SUSTAINABLE DEVELOPMENT OR RESOURCE CURSED?

AN EXPLORATION OF TIMOR-LESTE'S INSTITUTIONAL CHOICES

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STATEMENT OF ORIGINALITY

I declare that this thesis is the result of my original work and all sources have been acknowledged.

Jennifer Drysdale

3 July 2007

Dedicated to the memory of

Phil Pagan

9.11.1968 – 1.9.2007

A more gentle soul I can not imagine

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Abstract

This thesis explores the institutional choices available to Timor-Leste to manage their natural resource wealth wisely and avoid the resource curse. Timor-Leste is a poor country and its challenge is to use its large per capita resource wealth to alleviate poverty and enable sustainable development. This research examines the Petroleum Fund Law, and other mechanisms to manage petroleum revenue that the Government of Timor-Leste has established. These mechanisms appear to be resilient, but remain untested. Based on field interviews in Timor-Leste, the study offers insights into the opinions of East Timorese and foreign advisers about how Timor-Leste's petroleum revenue should be managed, and how a poor country can raise the living standards of its people.

A framework that identifies human and social capital as essential to the quality of institutions is developed in this research, which proposes that the pre-condition of institutions affects the management of natural resource revenue. As a result of history (not its natural resource wealth) Timor-Leste's productive institutions are weak and destructive institutions, such as corruption, are strong. The preferences of the research participants, identified using semi-structured interviews and multi-criteria decision analysis, revealed that what petroleum revenue is spent on is the most important petroleum revenue management decision. Further, health and education were regarded the highest spending priorities. Petroleum revenue management decisions that may affect Timor-Leste's economic, social and political independence were also important to participants.

Timor-Leste's sustainable development depends on continued assistance in the form of foreign advisers to address its lack of human capital. A commitment to transparency should counteract the lack of trust between government and civil society. Timor-Leste will also need to invest more in people, and recognise that the wise management of its petroleum revenue depends as much on good governance as the mechanisms designed to manage it. The people of Timor-Leste's fierce determination to overcome the challenges they face, against all odds, may help Timor-Leste to avoid the resource curse.

Acronyms

ABC	Australian Broadcasting Corporation
ANU	The Australian National University
AusAID	Australia's Aid Program
bbls	Barrels
BPA	Banking and Payments Authority (Timor-Leste's Central Bank)
CMATS	Certain Maritime Arrangements in the Timor Sea (Treaty)
CPD-RDTL	The Council for the Popular Defence of East Timor
DII	Development Impeding Institution
DUP	Directly Unproductive Profit-seeking
EITI	Extractive Industries Transparency Initiative
ESI	Estimated Sustainable Income
F-FDTL or FDTL	Defence Force of Timor-Leste
GDP	Gross Domestic Product
HDI	Human Development Index
IAB	Investment Advisory Board
IMF	International Monetary Fund
InterFET	International Force for East Timor
JPDA	Joint Petroleum Development Area
JSMP	Judicial System Monitoring Program
MCDA	Multi-Criteria Decision Analysis
mm	million
MOPF	Ministry of Planning and Finance
MoU	Memorandum of Understanding
MRSF	Mineral Resources Stabilization Fund
NGO	Non-Government Organisation
NOK	Norwegian Krone
PD	Partido Democratico
PPP	Purchasing Power Parity
PSD	Partido Social Democrata
SIP	Sector Investment Program
tcf	trillion cubic feet
TSDA	Timor Sea Designated Authority
TSO	Timor Sea Office
UDT	Timor Democratic Union
UNAMET	United Nations Mission in East Timor
UNDP	United Nations Development Program
UNMISET	United Nations Mission of Support in East Timor
UNMIT	United Nations Integrated Mission in Timor-Leste
UNOTIL	United Nations Office in Timor-Leste
UNTAET	United Nations Transitional Administration in East Timor
USAID	The United States of America's Aid Program

Non-English Terms

Belun	An East Timorese NGO (Friend)
Falantil	The East Timorese resistance or Armed Forces for the National Liberation of East Timor
Firaku	People coming from the east of East Timor
Fretilin	East Timorese Political Party
Kaladi	People coming from the west of East Timor
La'o Hamutuk	An East Timorese NGO (Walk Together)
Lalenok ba Ema Hotu	An East Timorese NGO (The Mirror to the People)
Lulik	Animist spirituality or sacred object
Luta Hamutuk	An East Timorese NGO (Fight Together)
Malae	Foreigner
Partido Democratico	East Timorese Political Party
Partido Social Democrata	East Timorese Political Party
Suara Timor Lorosae	Local newspaper
Suco	Village
Tetum	A local language spoken widely in Timor-Leste
Uma lulik	Sacred house

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Chapter 1 INTRODUCTION

This thesis explores the institutional choices available to Timor-Leste to manage their natural resource wealth wisely and avoid the resource curse. Timor-Leste is a poor country and its challenge is to use its large per capita resource wealth to alleviate poverty and enable sustainable development. This research examines the Petroleum Fund Law, and other mechanisms to manage petroleum revenue that the Government of Timor-Leste has established. These mechanisms appear to be resilient, but remain untested. Based on field interviews in Timor-Leste, the study offers insights into the opinions of East Timorese and foreign advisers about how Timor-Leste's petroleum revenue should be managed, and how a poor country can raise the living standards of its people.

1.1 Timor-Leste and the resource curse

Timor-Leste's petroleum revenue could be used to enhance a range of government services, like health and roads, and, in contrast to many poor countries, use their natural resource revenue wisely to achieve sustainable development. This inability to convert resource wealth into sustainable development is what Auty (1993) describes as the 'resource curse'. The resource curse occurs when an influx of revenue from the exploitation of natural resources hinders development, leading to stagnation or a decline in economic growth. Expenditure of natural resource wealth can have detrimental effects on the foreign exchange rate, and on other sectors (such as manufacturing and agriculture). The resource curse literature reveals that natural resource revenue affects institutions. For instance, countries with natural resource revenue are more likely to experience conflict, corruption and to have weak formal state institutions. By contrast, nations that have avoided the resource curse are those whose productive institutions are strong.

To address some of these challenges and avoid the resource curse, the Government of Timor-Leste established a Petroleum Fund in 2005, based on Norway's petroleum revenue management model. Like Norway's, Timor-Leste's Petroleum Fund is designed to finance the State's budget and save some revenue for future generations. The Petroleum Fund Law institutionalizes a range of mechanisms to manage petroleum revenue that assist decision-makers to decide how much to save, how much to spend, how to save, and when to spend. What to spend natural resource wealth on is another important decision that Timor-Leste makes in conjunction with these decisions. In this way, the Government of Timor-Leste believes the Petroleum Fund will 'contribute to the wise management of petroleum resources, [for] the benefit of both current and future generations' (Office of the Prime Minister 2004).

The institutions associated with petroleum revenue management are supposed to help Timor-Leste avoid the resource curse, but its history (Portuguese colonialisation, Indonesian occupation, and United Nations administration) has weakened its formal institutions and strengthened its destructive informal institutions. The Government is determined to improve the quality of life for all East Timorese with the benefits from exploitation of its petroleum resources (Timor Sea Office 2004b), but corruption and violence are accepted ways of doing business and in April 2006 a crisis erupted in Timor-Leste which highlighted its institutional inadequacies. As a result of the crisis and the ensuing violence, more than 70,000 people remain internally displaced in Dili, the capital of Timor-Leste (Ministry of Labour and Community Integration 2007). Petroleum revenue does not appear to be sustaining development in Timor-Leste, let alone meeting current needs.

1.2 Research overview

This thesis researches the problem of how to manage natural resource revenue wisely, and provides insights that are specific to Timor-Leste. The relationship between natural resource wealth and the potential for sustainable development is evident. Natural resources provide an opportunity for a country to generate wealth and, depending on how that wealth is managed, either create sustainable development, or render a country resource cursed (or somewhere along that continuum). Timor-Leste is not yet resource cursed. The decision-makers have choices, and thus the opportunity, to avoid the mistakes of some other natural resource rich, poor countries and use their petroleum revenue to create sustainable development.

The Government of Timor-Leste has plans for managing their petroleum revenue. They have a Petroleum Fund Law that should ensure that the petroleum revenue is only spent via the State's budget. The Offices of the Inspector General and the Ombudsman for Human Rights and Justice have been established to hold the Government and people to account but, Timor-Leste's institutions are fragile and gangs can render the State virtually immobile as they plunder the streets and burn houses (Scambary et al. 2006). Thus, the central question answered by this research is 'Does the Government of Timor-Leste's management of petroleum revenue enable Timor-Leste to avoid the resource curse and enable sustainable development?' In response to this question, a number of sub-questions were answered. Each sub-question is answered by each subsequent chapter. Overall, the thesis contains nine chapters and answers seven sub-questions, as follows:

(i) What are the challenges in managing natural resource wealth?

(ii) Which informal and formal institutions, and background information, are relevant to an understanding of how Timor-Leste might manage its petroleum revenue?

(iii) How does the Government of Timor Leste manage its petroleum revenue?

(iv) What are the methods used in this research?

(v) How do a selected group of East Timorese people and decision-makers (East Timorese and Foreign Advisers) think their petroleum revenue should be saved and invested?

(vi) How do a selected group of East Timorese people and decision-makers (East Timorese and Foreign Advisers) think their petroleum revenue should be spent?

(vii) According to a selected group of East Timorese people and decision-makers (East Timorese and Foreign Advisers), what will jeopardise and what will sustain development in Timor-Leste?

1.3 Scope

The resource curse literature is mainly economic in nature. This research examines the institutional aspects of the resource curse, specific to Timor-Leste. The research examines the Petroleum Fund Law and other mechanisms put in place by the East Timorese Government to manage their petroleum revenue. The examination covers the themes of saving and spending petroleum revenue, transparency and accountability, and the strength and capacity of East Timorese institutions to manage petroleum revenue. The literature review covers some of the economic aspects of the resource curse in order to explain the problem. The review then broadens to include the institutional aspects of the resource curse, and the social capital literature. The review of the academic and grey literature covering Timor-Leste's institutions is comprehensive. The review of petroleum revenue management institutions is, however, limited, for the most part, to those of Timor-Leste[1].

The empirical component of the research is limited in two ways. Time and human resources were the main constraints which defined the participants sampled. The details of the sample are provided in Chapter Five. The results of the empirical research are also time-specific. In particular, the results of the research indicate a perspective from the participants at a time when Timor-Leste enjoyed relative peace. The research was conducted in 2004 and 2005, by which time the East Timorese government had assumed full responsibility for governing the country, and precedes the time when the country fell into crisis.

1.4 Thesis outline

The thesis is divided into two main parts, with an introductory and concluding chapter. An overview of the thesis structure is provided in Figure 1.1. The first part explores the academic

[1] A comparative review of other countries' petroleum revenue management institutions would enlighten this research, but was not its purpose.

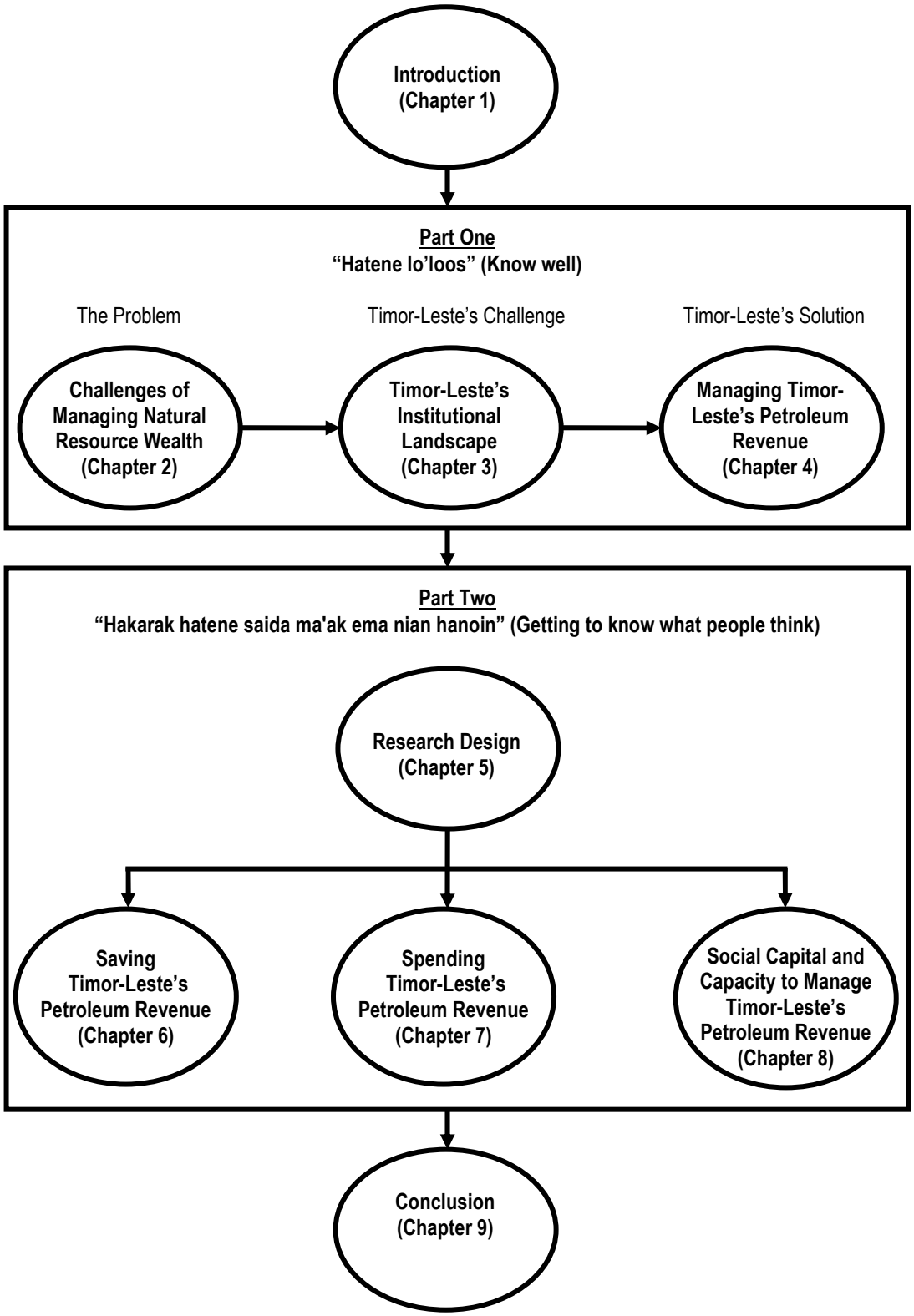

Figure 1.1 Thesis Structure

and grey literature, and includes three chapters. Part One is titled 'Hatene Lo'loos' (*Tetum*[2] words meaning 'know well') and is dedicated to understanding the problem of the resource curse and its potential and relevance to Timor-Leste. Part Two of the thesis, 'Hakarak hatene saida ma'ak ema nian hanoin' (*Tetum* meaning 'getting to know what people think') is dedicated to the explanation and results of the empirical component of this research.

Chapter Two begins with an exploration of the challenges of managing natural resource wealth. The literature on the resource curse is reviewed and the relationship between institutions and resource revenue management is discussed. Throughout the evaluation a framework for understanding that relationship is developed. This framework distinguishes three possible outcomes when a state exploits its natural resource wealth; a state is either cursed, resource cursed, or enables sustainable development. Social and human capital (the 'two caps') are fundamental to institutional quality, and therefore fundamental to the outcome under this framework. Thus, the empirical component of the research is designed cognisant of the need to enhance participation in making decisions about petroleum revenue management.

Chapter Three describes Timor-Leste's institutional landscape in terms of the framework developed in Chapter Two. Timor-Leste's history is central to an understanding of its institutions today, and the state of its institutions today provide an indication of the potential outcomes of Timor-Leste's natural resource revenue boom. This chapter also provides an overview of Timor-Leste's potential petroleum wealth and illustrates the enormity of its contribution to the future of Timor-Leste as a sustainable state.

Chapter Four describes the Government of Timor-Leste's plans for managing its petroleum revenue. The Petroleum Fund Law is central to the Government's plans but it is not the only institution responsible for managing petroleum revenue. Managing Timor-Leste's petroleum revenue includes saving, spending and monitoring it. Thus, petroleum revenue management in Timor-Leste is everyone's responsibility; the President, the Parliament, the Bureaucracy, the Courts, and civil society. This chapter provides a comprehensive analysis of the details of the Petroleum Fund Law and other mechanisms that govern the management of petroleum revenue.

Part Two of the thesis presents the results of the field research and begins with a review of the research design. Chapter Five explains the methods for both collecting and analysing the data, and reflects on the efficacy of the chosen methods. The data comes from 28 semi-structured interviews (conducted in 2004) and 47 interviews (conducted in 2005) using multi-criteria decision analysis (MCDA) software called Point*Wizard (Hansen and Ombler n.d.). A total of 67 people took part in this research (eight people participated in both methods). The methods were designed to elicit opinions about key decisions in managing Timor-Leste's petroleum revenue. The sample was designed to include decision-makers and people outside of

[2] *Tetum* is a widely spoken local language of Timor-Leste.

government, both East Timorese and foreign advisers. The objective was to seek a broad range of opinions to broaden and illuminate the discussion about petroleum revenue management in Timor-Leste. The data is presented in three chapters which each focus on a different aspect of petroleum revenue management.

Chapter Six explores how participants think Timor-Leste's petroleum revenue should be saved and invested. Point*Wizard software was used to generate a ranking of which aspects of saving and investing Timor-Leste's petroleum revenue were most important to participants. The method also generated discussion themes, which include choices about Timor-Leste's revenue potential (in terms of whether the Government uses its petroleum revenue or seeks international finance, and how soon petroleum fields should be exploited), whether expenditure of natural resource wealth is sustainable (in terms of the amount that is withdrawn from the petroleum fund), and three aspects of petroleum revenue investment (the level of risk, where revenue is invested and in what currency).

Chapter Seven is concerned with how participants think Timor-Leste's petroleum revenue should be spent. The semi-structured interviews generated a vision for Timor-Leste expressed by the participants and this, in turn, informed the design of the Point*Wizard research which asked participants to choose how petroleum revenue should be spent. One part of the Point*Wizard research elicited a ranking of the choice between spending on social services, infrastructure, individual payments and consumable capital. Another component of the Point*Wizard research asked participants to rank 14 budget sectors in terms of their priority to increase budget expenditure. The results of the research in this chapter provide an understanding of the links between sectors in terms of budget priorities, and the ultimate goal of sustainable development.

Chapter Eight draws the discussion throughout the thesis together. Further findings from the field research underpin the basis of the framework from Chapter Two. Participants' comments about Timor-Leste's institutions and the themes of accountability and responsibility are discussed. Social and human capital are essential to wise petroleum revenue management and, ultimately, Timor-Leste's sustainable development. This chapter explores the 'two caps' in terms of their role in enhancing accountability and responsibility. Finally, this chapter looks to the way forward for Timor-Leste and highlights three aspects of petroleum revenue management that will require attention if Timor-Leste is to avoid the resource curse. Chapter Nine concludes the thesis by highlighting the contributions that the thesis has made to understanding the problem of managing natural resource wealth in Timor-Leste.

1.5 Research contribution

This research contributes to the literature on the resource curse, and provides practical insights to further sustainable development in Timor-Leste. This thesis also provides a deeper, more complex understanding of the institutional aspects of the resource curse and the role of social capital in managing petroleum revenue. Finally, it provides the first institutional analysis of sustainable development in the context of Timor-Leste and petroleum revenues. This research is unique as it precedes Timor-Leste having the resource curse. Until now, the literature has been primarily based around economic theories, and analyses countries which are already resource cursed. By contrast, Timor-Leste has an opportunity to learn from those countries' mistakes.

This research provides a holistic picture of petroleum revenue management in Timor-Leste, and in-depth insights into a country that has put mechanisms in place to avoid the resource curse and enable sustainable development. A comprehensive analysis of Timor-Leste's institutions, both formal and informal, with particular regard to petroleum revenue management has never been conducted. Extensive field work, over six months, brings insights to petroleum revenue management in Timor-Leste from people working both inside government and outside. Sixty-seven people contributed to the empirical data set, from the Prime Minister and President of Timor-Leste to health workers, teachers and students. This research also asks what people, other than the decision-makers, think about petroleum revenue management and compares those views with the decision-makers. Thus a broader sense of what is important in terms of how petroleum revenue should be saved, how it should be spent and how the exploitation of petroleum resources may jeopardise or enhance the sustainable development of this new country, imbues this research.

Understanding the problem of the resource curse in an East Timorese context is crucial as the decisions being made in this current period will impact on the well-being of both current and future generations of East Timorese. To learn how petroleum revenue can sustain Timor Leste is of the utmost importance to the people of Timor Leste who are relying on this source of income in order to avoid aid-dependency, and to fund many government programs, including education and health services. Thus, income from petroleum revenue has the potential, if managed well, to improve the quality of life for the people of Timor Leste. But, conversely, it also has the potential to make life much worse.

The author has contributed directly to both the policy development process, and the process of community learning about petroleum revenue management in Timor-Leste. During the candidature, the author contributed the following documents to the consultation on the development of the Government of Timor-Leste's Petroleum Fund Law:

(i) Comments on the Timor-Leste Petroleum Fund Draft Act (Submitted to the Petroleum Fund Steering Group, Democratic Republic of Timor-Leste in February 2005);

(ii) Analysis of the changes to the Petroleum Fund Draft Act, identifying additions to the Petroleum Fund Law Bill, and recommendations about issues to be raised with the Parliamentary Committee C (responding to a request by Oxfam and the Office of the President on 30 May 2005);

(iii) An individual submission regarding the proposed Petroleum Fund Law (a letter to the Honourable Members of Parliamentary Committee C on 8 June 2005)

Aspects of the research have been presented in academic fora, including a proposal seminar at the Australian National University (ANU) in March 2004 witnessed by the (then) Secretary of State for Natural Resources, Sr. Jose Teixeira, and at a Conference at Victoria University (in June 2005), witnessed by the (then) Prime Minister of Timor-Leste, Sr. Mari Alkatiri.

Two publications have resulted from this research to date. They are:

Drysdale, J. (2007) 'Portrait of a Petroleum Fund consultation' in *East Timor: Beyond Independence*, D. Kingsbury and M. Leach (Eds), Melbourne, Monash University Press.

Drysdale, J. (2005) 'Managing petroleum revenue in Timor-Leste: A brief explanation,' *Development Bulletin* **68** October.

To further disseminate the results of this research with the aim of practical application both the publications and the consultation submission were translated into languages spoken by the relevant audience. The Comments on the Timor-Leste Petroleum Fund Draft Act were translated into Indonesian. The Letter to Committee C was translated into Portuguese, the official language of the Government of Timor-Leste, and both the publications were translated into *Tetum* (to encourage discussion within civil society). The publications and the Comments on the Timor-Leste Petroleum Fund Draft Act remain available on the internet.

PART ONE

HATENE LO'LOOS

(KNOW WELL)

Chapter 2 THE CHALLENGES OF MANAGING NATURAL RESOURCE WEALTH

Revenue from the exploitation of natural resources might seem like a blessing to a new nation like Timor-Leste. But, just like winning the lottery, there are challenges in managing an influx of revenue well. When natural resource revenue is poorly managed a state can fall victim to the 'resource curse'. The quotes in Figure 2.1 illustrate the feelings of those who have seen how countries can be cursed by natural resource wealth. Chapter One provided an introduction to the thesis, explained its focus was on Timor-Leste, and that its natural resource wealth could enable it to develop sustainably. This chapter is the first of three that explore the fundamental problem of the thesis, how to manage natural resource revenue wisely. This chapter explains the challenges of managing natural resource wealth by reviewing the academic literature on the resource curse and explaining related concepts, such as institutions, social capital and sustainable development. The following two chapters explore Timor-Leste's institutional landscape and the Government of Timor-Leste's plans for managing petroleum revenue, providing a specific case with which to explore the challenges of managing natural resource wealth.

'It [oil] is the devil's excrement. We are drowning in the devil's excrement.'
(Juan Pablo Pérez Alfonso, founder OPEC)

'We are part to blame [for our country's impoverishment], but
this is the curse of being born with a copper spoon in our mouths.'
(The President of Zambia, Kenneth Kaunda)

'All in all, I wish we had discovered water [not oil]'
(The oil minister of Saudi Arabia, Sheik Ahmed Yamani)

Figure 2.1 Quotes from those who have seen countries cursed by natural resource wealth (Ross 1999)

The description of the challenges of managing natural resource wealth is sometimes called the resource curse literature. A country is described as having the resource curse if it exploits its natural resources (e.g. forests, minerals or petroleum) and the consequent revenue does not contribute to economic growth. Rather the revenue is misused and a range of indicators (including economic growth) decline. A superficial review of the literature gives the impression the resource curse might be inevitable when a natural resource boom occurs. However, wealthy, industrialized countries such as Australia, Canada and the United States have managed to avoid

it, and some have argued that countries like Malaysia, Indonesia, Botswana, and Chile (e.g. Rosser 2007; Vincent 1997) have also managed their natural resource wealth well. Thus, the resource curse is by no means a *fait accomplit* for less wealthy countries who choose to exploit their natural resources.

There are many challenges to managing natural resource wealth well. The literature has often broadly described these challenges as economic or institutional. This chapter begins with a brief explanation of the economic challenges of a natural resource boom. Although the focus of this thesis is on the institutional aspects of the resource curse, the institutional and economic aspects are often inter-related and, as has been noted, are often difficult to disentangle (Engerman and Sokoloff 2002; World Bank 2005c)[3]. Here, concepts (such as Dutch disease and the resource curse) developed by economists are explained briefly, and the framework for understanding the relationship between natural resource revenue and institutions begins to develop. The two sections that follow are dedicated to exploring the institutional challenges of natural resource wealth.

The literature on the institutional aspects of natural resource wealth management is relatively recent and still evolving. This chapter explores how natural resource wealth affects the quality of institutions. There appear three main institutional challenges; corruption, resource-related conflict and natural resource revenue waste. The chapter also discusses that relationship in reverse; how institutional quality affects the management of natural resource revenue. This aspect of the relationship between institutional quality and natural resource revenue has not been investigated at length in the literature. Recognition that the pre-condition of institutional quality may impact on the management of natural resource revenue is essential to a deeper understanding of how natural resource revenue might be better managed. The reasons that corruption, conflict and revenue waste exist may not be due to the presence of natural resource revenue.

Other factors that may affect institutional quality include social and human capital. Low levels of human capital in government institutions are likely to affect the quality of those institutions (e.g. the inability to manage finance may lead to revenue waste). Social capital is also a determinant of institutional quality. These aspects of institutional quality are incorporated into the framework for managing natural resource revenue, and a more holistic understanding of the reasons why a country may be cursed, resource cursed, or achieve sustainable development evolves.

A state can choose to manage its natural resource wealth well, thereby providing the climate for sustainable development, or natural resource wealth can be managed poorly (or not managed at

[3] A report by the World Bank (2005c) explained: 'Economic and political explanations are difficult to disentangle. In the course of development, economic institutions are shaped by economic incentives and opportunities, and political dynamics respond to underlying economic forces' (World Bank 2005c :311).

all) and a whole range of indicators and institutions will decline, resulting in the resource curse. Managing natural resource wealth presents challenges that are a sub-set of a whole range of other challenges to be addressed in order to achieve sustainable development. But, if the natural resource-related challenges are considered on their own, we find the literature reveals a continuum whereby a state, depending on the choices it makes and how well it meets these natural resource wealth management challenges, either contributes to achieving sustainable development or, at the other end of the spectrum, is single-handedly cursed.

2.1 Natural resource revenue and the economy

The discussion of the impact of wealth on society goes back to, at least, the 14th century (Stevens 2003). A broad understanding of the effect of rents (from natural resources or otherwise) is relevant to this research but belongs to a much broader analysis of the economic literature, which is not the purpose here. However, to note that a rent is a return in excess of normal profit, and that in the case of natural resources, rents are high because the natural resource is 'free', other than the costs of capital and production provides a necessary departure point.

The specific effects of an influx of natural resource wealth on an economy have been explored in the academic literature since the 1950s and 60s. In the 1950s natural resources were viewed simply as abundant, easily exploitable and a major means of capital accumulation. Ginsburg's (1957) idea that a healthy resource endowment equated to an accelerator for economic growth and potential for improvements in health and literacy has since been questioned and described as 'conventional' (Auty 1993). In the 1970s a literature specific to the effects of rents on Middle-eastern states was generated, and is known as 'rentier-state' literature[4]. Mahdavy (1970) explains that 'rentier states are defined here as those countries that receive on a regular basis substantial amounts of external rent' (Mahdavy 1970: 428) and he uses Iran as an example of the patterns and problems that rentier states have encountered since the mid-1950s. Mahdavy's work, like earlier literature about rent, indicated the kinds of problems that would later be described under the heading of the resource curse literature[5].

The oil crisis of the 1970s led Solow (1974) and Hartwick (1977) to explore inter-generational allocation of exhaustible resources, and Gregory (1976) used the term 'Gregory thesis' to describe how a mining boom can contribute to shrinking the agriculture and manufacturing

[4] Ross (1999) provides a particularly insightful summary of the key authors of this literature.

[5] For example, Mahdavy explained some of the problems of Iran as a rentier state: 'the mass of the Iranian people are hardly touched by the so-called development programmes… Industrialization is proceeding at a slow pace providing little opportunity for employment… considerable disparity of income and welfare between the rural and urban populations… government expenditures and programmes become increasingly dependent on oil revenues, the consumption patterns of the people are also thoroughly geared to the utilization of imported commodities… the Iranian economy remains, as before, at the mercy of fluctuations in oil prices…' (Mahdavy 1970: 465-466)

sectors. The literature on the 'Dutch disease' appeared with its first description in *The Economist* (Anon. 1977) and has since been widely discussed (e.g. Corden and Neary 1982; Krugman 1987; Nankani 1979). The Dutch disease occurs when a rapid influx of resource rent comes from the export of natural resources, and results in high domestic absorption and appreciation of the domestic currency[6], which then affects the non-mining sectors detrimentally[7]. This happened in the Netherlands, in the 1960s and 70s, when the Dutch exploited their North Sea natural gas, hence the name. In response to the strengthening exchange rate, non-mining sectors (such as agriculture and manufacturing) may shrink, become less export competitive and more dependent on import protection and subsidies to maintain their importance in the economy, thereby contributing to inefficiencies. These subsidies are provided, courtesy of the natural resource revenue[8]. When the resource rents decline, governments can find it difficult to continue to subsidise the non-mining industries because of the decline in tax revenue and the exchange rate appreciation.

Dutch disease can lead to a state becoming petroleum-dependent and a lack of industrial diversification can impede sustainable development. Research has shown that resource-poor countries tend to be more efficient and pursue policies that maximise social welfare (Auty 2000). This phenomenon (that a lack of industrial diversification is less productive) is not new. In 1576, the French political philosopher Jean Bodin said:

> Men of a fat and fertile soil, are most commonly effeminate and cowards; whereas contrariwise a barren country make men temperate by necessity, and by consequence careful, vigilant, and industrious (quoted in Sachs and Warner 1995: 4).

Further exploration reveals that Dutch Disease is part of a complex system of problems that may result from an influx of natural resource wealth. Gelb (1988) identified four critical problems in managing the mineral sector and resource booms; reduced competitiveness of the lagging non-mining tradeables sector during the booms (Dutch disease), inadequate savings during booms, the establishment of unsustainable patterns of consumption and investment during booms, and tardy adjustment to post-boom downswing. These problems revolve around the uncertainty inherent in managing natural resource wealth.

The flow of wealth from natural resources to a state is not constant; the price of the resource changes, production output varies and resources are discovered and exhausted over time. Managing natural resource wealth well takes fluctuations into account so that when there is less natural resource wealth a state can rely on its savings, built up during a boom in natural resource wealth. On the other hand, if the additional revenue from a boom is not managed well this will

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[6] The Dutch Guilder rose in trade-weighted terms by 16.4% between 1971 and 1977 (Anon. 1977).

[7] This is not how Dutch disease was originally described in *The Economist* in 1977. Amongst other differences, *The Economist* article did not specifically mention the impact on non-mining sectors.

[8] Willett (2002) describes subsidies as 'artificial impediments that handicap industries' (Willett 2002 :412).

have a three-fold effect; no savings will accrue, whatever the additional revenue was spent on will be neglected when there is less revenue to spend (such as subsidies to the non-mining sectors described above) and it will be difficult to adjust to the lower income stream. These effects result in poor, or negative, economic growth. The economic effects of poor natural resource wealth management can be further exacerbated if a state borrows (e.g. finance from international financial institutions) to fund its unsustainable consumption and generates unmanageable debt.

Discussion of the phenomenon of resource-rich countries performing worse economically than resource-poor countries had occurred for almost 20 years before Auty (1993) first described these problems as the 'resource curse'. Auty conducted a detailed examination of the political economy of six countries and their macroeconomic responses to a series of external shocks[9]. Auty's rationale was to investigate the suggestion that 'not only may resource-rich countries fail to benefit from a favourable endowment, they may actually perform worse than less well-endowed countries' (Auty 1993 :1). This counter-intuitive outcome was what Auty described as the basis of the resource curse. Sachs and Warner's (1995) research supported Auty's findings and the standard view of that time[10], that volatility and the Dutch disease lead to the resource curse. They showed, using standard cross-section growth regressions that economies with a high ratio of natural resources to Gross Domestic Product (GDP) tend to have low growth rates[11].

The work of Auty, and Sachs and Warner, is indicative of most of the economic literature on the resource curse; which is about the statistical relationship between natural resources and economic growth. However, economic growth is one of a number of indicators that may determine progress towards sustainable development. A few authors (e.g. Nankani 1979; Ross 2001) show that lower levels of social development are also evident in some countries with large natural resource wealth. Nankani (1979) also showed that income inequality was higher in resource-rich countries.

Most recently, there have been many articles (e.g. Banks 2005; Davis and Tilton 2005; Gylfason 2001; Hausmann and Rigobon 2002; Manning 2004; Stevens 2003) that review the economic literature, discuss, analyse and even offer new interpretations or results in investigating the economic challenges of the resource curse. Their methods are varied, but always quantitative or statistical, yet they all come to the same general conclusion; there is a negative correlation between natural resources and economic growth. However, there are many countries (e.g.

[9] Auty (1993) used three variables in his examination; government resolve, policy choice and external shocks.

[10] Sala-i-Martin and Subramanian (2003) regard Sachs and Warner as having a 'commonly held view' (Sala-i-Martin and Subramanian 2003 :5).

[11] The percentage of exports from natural resource wealth which defines a resource-rich state, which might be at risk of the resource curse, varies. Nankani (1979) describes a mineral economy as one which generates at least 40% of its export earnings from minerals, whilst Stevens (2005) identifies countries at risk of resource curse as those whose natural resource exports exceed 30%.

Australia, USA, Norway) whose experience contrasts with this finding, which suggests the resource curse is not purely an economic dilemma.

2.2 Natural resource revenue and institutional quality

The impact of natural resource revenue on an economy reveals only part of the problem of the resource curse. Recent research on the resource curse has focussed on how an influx of natural resource revenue may affect institutional quality. Natural resource revenue may strengthen or weaken the quality of an institution. Depending on the type of institution, the effects of natural resource revenue on institutional quality may contribute to the resource curse. These effects will be explored in this section.

North is the author of one of the most widely referenced books on institutions[12]. North (1990) describes institutions as 'the rules of the game in a society or, more formally, the humanly devised constraints that shape human interaction' (North 1990 :3). North places great emphasis on the role and impact of institutions:

> In consequence they [institutions] structure incentives in human exchange, whether political, social or economic. Institutional change shapes the way societies evolve through time and hence is the key to understanding historical change. (North 1990 :3)

Institutions can be classed as formal and informal. Formal institutions are usually externally enforced, such as laws (e.g. property rights), treaties, conventions, rules (of engagement) and policies. Sometimes organisations (e.g. universities) are regarded as formal institutions however Dovers (2005) makes the following distinction[13]:

> Organisations are manifestations of institutions, such as specific departments, associations, agencies, and so on. In some cases, an organisation may be persistent, recognisable and influential enough to be regarded as an institution, but generally organisations can be more quickly dissolved or radically changed whereas an institution is more durable. (Dovers 2005 :12)

Informal institutions are conventions or rules that constrain individual behaviour or 'structure social interactions in a particular way' (Knight 1992 :54). Examples of informal institutions are corruption or forming a queue. These kinds of rules imply there is a consistency of individual expectation. However, as informal institutions include social and cultural institutions, it follows that such expectations are bound within social and cultural constraints. Therefore they may not transcend specific community or state boundaries and the same may be said for some formal institutions.

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[12] North's (1990) book, *Institutions, Institutional Change, and Economic Performance*, has 425 citations on the *EconLit* database.

[13] North (1990) also makes a distinction saying organisations have a role as the agents of institutional change and argues that institutional change hinges on this distinction.

The quality of an institution can vary from weak, unpredictable and not able to withstand pressure, to strong, with the qualities of persistence, or robustness, and predictability. By their nature, institutions that are strong 'reduce uncertainty by providing a structure to everyday life…[and] guide human interaction' (North 1990 :3). Strong institutions result in compliance and conformity, which are qualities that are essential in productive institutions designed to achieve sustainable development. However, there are some institutions (e.g. corruption) that have negative effects. When institutions with negative effects are strong, it may be difficult to prevent the resource curse. This section illustrates that natural resource revenue may strengthen the very institutions that have negative effects on sustainable development.

Institutions that actively erode other institutions that enable sustainable development, are known as Development Impeding Institutions or DIIs (Grafton and Rowlands 1996). Figure 2.2 expresses Grafton and Rowlands' vision of the relationship between the strength of DIIs and the quality of development. Lines A and B, in the figure, represent alternative development paths. Both paths demonstrate that a move towards inclusive development (in which most of society benefits) requires some weakening of DIIs.

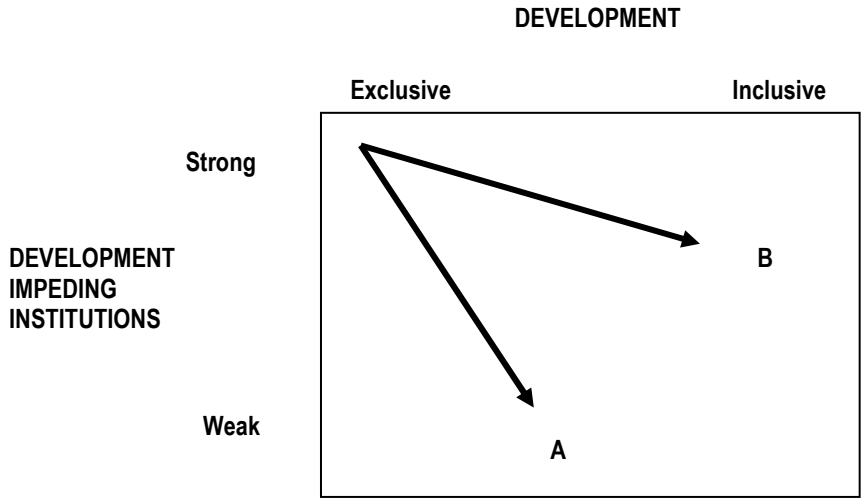

Figure 2.2 Development Impeding Institutions (Grafton and Rowlands 1996 :263)

Institutions, both destructive and productive, can be weakened or strengthened. However, the time it takes to change an institution varies, depending on its strength. Matthews (1986) talks about an inertia that is inherent in some institutional change because such institutions have evolved, over time, to be strong:

> None of these [institutions] would serve much purpose if they were continually changing. Institutional arrangements are about interpersonal relations... [When change occurs]

> Previous arrangements have to be undone, possibly arrangements that were arrived at after long bargaining with many people. Trust has to be recreated. (Matthews 1986 :913)

Sometimes institutional change occurs at a glacial pace. Sometimes, change can come quickly, such as changing a contract or a law (although this generally follows a period of negotiation or lobbying). People are integral to the process of creating, changing, sustaining and dismantling institutions. People who benefit from an institution are likely to behave in ways that perpetuate that institution. 'Some people are always likely to lose from an institutional change and these vested interests are continuously being recreated as long as the institution remains in force' (Matthews 1986 :914). Institutions that sustain vested interests of people with power are likely to be strong. Strong institutions that serve a few self-interested individuals are likely to be informal and destructive. Thus, not all strong institutions will have a positive effect on sustainable development. On the contrary, it may be these kinds of institutions that cause the resource curse.

The institutional literature on the resource curse confirms that institutions in some resource-rich countries are weaker than institutions in countries without great natural resources wealth (e.g. Auty 1993; Mauro 1997; Mehlum et al. 2002; Robinson et al. 2002; Ross 2001; Sala-i-Martin and Subramanian 2003; Woolcock et al. 2001). From this literature, Woolcock, Pritchett et al. (2001) identified two groups of research, one coming from economic research on 'social' issues and the other, social research on 'economic' issues. Matthews (1986) remarked:

> [In the last few decades] the economics of institutions has become one of the liveliest areas in our discipline. It has, moreover, brought us more closely in touch with a number of other disciplines within the social sciences. A body of thinking has evolved based on two propositions: (i) institutions do matter, (ii) the determinants of institutions are susceptible to analysis by the tools of economic theory. (Matthews 1986 :903)

The examination of the relationship between the resource curse and institutional quality has, to date, largely been based on an economic analysis of social issues, whilst this thesis falls into the other group, of social research on economic issues. Although the institutional challenges of managing natural resource revenue had previously been considered, it was Sala-i-Martin and Subramanian (2003) who suggested the impact of natural resource wealth on institutions is the sole reason for poor growth and the development of the resource curse, rather than Dutch disease or other economic factors. This may explain why some resource-rich countries avoid the resource curse. Today the institutional literature on the resource curse is more abundant than the economic literature. Woolcock et al. (2001) explained the value of incorporating 'social' issues:

> The poor performance of countries with abundant natural resources can be explained using orthodox economic tools, but ... a more comprehensive picture emerges when social and political factors are also taken into consideration. (Woolcock et al. 2001 :76)

Ross (2003), Sala-i-Martin and Subramanian (2003), and Woolcock et al. (2001) have illuminated the economic analysis of the resource curse with their social and political insights, which reveal that an influx of natural resource revenue can influence formal and informal institutions, and lead to either sustainable development or the resource curse, or somewhere in between. This basic view of the impact of natural resource revenue on institutions is illustrated in Figure 2.3. This figure forms the basis of a framework for a more detailed understanding of the relationship between natural resource revenue and institutions. This framework will develop as this chapter progresses. However, the ways in which natural resource revenue impacts on institutional quality will be explored in detail first.

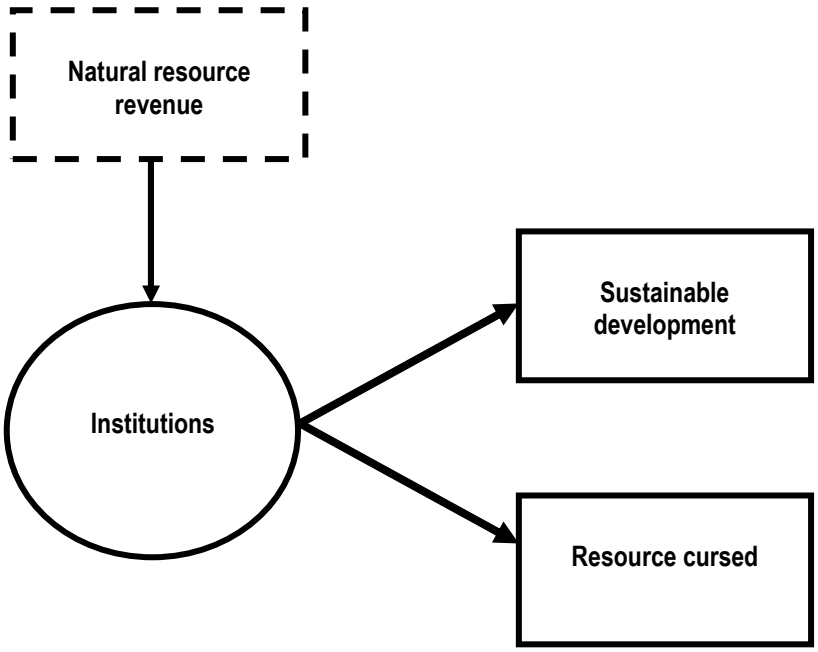

Figure 2.3 A basic view of the impact of natural resource revenue on institutions

The institutional literature on the resource curse can be divided into three themes; rent-seeking and corruption, resource-related conflict, and natural resource revenue waste. These themes are not absolutes as not all countries face the same challenges in managing their natural resource wealth. The way in which a state responds to each of these challenges, and how successful it is in managing each challenge, will determine whether they are closer to establishing a climate for sustainable development or being resource cursed.

2.2.1 Rent-seeking and corruption

Rent-seeking is when an individual or a group searches for ways in which they might benefit by manipulating the institutional environment to their own advantage, as opposed to participating in established and legitimate means of creating wealth. Rent-seeking may negatively affect those who would otherwise benefit from normal means of wealth production by detracting from the value that would otherwise be attributed to them. Similarly to the discussion about rent in section 2.1, rent-seeking is not a phenomenon that is specific to natural resources. Krueger (1974) coined the term 'rent-seeking' with no specific regard to natural resource revenue. Also of relevance, Bhagwati (1982) developed the concept of directly unproductive profit-seeking (DUP) activities:

> [DUPs are] ways of making a profit (i.e. income) by undertaking activities which are directly unproductive; that is, they yield pecuniary returns but, do not produce goods or services that enter a utility function directly or indirectly via increased production or availability to the economy of goods that enter a utility function. (Bhagwati 1982 :989)

Bhagwati (1982) gives examples of DUPs as 'lobbying for protection, competing for a share of industrial or import licenses, inducing legislatures to enact monopolistic barriers to domestic entry, utilizing resources to evade "price" or "command" governmental regulations, etc.' (Bhagwati 1982 :988). There is some cross-over between the concepts of DUPs, rent-seeking and corruption[14], but their commonality is that they all have the potential to negatively affect institutional quality and sustainable development. Rent-seeking is closely related to corruption in the sense that corruption also diverts returns from those who would otherwise benefit from normal means of production. However, where corruption is generally illegal[15], rent-seeking may be a legitimate, legal activity performed (perhaps even encouraged) by a state, sometimes even benefitting the greater good (in which case it would not be regarded as a DUP).

Today the literature that links rent-seeking, corruption and natural resources is now common (e.g. Bannon and Collier 2003; Mauro 1997; Mehlum et al. 2002; Robbins 2000; Robinson et al. 2002; Woolcock et al. 2001; World Bank 2003a). Tornell and Lane (1999) established that resource-rich economies are more subject to rent-seeking and corruption than resource-poor economies. Natural resource wealth provides incentives for rent-seeking behaviour and corruption that generate an environment which perpetuates these institutions. Resource-rich countries that have few or no other industries give educated and talented individuals few legitimate opportunities for personal wealth creation. The result is that they may be tempted to

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[14] The *Oxford English Dictionary* defines corruption as the 'perversion or destruction of integrity in the discharge of public duties by bribery or favour; the use or existence of corrupt practices, *esp.* in a state, public corporation, etc.'.

[15] Corruption has a cultural context and there are occasions where a person from one country, or culture, may view a transaction as corrupt whilst someone from another country, or culture, might see the same transaction as simply the way business is done, and therefore not illegal. A strict definition of corruption is, therefore, one which relates to its cultural context.

participate in institutions that benefit themselves over others. In such an environment individuals may be lured to participate because rent-seeking and corruption appear more beneficial to the individual compared to production by normal means (made difficult because productive institutions have been eroded or weakened). The outcome of these activities is a state where wealth is diverted to the hands of a few and the divide between rich and poor widens[16]. This divide is further exacerbated by the fact that some resource industries are not labour intensive (i.e. not many jobs are created by these industries).

As discussed earlier, strong institutions can have negative effects (and erode other institutions) and corruption is a good example of such a destructive institution. Robbins noted that 'Corruption is an institution, not the absence of one' (Robbins 2000 :439)[17]. Corruption is an informal institution. Rent-seeking and corruption are institutions that can erode or destroy other productive institutions (such as transparency and accountability); they are destructive institutions. For example, constant fighting over resource rents may result in political instability and shorter political timeframes (e.g. as in Bougainville, Papua New Guinea). In such an environment, the quality of democratic decision-making is reduced and the democratic institutions of government begin to decline (such as the long-established formal conventions around government purchasing which may be worn down by the destructive rent-seeking behaviour that contrasts with them).

As these destructive institutions solidify and sustain the rich, the divide between rich and poor increases and life becomes more difficult for the poor and for those trying to develop or maintain democratic institutions. Some of the literature explores this phenomenon and suggests that a wider diffusion of wealth is more conducive to democratic institutions (Woolcock et al. 2001). As the game of rent-seeking is played out, participation in democratic, legal and political institutions becomes more like hard work and less appealing, whilst corruption becomes more appealing. Thus, the institutions of rent-seeking and corruption are self-perpetuating and worse, rent-seekers may exert influence to ensure the economy remains natural resource-dependent and retard attempts to diversify the economy (so that they can continue to extract rents). The further they destroy the legitimate productive institutions the more rent-seekers are likely to benefit. In addition, rent-seekers may create institutions to justify and sustain their rent-seeking. For example, a corrupt government may put in place legislation that legitimises rent-seeking in

[16] Collier (2001) reported that between 1965 and 2000 Nigeria received around US$350 billion (at 1995 prices) in revenue. Yet during this time the overall per capita income of its citizens did not improve. The work of Sala-i-Martin and Subramanian (2003) also showed that Nigeria's natural resource wealth did not benefit everyone. In Nigeria, in 1970, the top two percent and the bottom 17 percent of the population earned the same total income. In 2000, the top two percent earned the same total income as the bottom 55 percent.

[17] Robbins (2000) is intimating here that corruption is sometimes regarded simply as an eroding force rather than an institution. Corruption is regarded as an institution for the purposes of this research, not so that it has status, but so that it can be distinguished from other institutions as informal and destructive within the framework which evolves.

some way, or at an informal level, pay-backs may become part of the fabric of doing business[18]. Once the rent-seeking environment is established and the divide between rich and poor is further widened, re-building or creating those necessary formal and productive institutions becomes more difficult[19].

A lack of transparency can be beneficial in perpetuating these institutions. Where institutions are weak and total resource revenue wealth is not publicly known, it is easier for those in power to take money from the public for their own personal gain, bribes or other illegitimate uses. Nigeria provides an unfortunate example of a country cursed by its natural resource wealth, largely because of corruption[20]. In 2005 Nigeria was ranked 154th of 159 countries included in Transparency International's Corruption Perception Index (Transparency International 2005)[21]. The institutions of transparency and accountability can retard the opposing forces of destructive institutions, such as rent-seeking and corruption.

2.2.2 Resource-related conflict

Natural resource wealth can be the cause of conflict and there are numerous examples of long and bloody civil conflict over resources (e.g. oil and the Biafran war in Nigeria or the Panguna Copper mine in Bougainville, Papua New Guinea[22]). Natural resource wealth is often linked to violence and conflict (e.g. Bannon and Collier 2003; Collier and Hoeffler 2002; Mkandawire 2002; Ross 2001; Sala-i-Martin and Subramanian 2003). Collier and Hoeffler (in Sala-i-Martin and Subramanian 2003) showed that a country which has no natural resources faces a probability of civil conflict of 0.5 percent, whereas a country with natural resources-to-GDP share of 26 percent faces a probability of conflict of 23 percent. Bannon and Collier (in Banks 2004) also found that a country with primary commodity exports of 5 per cent of GDP had a risk of civil war in the next five years of 6 percent, whereas a country with primary commodity exports of around 25 percent of GDP had a 30 percent risk of civil war in the next five years.

The reasons for conflict over natural resources are varied. One source of natural resource-related conflict is establishing who owns the rights to the resources. If natural resources are shared across groups, or property rights are not well defined, resulting frustration can lead to violence and conflict. Conflict over property rights may be entwined with longer-term property claims (unrelated to natural resources), but the natural resources provide a further incentive for conflict,

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[18] In Nigeria, 'Large windfall oil profits corrupted Nigeria's institutions and changed its politics, which came to be shaped by the incessant fight over resource revenues' (World Bank 2005c :310).

[19] 'Poorer countries lack the resources to police corruption effectively, and poverty itself breeds a greater willingness to go around the rules' (Krugman and Obstfeld 2000 :683).

[20] For a more detailed explanation of natural-resource related corruption in Nigeria read Sala-i-Martin and Subramanian (2003).

[21] For the purposes of comparison it is noted that Australia ranked 9th (Timor-Leste was not ranked in that year).

[22] For further detail about the Panguna mine in Bougainville and the resource curse see Brown (2005).

often to the extent of demanding a separate state and causing civil war (e.g. West Papua in Indonesia, or Sudan).

Migration arising from natural resource-related employment can also be a cause of conflict due to social disintegration. Banks (2005) talks about migration caused by resource industries changing the social landscape and disrupting community cohesion[23]. Vincent (1997) agrees the process is socially disruptive, but it might be inevitable and in fact economically efficient when resource-extractive industries are the only viable ones in a region. Banks (2004) mentions that economic migrants are often held responsible for social pathologies such as drinking, gambling and prostitution. Prostitution may also lead to an increase in sexually transmitted diseases. Grievances over problems such as these could provide further incentive for conflict. Migration may also occur as a result of the destruction of the environment and violations of human rights that are sometimes perpetrated by governments or companies that exploit natural resources. In order to flee from persecution or when livelihoods (generated by environmental resources) have been destroyed, migration may follow.

Just as corruption is self-perpetuating, conflict is too. More conflict leads to further instability and uncertainty which then affects political time frames (which is another example of a strong destructive institution eroding a democratic institution). Conflict can also escalate due to natural resource wealth because the revenue can be used to purchase weapons. Resolving natural resource-related conflict is difficult and complex not only because of the instability but also because the challenges of natural resource-related conflict are country, and sometimes even community-specific. Banks (2005) points out that most of the literature about natural resources and conflict uses African countries as examples, and the solutions are not always applicable in the Asia-Pacific region. Banks (2004) specifies the Melanesian case and argues that this poses a unique natural resource dilemma because of the importance of identity and social relationships being inextricably linked to land and natural resources. The literature suggests there are no generic solutions and that the causes of natural resource-related conflict are unique to each case.

There is, however, a factor that is common to most natural resource-related conflict. Conflict often follows from the exploitation of natural resources on land, rather than offshore. For this reason, the resource curse literature, which has regard to conflict over natural resources, could be said to have a terrestrial exploitation bias. Wars are often fought between countries over access to natural resources that might be located off-shore however the context of this discussion is the resource curse literature, so international conflict will not be discussed here. In any case, the literature does not appear to distinguish between countries whose resources are exploited on-shore and those whose are exploited off-shore. In the latter scenario, communities would be less likely to fight over ownership of the resources and they would be more likely to

[23] 'The impact of this migration is perhaps the most devastating of all the effects of large-scale mining in Melanesia, largely because of its effects on the core pillar of Melanesian identity: social relationships' (Banks 2004 :7).

be regarded as communal or state assets. Thus, the problem of conflict over resources may be less likely to occur if the resources are located offshore. Unfortunately, there appears to be no literature that explores this distinction.

2.2.3 Natural resource revenue waste

Much natural resource revenue is wasted simply because the quality of formal institutions and mechanisms to manage the revenue are weak. Spending an influx of natural resource wealth is tempting, particularly when the amount is above annual budget expenditure requirements. When there is extra liquidity, it would appear legitimate to spend the extra revenue, and there may be pressure to do so, yet rash decisions and poor expenditure may not achieve long-term goals (e.g. saving for future generations when the natural resource is exhausted) let alone sustainable development. In some respects, having an influx of natural resource wealth is similar to an individual winning the lottery; the revenue is seen as a bonus and thereby wasted because it is spent without regard for the future.

At the heart of the challenge of managing natural resource wealth well is planning, and the human capital to execute those plans. At the core of planning is projecting the amount of natural resource income and how it will be allocated. Auty (1993) remarked 'The estimation of permanent income is exactly what the Governments of mineral economies have been unable to perform well' (Auty 1993 :25). The flow of natural resource income is, by its nature, difficult to predict because there are many variables (e.g. market price, production plans, exploitation of fields, and the amount of resources) which are all subject to change, and these changes are often exogenous. Frequently too much optimism surrounds the estimates of natural resource income and a situation arises where a state spends a windfall on the assumption that further revenue will be forthcoming, and when estimates are not met expenditure can not be sustained.

There are many references to the need to extract and expend natural resources and the income they generate in a sustainable manner. Solow's (1974) definition of intergenerational equity (per capita consumption remains constant over time) has been used by Hartwick (1977) to generate a rule that has regard to investment of the rents from exhaustible resources for the purpose of intergenerational equity. The meaning of sustainable development within the context of this research will be explained later in this chapter so here it is simply noted that wasted natural resource revenue affects not only current generations, but may indeed have a greater impact on future generations[24]. Managing natural resource wealth well requires consideration of the variable nature of the flow of natural resource income. That is, when there are peaks in natural

[24] This is the case in Nauru where the natural resource revenue boom of the 1970s was mismanaged and Nauruans today are much worse off.

resource income, revenue should be saved (or used to generate further income) for the times when there will be troughs in natural resource income (i.e. saving for future generations).

Part of the reason for poor planning is because of public pressure to spend and politicians responding to this pressure because of short political time-frames. Unfortunately, projects are often undertaken because of their immediate income-generation potential rather than any long-term benefit (Auty 2000). Often the amount spent on projects is larger than the additional revenue provided by the natural resource income. This problem was highlighted when Dutch Disease was first discussed; The Netherlands had run up a large budget deficit because gas revenues on their own were not enough to finance the increase in government spending (Anon. 1977).

Another reason natural resource revenue is wasted is that, in some cases, there is little, or no, institutional capacity or human capital to manage finance. Or, the institutions may have the capacity, but they may not be designed to manage the scale of wealth. For example, an administration designed to run a government based on a budget of $100 million could not be expected to execute a budget of $500 million the following year. A lack of human capital may also be blamed for poor expenditure decisions. With an influx in revenue there is the temptation to invest in physical capital and infrastructure, but states often over-invest to the point where projects provide little economic return (sometimes called 'white elephant projects'[25]). An example is the temptation to establish a resource-based industry (such as a national oil company) when the economy is not ready or does not have the human or trade potential to do so effectively. Such projects may not bring economic return if the domestic capacity does not exist and, particularly if such projects are subsidised, they may not be internationally competitive in the long term.

Another temptation is to increase spending on budget items in response to pressure from the public. One example is when public pressure calls for extra civil service positions, perhaps because of high unemployment. If no real need exists and positions are created this can result in an unproductive civil service. This is a politically appealing way to distribute rents (Auty 2000) as is increasing transfer payments such as pensions, and unemployment payments (Anon. 1977). Another appealing way to spend natural resource revenue is on the purchase of arms, and this is often reported in the literature (e.g. Mkandawire 2002; Ross 2001, 2003). This problem is, of course, inter-related with the challenge of managing resource-related conflict and the waste of natural resource revenue provides the community with yet another grievance that could cause

[25] Sala-i-Martin and Subramanian (2003) talk about Nigeria's over-investment in physical capital resulting in poor productivity. In Nigeria, state institutions made poor decisions about what to spend petroleum revenue on. The revenue was spent but, there was nothing to show for it. As an example, the 'famous' Ajakouta steel complex was built in the 1970s but, until the time of writing (33 years later) had not produced a ton of steel.

further conflict. The potential for conflict (whatever the reason for it) would be limited if the Government did not fuel the conflict by purchasing arms.

The other way in which natural resource revenue leads to waste is because there is little incentive for a country with an abundance of natural resource wealth to gather taxes:

> When government must finance its activities through general taxation, it must interact and negotiate with taxpayers, giving citizens greater opportunities for holding their leaders accountable. But, having funds available from natural resources, especially when production involves a concentrated few, enables government leaders and others with de facto control to pursue their own agenda. (World Bank 2003a :151)

This has a two-fold impact; the Government's accountability and responsiveness to its citizens is weakened, and less revenue is generated. Generating less revenue from other industries means the Government becomes even more dependent on natural resource revenue and therefore more vulnerable to volatility in natural resource income.

Stevens' (2005) review of how countries have avoided the resource curse suggests that planning, expenditure and human capital are central to the solution. Botswana is often used as an example of a country that has managed its natural resource wealth well and Stevens says Botswana instilled fiscal discipline and adhered to its development plan to develop physical and social infrastructure, which included spending much on social services. Stevens (2005) also posits that highly competent senior bureaucrats (who form groups) are also a factor common to countries that have successfully avoided the resource curse (in Chile they are called 'the Chicago Boys', in Indonesia they are 'the Berkeley Mafia' and in Malaysia they are 'the Backroom Boys').

Capacity or human capital (the skills and knowledge of workers which contributes to productivity) is a factor that several authors (e.g. Gylfason 2001; Manning 2004) have identified as influencing economic growth. Human capital is required to manage natural resource wealth well and Manning (2004) argues that low levels of human capital can have a negative effect on the management of natural resource revenue resulting in a lower rate of (or decline in) economic growth. Manning suggests that this factor may be more detrimental than natural resource wealth itself:

> Low levels of human capital in resource-rich countries serve as a transmission mechanism that creates the resource curse. Thus, low levels of human capital directly hinder economic growth in resource-rich countries, not the actual natural resource endowment. (Manning 2004 :76)

This can be explained further by considering the difference between giving $500 to someone saving for their first family car and giving $500 to someone who has a drug habit. The car buyer is likely to manage the influx of wealth well because they have the systems in place for managing their wealth and the interests of others (as well as their own) in mind, whereas the

drug user is likely to spend the $500 immediately, without consideration of the long term effects of that decision. Similarly, civil servants who are experienced and educated are more likely to manage natural resource wealth well. Woolcock (2001) described the kind of institutional and human capital that is needed to manage natural resource wealth well:

> Coherent, credible, and competent public institutions that are simultaneously actively engaged with the day-to-day affairs of their constituents… skilled employees who can relate to their colleagues, yet are also openly accountable for their actions, able to make timely responses to crises and opportunities alike, and are in touch with the ongoing concerns of those they feign to serve. (Woolcock et al. 2001 :80)

So far this chapter has explained the three themes of the institutional resource curse literature; rent-seeking and corruption, resource-related conflict and natural resource revenue waste. Natural resource revenue can have a deleterious effect on achieving sustainable development because of the way it affects institutional quality. However, there are other factors that determine institutional quality (and sustainable development for that matter). Natural resource revenue is managed by institutions, therefore, there must be an iterative relationship between institutions and natural resource revenue. That is, whilst natural resource revenue impacts on institutional quality, at the same time it must be that institutional quality determines how well natural resource revenue is managed.

2.3 Institutional quality affects management of natural resource revenue

Section 2.1 explained that natural resource wealth may affect economic growth and sustainable development. Section 2.2 then explained that research on the resource curse suggests the problem with natural resource wealth may in fact be its impact on institutional quality, which, in turn, affects economic growth and sustainable development. However, there are many other variables in determining economic growth and sustainable development. Woolcock, Pritchett et. al. (2001) noted some other growth-reducing factors: '…isolationist trade policies, deficient public services, unfavourable geography, political instability, lack of financial depth, high aid dependence, and low social capital' (Woolcock et al. 2001 :79). If a country has natural resource wealth and experiences corruption, conflict or revenue waste it does not necessarily follow that it is 'resource-cursed' because the poor institutional quality that leads to growth reduction may be for other reasons. The exploration of the distinction between a 'curse' (which bears all the hallmarks of a natural resource curse but, is not a corollary of natural resource wealth) and a 'resource curse' is an area of theory that has been given less attention in the resource curse literature.

Where institutions are already weak the effect of natural resource wealth on their quality might be to improve or to have negligible effect on them. Where institutions are strong they may actually prevent the resource curse. The World Bank's research supports this finding:

> The importance of institutions has emerged as a key aspect of the debate. In the context of a viable social contract, based on widely agreed formal and informal rules for the allocation of resources and the settlement of grievances, institutional arrangements can be sufficient to restrain opportunistic behaviour and the violent expression of grievance. (World Bank 2003a :148)

If productive institutions are weak and destructive institutions are strong, the reasons for this institutional environment must be clearly identified, so that institutional effects resulting from an influx of natural resource wealth are distinguished from institutional effects resulting from other factors. Further, we need to understand what lies at the heart of strengthening productive institutions and weakening destructive institutions.

2.3.1 Distinguishing natural resource wealth-related challenges

Distinguishing whether factors that lead to economic stagnation or institutional decline are the result of natural resource wealth, or other factors, is difficult. A country may be cursed by corruption, conflict or poor revenue management, but these are not intrinsic to natural resource wealth. Indonesia, for example, experiences corruption and conflict, but is considered, by some, one of the countries that has avoided the resource curse (e.g. Rosser 2007). Stevens (2005) mentions this difficulty, of determining the source of a countries' problems being natural resource-related or not, but this difficulty is not addressed thoroughly in the literature. This section will explore a range of challenges that may also contribute to economic decline in resource-rich economies or render them more vulnerable to the resource curse.

A country with high levels of poverty may be retarded in its attempts to stimulate economic growth because poverty relates to low levels of education. Poverty and low literacy rates would be another cause of limited capacity within the civil service. Increased rates of poverty in a population may also be the cause of civil conflict (Ross 2001) and if a government is simultaneously poor and can not afford to pay its civil servants well, relative to the private sector, this may be a cause of corruption[26].

To complicate matters further, aid (or donations) can have effects similar to an influx of natural resource wealth. Poor countries are likely to be those that receive aid and where those countries also exploit natural resources, in some cases, it would be difficult to discern whether the weakening of institutions resulted from the aid contributions or the natural resource wealth (or

[26] 'Low wages in the civil service relative to wages in the private sector are a source of low-level corruption. When civil service pay is too low, civil servants may be obliged to use their positions to collect bribes as a way of making ends meet, particularly when the expected cost of being caught is low' (Mauro 1997 :5).

the poverty). There is increasingly more research about the similarities between the effects of aid and natural resource wealth (Moss and Subramanian 2005; World Bank 2003a)[27]. Both are sources of revenue that provide proportionally large amounts of revenue in return for little effort and both lead to economic difficulties (affecting the exchange rate, problems with absorption, etc.) and institutional decline (corruption, poor financial management and waste, etc.) ultimately benefiting the rich more than the poor. There are a couple of pertinent differences between aid and natural resource wealth though. Aid is more often spent within transparent frameworks because of donor requirements (with the strength of the donors' institutions supporting the expenditure rather than a state's). Further, aid can be directed, somewhat, by external and potentially independent actors who may be able to exert some influence over the way in which that revenue is managed[28]. Moss and Subramanian (2005) note:

> The role of strong public institutions in providing the framework for long run development is well-established. Economists and donor agencies have all come to recognize that institutional development is a key determinant of development success... Donors have been increasingly selective in skewing aid toward countries thought to have institutional environments best able to utilize new funds. (Moss and Subramanian 2005 :3)

Conflict is another challenge that may contribute to economic decline, but may not be natural resource related. Mkandawire (2002) said 'While the focus on raw materials in some of Africa's major wars has usefully drawn attention to the need to cut off the access of rebel movements to these "conflict" resources... they are not the cause of the wars' (Mkandawire 2002 :207). Conflict may arise for many reasons, which may not be related to natural resources. Thus, the battle for control of resource rents must be distinguished from ethnic or religious tensions, for example. As discussed previously, conflict can impact on the strength of institutions and given some 'institutions are known to exhibit stubborn persistence' (Sala-i-Martin and Subramanian 2003 :18) it follows that institutional inadequacies may arise from past conflicts. So states that are attempting to rebuild their institutions (post-conflict states) are automatically vulnerable, regardless of their potential natural resource wealth. Similarly, states that have been released from colonial ties, particularly where the coloniser neglected to invest in the local institutions, will be struggling to develop their institutions and will be vulnerable.

Distinguishing non-natural resource related grievances from rent-seeking is a theme that has only recently developed in the literature. Whilst some (Berdal and Malone 2000; Collier and Hoeffler 2000) make a distinction between greed and grievance, Hausmann and Rigobon (2002) point out that greed is not specific to resource-rich economies. Thus, the term 'rent-seeking' will

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[27] Subramanian has written on the effects of both aid and natural resource wealth with essentially the same findings.

[28] Actors involved in donating to natural resource projects are increasingly being asked to consider 'should donors contribute to natural resource projects where institutions are known to be weak?' This question has been given particularly currency in recent times because of the failure of the Chad pipeline. A discussion has centred on whether donors have a duty of care in deciding whether to invest in proposed natural resource exploitation (see Horta n.d.).

be used instead of greed. Regardless of the terminology used, Collier and Hoeffler say that conflict may arise for reasons which are not related to seeking natural resource rents and these instances should be distinguished from those which are resource-related. Banks (2005) gives examples from Melanesia where conflict has arisen from communities' grievances with resource operators and these grievances are not about access to money. Banks adds that in the case of Bougainville 'no amount of money would satisfy their grievances' (Banks 2005 :187). Another example of resource-related grievances may be conflict arising over who has control over decision-making.

As a result of the discussion so far in this section, the simplistic nature of the way in which the relationship between natural resource revenue and institutions has been viewed in the past can be understood. This traditional view (which was depicted in Figure 2.3 on page 19) assumes institutions were stable and effective when an influx of natural resource revenue occurred, and had the potential to divert a state to become resource cursed. As the discussion has illustrated, institutions are not necessarily stable or effective when the natural resource revenue impacts. Figure 2.4 accounts for the condition of institutions prior to an influx of natural resource revenue. This new framework is cognisant that a country may be 'cursed' irrespective of its natural resource wealth.

If a country has strong productive institutions and weak destructive institutions it is more likely to already be on the path to sustainable development. In this scenario, an influx of natural resource revenue may divert a state to be resource cursed (the traditional view). However, if a state is already cursed, and its productive institutions are weak and its destructive institutions are strong, then it is unlikely that natural resource revenue will enable sustainable development. Rather, a state will either continue to be cursed, or if the natural resource revenue inhibits the productive institutions, and strengthens the destructive institutions further, then it may be resource cursed. Natural resource revenue may be able to change a state from being cursed, or resource cursed, to one that enables sustainable development, but it would need to address the other mitigating factors that caused the institutions to be cursed initially.

Sala-i-Martin and Subramanian (2003) suggest that getting the management of natural resource wealth right could contribute to improving institutional quality, and the World Bank (2003) suggests that a state can take advantage of resource rents to promote inclusiveness in access to assets and encourage social cohesion and institutional development. However, it is hard to imagine natural resource revenue, alone, being the 'manna' from heaven that resolves a state's institutional deficiencies.

The pre-existing quality of institutions is important to an understanding of how natural resource revenue impacts on a state. This leads to the question of what other factors may contribute to institutional quality. The discussion, so far, has indicated that human capacity or human capital

is one of the key factors contributing to institutional quality. Social capital is another factor contributing to institutional quality.

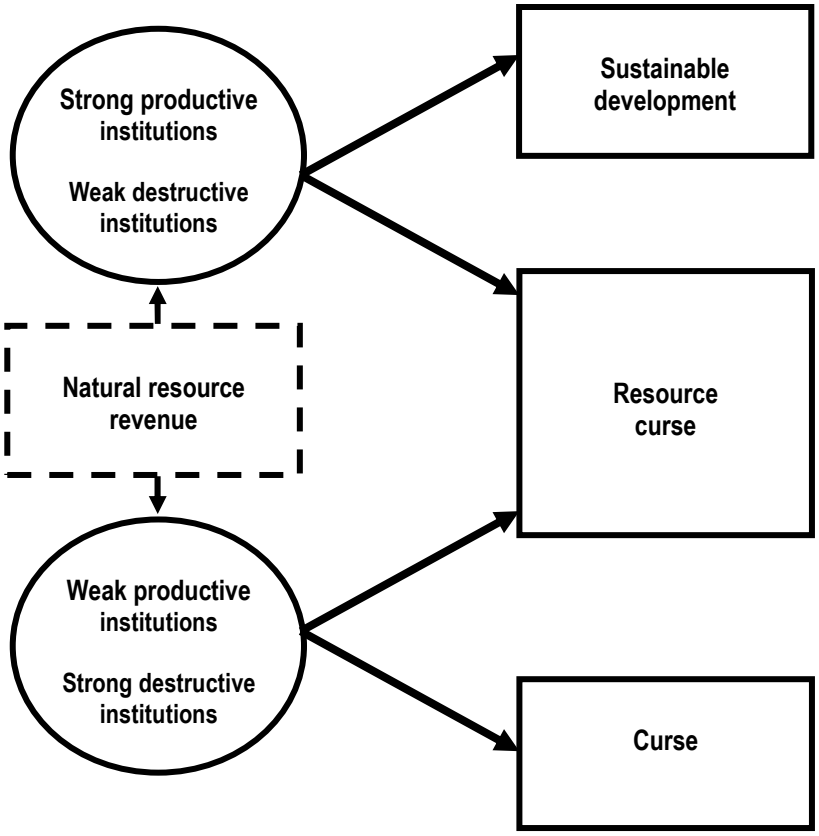

Figure 2.4 **The impact of natural resource revenue when institutional conditions are considered**

2.3.2 Social capital and institutional quality

The final contributor to institutional quality that will be explored in this chapter is social capital. If institutional quality is the key to managing natural resource wealth well, then what makes institutions strong or robust must be understood. The literature on social capital is relevant to this exploration of the challenges of natural resource wealth yet there are few authors who give anything more than a cursory mention of social capital in exploring the resource curse despite the obvious relevance to the phenomena explored in section 2.2.

'Social capital', according to Putnam (1993; 1995) [29] who is most synonymous with the relevant literature, constitutes three features of social organisation that facilitate coordination and

[29] Putnam declares that Coleman (1988) deserves primary credit for developing the social capital theoretical framework.

cooperation for mutual benefit (social networks such as voluntary associations, moral obligations or norms, and shared values such as trust). Although many refer to social capital in the way Putnam exposes it, there are a variety of definitions[30]. Others (e.g. Bourdieu 1980; Coleman 1988; Fukuyama 2001) may explain it differently, and from different disciplines (sociology, economics or political science)[31]. However, this thesis is not about social capital so its precise definition is not as important as its inherent relevance and connection with our understanding of institutional quality. Hence, reviewed here are the concepts of social capital relevant to managing natural resource revenue well[32].

The crucial point is that our understanding of social capital has close connection with our understanding of institutions, and informal institutions in particular. Knowles (2005) explores this connection and identifies social capital as a concept similar to what North (1990) defined as an informal institution and suggested, therefore, that social capital was part of an institutions continuum. This is reflected in the World Bank's (2003) perception of social capital and institutions illustrated in Figure 2.5. Some authors (e.g. Harper 2001; Stanley 2005; World Bank 2003a)[33] have called social capital the 'glue' that enables cooperation. Social capital might also be understood as a will or desire to participate in informal institutions, such as networks, norms, and conventions (like standing in a queue) or traditions, because of trust, shared values or expectations. Social capital is regarded as the 'stuff' that enables participation (in both formal and informal institutions) and in that sense it can be seen as a pre-condition for participation, and therefore a necessity for generating productive institutional strength and managing natural resource wealth well.

Social capital requires those participating to have faith or confidence in something (perhaps an institution) or someone. Reserves of social capital are built up as a result of repeated interactions. Knowles (2005) notes that social capital can be eroded quickly and Putnam (1995) notes social capital takes a long time to build. When reserves of social capital are drawn on and the result or outcome is negative (e.g. you trust your brother to mind your wallet and he spends your money) the stocks of social capital are depleted and there may be less will to participate in the future. Similarly, positive outcomes generate greater stocks of social capital, resulting in increased participation. Informal institutions (such as networks, norms and conventions),

[30] Siisiainen (2000) explains the difference between Putnam and Bourdieu's perception of social capital.

[31] Fukuyama (2001) describes social capital as 'an instantiated informal norm that promotes co-operation between two or more individuals. In the economic sphere it reduces transaction costs and in the political sphere it promotes the kind of associational life which is necessary for the success of limited government and modern democracy' (Fukuyama 2001 :7).

[32] Reviews of the social capital literature are undertaken by Harper (2001) and Stanley (2005).

[33] The Website of the World Bank (n.d.-b) defines social capital as 'the institutions, relationships, and norms that shape the quality and quantity of a society's social interactions… not just the sum of the institutions which underpin a society, it is the glue that holds them together'.

however, can not be eroded so quickly. The norm of forming a queue and corruption are examples of informal institutions that might be difficult to erode.

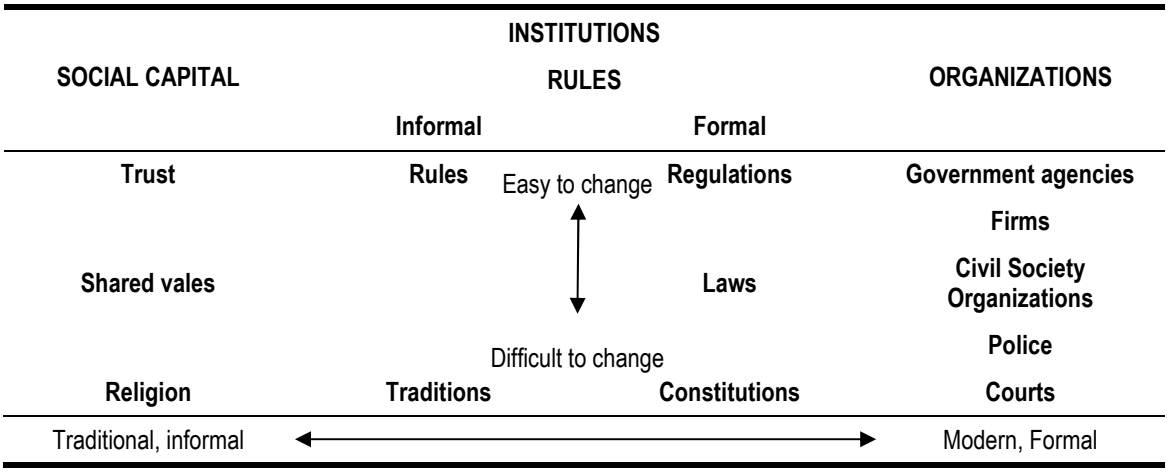

Figure 2.5 **Social norms, rules and organizations for coordinating human behaviour (World Bank 2003a :38)**

Figure 2.5 indicates that trust is a form of social capital, but there are varying views on the relationship between trust and social capital in the literature. Depending on which view you support, trust can be a form of, or an outcome of social capital. Regardless, the literature suggests there are different types or levels of trust. Putnam (1993) and Offe and Fuchs (2002) refer to thick and thin trust; thick trust is the trust you have in those you interact with regularly (more intimate social networks) and thin trust is the trust in those that you do not know or know less well, sometimes called generalised trust (such as in other community members). Fukuyama (2001) talks about the concept of 'radius of trust' and the idea that individuals inhabit different networks of trust, some radii being larger or smaller than the group itself. Fukuyama's (2001) networks of trust are presented in Figure 2.6. Fukuyama describes how (what shall be described as) an 'imbalance of trust' can have negative consequences:

> In many Latin American societies, a narrow radius of trust produces a two-tier moral system, with good behaviour reserved for family and personal friends, and a decidedly lower standard of behaviour in the public sphere. This serves as a cultural foundation for corruption, which is often regarded as a legitimate way of looking after one's family (Fukuyama 2001 :12).

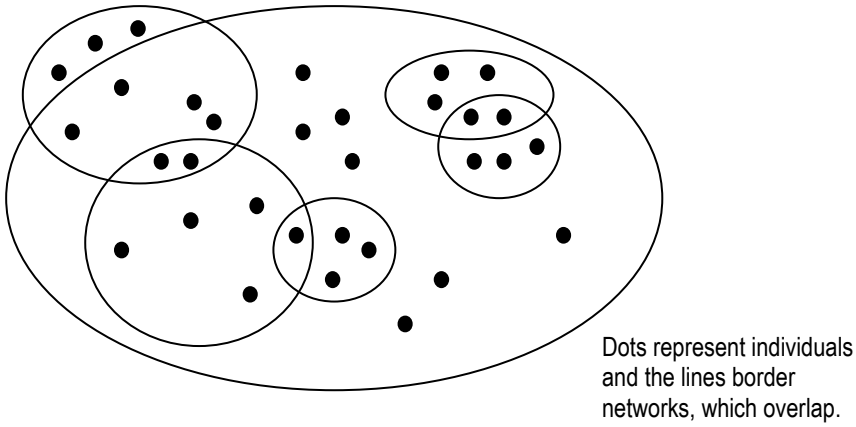

Figure 2.6 Networks of trust (Fukuyama 2001 :9)

Offe and Fuchs (2002) observe that trust is the 'absence of fear or suspicion concerning the likely behaviour of others' (Offe and Fuchs 2002 :191). Thus, very thick trust within a group where there is little or no thin trust in outsiders can cause problems, as can the loss of opportunity for interaction with members outside a group and the benefits that interaction can bring (information, communication and economic development, etc.). Fukuyama (2001) explains the effect of this phenomenon:

> At best, this [lack of social capital] prevents the group from receiving beneficial influences from the outside environment; at worst, it may actively breed distrust, intolerance, or even hatred for and violence towards outsiders (Fukuyama 2001 :14).

The different types of social capital have also been classified to denote a kind of proximity (Harper 2001; Knowles 2005). 'Bonding' social capital refers to that which occurs in close (homogenous) groups, such as families or members of religious organisations. 'Bridging' social capital is that amongst distant friends, colleagues and some associations. The concept of 'linking' social capital applies where individuals or groups have a hierarchical relationship to each other, such as interactions between an individual and a state. Figure 2.7 combines the concepts of radii of trust (borrowed from Fukuyama) and the different types of social capital from the perspective of an individual's interactions both within groups and with other individuals or groups. Depending on an individual's context the groups, or other individuals, would be placed at different lengths (from the individual) and at different levels of social capital. So each individual's version of this figure would reflect their cultural and social difference. Some individuals may feel less connected to family than members of their local sporting club for example. Trust and relationships are essential to the strength of institutions, whether they are productive or destructive, and thus individuals and their interactions with institutions are important. As Matthews (1986) was quoted earlier in this chapter, institutions are about inter-personal relationships. Thus the individual is the focus of Figure 2.7.

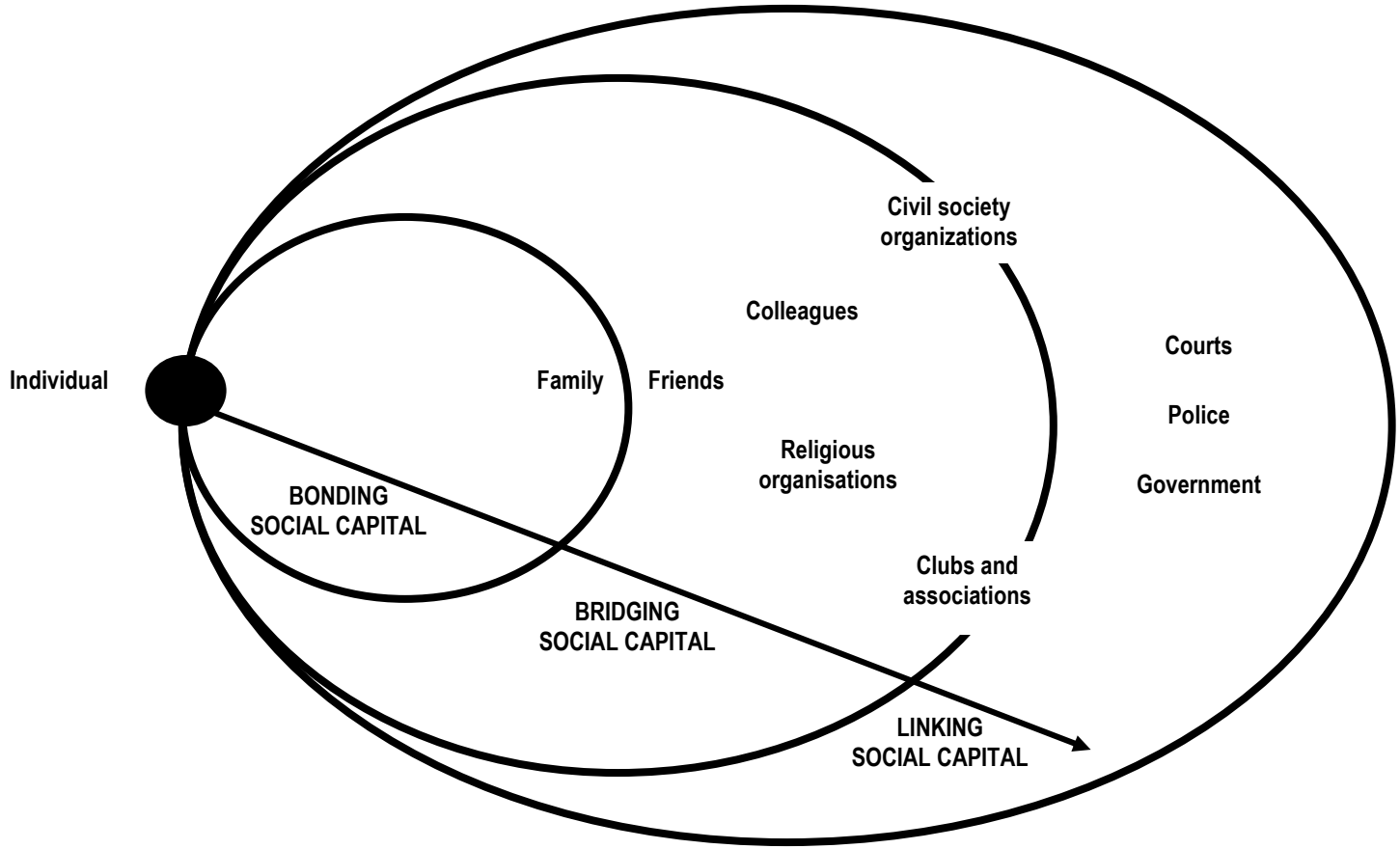

Figure 2.7 **Forms of social capital depicted within radii of trust**

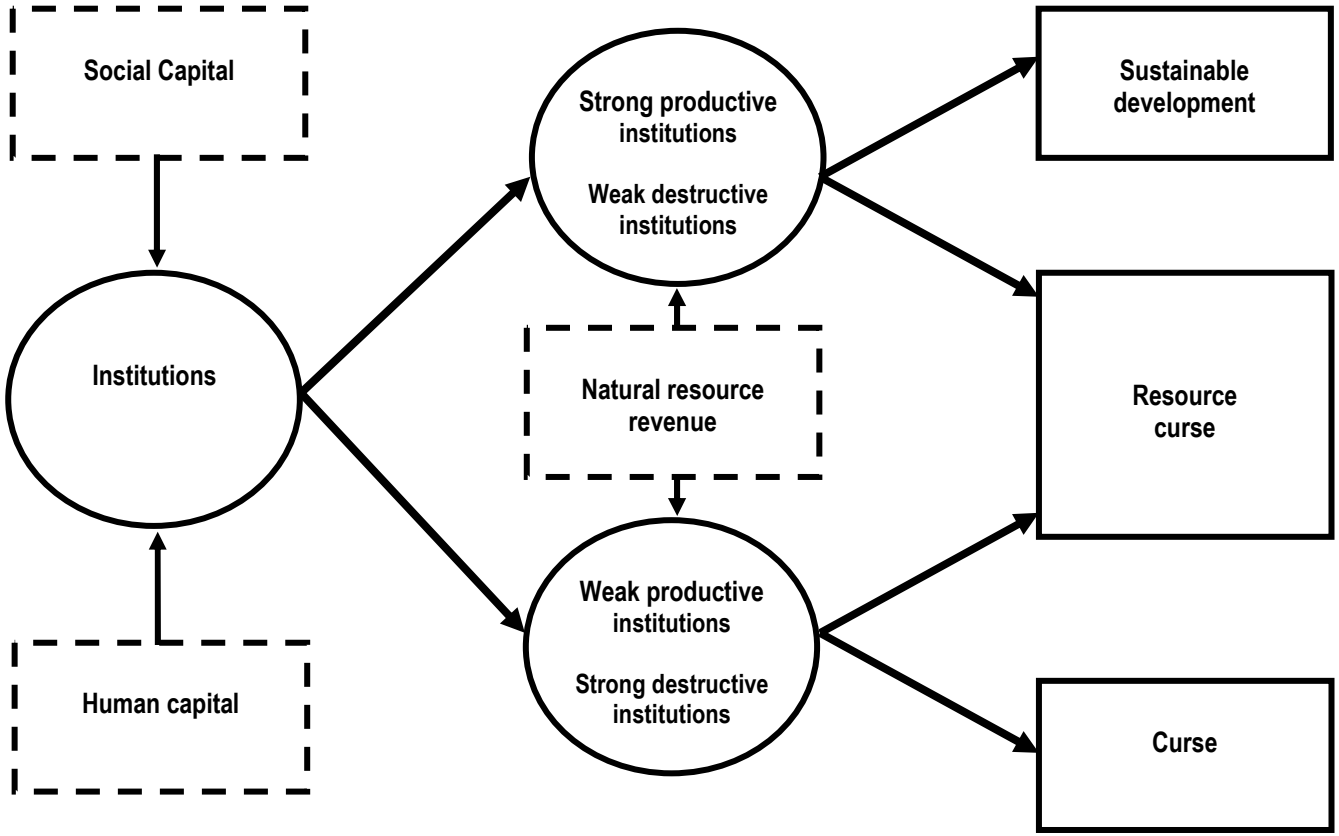

Figure 2.8 **A framework for understanding the relationship between natural resource revenue and institutions**

The discussion, so far in this chapter, has highlighted ways in which peoples' interactions are crucial to the success of managing natural resource revenue well. Given that human capital is also crucial, it is necessary to include both these aspects into the framework. Figure 2.8 (on the preceding page) illustrates the framework for understanding the relationship between natural resource revenue and institutions when social and human capital are incorporated. This is the framework on which the analysis used in this thesis is based. The figure illustrates that social and human capital, which shall sometimes be referred to as 'the two caps', are important to understanding in what circumstances natural resource revenue can enable sustainable development. When the capacity of individuals is minimal and the social capital between civil society and government is lacking, productive institutions, such as transparency and accountability might be weak. This section closes with a discussion about participation, which will provide insight into a practical application of the framework.

2.3.3 Participation and managing natural resource revenue

Participation is an indicator of social and human capital (the 'two caps'), and also a measure of the strength or weakness of an institution. If an institution exists, an individual will participate if they have trust in the institution, and if they have the capacity to do so. This is an important aspect of managing natural resource revenue. If individuals participate in the productive institutions that are established to manage natural resource revenue, the institutions will be strengthened. If social capital, or trust, in those productive institutions is lacking, the institutions will have less successful outcomes.

In theory, a democracy provides opportunities for individuals to participate, to have access to information, and allows differing viewpoints to be heard. A corollary and a benefit of a democracy is that individuals, through opportunities for repeated interaction, have the opportunity to judge information and make decisions of their own volition. One of the most crucial relationships in a democracy is that between individuals and a state. But, this relationship requires social and human capital to enable participation. The 'two caps' are important in managing natural resource wealth well because, although a state establishes the productive institutions that determine the way in which revenue is saved and spent, it is the role of non-state actors to participate in those institutions. An individual can only participate in those institutions if they trust the State and the institution, and they have the capacity to participate.

When a state develops 'good' relationships with its constituents through establishing mechanisms that encourage participation, and individuals respond by participating actively, this augurs well for the wise management of natural resource wealth. An example of an institution that encourages participation is consultation. Where consultation is sincere it provides a valuable opportunity for a state and individuals to cooperate and generate decisions (or policies, laws, etc.) that reflect a range of interests larger than those of the public servants. A productive

consultation indicates the existence of social and human capital. However, Pratchett (1999) explains there is a relationship between public participation and representative democracy, and if the objective of undertaking a consultation is to enhance or supplement democracy then it must be both representative and responsive. A sincere consultation is therefore one that attempts to be both representative and responsive. Regular definitions of, and mechanisms for, consultation tend to focus on representation (rather than response). The World Bank and others have adopted the following definition of public consultation:

> The process of engaging affected people and other interested parties in open dialogue through which a range of views and concerns can be expressed in order to inform decision-making and help build consensus. To be meaningful, consultation should be carried out in a locally appropriate manner, for example with information in local languages distributed in advance. (World Bank n.d.-a)

The aim of consultation is generally to ensure that a wide range of views (including minority opinions) is considered, and that the outcome reflects consideration of those views. However, sometimes, as in circumstances where the issue is technical, and individuals do not have the capacity to participate in a way that contributes to the outcome, the primary benefit of consultation is that it provides an opportunity for individuals to learn about the issue. If a state is cognisant of the lack of human capital it may not expect participation to deliver contributions to decision-making. However, the opportunity for repeated interaction and cooperation between individuals and a state, which consultation offers, can create stronger institutions.

Similarly, social and human capital are essential to the success of institutional mechanisms to ensure transparency and accountability. A state can establish mechanisms of transparency, but if the outcomes are not seen, or not understood, then they can not be actively observed, and a state can not be held to account. Unfortunately, in poor countries, literacy and low standards of education result in a lack of human capital, which can mean that there are few individuals that have the capacity to hold the Government to account. The mechanisms of transparency and accountability are weakened further if the observers do not have faith in, or trust, the mechanisms, or the State. These are not reasons to avoid establishing institutions of transparency and accountability. On the contrary, institutions of transparency and accountability can enhance social and human capital. Dovers (2005) writes:

> Transparency and accountability are prime antidotes to the emerging problem in modern systems of government of declining trust in public institutions. In a policy domain requiring long-term collaboration between government and non-government players such as sustainability, cynicism, erosion of trust, or even uncertainty as to why policy and management outcomes have not been satisfactory, represent serious risks. Where there will be instances where secrecy or confidentiality may be warranted to protect privacy or commercial interests, this should be the exception rather than the norm... Participation,

> transparency and accountability are linked, and all are determinants of policy success and failure. (Dovers 2005 :158)

Transparency and accountability require participation, but they also rely on some forms of social capital. A lack of trust in the State can be exacerbated by an imbalance of different types of social capital. In section 2.3.2, a distinction was made between bonding (between an individual and family members) and linking social capital (between an individual and the State). If stocks of bonding social capital are large, family members may distrust outsiders (resulting in poor stocks of linking social capital). Such close ties between a public servant and his family and friends within the context of weak institutions (indicating a lack of linking social capital) may result in nepotism (e.g. appointing family members to state positions or winning tenders) or corruption (as the individual's priority is to look after those close to him rather than the public he was appointed to serve). When there is a lack of linking social capital, state institutions are likely to be weak. When productive institutions are weak, strong destructive institutions (e.g. corruption) are likely to thrive. Putting in place productive institutional mechanisms is just the first step to ensure wise natural resource revenue management. The greater challenge is to ensure that social and human capital that supports those productive institutions is developed.

2.4 The sustainable development context

The final section of this chapter provides an understanding of sustainable development within the context of this research. Sustainable development has many definitions and natural resource management (or environment) is given varying status amongst them. Thus, it is necessary to specify the realms of what themes will be explored within this thesis. This research assumes that sustainable development is the goal of any state, in this case Timor-Leste. This immediately distinguishes this research from that which uses economic growth as its reference point. Often, particularly in the economic literature, institutional quality is regarded in terms of its effect on economic growth, however this presents a limited view of the world and does not reflect the wider goals of sustainable development.

The most commonly held understanding of sustainable development comes from the World Commission on Environment and Development. Sustainable development is defined in 'the Brundtland Report' as 'development that meets the needs of the present without compromising the ability of future generations to meet their own needs' (World Commission on Environment and Development 1987 :87). The report explains that sustainable development contains within it two key concepts:

> The concept of 'needs', in particular the essential needs of the world's poor, to which overriding priority should be given; and the idea of limitations imposed by the state of technology and social organization on the environment's ability to meet present and future needs. (World Commission on Environment and Development 1987 :87)

By implication, sustainability is about the finite nature of the earth's resources and the question of when and how much natural capital is depleted. Economic approaches suggest that natural capital can be substituted by human capital thereby 'maintaining' capital as a whole and achieving sustainable development (sometimes called 'weak' sustainability):

> Mainstream economists consider that sustainable development based upon the exploitation of finite mineral resources is feasible, despite the apparent contradiction, provided there are practical substitutes for the depleting natural asset. The critical assumption is that sustainability does not require that the natural resource be passed on to future generations. After all, the natural resource may be rendered worthless by the discovery of superior resources elsewhere or technological substitutes. Rather, sustainability requires that the capacity to sustain the income stream from the mineral asset needs to be passed on to future generations. This calls for the income generating capacity of the depleted mineral to be replaced with alternative wealth-generating assets (for example, factories or an educated workforce) (Auty 2003 :9).

An alternative (perhaps less practical) view is that any reduction in natural capital that can not be regenerated means sustainable development can not be achieved. This research is about petroleum revenue which means that it is taken as given that natural resources will be exploited, and therefore the concept of sustainable development used in this thesis is aligned with the former (i.e. natural capital is substitutable) rather than the latter (i.e. any reduction in natural capital is not sustainable development).

Dovers (2005) points out that the term 'sustainability' has many and varied definitions, but as it is a 'higher order social goal' (like democracy, equity, public health or justice) it does not require a definition to make progress towards its achievement:

> Higher order social goals such as democracy or justice are still being argued about and pursued, centuries after they emerged, even though in modern societies they have far more substantial institutional and policy underpinnings than the goal of sustainability has. (Dovers 2005 :9)

Thus, if action can proceed without agreement of a rigid definition, then the goal of sustainable development can be approached (as opposed to remaining in a static or degrading state). This research is limited to exploring management of petroleum revenue in Timor-Leste. Thus, there are two principles or themes of sustainable development that are more relevant. First, sustainable development requires that both the needs of current and future generations are considered. The concept of needs is particularly pertinent to this research because 'needs' (as opposed to wants) are clearly better satisfied in the developed world than in countries, such as Timor-Leste, where food, shelter and protection from conflict are not satisfied. In this sense, as a state, Timor-Leste has a different balance to other countries when it comes to servicing this generation versus future generations' needs. Thus, questions of how much of the natural resource stock to exploit, and when, require a different approach and the World Commission on

Environment and Development definition (above) acknowledges this difference by referring to 'the world's poor'. Thus, sustainable development, in this research, is about the sustainable development of Timor-Leste, the State, and does not consider the global, or specifically environmental, dimensions of sustainable development. In this sense it is appropriate to ask the East Timorese what their needs are, and this is where the value of the research lies.

The second theme of relevance to this research is that information is crucial to sustainable development, and as a corollary, relationships are also crucial. Thus, the link between the themes of transparency and participation (highlighted earlier) and the goal of sustainable development is apparent. Even more important, if information is not known or available, is the need to act conservatively. That is, in terms of satisfying future generations' needs, without confirmation of (or at least some kind of information about) the future availability of stocks of natural or other capital, it is necessary to judge whether current stocks should be depleted (without reducing the amount of stocks available for future generations).

In summary, and in terms of Timor-Leste's sustainable development, it is necessary to exploit petroleum resources to generate revenue to establish and maintain the state of Timor-Leste but, as this chapter has shown, the management of petroleum revenue has its challenges and even if revenue does not disappear as a result of corruption or conflict, it is crucial that the way in which it is managed has regard to both current and future generations. The needs of current generations of East Timorese are not being met at this time, but at the same time the natural resources available are finite and the stocks are not enormous. Either some natural resources must be conserved, or some must be converted to financial capital so that future generations may benefit and their needs are also met. Unfortunately, determinations of the wealth of current natural capital, the value of its wealth upon exploitation and its potential wealth in the future are inexact, and by their nature unknown. Thus, an element of conservatism in planning and managing Timor-Leste's petroleum revenue is warranted.

This chapter has outlined the challenges of managing natural resource wealth. Natural resource wealth may contribute to sustainable development or to a resource cursed state depending on how well that wealth is managed. A state may be 'cursed' (that is, it may face the challenges of conflict, corruption and financial mismanagement and experience a decline in economic growth and other indicators) regardless of how well its natural resource wealth is managed. There are paths that lead to sustainable development and there are paths that lead to a state being cursed (by natural resource wealth or otherwise).

The literature on the resource curse has evolved from being economically focussed to that which explores the issue from an institutional (sometimes called social) perspective. Avoiding the resource curse is not simply an economic challenge. Institutional quality is perhaps more crucial in determining whether a state can avoid the resource curse, both because natural resource revenue affects the quality of institutions and because the quality of institutions affects how well

natural resource revenue is managed. Stocks of social and human capital, the ‘two caps’, are essential to establishing strong institutions, and building understanding and relationships between individuals, or civil society, and the State. The State is at the core of the solution to managing natural resource wealth well, and enabling sustainable development, but civil society also has a role to play.

Chapter 3 TIMOR-LESTE'S INSTITUTIONAL LANDSCAPE

Chapter Two described the pitfalls of natural resource revenue management that involve institutional quality. The aim of this chapter is to review Timor-Leste's institutions and highlight those aspects of East Timorese institutions that are relevant to an understanding of how well Timor-Leste might manage its natural resource wealth. An understanding of Timor-Leste's institutional history and the state of the nation today provides a necessary background and a context in which Timor-Leste's plans to manage their natural resource revenue wisely (described in the next chapter) can be assessed.

Like footprints of visitors past, the institutional dynamics of Timor-Leste's history are still evident today. This chapter describes these institutional footprints left by the Portuguese, who colonised Timor-Leste for over 450 years, and the Indonesians, who occupied Timor-Leste for 24 years, and also by the United Nations, which administered Timor-Leste for two and a half years. Timor-Leste achieved independence only recently (in May 2002) so its own formal institutions remain in the developmental stages. In contrast, Timor-Leste has many informal institutions that have developed over time and are strong.

Today, the social and economic indicators reveal the effect of institutions, old and new, formal and informal. The indicators reveal the extent of poverty and low levels of development and show Timor-Leste to be a poor, small country with huge challenges to change the course set by its history and precedent. The State appears to be cursed already, with instances of corruption, conflict and weak institutions. Against this backdrop, Timor-Leste's petroleum revenue is approaching like a tsunami[34], both in terms of its size relative to other revenue generating options, and also the height of the hopes that it will wash away the woes of a nation. Timor-Leste's petroleum revenue is required to meet immediate needs, but its wise management is necessary to ensure future generations' needs are also met.

3.1 Timor-Leste's institutional history

Timor-Leste's historical experience has left profound institutional (mostly informal) legacies that remain evident today. These institutional legacies are explored in this section because they are relevant to the way in which petroleum revenue is managed today and will be in the future. Portuguese colonisation, Indonesian occupation and administration by the United Nations have

[34] Amandio Gusmão Soares (of the Government of Timor-Leste's Oil and Gas Directorate) expressed Timor-Leste's potential petroleum wealth in this way during a presentation at a Petroleum Revenue Workshop (Gusmão Soares 2006b).

affected this tiny and fragile nation in many ways. Timor-Leste's own traditional culture also plays a part in this history.

3.1.1 Colonisation by Portugal

Timor-Leste was a Portuguese colony for over 450 years, from around 1515 until 1975[35]. Initially attracted there by the trade in sandalwood, Portugal's first two centuries in Timor-Leste revolved around missionary activities, and it was only in the early 18th century that a seat of government was established there. On the whole, this period of colonisation in Timor-Leste's history is often characterised as one of neglect as Portugal did little to assist Timor-Leste to develop until the 1960-70s. Dunn (2003) reminds us to keep Portugal's size in mind, and also that their power declined over the period they colonised Timor-Leste. These factors affected their ability to provide for Timor-Leste[36]. As their most distant colony, Timor-Leste was a low priority for Lisbon (the seat of Portuguese government) to attend to, and received little attention or resources.

Portuguese management of Timor-Leste's forest resources, particularly sandalwood, was indicative of its lack of concern for the long-term welfare of the colony and its local communities. Timor-Leste's sandalwood was renowned and highly lucrative, and Portugal did not hesitate to plunder the reserves ensuring that revenue from this resource dwindled to a trickle (McWilliam 2003)[37]. Essentially the Portuguese managed the forest resources in exactly the opposite way (i.e. unsustainably) to which Timor-Leste needs to manage its petroleum resources (i.e. sustainably). Dunn (2003) writes that with the decline of the trade in sandalwood, and Portugal's position in Europe in the 19th century, that Timor-Leste became more and more isolated and investment in the colony declined further.

The Portuguese lack of enthusiasm for Timor-Leste's welfare is illustrated by their feelings about going to live there. 'A posting to Dili was a kind of penance… seldom visited by top-ranking officials...' and Timor-Leste was seen as 'a poor, backward territory with an uncertain

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[35] The Portuguese were not the first *malae* (foreigners) to set foot in Timor-Leste. The sandalwood trade bought the Chinese to Timor-Leste some decades earlier and thus the seed of a Chinese-East Timorese community was born (Dunn 2003). The Chinese have played a significant role in the economic development of the country throughout the years. Despite Chinese people having lived in Timor-Leste for generations, they are still distinguished as foreigners today.

[36] Dunn (2003) writes 'If we take account of Portugal's small size and weakness as a European power after the seventeenth century, it is remarkable that Lisbon was able to maintain an empire, let alone an outpost like East Timor... no funds available for its social or economic development. In Lisbon, Timor was known for its modest production of high-quality coffee and as a safe, distant place of exile for opponents of the Salazar regime... On the eve of World War II the capital Dili, had no electricity and no town water supply; there were no paved roads, no telephone services (other than to the houses and offices of senior officials) and not even a wharf for cargo handling' (Dunn 2003 :18).

[37] McWilliam (2003) reported 'Sandalwood continued to figure in revenues from the Portuguese colony and was sold in declining quantities into contemporary times. However, the reputed great forests of sandalwood disappeared long ago... Sandalwood never accounted for more than 10 per cent of the colony's exports after 1920 and in 1926, the colonial forestry service officially prohibited the cutting of the tree' (McWilliam 2003 :312).

future' (Dunn 2003 :31). Yet Portugal's influence in Timor-Leste has left lasting legacies[38] and Dunn, in his very detailed account of Timor-Leste's history, notes that Timor-Leste was, in many ways, 'better off than the neighbouring Indonesian province' (Dunn 2003 :37)[39]. Unfortunately, the benefits of Portuguese colonisation were limited to an elite East Timorese. Education was available to only a few, but even then the quality of government schools was poor[40].

A better education was available from the Catholic schools, which further solidified the idea of a connection between the Portuguese and an elite East Timorese. Catholicism remains one of the greatest institutional legacies of Portuguese times. The first Europeans to arrive in Timor were Portuguese monks (Anon. 1930) and thus began the rise of the Catholic church in East Timorese culture. The lack of contact between the Portuguese and the wider population is evident in the fact that, by the end of colonisation, the number of baptised East Timorese Catholics was only about one third of the population (Dunn 2003). This is much lower than the 98% of East Timorese that are Catholic today (World Bank 2005b), which suggests that the rise of the Catholic Church during Indonesian times was significant politically, as well as culturally, and also shows that Catholicism no longer exists just within the realm of the elite.

The imbalance, between Portugal's interactions with the East Timorese elite and the local community, is also illustrated by the way in which Timor-Leste was administered. The Portuguese ruled the territory through the local kings and that rule was at least partially administered via the military[41]. Hohe (2002) provides analysis of the interaction between the East Timorese and the Portuguese (as well as the Indonesians and the United Nations). Most contact between local communities and the Portuguese government was for the purpose of

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[38] Some direct benefits from Portuguese times can be seen today. People whose parents or grandparents were civil servants during Portuguese times are relatively well off because their parents collect pensions from the Portuguese government.

[39] Dunn (2003) explained further, citing the experience of a visitor to Timor-Leste, who described a 'hospital in Dili [as] a "first-class institution, with a well-equipped operating room and a full staff of doctors... successful vaccination campaigns" ... Whatever the shortcomings of the Portuguese system, health and nutrition conditions appeared to have been no worse than in the adjacent Indonesian islands' (Dunn 2003 :37-38).

[40] In a UNESCO/Oxfam Report, Victorino-Soriano (2004) wrote 'During the Portuguese time, only a few boys and girls went to school… mostly the children of the Liurai and *chef de suco* [Chief of the Village] were sent to school… The few that benefited from the Colonial education system were the Assimilados (East Timorese who were assimilated into a higher standing) and Mesticos (those of mixed blood), while the Chinese and the Moslems ran their own [schools]' (Victorino-Soriano 2004 :26).

[41] Hohe (2002) found: 'A Portuguese commander headed each district, with civilian and military tasks, and a small number of soldiers. The commanders were responsible for peace in their districts and had to work with the local kings. The idea was to strengthen Portuguese rule by influencing the local kings and pacifying them... the choice of a new king had to be approved by the colonial government... The king's position was now replaced by the Portuguese administration at the sub-district level... Only at the very top level, the kings established relations with the Portuguese... the Portuguese were never in frequent contact with the population' (Hohe 2002 :573-574).

collecting taxes and often this was implemented via government-appointed East Timorese officials[42].

The way in which Timor-Leste was governed by the Portuguese may have ramifications for the wise management of petroleum revenue today. The Portuguese perpetrated a system that distinguished between an 'elite' and the people[43]. Today the distance between those in power and those in the villages is perceived to be great. Many of those with the power to make decisions continue to have strong links to Portugal and other Portuguese colonies (Phillips 2004; Toohey 2004). Mari Alkatiri (the former Prime Minister), Madalena Boavida (the Minister of Planning and Finance) and Anna Pessoa (the Minister of State Administration), are sometimes referred to as the Mozambique clique or the Mozambique mafia because they spent time in that country (also a former Portuguese colony) as East Timorese diaspora escaping the Indonesian occupation. During the crisis in April 2006[44], when Ana Pessoa was tipped to take over from Alkatiri as the Prime Minister, one critic said 'She's very Portuguese, very formal and it will be difficult for her to be accepted by the people' (Tigor Naispolos quoted in Kearney 2006). Some East Timorese are critical of the decision-makers and those with power in the Government because they did not fight in the local resistance during the struggle against Indonesian occupation.

As a result of these personal connections with Portugal, some recently created institutions also link to Timor-Leste's Portuguese colonial past and this has alienated critics further. The most notable of these is the choice of Portuguese as one of Timor-Leste's two official languages (the other being *Tetum*, a widely-spoken local language). Portuguese is the official language of instruction in schools, although teachers often rely on *Tetum* (or Indonesian) to explain things (World Bank 2004a). This language decision has alienated a large portion of the East Timorese community, mostly young men, who do not speak Portuguese because they were educated in Indonesian times and thus speak mainly Indonesian[45]. A discussion of the merits of Timor-Leste's language policy is not pertinent here. Rather, it is necessary to acknowledge that a

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[42] Dunn (2003) also wrote about the relationship between the Portuguese and local East Timorese communities: 'Until the 1970s most of these people had only infrequent direct contact with representatives of the metropolitan power. Official dealings, such as they were, amounted to little more than the annual collection of population figures, levying a head tax on the adult males, and collecting levies on livestock. In most cases these onerous and, in hard times, unpleasant tasks were not the lot of Portuguese officials, but of the *chefe de suco* (head of the tribe), an East Timorese appointed by the Government to carry out administrative duties at the tribal level, but his responsibilities were fairly limited, with other aspects of social and political authority remaining in the hands of the traditional local rulers' (Dunn 2003 :4).

[43] Hohe (2002) and McWilliam (2005) both explain, in detail, how Portuguese (and Indonesian) attempts to subvert the local social order to their gain were not very successful.

[44] A crisis erupted in Timor-Leste in April 2006, which resulted in 38 deaths and around 150,000 internally displaced people in the months that followed. The crisis is explored in section 3.1.3.

[45] Kingsbury (quoted in Kearney 2006) suggested that one of the problems with Ana Pessoa taking the position of Prime Minister was that she did not speak *Tetum*.

common language is necessary to communicate, and therefore crucial to the relationship between government and civil society.

Timor-Leste has also utilised its links to Portugal as it develops new institutions. One example is that Timor-Leste's constitution is 'loosely based' on that of Portugual's (Shoesmith 2003). Most notably executive power is exercised by the Prime Minister, and not the President of the Republic. During the April 2006 crisis this problem (with the Constitution) became apparent; the conflict between the (then) Prime Minister and the (then) President ultimately led to the resignation of the Prime Minister[46]. The failings of the Constitution will not be explored further, but its similarities to the Portuguese system are noted. Further links are illustrated by the current Portuguese government's bi-lateral commitments to Timor-Leste (significant amounts of aid, particularly in the form of Portuguese teachers and police assistance). Such institutional, social and cultural associations confirm that Timor-Leste's ties to its former coloniser are still strong. By and large the formal links and donor relations are beneficial, but the informal associations, like an elite connected to Portugal, may be problematic (or perceived to be).

Although this description of Timor-Leste's history is brief, it is important to mention that conflict was a part of East Timorese society well before Indonesian occupation. East Timorese living today remember the occupation of Timor-Leste by Japan, who invaded during World War II. More than 20,000 Japanese troops landed in Timor-Leste and fought Australian and other allied forces. The Australian troops were protected and assisted by many East Timorese and this was perhaps the first significant connection in the Australia Timor-Leste relationship. After the Australian troops withdrew, allied bombing and reprisals from the Japanese left farms abandoned, buildings destroyed, many East Timorese and Portuguese starving, and upwards of 40,000 East Timorese dead (Dunn 2003). Conflict amongst local groups was also apparent during Portuguese times (sometimes orchestrated by the Portuguese)[47]. Gunn (1999) provides a thorough analysis of the last 500 years of Timor-Leste's history, including a litany of rebellions. The Viqueque rebellion of 1959, which Gunn (1999) describes as 'extremely bloody with between 500 and 1,000 killed' (Gunn 1999: 260) would also remain in the minds of East Timorese today.

3.1.2 Occupation by Indonesia

A coup in Lisbon in 1974 bought the end of the Salazar-Caetano regime in Portugal and the release of its colonies, including Timor-Leste. At this time two East Timorese political parties, UDT (Timor Democratic Union) and Fretilin, formed a coalition for independence, but later

[46] Shoesmith (2003) analysed the semi-presidential system and saw the 'fault-line' between the then Prime Minister (Mari Alkatiri) and then President (Xanana Gusmão, Citizen of Timor-Leste) back in 2003.

[47] McWilliam (2005) has reported 'there was a long history of enmity and inter-group warfare' (McWilliam 2005 :28).

split. In August 1975 conflict between the parties erupted, and on 28 November 1975 Fretilin declared Timor-Leste independent[48]. Shortly thereafter, Indonesia invaded Timor-Leste. Regardless of the motive, Indonesia did not enter Timor-Leste unwillingly[49]. Dunn (2003) attributes the conflict amongst the East Timorese political groups to 'the culmination of months of subversive actions by the Indonesian military, operations designed to destabilise the situation in the colony' (Dunn 2003 :v).

Indonesian times can be characterised as a period of violent oppression. Estimates of the number of East Timorese killed vary. Dunn (2003) estimated that during 24 years of Indonesian occupation 200,000 East Timorese people were killed. In 2005, the Commission for Reception, Truth and Reconciliation reported:

> The minimum figure for the number of conflict-related deaths during the Commission's reference period 1974-1999, is 102,800 (+/- 12,000)… [This figure includes] (i) an estimated 18,600 total killings (+/- 1000)… and (ii) an estimate of 84,200 (+/-11,000) deaths due to hunger and illness. (Commission for Reception Truth and Reconciliation 2005 :44)

That Timor-Leste was able to overcome twenty four years of occupation by the Indonesians and form an independent state is an indication of the strength and determination of its people. There are several papers, prior to 1999, that explored Timor-Leste's options in terms of how their situation would be resolved (e.g. Salla 1997). A crucial turning point was when President Suharto resigned and B. J. Habibie took over as the President of Indonesia. Early in 1999 Habibie declared that the East Timorese would have the opportunity to vote for or against 'proposed special autonomy for East Timor within the Unitary State of the Republic of Indonesia'. The United Nations Mission in East Timor (UNAMET) was established to assist the people of Timor-Leste to carry out a free and fair consultation. On 28 August 1999, under intimidation and the threat of violence, 78.5% of 451,792 registered East Timorese voted against autonomy, leading to Timor-Leste's independence (United Nations Security Council 1999a). When the result was announced, groups of militia and Indonesian military commenced a rampage throughout Timor-Leste as part of a 'scorched earth policy' (United Nations Security Council 1999b) and the United Nations subsequently withdrew. Indonesian orders were to kill

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[48] Some (e.g. Shoesmith 2003) suggest that the conflict from this period has had a long-term affect on relationships and is the cause of some of the conflict seen today.

[49] Indonesia is reported by some (e.g. Leifer 1976) to have been invited by East Timorese to restore peace in the territory. Way et. al. (2000) suggest Indonesia felt obliged to intervene lest Timor-Leste became a communist haven, and Viviani (1999) reported that Indonesians 'were concerned that an independent Timor would be weak and constitute an open invitation to meddling by China, USSR, and the United States, and a stimulus to East Indonesian secessionist movements' (Viviani 1999: 87). Others are mindful that Australia did not object to Indonesia's annexation of Timor-Leste at the time and this author believes it is significant that this occurred pursuant to Australia's discussion about the exploitation of petroleum resources in the Timor sea with Indonesia. Munton (2006) provides insight into these negotiations in his thesis, *A Study of the Offshore Petroleum Negotiations between Australia, the UN and East Timor*, when he explores the history of the seabed dispute.

'those 15 years and older, including both males and females, without exception' (Chopra 2000)[50].

Some claimed that the atrocities had been carefully conceived and planned by the Indonesian army in the preceding year. *The Guardian* newspaper reported 'the aim, quite simply, [was] to destroy a nation' (Anon. 1999). Estimates of destruction of the country's physical infrastructure vary between 70% (Hill and Saldanha 2001; World Bank 2005b) and 85% (Havely 2001), with some (e.g. Chopra 2002) suggesting some areas had 95% of their buildings partially or completely destroyed. Dili lost one third of its electricity-generating capacity and government buildings as well as the files that constituted the formal institutions of government (such as titles to land, and records of civil registration and education) were destroyed (Hill and Saldanha 2001). Timor-Leste was left with only two power engineers, 20% of its secondary school teachers, 23 medical doctors, one surgeon and no pharmacists (World Bank 2005b).

Estimates of deaths from the Indonesian rampage in 1999 vary from 1,000 (World Bank 2005b) and 1,500 (Gorjão 2002) to over 2,000 (Commission for Reception Truth and Reconciliation 2005). The Commission for Reception, Truth and Reconciliation (2005) reported:

> 1999 marked a high point for estimated killings 2,634 (+/-626)... Of the killings and disappearances reported during the Commission's statement-taking process, 57.6% (2,947/5,120) of the perpetrator involvement in fatal violations was attributed to the Indonesian military and police, and 32.3% (1,654/5,120) to East Timorese auxiliaries of the Indonesian military (such as the militias, civil defence forces and local officials who worked under the Indonesian administration). (Commission for Reception Truth and Reconciliation 2005 :44)

In August-September 1999 some 250,000 East Timorese were deported to West Timor and around 200,000 East Timorese abandoned their homes and fled to the mountains risking starvation with 'hundreds of cases of wounding, torture, sexual assault, and abduction' (Dunn 2003; Gorjão 2002).

Timor-Leste does have a traumatic history, but because of its proximity in time, the trauma from Indonesia's occupation is felt the most acutely today. With one fifth of the East Timorese population killed during Indonesian occupation many East Timorese bore witness to the atrocities. Byrne (2006) wrote:

> A survey in 2000 by the International Rehabilitation Council for Torture Victims found that 96.6 per cent of those surveyed had suffered trauma during the Indonesian occupation. Three-quarters had experienced a combat situation, more than half had come close to death, and more than a third had symptoms of post-traumatic stress disorder. (Byrne 2006)

[50] Chopra (2002) explains further, that 'The independence vote triggered a three-week campaign called "Operation Clean Sweep", in which Indonesian armed forces and locally-organized militia reduced buildings to rubble and executed hundreds, possibly upwards of 2,000, East Timorese (the final figure remains to be determined). More than three-quarters of the country's population of 890,000 were displaced' (Chopra 2002 :983).

The Commission for Reception, Truth and Reconciliation was established to 'inquire into human rights violations committed on all sides, between April 1974 and October 1999, and facilitate community reconciliation with justice for those who committed less serious offences' (Commission for Reception Truth and Reconciliation n.d.) Thus, the East Timorese were provided with an opportunity to establish the truth of what happened. However, justice at a formal level has not been achieved. Xanana Gusmão, the former President of Timor-Leste, has repeatedly asked the East Timorese people to 'forgive, in the spirit of reconciliation, the Indonesian military and East Timorese militia who committed crimes against them' (Byrne 2006). The result of a process, administered by the United Nations, was to charge 339 Indonesians in relation to serious crimes, but none of the Indonesians have been prosecuted, and only a handful of East Timorese militia have been jailed for their crimes (Byrne 2006)[51]. The lack of justice for serious crimes remains a thorn in the side for many East Timorese and the consequences of the trauma are still felt.

In terms of government administration during Indonesian occupation life for the East Timorese was, in some ways, easier than during Portuguese times. With the benefits of the relative wealth of the Indonesian government, such as subsidised fuel and local infrastructure works (e.g. roads and irrigation) some development did occur. One of the downsides of the Indonesian Government administration was that the Indonesians held the majority of the senior positions in the Government, so when independence arrived there were few East Timorese with the skills to run, let alone establish a government[52]. This lack of capacity was even more acute when it came to establishing the petroleum industry, its laws (particularly negotiations with Australia over maritime boundaries) and institutional mechanisms to manage petroleum revenue.

The way in which local communities were governed also changed during Indonesian times. Unlike the Portuguese, the Indonesians did not honour the local kings and village chiefs. Several authors (e.g. Hohe 2002; McWilliam 2005) explore these dynamics in detail and note that Indonesian efforts to destroy these traditional power structures were fruitless, as they simply morphed into informal power mechanisms and the local kings continued in their roles informally. In 1999 the Indonesians deliberately burned the sacred houses (*uma luliks*) of the East Timorese because the strong bonds of family and East Timorese social life are embedded in them (McWilliam 2005). Fortunately, in this case, these traditional power structures are strong informal institutions that have withstood colonial and occupying efforts to diminish them. Unfortunately, Timor-Leste's resources were not as resistant.

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[51] Byrne (2006) reports that '339 suspects charged under the Serious Crimes process, which ran parallel with the CAVR [The Commission for Reception, Truth and Reconciliation], remain in Indonesia. It [Indonesia] refuses to co-operate with extradition requests.' (Byrne 2006)

[52] This apparently contrasts with the end of the Portuguese times, as Dunn (2003) reported that many East Timorese held senior positions in the Military and the Government then.

Like Portugal, Indonesia set poor examples of sustainable resource management. Indonesia continued to exploit what was left of Timor-Leste's sandalwood and teak and further destroyed much of the forest cover by regularly burning and using chemical warfare to destroy forest that may have been hiding *Falantil* (the resistance) forces[53]. McWilliam (2003) suggests that forest cover was reduced by 30% between 1972 and 1999. Indonesia also proceeded with plans for the exploitation of Timor-Leste's petroleum resources in the Timor Sea (in conjunction with Australia) without the resolution of maritime boundaries or legitimate authority to govern the country. Both Portugal and Indonesia exploited Timor-Leste's natural resources with little regard for the communities that depended on them, providing the perfect illustration of how natural capital can be depleted with no benefits for future generations.

The Indonesians did not only pillage Timor-Leste's human and natural resources, but most of the formal institutions (e.g. buildings and records) were destroyed by the Indonesians as well. At the same time, they strengthened the insidious and destructive informal institutions, such as corruption and conflict resolution through violence. These informal institutions, entrenched in Indonesia at the time, became embedded in the East Timorese way of life. Many report that corruption was rife during Indonesian times (e.g. Hill and Saldanha 2001) and this informal and destructive institution remains evident today as a notorious and problematic legacy of Indonesian times. Xanana Gusmão, the former President of Timor-Leste, often cites corruption as an issue:

> Let us not forget that our nascent nation is faced with poverty – a major cause for corruption. Worse is when our situation is difficult, because then corruption is great. I have often stated that corruption is the worse social disease imaginable. Unlike any other conventional disease, corruption destroys whole societies and tears at the very fabric of our way of life. (Gusmão 2004a)
>
> I often say to society and to the people that the Indonesians left our Homeland, however their practices and mentality of system still live in our minds and in our actions. We all have the duty to change mentalities to improve our practices - and this is the most difficult struggle... This is what we need to do – we need to combat corruption, collusion and nepotism. (Gusmão 2003)

The East Timorese people's determination won the nation its independence, but its journey to statehood was cursed from the outset. Chapter Two explained that resource revenue can impact on institutional quality. But, more importantly in Timor-Leste's case, institutional quality can affect wise management of petroleum revenue. If Timor-Leste fails in the task of managing its petroleum revenue wisely, this will most likely be the reason. As a result of Indonesian occupation and Portuguese colonisation, Timor-Leste is cursed with corruption, the legacies of

[53] The role of *Falantil* resistance forces during Indonesian times is not explored in this thesis.

conflict such as trauma, and weak institutions. With an influx of petroleum revenue Timor-Leste has all the hallmarks to find itself a resource cursed state.

3.1.3 Independent growing pains

The East Timorese took a stand in 1999 and proved their determination to be independent, but few realised how difficult the journey to true freedom, in the form of self-administration, would be. Amidst Indonesian and militia violence in early September 1999, the majority of the United Nations (UN) personnel (who had monitored the referendum) withdrew. The UN Security Council then took some time to achieve agreement from the Indonesian government to allow international assistance to end the violence. On 20 September 1999 the International Force for East Timor (InterFET) led by Australian troops arrived in Timor-Leste, and thereafter, Indonesian troops and many of the militia withdrew. On 28 September 1999 UNAMET returned, and on 25 October 1999 the Security Council resolved to establish the United Nations Transitional Administration in East Timor (UNTAET). At its peak, the UNTAET mission had 9,000 uniformed and civilian personnel responsible for peace-keeping operations, and the administration of East Timor during its transition to independence. The personnel of the mission had a staged departure until, on 20 May 2002, Timor-Leste celebrated its true independence and a follow-on support UN mission was established; the United Nations Mission of Support in East Timor (UNMISET). UNMISET had 900 personnel, whilst the United Nations Office in Timor-Leste (UNOTIL), established on 20 May 2005, had 120 civilian and police advisers. Following the crisis in April 2006, personnel numbers rose again (to around 3,000 personnel) with the establishment, on 20 August 2006, of the United Nations Integrated Mission in Timor-Leste (UNMIT). Timor-Leste was, and remains, a country seriously in need of assistance. That support came from all over the world, not just from the United Nations, but also in the form of bi-lateral and multi-lateral assistance and support from international non-government organisations (NGOs).

Several authors (Chopra 2000, 2002; Gorjão 2002; Gunn and Huang 2006; Hohe 2002; Traub 2000) have analysed and critiqued the work of the United Nations in Timor-Leste and much has been said about the failings of the UN mission. Gorjão (2002) suggests that UNTAET ‘began on the wrong foot’ as no East Timorese were involved in the planning phase of the mission, conducted by the United Nations Department of Peace-Keeping Operations (who had little experience of governance) in New York. The initial period of United Nations administration focussed on rehabilitation and reconstruction, and large amounts of aid flowed into Timor-Leste in the early years of the mission. João Saldanha (2003) posits that the amount of aid was excessive and not spent wisely. As mentioned previously, during Indonesian times, most of the senior administrative positions were held by Indonesians (Hill and Saldanha 2001; Traub

2000)[54]. One of the roles of the UN, and also bi-lateral personnel, was to train counterpart East Timorese to run the Government. Unfortunately, the success of that skills transfer and capacity development was limited, and the East Timorese government remains dependent on foreign advice and assistance for many of the tasks of administration, particularly at senior levels[55].

The East Timorese have witnessed much change in the seven years since the referendum and have struggled to meet the challenges of building a nation. In 2001, Hill and Saldanha estimated that the economy had declined (since Indonesian times) by almost 40% (Hill and Saldanha 2001). In 2003, *Suara Timor Lorosae* (a local East Timorese newspaper) reported that '40 per cent of East Timorese say they feel worse off now than under Indonesian rule' (Anon. 2003b). Given the East Timorese government have had neither the resources nor the intention to re-establish the paternalistic state maintained by the Indonesian occupation, citizen satisfaction was bound to be lower. Following the post-referendum destruction, many farmers were left without tractors, farm animals or irrigation, and fishermen's boats had been destroyed. Many East Timorese who had held jobs in the Government had lost them. The size of the civil service decreased from 32,000 during Indonesian times (Hill and Saldanha 2001) to 17,000 today[56], yet the role of the civil service had changed from running a province (of Indonesia) to running an independent country.

Although the literature focuses primarily on the failings of the United Nations in Timor-Leste, given the level of destruction (power, irrigation and buildings were destroyed, telecommunications were rendered non-existent, most government documents were destroyed) a great deal has been achieved in this short time frame. The amount of work it would take to build a nation in these circumstances could not have been estimated and was a task the United Nations had never undertaken on that scale before. Critics focus on the lack of laws, particularly land title administration, and donor dependence, but there were some positive achievements. A Constituent Assembly election was held in August 2001, and the Constitution was written as a result. A Parliamentary system was developed and although Fretilin won 55 of the 88 seats (providing them with a majority), 11 parties in total won representation (World Bank 2005b)[57]. In 2005, Timor-Leste's first census was conducted. Systems, such as those to register cars and businesses, have been put in place. The Government of Timor-Leste's Health department has

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[54] Traub (2000) explained: 'The Indonesians took all the good jobs for themselves. Elementary-school teachers were East Timorese, for example, but high-school teachers were Indonesian. Police clerks were East Timorese, but the officers were Indonesian. East Timorese were permitted neither a professional class nor a political one.' (Traub 2000 :76)

[55] For a detailed account of the peace-building process by the United Nations, and their particular efforts in state-and building and institutional development read 'New Nation: United Nations Peace-Building in East Timor' by Gunn and Huang (2006).

[56] In Indonesian times the Ministry responsible for Agriculture, Forestry and Fisheries had a staff of 6,000. The number of that Ministry's staff is now 400. (World Bank 2005b)

[57] Kingsbury (2007) describes Timor-Leste's electoral system as 'probably the most open and genuinely democratic in Southeast Asia' (Kingsbury 2007 :21).

reported that immunisation campaigns have occurred with great success (Anon. 2003c) and, despite some concerns about the Department of Education 'Today more children are in school than under the Indonesian occupation' (World Bank 2005b). There are many more examples of institutions that have been established, such as the Petroleum Laws and the Petroleum Fund (which will be explored in Chapter Four).

Unfortunately, many of these successes of the administration did not reap direct or tangible benefits for the person in the street. Creating strong institutions takes time and, in some cases, progress is glacial (hardly apparent). Conflict commonly occurs in post-conflict states. The World Bank (2005b) remarked that 'most countries emerging from conflict, especially new countries, relapse into violence within five years' and added that 'Timor-Leste has avoided that fate, maintained peace and political stability, and established security' (World Bank 2005b :2). Unfortunately, Timor-Leste did not avoid that fate. The tension and trauma amongst the community has resulted in several instances of conflict, such as the riots of December 2004, in which several businesses and houses were burned. Then, in April 2006, a civil crisis erupted in Timor-Leste. The extent of the conflict took some by surprise, including the horror of an armed confrontation between Defence Force of Timor-Leste (FDTL) soldiers and East Timor Police, which left nine people dead and 27 injured (United Nations 2006). At the Timor-Leste and Development Partners meeting held just prior to the crisis on 3-4 April, donors sang the praises of Timor-Leste's successes and achievements with little caution about the potential for violence or acknowledgement of the simmering discontent. Yet the tell-tale signs of disruption were there and some had acknowledged them:

> current stability fragile... vulnerable to conflict... internal fault lines contributing the risk of renewed violence including declining income, increasing poverty, high unemployment, and emerging corruption... high youth unemployment... expansion in martial arts groups. (World Bank 2005b :4)

A detailed exploration of the crisis and ensuing instability that occurred in 2006 is worthy of far greater analysis than will be offered here. For the purposes of this thesis a brief summary of the events focussing on the institutional weaknesses will suffice. The reasons for the instability are many and varied. The flash point was the culmination of unresolved tensions, based on ethnic divisions (between the *Kaladi* and the *Firaku*, or Easterners and Westerners), both within and between the Defence and Police forces. Several authors had pointed out this tension earlier (Rees 2004; Saldanha and Guterres 1999; Shoesmith 2003)[58]. Yet, as many observers have pointed out since (e.g. Lowry 2006) the institutions of security were too weak and unable to

[58] Shoesmith (2003) had explained previously: 'The senior commanders and most of the *Falantil* recruits in the first battalion were drawn from the area collectively referred to as '*Firaku*' in the eastern districts... The *Firaku-Kaladi* ethnic divide is a potential fault-line in East Timorese politics. The core of the new defense force is identified, then, not only with the president and commander-in-chief, rather than the Government, but with one ethnic collectivity rather than another… From its inception it was clear that FDTL [Defence Force of Timor-Leste] was not to be a neutral professional force…' (Shoesmith 2003 :246-247).

address the problems. Rogerio Lobato, the Minister for Internal Administration, and a known trouble-maker[59], had allegedly contributed to the havoc by providing guns to civilian militias and instructing them to eliminate political opponents. Lobato was found guilty and sentenced to prison for seven years and six months. Attempts to link the former Prime Minister Mari Alkatiri to the crime have not been realised to date.

A United Nations enquiry was established and reported a litany of inadequacies in the ways in which senior figures in the East Timorese government responded to the crisis situation. Following are some examples:

> There is no evidence before the Commission of Inquiry that the dismissal [of the 594 petitioning soldiers] was officially executed. The Commission notes that approximately 200 of the personnel dismissed were not petitioners, but officers and other ranks who had been chronically absent without leave in the months and years prior to March 2006. (United Nations 2006 :21)

> In a report to the President of the National Parliament dated 11 May 2006, Prime Minister Alkatiri styled the decision of this meeting to deploy F-FDTL [Defence Force of Timor-Leste] as one of the Crisis Cabinet pursuant to article 20 of Timor-Leste Decree-Law 7/2004 and section 115(1)(c) of the Constitution of Timor-Leste. The legality of this decision is considered elsewhere in this report. Here it is sufficient to note the following. No orders were given in writing. No formal declaration of the state of crisis was made. During the meeting no contact was made or attempted with the President. Prime Minister Alkatiri telephoned the President the following day. The Minister for Foreign Affairs did not attend. Colonel Lere telephoned the Minister the following morning to inform him of the Prime Minister's orders, having been too busy to do so on the evening of 28 April. (United Nations 2006 :27)

These examples illustrate the weaknesses inherent in some of Timor-Leste's institutions, and the unfortunate reality that the violent form of dispute resolution, preferred by the aggressive male-dominated factions, was well-entrenched in Timor-Leste's culture. The United Nations' Inquiry concluded:

> The crisis which occurred in Timor-Leste can be explained largely by the frailty of State institutions and the weakness of the rule of law. Governance structures and existing chains of command broke down or were bypassed; roles and responsibilities became blurred; solutions were sought outside the existing legal framework. (United Nations 2006 :52)

The Judicial System Monitoring Programme or JSMP (2006a) noted that in previous cases in which commissions have provided recommendations in Timor-Leste (citing the report of the Commission for Reception, Truth and Reconciliation as an example) the President, the Government and Parliament have not followed recommendations. 'Rather, political decisions

[59] Shoesmith (2003) writes that, in 1983, Rogerio Lobato was convicted of diamond smuggling in Angola and jailed for several years.

are often used to resolve criminal cases, a practice which has a negative impact on democracy and the rule of law' (JSMP 2006a). The Commissioners of the Inquiry recognised the weaknesses of the justice system, and warned:

> It is vital to Timor-Leste that justice be done and seen to be done. A culture of impunity will threaten the foundations of the State. The Commission is of the view that justice, peace and democracy are mutually reinforcing imperatives. If peace and democracy are to be advanced, justice must be effective and visible. This will require a substantial and long-term effort on the part of the Government and its international partners. (United Nations 2006 :3)

Unfortunately, the problems that generated the ongoing violence and instability are symptomatic of social tensions that are larger than the problems between the Defence and the Police Forces[60]. The crisis was an opportunity for a whole range of political and social complaints to be aired. Thousands of people took to the streets protesting against the Government and the then Prime Minister Alkatiri. The 'fault lines' of the Constitution that Shoesmith (2003) predicted became clear[61]. Gusmão, then President, gave Alkatiri, then Prime Minister, an ultimatum and, under pressure, Alkatiri resigned[62]. Whether the series of events that occurred during the crisis were unconstitutional is debatable. But, certainly the tension between the roles of the Prime Minister and the President was evident. As suspected, by the author, Alkatiri's resignation and the appointment of Jose Ramos Horta as interim Prime Minister did not end the violence.

The violence and destruction of 2006 was reminiscent of 1999, with 38 people killed during the crisis (and more since), 1,650 homes destroyed and around 150,000 people displaced (United Nations 2006). Some commentators (e.g. Da Silva 2006) suggest that the East-West distinction did not exist prior to the crisis, at least not with such negative ramifications. There was no mention of such a distinction in any of the thousands of testimonies heard by the Commission for Reception, Truth and Reconciliation. An analysis of the history of the East-West distinction will not be undertaken here[63]. But, it is noted that the East-West distinction became the basis on which violence was perpetrated, predominantly by young men, some belonging to local gangs or martial arts groups. Youth representatives had long claimed they are ignored by their leaders. In October 2006 there were media reports that locally made 'ice' (methamphetamine) was fuelling the gang violence (Wilson 2006). Scambary, Gama and Barreto's (2006) report on gangs and youth groups in Dili explained it is 'impossible to generalise about these groups';

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[60] The UN acknowledged, during its inquiry, that a full explanation of the crisis could only be understood fully in the historical and cultural context of the country. (United Nations 2006)

[61] Shoesmith (2003) linked the problems between then Prime Minister Mari Alkatiri and then President Xanana Gusmão back to a 1980s crisis in the resistance movement.

[62] Alkatiri was reported to say 'I declare I am ready to resign my position as Prime Minister of the Government… so as to avoid the resignation of His Excellency the President of the Republic.' (Kearney 2006)

[63] Babo-Soares' (2003a) PhD Thesis gives detailed insight into the East-West phenomenon and national identity in the form of Mauberism.

some are involved in socially responsible activities such as street cleaning and helping the poor. However, Scambary, Gama and Barreto (2006) noted that individuals from some martial arts groups had aligned themselves with political groups, infiltrated the security forces, and some had received guns distributed by the police, whilst others had aligned with former resistance figures and manipulated local youth to perpetrate crimes or violence.

There are many lessons to be learned from the crisis and the ensuing violence. The first is to acknowledge that 'political competition within Timor-Leste has been historically settled through violence' (United Nations 2006). For this reason it is disconcerting to know that there are many weapons remaining in civilian hands[64]. Second, despite the then Prime Minister, Jose Ramos Horta's (2006) protestations that Timor-Leste is stable and open to foreign investment, it may be difficult to imagine any serious business developers being interested in investing in a country where taxi drivers are too scared to work after dark[65]. Third, the crisis highlighted strong resentment of the political leaders and a very large divide between the decision-makers and the community, a lack of bridging social capital. Fourth, the concepts discussed in Chapter Two, such as distrust of outsiders, lack of confidence in national institutions, a problematic relationship between civil society and government, were all evident in Timor-Leste at the time of writing. Finally, the state of Timor-Leste, as a nation, is very fragile, and in desperate need of building on its small reserves of social capital. Understanding the machinations of this phenomenon and these matters are crucial to the central question of this thesis; whether Timor-Leste can avoid the resource curse.

3.2 Timor-Leste today

Timor-Leste today reflects the institutional legacies of its past in many ways. This section explores some aspects of Timor-Leste today to indicate the status of its social geography, the economy and the capacity of individuals and institutions. These details illustrate how Timor-Leste is the poorest country in Asia and why, in the short time since independence, the Government has been unable to achieve success in providing for the needs of its people.

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[64] The UN Inquiry reported that 219 PNTL [East Timorese Police] weapons remain outside PNTL custody and control and further that it is impossible to know where those weapons are now. The report of missing F-FDTL [East Timorese Defence Force] weapons is even more concerning: 'The Commission notes with concern the irregularities in the F-FDTL weapons holdings spanning several years. The baseline of 1,200 M16 weapons issued to F-FDTL by the Government is established by 2002 records. The recently conducted international weapons audit established that in February 2004 F-FDTL held 1,230 M16 weapons. The additional 30 weapons were not provided by the Government. By November 2005 the F-FDTL could account for only 1,073 M16 weapons. Although F-FDTL has stated that in 2006 they hold 1,200 M16 weapons, the records reveal that 45 M16 weapons are missing. Additionally, three FN-FNC semi-automatic rifles, three SKS semi-automatic rifles and two Uzi weapons previously within the custody and control of F-FDTL are missing. F-FDTL is also in possession of one Minimi, one .38 Special, one Browning 9 mm, two G3 semi-automatic rifles, one M16 A1 rifle and one M2 .50-calibre firearm, the provenance of which is unexplained. Also unexplained is the pedigree of 342 ex-FALINTIL weapons in the possession of F-FDTL.' (United Nations 2006 :41-42)

[65] This is an observation of the author's on a visit to Timor-Leste in November 2006.

3.2.1 Social geography

Timor-Leste is a small country both in terms of its size (15,007 km^2) and population. In 2004, Timor-Leste's first census counted a population of 924,642 (Chandran 2004). Although the population is small, it will grow quickly. In 2003, it was estimated that every fertile woman would have 7.8 children (Hull et al. 2003). Indeed Timor-Leste's annual population growth rate of 4.7% is the highest (by far[66]) of 177 countries listed in the Human Development Index or HDI (UNDP 2006a). In 2005, more than 50% of the population were under the age of 15 (World Bank 2005b :18). This population boom is assumed to be a response to the conflict in 1999, and thus is expected to be short-lived. Reasons for the boom may be that people had been delaying having children because of the insecurity, however there is no data or research that confirms this. Some research indicates that conflict has an impact on fertility rates. The World War II baby-boom is often given as an example (see Curlin et al. 1976; Hirschman 2005). However, it remains to be seen how long it will take for Timor-Leste's fertility rate to decline. Timor-Leste's population growth is an important factor in managing petroleum revenue, because high population growth means a dramatic increase in spending, particularly on social services such as health and education.

Babies born in Timor-Leste are likely to struggle through life. Timor-Leste is affected by El-Nino weather patterns and also experiences severe droughts and floods. Timor-Leste's terrain also makes agriculture difficult. Over 40% of Timor-Leste has a slope of greater than 40% which, along with the heavy rainfall, results in severe erosion (UNDP 2006b). The 2001 *Suco* Survey (East Timor Transitional Administration 2001) found that agriculture was the main source of income in 94% of *sucos* (villages). These terrain and weather conditions have a profound effect, particularly in the rural areas, where three quarters of the population of Timor-Leste live (International Federation of Red Cross And Red Crescent Societies 2005). There are huge disparities between those living rurally and those living in the urban areas. School enrolments, quality of teaching, access to health services, markets, clean drinking water and sanitation are all of lower number or standard in rural areas. The 2001 *Suco* Survey (East Timor Transitional Administration 2001) found that more people travel to schools and to health facilities on foot, take more than 20 minutes (on average) to reach a vehicle passable road, more than 30 minutes to reach a paved road, and 70 minutes to reach a health post or community health centre. The United Nations Development Program (UNDP) found that 64% of the population suffer from food insecurity (UNDP 2006b). Many people live in basic accommodation made from bamboo, grass or leaves and earthen floors[67]. The quality of life is very basic for most East Timorese and Table 3.1 indicates that the prospects of the average East

[66] Uganda has the second highest annual population growth rate (3.7%) of the 177 countries listed in the HDI.

[67] The main floor of 67% of all houses in Timor-Leste is made of earth or bamboo. (UNDP 2006b)

Timorese person are not at all good compared with its nearest neighbours (Australia and Indonesia). However, compared to Nigeria, a country known to be resource-cursed, Timor-Leste fares well. São Tomé and Príncipe, another country with huge petroleum resources, rates marginally better than Timor-Leste in some indicators.

	Nigeria	Timor-Leste	São Tomé	Indonesia	Australia
Human Development Index Rank (of 177 countries)	159	142	127	108	3
Life expectancy at birth (years)	43.4	56.0	63.2	66.5	80.2
Probability at birth of not surviving to age 40 (%) 2000-05	46.0	25.5	17.1	11.2	No data
Under-5 mortality rate (per 1,000 live births) 2004	197	80	118	38	6
Maternal mortality (per 100,000 live births) 2000	800	660	No data	230	8

Table 3.1 Selected Human Development Indicators for Timor-Leste and other countries (UNDP 2006a)

Timor-Leste fares comparatively better in the HDI than when GDP alone is compared. Timor-Leste's non-oil GDP per capita is just US$367 (MOPF 2006b). Although its human development levels are almost the lowest in Asia, Timor-Leste sits in the group of medium human development countries (not the group of low human development countries that are predominantly African countries). This is because the HDI provides a 'broader definition of well-being' derived from three dimensions; living a long and healthy life, being educated and having a decent standard of living (UNDP 2006a). Timor-Leste's per capita income may not be as high as others, but its public expenditure on health (7.3% of GDP) is the highest of the medium human development countries and the sixth highest in the HDI ranking. Assuming this revenue is spent wisely on health, high hopes could be held for the future of Timor-Leste, but as Table 3.1 shows, Timor-Leste has a long way to go.

Despite Timor-Leste's medium HDI ranking, babies born in Timor-Leste are also likely to encounter a range of social problems. Approximately one third of East Timorese children do not attend primary school. 'Out of every 100 children, 80 will start primary school' (Clifton 2005 :30). The 2004 census (National Statistics Directorate 2006) found that only 15.3% (or 70,663) East Timorese had graduated from High School[68]. This begins to explain why 54.2% of the adults are illiterate (National Statistics Directorate 2006)[69]. High levels of illiteracy affect the

[68] In one particular sub-district (Passabe in Oecussi) only 1.5% of the population over the age of 18 (just 55 people) held a high school diploma. (National Statistics Directorate 2006).

[69] Illiteracy rates vary across the country and age. In Ermera they are the highest at 71.1% whilst in Dili illiteracy is the lowest at 25.8%. 'In Timor-Leste, 27% of people between the ages of 15 and 24 are illiterate; the rate rises to 54% for people aged 6 and older' (National Statistics Directorate 2006 :72).

dissemination of information, which means attempts at civic education and community consultation are difficult. The implications of this problem are evident in the levels of health and social awareness. For example, 'Four out of five women have never heard of HIV/AIDS with the ratio only slightly lower for men' (World Bank 2005b :16). To date, Timor-Leste appears to have eluded the AIDS epidemic, but numbers are increasing. In 2004 the Ministry of Health reported a total number of 24 HIV/AIDS cases (Anon. 2004b). In 2005 the Vice Minister for Health, Luis Lobato, reported 33 people being positively identified as HIV-positive and 200 others suspected of being infected (Anon. 2005). Civic education is also important in addressing issues of child abuse, domestic violence and sexual assault, which are prevalent in the East Timorese community (De Sousa 2005). The UNDP says that around half the women in relationships suffer from some form of violence (UNDP 2006b). De Sousa (2005) talks about the suffering of East Timorese women and how 'the mentality of [a] patriarchal system is ingrained' (De Sousa 2005 :34). Byrne (2006) suggests that much of the domestic violence in the community is connected with the trauma experienced during Indonesian times. The resolution of these kinds of problems is difficult, with the lack of education and high levels of illiteracy that hamper awareness, and the strength of informal institutions within the family and local community, which hinder social change.

According to De Sousa (2005), domestic violence is hidden from public view because of 'family pride and status' (De Sousa 2005 :34)[70]. The concept of the family in Timor-Leste appears to be strong, and central to community life. Niner (2003) talks about the family unit and its importance in traditional ceremonies, whilst McWilliam (2005) analyses the important bonds between families and communities expressed through the traditions associated with *uma luliks* (sacred houses), which have great social and cultural importance. There is high regard, particularly in rural areas, for traditional East Timorese customs and beliefs, such as their traditional animist spirituality, or *Lulik*[71]. In Timor-Leste, the trust and social capital within the family, and between family members, and at the local level (bonding social capital) outweighs the social capital at other levels (e.g. between government and civil society; bridging social capital). As discussed previously in this chapter, these bonds have withstood the external influences of the Portuguese, Indonesians and the United Nations. Hohe (2002) explains:

> Centuries of Portuguese rule and decades of Indonesian rule over East Timor did not manage to eradicate local socio-political structures that have proved resilient... a state-

[70] Tradition dictates that it is more important to maintain the appearance of family than to 'secure justice for individual women' (UNDP 2006b :17).

[71] Dunn (2003) explains that 'Social and religious life in the East Timorese village continued to be strongly influenced by traditional animistic beliefs... the spirits of the dead are an essential element in the living environment and their presence as evil or good spirits must always be taken into account... *Luliks*, or sacred objects, symbols of good, evil, or of the unknown ... Christianity weakened, but did not destroy these beliefs.... Christian and animist prejudices and practices came to coexist with a degree of harmony.' (Dunn 2003 :5)

> building exercise by the international community was unable to have much effect on, let alone transform, the local level. (Hohe 2002 :569)

The strength of the bonds between family members and community (i.e. good bonding social capital), and conversely the distrust of outsiders, can have negative consequences. For example, members of government may wish to benefit their own extended family members over others by allocating jobs or tenders to them (nepotism), or using their power to bring about financial gain (corruption). The bonds between community members are also used to exert influence and these bonds have been a destructive force in the recent East-West conflict.

Unfortunately, the relationship between government and civil society is tenuous and there appears to be a dearth of bridging social capital in Timor-Leste. The World Bank (2005b) reported 'increased dissatisfaction with government performance' and believes that 'communication between the Government and the population is inadequate and often ineffective, resulting in limited mutual understanding' (World Bank 2005b :i). Many of the calls for the Prime Minister to resign (both of Mari Alkatiri and Jose Ramos Horta) are a reflection of the dissatisfaction and distrust of the Government by members of the community. Building a nation is a difficult task and begins with the development of institutions that, even if successful, may bring no immediate direct benefit to the community. The longer term successes of the Government, such as improvements in education and health, are yet to be seen, although they are beginning. For example, infant and under-five mortality, although high, has dropped from 87 to 64 and from 124 to 80 (respectively) in the last year (UNDP 2005, 2006a). Some (e.g. World Bank 2005b)[72] claim that the Government has not done enough to reach out to the community yet there are several examples of the Government taking extraordinary steps to work, and communicate, with the community such as the Petroleum Fund consultation (which was analysed by Drysdale 2007) and the consultation that preceded the National Development Plan (Planning Commission 2002), of which 38,293 people participated. Unfortunately, it is perception, rather than reality, that fuels most of the criticism and the kind of conflict that has occurred in recent times[73].

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[72] The World Bank (2005b) is concerned about the lack of connection between government and civil society: 'Poor outreach on the part of Government may contribute to Timor-Leste's vulnerability. Effective communication and genuine participation are critical to shoring up popular support for the national development process, and for avoiding conflict… The Government neither has the resources nor the intention to re-establish the paternalistic State maintained by the Indonesian occupation. Yet the Government is hesitant to collaborate with civil society and maintains a statist style. It has not yet succeeded in engaging constructive critics or in maintaining an effective dialogue with communities.' (World Bank 2005b :4)

[73] For example, there was a very destructive rumour circulating that F-FDTL had massacred sixty people in the demonstration that took place in late April, but the UN Inquiry investigated and could find no evidence of a massacre. (United Nations 2006)

3.2.2 Economy

Timor-Leste is not only small, but a very poor country. The previous section highlighted many aspects of the poverty that East Timorese people endure. Timor-Leste's petroleum reserves are expected to bring upwards of US$17 billion over the next 20 years, but its non-oil GDP per capita is just US$367 (MOPF 2006b). In rural areas, non-oil GDP is even lower, at US$150 (UNDP 2006b). Surveys in 2001 indicated that 40% of the population lives below the poverty line (MOPF 2006b). According to the International Federation of Red Cross And Red Crescent Societies (2005), 75% of East Timorese live in rural households. Despite the fact that agriculture is the major contributor to the local economy, many people without skills have left the rural areas and are unable to find work in the cities. Unemployment is 8.9% (UNDP 2006b) and higher in urban areas where this problem, along with the high birth rate means there are large, and increasing, numbers of young men that have nothing to do. Youth unemployment was 23.1% in 2004 (UNDP 2006b). These groups of young, unemployed, men have caused much of the violence and destruction over the past year (Wilson 2006).

In 2002, when large numbers of UN and bi-lateral personnel departed from Timor-Leste, the economy significantly contracted. In recent years, there have been signs of recovery with non-oil GDP growing by about 2% and an increase in bank lending to the private sector[74]. Evidently, the Government sees economic growth as the solution to poverty reduction. Yet, there are numerous impediments to business development in Timor-Leste. Electricity supply in the capital reaches 92%, but is intermittent and only 10% in rural areas (UNDP 2006b). The main road system is adequate, but feeder roads are in poor condition and often washed away. There are limited telecommunications and a whole range of regulatory and other barriers as the following excerpts show:

> Incomplete regulatory framework, unclear and cumbersome administrative procedures, high costs for labor and electricity, poorly developed infrastructure, and growing corruption pose significant challenges to business development… Business registration is complex and unclear. Customs procedures are lengthy, creating unnecessary admin hurdles... justice system particularly weak. (World Bank 2005b :14)

> Key land legislation, the insurance law, and the domestic and foreign investment laws [have] all either [been] approved or submitted to Parliament. However, the overall legal framework is still incomplete, and complex regulations, an ineffective administration and weak judiciary continue to discourage private activity. (IMF 2005a :1)

[74] The Ministry of Planning and Finance reported that 'Credit to the private sector rose from 2% of non-oil GDP at end 2002 to 25% at end 2005' (Ministry of Planning and Finance 2006 :13).

In terms of developing local industries Timor-Leste's options are few, yet if it is to avoid petroleum dependency the options must be expanded[75]. Once the sandalwood declined, the Portuguese established large plantations of coffee, which generated over 80% of Timor-Leste's exports until the final decades of Portuguese rule (McWilliam 2003). Coffee remains the most significant local industry, but other opportunities for foreign investment (e.g. tourism) are limited, because of the constraints described, and also because Timor-Leste's wages are higher than that of their neighbouring countries, rendering Timor-Leste's wages less competitive internationally. The International Monetary Fund (IMF) suggests this is a reflection of the impact of the international presence, including the United Nations (IMF 2005a).

With so few opportunities for, and many challenges to, private investment, revenue from the exploitation of Timor-Leste's oil and gas appears the solution to many of Timor-Leste's problems. To make the best use of these funds, the Government has opted to establish macroeconomic policies that are relatively conservative. For example, rather than establishing an East Timorese currency, Timor-Leste uses the United States dollar as its legal tender. Further, Timor-Leste has a policy of remaining debt-free and has not taken a loan from a financial institution to date. The Government has a very strategic approach to economic development that is illustrated by its National Development Plan (Planning Commission 2002). The National Development Plan sets out the priorities for the East Timorese government for the five years from 2002 until 2007. The Sector Investment Programs (SIPs) are the shorter-term strategies used to implement the National Development Plan, which have a budgetary component. The SIPs are used to guide both domestic state expenditure and the funds that donors contribute. In summary, Timor-Leste's economy is weak, and the amount of domestic expenditure and donations it can absorb is limited. Plenty of work must be done to enable growth and development, but progress will be slow.

3.2.3 The State budget

This section explores the components and size of Timor-Leste's budget, and discusses one of Timor-Leste's greatest administrative challenges; budget execution. Given the state of Timor-Leste's economy, the size of its budget is not a surprise; at US$316 million (in 2006-2007) it is small. The amount of money that is spent is dependent on how much income the State can generate and also its capacity to execute that expenditure. Figure 3.1 provides a breakdown of the Annual State Income last year, and estimates of Annual State Income over the next four years. The figure illustrates Timor-Leste's dependency on its petroleum revenue, and shows that the Budget has recently increased markedly. Since the last financial year the Budget increased

[75] The IMF (2005a) remarked 'the pace and quality of Timor-Leste's economic development will depend on the effective management of its new oil/gas wealth and creation of an environment conducive to private investment and activity in the non-oil economy' (IMF 2005a :2).

by 122% (from US$142.3 million in 2005-2006 to US$315.5 million in 2006-2007). This follows a gradual increase in the Budget over the last four years[76]. Timor-Leste raises income by charging taxes and fees for services, such as customs and passports (domestic revenue[77]), and through agencies such as aviation, ports and electricity, which are self-funded (autonomous agency revenue). Donors also contribute funds directly to the State for expenditure via the Budget. The remaining funds required to meet the State Budget are withdrawn from the Petroleum Fund. In this financial year (2006-2007) the State proposes to withdraw 82% (US$259.7 million) of the amount it requires to fund the Budget (US$315.5 million) from the Petroleum Fund. Domestic revenue is very small in comparison, and Direct Budget Support from donors will decline over the coming years. Thus, petroleum revenue is crucial to Timor-Leste's bottom line, in terms of its Annual State Income.

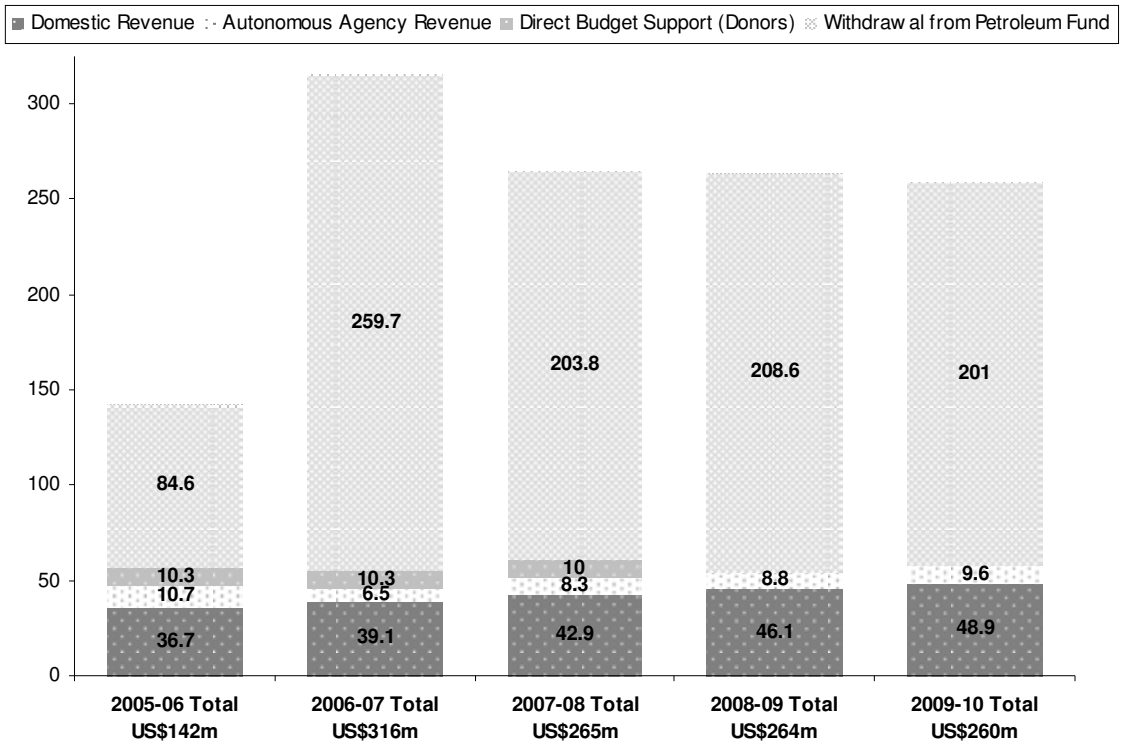

Figure 3.1 Estimated total Annual State Income for Timor-Leste (MOPF 2006b)

Timor-Leste also receives donor funding for projects that complement its planned budget expenditure. The Combined Sources Budget includes donor funding and Annual State Income.

[76] The budget in 2002-2003 was US$67.6 million (MOPF 2002), the budget in 2003-2004 was US$74.6 million (MOPF 2003), the budget in 2004-2005 was US$75.1 million (MOPF 2004a), and the budget in 2005-2006 was US$112 million (Ministry of Planning and Finance 2005).

[77] The Government plans to increase income from taxes and user fees (through improvements in administering land and property fees, managing government property and increases in university, water, ID card and passport fees). (Ministry of Planning and Finance 2006)

The next four years of Combined Sources Budget are shown in Figure 3.2. The total income from Combined Sources in this financial year (2006-2007) is US$644.2 million. Figure 3.1 showed that in this financial year, the withdrawal from the Petroleum Fund will be US$259.7 million, which means petroleum revenue constitutes 40% of the Combined Sources income. The contribution from donors in this financial year totals US$339 million[78], which constitutes 52% of the Combined Sources income. Thus, in this financial year, Timor-Leste is heavily dependent on both donors and its oil and gas revenue. Figure 3.2 also shows that confirmed donor funding will decline in the next four years, thereby continuing the trend established since 2002 (MOPF 2006b). However, a spike in donor expenditure in this financial year is expected due to the establishment of the new UN mission, which was confirmed after these figures were described in the current budget.

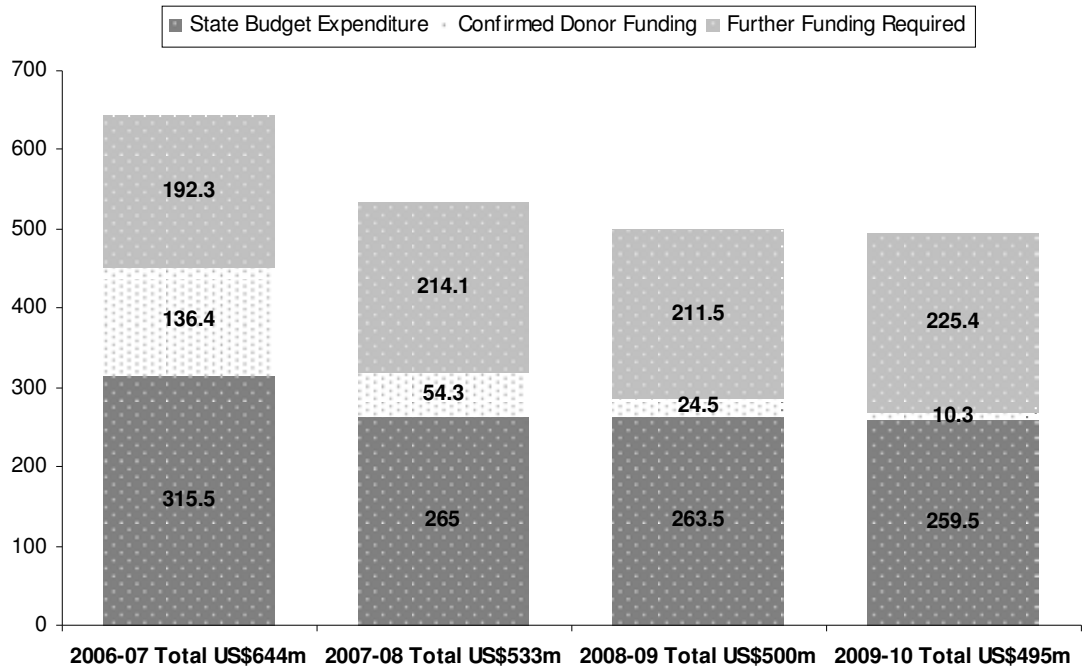

Figure 3.2 The Combined Sources Budget of Timor-Leste (MOPF 2006b)

Timor-Leste's budget is divided into six categories of expenditure. Figure 3.3 shows that the largest increases in expenditure, since the last financial year, have been to Capital and Development (an increase of 209%) and Minor Capital (202%). The budget for Goods and Services has also increased markedly (by 97%). The State has also introduced (in 2006-2007) an item called 'Current Transfers' (US$18.2m) which includes public grants (acquittable) for

[78] This amount includes direct budget support of US$10.3 million (shown in Figure 3.1), confirmed donor funding of US$136.4 million, and further funding required of US$192.3 million (both shown in Figure 3.2).

schools (e.g. for small repairs) and community groups (for organised civil society groups to execute small development projects), and Personal Benefit Payments (non-acquittable) to veterans. Spending petroleum revenue in some of these categories will be less sustainable, or have a shorter-term effect, than others. Spending revenue on capital and development may have longer-term effects, whilst the effect of allocating revenue for goods and services is more short-term, but necessary to administer the Government's projects.

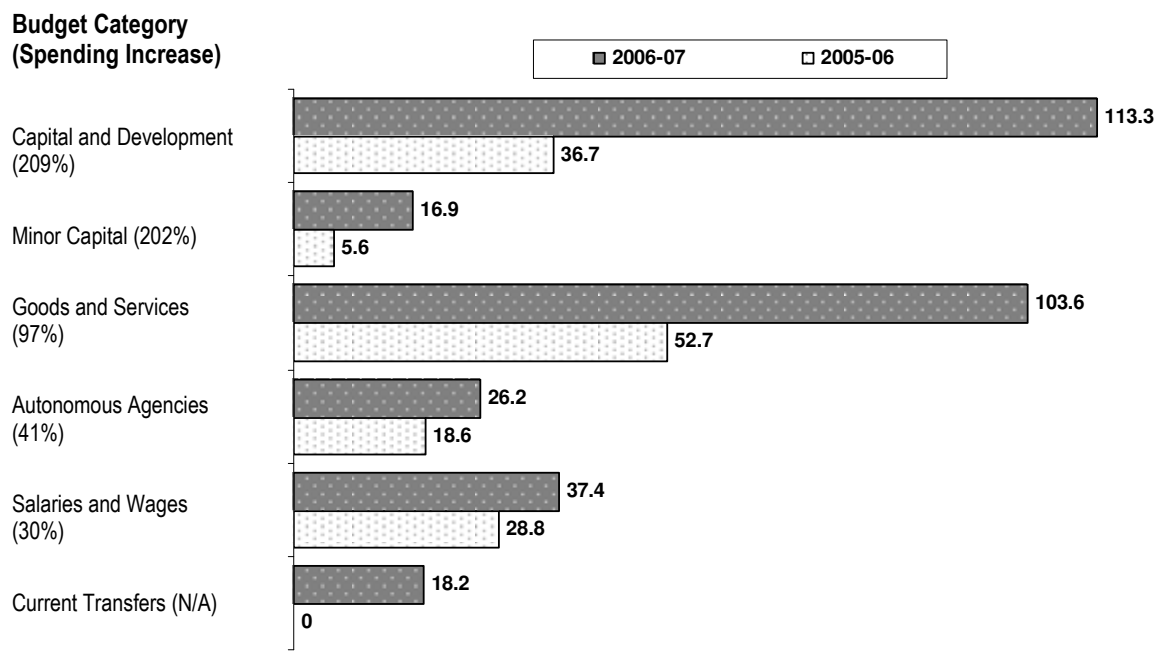

Figure 3.3 Breakdown of Timor-Leste's State Budget Expenditure and Analysis of Increase between 2005-2006 and 2006-2007 (MOPF 2005b)

Timor-Leste's budget can also be broken down by sector. Figure 3.4 indicates the portion of the State's budget allocated to each sector in financial year 2006-2007. The majority of the Budget is allocated to Public Works, which explains why such a large portion of the Budget is spent on Capital and Development (as per Figure 3.3). However, the Ministry of Planning and Finance (MOPF) sets targets for expenditure based on recurrent expenditure (i.e. not including the Capital and Development portion) because Capital and Development can vary significantly from year to year whilst recurrent expenditure generally remains proportionately similar relative to other sectors. Figure 3.5 indicates the portion of the State's budget allocated to each sector in the same financial year based on recurrent expenditure and reveals different budget priorities. A larger portion of the Budget appears to be spent on Education and Health if only recurrent expenditure is considered. Using targets based only on recurrent expenditure can be misleading.

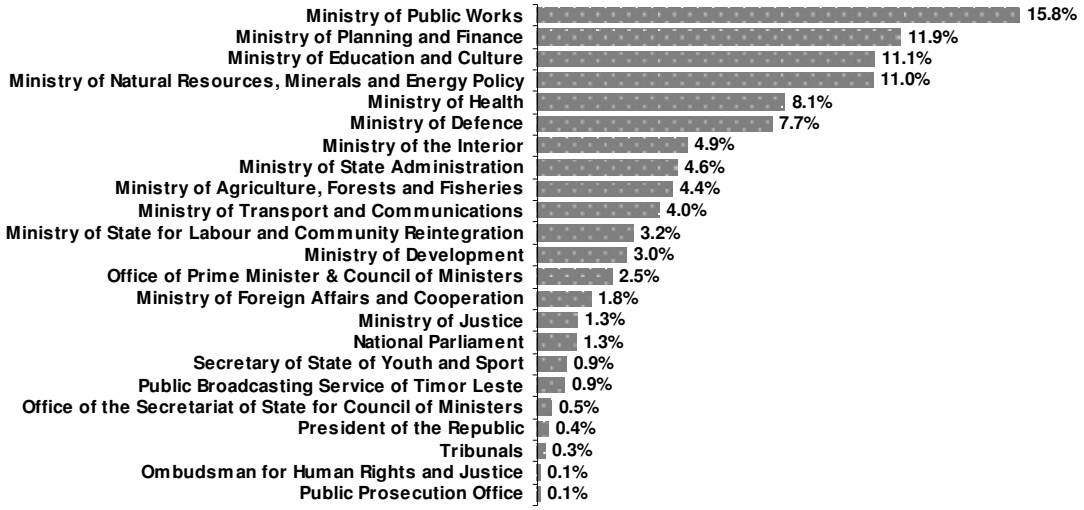

Figure 3.4 Portion of Total State Budget 2006-2007 Allocated to Each Sector (%)

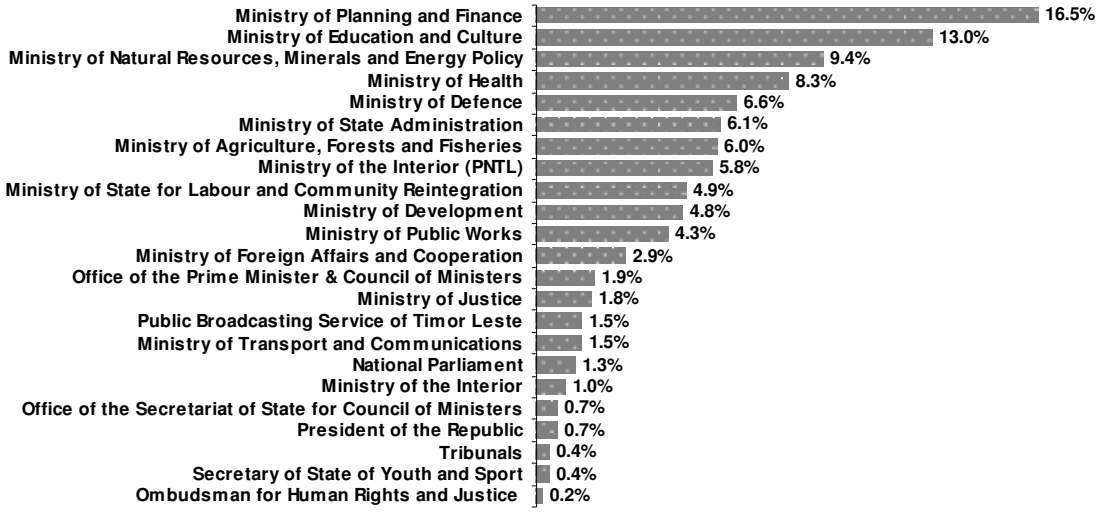

Figure 3.5 Portion of Recurrent State Budget 2006-2007 Allocated to Each Sector (%)

The General Budget of the State 2005-06 (MOPF 2005b) indicated that the recurrent expenditure for Health and Education (combined total) should be greater than 35% of the total recurrent budget, whilst no more than 25% should be spent on Security (including Police and Defence), and more than 4% should be spent on Agriculture. The Government has been unable to meet some of these targets. Figure 3.5 shows that the target for recurrent expenditure on Health and Education was not met in 2006-07. That target was not met in 2005-2006 either (as shown in Appendix 1, which details the breakdown of the recurrent portion of the State Budget for 2005-2006 and 2006-2007). The portion of the recurrent State Budget spent on Health and Education has fallen 10.2% (from 31.47% in 2005-2006 to 21.27% in 2006-2007). However, the total Health and Education recurrent budget has risen from US$27 million to US$40 million (an

increase of 49%). Spending on Security's (Defence and Police) recurrent budget has also dropped from 19.5% to 12.3% whilst Agriculture has increased from 4.54% to 5.95%. This means that both the Security and Agriculture targets have been met in both of the years analysed.

The Budget of Timor-Leste is debated and agreed to by the Parliament. This debate ideally precedes the beginning of each financial year (however it has not always in the past). Timor-Leste's plans for budget expenditure with an emphasis on poverty reduction would appear to be a wise use of petroleum revenue; however the Government of Timor-Leste has a problem with budget execution (the ability to fulfil their spending commitments). The 2005-2006 Annual Financial Report and Accounts of the Treasury (MOPF 2006a) state that overall budget execution in that year was 92%. But, this result is based on the commitments that were made rather than the actual cash payments made. Table 3.2 shows the Appropriation and Actual Expenditure in the 2005-2006 financial year, which reveals that US$38 million was committed but, not spent. This money is regarded as a liability in the current financial year. During the 2005-2006 financial year, US$12 million of US$20 million of liabilities from the previous financial year (2004-2005) was discharged. Thus, the Government began the 2006-2007 financial year with total liabilities of US$46 million (US$8 million of which had been outstanding for at least 12 months). These figures indicate that execution of the Capital and Development portion of the Budget was most problematic. This financial year began with US$23 million worth of Capital and Development expenditure outstanding. The figure also shows that US$17 million of the Goods and Services budget was not realised within the 2006-2007 financial year.

	Appropriation		**Actual Expenditure**			
	Original	**Revised**	**Payments made during the year**		**Expenses recognised against appropriation**	
Salary & Wages	US$29.10m	29.41	US$26.05m	89%	US$26.05m	89%
Goods & Services	US$50.64m	56.99	US$40.22m	71%	US$51.84m	91%
Minor Capital	US$5.80m	6.90	US$3.46m	50%	US$6.37m	92%
Capital and Development	US$34.89m	36.84	US$12.22m	33%	US$35.55m	96%
Total	**US$120.43m**	**130.14**	**US$81.95m**	**63%**	**US$119.81m**	**92%**

Table 3.2 Summary of 2005-2006 Expenditure – Treasury Account (MOPF 2006a)

Some of the problems with budget execution, at least in the most recent financial year, can be attributed to the disruption caused by the crisis in April 2006. However, donors and the MOPF have noted there are problems with budget execution, and a study into the problem was conducted. The World Bank reported:

> Slow budget execution is due to heavy centralization of expenditure management, tight expenditure and procurement controls, weak capacity in ministries, and poor communication between the MPF [Ministry of Planning and Finance] and line ministries. (World Bank 2005b :9)

Budget execution is problematic because it means the Government is unable to implement the plans it agreed to with Parliament at the beginning of the financial year. These are not the only issues that prevent revenue (including petroleum revenue) being spent wisely.

Corruption is also a problem in Timor-Leste, as mentioned previously. According to the Office of the Inspector General there have been 51 cases of corruption identified and investigated (Office of the Inspector General 2006). In 2003 the Former Inspector General presented the number of different types of corruption in the public administration as financial fraud (irregularity of salary payment, falsification of invoice, theft of cash, misuse/uneconomical use of money), recruitment fraud (favourtism, falsification of documents, unclear recruitment process), abuse of power (bribery), theft of public goods and procurement fraud (Lopez da Cruz 2003). Indeed the types of corruption heard about most are small scale, such as irregularities at the Port and people using petty cash inappropriately (Anon. 2004c)[79].

Despite the hangover of a mentality from Indonesian times, the scale of corruption in Timor-Leste is not as grand as that of Indonesia (which would be impossible because the scale of finances circulating in Timor-Leste's economy is small in comparison). Timor-Leste ranked 111th in the Corruption Perceptions Index (Transparency International 2006), whilst Indonesia ranked 130th (of 163 countries). The word 'perception' is important here because in Timor-Leste there is an expectation that those with power will abuse their position for their own gain. Yet, there have been no prosecutions of large scale corruption to date (only rumour and claims[80]). The Former Inspector General explained that people often talk about corruption without presenting evidence, and sometimes when the allegations are investigated it is shown that financial resources have been mismanaged rather than corrupted (Anon. 2003a, d, 2004a). Nevertheless, there are several NGOs which try to monitor cases of corruption by government officials (e.g. *Lalenok Ba Ema Hotu*/Mirror to the People and *La'o Hamutuk*/Walk Together). The role of the Office of the Inspector General and other institutions in ensuring transparency and accountability will be discussed in the following chapter.

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[79] In 2004, the World Bank barred four individuals and four firms who colluded to win contracts to purchase desks and chairs worth US$245,000 (World Bank 2004b). However, no other instances of corruption or nepotism of this scale are known.

[80] Oceanic Exploration and its subsidiary Petrotimor have filed a lawsuit in the US alleging that former Prime Minister Mari Alkatiri accepted US$ 2.5 million from ConocoPhillips Petroleum to secure their investment in the Timor Sea. The lawsuit also claimed Australia, Indonesia and ConocoPhillips had conspired to steal a concession it [PetroTimor] was granted by former coloniser Portugal, before Indonesia invaded East Timor in 1975. Both Alkatiri and ConocoPhillips deny the allegations and the matter has not yet [as of December 2006] been heard. (Barker 2006; East Timor Action Network n.d.)

3.2.4 Human capital

In Chapter Two the importance of human capital in avoiding the resource curse was discussed. In Timor-Leste there exists no single group of highly educated and mutually motivated senior bureaucrats (such as Indonesia's 'Berkeley mafia' or Chile's 'Chicago Boys'). Indeed there is a dearth of experience at senior (and all) levels. East Timorese experience of civil servants during Indonesian times has left a bad impression; civil servants are perceived to be low paid and lazy (Babo-Soares 2003b). Thus well-educated East Timorese today prefer to seek jobs in the better paid NGO or private sector. Unfortunately, there are not enough well-educated East Timorese for all sectors, least of all government. In 2003, Babo-Soares (2003b) suggested the number of graduates was then as few as 1,000-2,000 and those with experience in the Indonesian civil service are very small in number. There is, however, a group of 5000-7000 who do not have degrees, but do have some government experience from working during the Indonesian times. Unfortunately they are marginalised and can not get work in the Government because they do not speak Portuguese or English. This lack of both educated and experienced East Timorese means that it is difficult to establish, let alone develop the institutions of State (Babo-Soares 2003b).

The lack of skills and capacity throughout the Government is widely acknowledged and many donors have created 'capacity building'[81] projects to address this problem. AusAID's (Australia's Aid Program) Australia East Timor Capacity Building Facility is one example (AusAID n.d.). Some development options have been rejected because, without the capacity to implement the projects undertaking the task or accepting the donation is futile, if not destructive. Former Prime Minister Alkatiri was quoted by a local newspaper (*Suara Timor Lorosae*):

> 'It is not that the Government does not want to borrow from the World Bank'. As a new Nation firstly he said 'Timor-Leste needs to build its capacity to manage, and wisely, budgets in every sector of the society'. He said 'the important thing is to develop capacity at an administration level'. (Anon. 2003e)

Unfortunately, the attempts to build capacity have had limited success. In some cases, foreign staff have been employed as 'advisers', but the majority of their time has been spent completing line tasks either because deadlines prevent taking the time to transfer the skills needed to do the task or, often, the advisers do not have the necessary skills to transfer their knowledge. The Government has reflected on the situation and is trying to learn from its experience of the process of building capacity to date. The Ministry of Planning and Finance has identified that capacity building programs generally include a 'three pillar approach' to address skills and

[81] The term 'capacity building' is widely debated, but will not be explored here.

knowledge, systems and processes, and attitudes and behaviours. The Ministry recognises that organisations and resources also need to be addressed (MOPF 2005a).

The lack of people with the knowledge, skills and experience to manage Timor-Leste's petroleum industry and petroleum revenue, in particular, is even more acute. The petroleum industry and the associated laws and mechanisms that must be understood (e.g. how royalties and taxes are calculated) are highly technical. Decisions about petroleum revenue management are ultimately ratified by East Timorese ministers and the Parliament, but are generally proposed by international staff or institutions. Most significantly, Timor-Leste's Petroleum Fund model arose from advice the IMF gave, upon request, to the Government of Timor-Leste. Further, staff in the Macroeconomics Unit of the Ministry of Planning and Finance, tasked with developing the Petroleum Fund Law, were Norwegian and Australian. During the period the Petroleum Fund Law was developed, the Macroeconomics Unit employed only one East Timorese staff member. Norway has a wealth of experience in the petroleum industry, so the Norwegian government provides the majority of advice and assistance in skills and capacity development to the individuals working in the East Timorese petroleum institutions.

Outside of the Government, the skills and knowledge to monitor petroleum revenue management and hold the Government to account in this regard is in even shorter supply. Although many East Timorese women understand the principles of managing scarce resources (evidenced by their high micro-credit repayment rates) it is difficult to translate the Government's plans for managing petroleum revenue into the simple terms that those without a formal education may understand. Some individuals, from NGOs, have made an effort to increase their knowledge and understanding of the petroleum sector, mostly from government presentations and workshops. Some, like Thomas Freitas from an NGO called *Luta Hamutuk,* are now astute enough to question the Government, but they can not hold the Government to account alone.

Section 3.2 has described the situation in Timor-Leste today which, like section 3.1, highlights how Timor-Leste is cursed. Timor-Leste is a poor, small country with many social problems, conflict, corruption, and weak institutions. The Government has established some good policies, but is having difficulties implementing them. Timor-Leste is reliant on the revenue from exploitation of the petroleum resources as well as the support of donors, but the capacity of East Timorese civil servants and the institutions in which they work is limited. Progress will occur at a glacial pace and with the nature of the relationship between the Government and civil society the way it is (described in section 3.1.3) the prospects for Timor-Leste's future are limited.

3.3 Petroleum wealth

Section 3.2 illustrated the desperate need Timor-Leste has for revenue to improve the lives of the East Timorese people and the enormous amount that petroleum revenue contributes to the State's income now and in the future. The Government aims to reduce Timor-Leste's petroleum dependency, but, for now, Timor-Leste is petroleum-dependent. This section will explore, in detail, how much petroleum wealth Timor-Leste has, the projections, the factors involved in determining those projections and the factors relevant to how much petroleum revenue Timor-Leste ultimately receives.

3.3.1 How much?

The Government uses forward estimates of how much petroleum revenue Timor-Leste will receive to determine its budget. Figure 3.6 illustrates the amount of petroleum revenue Timor-Leste estimates it will receive over the next 20 years. At the time the 2006-2007 Budget was prepared, the total petroleum revenue Timor-Leste expected was just over US$12 billion. This figure does not represent Timor-Leste's petroleum wealth in its entirety, only those petroleum fields currently being exploited and providing revenue. The two petroleum fields currently providing revenue are Bayu-Undan and Elang Kakatua/Kakatua North. Elang Kakatua/Kakatua North is in the final stages of production and will soon be exhausted whilst Bayu-Undan began production in 2003, so the projections are almost entirely made up of revenue from Bayu-Undan.

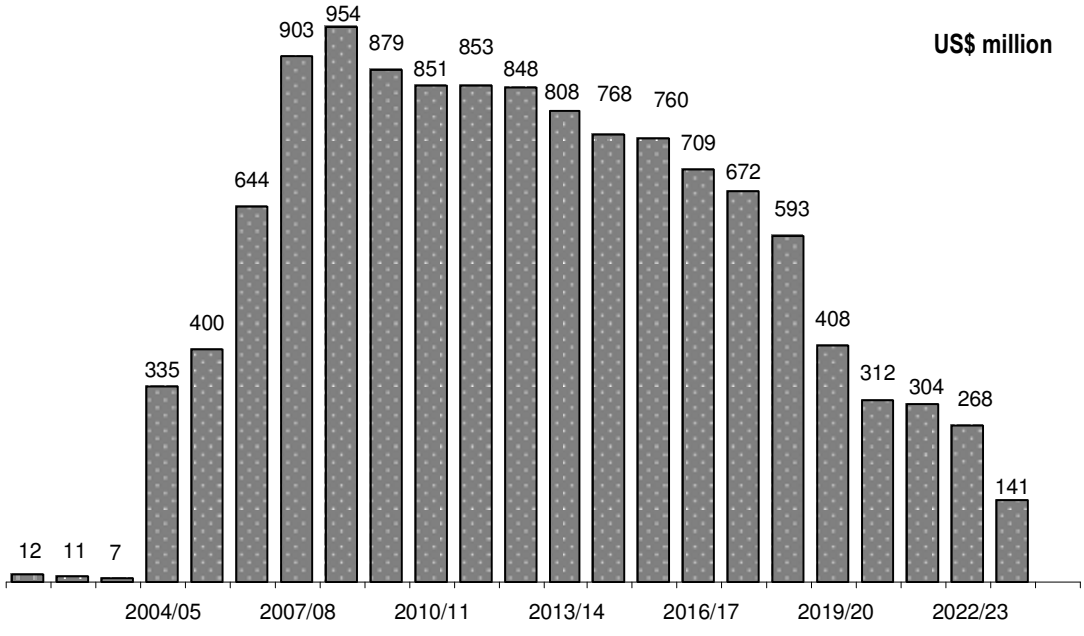

Figure 3.6 Timor-Leste's Estimated Petroleum Receipts (MOPF 2006b)

The goal of sustainable expenditure is achievable if Timor-Leste's Petroleum Fund never has a nil balance. To achieve this goal, Timor-Leste must only withdraw an amount which, based on current projections, it could withdraw every year in the future. The Petroleum Fund Act (2005) named this amount 'Estimated Sustainable Income' (ESI)[82]. In this financial year the Government estimates the value of ESI is US$283 million (MOPF 2006b). If the Government chose to withdraw US$283 million every year, based on the current projections, the Petroleum Fund would never have a nil balance. In reality the income will vary from the estimates, but this principle guides the decision-makers in achieving sustainable expenditure.

The State Budget projects revenue and expenditure, in detail, for the budget year in question and the three financial years following that year. Table 3.3 shows that Timor-Leste plans to spend less than ESI (i.e. less than US$283 million) in this and the forthcoming financial years. This scenario indicates that it is possible, in theory, for the Government of Timor-Leste to survive on the proceeds received from Bayu-Undan alone. Indeed, even before revenue from any other fields comes in, the revenue from Bayu-Undan will generate a large balance in the Petroleum Fund.

	2006-07	2007-08	2008-09	2009-10
Petroleum Fund Opening Balance	US$623.4m	US$1,047.0m	US$1,815.6m	US$2,669.1m
Withdrawal from the Petroleum Fund	-US$259.7m	-US$203.8m	-US$208.6m	-US$201.0m
Opening Balance Minus Withdrawal	US$363.7m	US$843.2m	US$1,607.0m	US$2,468.1m
Petroleum Revenue earned	US$643.7m	US$902.8m	US$953.7m	US$878.9m
Interest earned on the Petroleum Fund	US$39.6m	US$69.6m	US$108.4m	US$148.7m
Petroleum Fund Closing Balance	US$1,047.m0	US$1,815.6m	US$2,669.1m	US$3,495.7m

Table 3.3 Projected value of the Timor-Leste Petroleum Fund (based on data from MOPF 2006b)

Figure 3.7 illustrates the balance of the Petroleum Fund over the next few years. Based on what other countries have experienced, as the Petroleum Fund grows and civil society becomes more aware of the problems of budget execution, the Government is likely to be criticised further, and the potential for corruption and conflict over management of Timor-Leste's natural resource wealth will increase. If the Government achieves its plan and spends less than ESI, the Petroleum Fund will accrue almost US$4 billion by June 2010. However, even these estimates are conservative and the revenue earned is expected to be much greater as the following section will show.

[82] ESI will be explained further in the following chapter.

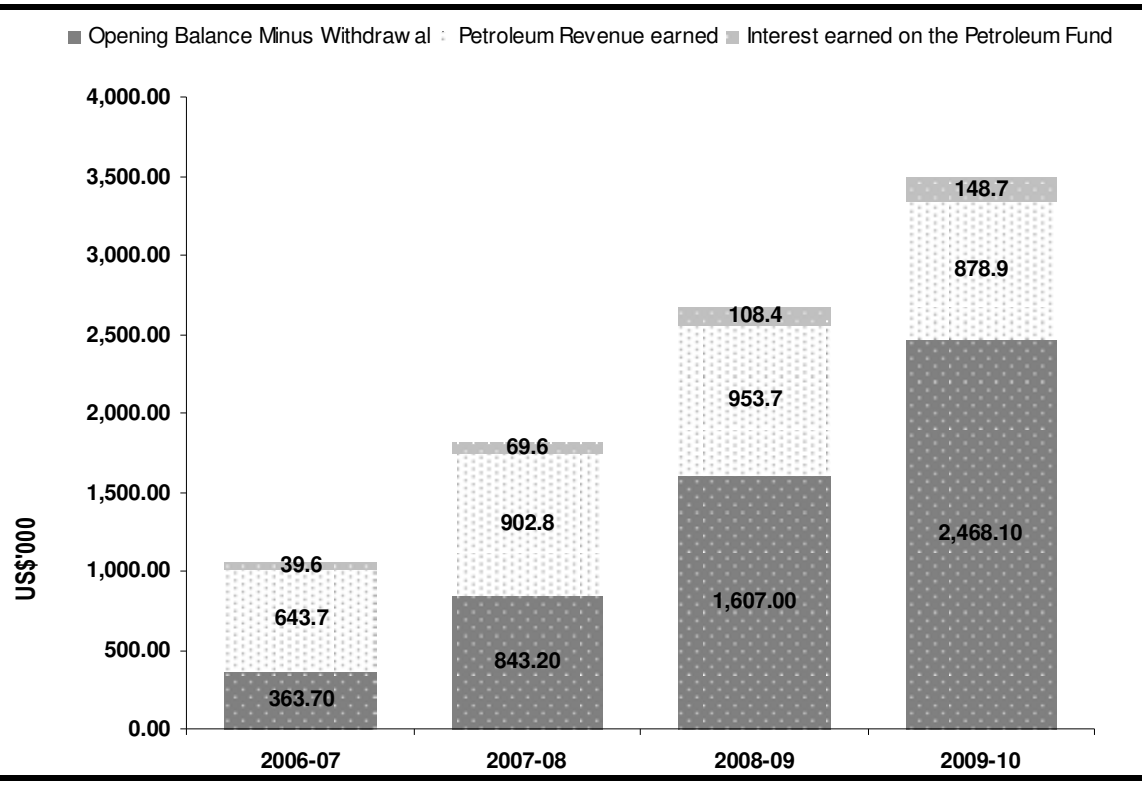

Figure 3.7 Petroleum Fund Balance (MOPF 2006b)

3.3.2 Making projections

One of the difficulties for any country managing petroleum revenue is the lack of certainty of income projections. Many factors including changes in oil price, changes to production plans and the value of the US dollar, can all impact on income projections. Figure 3.8 shows the difference in projections between the last financial year (2005-2006) and this one (2006-2007). A plan for expenditure in 2008-09 prepared (hypothetically) in 2005 may have looked significantly different to one prepared in 2006 as there was a difference of US$2 billion in expected income[83]. In 2002, when the National Development Plan was written, it was expected Timor-Leste would have earned just US$84 million petroleum revenue by the end of this financial year (2006-2007). Instead, by March 2007 the Petroleum Fund had a balance of over US$1.2 billion (Maria and Vasconselos 2007). These examples show a huge increase in income in the Government's favour, but this may not always be the case. The Ministry of Planning and Finance has outlined the reasons why plans for expenditure should be prudent:

> There is a risk, however small, of a major disruption in the production, and hence [Timor-Leste's] revenues. Against this background we should be cautious in taking expenditures up to sustainable income levels as long as Timor-Leste has only one field in production. There

[83] The reason for the difference between the 2005-06 Budget and the 2006-07 Budget is not entirely due to increased production and increased oil prices. The Petroleum Fund was established in the 2005-06 financial year and when it was established the Government decided to deposit an additional US$250 million into the Petroleum Fund.

> are a range of risks and uncertainties in any forecast of petroleum revenues. The most sensitive assumption is oil price, meaning that the forecast of petroleum revenues changes substantially even from a relatively small change in assumed oil prices. Other uncertainties include LNG contract volume, and pricing terms, condensate and LNG spot sales price relative to oil prices, operating costs and inflation. The [Ministry of Planning and Finance] has endeavoured to adopt prudent assumptions in all cases. (MOPF 2006b :19)

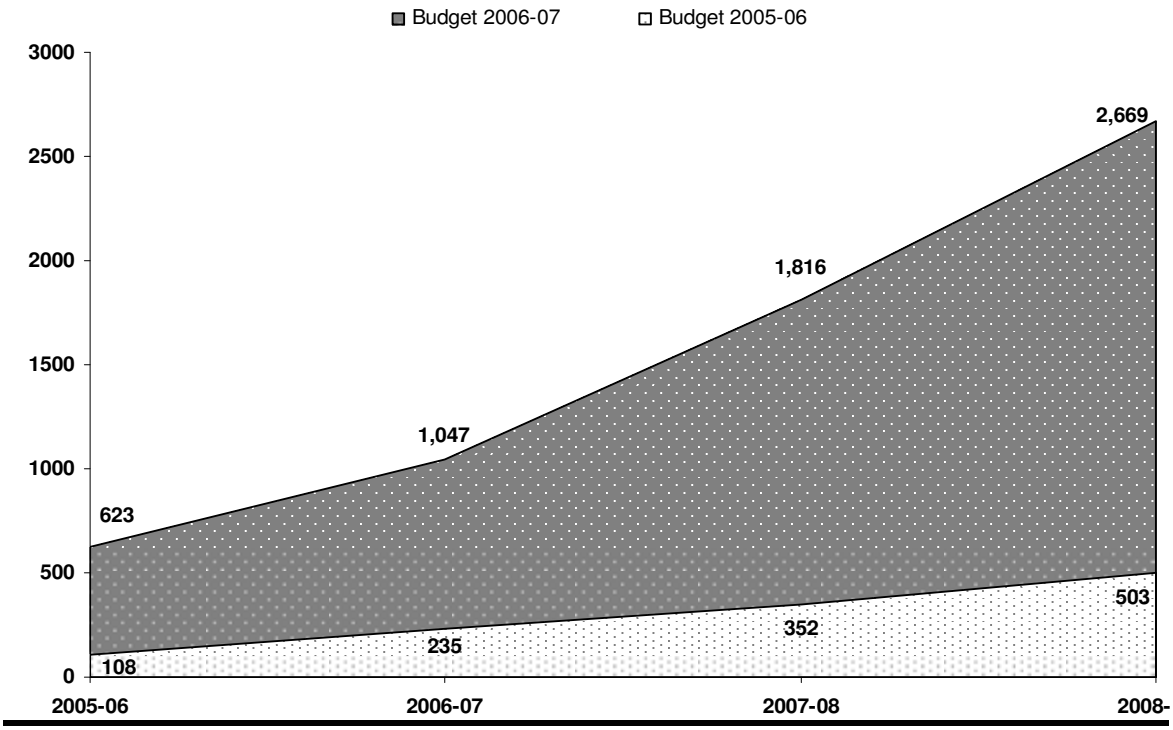

Figure 3.8 Estimated Balance of the Petroleum Fund at Year End (based on data from MOPF 2005b, 2006b)

There are various reasons why estimated projections may not be met thus there is a need to minimise risk and use conservative principles when projecting revenue. One of the main assumptions used is the price of oil. In order to minimise projection error, the Government of Timor-Leste prepares projections based on different scenarios and Figure 3.9 illustrates these. The Base scenario assumes that oil prices will average US$58 per barrel and this is the scenario which gives an ESI value of US$283 million. If, however, the price of oil dropped to an average of US$48 as illustrated in the low scenario the value of ESI would be US$212 million. The Government plans to withdraw US$259 million in this financial year, which is below ESI if oil prices follow the base scenario (US$58 per barrel), but not if they follow the low scenario (US$48 per barrel). In the latter case, that level of expenditure would be unsustainable. The current (as at 12 December 2006) value of oil is US$61 per barrel. Given the war in Iraq and the instability in Nigeria and Sudan, the price of oil is unlikely to drop and more likely to remain much higher than US$58 (the base scenario) yet the purpose of this discussion is to show that

petroleum prices are volatile. Thus, it is necessary to remain conservative in projecting expected petroleum revenue. In addition to preparing conservative projections, establishing the Petroleum Fund is another way of managing the volatility of petroleum revenue income and attempting to ensure there is always a source of revenue to fund budget expenditure.

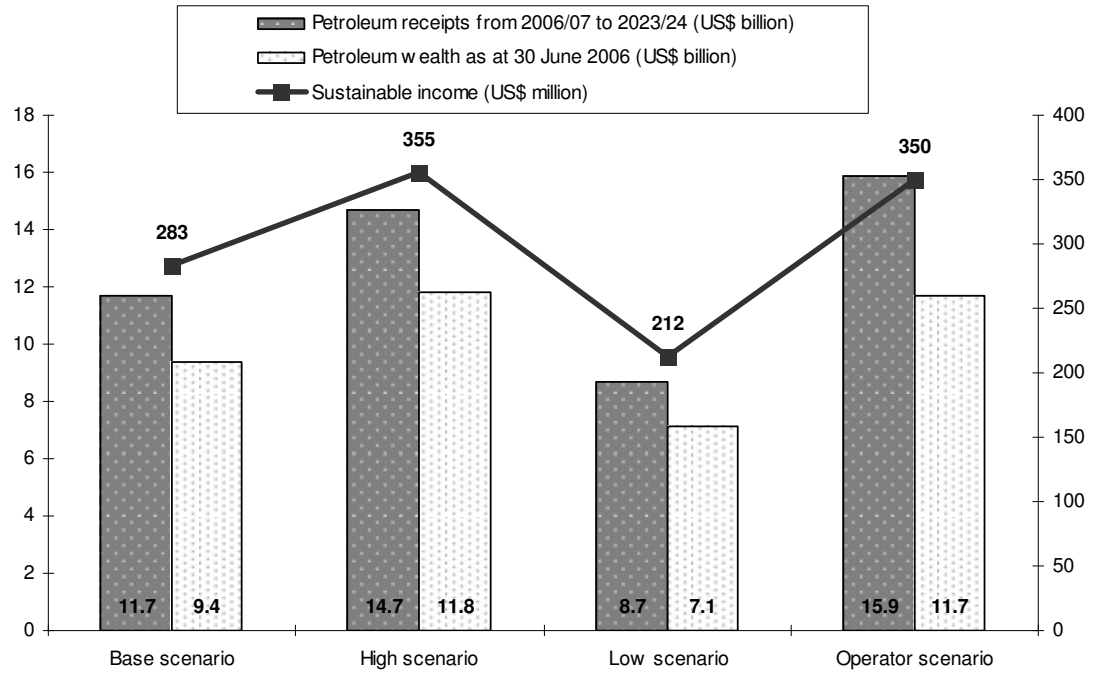

Figure 3.9 Timor-Leste's Projected Petroleum Revenue Scenarios (MOPF 2006b)

This chapter presented a detailed analysis of Timor-Leste's institutions, both formal and informal. Timor-Leste is poor, and its people must struggle to survive. Timor-Leste's history has rendered its productive institutions weak and some of its destructive institutions strong. A crisis that erupted in April 2006 highlighted some of the institutional inadequacies and a lack of trust between the Government and civil society. The Government is heavily dependent on petroleum revenue to fund its minimal budget and its capacity to manage that revenue, and to execute the Budget is weak. The lack of human capital and the problematic relationship between civil society and the Government may undermine the Government's efforts to manage Timor-Leste's petroleum revenue wisely, and to avoid the resource curse.

Chapter 4 MANAGING TIMOR-LESTE'S PETROLEUM REVENUE

The Government of Timor-Leste aims to avoid the resource curse and has established mechanisms to manage its petroleum revenue to achieve that aim. Chapter Three described Timor-Leste's institutions that provide the landscape in which decisions about petroleum revenue are made. This chapter details how the Government of Timor-Leste manages Timor-Leste's petroleum revenue. The Petroleum Fund Law (Democratic Republic of Timor-Leste 2005d) is a cornerstone of the Government's petroleum revenue management plans, and thus the primary focus of this chapter. This chapter begins by describing the development of the Petroleum Fund Law, then its objectives, the receipt and investment of petroleum revenue. But, there are other institutional mechanisms that are used to manage Timor-Leste's petroleum revenue. For example, the Petroleum Fund Law does not define how petroleum revenue is spent, the Parliament makes that decision. Therefore, this chapter also describes the role of other institutions in managing Timor-Leste's petroleum revenue, particularly in terms of expenditure (outflow), transparency and accountability. First, however, the chapter is introduced with a description of Timor-Leste's petroleum fields, which provide the revenue, and an overview of the Government of Timor-Leste's institutions that are directly involved in processing Timor-Leste's petroleum revenue.

Timor-Leste is blessed with oil and gas deposits both on and offshore. Gunn (1999) reports that low grade crude oil was identified in several areas of Timor-Leste in 1947 and this concurs with suggestions that during World War II the Japanese fuelled their planes by extracting petroleum from onshore seeps[84]. In the late 1960s, Portugal began to consider exploitation of Timor-Leste's offshore petroleum resources. The Oceanic Exploration Company approached the Portuguese Government to obtain a license to explore an area of the Timor Sea to which Australia had made claim. Despite Australia's opposition, Portugal granted the concession to PetroTimor (a company later incorporated by Oceanic) in January 1974 (Antunes 2003), by which time Australia had negotiated a maritime boundary with Indonesia. As Portugal had not been party to those negotiations, the 1972 boundary between Indonesia and Australia left a gap in the boundary between Portuguese East Timor and Australia. That gap came to be known as the 'Timor Gap'.

After Indonesia invaded Timor-Leste, the question of establishing a maritime boundary that closed the gap between Timor-Leste and Australia became pertinent to proceeding with the

[84] Photos of Timor-Leste's onshore seeps can be seen on the Government's Oil and Gas Directorate's website (National Directorate of Oil and Gas 2006).

exploitation of petroleum resources in the Timor Sea. The negotiations between Indonesia and Australia proceeded slowly until in 1989 they agreed to defer the establishment of a permanent maritime boundary and established a Joint Zone of Cooperation instead. Australia and Indonesia shared the proceeds of petroleum exploitation from that zone equally. This arrangement was known as the 'Timor Gap Treaty' and although it had no legal basis, it was the precursor to agreements that Timor-Leste and Australia would make in the future.

The issue of establishing a permanent maritime boundary, between Timor-Leste and Australia, is one that, once Timor-Leste had gained its independence, caught the attention of civil society and the media, both in Timor-Leste and Australia. A campaign was waged that highlighted the stark difference between the wealth of the two nations (Timor Sea Justice Campaign 2005). A permanent maritime boundary has never been established between Timor-Leste and Australia. The history of maritime boundary negotiations between Timor-Leste and Australia, and between Indonesia and Australia, is complex. However, maritime boundary negotiations are not the subject of this thesis, and will not be explained[85].

Timor-Leste's petroleum fields have been discussed in terms of three 'petroleum provinces' (Gusmão Soares 2006b), and these are depicted in Figure 4.1[86]. The three provinces differ in terms of their size, development status, and the nature of their institutional and administrative arrangements. Some onshore seeps are used locally, to fuel cars and generators, but formal exploration of Timor-Leste's onshore oil and gas seeps is expected to begin in 2008 (Gusmão Soares 2006b). However, this strategy is still evolving and decisions about the development of Timor-Leste's onshore oil and gas will be taken by the new government (Gusmão Soares 2006b).

In 2005, 11 acreage areas were released for exploration in Timor-Leste's sovereign offshore area. Five areas have since been awarded to companies for exploration (Gusmão Soares 2006a). Exploration of some areas began in 2006, with production (dependent on discovery) expected in 2013. The petroleum resources found and exploited in these areas, and any proceeds from them, will be 100% East Timorese. The Government of Timor-Leste emphasised transparency in the process to bid for exploration of these areas. Article 12 of the Government Decree on Bidding Rounds for the Award of Petroleum Contracts states that 'a summary of the proposals evaluation results, and a significant summary of the Report shall be published in the Jornal da Républica [the Government Gazette], as well as through public media considered adequate by the Minister of Natural Resources, Minerals and Energy Policy, Minerals and Energy Policy, within ten (10) working days' (Democratic Republic of Timor-Leste 2005a). The Production

[85] For details of the history of the administration of petroleum resources in the Timor Sea, read 'A Study of the Offshore Petroleum Negotiations Between Australia, the U.N. and East Timor' by Munton (2006).

[86] For more detailed maps of Timor-Leste's oil and gas seeps, refer to the Government of Timor-Leste's Oil and Gas Directorate's website: (National Directorate of Oil and Gas 2006) and Charlton (2002).

Sharing Contracts were also published, and made available on the National Directorate of Oil and Gas' website (National Directorate of Oil and Gas 2006).

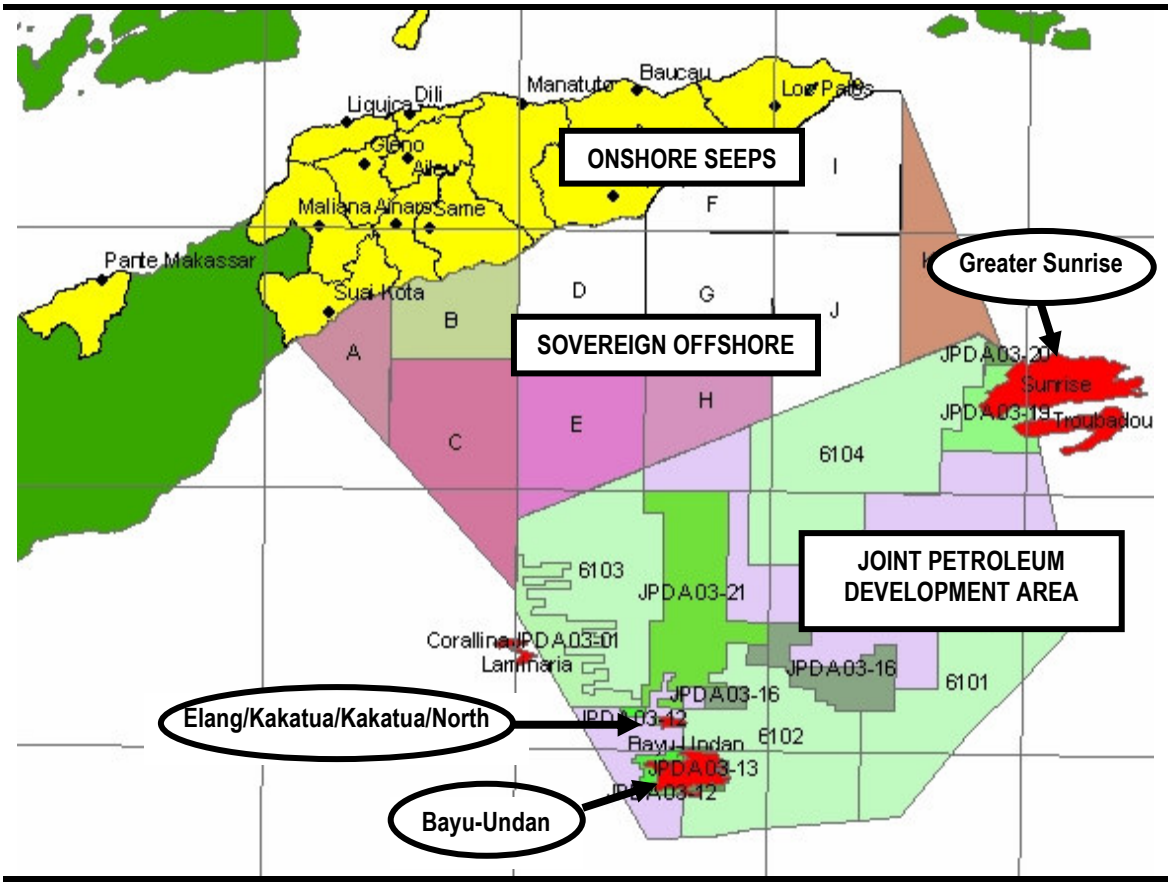

Figure 4.1 Timor-Leste's Onshore, Sovereign Offshore and Joint Petroleum Development Areas (Gusmão Soares 2006b)

In the absence of a legally defined maritime boundary, Timor-Leste and Australia agreed to share revenue from the exploitation of petroleum resources in the Joint Petroleum Development Area (JPDA) of the Timor Sea (depicted in Figure 4.1). Exploration of the JPDA (then known as Zone of Cooperation A under the Timor Gap Treaty) began in 1992 (during Indonesian occupation), and three petroleum fields, of note, have or will be exploited. Production from Elang/Kakatua/Kakatua North began in 1998, and those fields are now almost exhausted. Bayu-Undan was discovered in 1995, and is the field that currently provides the majority of revenue to the Government of Timor-Leste. Bayu-Undan is estimated to contain 400 mm bbls (million barrels) of liquids and 3.4 tcf (trillion cubic feet) of gas (Gusmão Soares 2006b). However, Greater Sunrise, discovered in 1974, is the largest of the petroleum fields identified to date, and is estimated to contain 350 mm bbls of liquids and 7.7 tcf of gas (Gusmão Soares 2006b). Greater Sunrise has also received the most attention because of its size, the negotiations between Timor-Leste and Australia relating to administration of revenue from the field, and the establishment of a permanent maritime boundary.

The Timor Sea Treaty (2002) legislates the management of revenue from the JPDA. Timor-Leste gets 90% and Australia gets 10% of the revenue from petroleum field production within the JPDA. Elang/Kakatua/Kakatua North and Bayu-Undan sit entirely within the JPDA so Timor-Leste receives 90% of the revenue from those fields. But, the Greater Sunrise gas field sits only 20% inside it which means, in theory, Timor-Leste would get just 18% of the production revenue from this field under the Timor Sea Treaty (2002). However, in the absence of the delimitation of a permanent maritime boundary, which might change the portion of Greater Sunrise belonging to Timor-Leste, Timor-Leste negotiated with Australia so that Timor-Leste would receive a larger share of the Greater Sunrise field[87]. On 23 February 2007, the Certain Maritime Arrangements in the Timor Sea (CMATS) Treaty (2006) and the Greater Sunrise International Unitisation Agreement (2004) came into force. Pursuant to the CMATS Treaty, revenue from Greater Sunrise will be equally shared by Timor-Leste and Australia, and the resolution of a permanent maritime boundary will be deferred for at least 50 years.

There are a range of institutions involved in the management of Timor-Leste's petroleum revenue. The resources of the JPDA are currently managed by the Timor Sea Designated Authority (TSDA) on behalf of both Timor-Leste and Australia. The East Timorese ministry responsible for petroleum activities was supposed (under the Timor Sea Treaty) to assume the responsibilities of the TSDA in April 2006, but that transfer of responsibility has been extended until July 2007, whilst the Government of Timor-Leste 'seeks to create a National Petroleum Regulatory Authority' (Campos 2007). The TSDA is responsible for transferring all of the revenue from exploitation of petroleum fields within the JPDA to the Petroleum Fund.

Within the Government of Timor-Leste, there are a range of institutions across several ministries involved in managing petroleum revenue. The Oil and Gas Directorate sits in the Ministry of Natural Resources, Minerals and Energy Policy. Institutions such as the East Timor Revenue Service (which collects tax, including that from companies exploiting Timor-Leste's petroleum fields[88]), the Macroeconomic Planning, and the Budget department are located within the Ministry of Planning and Finance. The Banking and Payments Authority (Timor-Leste's Central Bank) also has responsibilities in managing the Petroleum Fund. The Timor Sea Office (TSO) is structurally located within the office of the Prime Minister, illustrating the importance

[87] Some legal opinions (e.g. Lowe et al. 2002) suggest that, based on current international maritime law, Timor-Leste could be entitled to a larger share of the Greater Sunrise petroleum field. There is also another oil field, Corallina/Laminaria, situated outside the JPDA, to the west, which, under the current arrangement, sits within Australia's maritime boundaries. If a permanent maritime boundary were decided, some or all of Corallina/Laminaria might belong to Timor-Leste (depending on where the maritime boundary lay). But, exploitation of Corallina/Laminaria has already begun and Australia has taken 100% of the revenue from this petroleum field to date.

[88] Timor-Leste's Oil and Gas Directorate (2006) explains how tax and production revenue from the JPDA are handled: 'Both Timor-Leste (90 per cent) and Australia (10 per cent) may tax contractors' profits under each country's tax rules. The Timor-Leste share of tax revenue is paid directly by companies into the Timor-Leste Petroleum Fund while production shares are paid to the TSDA as a PSC partner and then forwarded to the Petroleum Fund.' (National Directorate of Oil and Gas 2006: 'Answers to questions put at Timor-Leste's presentations in Singapore, London, Calgary and Houston, September 2005')

of its work. The primary task of the TSO is to establish permanent maritime boundaries with Timor-Leste's neighbours, Australia and Indonesia (Timor Sea Office 2004a).

4.1 The development of Timor-Leste's Petroleum Fund Law

The Government of Timor-Leste decided to establish a Petroleum Fund to manage their petroleum revenue and they chose to create a separate law for that purpose (rather than enshrine the Petroleum Fund in the Constitution[89]). The Petroleum Fund Law (Democratic Republic of Timor-Leste 2005d) institutionalises some mechanisms that may assist Timor-Leste to manage their petroleum revenue sustainably, and avoid the resource curse. Timor-Leste's Petroleum Fund Law is provided in Appendix 2. In brief, the Petroleum Fund Law establishes the Petroleum Fund for Timor-Leste (hereafter referred to as the Petroleum Fund), which sets the parameters for operation and management of the Petroleum Fund, governs the collection and management of receipts associated with petroleum wealth, regulates transfers to the State Budget, and provides for government accountability and oversight of these activities.

The development of the Petroleum Fund Law is summarised in Figure 4.2. Timor-Leste received its first payment of petroleum revenue in October 2000 (Timor Gap Joint Authority for the Zone of Cooperation 2000). At that time (under an arrangement put in place by the United Nations Transitional Administration in Timor-Leste) royalties were deposited into a specific account of the Timor-Leste's Central Bank and accrued in that account. Taxes earned from petroleum exploitation were not saved, but spent via the budget process along with domestic revenue. This was an interim arrangement with no detailed plans for how petroleum revenue should be invested or when and how it should be spent. The arrangement allowed taxes from petroleum exploitation to be spent outside a petroleum revenue framework and thus a more rigorous approach was needed before substantial amounts of petroleum revenue began to flow.

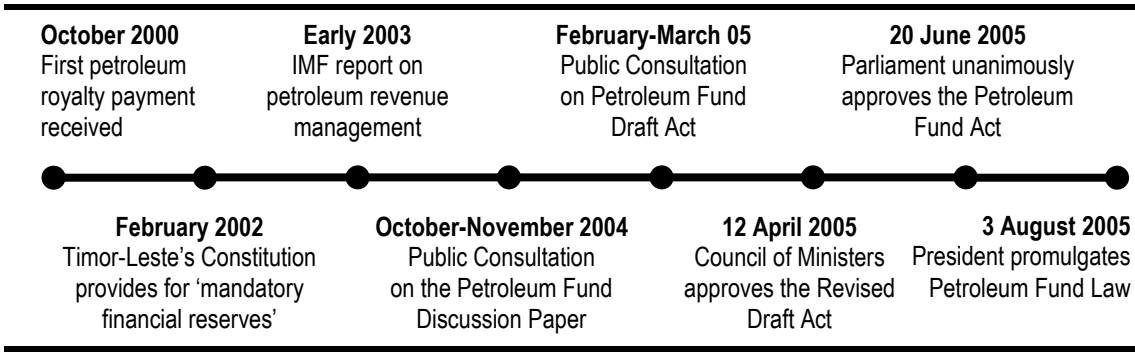

Figure 4.2 The road to a Petroleum Fund (Drysdale 2007)

[89] Although this is a choice of some significance it will not be explored in this thesis, because it was not ranked highly by the research participants as an issue of importance (see Chapter Five).

On 9 February 2002 Timor-Leste's constitution was approved. Section 139 of the Constitution established the basic conditions for management of Timor-Leste's natural resources and paved the way for some form of petroleum revenue management:

> The resources… shall be owned by the State and shall be used in a fair and equitable manner in accordance with the national interests… The conditions for the exploitation of the natural resources… should lend themselves to the establishment of mandatory financial reserves (Constituent Assembly of East Timor 2002 :59).

Thereafter, the Government of Timor-Leste sought the opinion of the World Bank, the IMF, and the Asian Development Bank on how best to manage their petroleum revenue (Alkatiri 2003a). In early 2003, the IMF provided the Government with a report suggesting they establish a Petroleum Fund. That report was not made available to the public, and no reason was given for this lack of transparency. Statements by the Government about their plans for petroleum revenue management focussed on the IMF's suggestion that the model for Timor-Leste's petroleum revenue management should be based on Norway's Petroleum Fund.

The Government's decision to create a Petroleum Fund Law with many similarities to Norway's Fund was based on the assumption that Norway's model was appropriate within the East Timorese context. But, other than the fact that both countries exploit petroleum resources, there are few similarities between Norway and Timor-Leste. Even the contribution that petroleum wealth makes to each country's GDP differs markedly. Norway's petroleum industries, including crude oil and gas extraction, account for just 22.5% of GDP (Government of Norway n.d.). Timor-Leste's petroleum revenue is closer to 80% of GDP. Norway has a diverse industrial society and is the world's third largest oil exporter. Norway began exploiting petroleum resources in the North Sea in 1971, and has 35 years' experience in the industry. Norway's institutions, particularly its petroleum institutions, are much stronger, and they have a good deal more experience in the industry than Timor-Leste[90]. Norway's constitution is 200 years old, and Norway has one of the most democratic systems in Europe. Even before Norway's petroleum revenue flowed, Norway was a relatively rich, industrial nation. If sustainable petroleum revenue management depends on institutional strength as well as mechanisms to manage petroleum revenue wisely (as Chapter Two suggests), then Norway is well placed to manage its revenue effectively. If the balance of Norway's Fund is an indication of managing its revenue well, then it has — the market value of Norway's 'Government Pension Fund-Global' (formerly the Norwegian Petroleum Fund) is now NOK1,712.3 billion (the equivalent of about US$277 billion). Timor-Leste, on the other hand, does not have the experience and institutional strength to complement the Petroleum Fund. Timor-Leste can

[90] Norway is often used as an example of a country that has avoided the resource curse, but Roed Larsen suggests there has been some decline in their good fortune in recent years (Roed Larsen 2003).

'appropriate' the mechanisms[91] that Norway has used for its own benefit, but the success of that model will depend on institutional strength that Norway can not gift.

In Chapter Three (Table 3.1), the GDP and HDI of countries relevant to Timor-Leste were documented. Whilst Norway is a developed nation, ranked first of all the countries in the UN's HDI (UNDP 2006a), Chad and São Tomé e Príncipe have more similarities with Timor-Leste. Chad provides an example of a country with institutions that are so weak that petroleum companies would not invest in the building of the pipeline there without the backing of the World Bank (Walsh 2004). The World Bank put conditions on their support of the project that included the establishment of a petroleum revenue management framework. Chad and Timor-Leste are similar in some ways. Chad has a long history of civil war, continued political instability, a weak judicial system, widespread corruption and a lack of institutional capacity. But, having won independence in 1960, Chad has had almost 50 years to develop. Today, Chad ranks 171st, of 177 countries, in the UN's HDI (UNDP 2006a). Chad's GDP per capita (PPP) is US$2,090, life expectancy in Chad is 44 years, only 35 percent of the school age population is in school and only 26 percent of the adult population is literate (UNDP 2006a). Chad's HDI ranking (171st) is lower than Timor-Leste's (142nd), but its GDP per capita is higher (Timor-Leste's is $367).

São Tomé e Príncipe has even more similarities to Timor-Leste. São Tomé and Príncipe are small islands in the Gulf of Guinea; both were Portuguese colonies that became independent on 12 July 1975. There is a Joint Development Zone between São Tomé e Príncipe and its large neighbour, Nigeria, which operates under an arrangement that has similarities to the Timor Sea Treaty between Timor-Leste and Australia. São Tomé e Príncipe fares slightly better in the HDI than Timor-Leste, ranking number 127 (UNDP 2006a). São Tomé e Príncipe's GDP per capita (PPP) is US$1,231, life expectancy in São Tomé e Príncipe is 63 years, 63 percent of the school age population is in school and 83 percent of the adult population is literate (UNDP 2006a). São Tomé e Príncipe established a Petroleum Fund Law in October 2004. As at 2006, signature bonuses have been received, but petroleum fields have not yet been exploited. Chad and São

[91] The main similarity between the Timor-Leste Petroleum Fund and the Norwegian model is that the outflow from the Petroleum Fund is the sum needed to cover the non-oil budget deficit, making net allocations to the Petroleum Fund equal to the total budget surplus including oil revenues. But, there are many other similarities. In both countries:
- The Ministry of Finance is responsible for the management of the Petroleum Fund
- The operational management is carried out by the Central Bank
- The Petroleum Fund is placed in a separate account and invested separately
- The fund's capital is invested offshore
- The Fund can be invested in bonds and equities
- Fund management is in accordance with guidelines set by the Ministry of Finance
- Withdrawals are sanctioned by Parliament
- The Fund is managed prudently
- The Ministry of Finance has an advisory council on investment strategy (In Norway the Investment Strategy Council, in Timor-Leste the IAB).
- The Central Bank publishes quarterly reports on the management of the Petroleum Fund, as well as an annual report and the reports are made public. (Government of Norway n.d.)

Tomé e Príncipe's experience in managing their petroleum wealth are used as examples in this chapter because of their similarities to Timor-Leste.

Despite some similarities to the Norway model, Timor-Leste attempted to develop a Petroleum Fund model that was distinctly East Timorese and served East Timorese purposes. Recognising the national importance of this institution, on 18 October 2004, the Government launched a public consultation on the Petroleum Fund that ran for six months and sought feedback on a Petroleum Fund Discussion Paper (MOPF 2004b) and the Petroleum Fund Draft Act (Ministry of Planning and Finance and Petroleum Fund Steering Group 2005). An analysis of this consultation process can be found in 'Portrait of a Petroleum Fund Consultation' by Drysdale (2007). The consultation process attempted to give all East Timorese an opportunity to participate in the Petroleum Fund Law's development. Public meetings were held throughout the consultation process, both in Dili and in the districts. Government officials (including the Prime Minister) attended and presented at the public meetings. The consultation documents were available from the Ministry of Planning and Finance website (MOPF 2007) in three languages (Portuguese, English and *Tetum*) and the meetings were (for the most part) conducted in *Tetum*. At least one meeting was televised and several meetings were broadcast on radio.

On 12 April 2005 a revised Petroleum Fund Draft Act was approved by the Council of Ministers (Democratic Republic of Timor-Leste 2005c) and sent to Parliament. Following further consultation by the Parliamentary Committee responsible for Economic and Financial matters, the Parliament made one amendment to the revised Petroleum Fund Draft Act before it was passed on 20 June 2005. This was the first occasion on which an Act had been passed unanimously by the Parliament of Timor-Leste, thereby symbolising parliamentary unity on this important issue of petroleum revenue management. The Petroleum Fund Law (Democratic Republic of Timor-Leste 2005d) was promulgated by the President, without amendment, on 3 August 2005, almost five years after Timor-Leste received its first petroleum royalty payment.

4.2 Timor-Leste's Petroleum Fund objectives

Broadly speaking, a natural resource fund (a Petroleum Fund in Timor-Leste's case) is an institution and a mechanism that distinguishes natural resource revenue from other revenue. By establishing a Petroleum Fund a state illustrates an intention to distinctly manage the funds from exploitation of petroleum resources, and this is a first step in accounting for such funds separately[92]. Where no Petroleum Fund exists, to determine how much revenue is received from the exploitation of petroleum resources, let alone how the revenue is spent (or mis-spent), particularly where institutions are weak, is more difficult (and in some cases impossible).

[92] 'Petroleum Fund' and 'Natural Resource Fund' are used interchangeably throughout.

In this way, a Petroleum Fund can support fiscal discipline and the Preamble of Timor-Leste's Petroleum Fund Law states 'The Petroleum Fund shall be a tool that contributes to sound fiscal policy' (Democratic Republic of Timor-Leste 2005d). However, the mechanisms through which a Petroleum Fund does that may vary from one fund to the next. Davis et al. (2001; 2003) have provided the most comprehensive analysis of natural resource fund objectives to date. Depending on the mechanisms put in place a natural resource fund may achieve one or more of these objectives. This section explores three objectives that Timor-Leste's Petroleum Fund Law aims to achieve; stabilising the flow of petroleum revenue, financing the State budget, and saving some petroleum revenue for use in the future.

4.2.1 Stabilising the flow of petroleum revenue

The impact of the volatility of the flow of petroleum revenue was explained in Chapters Two and Three. A Petroleum Fund may serve to stabilise the flow of revenue by insulating the Government, and the economy, from revenue shocks that arise from the unpredictable nature of resource extraction and petroleum prices. Instead, this volatility and uncertainty is transferred to the Petroleum Fund, and the State uses a mechanism to limit expenditure. In this way a state can reduce the risk of 'Dutch disease' or volatility in the exchange rate, because revenue is not spent as quickly (or slowly) as it comes. Such funds are often referred to as 'stabilisation funds' (Davis et al. 2001; Davis et al. 2003).

The degree of flow stability and certainty attained depends on how the flow to, and from, the Petroleum Fund is mechanised. Sometimes the amount deposited or withdrawn from a Fund is based on contingencies that relate to externalities, such as oil price or production. The basis of a contingency-based approach is that when revenue is greater, more revenue is saved, and vice versa when revenue drops. Such funds operate in response to external factors, so they could quickly accumulate revenue, or are rapidly exhausted. Thus, a fund based on contingencies provides less stability, because a state can not be certain of the annual spending amount that will be available to it, and must expect fluctuations in available revenue[93]. If, instead, a state uses a rule for fund deposits, and withdrawals, which is not affected by externalities, the flow of petroleum revenue can be more stable.

Timor-Leste's Petroleum Fund Law stabilises the flow of petroleum revenue by creating the effect of a reservoir. Whilst some funds might save only a specified portion of petroleum revenue (perhaps just the interest earned), all of Timor-Leste's petroleum revenue is invested in the Petroleum Fund and small scale portions of revenue are withdrawn when needed (just as a reservoir gate allows water through when it is needed). In Timor-Leste's case, deposits are not

[93] Davis and Ossowski (2001) explain that contingent funds with fixed rules can be difficult to design and operate, and may also be less transparent (particularly if the fund is financed from elsewhere, or funds are loaned).

contingent on any externalities and withdrawals depend only on the total estimated income (not short-term factors, such as price or production). The aim of this mechanism (which will be explained further in section 4.3.3) is that the withdrawals can, potentially, be of equal value every year. In this way the Government can plan its expenditure based on its long-term strategies rather than in response to the effects of the petroleum industry. This is indicative of Timor-Leste's prudent approach to petroleum revenue management.

The flow of petroleum revenue into a fund is also affected by decisions about when petroleum fields are exploited. This is pertinent in Timor-Leste's case, particularly because Timor-Leste has petroleum reserves that are both unexplored and unexploited. In Timor-Leste, there is no over-arching Government policy, or law, that determines when a petroleum field, once identified, should be exploited. This means that, in effect, decisions to exploit are not based on the need for revenue to fulfil the Government's strategies. Chapter Three (section 3.3.1) explained that revenue from the exploitation of Bayu-Undan is more than enough to sustain current levels of Government expenditure forever. The only reason, the Government gave to exploit the Greater Sunrise petroleum field was because there is a small risk that Bayu-Undan could fail (Borges and Lobato 2006). This rationale does not hold as a reason to explore or exploit other petroleum fields, but the Government is proceeding to do so. The revenue that these fields will generate will cause the Petroleum Fund to grow substantially and, like the water in the proverbial reservoir alluded to earlier, this revenue will put pressure on the mechanisms that affect the outflow from the Petroleum Fund. Despite the Petroleum Fund's allusion of stability, stability could be eroded as the ratio of the Petroleum Fund's balance relative to its outflow grows.

4.2.2 Financing the State budget

Timor-Leste's Petroleum Fund is also a financing fund, which is a fund that provides a source of revenue to fund a state's budget. When the Budget is in deficit, a withdrawal from the Fund is made to finance the Budget gap. Such a mechanism assumes there is enough revenue in the Petroleum Fund to finance that gap, and relies on the good governance of other institutions to ensure the Budget is not increased because the Petroleum Fund has the revenue to finance it. If a fund's sole purpose is to finance the State budget then the only withdrawals from such a fund would be to the Budget. Such integration between Timor-Leste's Petroleum Fund and the Budget provides a robust mechanism that can facilitate monitoring of petroleum revenue and enhance transparency and accountability.

The Norwegian 'Government Pension Fund-Global' (formerly the Norwegian Petroleum Fund) is also a financing fund, and this is the most significant similarity between Norway and Timor-Leste's Fund; all petroleum revenue is transferred to the Petroleum Fund and withdrawals cover the non-oil budget deficit. The Preamble of Timor-Leste's Petroleum Fund Law states the

Petroleum Fund is 'coherently integrated into the State Budget' (Democratic Republic of Timor-Leste 2005d). Figure 4.3 illustrates how East Timorese petroleum revenue flows from its receipt, into the Petroleum Fund and then to the State Budget for expenditure. The Figure also shows that other revenue[94] flows into the State Budget, which means that once petroleum revenue is deposited into the State Budget account it is indistinguishable from other revenue. Another option for Timor-Leste is to fund State Budget expenditure by taking a loan from an international financial institution (such as the IMF or the World Bank), but (as explained in Chapter 3) the Government of Timor-Leste has a policy of remaining debt-free.

The Petroleum Fund is an earmarked receipts account held by the Central Bank (under Article 5.2 of the Petroleum Fund Law) and all petroleum revenue must be deposited into that account. Other than management expenses paid to the Central Bank the only transfers out of the Petroleum Fund are electronic transfers 'to the credit of a single State Budget account' (Article 7.1). These transfers (or appropriations) must be approved by Parliament, and take place only after the publication of the Budget Law. The fact that the Petroleum Fund is integrated with the Budget means the mechanism is clear, and therefore simple for civil society to understand and to monitor. Other countries have developed much more complex models that hamper wise petroleum revenue management because of their complexity.

4.2.3 Saving for the future

Timor-Leste's Petroleum Fund can also be described as a savings fund. In Chapter Two the dilemma of simultaneously meeting current and future generations' needs was discussed. A savings fund is designed to assist the Government to create a store of wealth for future generations. The rationale for saving is that all non-renewable resources are finite and, based on that rationale, a state must recognise and plan for the eventual decline and exhaustion of this natural resource income (Davis et al. 2003). A savings fund has the potential to meet the needs of both current and future generations, if the mechanism that determines expenditure results in enough revenue to do so. However, even if the mechanism ensures revenue is equitably spent now and in the future, there are other factors that determine whether the relevant generation's needs are met (e.g. the quality of institutions and governance). Despite those other factors, ensuring that revenue is shared equitably between current and future generations is a necessary starting point.

[94] Domestic revenue, autonomous agency revenue and donations were explained in section 3.2.3.

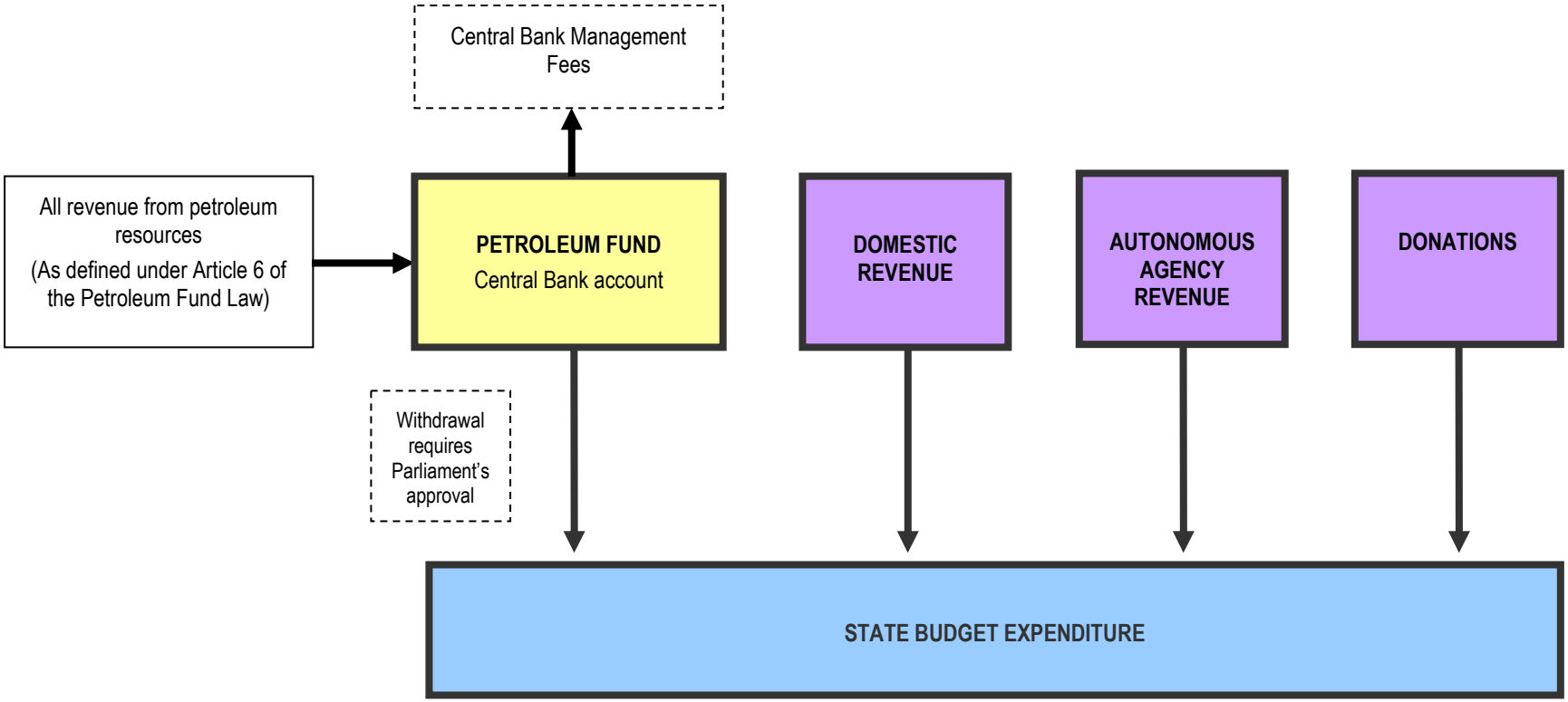

Figure 4.3 The flow of Timor-Leste's Petroleum Revenue

Timor-Leste's Constitution, under the heading of Economic, Social and Cultural Rights and Duties, has regard to sustainability in an environmental context. Figure 4.4 presents Section 61 (Environment) of the Constitution. Sub-section 61(1) is specifically about the sustainability of the environment. This sub-section illustrates the concept of current generations having regard to preserving environmental benefits for future generations. As sub-section 61(1) is not specifically about the use of the environment, but rather about its preservation, it's only relevance to petroleum revenue management is that it recognises that the exploration and exploitation of natural resources may impact on the environment (and that in turn may impact on potential revenue).

The Constitution of the Democratic Republic of Timor-Leste - Section 61

Environment

1. **Everyone has the right to a humane, healthy, and ecologically balanced environment and the duty to protect it and improve it for the benefit of the future generations.**
2. **The State shall recognise the need to preserve and rationalise natural resources.**
3. **The State should promote actions aimed at protecting the environment and safeguarding the sustainable development of the economy.**

Figure 4.4 Section 61 of Timor-Leste's Constitution (Constituent Assembly of East Timor 2002)

Sub-section 61(2) suggests that natural resources should be preserved, but how one preserves and rationalises natural resources at the same time (or what that means) is not explained. The phrase 'recognise the need' suggests the word 'preserve' does not mean the State intends all natural resources should be preserved in their pristine entirety. The State exploits its petroleum resources to create revenue, and thus does not illustrate an intention to preserve resources. Perhaps, instead, the meaning of the Constitution is that some non-renewable natural resources can be exploited (e.g. minerals and petroleum) whilst stocks of renewable natural resources (e.g. forest) should be preserved. Another interpretation is that the value of the natural resources (rather than the natural resources themselves) is preserved. Section 61(3) supports this last interpretation. Section 61(3) suggests that the State's position is that natural resources may be exploited if the environment is protected and sustains the economy.

Thus, the Constitution does not ensure that petroleum revenue is saved for future generations, and nor is saving revenue for expenditure in the future the primary objective of Timor-Leste's Petroleum Fund Law. Arguably, though, saving petroleum revenue is a corollary of the other objectives of Timor-Leste's Petroleum Fund Law. Petroleum revenue may be saved for future expenditure as a consequence of the fact that all petroleum revenue is placed in the Petroleum Fund to begin with. If, for example, the amount of the Budget was increased such that all the revenue in the Petroleum Fund was withdrawn, there would be none saved for future

generations[95]. However, Timor-Leste's Petroleum Fund Law does specify that management of the Petroleum Fund shall be in accordance with the principle of good governance for the benefit of current and future generations (Article 11.4). The mechanism (which will be explored in section 4.3.3), by which the Petroleum Fund regulates expenditure, also provides for petroleum revenue to be spent sustainably. However, the use of that mechanism is not legally binding; it is just used as a guide for the decision-makers. Thus, it is within the law for the decision-makers to choose to spend more revenue now, and leave less for future generations. For this reason, once again, the Petroleum Fund relies on the good governance of other institutions to achieve sustainable management of Timor-Leste's petroleum revenue, and to ensure that some revenue is saved for expenditure in the future. Some comparable funds have a mechanism by which such an event (i.e. leaving no revenue for future generations) could be avoided. For example, Chad's Revenue Management Law (1999) puts ten per cent of its revenue into a 'Future Generations' Fund, and the Oil Revenue Management Law of São Tomé e Príncipe requires that a portion of the oil revenue be transferred to a sub-account, the Permanent Fund, for the benefit of future generations of São Toméans. In theory, these special funds would provide some revenue for future generations in the event that other accounts were misused.

This section has identified three objectives that Timor-Leste's Petroleum Fund Law attempts to achieve, either by design or consequence. By virtue, or as a corollary, of its existence a natural resource fund can also achieve a number of other objectives. For example, a natural resource fund may achieve political objectives and assist the Government to resist spending pressures. If there are constraints on spending resource wealth and there are public processes and mechanisms (such as parliamentary approval) which must be undertaken to enable spending it is more difficult for revenue to be misused. Such barriers, or limits, to expenditure could be used as a reason or an excuse in the face of pressure from the public who perceive that funds could be better spent elsewhere.

Timor-Leste's Petroleum Fund has mechanisms, the functions of which are to stabilise the flow of petroleum revenue, save revenue for future generations, and to finance its budget simultaneously. For the most part, these objectives will simultaneously be met, but there may be occasions when they conflict. Further, the mechanism which regulates expenditure is only a guide and if not used as a rule, the amount of petroleum revenue withdrawn may become erratic and differ markedly from one year to the next, thereby making it difficult for the Government to plan. This would be the result of a lack of governance across the board, in the context of which the mechanisms of a fund would possibly be of little assistance.

[95] The fact that the word 'future' is not defined in the Petroleum Fund Law is noted. This means that saving for the future does not necessarily mean future generations, but perhaps in the next 10 or 20 years.

4.3 Institutional mechanisms to manage petroleum revenue in Timor-Leste

The details of how Timor-Leste's Petroleum Fund Law works will determine the way in which petroleum revenue is handled. This section explores these details, proceeding logically from the definition and receipt of petroleum revenue, and its deposit into the Petroleum Fund (inflow), to the investment of the revenue and, finally, the expenditure of the revenue (outflow). The analysis of the mechanisms the Government uses to manage petroleum revenue are based on two objectives; ensuring that Timor-Leste's petroleum revenue can not be illegally used (i.e. outside the terms of the Law), and the wise use of Timor-Leste's petroleum revenue.

4.3.1 Petroleum Fund inflow

The definition of what constitutes petroleum revenue must be known and commonly understood, and the definition should be as comprehensive as possible, otherwise rent-seekers will find loop holes to achieve their ends. Definitions of petroleum revenue or, rather, the revenue that must be deposited into a country's petroleum fund, can differ markedly. Gary and Reisch (2005) claim that in Chad, much of the oil revenue falls outside of the Law because Chad's Revenue Management Law (1999) applies to only three fields (Komé, Miandoum and Bolobo). Further, only direct revenue (dividends and royalties) must be deposited into Chad's Petroleum Fund, whilst so-called indirect revenue (taxes and customs duties on oil production) goes into the nation's public accounts (in theory)[96].

Under Timor-Leste's Petroleum Fund Law, petroleum revenue is called 'Petroleum Fund Receipts' and defined under Article 6 (Figure 4.5). Timor-Leste's definition of petroleum revenue appears to be encompassing (although not as comprehensive as Norway's[97]). However,

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[96] According to Gary and Reisch (2005), such in-direct revenue may represent as much as 45% of total revenue over the life of the project.

[97] Norway's definition of petroleum revenue (Government of Norway 1990) is much more detailed, as follows:

> The cash flow is the sum of
> - total tax revenues and royalty deriving from petroleum activities collected pursuant to Petroleum Taxation Act (no. 35 of 13 June 1975) and the Petroleum Activities Act (no. 72 of 29 November 1996),
> - revenues deriving from tax on CO2 emissions due to petroleum activities on the continental shelf,
> - revenues deriving from the State's Direct Financial Interest in petroleum activities, defined as operating income and other income less operating expenses and other direct expenses,
> - central government revenues from net surplus agreements associated with certain production licences,
> - dividends from Statoil ASA,
> - transfers from the Petroleum Insurance Fund,
> - central government revenues deriving from the removal or alternative use of installations on the continental shelf,
> - any government sale of stakes representing the State's Direct Financial Interest in petroleum activities,
> less
> - central government direct investments in petroleum activities,
> - central government expenses in connection with the Petroleum Insurance Fund,
> - central government expenses in connection with the removal or alternative use of installations on the continental shelf,

the definition assumes that all petroleum revenue is received by Timor-Leste (the Government). The Petroleum Fund Law does not require companies to publish what they pay to the Government, or to individuals (inside or outside of the Government), so there is no audit of the amounts received. If an individual were to receive a payment from a petroleum company, they could argue that it was not a Petroleum Fund receipt under the definition (as Article 6 refers to amounts received by Timor-Leste).

Petroleum Fund Law - Article 6

Petroleum Fund Receipts

6.1 The following amounts are Petroleum Fund gross receipts:
(a) The gross revenue, including Tax Revenue, of Timor-Leste from any Petroleum Operations, including prospecting or exploration for, and development, exploitation, transportation, sale or export of petroleum, and other activities relating thereto;
(b) Any amount received by Timor-Leste from the Designated Authority pursuant to the Treaty;
(c) Any amount received by Timor-Leste from the investment of Petroleum Fund Receipts;
(d) Any amount received from direct or indirect participation of Timor-Leste in Petroleum Operations; and
(e) Any amount received by Timor-Leste relating directly to petroleum resources not covered in paragraphs (a) to (d) above.

6.2 In the event that Timor-Leste participates in Petroleum Operations indirectly, as provided for in paragraph 6.1(d), through a national oil company, the receipts of the Petroleum Fund shall include the following:
(a) Any amount payable by the national oil company as tax, royalty or any other due in accordance with Timor-Leste law; and
(b) Any amount paid by the national oil company as dividend.

6.3 From the amount received in accordance with Section 6.1, the Central Bank shall be entitled to deduct, by direct debit of the Petroleum Fund account, any reasonable management expenses, as provided for in the operational management agreement referred to in Section 11.3.

Figure 4.5 Petroleum Fund Law definition of petroleum revenue (Democratic Republic of Timor-Leste 2005d)

A lack of transparency, such as this, is open to exploitation. When the Government of Chad was accused of misspending a signature bonus, they argued that signature bonuses did not come under the definition of petroleum revenue in the law. During the consultation to develop Timor-Leste's Petroleum Fund Law, Sandbu (2005) pointed out the definition of Petroleum Fund receipts did not specifically include signature or production bonuses. Other submissions (e.g.

- any government purchase of stakes as part of the State's Direct Financial Interest in petroleum activities.
Net financial transactions associated with petroleum activities are the sum of:
- gross revenues from government sale of shares in Statoil ASA,
less
- government capital contributions to Statoil ASA and companies attending to government interests in petroleum activities.

Global Witness and Catholic Agency for Overseas Development 2004) suggested that petroleum-related payments not paid into the Petroleum Fund should be banned or prohibited.

There are potentially gaps in Timor-Leste's definition of petroleum revenue that are yet to be tested. But, already a situation can be imagined in which revenue that might be considered petroleum revenue by some, under Article 6, will not be deposited into the Petroleum Fund. In a presentation on 'local content'[98], Soares (2006b) talked about projects funded by petroleum companies covered under Production Sharing Contracts and also Memorandums of Understanding (MoUs) with other countries which undertake petroleum industry-related activities in Timor-Leste (e.g. an MoU with Kuwait to promote the construction of an LNG plant and bring a pipeline onshore). At the same time, a diagram (Soares 2006a) showed that the revenue from such projects would not flow through the Petroleum Fund and stated 'the independent investment projects give no revenue to Government', because the projects are the responsibility of the Petroleum Company. Although it might seem clear to the Government and the Petroleum Companies that this revenue is distinct from 'Petroleum Fund Receipts' under the Petroleum Fund Law, in practice, with less well-intentioned decision-makers, this arrangement could provide an opportunity for Petroleum Companies to provide funds to corrupt decision-makers under the auspices of a 'local content' project.

4.3.2 Investing petroleum revenue

Another important aspect of managing Timor-Leste's petroleum revenue wisely is how that revenue is invested. Timor-Leste's petroleum revenue will be invested entirely offshore (Article 14 & 15), which has three benefits. First, it allays concerns there might be bias in investment choices (for example, political elites investing in family businesses). Second, investing offshore can help to avoid corruption, because investing in Timor-Leste would provide more opportunities for corruption (with businesses competing for contracts, for example). Third, there are currently few opportunities to invest revenue (certainly not billions of dollars) in Timor-Leste, because industry and infrastructure are not yet developed. So it is not possible to invest wisely in Timor-Leste now. For these reasons, to invest in Timor-Leste at this time would entail higher risk and lower return, and thus investing the revenue offshore offers a conservative approach to investment. Timor-Leste is not unique in choosing to invest their revenue offshore; Norway, São Tomé e Príncipe and Chad also invest their Petroleum Funds entirely offshore.

[98] A Draft Decree Law on Local Content (Ministry of Natural Resources Minerals and Energy Policy 2007) was released for public consultation on 30 May 2007. Local Content, or Timor-Leste content 'Timor-Leste content means the money and resources provided by Authorised Persons in the petroleum sector to Timor-Leste for sustainable development, or money spent by Authorised Persons on Timorese goods and services.' (Ministry of Natural Resources Minerals and Energy Policy 2007 :2).

Timor-Leste's choice of investment strategy is also conservative. The Petroleum Fund Law specifies that not less than 90% of the revenue will be invested in 'qualifying instruments'[99]. These qualifying instruments are defined in Article 15 (Figure 4.6). By investing Timor-Leste's petroleum revenue in this way, the majority of investments will potentially provide a lower return, but also will carry a lower risk of loss (than if revenue was invested elsewhere). The other 10% (or less) of the Petroleum Fund may be invested in other instruments so long as they are 'issued abroad, liquid and transparent, and traded in a financial market of the highest regulatory standard' (Article 14). These investments could potentially provide a higher return, but may also incur a greater risk of loss.

Petroleum Fund Law - Article 15

Qualifying Instruments

15.1 Subject to other provisions of this present article, a qualifying instrument is:

(a) a debt instrument denominated in United States Dollars that bears interest or a fixed amount equivalent to interest, that is:

(i) rated Aa3 or higher by the Moody's rating agency or rated AA– or higher by Standard & Poor's rating agency; and

(ii) issued by or guaranteed by the World Bank or by a sovereign State, other than Timor-Leste, provided the issuer or guarantor is rated Aa3 or higher by the Moody's rating agency or rated AA– or higher by Standard & Poor's rating agency; or

(b) a United States Dollars deposit with, or a debt instrument denominated in United States Dollars that bears interest or a fixed amount equivalent to interest issued by:

(i) the Bank for International Settlements;

(ii) the European Central Bank; or

(iii) the Central Bank of a sovereign State, other than Timor-Leste, with a long-term foreign currency rating of Aa3 or higher by the Moody's rating agency or AA– or higher by the Standard & Poor's rating agency;

(iv) a bank designated by Moody's rating agency with a long-term foreign currency rating of Aa3 or higher or designated by Standard & Poor's rating agency with a long-term foreign currency rating of AA– or higher.

Figure 4.6 Petroleum Fund Law definition of qualifying instruments (Democratic Republic of Timor-Leste 2005d)

The original draft of the Petroleum Fund Act suggested that 100% should be invested in qualifying instruments (a more conservative investment approach). However, during the Petroleum Fund Consultation, the World Bank (2005a), the IMF (2005b) and Timor-Leste's Central Bank (BPA 2005) each suggested that at least a small proportion of the Petroleum Fund should be invested in higher risk, but similarly well-managed assets. The rationale for allowing a small portion of the Fund to be invested elsewhere was to allow the Central Bank staff to

[99] Article 15 of the Petroleum Fund Law also requires all investments to be invested in United States dollars. Participants in this research responded that the choice of investment currency was not relatively important (see Chapter Six) so this aspect of Timor-Leste's petroleum revenue management will not be explored.

develop the capacity to learn about these kinds of investments. With that in mind, the Government responded by allowing a 90:10 ratio[100]. However, under the Law, this arrangement can be revised after five year's of the Petroleum Fund's existence, which means that the portion of the Fund that can be invested in higher risk assets could increase.

There are other provisions under the Petroleum Fund Law to ensure Timor-Leste's investments are soundly managed. An Investment Advisory Board or IAB[101] (Article 16) advises the Minister of Planning and Finance with respect to investment strategy, including benchmarks for desired investment returns, risk of investments, instruction for External Investment Managers, and their performance. The duties of the External Investment Managers are to maximise the return on the Petroleum Fund investments, with regard to appropriate risk, abide by an Operational Management Agreement and take instructions from the Minister (Article 12.5). The External Investment Managers are appointed by the Central Bank and are bound by several constraints on the decisions they make regarding investment of the Petroleum Fund. Revenue saved in the Petroleum Fund must be prudently managed, invested securely in low-risk financial assets offshore, and investment performance is periodically evaluated.

Timor-Leste's plan to invest its petroleum revenue offshore in low risk instruments fits with its aim for prudent management of its petroleum revenue. Unfortunately, Timor-Leste's conservative plans to manage its petroleum revenue well may not prevent poor investment choices. There are examples of countries that had plans in place to manage their natural resource wealth well, but failed. Nauru is a country that was once rich with the revenue earned from exploitation of its phosphate resources. In 1968, each Nauruan man, woman and child was worth $3.5 million (today's equivalent of $500,000 then) as a result of their good phosphate fortune (Hughes 2003). Their resource revenue was invested in a portfolio. The investments proved to be high risk and within a matter of decades Nauruans went from having the highest per capita income in the world to one of the poorest (Hughes 2003). The Nauruans have seen their once-vast portfolio of $US800 million in assets dwindle to little more than US$250 million (Pettafor 2004). Nauru is now so poor that the Australian Government considered a plan to re-locate the citizens of Nauru to Australia, because their environment and economic prospects are such that they will continue to be aid-dependent (Forbes 2003). Nauru had plans to manage their revenue wisely, but they received poor investment advice and their institutions have progressively weakened[102].

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[100] As at December 2006, 100% of Timor-Leste's Petroleum Fund is invested in qualifying instruments.

[101] Members of the IAB (defined under Article 17.1) are the Director of Treasury, the Head of the Central Bank, two persons appointed by the Minister with significant experience in investment management, and one other person appointed by the Minister of Planning and Finance.

[102] In 2004, *The Australian* newspaper reported that the Nauruan Government was in crisis; the Nauruan Parliament could not stand because the two sides could not agree on a speaker. Mining has left much of Nauru uninhabitable and they had plans to make the island an offshore banking centre (at one time 400 offshore banks were registered to one

In an attempt to diffuse the potential for poor investment decisions in Timor-Leste, a local NGO, *La'o Hamutuk* (2005) suggested that each investment manager's portfolio should be limited to no more than 30% of the Petroleum Fund, but the Petroleum Fund Law remains without this restriction. Under the Petroleum Fund Law, Timor-Leste's Central Bank could appoint just one investment manager who could be responsible for the entire Fund (Article 12). At the present time only 10% of the Petroleum Fund can be invested in instruments other than those designated qualifying instruments, but in future this portion could be much higher (if the Petroleum Fund Law is changed). If one investment manager was responsible for a large portion of Timor-Leste's Petroleum Fund and made a poor investment decision there could be disastrous implications for Timor-Leste (particularly if the amount that could be invested in 'other instruments' was much greater than 10%).

Further, despite Timor-Leste's plans to invest conservatively, the Petroleum Fund Law provides for the range of qualifying instruments to be reviewed after five years (Article 14.3) and, in any case, the Law can be amended by Parliament at any time. Timor-Leste's Central Bank has stated it will choose lower risk investments until their staff build the capacity to manage investments of higher risk. At some point, therefore, Timor-Leste's investment strategy may change and, potentially, involve greater risk. The Norwegian model is as an example of how a Petroleum Fund can evolve. The Norwegian Parliament passed its equivalent petroleum fund law in 1990 (Government of Norway 1990) and the first net transfer was in 1996. In 1998 investment in equities was introduced into the benchmark, and in 2004 Ethical Guidelines on Investment were introduced[103] (Government of Norway 2004). In 2005 the Norwegian Petroleum Fund Law was amended and the 'Petroleum Fund' became the 'Government Pension Fund-Global'; the Petroleum Fund's main objective now is 'to facilitate government savings necessary to meet the rapid rise in public pension expenditures in the coming years' (Government of Norway 2005). Timor-Leste's model will evolve as well; the Petroleum Fund Law is not static, change may be inevitable.

4.3.3 Petroleum Fund outflow

Decisions on how much revenue is withdrawn from the Petroleum Fund, and for what purpose, are perhaps the most important that the Government must make. The Petroleum Fund Law does not specify how many withdrawals can be made each year, but withdrawals 'shall only take

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government mailbox), but rumours of money laundering caused the Group of Seven countries to consider sanctions. Nauru bowed to international pressure and revoked the banking licences. (Pettafor 2004)

[103] Norway's Ethical Guidelines on Investment are based on two premises; that the instrument ensures that a reasonable portion of the country's petroleum wealth benefits future generations and that the Petroleum Fund should not make investments which constitute an unacceptable risk that may contribute to unethical acts or omissions, such as violations of fundamental humanitarian principles, serious violations of human rights, gross corruption or severe environmental damages. (Government of Norway 2004)

place after the publication of the Budget law, or any subsequent changes thereto' (Article 7.3). Generally, as the Government prepares an annual budget and a mid-year budget update, one assumes there could be one or two withdrawals annually. Each withdrawal must be approved by Parliament and the Parliament must previously have been informed of the value of ESI[104]. The calculation of ESI is explained in Schedule 1 of the Petroleum Fund Law (see Appendix 2), and is the amount of money that can be withdrawn from the Petroleum Fund each year so that the Petroleum Fund will always provide for State Budget expenditure.

The calculation of ESI is revised each year because it depends on the total expected petroleum revenue (and this is affected by various factors such as oil price, production, etc.) The value of ESI also depends on how much revenue is actually withdrawn from the Petroleum Fund each year because there is no rule that says Parliament must withdraw an amount equal to ESI each year. Parliament may choose to withdraw more or less than ESI. If less than the value of ESI is withdrawn each year, the value of the Petroleum Fund will increase (all else being equal). If more than the value of ESI is spent[105] (and all else is equal) the value of the Petroleum Fund will decline until eventually (sooner or later, depending on the extent of over-expenditure) there is no revenue left in the Petroleum Fund. The formula for ESI (provided in Appendix 2) is not based on contingencies, and is relatively easy to determine, which for East Timorese citizens wanting to monitor petroleum revenue is a blessing.

A Petroleum Fund from which an amount that is the value of ESI is withdrawn every year will be sustainable, but ESI is a guide, not a rule, and Timor-Leste's Petroleum Fund Law has no ceiling on withdrawals and no minimum balance[106]. The Law lacks a mechanism to regulate expenditure above ESI and theoretically the Parliament could approve a withdrawal of the entire Fund. Thus, ensuring the amount withdrawn from the Petroleum Fund each year is sustainable does not depend on the Petroleum Fund Law, but on good governance and the strength of institutions; the Parliament in particular. Nevertheless, the experience of other countries indicates that having a rule for withdrawals does not stop rent-seekers. Elek (2001) explains that Papua New Guinea established a Mineral Resources Stabilization Fund (MRSF) in 1974, including rules for withdrawal which would, in theory, provide a stable flow of revenue.

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[104] The Petroleum Fund Law legislates that the Independent Auditor must also certify the amount of ESI (Democratic Republic of Timor-Leste 2005d :Article 8).

[105] If the Government or the Parliament proposes to make a transfer that exceeds ESI, under Article 9, the Government must provide the Parliament with a report estimating the amount by which ESI would be reduced for that Fiscal Year as a result. The Independent Auditor must also certify this report. The Government must also provide a detailed explanation of why it is in the long-term interests of Timor-Leste to transfer from the Petroleum Fund an amount in excess of the ESI. (Democratic Republic of Timor-Leste 2005d)

[106] Concerns that there are no rules or ceilings to limit the amount Parliament can withdraw from the Petroleum Fund were raised in the submissions (e.g. Drysdale 2005a) when the Petroleum Fund Act was drafted, but the Government chose to proceed without amendment. In the Petroleum Fund Discussion Paper circulated by the Government (MOPF 2004b) there were three options for a 'fiscal policy guideline' and the paper referred to another three 'inferior' strategies, but concluded by outlining the Government's 'preferred' policy (ESI) and there was little or no debate on this issue.

However, as time passed the fiscal discipline weakened and withdrawals from the MRSF increased.

Another difficulty with using the value of ESI as a guide (or a rule for that matter) is that it assumes other variables are constant. This model of petroleum revenue management assumes that variables such as the spending requirements of government and the size of the population are constant from year to year, which they are not. The population of Timor-Leste will vary significantly from year to year and thus the spending requirements of government will alter, particularly in the health and education sectors. With Timor-Leste's population growth the highest in the world at 4.7% (UNDP 2006a), this is not an insignificant factor in terms of planning the State's expenditure.

Timor-Leste's Petroleum Fund Law does not include guidelines or rules for how the petroleum revenue should be spent. Rather, the Parliament is the institution that decides how the Budget is spent. São Tomé e Príncipe's Bill of Law on Oil Revenues does specify that petroleum revenue should be spent on poverty reduction, certain priority sectors, and institutional development. São Tomé e Príncipe's Law also specifically reserves seven percent for the island of Príncipe, and ten percent for local governments. Chad is another example of a country that has rules for expenditure of its petroleum revenue. Chad's Revenue Management Law (1999) stipulates that 80% of petroleum revenue must be directed to expenditure on priority sectors (public health and social welfare, educational infrastructure, rural development, environment and water resources), and 5% must be directed to the decentralised authorities in the oil-producing regions[107]. Unfortunately, Chad also provides an example of how such laws can be broken, and petroleum revenue mismanaged. Until 2005, no revenue had been disbursed to the oil-producing regions (Gary and Reisch 2005). Given Chad's Revenue Management Law does not specify which regions revenue should be disbursed to, all the investments could be made in one region, according to political preference, for example (Open Society Institute and Revenue Watch Iraq 2005). Further, despite the intention of spending on priority sectors, shortly after Chad's oil revenue began to flow, the Government spent US$4 million of a US$25 million signing bonus (referred to in section 4.3.1) to purchase military equipment. Technically, the decision-makers argued, this money was not covered by the agreements with the World Bank, but Greg Binkert (the World Bank's director in Chad) acknowledges that it broke the spirit of the scheme the Bank was trying to foster (Walsh 2004)[108].

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[107] Gary and Reisch (2005) point out institutions related to the judiciary, or the rule of law, are not priority sectors. Given the lack of strength in these institutions and the poor implementation of Chad's Revenue Management Law, they probably should be.

[108] Chad's President Deby told the World Bank that he regretted spending the money on weapons, but other senior figures in the Chadian government retain a 'flexible' attitude to the oil revenues. The Government's national oil coordinator, Haroun Kabadi, said the oil revenues should only be reserved for social spending, but this could not be guaranteed in 'an emergency'. (Walsh 2004)

Another option for expenditure of petroleum revenue is to provide individual payments to citizens. Citizens of Alberta, Canada and Alaska, USA have enjoyed annual dividend payments from their Petroleum Funds, but in these states petroleum revenue is not central to the economy. Both states receive substantial amounts of revenue from other domestic sources and can use that revenue to build roads, schools, hospitals, etc. In these countries, the petroleum payments are a 'bonus' for most of their citizens, not a necessity, as they might be elsewhere. For countries that do not have enough domestic revenue to fund their state's budget it might be counter-productive to use their petroleum revenue to fund individuals' needs. However, there are some that disagree.

Sala-i-Martin and Subramanaian (2003) have argued that if natural resource revenue is being mismanaged by the Government (and not benefiting the people) then it does make sense to distribute the revenue as dividend payments. They use Nigeria as an example of a country where such a plan would have benefits:

> Of course, one implication of our proposal would be that the Government would lose revenue. In fact, if our proposal were to be implemented, the Government would [lose] all the revenue that it now collects directly from the sales of oil. Although this would seem tragic to some, this is indeed what happens to most governments in the world. And, as most of those governments, if the Nigerian authorities want to raise resources for necessary public expenditures, they would have to raise them by taxing the Nigerian citizens and companies. Our reading of the evidence is that it would be much more difficult to mismanage the resources that come from taxes than those that fall from the sky like manna. This would therefore create the right incentives for governance, incentives that are now sorely missing, and would contribute to reduce corruption and the rest of the problems that affect the Nigerian institutions today. (Sala-i-Martin and Subramanian 2003 :18)

However, if the reason revenue does not benefit the people is because the Government is corrupt, and the institutions are weak, such a state is unlikely to have the capacity, let alone the will, to put in place the mechanisms to distribute such wealth to its citizens (nor the mechanisms to gather taxes to fund state expenditure in other ways as Sala-i-Martin and Subramanian suggest). Such a proposal was suggested for Iraq (Vieth 2003), but would have provided Iraqis with just an extra US$110 a year (Palley 2003). There are many Iraqis who do not have that much money each year, but such a payment will not greatly enhance the lives of the poor people if the Government does not also have the institutional strength and the funds to re-build the country's infrastructure and social services[109].

[109] Casassas et. al. (2004) have suggested that Timor-Leste should establish a system of 'Basic Income'. However, they have not explained how the Government would fund its State Budget if petroleum revenue were used to fund a Basic Income instead, and nor have they provided any long term financial analysis of whether Timor-Leste's petroleum revenue could sustain both a Basic Income and State expenditure.

In Timor-Leste's case, once revenue is withdrawn from the Petroleum Fund and deposited into the Budget it is indistinguishable from other state revenue (as Figure 4.3 illustrated) and there are no guidelines that dictate its expenditure. Rather, state expenditure in Timor-Leste, as a whole, is dictated by the National Development Plan (Planning Commission 2002). This means that plans for State expenditure do not revolve around the idea that petroleum revenue is abundant, but rather plans for expenditure sit within a separate institution, and they are debated and approved by the Parliament.

4.4 Monitoring petroleum revenue

Chapter Two illustrated that transparency and accountability are crucial to trust in public institutions. Civil society's trust in the Government of Timor-Leste is fragile, as discussed in Chapter Three. Transparency and accountability in the management of petroleum revenue are paramount, and will be essential if Timor-Leste is to manage its petroleum revenue wisely, and avoid the resource curse. Institutions that hold the Government to account and ensure petroleum revenue is managed transparently must be strong, otherwise members of the Government will potentially be able to subvert such mechanisms, and the mismanagement of petroleum revenue and conflict will increase. This section reviews the Petroleum Fund Law and other institutional mechanisms that are designed to ensure the transparent and accountable management of Timor-Leste's petroleum revenue.

4.4.1 Transparency

The resource curse can not be avoided, and misuse of petroleum revenue can not be prevented, without transparency. Transparency, or transparent accounting, is widely regarded as the key to resolving issues of waste and corruption (Department for International Development 2007). Independent reporting of transactions is now widely demanded of countries that have problems with corruption. Governments and NGOs have also established a number of initiatives in order to improve accounting mechanisms between energy companies and governments, thereby enhancing transparency. Such initiatives are designed to improve accountability in Government, and to promote better fiscal management.

Timor-Leste has adopted transparency as a fundamental principle of the Petroleum Fund Law; 'The management of the Petroleum Fund shall always be carried out, and the related duties of all relevant parties shall be discharged, with the highest standard of transparency' (Article 32.1). However, the Government has not set a good example of transparency. Prior to the development of the Petroleum Fund Law, the Government of Timor-Leste sought advice from the IMF regarding management of their petroleum revenue. The IMF provided the Government with a report that was never made public. The IMF claimed it was up to the Government to release it

(Al-Eyd 2004), and the Government claimed they could not release it without the permission of the IMF (Alkatiri 2004). This is an example of a lack of transparency by both the Government of Timor-Leste and the IMF. Transparent management of petroleum revenue requires three actions; the preparation of relevant information by the responsible authority, the publication of that information, and the cognisant observation of that information. The Petroleum Fund Law provides some mechanisms to facilitate these actions and this section analyses those provisions.

The balance of the Petroleum Fund and some details of its investment (e.g. market trends, portfolio performance and any withdrawals from the Petroleum Fund) are available on a quarterly basis through Timor-Leste's Central Bank. The Central Bank has published a quarterly report on the Petroleum Fund since the Petroleum Fund was established. On some occasions, access to the quarterly reports through the Central Bank's website has been delayed because of technical difficulties, but the Reports are generally available in Portuguese, *Tetum* and English.

However, analysis of the reporting of Petroleum Fund revenue and associated provisions under the Petroleum Fund Law reveals anomalies in Timor-Leste's quest for transparency. Analysis of the Petroleum Fund Law reveals that the Government has enabled a range of information to be made available to the public, but not all information provided under the Law is made available to the public. Table 4.1 lists the information generated by the Petroleum Fund Law, and distinguishes that which is available to the public and that which is not. Information not available to the public includes the declaration of assets of the IAB and the Consultative Council (explained in section 4.4.2). If a declaration of assets is not made available to the public, it serves little purpose (particularly if the internal mechanisms which judge the validity of those declarations are corrupt). The requirement that the individuals from these institutions declare their assets was included in the Law as an amendment by the Parliament. Both IAB and Consultative Council members must 'on occasion of taking and vacating office, submit a declaration concerning their assets and income from property and capital, including information relating to their bank accounts' (Articles 17.4 and 27.6).

By contrast to the requirements of the IAB and the Consultative Council, the Petroleum Fund Law does not require the External Investment Managers, or any other individual or institution with responsibilities under this law, to declare their assets. The former Prime Minister Alkatiri reported that the Government would 'commence on worlds best practice declaration of interests for public officials' and '[the] petroleum laws already prohibit public officials (including members of parliament and parliamentarians) from directly or indirectly holding an interest in any entity that seeks or holds authorization for a petroleum activity authorization or PSC

Information provided to the public	Relevant Section of Law	Responsibility for preparation
Quarterly Report	13.2	Central Bank
Annual Report includes:	23	Government
- Audited financial statements	24.1(a)	Indep. Auditor
- List of the qualifying instruments	24.1(a)	Indep. Auditor
- Advice provided by the IAB	24.1(b)	Minister
- Payments made as Petroleum Fund Receipts	24.1(b)	Minister
- Discrepancy between payments made and which should have been made	24.1(b)	Minister
- Statement identifying any accounting issues	24.1(c)	Dir. Treasury
- Income derived from Petroleum Fund investment cf. previous three years	24.1(d)	Government
- Comparison of nominal income on investment with real return	24.1(e)	Government
- Comparison of income derived with benchmark performance indices	24.1(f)	Government
- Comparison of ESI with the sum of transfers from the Petroleum Fund	24.1(g)	Government
- Members of the IAB	24.1(i) (iii)	Government
- The identity of the External Investment Managers	24.1(i) (iv)	Government
- Members of the Petroleum Fund Consultative Council	24.1(i) (vi)	Government
- Sources of the information provided in the Annual Report	24.2	Government
Instructions relating to the Petroleum Fund	32.5	Minister
Operational Management Agreement (between Central Bank and the Minister)	32.5	Minister
Reports specifying ESI (current & past year)	32.5	Government
Auditor's certification of ESI	32.5	Auditor
Report estimating reduction in ESI if a transfer in excess of ESI is proposed	32.5	Government
Auditor's certification of reduction in ESI if a transfer in excess of ESI is proposed	32.5	Auditor
A detailed explanation of why it would be in the long-term interests of Timor-Leste to transfer an amount exceeding ESI	32.5	Government
Consultative Council advice to Parliament	31.1	Parliament
Information not provided to the public	**Relevant Section of Law**	**Responsibility for preparation**
External Investment Manager's Contracts	12	Central Bank
Details about External Investment Managers' qualifications and performance record	12.2	Central Bank
Details of the significant experience in investment management of appointees to the IAB	17.1(c)	Minister
The level of remuneration for members of the IAB	17.3	Minister
The person appointed to sit on the secretariat of the IAB	17.3	Minister
Declaration of assets of the IAB	17.4	Government
Quarterly Management Report to the Minister	21.2	Dir. Treasury
Internal audit	22	Relevant institution
Declaration of assets of Consultative Council	27.6	Parliament
The level of remuneration for members of the Consultative Council	30.6	Parliament
Information on any aspect of the operation of performance of the Petroleum Fund for the purpose of its monitoring of the Petroleum Fund (provided to the Consultative Council)	31.1	Minister Central Bank
Clear reasoning for the motives for treating information or data as confidential. Note: after five years confidential information can be published	32.2	Minister Parliament Central Bank Cons Council

Table 4.1 Information provided (and not provided) by the Petroleum Fund Law

[Production Sharing Contract]'[110] (Alkatiri 2005). Policies or laws of this kind have not been generated to date. However, in April 2007, the Presidential Candidate, Francisco 'Lu Olo' Guterres, declared his pecuniary interests in a media statement (Moucho and Fernandes 2007).

The usefulness of information that is available to the public is also limited because of timeliness and the confidentiality provisions in the Petroleum Fund Law. Most information that must be made publicly available is not available immediately. Much of the information is provided in the Annual Report, which means it can be up to twelve months before some information is available. The institution responsible for preparation of the information must ensure that the published form does not include 'confidential' information, and information declared confidential is made available only after five years. Confidential information is defined under Article 32.2 (Figure 4.7). This definition is open to interpretation and could result in information being kept from publication. For example, if a Minister of Finance or Natural Resources was known (internally) to be corrupt, this information could be claimed confidential because its disclosure would 'significantly affect the functioning of the Government' (under Article 32.3c). Five institutions (the Central Bank, the Minister, the Parliament, the Petroleum Fund Consultative Council and the Independent Auditor) must prevent the disclosure of confidential information under the Petroleum Fund Law. While some people participating in the consultation on the draft Petroleum Fund Act acknowledged that some information could legitimately be classified confidential (for example, seismic survey data: Sandbu 2005), other consultees argued that 'every item of information should be available to the public' (La'o Hamutuk 2004 :21).

Access to the information that is publicly available (in theory) is also a problem. Timor-Leste's Petroleum Fund Law does not actually specify where or how the information should be made available. Most information is available on the internet, but the majority of East Timorese people do not have access to the internet. Timor-Leste has no public registry (although some submissions on the draft Petroleum Fund Act suggested it: La'o Hamutuk 2004; Sandbu 2005). São Tomé e Príncipe's Petroleum Fund Law states that oil-related payments and contracts are to be made public through a public information office and through the web. No such public information office has been established in Timor-Leste, and a culture of secrecy often prevents government employees providing information to the public that should be freely available. Access to information is also hampered by issues of communication. The Government generally

[110] The Law on Petroleum Activities (2005) states that a 'Public Officer' means a civil servant or equivalent individual, members of Parliament or of Government, Judges or Public Prosecutors. Under Article 7 a Public Officers' right is restricted as follows:

1. A Public Officer shall not acquire, attempt to acquire or hold:
    a. an Authorisation or an interest, whether direct or indirect, in an Authorisation; or
    b. a share in a corporation (or an Affiliate of it) that holds an Authorisation.
2. Any instrument that grants or purports to grant, to a Public Officer, an interest, whether direct or indirect, in an Authorisation shall, to the extent of the grant, be void.
3. The acquisition or holding of an Authorisation, interest or share by the minor children or spouse of a Public Officer shall be deemed to be an acquisition or holding by the Public Officer.

provides information in several languages, even though it is not required by law. However, another effective barrier to communicating the information is the low literacy rate, and the low level of education of the wider East Timorese population.

Petroleum Fund Law - Article 32.2

32.2 Information or data whose disclosure to the public could, in particular:

(a) prejudice significantly the performance of the Petroleum Fund;
(b) be misleading, as it relates to:
  (i) incomplete analysis, research or statistics;
  (ii) to frankness and candour of internal discussion;
  (iii) the exchange of views for the purposes of deliberation; or
  (iv) the provision of confidential advice;
(c) significantly affect the functioning of the Government;
(d) amount to the disclosure of confidential communications;
(e) substantially prejudice the management of the economy;
(f) substantially prejudice the conduct of official market operations; or
(g) result in or lead to improper gains or advantages;

may be declared as confidential. The declaration of confidentiality shall, taking into account the principle of transparency and the right of the public as regards to access to information, provide a clear reasoning on the motives for treating such information or data as confidential.

Figure 4.7 Petroleum Fund Law definition of confidential information (Democratic Republic of Timor-Leste 2005d)

The Government of Timor-Leste presents an intention that petroleum revenue, and government as a whole, will be managed transparently. There have been many examples of projects, designed by the Government of Timor-Leste, to encourage transparency and accountability. For example, the International Conference on Transparency and Accountability was held in November 2003 (Democratic Republic of Timor-Leste 2003). Donors have also advised the Government on how to strengthen their institutions of governance (Bowles et al. 2006). The former Prime Minister, Mari Alkatiri, placed particular emphasis on this objective and established the Alkatiri Initiative to prevent corruption, nepotism and collusion (Cheema et al. 2006). Alkatiri also signed Timor-Leste up to the Extractive Industries Transparency Initiative (EITI) (Alkatiri 2003b). Established by the then British Prime Minister, Tony Blair, following the World Summit on Sustainable Development in Johannesburg in 2002, and known as the Blair Initiative, the EITI is a program designed to promote transparency in the transfer of revenue from exploitation of natural resources (in Timor-Leste's case petroleum) between companies and government officials through publishing amounts paid, received and later debited. Again, this commitment gives the impression that corruption will be combated and transparency will prevail. But, there is no legal requirement on companies to publish their payments under Timor-Leste's Petroleum Fund Law (despite suggestions in the consultation on the draft Petroleum Fund Act by Global Witness and Catholic Agency for Overseas

Development 2004). This raises doubts about the Government's commitment to the EITI, as this is one of the criteria for the EITI's implementation. Alkatiri explained:

> I would like to take the opportunity to express my government's position on the calls for legislative measures on our part to compel petroleum companies to publish what they pay. The reality is that there is reluctance on their part with respect to the potential loss of commercial proprietary and confidential and sensitive information. (Alkatiri 2005)

The TSDA does publish the amounts it receives from companies exploiting petroleum resources in the JPDA. Unfortunately, ConocoPhillips (the only operator currently paying revenue to the TSDA) does not, in turn, publish what it pays to the TSDA, so it is not possible to compare the amounts received with the amounts paid.

The Government of Timor-Leste has some mechanisms in place for the transparent management of petroleum revenue, but there are also some gaps and barriers that may hamper efforts to avoid the resource curse. Some corrupt governments will do as they please, regardless of the mechanisms put in place to enhance transparency. The current arrangements in Timor-Leste suit a government that is well governed, but if individuals came to power that wished to subvert the system, as it stands, they could, potentially without attracting notice. Thus, it is essential that there are also mechanisms and institutions in place to ensure the Government is held to account in its plans to manage Timor-Leste's petroleum resources, and all of the resulting revenue, transparently.

4.4.2 Accountability

The Petroleum Fund Law delineates the responsibilities of the positions within (and also some external to) the Government with respect to petroleum revenue. The Government of Timor-Leste has established three institutions (the Office of the Inspector General, the Ombudsman for Human Rights and Justice, and the Prosecutor General) that have various roles in holding the Government and others to account under the Laws of Timor-Leste. This section explores the roles and responsibilities accorded under the Petroleum Fund Law, and the institutions that are responsible for undertaking the requirements of the Petroleum Fund Law.

Figure 4.8 identifies the links between the actors and their responsibilities under the Petroleum Fund Law. The Ministry of Planning and Finance, the Treasury, the Parliament, the Central Bank and the Ombudsman for Human Rights and Justice are all separately-established government institutions that have responsibilities under the Petroleum Fund Law (these institutions are dark grey in the figure). The IAB (and its secretariat), the External Investment Managers appointed by the Central Bank, the Consultative Council (and the annual forum on issues relating to the Petroleum Fund), and the Independent Auditor are institutions specifically established under the Petroleum Fund Law (these are light grey).

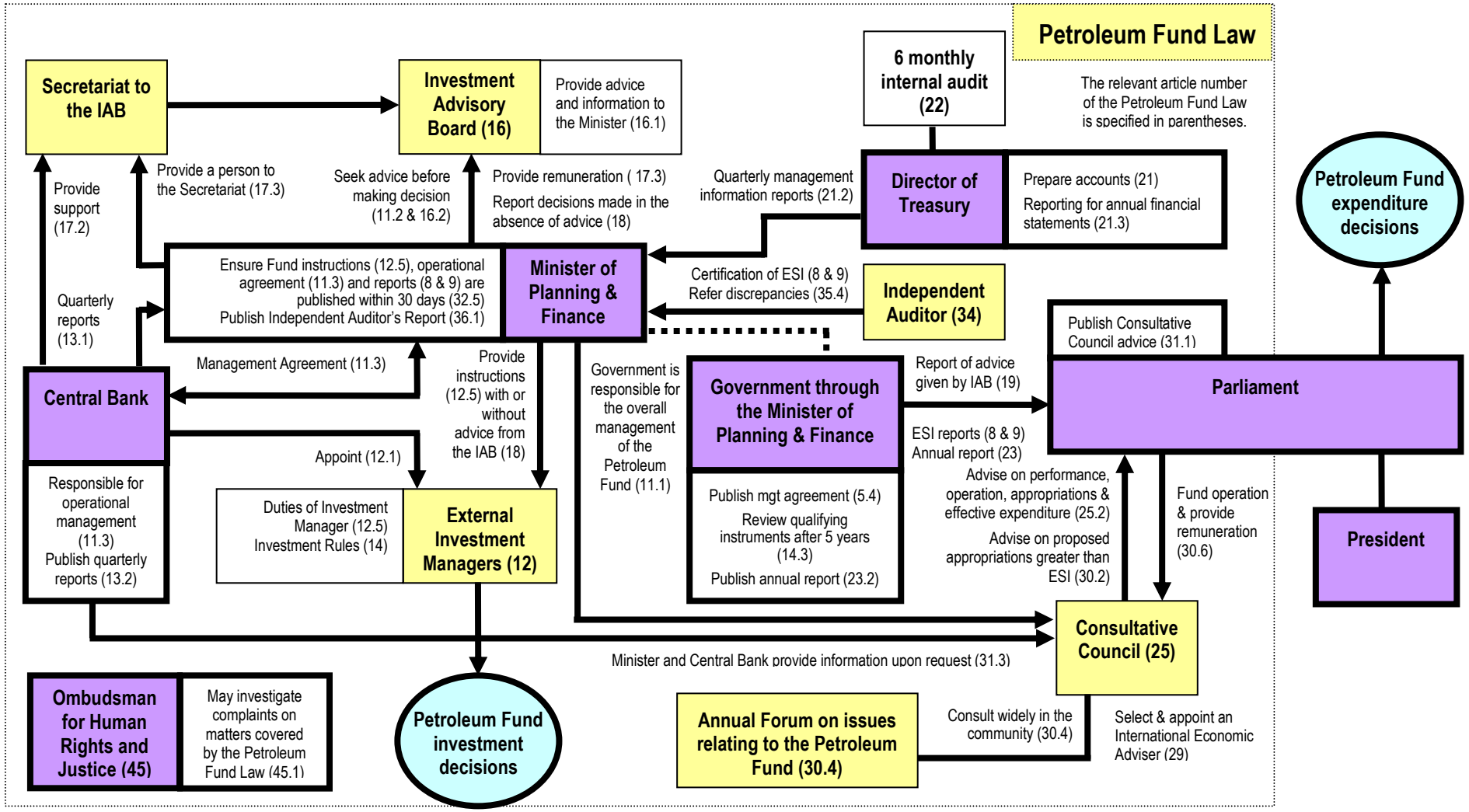

Figure 4.8 Linkages between actors and their responsibilities under the Petroleum Fund Law

The Figure illustrates that all of these institutions are ultimately bound by commitments to the Minister of Planning and Finance who is a central figure in the management of Timor-Leste's petroleum revenue. The majority of actions taken under the Petroleum Fund Law are by the Minister, or on the Minister's behalf. The Government departments responsible for actions under the Law are accountable to this Minister. The Minister also has enormous power in terms of the decisions that are made with regard to petroleum revenue management. For example, Article 11.2 states that the Minister shall not make any decisions in relation to the investment strategy or management of the Petroleum Fund without first seeking the advice of the IAB. However, Article 18 explains that in the absence of advice from the IAB, or if there is insufficient time to seek their advice, the Minister is able to proceed. If this were to happen, the Minister is required to report the making of the decision to the IAB. However, in another example which highlights the Minister's power, the need to report a decision which is contrary to the advice of the IAB (in a case where they did provide advice) is not required under the Law.

With regard to the actual Petroleum Fund, the Central Bank remains responsible for the operational management of the Petroleum Fund, but under a management agreement with the Minister of Planning and Finance. The Minister, along with the Prime Minister, are both signatories to the Petroleum Fund account held in the Federal Reserve of the USA. In São Tomé e Príncipe the signatures of four separate officials (The President, the Prime Minister, the Director of the Treasury and Patrimony, and the Director of International Transactions at the Central Bank) are required to make transfers out of their Petroleum Fund. Despite the power of the Minister and the Prime Minister with respect to petroleum revenue, neither is specifically held accountable under the Petroleum Fund Law. In the draft Petroleum Fund Act the Minister of Planning and Finance had overall responsibility for the management of the Petroleum Fund and reported to the Prime Minister. The draft Petroleum Fund Act stated:

> The Government is responsible for the overall management of the Petroleum Fund. In the exercise of any management functions and competences entrusted thereto, the Minister shall be accountable before the Prime Minister, and they both shall be accountable before the Council of Ministers and before Parliament (Ministry of Planning and Finance and Petroleum Fund Steering Group 2005 :8)

In the Petroleum Fund Law, only one sentence of this article remains: 'The Government is responsible for the overall management of the Petroleum Fund' (Article 11.1). The rest of the article that was drafted has been deleted. During consultation on the development of the Petroleum Fund Act, concerns were raised about this lack of accountability (by Clark 2005; Drysdale 2005a) but they were ignored. Whether the Minister of Planning and Finance would be held accountable in the event of a transgression against the Petroleum Fund Law would need to be tested in court.

There are institutions, other than the Petroleum Fund Law, designed to investigate corruption and hold Government officials to account. The Office of the Inspector General was established in July 2000. The Office of the Inspector General sits under the Office of the Prime Minister and conducts 'independent' reviews and examinations of maladministration and corruption within the Government[111]. The Inspector General has presented 78 investigative reports of maladministration to the Prime Minister of which ten have been referred to the Prosecutor General, in September 2006 (Office of the Inspector General 2006). The institution of the Office of the Inspector General remains weak; the Prime Minister cited 'major hurdles', the lack of an Organic Law, and a lack of office space as examples (Pereira 2006). The Office of the Ombudsman for Human Rights and Justice is another institution designed to enhance accountability, established pursuant to Section 27 (Figure 4.9) of the Constitution. The Statute of the Office of the Ombudsman for Human Rights and Justice (Democratic Republic of Timor-Leste 2004) was enacted in May 2004. The purpose of the Office of the Ombudsman (also known as the Provedor) is 'to combat corruption and influence peddling, prevent maladministration and protect and promote human rights and fundamental freedoms of natural and legal persons throughout the national territory' (Article 5.3).

The Constitution of the Democratic Republic of Timor-Leste - Section 27

Ombudsman

1	The Ombudsman shall be an independent organ in charge to examine and seek to settle citizens' complaints against public bodies, certify the conformity of the acts with the law, prevent and initiate the whole process to remedy injustice.
2	Citizens may present complaints concerning acts or omissions on the part of public bodies to the Ombudsman, who shall undertake a review, without power of decision, and shall forward recommendations to the competent organs as deemed necessary.
3	The Ombudsman shall be appointed by the National Parliament through absolute majority votes of its members for a term of office of four years.
4	The activity the Ombudsman shall be independent from any means of grace and legal remedies as laid down in the Constitution and the law.
5	Administrative organs and public servants shall have the duty to collaborate with the Ombudsman.

Figure 4.9 Section 27 of Timor-Leste's Constitution (Constituent Assembly of East Timor 2002)

The review of the Alkatiri Initiative (Cheema et al. 2006) noted the need for strong institutions to investigate and address the problems of corruption, and also that these two institutions (the Office of the Inspector General and the Ombudsman for Human Rights and Justice) overlapped in their responsibilities. When the new Prime Minister, Jose Ramos Horta, took office in June 2006 the Special Representative to the United Nations Secretary General, Sukehiro Hasegawa,

[111] The extent an institution can be independent when it is based within the Office of the Prime Minister is debatable.

re-presented the review document to him and shortly thereafter the Prime Minister ordered the Inspector General to undertake an audit of all government services, conduct a verification of all inventories of all State assets, and initiate new investigations of government services (Santos 2006). The Prime Minister also ordered the 2004 draft of the Organic Law (of the Office of the Inspector General) to be sent to the Council of Ministers for immediate approval.

The Offices of the Inspector General and the Ombudsman are supposed to work closely together however there is no formal arrangement between them. The Ombudsman appears to have a more independent and wide-ranging role and the Inspector General to be more of an internal mechanism within the Government. One report (Pereira 2006) suggested the Inspector General's job was to monitor mismanagement of State revenue (e.g. the waste of electricity in government offices, as well as telephone bills). On this basis one would assume the Inspector General would be responsible for investigating the misuse of petroleum revenue. However, Article 45.1 of the Petroleum Fund Law states that it is the Ombudsman that should investigate complaints on matters covered by that Law. The lack of a distinction between the roles of these two institutions and the weaknesses in the judicial system do not inspire confidence that transgressions of the Petroleum Fund Law would be dealt with appropriately or in a timely manner.

Another institution that serves as a watchdog to ensure petroleum revenue is managed wisely is the Petroleum Fund Consultative Council (hereafter Consultative Council), established under Chapter V of the Petroleum Fund Law. In the Consultative Council, the Government again illustrated its intent to engage civil society in petroleum revenue management. When the Government raised the idea (MOPF 2004b) of establishing a body independent of Government to participate in petroleum revenue management debate, the submissions to the consultation on the draft Petroleum Fund Act overwhelming supported it. Membership of the Consultative Council includes representatives from civil society, business and religious organisations as well as ex-government or former state institution officials.

The role of the Consultative Council is to advise Parliament regarding the performance and operation of the Petroleum Fund. The Consultative Council must also advise the Parliament, in the context of the budgetary process, whether the appropriations are being used effectively to the benefit of current and future generations (Article 25.2c). The Consultative Council, in addition to the Parliament, provides input into decisions made about petroleum revenue management on behalf of civil society. To this end, the Consultative Council is instructed to 'consult widely in the community' and to 'hold an annual forum on issues relating to the Petroleum Fund' (Article 30.4). In terms of the Consultative Council's representation of the wider community, there is no requirement that any of the members of the Consultative Council be women or representative of a range of communities other than Dili, so they must consult widely in order to represent all the people of Timor-Leste. Despite its limitations, in the absence

of an educated and informed civil society to hold the Government accountable the role of the Consultative Council may be crucial to Timor-Leste's ability to avoid the resource curse. The Norwegian Petroleum Fund model does not have such a Consultative Council, but Chad and São Tomé e Príncipe do. Unfortunately the Chadian government interfered with their council's member selection and the President's brother in law stands as a member (Gary and Reisch 2005).

4.4.3 Social and human capital

Chapter Three explained some of the limitations created by a lack of human capital in the Government of Timor-Leste. The lack of institutional capacity, and the lack of capacity of individuals managing Timor-Leste's petroleum revenue, has affected the timeliness of reporting, and implementation of actions required under the Petroleum Fund Law, to date. For example, under Article 46 of the Petroleum Fund Law, appointments to the Consultative Council were to take place within six months of the Law coming into force (i.e. by 3 February 2006). However, the Consultative Council did not have its first meeting until November 2006. Further, under Article 23, the Law requires the Government to publish the Petroleum Fund's Annual Report within 15 days of its submission to Parliament, which should be at the same time as the annual financial statements of the Fiscal Year are submitted. The Petroleum Fund annual report for the 2005-2006 fiscal year was not submitted to Parliament at the same time as the annual financial statements for that year, and, as at June 2007, the first annual report of the Petroleum Fund has not been published. The way in which petroleum revenue is managed is also affected by the lack of capacity in the Government. As discussed in section 3.2.4, there are many foreign advisers needed to support East Timorese staff in managing Timor-Leste's petroleum resources. For example, as discussed in section 4.3.2, the lack of capacity in Timor-Leste's Central Bank affects the way in which petroleum revenue is invested.

The lack of capacity of civil society is also an issue for the wise management of Timor-Leste's petroleum revenue. In order for the mechanisms of transparency and accountability to work, the citizens of Timor-Leste must bring contraventions of the Petroleum Fund Law, and instances of petroleum revenue mismanagement, to the attention of the Office of the Ombudsman for Human Rights and Justice or the Office of the Inspector General. At this time, there are few individuals in civil society, or the media, who understand the mechanisms and institutions that Timor-Leste has established to manage its petroleum revenue, let alone interpret and analyse the information that the Government publishes.

The weak capacity of Timor-Leste's media is also concerning. Journalists sometimes report rumours without corroborating what they have been told. The media industry itself is very

under-developed (like all sectors) in Timor-Leste[112]. Community radio is the medium that reaches most of the population (television and newspapers are limited, primarily, to Dili), but 'Community radio in East Timor is still a work in progress' (Scambary 2004 :2). Scambary (2004) reports that community radio's needs, in terms of training and management, are many and varied. However, radio is well placed, particularly given the high rates of illiteracy in Timor-Leste and because a number of stations broadcast in several local languages, to debate crucial issues, particularly in relation to management of Timor-Leste's petroleum revenue.

Discussion of issues surrounding petroleum revenue management is necessary throughout the country, so that learning can occur and the East Timorese people can begin to hold the Government to account. As the capacity of Government and civil society grows, petroleum revenue management in Timor-Leste will benefit from sincere debate and engagement between these institutions. Now, the lack of trust between government and civil society (including the media) is problematic. Too often, the Government ignores, or criticises, feedback from civil society. The Petroleum Fund Law consultation was portrayed as a process in which participants could engage with the Government and provide input to the development of the Petroleum Fund Law. In practice, it was more an opportunity for civil society to learn about the Government's plans for petroleum revenue management (Drysdale 2007). Mindful of the big picture, the Petroleum Fund consultation process was useful in this regard, but it illustrated that there are few in civil society with the capacity to question the Government on petroleum revenue management, let alone hold them to account over the long term.

The Government has formalised its lack of trust in civil society and the media by drafting a Penal Code, which criminalises defamation. A mission visiting Timor-Leste to explore transparency and accountability declared the law 'problematic' (Mattiske 2006) and the JSMP reported:

> Freedom of opinion and expression are important to the development of a democratic society. In JSMP's opinion, articles 172 – 177 of the draft Penal Code (which provide for one to two years imprisonment) place too strong a limit on individuals' and institutions' rights to freedom of expression. These articles could have the effect of stifling criticism of, and opposition to, the current and future Timor Leste governments. Criminal sanctions might dissuade journalists or individuals from reporting or discussing important issues for fear of prosecution and result in self-censorship by the media. (JSMP 2004 :5)

The development of a healthy and robust democracy relies on the opportunity for citizens to discuss and debate ideas and opinions, regardless of whether they are commensurate with the views of the Government. Similarly, how petroleum revenue is saved, spent and invested, must

[112] The Timor-Leste Media Development Centre (2007) was established to support the East Timorese media, and recently developed a Documentary Training Program to train radio volunteers to write, edit and produce radio programs on topics such as the 'Timor Gap Treaty', and 'Vox Pops' to get people's perspectives about how petroleum revenue should be spent, and what the development priorities are.

be understood, and debated, if Timor-Leste's petroleum revenue is to be managed wisely. The Government has established many mechanisms that provide for civil society and the media to hold them to account. But, ultimately, transparency and accountability rely on the capacity of all of the stakeholders (government, civil society and the media) and the social capital of those stakeholders. In this way, petroleum revenue management in Timor-Leste is everybody's responsibility.

This chapter examined how the Government of Timor-Leste manages its petroleum revenue. Not enough time has passed to conclude whether Timor-Leste's Petroleum Fund Law will ensure that Timor-Leste can manage its petroleum revenue wisely. The Petroleum Fund Law incorporates some institutional features that give the impression that Timor-Leste's petroleum revenue will be managed wisely. However, the strength of these institutions is ultimately dependent on the intentions of the decision-makers, the good governance of institutions, and the strength of the rule of law. Civil society has a role in holding the Government to account in these respects. Norway provides a model of wise petroleum revenue management that Timor-Leste can aspire to, but Chad and São Tomé e Príncipe provide more appropriate examples of comparison because their institutional environment are weaker than Norway's, and possibly weaker than Timor-Leste's. Timor-Leste would be better served, now that they have established a Norwegian-based institutional framework, if they paid attention to the countries whose experience they wish to avoid.

PART TWO

HATENE SAIDA MAK EMA NIAN HANOIN
(GETTING TO KNOW WHAT PEOPLE THINK)

Chapter 5 RESEARCH DESIGN

Part One (Chapters 2 to 4), of this thesis, identified the challenges of managing natural resource wealth, explored those challenges within the institutional context of Timor-Leste, and explained the Government of Timor-Leste's plans to meet those challenges. The framework, developed in Chapter Two, identified some key aspects of managing natural resource revenue that are important in attaining the ultimate goal of sustainable development, and avoiding the resource curse. Human and social capital are essential to this framework, and both are enhanced through participation. Thus, the empirical component of this research was designed to encourage participation, and illuminate the decisions made, in the management of Timor-Leste's natural resource wealth[113]. The aim of the field research was to seek the opinions of a selection of East Timorese and decision-makers about petroleum revenue management in Timor-Leste. Part Two (Chapters 6 to 8), of this thesis, illustrates the results of the empirical component of the research. This chapter explains the methodology of that research, and the methods used to elicit the data.

Qualitative and quantitative social research methods were used to conduct 75 interviews, during two field visits to Timor-Leste. In 2004, 28 semi-structured interviews were conducted over six weeks. Participants included key decision-makers, such as the (then) President Xanana Gusmão and the (then) Prime Minister Mari Alkatiri, and a range of East Timorese without a decision-making role. In 2005, 47 Point*Wizard[114] (Hansen and Ombler n.d.) interviews were conducted over three months. Point*Wizard is a software package that is used to conduct MCDA and provides both quantitative and qualitative data. The field work was completed by September 2005 and a crisis occurred in Timor-Leste in 2006. Some participants' views about security and the future of Timor-Leste may have changed since the crisis, therefore the results of this research are time-specific (i.e. the results might be different if the field work was undertaken today).

Some of the themes explored in the research were identified as the research evolved. The literature reviewed in the first part of the thesis provided the insights on which the questions posed in the semi-structured interviews were based. The data elicited by the semi-structured interviews provided the ideas upon which the Point*Wizard interviews were designed. In particular, the Point*Wizard technique was used to explore an apparent mismatch between respondent's views on how petroleum revenue should be managed, and their views on the actual

[113] In addition to illuminating the decisions made about managing Timor-Leste's petroleum revenue, the methods used in this research had the added benefit of enhancing participant's capacity on this topic; they were encouraged to reflect and consider ideas they might not have otherwise.

[114] Point*Wizard's name has changed since the field work was completed and is now called 1000minds. The name Point*Wizard will be used in the results of the research so that the data is recognisable to participants.

management strategy being implemented. This chapter equips the reader with an understanding of these methods so the data presented in Part Two of the thesis can be interpreted. MCDA using Point*Wizard is a research method that is relatively unknown (compared to semi-structured interviews). Further, the data elicited using the Point*Wizard software provides the bulk of the research data, thus this chapter focuses on this aspect of the research methods. The chapter also begins by explaining aspects of the field research preparation to highlight the integrity of the research methods. How the participant sample was determined, and how the challenge of cross-cultural research was approached are explained. The chapter then explains both of the research methods including aspects of the methodology.

5.1 Field research preparation

Preparation for the interviews was primarily completed prior to each field trip. The review of the literature (both academic and grey[115]) was used to develop the focus of the empirical component of the research. The questions asked in the semi-structured interviews and the information used to prepare the Point*Wizard technique relied on the facts and issues as described in the literature. The information that the literature provided was corroborated against information provided by participants in pilots, and in the field, and the research methods were adapted and developed, in light of new and relevant information, as the research proceeded.

Readings on research methods (e.g. Blaikie 2000; Minichiello et al. 1995; Oppenheim 1992) and advice from several academics were used to develop the format and style of the semi-structured interviews. Input from Paul Hansen and Franz Ombler, the creators of the Point*Wizard software used in the Point*Wizard interviews, was also crucial to the success of the research. Key factors in the success of the research preparation were identified, namely the need to justify the participant sample, and to incorporate mechanisms to address the cross-cultural nature of the research methods. This section explains the choices made in developing the samples for the research and how communication across cultures was approached.

5.1.1 Participant sampling

This research has two distinct participant samples; one sample for the semi-structured interviews (conducted in 2004) and a different sample for the Point*Wizard interviews (conducted in 2005). The samples differ in both number and the variety of groups of which the

[115] Grey literature includes documents and reports from government departments, local and international non-government organisations and institutions. There is relatively little academic literature that is specific to Timor-Leste (let alone the resource curse in Timor-Leste), thus the grey literature is used to learn about the state of Timor-Leste as a nation (Chapter Three) and the state of their institutions (Chapter Four).

participants are members[116] in several ways. A larger sample was sought for the Point*Wizard interviews because, although the time required to conduct the interview was similar to the semi-structured interviews, the data from the Point*Wizard interviews was simpler and less time-intensive to analyse[117]. Further, the results from the Point*Wizard interviews are more insightful and make a greater contribution to the research topic. The final selection of each sample also depended on each participant's availability at the time the research was conducted (e.g. some government employees had moved on to other positions, or were on leave at the time the Point*Wizard interviews were conducted). Participation also depended on the individual's work commitments, a prompt response to the original invitation and willingness to participate[118]. For example, the Minister for Planning and Finance declined to participate, but, generally speaking the majority of participants were enthused about the project and eager to participate[119]. For these reasons the number of invitations was much greater than the final sample. The number of participants selected was also constrained by other factors. These factors included the resources available to the researcher (research funds, human resources, time and opportunity to travel throughout Timor-Leste—these limited the time the researcher had to spend in each location in Timor-Leste), the nature of the themes explored in the research (the topic of petroleum revenue management, in particular the more technical aspects addressed in the Point*Wizard interviews, is inaccessible to those with no education or current knowledge), the selected research methods (which limit the sample to people with better literacy skills), and the Ethical Guidelines of the National Health and Medical Research Centre (NHMRC), which limited the sample to participants over the age of 18.

The aim of establishing each sample was to draw input and opinions from a cross-section of individuals, which included people both involved in making petroleum revenue management decisions and people that were external to the decision-making process. A primary, but not sole, focus of analysis was on the difference of opinion between decision-makers and those participants external to the decision-making process. Participation was sought from both East Timorese and foreigners working in Timor-Leste. The method used in selecting the participants for the semi-structured interviews and the Point*Wizard research was non-random sampling. The samples were not stratified, but quotas of certain demographic groups (defined by

[116] Participants do not necessarily officially represent the group with of which they are a member (e.g. female participants do not represent women in general).

[117] The semi-structured interviews required transcription and intensive analysis due to the qualitative nature of the data whereas Point*Wizard is, primarily, a quantitative method (although it does elicit some qualitative data as well), and the data was easier to manipulate and analyse (compared to the semi-structured interviews).

[118] In some cases, participants were contacted three or four times to ascertain a suitable time for conducting an interview, or when an appointment was made they did not attend. Given the cultural aversion to causing displeasure, it was assumed that participants whose actions contradicted their verbal commitment to participate on four or more occasions actually did not want to participate, but preferred not to disappoint by saying so. For example, one invited participant continually gave excuses to avoid meeting and later it was revealed (by someone else) that the participant was illiterate (and unable to read the invitation and information about the research).

[119] In making closing comments, most of the participants remarked they thought the research was important.

explanatory variables) were sought within the limitations posed by the availability of these variables in the various institutional groups represented. For example, an equal balance of men and women was desired, but as the number of men responsible for making decisions about petroleum revenue management far outweighs the number of women in that category it was not possible to have this gender balance in that group. In order to achieve more balance overall more women were sought to participate from other groups. An equal balance between urban and rural participants was also sought. The semi-structured interviews were conducted in three districts (Dili, Baucau and Manufahi). The Point*Wizard interviews covered a wider area and took place in five districts (Dili, Aileu, Ainaro, Baucau, and Liquica). For the reasons explained above, the target samples in rural areas were not achieved. In practice it was difficult to find individuals in rural communities who were sufficiently literate and had the ability (or capacity) to participate, particularly in the Point*Wizard interviews.

The field research was intended, in part, to be exploratory; to provide the opinions of some individuals who either have a decision-making role in managing petroleum revenue, or occupy a position as a member of an organisation or stakeholder group (e.g. young people or teachers). The comments of participants are presented throughout the thesis and each quote is attributed to the participants' variables (e.g. Female NGO, Female District Teacher or Male Foreign Adviser), or by their name (if the participant agreed to be identified). Stratification of the sample was not possible because the proportion of the variant groups within the total population was not known (and such data is not available in Timor-Leste). Thus, a target number for each participant group was set and the final result is acknowledged as non-proportional and the data does not represent opinion of the wider East Timorese population on this topic. For these reasons, the samples may be described as selective, and because participants must be able to understand the research information and therefore must be literate, which most East Timorese are not, the sample might also be described as elite. This does not mean that the views of all East Timorese on the topic of petroleum revenue management are not welcomed, but that this research could not attempt to include such a broad range of views given the limited resources referred to earlier.

The final participants in both samples have been classified as being members of groups and this classification is provided in Table 5.1. In total, 28 people participated in the semi-structured interviews and 47 people participated in the Point*Wizard interviews. Eight people participated in both interviews, which means a total of 67 people participated in 75 interviews. Figure 5.1 illustrates that a balance, between the number of participants with a role in making decisions about petroleum revenue[120] and the number of participants who had no such role, was achieved

[120] In some cases, participants who were foreign advisers to East Timorese with a role in making petroleum revenue management decisions did not self-identify as 'decision-makers', but for the purposes of this research they are considered 'decision-makers'. Conversely, one local village leader identified as a participant with a decision-making

in the sample for the semi-structured interviews. However, in preparing for the Point*Wizard interviews it was considered more important (because the semi-structured interview responses of participants with a role in making decisions generally aligned with the Government's plans for petroleum revenue) to elicit the opinions of participants external to the decision-making process. Thus, Figure 5.1 confirms that the number of decision-makers participating in the Point*Wizard interviews is fewer than the number of participants external to the decision-making process.

	Institutional group membership	Semi-Structured Interview Sample	Point*Wizard interview Sample
Petroleum revenue management decision-making role	Government – Council of Ministers [Fretilin]	1	1
	Government – The Bureaucracy	8	3
	Advisers	5	7
	Sub-total	**14**	**11**
No significant petroleum revenue management decision-making role	Government – The Bureaucracy	4	6
	Parliamentarians [Non-Fretilin or Opposition]	2	0[121]
	Non-government Organisations (NGOs)	3	7
	The Catholic Church	2[121]	0
	Teachers	0[122]	3
	Health workers	0[122]	5
	Young people	0[122]	5
	Other[123]	3[124]	10
	Sub-total	**14**	**36**
	TOTAL	**28**	**47**

Table 5.1 The institutional group membership of the samples in the research

role in petroleum revenue management (in the sense that he votes or makes decisions about government expenditure). But, for the purposes of this research a participant with a decision-making role is a person who is employed to make such decisions, or to advise those who make those decisions.

[121] Parliamentarians and the members of the Catholic Church that participated in the semi-structured interviews were not available to participate in the Point*Wizard interviews.

[122] Teachers, Health Workers and Young People were not specifically sought to participate in the semi-structured interviews as the sample was too small to include them.

[123] 'Other' is used to compile a range of other institutional groups; they are individuals who are Community Leaders, Academics, Union Leaders, Farmers, Advisers and Business People. They are grouped together because their numbers are not more than two of each.

[124] The President of Timor-Leste is included in this 'Other' group because Sr. Xanana Gusmão asked that his participation and comments be attributed to him as a citizen of Timor-Leste, and not in his official capacity as the (then) President of Timor-Leste.

Participants in both samples were asked to complete a Participant Details Survey (Appendix 3). In order to illustrate the breadth of the sample, the details of the participants' gender, age and home location are provided in Figure 5.2. For reasons outlined previously, gender balance was not achieved in either sample, but based on the difficulties of achieving gender balance in the semi-structured interview sample, specific effort was made to include women in the sample of the Point*Wizard interviews. The demographic details were used when the data was analysed, but the focus of analysis was on distinguishing the results of the interviews with decision-makers, compared to the results from the interviews with participants external to the decision-making process. All participants provided written consent (as per the National Health and Medical Research Council Guidelines[125]) for their opinions, and the data they produced, to be used in this research. Some participants, with a senior and public role in making decisions about petroleum revenue management, were asked to provide consent that they could be named in conjunction with their opinions and ten consented (and are identified in Table 5.2). Those participants are identified in conjunction with their comments in Chapters Six to Eight, and eight were provided with an opportunity to view and amend their comments[126].

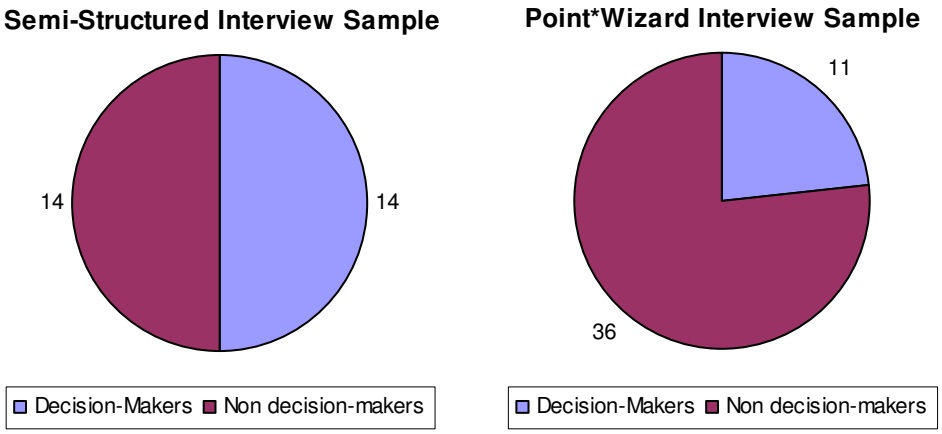

Figure 5.1 Breakdown of decision-makers and non-decision-makers in the research samples

The research results indicate a range of opinions about petroleum revenue management in Timor-Leste. The samples include participants from rural areas, from the church, women, teachers, health workers and young people, but these are not intended to be representative. The opinions of the participants illuminate the problem that this research addresses; the challenge of managing natural resource wealth well, with specific relevance to Timor-Leste.

[125] The Human Research Ethics Committee of the ANU approved Protocol No. 2004/91 for this research on 20 May 2004.

[126] Two participants were not sent their quotations; one participant could not be contacted, and one other participant had passed away.

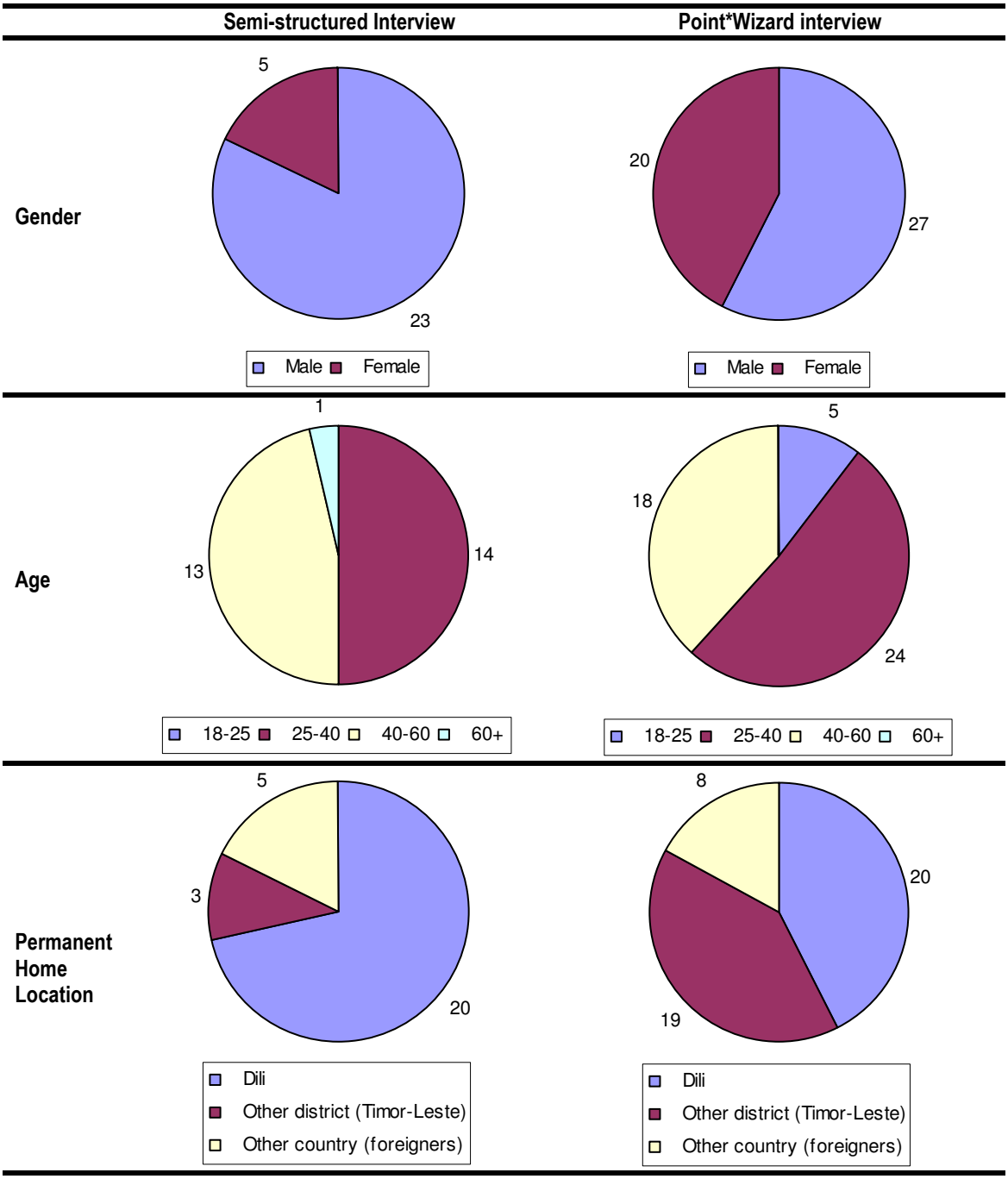

Figure 5.2 **Demographic details of participants**

Name (alpha order)	Title (at the time of the research)
Mr. Kadhim Al-Eyd	Resident Representative, International Monetary Fund
Sr. Mari Alkatiri	Prime Minister of Timor-Leste
Sr. Fernando de Araujo	Head of Partido Democratico (PD)
Sra. Niny Borges	Manager, Legal, Timor Sea Designated Authority
Sr. Xanana Gusmão	(then) President of Timor-Leste, identifying as a citizen of Timor-Leste
Sr. Mariano Lopez da Cruz	Inspector General
Bishop Basilio Nascimento	Bishop of Baucau, Catholic Church
Sra. Maria Paixão	Member of Parliament, Partido Social Democrata (PSD)
Mr. Einar Risa	Commissioner and former Executive Director, Timor Sea Designated Authority
Sr. Jose Teixeira	Commissioner, Timor Sea Designated Authority, and During the semi-structured interviews – Secretary of State, Tourism, Investment and Environment, and During the Point*Wizard interviews – Vice Minister, Ministry of Natural Resources, Minerals and Energy Policy.

Table 5.2 Participants who consented to be named in this research

5.1.2 Conducting cross-cultural research

Conducting field research in Timor-Leste presents many challenges. The main challenge[127] is the need for the researcher to communicate with the participant and explain concepts of petroleum revenue management and the research methods. The aim of the thesis is not to explore the implications of conducting research in a cross-cultural setting. However, it is important to acknowledge the researcher speaks a different first language and has a different cultural context to most of the research participants. Despite the researcher's considerable experience in living and working in Timor-Leste, and some local language skills, difficulties in communicating across cultures will always remain. Foreigners will always be *malae* (the *Tetum* word for foreigner) and Kirk (2003) explains this is the nature of living and working in Timor-Leste. For this reason it was necessary to recognise and respond to these challenges in developing the research methods, and carrying out the interviews.

Great attention was paid to the invitation to individuals to participate. In formal settings, introductions[128] were arranged for participants the researcher did not already know, and in some cases, approaching the local government office to assist in making connections was also helpful (in rural areas). In other informal situations some individuals responded well to being approached directly and upon explanation of the research were eager to participate, and some did not. Some situations required a formal approach, and others did not. If a participant did not speak English well, then an interpreter[129] was employed to assist. Regardless of the formality of the connection, each invitee was provided with a letter of invitation, a letter of introduction from

[127] The researcher acknowledges there are other physical and resource-related challenges to conducting research in Timor-Leste, but these are not discussed.

[128] East Timorese people are more likely to respond favourably if you are connected to someone they know. This is an example of the strength of bonding social capital in their culture (as discussed in Chapter Three).

[129] All of the interpreters signed a confidentiality agreement.

the Director of the (then) Centre for Resource and Environmental Studies[130], an information sheet about the research (Appendix 4), and a consent form[131]. In the case of the Point*Wizard interviews, supporting information and a participant questionnaire were also distributed (these are provided in Appendix 5 and Appendix 6).

All of the written information, including the letters and the explanation of the Point*Wizard interview method, was translated into *Tetum* (the most widely spoken local language of Timor-Leste) and in the case of invitations to the Prime Minister and the President, information was translated into Portuguese (the official language of the Government). The information, the research, and the ethics guidelines, were also explained verbally to the invitees, and participants were assured that the results of the research would be distributed upon completion[132]. Finally, to ensure the research methods were both culturally appropriate and robust, both of the interview methods were piloted with East Timorese citizens, living in Canberra, before departing for the field. In both cases, the methods and questions were adapted as a result of insights and feedback from the pilot participants.

5.2 Semi-structured interviews

The semi-structured interviews were designed to elicit participants' vision for the future of Timor-Leste, how they would use petroleum revenue to enact that vision and what challenges they thought Timor-Leste might encounter. A set of questions (specified in Figure 5.3) was used as a reference point for each interview, but the questions were altered to suit each participant's context. The interviews were semi-structured so that the discussion could flow with the course of conversation and participants were encouraged to elaborate on topics of interest. The questions were also intentionally broad and not specific so that participants could initiate discussion of the issues that were important to them (as opposed to the researcher). For example, participants were not asked 'is education important?', but 25 of the 28 participants chose to identify education as important when talking about the future of Timor-Leste.

The interviews were not taped because the researcher was concerned that the participants would not be as open if they were taped. Some participants (i.e. those in a position of responsibility or authority in relation to petroleum revenue management) were offered the option of being named

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[130] The Centre for Resource and Environmental Studies, at the ANU, has since been re-named the Fenner School for Environment and Society.

[131] Each of the participants signed the Consent to Participate form and ten participants were invited, and consented in writing, to be named in relation to their comments.

[132] Many East Timorese have complained that foreigners come and ask them many questions, but the results of their enquiries are never forwarded to the participants. This researcher made a commitment to distribute the results of the research and following publication, an article by the researcher (Drysdale 2005b) was translated into *Tetum*, and distributed by email to those participants who had access to email. In addition, all articles published by the researcher are translated into *Tetum* and available on the researcher's website (Drysdale n.d.). Ultimately, the thesis will be available digitally via the ANU library's website (http://thesis.anu.edu.au/).

in conjunction with their responses, but the identity of the other participants is kept confidential to encourage their openness of opinion. Hand-written notes were transcribed to computer shortly following each interview. The method for conducting semi-structured interviews is well known, so it will not be explained or explored further.

INTERVIEW QUESTIONS

PART A Survey questions

The Participant Details Survey questions are provided in Appendix 3.

PART B Vision of the future

1. How will the future be different to your life now?
2. How would you like the lives of children growing up today to be different to yours?
3. When you think about the future of Timor-Leste, what kinds of issues do you think about?
4. Are some of those issues more important than others?

PART C Use of Petroleum Revenue

5. If you were responsible for managing the revenue from oil and gas, how would you use it to create your vision of the future of Timor-Leste?

PART D Institutions

6. Can you describe the decision-making process you would use?
7. Do you think the current government has the capacity to manage these funds? If No – What would you change?
8. Do you trust/have confidence in them?
9. What are their strengths?
10. Will Timor-Leste fall victim to the resource curse?

Figure 5.3 Questions on which the semi-structured interviews were based

5.2.1 Analysis of the semi-structured interviews

The transcriptions of the 28 semi-structured interviews provided 76 pages of participants' opinions. The participants' comments in response to the questions detailed in Figure 5.3 are very rich in information, and the method of analysing the data from the semi-structured interviews is similar to the method used in grounded theory (Glaser and Strauss 1967; Strauss and Corbin 1998). The interviews were transcribed then themes and sub-themes common in the participants' discussions were identified. N-Vivo software (QSR International 2006) for qualitative data analysis was used to aid sorting of the text into themes and sub-themes. Five themes were identified; the future of Timor-Leste, managing petroleum revenue, institutions, corruption, and capacity. Under these five themes many sub-themes of discussion were identified, and they are listed in Figure 5.4. Analysis of the participants' comments under the sub-themes revealed conclusions, or priorities, which fell into three categories of issues that were important to participants, spending and saving petroleum revenue, decision-making and institutional challenges. These results were combined with some of the demographic data and

THEMES				
The Future of Timor-Leste	**Managing Petroleum Revenue**	**Institutions**	**Corruption**	**Capacity**
SUB-THEMES				
• Good/better education • Good/Better Health/Nutrition • Crime/Policing/Security • Improved Quality of Life • Continued Foreign assistance/ Connection with other countries • Increased Community participation • Enhanced Economy • Good/better electricity supply • Good/better water supply • Good/better roads • Good/better infrastructure • Gender equality • Good governance • Human resource development • Less poverty • Reduced mortality • Environment • Smaller families	• Must benefit future generations • Investing • Spending • Impact on the Economy/ Other sector development • Expectations of revenue • Transparency and accountability • Knowledge about the Plan • Input from Foreign Advisers and International Financial Institutions • Decision-making Process • Community participation • Royalty Payments • Tagging Petroleum Revenue • Resource Curse	• Institutional change/ Institutional development • Banking & Payments Authority • Ministry of Planning & Finance • Legislation • A petroleum industry • A petroleum ministry • Public sector employment • The Church	• How to prevent corruption – transparency • How to prevent corruption – leadership • How to prevent corruption – better employee conditions • Corruption is the most important issue • Is there corruption now? • Indonesian mentality • It will take time to change	• General improvement of personnel capacity required • Government capacity to manage funds • Trust in government • Civil society comprehension and information provision

Figure 5.4 Themes and sub-themes of discussion in the semi-structured interviews

tabulated. An example of the analysis of interviews is provided in Appendix 7. An analysis of the responses from East Timorese participants compared with the responses of foreign advisers revealed there was some distinction and this is discussed in Chapter Seven.

The quantitative manipulation of the semi-structured interview data was not used to a great extent in the research. The data from the semi-structured interviews was used in two ways. First, the comments are presented as quotations to support the discussion in Chapters Six to Eight. Secondly, the data from the semi-structured interviews was used to identify the issues of importance to participants and to develop the criteria and categories on which the Point*Wizard interviews were based.

5.3 Point*Wizard interviews

The results of the semi-structured interviews revealed issues and decisions that were important to participants, but gave no insight to their relative importance. The researcher suspected that to learn participants' opinions about the importance of some decisions relative to others might be useful in terms of understanding the challenges of petroleum revenue management in Timor-Leste, and avoiding the resource curse. MCDA is a research method suited to eliciting participants' preferences for a set of criteria. Point*Wizard is a unique computer software program that was used in this research to perform MCDA. This section explains how this research method works, and how it was used in the field research.

5.3.1 Multi-Criteria Decision Analysis

Every day people make decisions; sometimes the decisions are simple, and at other times choices between many things that have many attributes are more complex (buying a car, for example). Decisions are sometimes made intuitively, but when a situation arises in which the choices are complex, MCDA (sometimes known as Multi-Criteria Decision Making or MCDM) can be used to assess which alternative is preferable. Belton and Stewart (2002) explore MCDA in detail. The aim of this thesis is not to analyse MCDA as a method, so a literature review will not be undertaken. Rather, this section will explain the method as it was applied in this research.

MCDA requires the decision-maker to identify the criteria that are relevant to the decision (e.g. price, colour and age might be useful criteria to use when deciding which car to buy). The decision-maker then determines which of the criteria are most important. If there are only two criteria and one is more important, and there are only two alternatives to choose from, then a decision can be made relatively easily. If there are many criteria (such as the many decisions to be made about petroleum revenue management in Timor-Leste) and therefore many alternatives, then MCDA can be useful by providing a step-by-step mechanism to make a choice.

Some methods of MCDA (such as Point*Wizard) use a 'points system' to weight the criteria and provide a ranking of the alternatives using these points. This research does not rank alternatives, but rather focuses on the relative importance of the criteria in deciding which alternative is more important. Using the example of buying a car, this research is effectively concerned with participants' subjective judgments about the relative importance of price, colour and car age. If a low price is most important followed by the car's age, and colour is the least important criterion, then the buyer would look for a car that fitted those priorities. In the same way, knowing the priorities of participants in this research, a model for petroleum revenue management in Timor-Leste, which fits the participants' priorities, can be developed.

5.3.2 Point*Wizard software

Point*Wizard (Hansen and Ombler n.d.) is a software program, available for use via the internet[133] that uses MCDA to rank alternatives, or options, and in doing so, reveals the relative importance of the criteria used to make that decision. The user (in this case the researcher) establishes the criteria upon which the decision is based and the categories within each criterion, and then enters those details into the Point*Wizard system. This means that each set of criteria and categories can be entered in various languages. In the case of this research, English, *Tetum* and Portuguese. Point*Wizard then presents a dilemma and asks the subject (in this case the interview participant) to choose which option they prefer. Point*Wizard is based on pairwise comparison of two options at a time, so the subject chooses between the options, based on two criteria (with different categories), while all other criteria are equal[134].

Point*Wizard is useful because it enables comparison of options with more criteria and categories than the human mind could easily process without aid. Reducing, to two, the number of options a subject must consider at any one time means the subject can make a decision based on a limited number of criteria. Based on the participant's responses to each dilemma, Point*Wizard assigns point values (part-worth utilities) to represent the participant's preferences. When the participant has completed making decisions based on two criteria at a time[135], the system can provide the order of the relative importance of each criterion generated by the points system. The order of the relative importance of the criteria can be provided to participants immediately (by printing where available or copying the data onto a piece of paper by hand).

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[133] Internet is not widely available in Timor-Leste so the makers of Point*Wizard provided consent for the software to be downloaded to a laptop for the purposes of this field research.

[134] For an explanation of pairwise comparison see Salustri (2007).

[135] The Point*Wizard system can be used to generate a round of questions that present three criteria for each option to provide a more explicit result (because a greater number of dilemmas are used to produce the result), but because of time constraints and the complexity of such a dilemma, the research considered dilemmas at the first level (with two criteria) only.

Point*Wizard uses a method (sometimes known as scoring) to determine a system's point values known by the name PAPRIKA (which means Potentially All Pairwise Rankings of all Possible Alternatives). Other methods to achieve point values, such as conjoint analysis, are reviewed by Belton and Stewart (2002) and Orme (2006). Point*Wizard can also convert the points values to percentage values, thereby providing (for some) a more accessible indication of the relative importance of each criterion. For example, if the point values of two criteria are 10 and 50 and their percentage value is 5 and 25%, both numerical representations illustrate that one criterion is five times as preferable as the other. The analysis used in this research uses both value representations.

Point*Wizard also allows users to weight criteria according to their importance (e.g. when selecting job candidates the criteria of qualifications might weigh more than experience) however in this research Point*Wizard automatically created the points values based on the participant's responses. Weighting the criteria might be useful in making decisions about alternative models, but this research focuses on the participants' ranking of the criteria (rather than determining which of a group of models is preferred).

The number of dilemmas (choices) presented to each subject in order to achieve a complete ranking depends on the number of criteria and the number of categories, and the subject's responses. The number of hypothetically possible dilemmas (choices) will always be far more than the average number of dilemmas required to rank the criteria using Point*Wizard. If, for example, a decision relies on three criteria, which have two categories each, then the total number of hypothetical dilemmas is six. However, the number of dilemmas presented to a subject in order to achieve a ranking using Point*Wizard would be just two or three.

There are other methods of achieving a ranking, but they are not as simple for participants to use. For example, one common method is the Analytic Hierarchy Process (Saaty 1980, 1990), by which participants use ratio or interval scales to define their preferences (i.e. to say how much more they prefer one thing over another). This is inherently an unnatural task, particularly where the items are qualitative rather than quantitative. For this reason, Point*Wizard's method of presenting a simple choice (either or) of two options is extremely effective and useful for participants who are not familiar with complex research methods[136].

The main function of Point*Wizard, applied in this research, is to determine the relative importance of a number of criteria according to the participants. However, Point*Wizard has other features that were used in the field research. Point*Wizard provides the option of testing the results for consistency. In order to ensure the field results were robust, in the process of

[136] Withers and Edwards (2001) surveyed Australian citizens' opinions about Australian budget allocation. The survey options for each budget sector were 'spend much more', 'spend a little more', 'spend the same as now', 'spend less', and 'spend much less'. However, a process of MCDA was not used, and thus the results do not factor in the possibility that potential additional revenue may be limited. Using this methods a participant could respond 'spend much more' for all budget sectors, which is unrealistic.

conducting the interview, three additional questions (of the same format) were asked[137]. The results of these questions were compared with the participant's ranking result and the system indicated whether the response was consistent or not. Point*Wizard also provides a space below each dilemma for additional comments to be recorded. These comments can also be retrieved from Point*Wizard (using Microsoft Excel) for analysis.

Point*Wizard was used in this research to elicit participants' preferences for how Timor-Leste's petroleum revenue should be managed. Insights from the semi-structured interviews and the information from the academic and grey literature were used to develop the questions asked in the Point*Wizard interviews, which were conducted in both English and *Tetum* (with the aid of an interpreter). The Point*Wizard interviews were divided into two parts; Part One ranked participants' preferences in regards to budget allocation and Part Two ranked participants' preferences in regards to administrative decisions about petroleum revenue management. Both of these parts are explained in the following sections.

5.3.2.1 Part One – Budget allocation

The data from the semi-structured interviews showed that the participants had opinions about issues that were important to them. The participants also indicated that the Government was responsible for resolving some of those issues. Thus, the researcher suspected that participants would have opinions about how the State should allocate its budget (to address the issues that were important to them). Given that Timor-Leste's petroleum revenue is the major source of funding for the State's budget, knowing how participants would prefer to use that petroleum revenue is important. Thus, Part One of the Point*Wizard interviews was designed to elicit participants' preferences about how petroleum revenue should be spent, and the criteria ranked were budget sectors.

Point*Wizard was used to elicit a ranking of each participant's preferences in budget allocation by presenting them with two alternative budget expenditure scenarios and asking the participant 'Which option would you choose if you were to increase the Budget?' The question was preceded by a statement which provided a context for the question; 'The Government of Timor-Leste receives revenue from petroleum exploitation and may choose to increase its budget'. Figure 5.5 gives an example of such a dilemma. The two budget expenditure scenarios included two criteria for each option, whilst all of the other options (i.e. other budget sectors) were equal. The two criteria came from a list of 14 budget sectors, and these criteria are illustrated in Figure 5.6 (on page 132). Each participant was provided with information regarding the budget sectors to aid their decision-making, and this information is provided in Appendix 5.

[137] During the field research, if one of the three responses was inconsistent, a fourth question was asked to confirm consistency. Most of the participants achieved 75 or 100% consistency and where the rate was less the researcher was satisfied that the reason for the inconsistency was not because the participant did not understand the method.

In this part of the Point*Wizard research, each criterion has just two categories; maintain current budget or increase expenditure. The first option presents one sector's budget maintained and the other sector's budget increased. The second option presents the same criteria with the opposite categories. Effectively, participants were asked to trade off two budget sectors at a time. In the example presented in Figure 5.5, it might appear easier to ask the participant 'would you increase the Budget for education or public works?' In cases where the participant was not comfortable with the software the question was asked verbally in this way. But, the research could not have been conducted manually in this way. When a system has 14 criteria there are 16,384 hypothetically-possible dilemmas. This means that conducting the research manually would not have been practical and using Point*Wizard reduces the number of dilemmas required to achieve a result. In a case with 14 criteria with two categories each, a ranking can be achieved in an average of 35 responses (the number varies between participants as the result depends on their responses).

Figure 5.7 (on page 133) provides an example of one participant's ranking of the Budget sectors. The results indicate that this participant identified Water as the Budget sector most in need of increased budget allocation, whilst Defence was the sector this participant identified as being least in need of increased budget allocation. Participants' comments, as they made their decisions, were also recorded as the interview progressed. Those comments provided further qualitative data for the field research and were analysed using N-Vivo qualitative data analysis software (similar to the method of analysis for the semi-structured interviews). The comments are especially insightful in terms of the connections between spending on different budget sectors. In reality, budget is not allocated to two sectors independently of others. Point*Wizard is a good method for achieving a ranking of the Budget allocation priorities, but it is the comments which illuminate the results and fuel the discussion about the participants' priorities. For this reason, each interview took between 30 minutes and one hour depending on the extent of the participant's comments and their general aptitude for this kind of research.

Part One is a relatively simple example of how Point*Wizard can be used to determine the order of relative importance of a number of criteria. But, at least one participant did not have the capacity to understand the method. Despite the method being explained by the interpreter, this participant could not grasp the concept of making a choice between two options. Thus, the results of that interview were not used. In addition to that participant's results being excluded, a further two participants did not participate in Part One because of other constraints. Thus, 44 participants took part in Part One of the Point*Wizard interviews.

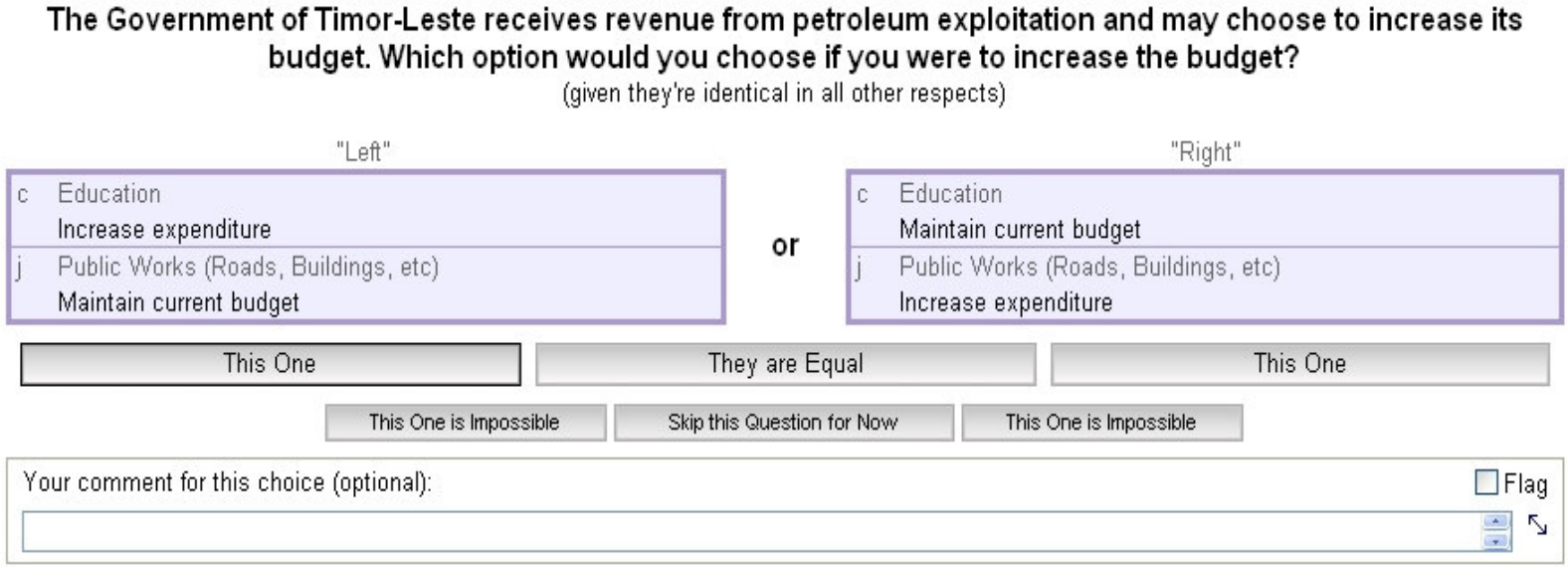


Figure 5.5 Point*Wizard Part One (Budget Allocation): Example Dilemma

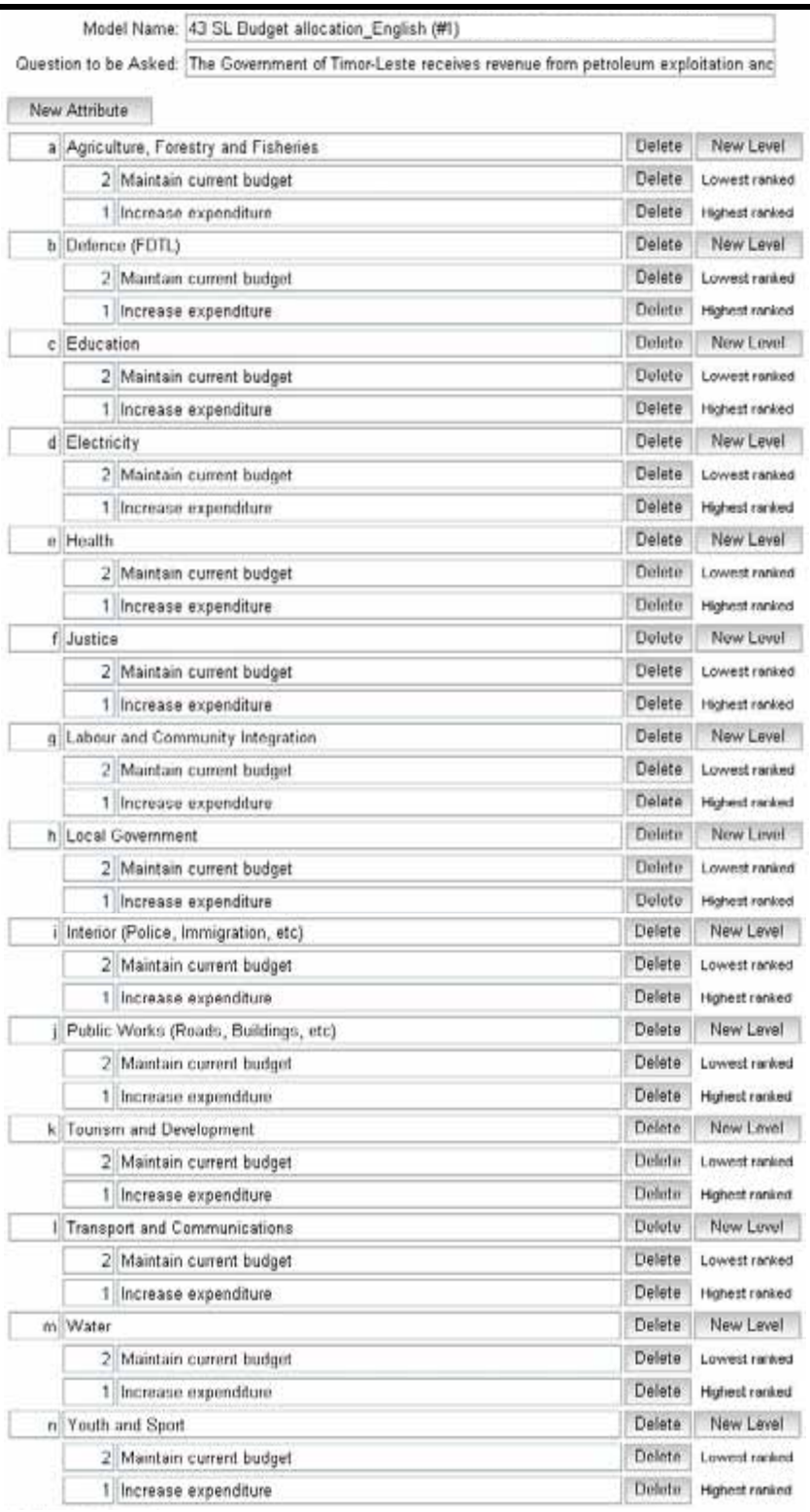
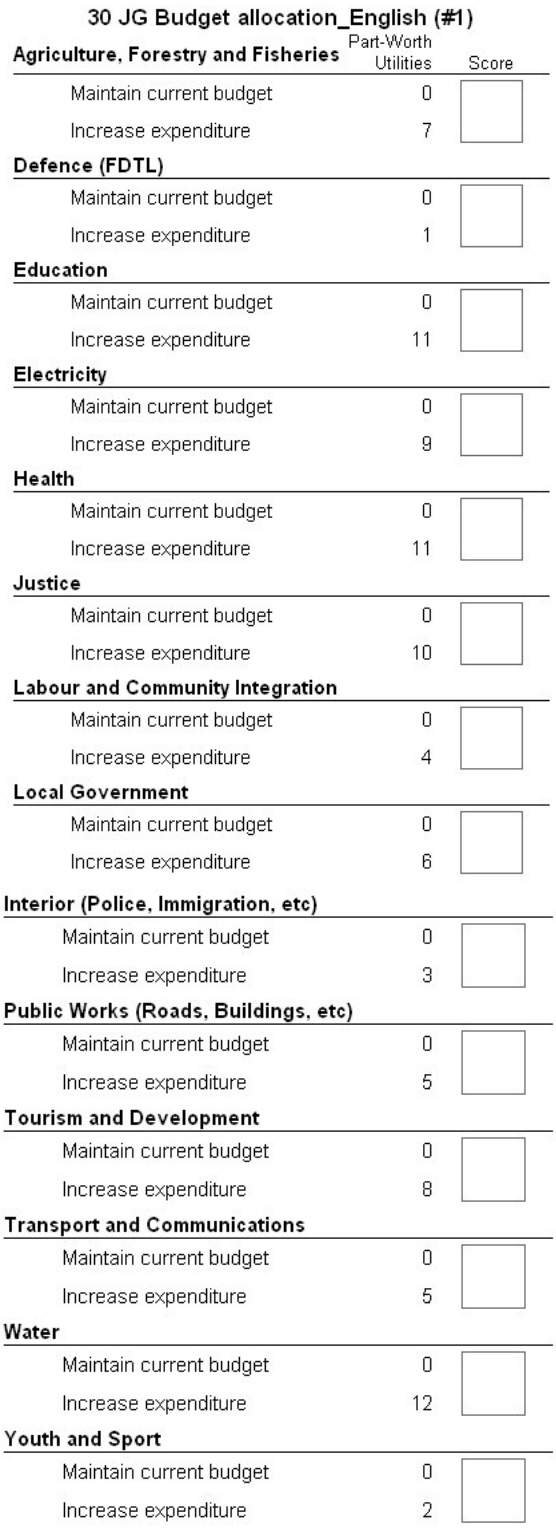


Figure 5.6 Point*Wizard Part One (Budget Allocation): Criteria and categories



30 JG Budget allocation_English (#1)

	Part-Worth Utilities	Score
Agriculture, Forestry and Fisheries		
Maintain current budget	0	
Increase expenditure	7	
Defence (FDTL)		
Maintain current budget	0	
Increase expenditure	1	
Education		
Maintain current budget	0	
Increase expenditure	11	
Electricity		
Maintain current budget	0	
Increase expenditure	9	
Health		
Maintain current budget	0	
Increase expenditure	11	
Justice		
Maintain current budget	0	
Increase expenditure	10	
Labour and Community Integration		
Maintain current budget	0	
Increase expenditure	4	
Local Government		
Maintain current budget	0	
Increase expenditure	6	
Interior (Police, Immigration, etc)		
Maintain current budget	0	
Increase expenditure	3	
Public Works (Roads, Buildings, etc)		
Maintain current budget	0	
Increase expenditure	5	
Tourism and Development		
Maintain current budget	0	
Increase expenditure	8	
Transport and Communications		
Maintain current budget	0	
Increase expenditure	5	
Water		
Maintain current budget	0	
Increase expenditure	12	
Youth and Sport		
Maintain current budget	0	
Increase expenditure	2	

Figure 5.7 **Point*Wizard Part One (Budget Allocation): Example order of relative importance**

5.3.2.2 Part Two – Administrative choices

In Part Two of the Point*Wizard research, participants were asked to choose between models of petroleum revenue management in which the criteria were different aspects of the administration of petroleum revenue. Part Two is a much more complex system than Part One. The system had only nine criteria, but the number of categories varied between two and four. Further, the ranking of the categories (as well as the criteria) was unique to each participant because they could not be commonly assumed as they were in Part One[138]. Thus, prior to each interview the participant was asked to number the categories for each criterion according to their preference. The information about each of the criteria that was provided to individuals is provided in Appendix 6. Participants who did not understand the majority of the information were excluded from Part Two of the Point*Wizard interviews. As a result, the sample for Part Two of the Point*Wizard interviews included 24 participants.

The criteria used in Part Two, and the categories in those criteria are detailed in Figure 5.8. The criteria and categories are explained further in the following chapters. The complexity of the dilemmas presented to participants based on these criteria can be seen by the example presented in Figure 5.9 (on page 136). After completing Part One, which was more simple, some participants were surprised at the complexity of the dilemmas presented in Part Two, but most expressed their enjoyment at the challenge. There are some models of petroleum revenue management (i.e. particular permutations of the criteria and categories) that are not possible in reality. For example, if a participant chose a model of petroleum revenue for Timor-Leste in which all of the revenue was withdrawn from the Petroleum Fund then there would be no need to invest any revenue and some of the criteria would be obsolete. Further, some of the dilemmas presented have already been resolved (e.g. Greater Sunrise will be exploited before maritime boundaries with Australia are resolved)[139]. However, the Point*Wizard method presents a useful means of determining which of these decisions was most important to participants and the comments revealed insights into the passion some of the participants held for some of the broader aspects of petroleum revenue management in Timor-Leste.

Figure 5.10 (on page 137) gives an example of one participant's order of the relative importance of Timor-Leste's administrative choices in regard to petroleum revenue management. This participant gives the greatest relative importance to the criterion of how budget expenditure should be financed, and the criterion of what currency petroleum revenue should be invested in

[138] In Part One of the Point*Wizard interviews it was assumed that everyone would increase the budget given the opportunity (thus it was ranked highest). However, in Part Two the ranking of categories within each criterion could not be assumed (e.g. participant's preferences as to whether petroleum revenue is invested in US$ or Euros may differ), thus the participant had to decide which category would be ranked highest.

[139] Note, the criterion of exploitation of petroleum fields is not dependent on revenue withdrawn because the amount of revenue withdrawn could be more than $100 million whether Greater Sunrise is exploited or not (because the amount of Estimated Sustainable Income is based on currently exploited fields).

is the least important[140]. These results indicate the participant's personal ranking of each category within each criterion. Another participant might give the same relative importance to the criterion of how budget expenditure is financed, but if they rank the category of 'borrowing money from an international financial institution' highest, then theirs would be a very different result. Knowing the ranking of the categories gives greater insight into why a particular criterion is, or is not, relatively more important. Thus, it is important that the two aspects of this research are analysed separately, and this will be explained in the following section.

CRITERIA	CATEGORIES
The Legal Context of the Petroleum Fund The Petroleum Fund should be:	• Enshrined in the Constitution • Established through an Act of Parliament
Revenue Withdrawn The amount of revenue withdrawn from the Fund each year should be:	• More than $100 million[141] • Less than $100 million • $100 million
Investment Location The Petroleum Fund should be financially invested in:	• Timor-Leste and Overseas • Overseas
Investment Currency Petroleum revenue should be invested in financial assets denominated in:	• Euros • US $ • Euros and US$
Investment Risk In the first five years the Petroleum Fund should be financially invested as follows:	• More than 10% should be invested in a wider range of investments (higher risk) • 90% should be invested conservatively, 10% in a wider range of investments (as in the Petroleum Fund Law) • 100% should be invested conservatively (risk-averse)
Exploitation of Petroleum Fields Greater Sunrise should be exploited:	• After 2055 (when future generations can decide) • When maritime boundaries with Australia are resolved • In 2025 (when Bayu Undan is exhausted) • In 2010 (As soon as possible)
Expenditure of petroleum revenue Petroleum revenue should be spent on:	• Individual payments to all East Timorese citizens • Consumer durable capital expenditure (e.g. cars, computers purchased by and for Government use) • Social services (e.g. health, education) • Durable capital expenditure/Physical infrastructure (e.g. roads, electricity, ports)
Budget finance Budget expenditure should be financed by:	• Withdrawing from the petroleum fund (i.e. not relying on loans) • Borrowing money from an international financial institutions (e.g. the World Bank or the IMF)

Figure 5.8 Point*Wizard Part Two (Administrative Choices): Criteria and categories

[140] Note that the indication of the relative importance of each criterion comes from its highest ranked category (by adding the percentage of all the highest ranked categories in each criterion the total is 100%).

[141] US$100 million was the value of Estimated Sustainable Income (explained in Chapter Three) at the time the research was conducted, thus these categories represent amounts more than, less than and equal to the withdrawal amount which would render the Petroleum Fund sustainable.

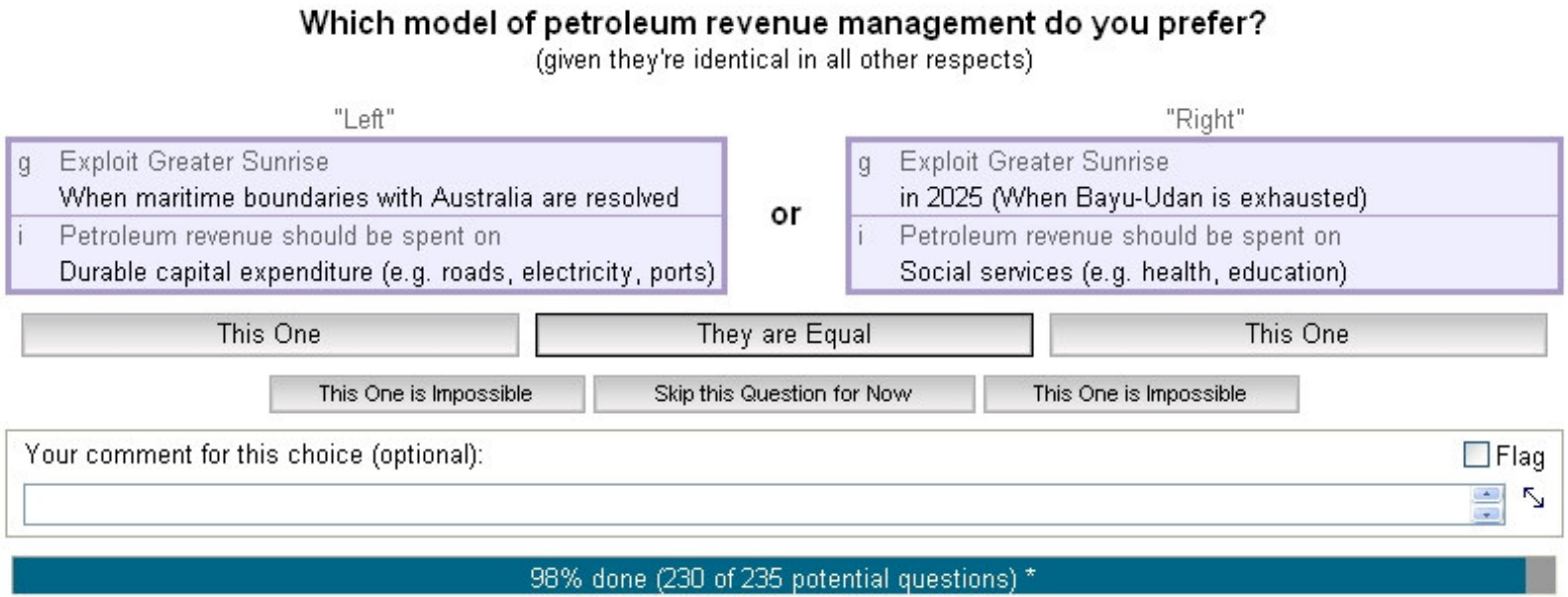


Figure 5.9 Point*Wizard Part Two (Administrative Choices): Example Dilemma

45 TF Administrative Choices_English (#2)

The Petroleum Fund is	Points	Score
Enshrined in the Constitution	0.0%	
Established through an Act of Parliament	16.8%	
The amount of revenue withdrawn from the Petroleum Fund each year is		
More than $100million	0.0%	
$100million	3.4%	
Less than $100million	5.0%	
The Petroleum Fund should be financially invested		
Overseas	0.0%	
in Timor-Leste and overseas	5.6%	
Petroleum revenue should be financially invested in		
Euros	0.0%	
US $	1.2%	
US $ and Euros	3.1%	
In the first five years the Petroleum Fund should be financially invested		
More than 10% should be invested in a wider range of investments (higher risk)	0.0%	
90% should be invested conservatively, 10% in a wider range of investments (as in the PF Law)	5.6%	
100% should be invested conservatively (risk-averse)	8.1%	
Exploit Greater Sunrise		
After 2055 (when future generations can decide)	0.0%	
in 2010 (As soon as possible)	0.6%	
in 2025 (When Bayu-Udan is exhausted)	2.8%	
When maritime boundaries with Australia are resolved	17.1%	
Petroleum revenue should be spent on		
Individual payments to all Timorese citizens	0.0%	
Consumable capital expenditure (e.g. cars, computers purchased by and for Government)	8.4%	
Social services (e.g. health, education)	16.8%	
Durable capital expenditure (e.g. roads, electricity, ports)	22.0%	
Budget expenditure should be financed by		
Borrowing money from an international financial institution (e.g. the World Bank)	0.0%	
withdrawing from the petroleum fund (i.e. not relying on loans)	22.4%	

Figure 5.10 Point*Wizard Part Two (Administrative Choices): Example of a participant's ranking

5.3.3 Analysis of the Point*Wizard interviews

The analysis of the Point*Wizard data permitted greater understanding of participants' opinions about petroleum revenue management in Timor-Leste, than the results of the semi-structured interviews did. The Point*Wizard data was extracted from the software, which generated it, and manipulated using Microsoft Excel. This was complicated by the need to translate the *Tetum* results into English before manipulating the data alphabetically. The two parts of the Point*Wizard research were extracted and analysed separately.

The analysis of the results of Part Two of the Point*Wizard interviews was more complex than the analysis of the Part One results. First, the participants' ranking of the categories within each criterion was analysed. Secondly, the relative importance of the criteria, generated by Point*Wizard, was analysed. Prior to each interview, the participant was provided with supporting information and asked to number the categories within each criterion (1 to 2, 1 to 3, or 1 to 4, depending on the number of categories) according to their preference. The analysis of these rankings was conducted using Microsoft Excel (as it is not a function of the Point*Wizard software to analyse participants' ranking of the categories). The total numbers of participants'

first, second, third and fourth rankings were converted to percentages of the total number of rankings and these results were depicted in Microsoft Excel column charts, such as the one in Figure 5.11. In this example, within the criterion of 'when Greater Sunrise is exploited', the category ranked first most often is 'In 2010 (as soon as possible)', and the category ranked last (fourth) most often is 'After 2055 (when future generations can decide)'. The results were then analysed in terms of the difference between the preferences of decision-makers and the preferences of participants who are external to the decision-making process. The results of the ranking of the categories, and the differences between the two groups, are explored and discussed in Chapters Six and Seven.

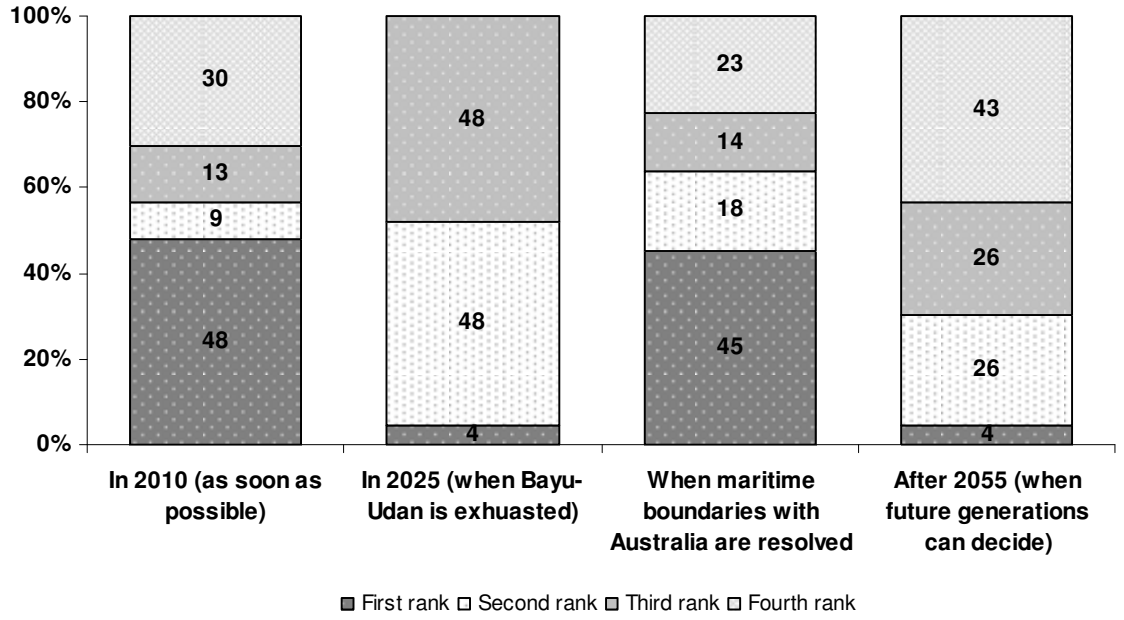


Figure 5.11 **Point*Wizard Part Two (Administrative Choices): An example of an aggregate percentage of participants' ranking of the categories within a criterion ('When Greater Sunrise is exploited')**

In order to analyse the relative importance of the Point*Wizard criteria for all participants, the mean values of the aggregate point values (or part-worth utilities) were converted into percentage values (which is a function of the Point*Wizard software). Thus, the order of the relative preference for each criterion, by the participants as an aggregate, was created. The participants' relative importance of the eight administrative criteria is depicted in Figure 5.12. The focus of Chapter Six is on saving petroleum revenue, thus it hosts discussion of six of the eight criteria ordered by Part Two of the Point*Wizard interviews. Discussion of the most relatively important criterion, 'what petroleum revenue is spent on' occurs in Chapter Seven (which focuses on spending petroleum revenue and includes the results from Part One of the

Point*Wizard interviews). However, discussion about the 'legal context of the Petroleum Fund' was not included in the thesis because it was comparatively unimportant to most of the participants (therefore it revealed little data) and because the Petroleum Fund Law has already been promulgated.

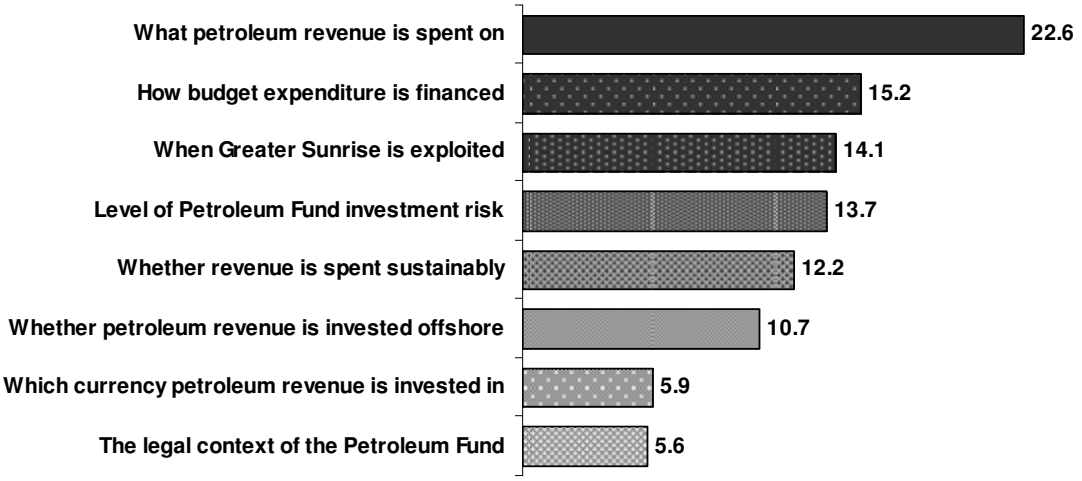


Figure 5.12 The relative importance of eight petroleum revenue management criteria (%)[142]

The empirical methods used in this research elicited both qualitative and qualitative data about the opinions of 67 participants, both East Timorese and foreign, decision-makers, and those external to the decision-making process about petroleum revenue management in Timor-Leste. Semi-structured interviews and interviews using Point*Wizard software, a means of conducting MCDA, were used to obtain the data. N-Vivo software and Microsoft Excel were used to analyse the data. The results presented in the following chapters indicate the research methods used were successful in acquiring otherwise unexplored insights into the problem of managing petroleum revenue in Timor-Leste well.

[142] Note, the aggregate point values of each criterion will change if the total number of criteria analysed varies. In Chapter Six, only six criteria are compared, and in Chapter Seven, seven criteria are compared, thus their aggregate point values are different.

Chapter 6 SAVING AND INVESTING TIMOR-LESTE'S PETROLEUM REVENUE

The Government of Timor-Leste has plans for saving and investing their petroleum revenue (described in Chapter Four). The aim of this chapter is to provide insights from research participants about those plans, to compare those insights and results to the Government's plans, and to explore the research outcomes in the context of the state of Timor-Leste's institutions (described in Chapter Three) and the challenges of managing natural resource wealth (described in Chapter Two). East Timorese Government officials make decisions that affect three aspects of petroleum revenue management. Those three aspects are explored in this chapter, and they are: the amount of revenue Timor-Leste has at its disposal (revenue potential); how much revenue is available in the future (sustaining natural resource wealth); and whether the revenue that is not spent is managed well (investing petroleum revenue).

This chapter uses some data (quotes) from the semi-structured interviews, but is primarily based on the results of Part Two of the Point*Wizard interviews (as explained in Chapter Five). This chapter explores the relative importance of six administrative choices in petroleum revenue management that cover the three aspects of petroleum revenue management. Figure 6.1 shows the relative importance of those six criteria (decisions), or petroleum revenue management decisions (as a mean percentage of participants' relative preferences). This research enhances understanding of the choices available to, and made by, the decision-makers who manage Timor-Leste's petroleum revenue by illuminating those decisions with the opinions of a wider range of East Timorese people. In particular, identification of the relative importance of those administrative choices provides a focus for the decision-makers.

6.1 Revenue potential

The first section of this chapter explores participants' opinions about two decisions that may affect the amount of petroleum revenue that is available to the Government of Timor-Leste. The first is a decision about whether Timor-Leste funds its budget deficit by withdrawing from the Petroleum Fund or taking a loan from an international financial institution. The second decision is about the optimal time to exploit the Greater Sunrise petroleum field. These criteria (decisions) were included in the Point*Wizard interviews and presented to participants because the semi-structured interviews revealed that issues surrounding maritime boundaries and the exploitation of Greater Sunrise, and internationally financed loans, are important to research participants. Both decisions could bring Timor-Leste great wealth but political and other issues

impact on these decisions. Thus, the basis on which such decisions are made is worthy of investigation.

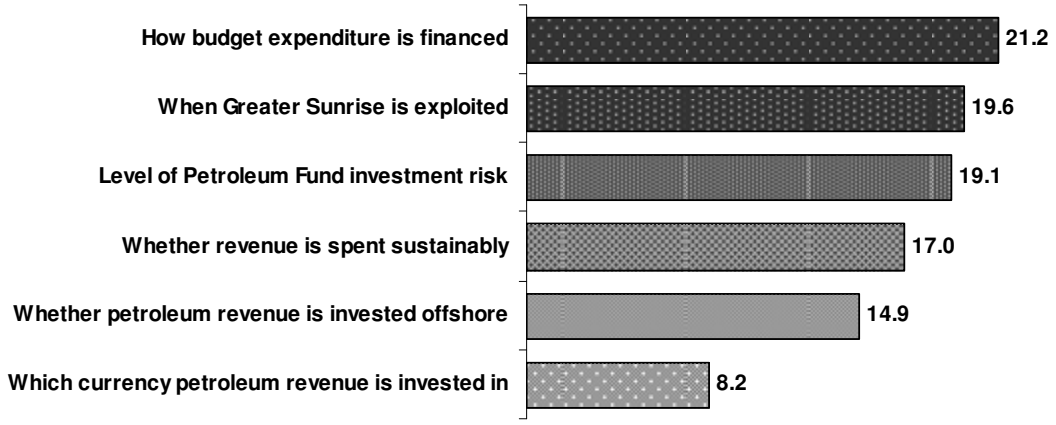


Figure 6.1 The relative importance of six petroleum revenue management criteria (%)

6.1.1 Avoiding debt

Timor-Leste's state budget currently has multiple funding sources, which were described in Chapters Three and Four. Timor-Leste generates only small amounts of domestic revenue. Some revenue is generated from autonomous agencies (such as airports and ports) and Timor-Leste receives some donor (bilateral and multilateral) funds. These funding sources, added together, do not meet Timor-Leste's budgetary demands. Thus, Timor-Leste has resorted to exploitation of its natural resources as a source of state revenue. In theory, Timor-Leste has another option to fund its budget gap; to seek a loan from an international financial institution.

To date, Timor-Leste has not taken a loan from an international financial institution and, for the time-being, the Government of Timor-Leste has a policy of remaining debt-free. However, a loan from an international financial institution is an option for Timor-Leste. Such a loan may have conditions attached to it, meaning that Timor-Leste may lose some autonomy over its budget expenditure decision-making. However, if the interest earned on the Petroleum Fund is greater than the interest that must be paid to an international financial institution for a loan, it may make financial sense for Timor-Leste to take a loan.

A choice between these two options, as noted in Chapter Five, is not necessarily realistic. In reality there are more than two options and the choices are more complex. For example, the Government might choose to do both (take a loan for a particular project for example). Given that Bayu-Undan, the petroleum field currently being exploited, produces enough revenue to sustain Timor-Leste (forever, if it only withdraws a sustainable amount), such a plan (to take a loan whilst continuing to exploit) would make greater amounts of revenue available to Timor-

Leste than they need. The vices or virtues of this kind of borrowing will not be explored (as it is not the topic of this thesis), but opinions about such decisions will be. Presenting this choice to participants revealed their opinions about taking a loan from an international financial institution, and illustrated the importance of this decision and the issues surrounding it.

Figure 6.1 showed that the criterion (decision) of 'How budget expenditure is financed' was the most important of all the petroleum revenue management decisions to participants, having 21.2% of participants' relative priority. Participants' responses indicate this decision is the most important decision in terms of how Timor-Leste's petroleum revenue is saved and invested. This criterion (decision) is 2.6 times more important than 'which currency petroleum revenue is invested in'. 'How budget expenditure is financed' is also 1.4 times more important than 'whether petroleum revenue is invested offshore', and significantly more important (1.2 times) than 'whether petroleum revenue is spent sustainably'.

The results of the ranking of the categories (options), and the comments that participants made during the interviews, indicate that participants' opinions about 'How budget expenditure is financed' derive from their thoughts on whether Timor-Leste should take a loan from an international financial institution. The participants' ranking, provided in Figure 6.2, of the categories (options) in this criterion (decision) show that, by far, the majority of participants (79%) preferred to finance budget expenditure by withdrawing revenue from the Petroleum Fund, rather than borrowing from an international financial institution. Given the clarity in category choice combined with the ranking of this criterion (decision) it is clear that avoiding debt is very important to participants overall.

Further analysis of the results shows a distinction between the preferences of participants with a decision-making role and those East Timorese external to the decision-making process. Nine out of ten East Timorese participants that do not have a decision-making role preferred to withdraw revenue from the Petroleum Fund. That is, 90% of East Timorese participants preferred to avoid taking a loan. Decision-makers were less adamant than the non decision-makers; only seven of eleven (64%) decision-makers preferred to finance the Budget by withdrawing from the Petroleum Fund[143].

Box 6.1 (on page 145) provides some of the comments made by participants, in either the semi-structured interviews or the Point*Wizard interviews, about the option of taking an internationally financed loan. The comments are divided into demographic groups which illustrate that the non decision-making East Timorese participants are passionate about this

[143] There were 24 participants in the sample, but the three foreign advisers who do not have a decision-making role were not included in these particular results.

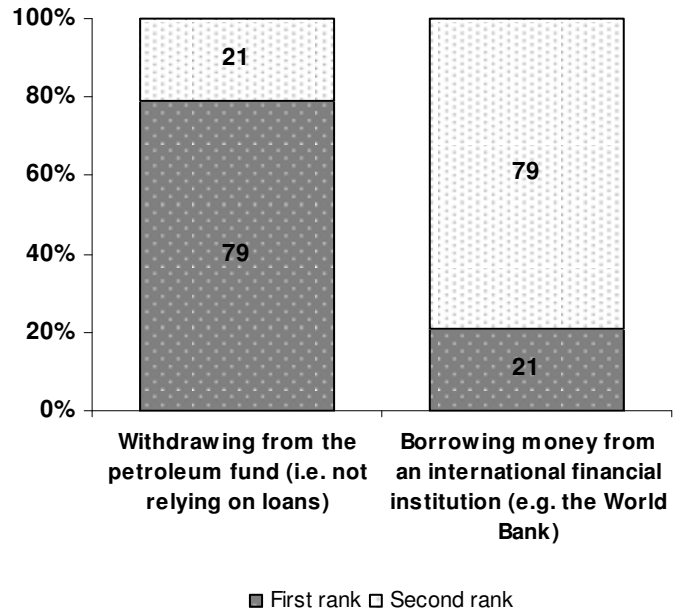


Figure 6.2 **Rankings of the categories (options) within the criterion (decision) of 'How budget expenditure is financed'**

issue, and determined to avoid taking a loan. Such loans are sometimes conditional and the participants' comments show that they want to avoid a situation where they are beholden to anyone from 'outside' when making decisions. Xanana Gusmão suggested it was better that Timor-Leste be financially independent. Gusmão explained the frustration of needing donor assistance and being beholden to donor's conditions as a result:

> The tendency of the generosity of donors is a dilemma because it continues to force us to be dependent. Sometimes we think what donors give us is to comply with certain objectives… We feel like we are being restricted in our plans of action. Although there is a feeling [*perception*] that the Government is made by the Government, although with support, but in reality the money is not actually ours... The dependency of the future of our budget is a reality we can not avoid because at the moment donors don't give us money for one thing, they divide it up for everything. This is a mechanism that makes their dependency [*us dependent*]… but if we have the money, we can say no because it is ours. We can decide where to locate funds. It is in that aspect [*in this context*] that I want to see the funds from oil and gas that will not restrict our own train of thought. (Xanana Gusmão, Citizen of Timor-Leste)

Some of the other comments express the same frustration, of being dependent on others for revenue, but having the desire for financial independence. This appears to be one of the motivating factors behind participants' desire to avoid taking a loan from an international financial institution.

Box 6.1 Participants' comments about the option of taking an internationally financed loan

Quotes from East Timorese participants (non decision-makers)

Borrow money? No way! (Union Leader Male)

We can not take a loan. We can not borrow too much money from the bank. (District Health Worker Male)

Yes, I don't want to take a loan because corruption happens when there is a lot of money… I don't want to use money from debt. Will create problems in the future if we have to pay back. (Male District Community leader)

Don't bring debt to your future generations if you want to develop sustainably. Problem is you pay interest. You have risk, but you won't bring benefits to future generations. (Male NGO)

Quotes from foreign advisers

If we developed Sunrise early and, at the same time, borrowed money for Government equity participation we would not have problems in repaying the loans. (Einar Risa, Commissioner and former Executive Director, TSDA)

Depends on the interest rate, but a long-term, low interest rate would make debt a profitable alternative. (Male Foreign adviser)

One thing I would do, because I am not constrained by East Timorese politics, is to decide whether to borrow money. If you want to build schools, etc. and you don't have the money now then this is an option. *Has this worked for other countries?* Normally it fails because countries borrow in excess of their need. (Male Foreign adviser)

In Chad there is the perception that international agencies are behind the management model and this is an issue of sovereignty. The involvement of the World Bank has been questioned in this sense. (Male Foreign Adviser)

Quotes from East Timorese decision-makers

The World Bank would like Timor Leste to save 100% and take a loan to fund their deficit. They argue that this would ensure prudent spending because we would have an obligation to pay the money back whereas revenue from oil did not require hard work or a savings plan to produce… There is no correlation between debt and poverty. I've changed my mind about that. (Jose Teixeira, Minister of Natural Resources, Minerals and Energy Policy)

Borrowing is not that bad because it builds awareness about the need to manage money properly… Borrowing also has conditions… If you take from the Petroleum Fund you don't feel the same responsibility. Some people are scared, but the medicine is actually to borrow for exactly that reason. (Male Decision-maker)

If there is capacity to manage the loan then why not? (Male Decision-maker)

The option of financing budget expenditure with loans (whilst a Petroleum Fund with substantial amounts of revenue available exists) requires considerable investigation, which is not the purpose of this thesis. However, the results of this research clearly show (even with the opinions of the decision-makers included) that this is one of the most important issues in managing Timor-Leste's petroleum revenue, and that, for the majority of participants, taking an internationally-financed loan is not a preferred option. By virtue of the fact that participants wanted to avoid debt, we can conclude that the Government's plan to withdraw revenue from the Petroleum Fund to finance budget expenditure and their policy of remaining debt-free are welcomed by participants. The Government could change this policy, but it would do well to consider the relative importance of this decision, and the opinions of non-decision makers, particularly in regard to their desire for financial independence, as illustrated by the participants' opinions in this research.

6.1.2 Strategies for exploitation

Another way by which Timor-Leste can increase its revenue potential is to exploit more natural resources. Timor-Leste's petroleum revenue potential, in terms of where oil and gas are located, and plans for exploration were described in Chapter Three. Based on this information the East Timorese must decide when is the best time to permit exploitation of each of their petroleum fields. With respect to managing petroleum revenue these decisions depend on how much revenue is needed now, and in the future. There may be other reasons why petroleum fields would be exploited sooner or later. This section explores participants' opinions about the decision of when to exploit petroleum fields using the Greater Sunrise field as an example.

The Greater Sunrise petroleum field is the most well known of Timor-Leste's petroleum fields because it was central to the maritime boundary negotiations with Australia. The Greater Sunrise field is also the most prominent in terms of its potential revenue. The exploitation of Greater Sunrise was used as a criterion in the Point*Wizard interviews because of this prominence. Also, Greater Sunrise is a good example to use to learn what participants think about the decision of when to exploit because it has not yet been exploited. The participants were offered four options of when Greater Sunrise should be exploited. One of the options was 'In 2010'. At the time the research was conducted, the earliest possible date that Greater Sunrise might be exploited was 2010. If Greater Sunrise were exploited in 2010 it would provide Timor-Leste with a large amount of revenue, therefore participants who preferred this option would effectively facilitate huge reserves of revenue for Timor-Leste. Another choice was to exploit Greater Sunrise 'In 2025'. The Bayu-Undan petroleum field is expected to cease production by 2025, and thus income would also cease from this field in 2025. Choosing 'In 2025' indicates that the participant does not advocate an urgent need to generate further revenue, and their decision may be linked to revenue coming from Bayu-Undan being exhausted. 'When maritime boundaries with Australia are resolved' was another choice, but because no date had been set at the time this research was conducted, this choice was not able to include a certain date[144]. Participants who chose this option were effectively prioritising the political aspects of the decision of when to exploit. The other option was 'After 2055' and participants who preferred this latest available date were effectively allowing future generations to decide when Greater Sunrise is exploited, and confirming their opinions that current generations have enough revenue now.

Figure 6.1 (on page 142) shows that the criterion (decision) of 'when Greater Sunrise is exploited' was second in importance, relative to other decisions about petroleum revenue management, with 19.6% of participants' relative priority. This criterion (decision) was

[144] The Greater Sunrise Agreement was ratified in March 2007, and ensures that the determination of maritime boundaries between Timor-Leste and Australia will not be resolved until, at least, 2057.

marginally less important than 'how budget expenditure is financed', thus illustrating that this decision is also very important to participants. However, ranking of the categories (options) of this criterion (decision) had a wider spread across participants than the results analysed in the previous section (6.1.1). Figure 6.3 depicts the results of how participants ranked the categories (options) of 'when Greater Sunrise is exploited'. The figure shows that an almost equal number of participants placed 'In 2010 (as soon as possible)' first as 'When maritime boundaries with Australia are resolved' (48% compared with 45%). Thereafter most participants ranked 'In 2025 (when Bayu-Undan is exhausted)' second (48%) and few participants prioritised the 'After 2055' category (choice), thereby signifying a preference for Greater Sunrise revenue to be available for expenditure by current generations. Although the first ranking of 'In 2010' was slightly greater than 'when maritime boundaries with Australia are resolved', overall the resolved maritime boundary option held a slightly higher ranking (that is, if first and second or first, second and third rankings are added). Generally speaking, these rankings indicate the majority of participants fall into two groups; those who believe maritime boundaries must be resolved with Australia before exploitation occurs, and those who wish to see Greater Sunrise exploited as soon as possible.

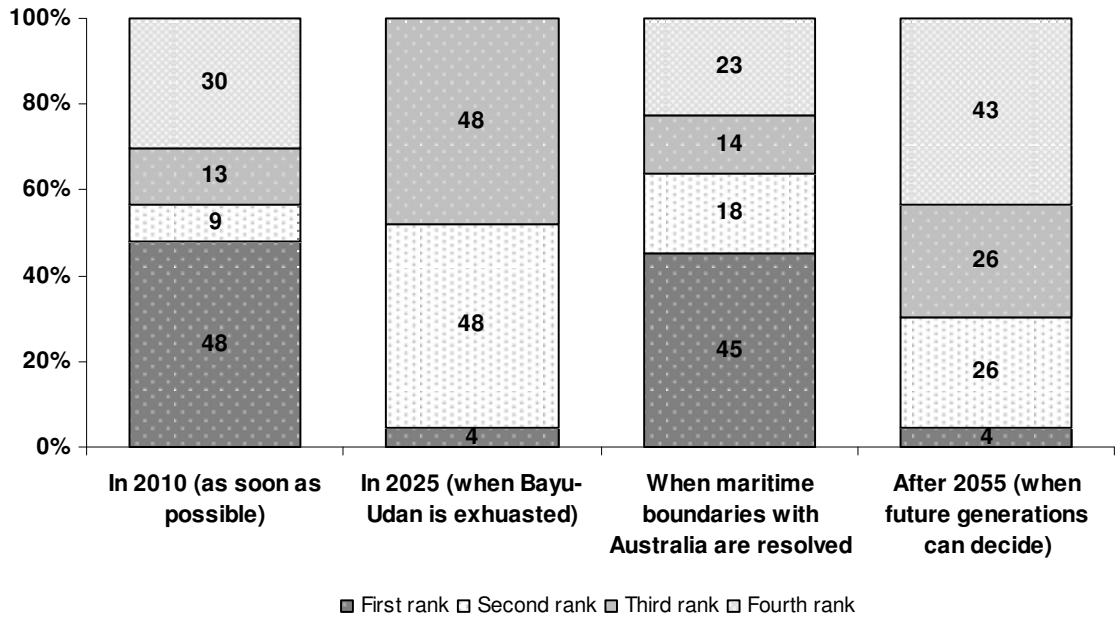


Figure 6.3 **Rankings of the categories (options) within the criterion (decision) of 'When Greater Sunrise is exploited'**

Of the participants who ranked 'When maritime boundaries with Australia are resolved' first, most (60%) ranked 'After 2055 (when future generations can decide)' second. This may be because these participants knew maritime boundaries would not be resolved in the near future

(the Greater Sunrise agreement was not finalised when this research was conducted), or that they did not see a need for revenue from Greater Sunrise to be used by current generations. Of the participants who wished to see Greater Sunrise exploited as soon as possible, 64% ranked 'in 2025 (when Bayu-Undan is exhausted)' second, which illustrates that their ranking prioritises the exploitation of Greater Sunrise, regardless of the resolution of maritime boundaries with Australia. These results emphasise a distinction participants' opinions that is worthy of further analysis.

To clarify the issue, these results were analysed with the demographic details of participants in mind. This analysis revealed that eight of the ten (80%) East Timorese participants that have no role in decision-making ranked 'When maritime boundaries are resolved with Australia' first whilst only two of the eleven (18%) decision-makers did. This is a surprising distinction. Most of the East Timorese participants who did not have a decision-making role with respect to petroleum revenue management felt that 'when Greater Sunrise is exploited' is inextricably linked to resolving the issue of Timor-Leste's sovereign rights to a maritime boundary. This result contrasted markedly with the number of decision-makers who ranked 'when maritime boundaries are resolved with Australia' first. This contrast is grave, given that the legislative decision to proceed with exploitation of Greater Sunrise has been made since the research was completed[145], and precedes the resolution of maritime boundaries between Timor-Leste and Australia. The decision-makers have proceeded with a plan that contradicts the opinions of the majority of East Timorese participants in this research.

The comments that participants made during both the semi-structured interviews and the Point*Wizard interviews when considering this issue reveal further context to these findings. Some of those comments are presented in Box 6.2. Participants who prioritised the category (choice) of resolving maritime boundaries before exploitation made comments such as 'of course' and 'maritime boundaries are very [emphasised] important'. These participants also made their choices quickly and boldly implying that they were very clear and strongly adamant that the resolution of maritime boundaries was a priority. The comments of East Timorese without a decision-making role in Box 6.2 indicate the passion of those who prioritise the resolution of maritime boundaries over earlier exploitation of Greater Sunrise. This passion is reminiscent of the passion and determination with which the East Timorese fought for, and overwhelmingly won, Timor-Leste's independence. These and other comments are evidence that these participants assumed resolution of maritime boundaries might result in Timor-Leste having a larger share of the revenue from the Greater Sunrise field. Thus, it is apparent that participants who preferred to resolve maritime boundaries, rather than exploit Greater Sunrise as soon as possible, came to that decision with financial independence as their goal. However, one

[145] The decision to proceed with exploitation of Greater Sunrise is also dependent on the operating company, Woodside Petroleum Company.

of the two decision-makers that prioritised the resolution of maritime boundaries explained Timor-Leste was not reliant on Greater Sunrise; 'we have other resources onshore and offshore' (Male Decision-maker).

Box 6.2 Participants' comments about the option of 'When to exploit the Greater Sunrise petroleum field'

Quotes from East Timorese participants (non decision-makers)

My focus is on the determination of maritime boundaries. (Male NGO)

If I were Xanana or Mari Alkatiri I would not exploit it [Greater Sunrise] yet. First, negotiate with Australia to define maritime boundaries. Second, repair our technicians, East Timorese. After we define the maritime boundaries we can start with exploitation. (Fernando 'Lasama' de Araujo, Partido Democratico)

They haven't resolved the maritime boundaries so this is the biggest problem… I think the Australian Government is richer and also smart so they know what belongs to East Timor. (Male District Community Leader)

We need to talk about boundaries first. Our government is too rushed. (Young Male District Veteran)

The second thing is that we need to build a good relationship with Australia to decide the border for the Timor Gap. Before that we are dreaming and 2020 will not come [as we have planned it]. (Male Decision-maker)

Quotes from decision-makers (East Timorese and foreign) prioritising earlier exploitation of Greater Sunrise

Greater Sunrise is the basis for a national oil industry… We don't know what will happen in the future… Maybe in 2055 no one wants to buy gas. (Einar Risa, Commissioner and former Executive Director, TSDA)

There is a window of opportunity to develop Greater Sunrise that is at a critical time in our development stage… The sustainable wealth will be higher if Greater Sunrise comes on line. (Jose Teixeira, Minister of Natural Resources, Minerals and Energy Policy)

The sooner you get it the sooner it earns interest. (Male Foreign Adviser)

Quotes from participants regarding delayed exploitation of Greater Sunrise

If we start talking about Greater Sunrise we can definitely last 15 years [before exploitation]. Mentalities [of corruption] will fall and retire. The new train of thought. (Xanana Gusmão, Citizen of Timor-Leste)

If it were up to me I would say 10 years from now. Because I need to build the capacity of this country. If we had US$1 billion it could be a disaster for this country. I say 'could' not would. (Mari Alkatiri, Former Prime Minister)

If you look at the current capacity of the JPDA including Greater Sunrise within the next 30-40 years we will be self-reliant because in the meantime you have infrastructure development; more diverse industry and more human resources and less reliance on petroleum. So the exploitation of Greater Sunrise is not paramount, it will not determine our survival. (Male Decision-maker)

Exploit Greater Sunrise sooner is important because it is good for East Timorese people so the Government can prepare work for many people and the money they can take from oil. (Young Female)

In contrast, the comments of the decision-makers who prioritise the early exploitation of Greater Sunrise were made based on, or cognisant of, higher economic goals. Participants who suggested Greater Sunrise should be exploited sooner than later included Jose Teixeira (currently Minister of Natural Resources, Minerals and Energy Policy), Einar Risa (the Commissioner and former Executive Director, TSDA) and at least one other foreign adviser. There was also one East Timorese non-decision-maker who expected benefits from the early exploitation of Greater Sunrise. The reasons they prioritise exploitation as soon as possible

revolve around the opportunities that the resulting revenue may present. Such opportunities include establishing a national oil industry, using the revenue to create jobs, and wealth creation through investment in infrastructure and financial investment. Industry market constraints were also given as reasons to prioritise exploitation of Greater Sunrise. None of the participants suggested exploiting Greater Sunrise was necessary in the event that Bayu-Undan supply was interrupted (due to an accident for example). But, more recently TSDA officials suggested that if there was a major shutdown of the facilities which would result in a long term reduction to Bayu-Undan revenue this would be a supporting reason for exploiting Greater Sunrise (Borges and Lobato 2006).

Another factor in the decision of when to exploit Greater Sunrise, expressed by participants, was whether the institutions are strong enough to utilise the revenue well. Some participants recognised there were benefits of delaying exploitation of Greater Sunrise. In the field interviews, both Xanana Gusmão and Mari Alkatiri explained that Greater Sunrise should be exploited when the State has the capacity to manage the revenue that will come from it. Both mentioned corruption as a reason to delay exploitation of Greater Sunrise. Some of their comments are highlighted in Box 6.2. Having a plan in place, as well as the capacity, was also seen as necessary before the most effective use could be made of the benefits from Greater Sunrise. Reasons to delay included hopes that industry would be more diverse, and infrastructure and human resources would develop in the meantime. Revenue from Greater Sunrise could only be put to good use if the capacity to implement the kinds of projects suggested earlier (e.g. establishing a national oil industry) exist. Further, if other industries developed, revenue from petroleum exploitation would not be so crucial to the economy. For these reasons, some participants believed it was not necessary, or more beneficial not, to exploit Greater Sunrise at this point.

In summary, participant responses to the question of ‘when to exploit Greater Sunrise’ did not appear to be based on the desire to increase revenue potential alone. Rather, their reasons for when they thought it best to exploit Greater Sunrise revolved around the political (i.e. resolution of maritime boundaries), the economic (i.e. wanting to make use of the revenue as soon as possible) and the institutional (i.e. needing to build capacity to make the best use of the revenue). The opinions of decision-makers and East Timorese with no decision-making role contrast and, for the time-being, the challenge of achieving both their goals has been won by the decision-makers. That is, the decision-makers have decided that the goal of true independence in the form of resolving Timor-Leste’s sovereign rights to a maritime boundary should be deferred, and the need for revenue to develop the economy has been prioritised.

The Greater Sunrise Agreement was ratified in March 2007 and although it delays the resolution of maritime boundaries between Timor-Leste and Australia for 50 years, the Agreement also guarantees Timor-Leste 50% of the revenue generated by Greater Sunrise. This half-half

agreement is a much better deal for Timor-Leste than the agreement between Australia and Indonesia would have generated. Under that agreement, Timor-Leste would receive only 10% of the revenue generated by Greater Sunrise[146]. So, in terms of potential revenue, the Greater Sunrise Agreement generates a significantly greater amount of revenue for Timor-Leste than the original agreement 'bequeathed' from Indonesia would have. This change in the arrangement indicates that the Government of Timor-Leste's decision-makers have successfully negotiated a deal which better represents the desire of the participants for financial independence. Despite that, the participant's desire to resolve their sovereign rights to a maritime boundary has not been met.

This section explored two decisions that may impact on the amount of revenue Timor-Leste has available to it. The results of the research revealed that participants based their decisions, about how the State's budget deficit should be met and when the Greater Sunrise petroleum field should be exploited, on political, economic and institutional factors. Timor-Leste's current financial position in terms of meetings its budget needs did not appear to factor in participants' decision-making. There appeared to be primarily two motivating factors for participants' decisions; a desire for independence in Timor-Leste's decision-making and a desire for more revenue to create economic development. Both are worthy higher goals and made in, what participants believe to be, Timor-Leste's best interest. One group of participants favour the opportunity for Timor-Leste to make its own decisions with no interference from other countries or outside institutions. The majority of this group are East Timorese with no decision-making role. Participants with a decision-making role are open to solutions that bring Timor-Leste economic development, but may trade-off Timor-Leste's autonomy in decision-making along the way. Thus, there is a gap between the priorities of decision-makers and the other participants. The crisis in 2006 highlighted that the opinions of many East Timorese with no power to make decisions differ from those within Government. These gaps are symptomatic of the problem of a lack of social capital between government and civil society, which Chapter Two showed is a curse that may contribute to poor petroleum revenue management. The issue of maritime boundaries has been deferred, for the time being, but the option of taking a loan from an international financial institution will remain and continue to be debated within, and between, government and civil society.

[146] Greater Sunrise sits 20% inside the area that was known as Zone of Cooperation A (now the JPDA) under the agreement between Indonesia and Australia. Indonesia and Australia shared petroleum revenue from the Zone of Cooperation A equally. Thus, if such an agreement were in place today, Timor-Leste would receive 50% of 20% (10%) of the revenue from Greater Sunrise.

6.2 Sustaining natural resource wealth

This section explores participants' opinions about the sustainable management of petroleum revenue. Sustainability means different things to different people, as explained in Chapter One. Participants offered their opinions about sustainable petroleum revenue management, and some of their comments are presented in Box 6.3. They expressed concern that petroleum revenue can be wasted (with only short-term benefit) and appeared to acknowledge a responsibility to ensure that the benefits of the exploitation of petroleum resources are shared with future generations (a sense of stewardship). In this regard there is commonality amongst the sentiments expressed by members of NGOs, opposition leaders and government participants. Overall, the views of participants in this research support the idea that sustainable management of petroleum revenue can be achieved in two ways, and that they are not mutually exclusive.

Box 6.3 Participants' comments about sustainable petroleum revenue management

> Ensure [that] what you invest in is something that is going to reproduce something else, that it will manage itself adequately, will achieve efficiency, and achieve returns. Investing in something that is self-managing, self-funding, self-producing. (Jose Teixeira, Minister of Natural Resources, Minerals and Energy Policy)
>
> You can invest the money and that investment can produce money. Not to buy weapons, cars, computers. We should invest in ports, airports and roads. (Fernando 'Lasama' de Araujo, Partido Democratico)
>
> Sustainability is not only about the means to have money to expend all the time, but about the impact of the money we spend being long term. For example, if you use the money to build a hospital (infrastructure), this has longer-term benefits. The Government must bring benefits to future generations. (Male NGO)
>
> The first thing I need to say is these resources belong to future generations. We are borrowing from future generations. Based on that principle all of the revenue should be preserved. We may use some, but this is the basic principle underlying the way we manage the revenue. We need to analyse which activity in development will have long term impact for future generations. Which sector can replace the petroleum sector when the oil runs out? Health and Education are the priorities… These will have a very strong impact on future generations. (Male NGO)

First, petroleum revenue can be spent on projects or items that, in turn, create an amount of revenue that is either equal to, or greater than the revenue spent (i.e. investing petroleum revenue by spending it). That option, of spending petroleum revenue to achieve sustainable development, is discussed in the next chapter. The second option is to ensure that the amount spent (the amount withdrawn from the Petroleum Fund) is sustainable. When the same amount of revenue is spent each year, expenditure is sustainable. The Government of Timor-Leste has institutionalised this option by providing the decision-makers with the knowledge of what that amount is; Estimated Sustainable Income (ESI). The concept of ESI was explained in Chapter Four and the aim of the following section is to explore participants' opinions about whether an amount equal to, more than, or less than, the value of ESI should be withdrawn from the Petroleum Fund each year. Whichever way sustainable petroleum revenue management is

achieved, this means that future generations will receive benefits from the petroleum revenue that are similar to the benefits experienced by current generations. If revenue expenditure is unsustainable or unbalanced (e.g. more spent now, less spent later, or vice versa) either the current or the future generation will benefit over the other. Thus, this section also explores what participants said about future generations, and the concept of saving.

What is relevant to this thesis is that the Constitution essentially reflects a concept of sustainability that is similar to some participants' view of sustainability (expressed with respect to petroleum revenue management). However, the participants' comments highlight that sustainable petroleum resource management and sustainable petroleum revenue management are two different things. Participants did not make comments about sustainable petroleum resource management, except to say that future generations had a right to benefit from the resources that they were exploiting. Rather, their primary concern is that the management of petroleum revenue is sustainable.

This distinction is important because if, for argument's sake, a decision was made to preserve all petroleum resources in their pristine entirety for use by future generations, petroleum resource management might be said to be sustainable, but petroleum revenue management would not be. In this scenario no petroleum revenue would be spent on current generations and they would not benefit from Timor-Leste's petroleum resources. However, the option of preserving *some* petroleum resources for future generations has not, to my knowledge, received debate in the East Timorese community. For example, Bayu-Undan is currently being exploited and providing petroleum revenue for expenditure by current generations. If that revenue is enough to meet current demand one could argue that the exploitation of Greater Sunrise, and other petroleum fields, is not necessary at this point and that these fields should be preserved for use by future generations. This suggestion would appear to meet the terms of sustainable natural resource management as expressed in the Constitution. Preserving some petroleum resources for exploitation by future generations may also have benefits in terms of sustainable petroleum revenue management because exploiting all the currently known petroleum resources in a scenario in which petroleum revenue was not managed well (e.g. wasted) may result in no benefits for future generations. For the time being, we shall concern ourselves with participants' view of sustainability based on the assumption that petroleum resources are exploited and sustainable petroleum revenue management is the focus.

6.2.1 Spending a sustainable amount

This section explores participants' opinions about whether petroleum revenue management is sustainable by reviewing the results of the relative importance of the criterion (decision) of 'whether the amount of petroleum revenue spent is sustainable', and the ranking of its categories (options). This criterion (decision) has three annual expenditure amounts as its

categories (options); less than US$100 million, (equal to) US$100 million, and greater than US$100 million. The value of ESI at the time of the research was US$100 million so participants were effectively asked to choose whether the amount of expenditure should be less than ESI (thereby increasing the value of the Petroleum Fund over time), equal to ESI (revenue expenditure is sustainable), or greater than ESI (the balance of the Petroleum Fund would eventually decline to nothing). In deciding how much revenue is spent now participants are, in effect, choosing whether revenue should benefit current or future generations, or both.

The relative importance of 'whether the amount of petroleum revenue spent is sustainable' expresses how important sustainable expenditure (in terms of how much revenue is spent) is to participants. Figure 6.1, on page 142, shows that this criterion (decision) has a relative importance of 17%, which means it is 2.1 times as important as 'which currency petroleum revenue is invested in'. However, 'whether the amount of petroleum revenue spent is sustainable' is much less important to participants than 'how budget expenditure is financed' and also less important than 'when Greater Sunrise is exploited', and 'the level of Petroleum Fund investment risk'. This result is not surprising, given that participants ranked the category (choice) of 'After 2055 (when future generations can decide)' last, in terms of 'when greater Sunrise is exploited'. The results of this research indicate that, more often than not, when given a choice, participants chose against spending petroleum revenue sustainably. That is, when faced with a trade-off, participants are less concerned about revenue being available to future generations, than meeting their own needs, which is also not surprising given the level of poverty in Timor-Leste today.

However, when participants were asked about spending petroleum revenue sustainably, without being asked to trade-off this issue, it was important. This is illustrated by the results of the participants' rankings of the categories (options) within this criterion (decision), which very clearly indicate a preference that expenditure should be less than ESI, which means revenue would be available to future generations. Figure 6.4 depicts the participants' rankings of the categories (options) within the criterion (decision) of 'whether the amount of petroleum revenue spent is sustainable'. 78% of participants chose 'less than US$100 million' (less than ESI) as the amount they preferred to spend each year. This means that, by far, the majority of participants' choice was to save more for future generations than they themselves had to spend. In picking a withdrawal amount that was less than ESI they were in fact opting for a model in which the value of the Petroleum Fund would continue to grow. Further, 22% of participants ranked 'US$100 million' (equal to ESI) second, which means that not one participant ranked 'more than US$100million' (more than ESI) first. These results suggest that the participants would be against a decision by the Parliament to withdraw greater than the value of ESI. One participant suggested spending more than US$100 million would be bad for Timor-Leste;

'Morally is it bad for the nation. Once you learn that you have it and if you run out it has a psychological effect. At least the elite understand these things' (Male Decision-maker).

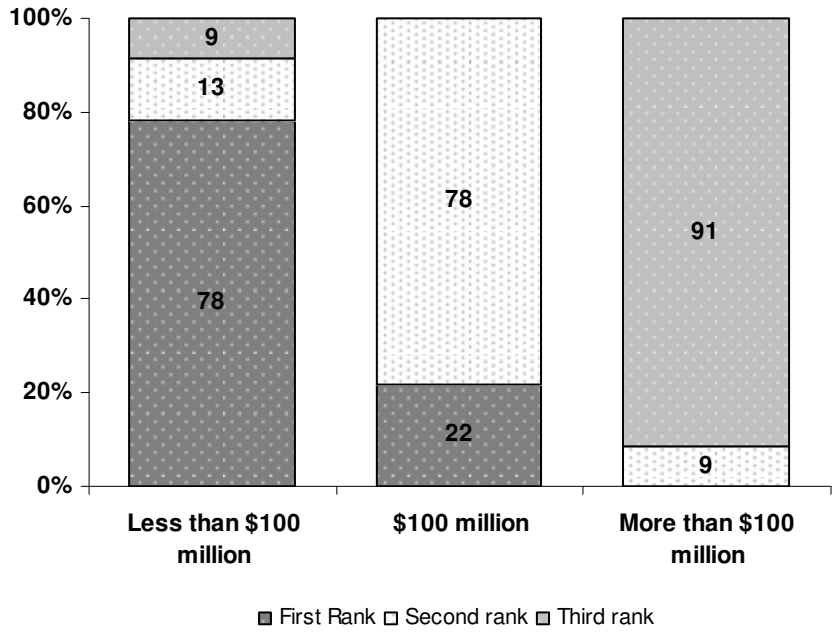


Figure 6.4 **Rankings of the categories (options) within the criterion (decision) of 'Whether the amount of petroleum revenue spent is sustainable'[147]**

As explained in Chapter Four, the Government of Timor-Leste does not have a policy to ensure that the amount withdrawn from the Petroleum Fund is sustainable, rather they provide the Parliament, which makes the decision of how much to withdraw, with the value of ESI to aid them in their decision-making. If Parliament decided to withdraw greater than the value of ESI, they could do that within the law. Regardless of the level of support, some of the participants indicated they are against the idea of a rule that governs the amount withdrawn from the Petroleum Fund each year. Jose Teixeira explained why rules may constrain fiscal management:

> It is important to develop the capacity of people to undertake responsible fiscal management and Parliament should not be bound by what they can and can not spend. It's not appropriate [to have a withdrawal rule] because the Parliament may act responsibly by spending more one year, and less the next. One-off expenditures can be re-couped in other years through other budgetary savings. (Jose Teixeira, Minister of Natural Resources, Minerals and Energy Policy)

[147] The value of ESI at the time of the research was US$100 million per annum, thus the three categories (options) are effectively less than ESI, ESI, or more than ESI.

Teixeira's explanation highlights a core challenge for the East Timorese government. Whilst institutional capacity remains weak, the temptation exists to create institutional mechanisms to prevent poor decisions being made. However, having such mechanisms in place might prevent better decisions being made, once capacity is built. Regardless of which model is followed, mechanisms can be changed (either legally or illegally depending on the strength of the institutions of the day). A foreign adviser explained that 'rules would not prevent the Government from withdrawing funds under pressure as illustrated in other countries.' To date, Parliament has not made any withdrawals from the Petroleum Fund, but they have agreed that an amount, less than ESI, will be withdrawn from the Petroleum Fund in this financial year. The impact of the decision to use ESI as a guide, rather than a rule, will not be felt until such time as Parliament decides to withdraw an amount greater than the value of ESI. Should such a decision to withdraw an amount that is greater than the value of ESI be taken, this would signify that, either the decision-makers had plans to invest petroleum revenue by spending it (and thus generate benefits for future generations in this way), or they had less regard for future generations' needs than their own. The following section explores whether future generations' needs were a factor in the participants' responses.

6.2.2 Saving for the grandchildren

At the centre of the problem of managing petroleum revenue is the fact that petroleum resources are finite. Once the petroleum resources are exhausted, no more revenue (from the resource itself) will be received. The amount of resources Timor-Leste currently has at its disposal (i.e. the Bayu-Undan petroleum field) would, if managed wisely, produce enough revenue to provide for both current and future generation's needs. However, if Timor-Leste's current generation exhausted the resources, and the associated revenue, and that revenue was not used to generate sustainable economic development, Timor-Leste's future generations would be disadvantaged. This section reveals what participants said, during both the semi-structured and the Point*Wizard interviews, about the concept of saving petroleum revenue, and how future generations factored in their decisions about managing petroleum revenue. The quotes in Box 6.4 indicate that some participants are mindful of the needs of future generations in making decisions about how much petroleum revenue should be saved. Several participants specifically mentioned that (at least some) revenue should be saved for future generations, and some participants suggested that petroleum resources actually belong to future generations.

The comments indicate that these East Timorese understand the concept of saving revenue. Participants gave examples that they, if not others, know how to save money. For example, one participant talked about working and saving money to go to Bali, Indonesia. Another mentioned that people sometimes saved money outside of the country (in Indonesia). A recent newsletter of Timor-Leste's Central Bank reports that the total private sector commercial bank deposits, as at

June 2006, is over US$1 billion (BPA 2006). Thus there is, at least, a small elite group who earns enough money to satisfy their immediate needs and save some. However, some participants made comments, examples of which are presented in Box 6.5, that suggest that some East Timorese may not understand why some petroleum revenue should be saved for future generations. However, some participants indicated that the problem is not so much whether East Timorese people understand the need to save, but whether they should save (or save as much), if current generations' needs are not being met.

Box 6.4 Participants' comments acknowledging regard for future generations

The reason we can't spend it is because it belongs to people in the future. We have a responsibility to future generations. (Jose Teixeira, Minister of Natural Resources, Minerals and Energy Policy)

These resources belong to future generations. We are borrowing from future generations... The Government must bring benefits to future generations… Don't bring debt to your future generations. (Male NGO)

Before no one cared about money because it came from elsewhere. Now we are responsible for our own funds. We must try not always to depend on donors. We need to try to work hard. To do something for ourselves. Take our own decisions. Not under pressure from donors. These are the objectives of the Government now. We are preparing everything for future generations. (Mariano Lopez da Cruz, Former Inspector General)

We should use half for income generation and half to be saved for future generations. (Maria Paixão, Partido Social Democrata)

We will save some revenue and we will use some. The Government wants to save some money, but the opposition wants to spend it. Personally, [joking] I would like to spend it all now so I can do lots of things and the people can see what I have done., but this is not what we are going to do. It needs to be sustainable. (Mari Alkatiri, Former Prime Minister)

We should save some of it for the future. (Male Decision-Maker)

Box 6.5 Participants' comments about people's understanding of the concept of saving

Some don't understand the need for a fund (to save). Some think we should spend it. They think it is better to create a multiplier effect by spending it, but they don't understand Dutch disease. Ordinary people just say 'feed us'. (Jose Teixeira, Minister of Natural Resources, Minerals and Energy Policy)

If they have a lot of money, they don't know how to save/invest. [They spend it on] Cock fighting [which results in] domestic violence… Many people take loans to buy taxi. There are too many, [they] can't pay [the money] back, then the bank takes their land. (Female NGO)

Many East Timorese live in poverty and are unable to earn enough income to meet their current needs, let alone save money. The frustration of many East Timorese, about why so many of their people live in poverty whilst Timor-Leste's petroleum revenue is saved, is commonly expressed, and most evidently during the recent crisis and since that time. In April 2007,

Xanana Gusmão is reported to have declared that he would 'unlock' the revenue from the Petroleum Fund and put it to use:

> Gusmão has promised he will unlock hundreds of millions of dollars in oil revenue held in a New York escrow bank account if he is elected Prime Minister… 'Democracy will not work if the people are hungry. We have so much money in an account in New York, while here in Timor people are struggling and living in misery.' (Fitzpatrick 2007 :8)

In the semi-structured interviews, Gusmão described what he thought would happen if too much revenue was saved:

> If we think only of hoarding it [the petroleum revenue] we will maintain the traditional life where people have food – pigs, chooks, goats, cows, buffaloes – they can not afford to seek medical treatment, the person dies, they kill all the animals at the burial to feed the people that come to cry. The children have no money left because they killed all the animals and they can't afford to go to school. This is not a good notion of richness. (Xanana Gusmão, Citizen of Timor-Leste)

Both of Gusmão's comments suggest that he believes meeting the needs of generations now is more important than saving petroleum revenue for future generations. The comments of others express this idea in more subtle ways.

Participants' responses to the question of 'how much petroleum revenue should be saved?' indicated that their primary concern is to satisfy current generations' needs, because their responses begin by indicating how much should be spent (not saved). That is, their first concern is to satisfy their generation's needs, and how much petroleum revenue should be saved is a corollary of that (i.e. what was left after the spending decisions had been made). For example, their responses included 'the proportion of what is spent needs to be determined' and 'the percentage [of what will be spent] will depend on the necessity from each sector'. A young bureaucrat explained his vision, for how much to save, as follows:

> First, I would look at the amount of revenue and say 'is it more than what we need to run the institutions of state; to strengthen them and build their capacity?' Then we need enough to provide the basic services including health and education. Second, if there is any left then we must divide this into two. The first half is for future generations (savings). The other half is used for potential distribution for society; to provide services for them. For example, veterans who are unhappy with the services provided by government, we can provide loans for them through commercial banks. (Male Decision-Maker)

In contrast, the Government of Timor-Leste has designed the Petroleum Fund Law such that 100% of petroleum revenue is saved automatically (initially). Under the Law, the decision to save petroleum revenue comes before decisions about spending it. The amount of petroleum revenue saved and the amount spent are complementary. That is, a decision about one decides the value of the other, but the decision that is made first signifies the priorities of the decision-maker. By saving 100%, and using ESI as a guide for how much to withdraw, the Government

of Timor-Leste signifies that future generations' needs are a priority, if not equally important to current generations' needs. Whilst participants who advocate determining current spending needs as a priority, with no framework for saving, signify that future generations will receive whatever is left.

Some participants did propose a framework for saving for future generations. They either suggested a percentage of revenue should be saved, or that only the interest on the Petroleum Fund should be spent (and the capital should be saved). Some of their responses are presented in Box 6.6. The calculation of the portion, which participants suggested should be spent, was not explained, and their responses indicated the figures were arbitrary. Further, not one of the participants distinguished whether the percentage was of current savings or projected total savings, each of which would provide vastly different outcomes. The other option, of preserving the Petroleum Fund's capital (petroleum revenue receipts) and spending only the interest earned on the Fund, assumes that the investment risk is low, and that the capital is indeed preserved. However, given the current value of the Petroleum Fund, the investment return would not be sufficient to cover the Budget expenditure requirements at this time[148]. Such a proposal would require another source of income to fund the Government budget, in the short-term at least (e.g. to request further donor assistance or take a loan from an international financial institution).

Box 6.6 Participants' comments identifying a ratio for expenditure and saving

> We should spend 25-50%. The other half we should save for future generations. (Male Decision-maker)
>
> We must make good investment. 60%... some should be saved – 40%. (Male NGO)
>
> There is no intention, like Nigeria, to put all of the money into our recurrent budget. Maybe 20%... If we can collect enough resources maybe we don't need to use this money. We can save it for emergencies or special programs. (Mariano Lopez da Cruz, Former Inspector General)
>
> Should you spend it all? Exactly not. How will you decide how much to spend? We need to use it. Our planning is for sustainable development. We should spend 25-50%. The other half we should save for future generations. (Male Decision-maker)
>
> We can spend 25%. (Fernando 'Lasama' de Araujo, Partido Democratico[149])

The Government's plan, of using the value of ESI to guide withdrawals from the Petroleum Fund, attempts to provide some balance between the amount of revenue used by current and future generations. But, realistically, exact balance of spending between current and future generations is impossible, for many reasons. For example, petroleum revenue projections

[148] Kadhim Al-Eyd (participating as Resident Representative of the IMF) proposed that this option (of spending just the interest) could work in the future. Al-Eyd said 'It is proposed by the World Bank, there be a savings plan such that a specific amount will be set aside. So that in 2025 you will have 67% of the revenue saved and you will then be able to live off that interest.' (Kadhim Al-Eyd, former Resident Representative, IMF Timor-Leste)

[149] Partido Democratico is a political party and Fernando 'Lasama' de Araujo is its President.

vary[150] and thus so would the value of ESI, and thus the amount of petroleum revenue available to current and future generations. Further, the value of spending revenue on health and education now, and the benefits that will bring to future generations can not be quantified in a way that is comparable with saving an amount of revenue today. Participants recognised that working out what is the best proportion of saving versus spending will be difficult. One foreign adviser pointed out the simple logic: 'whatever amount you save for the future means you will constrain current generation spending'. At the same time, there will be no future generations if the current generations' most basic needs are not met.

Whether petroleum revenue is saved, or spent, participants noted it must be used wisely, not wasted, and that when revenue is spent, it should benefit future generations, as well as current, where possible. In this regard, participants emphasised spending on some budget sectors because of the benefit they would bring to future generations (and this will be discussed further in the next chapter). For example, spending additional revenue on 'Youth and Sport' was considered an investment in future generations. Participants made comments, such as 'Youth are the future generation. Youth are the future of East Timor' (Female NGO). In this way, youth were considered symbolic of, or an example of, the 'future generation'[151] and an example of how spending today may benefit future generations.

This section explored participants' opinions about the concept of saving petroleum revenue and the place of future generations as decisions about how much petroleum revenue is saved and spent are made. The results indicate that, in theory, participants favour the sustainable management of petroleum revenue and that revenue should be saved for expenditure by future generations. However, the research also suggests that if a conflict of interest between current and future generations' needs exists, then the research participants might favour their own needs.

Timor-Leste's constitution only refers to future generations within the context of protecting the environment, and although the Petroleum Fund Law defines ESI, it is only a guide for withdrawals. Thus, the Government of Timor-Leste does not have a policy that would ensure that petroleum revenue is saved for future generations. Based on this lack of a policy, or rule,

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[150] Participants expressed a range of expectations about how much revenue Timor-Leste would receive from exploitation of their petroleum resources. Most participants acknowledged that Timor's petroleum resources would one day be exhausted, but one participant claimed projections for revenue would be much greater than anticipated (because of current oil prices and new geological evidence). Some participants mentioned revenue from Greater Sunrise, but Einar Risa (Commissioner and former Executive Director, Timor Sea Designated Authority) explained it was impossible to estimate how much the Greater Sunrise field would produce because the development plan has not been sighted and it will depend on how much customers, who have not yet been identified, will pay. Further Einar Risa said, '…it is difficult to provide these figures [*revenue projections*] to the public as they do not understand how they can change so much. Even the World Bank and the IMF have trouble understanding why they change so much.'

[151] The concept of youth as symbolic of future generations has the potential to limit the vision of the future to a very short time frame. If the youth of Timor-Leste are the future, one could have the impression that petroleum revenue can be spent 'on future generations' by spending it now and not saving for the generations to come. This was not, however, directly expressed by participants.

and given the preferences of the participants in this research, until the needs of the current generation are met, ensuring that petroleum revenue is available to future generations will be a challenge for Timor-Leste.

6.3 Investing petroleum revenue

Institutionalising mechanisms that ensure some petroleum revenue is saved for future generations is wise, but establishing a Petroleum Fund and other mechanisms will not necessarily prevent natural resource wealth waste. Nauru's natural resource wealth was wasted, not because it was spent unwisely, but because the investment of its revenue was unwise. Nauru's experience illustrates that the act of establishing a natural resource fund is not necessarily the solution to avoiding the resource curse. If natural resource revenue is not invested wisely, the revenue will be wasted before there is a chance to spend it. This section explores decisions about how Timor-Leste's petroleum revenue is invested financially (as opposed to being invested through spending revenue, which will be discussed in Chapter Seven). Participants' opinions about three aspects of petroleum revenue investment in Timor-Leste are discussed; the level of investment risk, where revenue is invested, and in what currency investments are made.

Figure 6.1, on page 142, illustrates that the criterion (decision) 'level of Petroleum Fund investment risk' is quite important, relative to the other petroleum revenue management criteria (decisions), with 19.1% of participants' relative priority. This criterion (decision) is almost equally important to participants as 'when Greater Sunrise is exploited', and only slightly less important than 'how budget expenditure is financed'. Thus, according to the participants, 'level of Petroleum Fund investment risk' is one of the three most important decisions in terms of Timor-Leste's petroleum revenue management. In contrast, the two other decisions, about how petroleum revenue is invested, are relatively less important to participants. 'Whether petroleum revenue is invested offshore' had 14.9% of participants' relative priority, whilst 'which currency petroleum revenue is invested in' was much less important, and had only 8.2% of participants' relative priority.

6.3.1 Level of investment risk

'Level of Petroleum Fund investment risk' was the third most important of the six petroleum revenue management criteria (decisions) and shared 19.1% of participant's priority (see Figure 6.1 on page 142). The categories (options) within this criterion (decision) distinguished three different levels of risk by denoting a split between the portion of the Petroleum Fund invested conservatively (risk-averse investment) and the portion invested in 'a wider range of instruments' (indicating a higher investment risk). This criterion (decision) was included in the

Point*Wizard research to elicit whether participants had a preference for higher or lower risk investment. The categories (options) were '100% invested conservatively', '90% invested conservatively, and 10% in a wider range of instruments', and 'More than 10% invested in a wider range of instruments'. The Petroleum Fund Law stipulates that, in the first five years, a minimum of 90% of the Petroleum Fund shall be invested conservatively, whilst a maximum of 10% of the Petroleum Fund may be invested in instruments of greater risk (represented by the second category, above).

Figure 6.5 illustrates the rankings of the categories (options) of 'level of Petroleum Fund investment risk' preferred by participants. The majority of participants (67%) preferred '90% invested conservatively, and 10% in a wider range of instruments', which reflects the level of investment risk that the Law defines. The Petroleum Fund Law had already been drafted when this research took place. Further, the consultation process had concluded and the East Timorese had had the opportunity to hear of the plans for investing the Petroleum Fund. Participants favoured the approach of investing 100% conservatively, as a second option. Increasing the risk (to more than 10% of the Petroleum Fund invested in a wider range of instruments) was least favoured. The results indicate that participants agree with the level of risk implemented through the Petroleum Fund Law, which is relatively conservative.

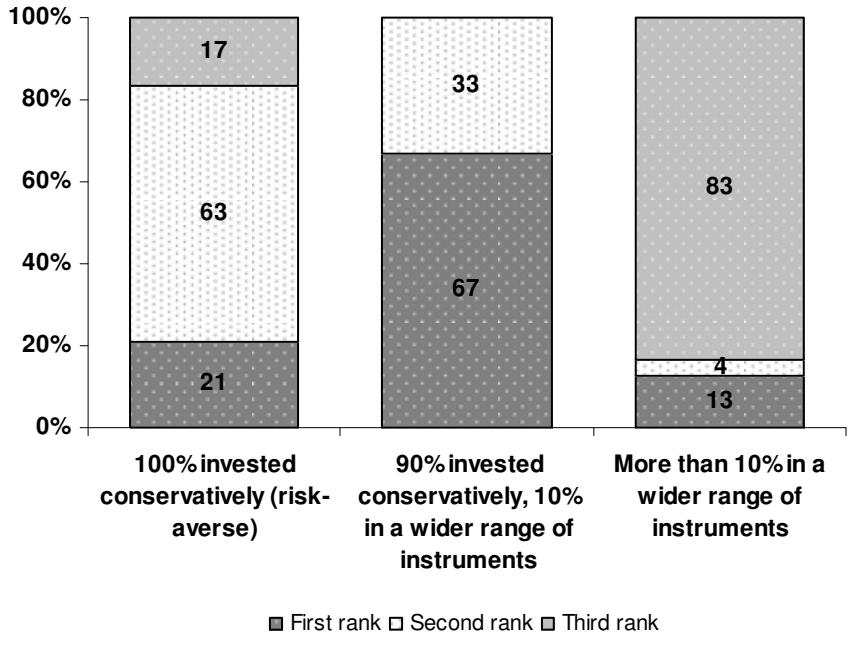

Figure 6.5 **Rankings of the categories (options) within the criterion (decision) of 'Level of Petroleum Fund investment risk'**

The reason the Petroleum Fund Law provides for 10% of the Petroleum Fund to be invested in a wider range of instruments is to limit the risk whilst capacity to manage investments in a wider range of instruments grows. A foreign adviser explained that:

> The reason the 90-10 split was proposed was to build institutional capacity in the Central Bank, train people to invest. Further, on average a 90% - 10% split fluctuates less, so they balance each other out. Usually, if one is not doing well the other will be. (Male Foreign Adviser)

The Government and the Central Bank have not yet taken the option to invest any of the Petroleum Fund in a wider range of instruments. The Petroleum Fund is currently invested entirely in US Federal Bonds. As the capacity of the staff of the Central Bank managing the Petroleum Fund grows and investments in other instruments are introduced, the return on investments may increase and is likely to vary more than the relatively constant return on US Federal bonds. This approach is conservative and a desire for conservative financial management is reflected in the results. 83% of participants ranked 'More than 10% in a wider range of instruments' last. The comments of the participants also indicate a desire to avoid risk, and a conservative approach to finance management. Some of the comments are presented in Box 6.7.

Box 6.7 Participants' comments about the level of investment risk

> I'm not a gambling person, I want to avoid risk. (Young Female)
>
> I prefer investment [in bonds] as shares are risky. You can lose money. (Maria Paixão, Partido Social Democrata[152])
>
> We will need safe returns on investments in bonds. (Jose Teixeira, Minister of Natural Resources, Minerals and Energy Policy)

Given the low-risk investment strategy currently in place, there has been little debate about investment of the Petroleum Fund to date. Civil society has the opportunity to monitor the Petroleum Fund's investments via the quarterly reports of the Central Bank. The quarterly reports have, so far, been informative in explaining how the Petroleum Fund investments perform (for example, why the return was less over the period when Hurricane Katrina hit the US), but as the investment portfolio expands and the investment results begin to vary, discussion may increase. Einar Risa explained that, in Norway, there is robust discussion about the results of the investment of their petroleum revenue: 'When the return is less than average there is an outcry in the media [in Norway]'. Once a portion of Timor-Leste's Petroleum Fund

[152] Partido Social Democrata is the Social Democrat Political Party.

is invested in a wider range of instruments, it will then be some time before patterns of financial return emerge and East Timorese (with the capacity) build an understanding of the way in which financial markets work. Nevertheless, for the time being the opinions of the participants closely reflect government policy in regard to the level of Petroleum Fund investment risk.

6.3.2 Where to invest

A matter that has been debated publicly is where Timor-Leste's petroleum revenue is invested. The criterion (decision) of where to invest petroleum revenue was ranked fifth important out of the six petroleum revenue management criteria (decisions), with a 14.9% share of participants' priority (see Figure 6.1 on page 142). The two categories (options) presented to participants were 'Overseas' or 'In Timor-Leste and Overseas'. The reason this criterion (decision) was included in the Point*Wizard research was because in the semi-structured interviews, some participants expressed concerns that the revenue would be invested in the US Federal Bank and it appeared they thought the revenue should stay in Timor-Leste. Figure 6.6 illustrates the relative rankings of those two categories (options)[153]. The majority of participants preferred a model of petroleum revenue management in which all of Timor-Leste's petroleum revenue is invested offshore. However, during the interviews it was evident that some participants could not distinguish between investing financially and spending petroleum revenue. With comments such as 'we have to recognise people [East Timorese] own it [the money]' (Male NGO) in response to this issue, the research suggests that some participants felt that where Timor-Leste's petroleum revenue was invested was related to the question of how independent Timor-Leste was in managing their petroleum revenue.

Some of the other participants' comments about where revenue is invested are presented in Box 6.8. They indicate that some participants have little understanding about financial investment. As an example, one participant suggested a terrorist could bomb the bank and take the money. A Foreign Adviser explained that Kuwait and Brunei had successfully invested their revenue offshore, but observed that 'the problem here [in Timor] is the political one. It will be difficult to explain why the money is being invested outside of Timor.' Once a distinction between financial investment and investing by spending in Timor-Leste is understood, this problem may be rectified. Einar Risa pointed out there is widespread ignorance of financial investment in Timor-Leste. Risa added that this is not the issue that people should be most concerned about:

[153] The option of investing solely in Timor-Leste was not presented as it would be physically impossible to financially invest large amounts (millions of dollars) of revenue in Timor-Leste at this point; there is no large industry and no stock exchange, etc.

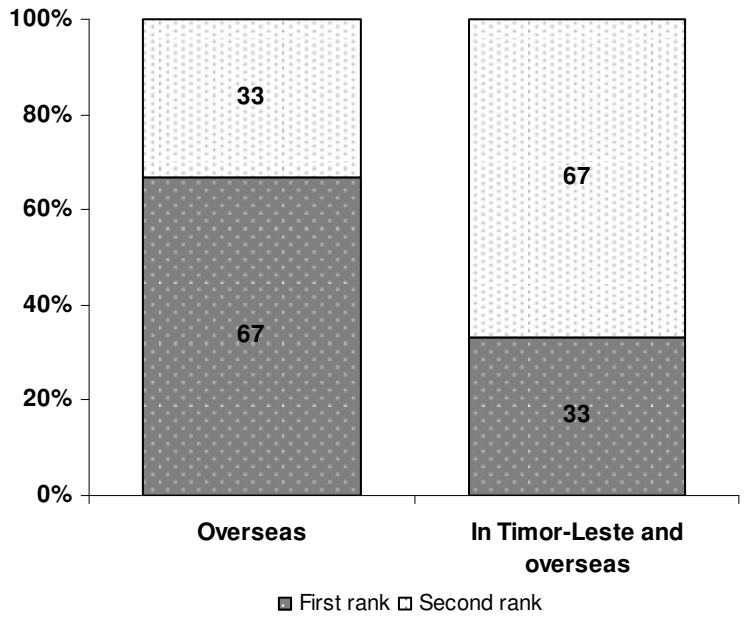

Figure 6.6 **Rankings of the categories (options) within the criterion (decision) of 'Whether petroleum revenue is invested offshore'**

Box 6.8 **Participants' comments about where petroleum revenue is invested**

Participants' quotes favouring investing revenue in Timor-Leste (and offshore)

Because not focus only overseas, but internally because we also have to provide funds to develop internally. Yes. [Petroleum revenue should be invested] in banks in Timor so they can use. (Male NGO)

You need to invest money here to provide market confidence. (Male Academic)

We need to have a bank. Can not just keep overseas if something happens it will all be gone. (Male Union Leader)

Participants' quotes favouring investing revenue offshore

First, implementation. Invest in outside because the risk inside is greater. Because economy; Inflation is high. Much money would be circulating in this country. We can create a strategy to spend more money. Put money inside and terrorism could come to bomb our bank. Its preventative to put outside. This money is the property of Timor-Leste's people. (Male Decision-maker)

Bruce and Cristino [the Macroeconomics Unit] gave a presentation. The discussion revolved around why revenue would be invested overseas and one of the reasons given was 'because of war' (i.e. so that the money can not be used to fund arms in the event of civil disruption). This was giving a bad impression and was misinformation. (Male Decision-maker)

It should be invested offshore (mostly) to avoid economy shocks. (Male Foreign Adviser)

[The priority is] Ensuring the money is invested overseas. (Jose Teixeira, Minister of Natural Resources, Minerals and Energy Policy)

> It seems there is not enough guidance on what are the key issues. The key issue is not which bank the money is invested in… I understand that there is no knowledge of international finance, but they should be discussing how this is going to be used. Is it going to be spent on infrastructure in the country or will it be invested overseas? (Einar Risa, Commissioner and former Executive Director, TSDA)

Participants clearly gave much greater priority to the investment of Timor-Leste's petroleum revenue by spending it, than its financial investment. What petroleum revenue is spent on was the most important criterion (and this is explored in Chapter Seven). However, as Nauruans learned the hard way, if the financial investment of petroleum revenue is not managed well, there will be no petroleum revenue to spend.

6.3.3 What currency to invest in

Which currency petroleum revenue is invested in was the least important of all the petroleum revenue management criteria (with just 8.2% of participants' priority). The lack of understanding of finance and investment may have had an impact on this ranking. The categories (options) within this criterion (of what currency petroleum revenue is invested in) were 'US$', 'Euros', or 'US$ and Euros' and their relative rankings are illustrated in Figure 6.7. The combination of US$ and Euros was slightly more preferred than US$ alone. Some participants explained this preference, saying that a mix of currency might yield a better return if the risk is spread, but one participant noted there is a lack of capacity amongst East Timorese to manage this kind of diversity at this stage. Some of the comments the participants made when choosing this dilemma are presented in Box 6.9.

Presenting the dilemma to participants also generated comments about Timor-Leste's policy of having the US$ as their currency. The participants' comments generally indicated their support for the Government's currency policy. The relatively large preference for investing solely in US$ may also be indicative of the level of ignorance surrounding the concept of what currency to invest in as some of the comments revealed that some participant's reasons for choosing 'US$' was simply because it was Timor-Leste's currency.

The results of the Point*Wizard research (particularly participants' comments) reveal that the reason these aspects of the management of Timor-Leste's petroleum revenue appear to be less important to participants may be related to the level of participants' understanding of these aspects. Financial investment is a topic that is not widely understood amongst participants, let alone East Timorese in general, and a distinction between East Timorese and foreign advisers'

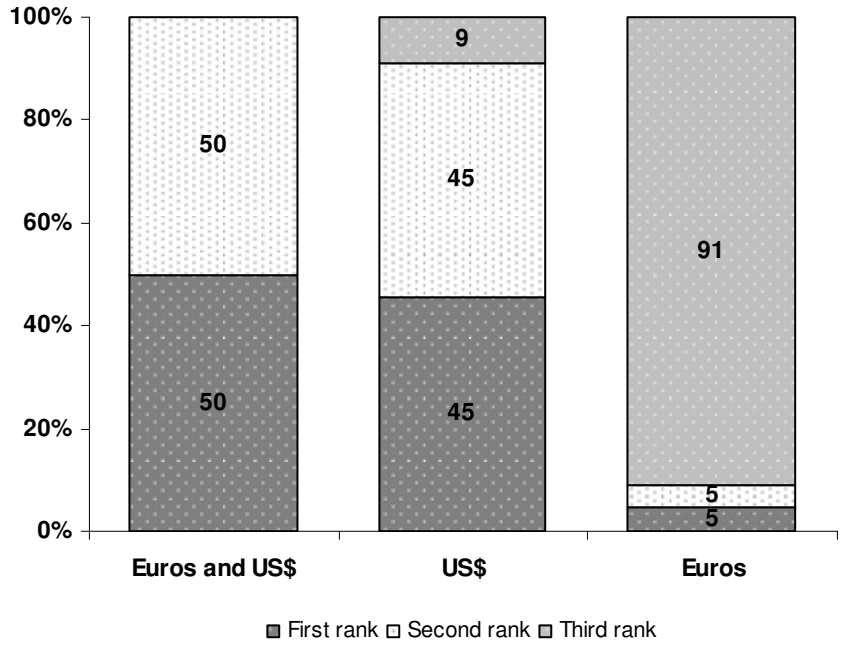

Figure 6.7 **Rankings of the categories (options) within the criterion (decision) of 'Whether revenue is invested in'**

Box 6.9 **Participants' comments about which currency petroleum revenue is invested in**

Participants' comments about which currency petroleum revenue is invested in

We can invest in many currencies, but right now we don't have the capacity. (Male Decision-maker)

US$ because this is the East Timorese currency (implying that the investment is in Timor). (Young Male District Veteran)

Participants' comments about the Government's policy of having a US$ currency

Our currency is US$ and it is international. (Male Union Leader)

If there is a crisis and we have no money its better because the US currency is stronger. (Male District Community Leader)

We are using USD, but if we use our own currency we may become victims of the Dutch disease. (Male Decision-maker)

US$ is important because we are not facing the exchange rate. The US$ is the currency that is being used in the oil and gas sector. It's easy. (Male Decision-maker)

The US$ currency needs to be preserved. In order to avoid a situation where people are storing local currency under their bed in case the exchange rate dives. The US$ is better for the long haul. (Male Foreign Adviser)

knowledge in this area was evident from their comments[154]. A decision-maker was asked 'What sort of feedback have you been getting from the community in regards to Petroleum Fund management?' and her response was 'None really. In our information sessions the people are generally expats that ask about these things. We have mentioned the Petroleum Fund in presentations, but there have been no questions about it.' This is another illustration that capacity is a factor for the wise management of Timor-Leste's petroleum revenue.

Finance and investment management are skills that very few East Timorese have so this is an aspect of petroleum revenue management where foreign advice and input is necessary. For this reason, it is useful that the Petroleum Fund Law provides for decisions about the investment of petroleum revenue to be made by External Investment Managers guided by an IAB. During the semi-structured interviews (before the Petroleum Fund Law was enacted) participants suggested an 'investment council' should be created. A foreign adviser suggested investment management of the fund should be contracted out and an East Timorese participant said that although it was important to have international representation on 'an Investment Committee', it should be as partners (to make recommendations) and the IMF and the World Bank should observe (rather than direct or participate in) the process. Several participants expressed concern that the revenue be managed independently and that the revenue managers should report to Parliament. In summary, these comments highlight that participants desire independence in their decision-making, but they also demand independent management of Timor-Leste's petroleum revenue. Both can be achieved under the Petroleum Fund Law; the External Investment Managers provide independent investment advice and the IAB (with both East Timorese and foreign members) is accountable to the Minister for Finance, providing independence (from foreign institutions) in the investment decision-making.

Participants' thoughts on six decisions about the saving and investing of Timor-Leste's petroleum revenue were explored in this chapter. Decisions that involved options that might affect Timor-Leste's independence were the most important to participants. Decisions that involved consideration of financial management, which participants might not be familiar with, held less importance. Their responses were not necessarily based on the amount of revenue that could be generated; political and economic reasons also dictated their reasoning. By and large, participants were conservative in their decision-making, advocating lower risk and more sustainable outcomes. However, the results suggest that faced with a conflict of interest, participants would prefer revenue was spent on current generations. The following chapter explores this question, of what Timor-Leste's petroleum revenue is spent on, in greater detail.

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[154] Some foreign advisers made comments about the criteria (decisions) and the categories (options) which revealed the research design did not elicit the level of detail they expected to make some decisions. For example, in regard to level of investment risk, one foreign adviser said 'it depends how high the risk', and in regard to the criterion (decision) of 'whether the amount of petroleum revenue spent is sustainable' one foreign adviser pointed out 'more than US$100million' might be just US$101million (thus it would make little difference as an alternative).

Chapter 7 SPENDING TIMOR-LESTE'S PETROLEUM REVENUE

When developing countries exploit their natural resource wealth, spending the natural resource revenue is expected to improve the lives of their citizens. Chapter Two explained how and why this assumption is not always realised. In Chapter Three we learned there is much to improve in Timor-Leste, economically, socially and environmentally. So, there are many reasons why spending Timor-Leste's petroleum revenue wisely is important. But, Chapter Four explained that Timor-Leste's Petroleum Fund Law does not define what petroleum revenue is spent on. Rather, petroleum revenue funds the Budget and decisions about what the Budget is spent on are made by the Parliament through the budget process. What petroleum revenue is spent on can determine how sustainable development is, and is also an important factor in avoiding the resource curse. For this reason it is important to know participants' opinions about what Timor-Leste's petroleum revenue should be spent on (through the budget process).

This is the second of three chapters that discuss the empirical results of the fieldwork research. This chapter focuses on the expenditure of petroleum revenue, and presents findings from the semi-structured interviews and the Point*Wizard research to explore how participants believe Timor-Leste's petroleum revenue can best be spent to create their vision for Timor-Leste. Chapter Six explored how Timor-Leste's petroleum revenue can be invested financially to achieve sustainable development, whilst this chapter analyses how Timor-Leste's petroleum revenue can be spent, and which spending options are the most sustainable. The chapter is divided into three parts which explore the participants' vision for Timor-Leste, how petroleum revenue can be most wisely spent, and participants' priorities in terms of budget expenditure.

Figure 7.1 illustrates the relative importance of what petroleum revenue is spent on compared to the six other petroleum revenue management criteria explored in this research (discussed in Chapter Six). By far, the participants in this research believe that what Timor-Leste's petroleum revenue is spent on is the most important of these petroleum revenue management criteria (decisions). This criterion (decision) is almost four times as important as 'which currency petroleum revenue is invested in', almost twice as important as 'whether petroleum revenue is spent sustainably', and one and half times as important as the next most important criterion (decision), 'how budget expenditure is financed'.

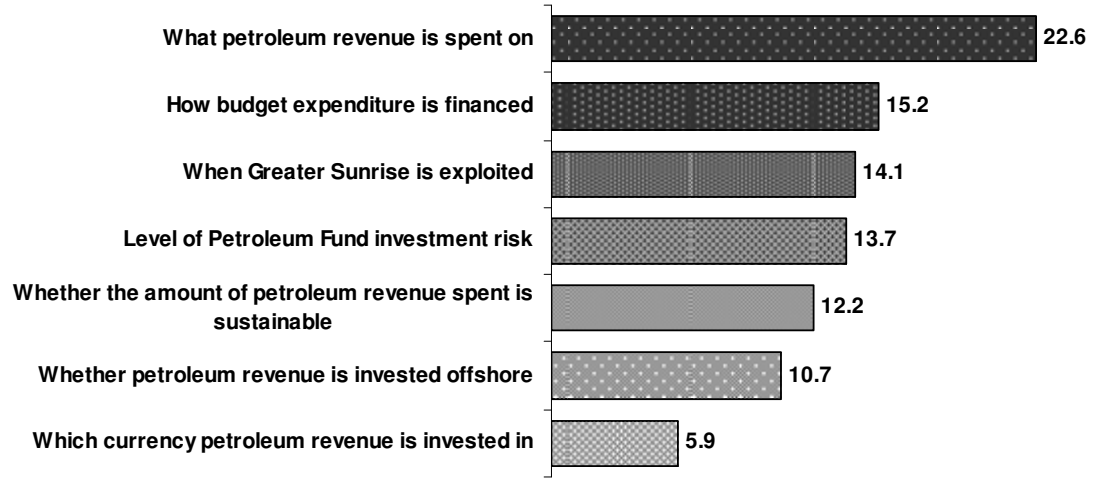

Figure 7.1 The relative importance of seven petroleum revenue management criteria (%)

7.1 Investment with a vision

This section analyses the results from the semi-structured interviews, which provide an overview of what participants said about the future of Timor Leste when asked about their own lives, the lives of their children and their thoughts about, and hopes for, the future of Timor-Leste[155]. Appendix 8 provides a selection of the participants' responses to these questions which are a useful reference to observe the subtleties of the discussion in this section. More detailed quotes are provided throughout this chapter[156]. Following the semi-structured interviews, the percentage of participants that identified an issue as important was calculated and it was found, significantly, that 96% of the East Timorese participants wanted the quality of life to improve[157]. Of the East Timorese participants, 96% also identified education as an important issue, and health and poverty (separately) were important issues for 83%.

Quality of life, education, health and poverty were the most important issues for the East Timorese participants when they were asked about the future. These are the most basic needs that were identified as the most important. The participants' comments reveal that the majority of participants were optimistic that spending petroleum revenue would improve the quality of their (and others') lives, and that spending petroleum revenue could lead to Timor-Leste's sustainable development. Essentially, the East Timorese participants in this research imagined that the future for them and Timor-Leste was brighter. These results are particularly significant given that, two years after this research was conducted, the quality of life for most of those East

[155] Participants without children were asked about the future in relation to the lives of children in general.

[156] All quotations in this chapter are from either the semi-structured or Point*Wizard interviews, unless specified otherwise.

[157] The methods used to analyse the semi-structured interview data and arrive at these results was explained in Chapter Five.

Timorese participants is undoubtedly worse as a result of the internal conflict, which began in April 2006. This section will explore participants' vision for, and concerns about, the future of Timor-Leste. The discussion is divided into two themes; quality of life and economic development.

7.1.1 Quality of life

The comments of the participants clearly indicate that the East Timorese people desire a better quality of life. The desires they spoke of were not superficial, but improvements to meet basic living standards; the desire to have three meals a day, for their children to go to school rather than having to work, and the desire to be free from struggle. Such improvements are essential for many East Timorese if they are to avoid premature death or find relief from poverty. Some participants made comments that suggested they thought petroleum revenue was the solution to improving the quality of life for East Timorese people. Unfortunately, in many countries with natural resource wealth, petroleum revenue has widened the gap between the rich and the poor.

Participants were concerned that Timor-Leste's petroleum revenue might be mismanaged (because of corruption) and the revenue might not be equitably distributed, that the rich would benefit and the poor would not. There is already a marked distinction between the (relatively) rich and the poor in Timor-Leste, which roughly follows the distinction between those living in urban and those in rural communities. East Timorese living in rural communities are most certainly disadvantaged in terms of their access to a whole range of government services such as health, education, electricity, water and roads, as the participants pointed out. Since the crisis, which began in April 2006, many of those living in urban areas have become internally displaced and are living in refugee camps[158], creating a surge in the numbers of disadvantaged East Timorese. Despite the East Timorese participants' optimism about the future, the numbers of disadvantaged and poor East Timorese has grown since this research was conducted, and the gap between the rich and the poor has continued to increase.

The participants suggested many ways in which petroleum revenue could be used to improve the three most important issues for participants; quality of life, education, and health. Box 7.1 provides a summary of a range of indicators that the East Timorese participants' thought would facilitate improvement in these three areas. Since the research was conducted, the Government has abolished fees to attend primary school. However, some of the indicators (e.g. children having a more carefree life) would have declined as a result of the internal conflict. If all of these indicators were monitored (but they are not), they might indicate improvement or decline,

[158] As at April 2007, 70,835 East Timorese people were receiving food from refugee camps (Ministry of Labour and Community Integration 2007). Not all of this number would be living in the IDP camps.

but, more importantly, the participants' comments have revealed that they are easily able to articulate their vision for the future and define what kinds of improvements they desire[159].

Box 7.1 Summary of indicators of improvement identified by East Timorese participants in the semi-structured interviews

Quality of life would be improved if:

- there was more freedom (e.g. political freedom)
- children had more opportunities and a more carefree life
- children went to school and did not have to work
- housing was good
- people ate three meals a day
- there was globalisation/access to communication (including television from other countries)
- there were more jobs
- there was less flexibility and therefore more assurance in police and judicial operations
- people had access to social justice
- there was equitable distribution of wealth
- the level of crime was reduced

Education would be improved if:

- School attendance was free/ Parents could afford to send their children to school (and to higher levels)/the system of school payment was aligned with income/Education was not only for the rich[160]
- People had better access to schools, particularly in rural areas (either more schools or better roads)
- Education was 'independent and liberating'/There was a good, established curriculum
- Resources were increased: Good teachers, more teachers (smaller class size), books, materials, infrastructure (e.g. laboratories)
- Tertiary institutions were accredited and properly organised ('to the equivalent standard of Australian Universities')

Health and nutrition would be improved if:

- there was enough (more) protein in people's diet
- people had better access to health services, particularly in rural areas
- families were educated by the Department of Health
- there was better sanitation
- there was good circulation of food

Participants also raised other important issues that they thought should be addressed to achieve their vision of the future. However, these issues were raised by only 30%, or less, of the participants. Roads were an issue for seven East Timorese participants (30%), most notably to improve access to markets for producers. Six East Timorese participants (26%) mentioned the need for good water supply (and or sanitation). Yet, only four East Timorese participants (17%)

[159] Some participants also specified criteria that could be used to monitor improvements (e.g. for health: the number of clinics, child mortality rates, and life expectancy, and for education: the number of children attending school, the literacy rate, and the level of schooling attained).

[160] Since the research was conducted, Primary School fees have been abolished.

mentioned electricity supply was an issue, including that they wanted no blackouts and power all night. Environmental issues, or natural resource management, were identified as an important issue for more East Timorese participants (26%) than those who mentioned electricity, whilst only three East Timorese participants (13%) mentioned gender equality was an issue (and they were all women). These results indicate that social issues (e.g. health and education) were significantly more important than issues about infrastructure (e.g. electricity supply, roads and water) at the time the research was conducted. This distinction gave rise to the idea that spending on health and education might be preferred over spending on infrastructure. The idea of spending preferences was explored during the Point*Wizard research, and will be discussed in the following section.

Throughout the semi-structured interviews, the East Timorese participants expressed their dissatisfaction with the Government's ability to meet their basic needs and, that they want to be heard in the Government's decision-making in this regard. 48% of the East Timorese participants referred to the need for greater participation in government decision-making and without that opportunity the perception that the decision-makers, and the rich, benefit, whilst the masses do not, may become problematic. The potential for such a disjuncture between civil society and government to become a security issue was clearly underestimated at the time of this research. Only 48%, of the East Timorese participants, identified security as an issue (half as many as education). The results of such research undertaken today would undoubtedly be very different because the crisis in April 2006, and the ongoing violence, bought security to the forefront of everyone's mind (Sabina et al. 2006).

When participants talked about security, during the semi-structured interviews, they recognised the legacy of the violent past and desired a stable future. The recognition of the impact of the violent occupation and the colonial institutions of the past appears in the participants' comments (see Appendix 8). Stability at the local level was identified as important and these comments surrounded the process of reconciliation being undertaken in Timor-Leste at the time. Participants felt that peace in the community and leaving conflict in the past would only come through this process of reconciliation. However, security issues relating to veterans and the political organisation called the Council for the Popular Defence of East Timor (CPD-RDTL)[161] were also identified as a potential cause of conflict. Some participants talked about the veterans having unrealistic expectations (e.g. asking to be paid by the Government) and that they had a lack of capacity to discuss their issues formally (because of a lack of education). As a means of resolving the veterans' issues, Maria Paixão (Partido Social Democrata) suggested the veterans should be paid, whether they are employed or not. Since the research was completed the Government has established a program to pay veterans. This option of distributing revenue to

[161] CPD-RDTL is a political organisation that 'does not recognise the legitimacy of the current government, the Constitution or the UN presence'. (Simonsen 2006 :593)

those who need it most means that revenue is not distributed equally, but it does have the ultimate aim of bridging the gap between the rich and the poor. The issue of security will be discussed further later in this chapter.

7.1.2 Economic development

When talking about the future, 74% of the East Timorese participants mentioned economic development as an issue. Some regarded it as the most important issue for Timor Leste. Participants thought that managing the economy was a big challenge for the Government, particularly managing the influx of revenue from petroleum resources. They recognised that the health of the economy underpinned improvements in health, education and other sectors. The strongest link in the discussion was between economy and agriculture. Participants noted that the majority of East Timorese lives depend on subsistence agriculture, so the issue of road quality and access to markets was raised numerous times. This section explores the participants' comments about economic development.

The key way in which participants imagined the economy would develop was through an increase in employment (or paid work). Jobs and wealth creation are central to participants' vision and they expected that with an increase in jobs, a range of benefits would result. Put simply, they said that if people had jobs, they would have money, and be able to pay for food and health services, including medicine. These are important insights as some participants assume that petroleum revenue is the solution to this dilemma, that it can be used to create jobs and reduce poverty. Some of the participants acknowledged that the task of creating jobs is a challenge. They said there are currently not enough jobs, even for university graduates returning from Indonesia or Australia, let alone jobs for the thousands of unskilled East Timorese who have not finished secondary school (or even primary school).

Some assume that if petroleum revenue is used to develop a petroleum industry that jobs will be created. Currently, jobs in the petroleum industry are primarily offshore and mostly highly-skilled. Only a handful of East Timorese have jobs in the industry. As explained in Chapter Four, the option of developing industry-related jobs onshore is being pursued, but even including unskilled jobs (such as in catering and hospitality) associated with such an industry, the great existing demand for employment will not be met. Participants acknowledged the need to diversify and develop industries other than petroleum so that jobs can be created in other industries. There was some awareness that this was desirable because when petroleum resources were exhausted other industries would be more important to Timor Leste's economic survival. Some participants understood that to ignore other industries could lead to symptoms of the 'Dutch disease'. One of the participants, the former Prime Minister, Mari Alkatiri, said 'Our policy is to avoid being a petroleum dependent country', and thereby signified his intention to avoid Dutch disease.

Participants made many suggestions for creating jobs outside of the petroleum industry by investing petroleum revenue. Investing large amounts of natural resource revenue to create big infrastructure projects has not always been successful (as discussed in Chapter Two). A small number of participants suggested investing in large scale infrastructure, such as ports, but more often the suggestions were to invest in small to medium scale industries. Maria Paixão (Partido Social Democrata) suggested soap and orange juice factories could be built to create jobs (like those that existed in Portuguese times). Other participants suggested investing in resources which could support small scale industries, such as improving the conditions of fishermen by resourcing them with skills and equipment. Some participants also mentioned agriculture, providing assistance to farmers and improving agricultural self-sufficiency. Investment in tourism and agriculture were the most often cited solutions to employment creation. How these sectors might develop will be the subject of further consideration in section 7.3.3.

There are many obstacles to job creation in Timor-Leste, regardless of the industry. At the outset, the economy must be able to support the development of new industries, and the business environment must be stable to assure investors. Participants viewed the development of institutions as crucial to Timor Leste's economic well-being. In particular, laws and mechanisms for land and property, the judiciary, and urban planning were essential for contracts to be adhered to and, therefore, for investment. Some of the participants remarked that having the US dollar as Timor-Leste's currency was a good step towards Timor-Leste's economic stability. This was one of the conservative economic policies which the Fretilin government developed.

The Petroleum Fund is another example of a financial institution designed to support wise economic management. However, the benefits of these conservative economic policies take time to appear and the person in the street sees no apparent benefit in the short-term. This is frustrating for the many unemployed East Timorese who seek jobs. The growing numbers of unemployed and unskilled young people are voicing their frustration through violence and perpetrating much of the ongoing conflict (Scambary et al. 2006). Given the conflict between the inherent long-term outcomes of conservative economic development and so many East Timorese' desperate need for immediate solutions, it is not surprising that, in his interview for this research, Alkatiri remarked 'When I talk to them [school children] they tell me they want to be the Prime Minister and I tell them, [chuckle] oh, no, its too hard' (Mari Alkatiri, former Prime Minister). To respond to the immediate and basic needs of the population, whilst trying to put in place a framework for strong economic development in the future, is hard work.

The results of the semi-structured interviews presented in this section have painted a picture of how petroleum revenue might be spent to achieve participants' vision of Timor-Leste in the future. The findings illustrate that the East Timorese participants are clear about their aspirations and they regard petroleum revenue as the potential means to achieve them. In their vision of the

future, East Timorese participants expressed a desire to meet very basic needs, but were certain that their quality of life would improve. Since the research was conducted their quality of life has declined. At the time of the research, they viewed health and education as the most important issues in the future, whilst infrastructure and security were less important. Their comments about security revolved around the past. Yet, Timor-Leste today is not secure (Department of Foreign Affairs and Trade 2007). Participants were concerned that petroleum revenue may benefit a few and exacerbate the gap between rich and poor. Traditionally, when this phenomenon occurs, frustration and discontent lead to conflict, and the resource curse. The contrast between the participants' vision and Timor-Leste's reality today is stark. The solutions to their problems are underpinned by solid economic development, which is difficult, if not impossible, to achieve in a climate of uncertainty and volatility. Participants imagine that if jobs were created their problems would disappear, but sustainable economic development takes time. People who can not meet their basic needs do not want to spend time continually struggling. Resolving that tension, between responding to immediate needs and developing long-term strategies for economic development, is difficult. The recent crisis has ensured that the Government's time is taken up by fighting fires (both metaphorically and literally) and meeting the immediate needs of the internally displaced, to the detriment of developing strong institutions that will build the economy, and ensure that the vision the East Timorese participants so articulately imagined might be a reality.

7.2 Spending petroleum revenue wisely

Chapter Six discussed how petroleum revenue can be invested wisely. That discussion focussed on investing petroleum revenue in financial instruments to create a sustainable source of wealth. Petroleum revenue can also be spent to create sustainable development. This section explores how petroleum revenue can best be spent to ensure that both current and future generations benefit from it. In the introduction to this chapter the importance of 'what petroleum revenue is spent on', relative to other petroleum revenue criteria (decisions), was highlighted; participants felt this criterion (decision) is the most important. This section explores that criterion, which has the following categories (choices): durable capital (e.g. roads, electricity, and ports), social services (e.g. health, education), consumable capital (e.g. cars, computers) and/or individual payments to all East Timorese citizens (i.e. royalty payments). The categories (choices) were selected as they provide for different outcomes in terms of how sustainable expenditure is.

The participants' ranking of the four categories (choices) within the criterion of what petroleum revenue is spent on is illustrated in Figure 7.2. The participants' comments about each of these categories (explored in this section) express their ideas about the importance of ensuring that what petroleum revenue is spent on meets the needs of both current and future generations. The participants made a clear distinction between spending petroleum revenue on social services

and/or durable capital, as compared to spending it on individual payments and/or consumable capital. Participants suggested that spending petroleum revenue on durable capital or social services would have more sustainable outcomes than spending it on individual payments or consumable capital. Thus, this section divides discussion of the four categories into these two groups as identified.

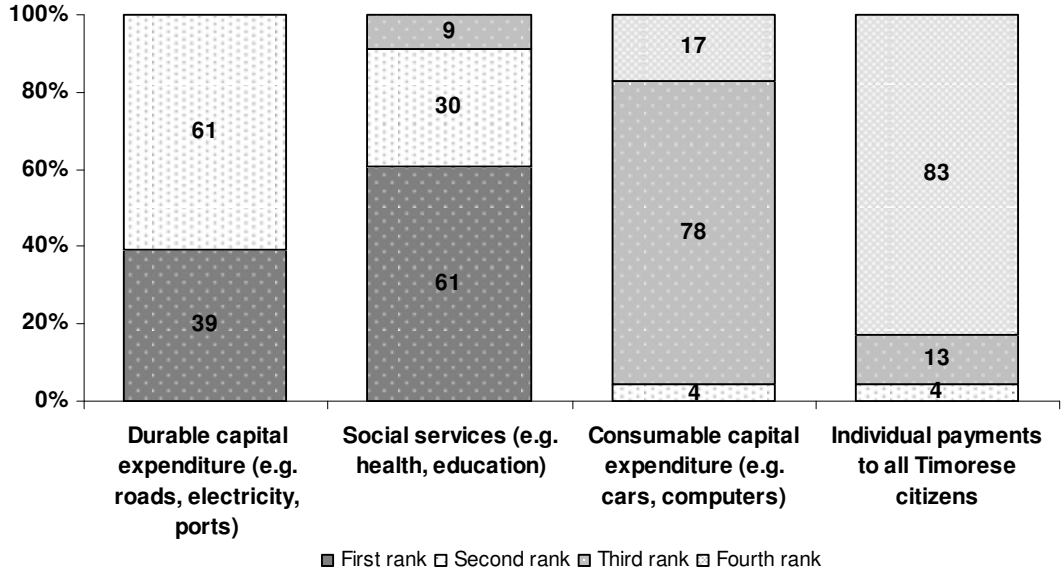

Figure 7.2 Rankings of the categories within the criterion of 'What petroleum revenue is spent on'

7.2.1 Social services and durable capital expenditure

Using petroleum revenue to boost expenditure on social services was the most preferred of all the categories (choices) of what petroleum revenue could be spent on; 61% of the participants ranked social services first. The criterion (decision) of 'what petroleum revenue is spent on' was the most important of all the petroleum revenue management criteria (decisions), which means that the number one priority for petroleum revenue management in Timor-Leste, for most participants, is that petroleum revenue should be spent on social services (e.g. health and education). Spending petroleum revenue on durable capital was the second most preferred category (choice); 39% of the participants ranked it first and the other 61% ranked it second[162]. These results corroborate and provide additional quantitative data to support, the findings of the semi-structured interviews. That is, that using petroleum revenue to improve social services is more important to participants than spending it on infrastructure (or durable capital). This

[162] No participant ranked spending on durable capital third or fourth which means that these options were always preferred, to spending petroleum revenue on consumable capital, or individual payments.

section explores the comments of the participants about these two categories (choices) in terms of their sustainability. The relationship between the two categories is also discussed.

In theory, increasing expenditure on social services, such as health and education, will result in an increase in human capacity and resources. The contribution of healthy and educated East Timorese people to the future of Timor-Leste is essential if Timor-Leste is to develop sustainably. The East Timorese participants made this clear in their comments; without human resources there can be no economic development. Some of the comments from participants on this topic, from both the semi-structured interviews and the Point*Wizard interviews, are provided in Box 7.2. Both the Prime Minister at the time, Mari Alkatiri, and the Minister of Natural Resources, Minerals and Energy Policy, Jose Teixeira, made comments that indicated they thought human resource development was more important than developing infrastructure. This is significant given they were the key decision-makers in regards to petroleum revenue management at the time. The NGO representative (whose comment is provided in Box 7.2) recognised that investing in health and education now would benefit future generations. Further comments specifically about investing in health and education will be discussed in the following section. Suffice to say that spending petroleum revenue on social services was the participants' first choice and they indicated such expenditure would provide the most benefit to both current and future generations.

Box 7.2 **Participants' comments about spending petroleum revenue on social services and durable capital**

Expenditure on Social services is more important	**Durable capital expenditure is more important**
We will invest in human resources… In the first five years the fund will be for human resource development. (Mari Alkatiri, former Prime Minister) Spending on social services is more important… *What will petroleum revenue be spent on?* Education and Health. Not physical/infrastructure. Forget about road building. It needs to be spent on human development. (Jose Teixeira, Minister of Natural Resources, Minerals and Energy Policy) Give priority to education… you can not do anything without human resources. (Male District Community Leader) Human resources depend on health. (Male NGO) Education because we need to develop our human resources. (Young Male District Veteran) We are working from a minimal base now. Health and Education are the priorities. These will have a very strong impact on future generations [if we develop them now]. Right now we just have the basic conditions. (Male NGO)	In the first years we need to create infrastructure, agricultural, medium and small scale industry so that people can be productive. In this way I believe the money that will come from the depths of the sea shall be well applied and well spent. (Xanana Gusmão, Citizen of Timor-Leste) We need infrastructure. First we need good roads all over. (Fernando 'Lasama' de Araujo, Partido Democratico) There will be a better standard of electricity, water, roads, and infrastructure. This will come from the revenue from natural resources. (Female District Bureaucrat) First I would be concerned with private activity. First poverty reduction. *How?* To create national infrastructure. I want to dream of good agriculture. People need good roads to establish good production. (Male Bureaucrat)

Spending petroleum revenue on durable capital was the participants' second preference overall. Yet, 39% of the participants indicated it was their first preference. The example given to explain durable capital in the interview was roads, electricity and ports. Participants, and others, sometimes describe durable capital as 'infrastructure', so the terms are used interchangeably. Of those participants who thought petroleum revenue should be spent on durable capital, the most interesting comments came from Xanana Gusmão (identifying as a citizen in this research) and the President of Partido Democratico[149], Fernando 'Lasama' de Araujo. The following quote explains how Gusmão justifies his preference (using agriculture as an example of infrastructure):

> We need to develop other things like agriculture so that parents have the means to send their children to school. Education is essential for the capacity of the nation…. (But) the more we educate youth, if we don't at the same time activate agriculture, the youth will go to urban areas to look for work that is not there. If we continue to spend money on education, and we have reduction of policy in agriculture, we will not be able to be self-sufficient in agricultural products. (Xanana Gusmão, Citizen of Timor-Leste)

The fact that the (then) President (identifying as a citizen) and a leader of the opposition preferred spending on infrastructure over social services contrasts with the Government of the day. This contrast, between the priorities of the Government of the day, and those of the (then) President and the opposition, is one way in which the latter can distinguish themselves from the Government.

Participants in favour of spending revenue on infrastructure, as a first priority, argued that it was required to establish a good base for the country's development and would therefore enable sustainable development. The participants argued revenue that is spent to create something useful, whether that is an individual's education or a road, can create benefits in other sectors. The participants gave examples, such as individuals using their education to create a small business, or to teach their family about good health practices. A new road can allow rural communities to take their produce to market or give them easier access to schools and health clinics. The comments in Box 7.3 indicate that participants recognised that spending on social services and durable capital potentially benefits other sectors, and thus that they are interconnected. Although the method of this research required participants to choose between spending on social services and durable capital, some participants commented it was difficult to make that choice, as both were important. For example, improvements in health result from better education, or education is a necessity for economic development of the nation. Economic development is a priority so that families can afford to send their children to school. Participants not only repeatedly expressed a connection between social services and infrastructure, but also stressed their inter-dependence. They explained that spending in both sectors is required for Timor-Leste to meet the needs of both current and future generations.

Box 7.3 Participants' comments about durable capital and social services expenditure

Spending on durable capital benefits social services

Infrastructure is what we need to develop this country economically and socially. You need good infrastructure in order to support attempts to bring in vital capital input which will create employment. (Jose Teixeira, Minister of Natural Resources, Minerals and Energy Policy)

It is quite difficult because water is important for health. Water can be understood as infrastructure. (Male NGO)

Public Works because when you have infrastructure you will also be able to help indirectly the community in rural areas to sell their products. (Male Decision-maker)

Infrastructure is also important. If there are no roads; we will only focus on youth in the urban areas. Youth are also in rural areas. (Male NGO)

Spending on social services benefits development

Education is important if we look to have a good country. To have a technological country like the US or G8. Human resources are important. If we have human resources we have knowledge and then tourism will be developed by the human resources. (Male Decision-Maker)

Education is needed to produce good human resources and competitive human resources for global economic development. (Male NGO)

Spending on both durable capital and social services is important

There needs to be mental as well as physical development. (Male Decision-maker)

When petroleum revenue comes, it should not be given to individuals and not spent on physical (like infrastructure), but first we want to spend to invest in human resources and second we want to invest in capital because one day petroleum resources will be finished. (Male Decision-Maker)

Both are important. Human and capital development. Both will contribute to economic development and the eradication of poverty. (Male Foreign Adviser)

Participants viewed health and education, ultimately, as the most important sectors for expenditure because these needs are more basic, and therefore acutely apparent and immediate to participants. Roads and electricity are important to economic development, but a lack of revenue in these sectors is not likely to cause immediate detriment. Participants pointed out that East Timorese people die without access to good health services, and without better education services (for all East Timorese, at all levels), poverty will remain.

7.2.2 Individual payments and consumable capital

In Chapter Six, the results indicated that participants felt very strongly about some petroleum revenue management issues (e.g. that debt should be avoided). Using petroleum revenue to pay royalties to individuals (or individual payments) is another issue that participants provided an almost homogenous response to. Figure 7.2, on page 177, shows that 83% of participants ranked the option of using petroleum revenue to provide individual payments to all East Timorese citizens last (and 96% third or last). When participants were faced with this option, invariably they made a comment denouncing the idea and always took the other option in order to avoid individual payments (rather than because they preferred the alternative). By contrast, the participants' decision of whether to spend petroleum revenue on consumable capital was a corollary of their intent to spend it on social services or durable capital, or their passion to avoid

spending it on individual payments. Spending on consumable capital was ranked third by 78% of the participants. This section explores the participants' comments on spending petroleum revenue on individual payments and consumable capital.

Participants' preference to avoid using petroleum revenue to fund individual payments was a central theme of their comments when faced with this choice. Some of the participants' comments are provided in Box 7.4, and they indicate their passion to avoid this option. To use petroleum revenue in this way was regarded as a waste, and seen as potentially disastrous. There was only one participant, a male decision-maker, who chose this option over spending on social services; the final comment in Box 7.4 is his. This participant had recently read an academic paper on individual payments (by Casassas et al. 2004) and thought it was a good idea, in combination with spending on infrastructure. Other than this participant, all other participants' opinions on this topic were the same; using petroleum revenue to fund individual payments is not a good idea.

One of the themes in the participants' comments was that individual payments were the least sustainable of the four spending options. Participants felt that providing individuals with money was a wasteful use of the petroleum revenue because it provided only short-term relief or benefit. This option was the one which provided the least opportunity to return long-term benefits to the wider community, let alone the individual or future generations. They also argued that giving people money would make them lazy and create a culture of dependency, causing further problems. Some of the participants explained that this kind of dependency already existed in Timor-Leste. The similarities between the effects of natural resource revenue and aid or donor money were discussed in Chapter Two. The East Timorese have been inundated with donations, at the individual, community, and the bilateral level, over the last seven years (and even more acutely during the recent violence). The scale of donations presents issues of dependency, and some participants recognised this issue needs to be addressed. The decision-makers, in particular, advocated a more holistic approach to using the petroleum revenue in comparison to the current donation driven situation.

Another problem with spending petroleum revenue in this way that participants identified was that it might lead to inflation. Einar Risa (Commissioner and former Executive Director, TSDA) argued that if money were paid directly to the citizens, spending would invariably increase (and not necessarily for what he considered the priority items, health and education) and that spending effect could cause inflation. Instead, participants suggested that petroleum revenue would best be spent if it provided collective benefits. Representatives from NGOs and foreign advisers recognised that petroleum revenue is a public good, and that the people of Timor-Leste will benefit more from its collective use.

Box 7.4 Participants' comments about the option of individual payments

No long-term benefits

I do not believe that subsidising people's lives contributes to social development or economic growth. In the long run the effect would be detrimental to Timor-Leste. (Male Foreign Adviser)

Avoid individual payments because they [East Timorese people] don't know how to save. (Male NGO)

Creates a mentality of dependency

I am against [individual payments]. The State can not be seen as a paternal state. The people, themselves, must become productive. This is stupidity. (Xanana Gusmão, Citizen of Timor-Leste)

If you start giving people money they will never work and society will be destroyed. (Jose Teixeira, Minister of Natural Resources, Minerals and Energy Policy)

I don't want to give individual payments to East Timorese. It will reduce the human resources; it will create lazy people that don't want to go to school or work. (Male District Community Leader)

Don't make your people feel the State as a patron. (Male NGO)

Has an inflationary effect

There is a tendency to create inflation by handing it out directly to the citizens. And how would you decide how to distribute it anyway? They need to have a reasonable economic policy and money should be spent on the people who need it most. It would be 'unsocial' to do otherwise. (Einar Risa, Commissioner and former Executive Director, TSDA)

Petroleum revenue should be spent for collective benefit

I wouldn't entertain that idea [individual payments]. You need to promote social and physical infrastructure and to create the conditions for development rather than giving directly which creates dependency… You don't make decisions on a per capita basis. The National Development Plan outlines the needs and priorities. The National Vision was achieved through consensus and we shouldn't lose track. We shouldn't compromise our broad goals. No. We need an alternative mechanism for the eradication of poverty. (Jose Teixeira, Minister of Natural Resources, Minerals and Energy Policy)

No. I am not for the Alaskan model. This is my personal political philosophy. You need to do what is best for the Public Good (not individuals). You need to know what society needs the money for. (Einar Risa, Commissioner and former Executive Director, TSDA)

Pro-individual payments

Individual payments actually eliminates the poverty line aspects. *Like a subsistence subsidy?* It does have that effect. If you have options between the two, durable capital expenditure enhances more the capacity of society to meet its own needs, so you go for self-reliance of the individual citizens. (Male Decision-maker)

Participants explained (as discussed in section 7.1) that East Timorese are desperately in need of very basic services, so the idea of giving them money to meet their needs might appeal, in theory, but it is almost impossible to meet all individuals' needs in this way. If, for example, each East Timorese person was given $500 per annum the Petroleum Fund would probably be exhausted within three years and there would be no money to run government, let alone provide the health and education services that are desperately needed. Without a comprehensive personal tax system, or any significant formal mechanisms, or structures, in which all East Timorese engage on a regular basis, in conjunction with the lack of financial understanding, or engagement with the banking sector, combined with the problems of how such a mechanism would be defined (e.g. would it be per family, or per person and how would all the potential loop holes be avoided), such a proposal would be problematic in many ways. These issues could be addressed, given time and resources, but the responses of the participants indicate that

support for such an initiative does not exist at the moment. On the contrary, participants have expressed that meeting collective needs is a greater priority, and given the participants' apathy towards the suggestion, exploring the reasons why this is a bad idea further is not necessary.

The option of spending petroleum revenue on consumable capital (e.g. cars and computers) was not widely commented on during the interviews. However, sentiments about avoiding unproductive spending were expressed throughout the research. A young female said 'I don't want to spend money on cars' and a decision-maker also suggested it was un-constitutional to spend revenue on consumable capital because it was not sustainable. Fernando 'Lasama' de Araujo (Partido Democratico) expressed frustration with the amount the current government spent on cars and computers and general government finance waste due to bureaucracy:

> We don't need Vice Ministers, Secretary of States, government cars. We could privatise the cars, loan to the public servants with [a] low price so government doesn't spend on gas and maintenance. We could just have several cars in each department and they can use them to go to the districts. We could use private cars to go to work… I just want to comment about the Government, every year they buy computers, cars which they can only use for one year. (Fernando 'Lasama' de Araujo, Partido Democratico)

Consumable capital is the budget item that has the most potential for abuse because the limit for procuring works without a tender is US$15,000, whilst the limit for procuring goods (US$10,000) and services ($6,000) without a tender is less (United Nations Transitional Administration in East Timor 2000). Comparatively speaking, each item may represent a relatively small cost, but the possibility of wasting a large amount of revenue exists. In the 2006-07 financial year, the goods and services component represents 39% of the total budget, and minor (consumable) capital a further 6%, which means almost half the Budget is spent on consumables, which some participants believe make a smaller contribution to Timor-Leste's sustainable development[163]. Spending revenue on consumables is necessary for the Government to conduct its business, but the participants have expressed that ensuring this kind of revenue is spent wisely, and not wasted, will be important. Ultimately, the result will depend on the strength of the institutions, and this will be discussed further in the next chapter.

7.3 Budget spending priorities

The results of the semi-structured interviews (discussed in section 7.1) showed that participants' vision for the future of Timor-Leste indicated some issues were more important than others. The Point*Wizard research, which elicited the relative importance of the petroleum revenue management criteria (decisions), indicated that what petroleum revenue was spent on was the

[163] In 2005-06, 50% of the Budget was spent on goods and services, and minor capital. The reduction, in this spending, to 45% of the 2006-07 Budget, is because the capital component of the budget increased from 28% to 38% (the salaries component decreased).

most important criterion (decision), and that spending revenue on social services and infrastructure was more important than spending it on consumable capital or individual payments (discussed in section 7.2). The research presented, so far in this chapter, leads to a need for a more specific understanding of which particular budget sector participants think most needs to increase.

In Timor-Leste, petroleum revenue is the means to increase spending in each sector; the State's budget can be increased by withdrawing revenue from the Petroleum Fund. Between 2005-06 and 2006-07, the State budget increased significantly, by 122%. This section begins by exploring the relative importance, to participants, of increasing funding to fourteen budget sectors[164]. The order of participants' relative importance is compared to the order of the Government's actual increases in expenditure for each of those sectors[165]. This provides an indication of whether the Government's spending priorities reflect the participants', or not. The section then discusses participants' comments specific to each of the sectors, and assesses the relative importance of increasing funding to each sector.

Figure 7.3 depicts participants' relative importance of the 14 budget sectors when they were asked 'The Government of Timor-Leste receives revenue from petroleum exploitation and may choose to increase its budget. Which option would you choose if you were to increase the Budget?' The participants were, effectively, asked to choose between two budget sectors at a time[166] (Chapter Five provides a detailed explanation of the research method). The groups of sectors shall be discussed later in this section. However, there are observations to be made from their relative importance. The results show that Health and Education are the sectors that participants felt most needed increased funding. This finding concurs with the results presented previously in this chapter. Participants also noted a connection between these two sectors. When asked to choose between these two sectors, participants often expressed this choice was more difficult than others[167]. Sometimes Health was a priority, and sometimes Education was the priority. One participant said 'Health comes first. No life, no need for education' (Female Foreign Adviser).

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[164] The Government of Timor-Leste's state budget is actually divided into 23 budget sectors, however only the most relevant or most pertinent to the issues discussed in the semi-structured interviews were identified in this research. Further, Water and Electricity were extracted, and referred to separately, from the Ministry of Natural Resources, Minerals and Energy Policy, and the total for 'Justice' includes other budget categories (i.e. Tribunals, Provedor of Human Rights and Justice, and the Public Prosecution Office).

[165] Comparing the increase in Government Budget between two years is not as effective as looking at longer term trends (because one-off expenditures will inflate the results). However, the figures to establish longer term trends were unavailable at the time of the research.

[166] In order to answer these questions, the participants were shown a bar graph indicating the relative budget expenditure of each of the 14 sectors. Conceivably, participants' responses may have indicated their preference for which sector they thought was more important, rather than which sector they thought should receive additional funding, however it is likely that, for some participants, their responses would have been the same, regardless.

[167] Nine participants chose Health and Education as equal (Point*Wizard allows participants to choose 'equal', but the participants were asked to limit the number of times they chose 'equal' to three or less). Health was more important than Education for 17 participants, and Education was more important than Health for 18 participants.

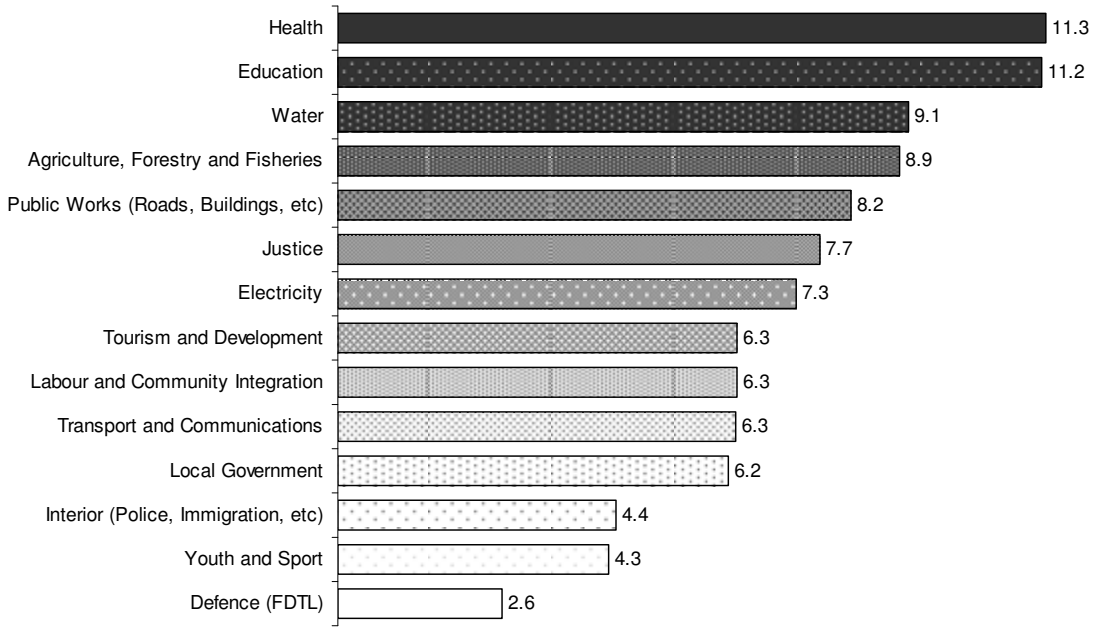

Figure 7.3 Participants' relative importance of additional spending for the budget sectors (%)

After Health and Education, increasing expenditure for Water, Agriculture, Forestry and Fisheries, and Public Works is also important to participants. Conversely, participants' thought the need to increase spending to Interior[168], Youth and Sport, and (particularly) Defence, was least important. Increasing expenditure to Health and Education was more than 2.5 times as important, to participants, than increasing expenditure to Interior and Youth and Sport, and 4.3 times more important than increasing expenditure to Defence. This is a remarkable finding given that the research was conducted just seven months prior to a crisis, which highlighted the desperate need to strengthen the institutions of Police and Defence, and the problems surrounding the large numbers of unemployed young males. If this research was conducted today, the results may be different. These results show, either that the crisis and the institutional breakdowns that occurred were not expected by the participants, or that they did not expect that government funding to these sectors would have prevented the crisis. There were few comments about weaknesses in the Police or Defence and no participant mentioned a distinction between the East and the West of Timor-Leste (a core issue which developed during the crisis), so it is assumed that participants did not expect the crisis. The only indication that participants were concerned about issues of security, at the time of the research, was in terms of ensuring the Justice system had increased funds. Increasing expenditure to Justice was less important than Health, Education, Water, Agriculture, Forestry and Fisheries, and Public Works, but more

[168] The Department of the Interior was identified by most people as the department which funds the East Timorese police, although it also has other funding responsibilities.

important than eight other sectors. The comments of the participants indicated that Justice was necessary to resolve issues of the past. The participants' views on Security (covering Justice, Youth and Sport, Interior, and Defence) shall be discussed further in section 7.3.5.

Figure 7.4 compares the difference between the order of the participants' relative importance for increased spending to each sector, and the order of the Government's actual increases in spending to each sector[169]. Appendix 9 provides the details of the Government's actual increase in spending to each sector. Figure 7.4 illustrates the sectors in decreasing order of difference between the participants' relative importance and the Government's actual increase. For example, the greatest difference is between the participants' order of Defence (last) and the place of Defence in the order of the Government's actual increase to expenditure (third), so Defence is at the top of the diagram. The place of Defence in the order of participants' relative importance, might have been higher if the research had been done since the crisis, and the Government's significant increase to spending on Defence, since the last financial year, can be wholly explained by their plans to purchase a naval patrol boat to police the southern maritime borders (MOPF 2006b). Nevertheless, there are some other significant differences, between the participants' opinions about which sectors' budget should be increased and the Government's actual increase to expenditure.

The differences that are most instructive to focus on are those which the participants ordered more in need of increased funding. The participants felt that, after Health and Education, Water was the sector most in need of increased funding. Yet Figure 7.4 shows that the Government's actual increase to spending ordered it third last. The difference between these two rankings is stark and illustrates a disconnection between the Government's priorities and the participants'. Participants also ordered Justice much higher than the Government's actual spending. The whole of Government's budget increased by 122% between 2005-06 and 2006-07, but Justice received a decrease in funding (minus 8%). Justice was the only sector which decreased in funding in 2006-07, which is an extraordinary fact, given the widely reported deficiencies in the Justice system (e.g. JSMP 2006b).

The other stark finding was the lack of priority given by the Government to increasing spending on Health compared to the participants. Although the Health budget was increased by US$11.4 million (between 2005-06 and 2006-07) this is much less than the increase to the Public Works budget (US$40.9 million). The participants thought Health was 1.4 times more important to increase funding to, than Public Works., but, the difference between the Government's actual increase to Health and Public Works is a factor of 3.6, in favour of Public Works, and contrasts

[169] The participants' relative importance of each sector was numbered 1-14 (i.e. 1 being the highest priority for increased expenditure [health] and 14 being the lowest priority [Defence]). The Government's actual increase in spending to each sector was put in order from highest to lowest, and numbered 1-14 (e.g. Public Works had the largest increase in funding between 2005-06 and 2006-07 so it was numbered 1).

with the participants' preferences to prioritise spending on Health. Some may argue that Public Works is a more costly sector because the majority of its expenditure is on capital. The capital component of the Public Works' budget is 84% whilst the capital component of the Health budget is just 39%. However, the total portion increase of each reveals that the Government of Timor-Leste prioritises extra funding to Public Works. The budget for Public Works increased by 447% (between 2005-06 and 2006-07) whilst the Budget for Health only increased by 80%. There were, however, some similarities between the order of participants' preferences, and the actual increase in Government expenditure. Education, Transport and Communications, and Youth and Sport were ordered equally, by participants and the Government. Tourism and Development, Labour and Community Integration and Interior were also close in order.

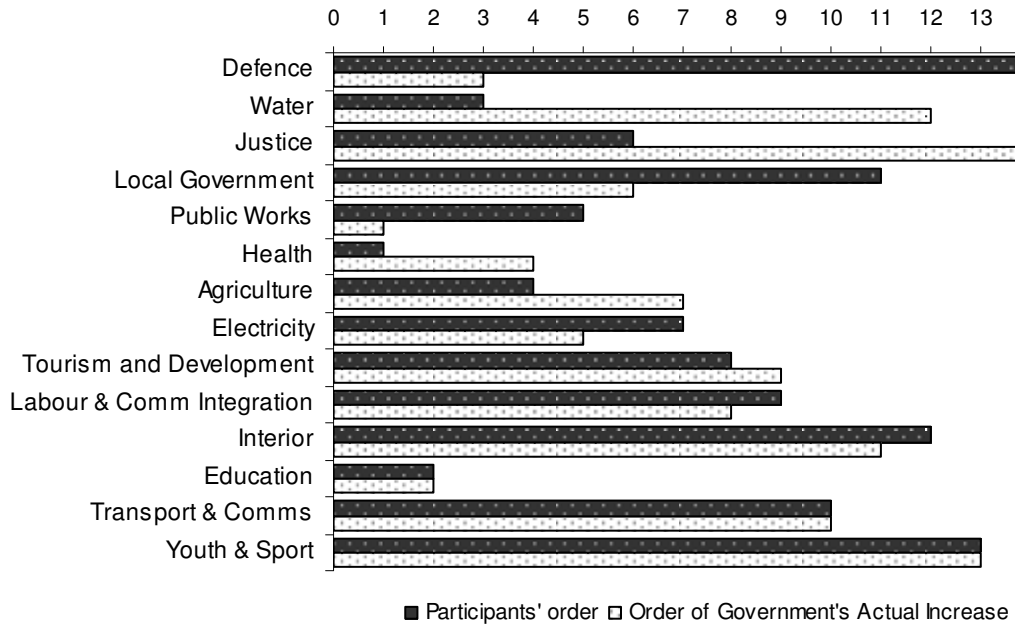

Figure 7.4 Comparison of participants' order of relative importance and the order of the Government's actual increase in spending to each sector (1 being the highest)

The 14 budget sectors have been divided into five groups for the purposes of discussing similar themes and also because of the similarities in the way the sectors in a group contribute to the overall aim of sustainable development. The five groups are depicted in terms of their order of relative importance in Table 7.1. The first row numbers the participants' order of relative importance of increasing funding to each of the sectors below it (e.g. Health is number one and Defence is number 14) and the first column denotes the section and the sector group heading that each sector belongs to. Two sectors, Agriculture, and Youth and Sport, have relevance to two sector groups, and therefore appear across two rows.

Sector Group & Section	Order of relative importance													
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Social services 7.3.1	Health	Education												
Infrastructure 7.3.2			Water		Public Works		Electricity			Transport Comms				
Local Development 7.3.3				Agriculture				Tourism & Development						
Disadvantaged groups 7.3.4									Labour & Community Integration		Local Govt		Youth & Sport	
Security 7.3.5						Justice						Interior		Defence

Table 7.1 **Order of participants' relative importance of budget sectors linked to sector groups/chapter sections**

Health and education have previously been discussed as Social Services in this chapter, and again they are ordered first in this research method. Electricity, Public Works, Transport and Communications, and Water represent the Budget sectors that participants would regard under the heading of Infrastructure (also named durable capital previously in this chapter). Although the relative importance of these sectors is spread throughout the order, as a group they are generally of greater importance than the other groups. Tourism and Development, and the Department of Agriculture, Forestry and Fisheries (sometimes simply referred to as Agriculture) are discussed under the heading of Local Development because they both have the potential to improve livelihoods and contribute directly to the economy. Another sector group was named Disadvantaged Groups to cover participants' discussion of issues that affect minorities, or a specific group of people that require government services, without which they would be disadvantaged. Sectors addressed under this heading include Agriculture, Labour and Community Integration, Local Government, and Youth and Sport. Thus, for example, Local Government has apparent benefits for people at the village level, as does Agriculture, and Labour and Community is expected to benefit veterans, people without jobs, internally displaced people, etc. Finally, the sector group named Security includes analysis of participants' discussion about Defence, Interior, Justice, and Youth and Sport. This section closes with a discussion about the way in which spending petroleum revenue on each of these sector groups contributes to sustainable development.

7.3.1 Social services

Participants considered that health and education are the most basic services, and the most in need of extra budgetary spending. Some selected comments made by participants when they were faced with choices involving Health and Education are presented in Appendix 10. The participants specifically mentioned 'diseases that kill people', which need to be addressed in Timor-Leste, such as tuberculosis, malaria, dengue, and HIV and AIDS. Participants also identified health issues, such as mental health, and family planning. Participants also stated that they want their children to get a good education, but the system of education is now basic and they want the education system to improve.

Participants also pointed out that improvement in these social services will benefit and support other sectors, and sustainable development. They made connections between improvements in health and education, and other sectors. For example, better educated East Timorese will improve sectors such as Tourism and Justice (particularly lawyers). They also recognised that improvements in Education will help reduce the impact on the environment, and improve security because, they said, the uneducated are unemployed, and have nothing to do, and they cause trouble. Education, particularly vocational education, was seen as the way towards 'advancement' and globalisation. Specifically, some participants were in favour of directing

funding towards technical or professional (or work place training) education so that capacity could be built more quickly. This connects with the participants' desire for independent government (discussed elsewhere in the research) as they see that improving Education will reduce Timor-Leste's reliance on foreign advisers.

The results reveal an iterative relationship between these two sectors. Participants suggest that improvements to Education will enhance Health outcomes (e.g. family planning and sanitation), and better Health will enable people to participate, and not miss out (on work or school) because of illness, or malnutrition. Participants made comments that indicate the quality of Health services impacts on everything. For example, a Female NGO worker said 'If people are healthy they will be better able to attend education'. Comments also indicated that being healthy enhances the ability of East Timorese to learn. Participants explained that the interconnectedness of these sectors made it difficult to choose which one was more important.

Specifically, participants identified both capital and human resource constraints in both sectors. They said the Budget required additional funding for infrastructure to support these sectors and they gave examples. There are not enough clinics or hospitals, and more medicine is required in the Health sector. Schools require desks, chairs, books, and computers. Both sectors are also desperately in need of human resources. The Health sector requires more doctors and nurses, and the Education sector requires more teachers. In addition, some participants noted that the East Timorese universities require accreditation.

Finally, participants who attributed less priority to these sectors (and suggested they do not require increased funding from the Government) did so because, they believe, they are more appealing to donors, and therefore the Government as a whole might benefit by prioritising other sectors to spend their revenue on. Kadhim Al-Eyd (Former Resident Representative, IMF) suggested it may be worth being mindful of the propensity of donors; 'there is still a great deal of sympathy [from donors]. They [Timor Leste] can still attract a great deal of aid. They can get funding for health and education.' Al-Eyd noted that donors have a propensity to fund 'the sexy areas' of health and education and that it would be wise for Timor-Leste to use its petroleum revenue to fund projects that donors are less likely to (e.g. power and roads).

7.3.2 Infrastructure

Health and Education were the funding priorities for participants, but, thereafter, extra budgetary funding to sectors constituting the infrastructure of Timor-Leste was welcomed. Appendix 11 provides a selection of participants' comments on the four sectors under the heading of Infrastructure (Electricity, Public Works, Transport and Communications, and Water). Of all the infrastructure sectors, Water was the sector that participants thought was the most in need of extra funding. Participants' comments in response to choices that involved Water revolved around it being a basic necessity. For example, 'Water because it's necessary,

because it's a human right' (Male NGO). Thereafter, participants primarily talked about the need to have good infrastructure, particularly in the form of Public Works and Electricity, to enable economic development.

Infrastructure was regarded, by participants, as the key to foreign investment in Timor-Leste. Roads and electricity are basic necessities without which, participants said, business (e.g. tourism) could not be conducted, and foreign investment would not be viable. Some participants also remarked on the need for better infrastructure so that industries, other than those based on Timor-Leste's petroleum resources, could develop. In this respect, participants acknowledged that infrastructure was the key to avoiding petroleum dependency.

Participants also identified several benefits of improvements to infrastructure (due to increased budget) that would support other sectors. They complained about the quality of the roads and suggested improvements to Timor-Leste's roads would enable people to have better access to schools, health care, and enable East Timorese to access markets to sell their produce. Comments about Transport and Communication included similar benefits for access. Participants imagined that spending more on Public Works would create more jobs in construction, and that would have flow on effects in terms of better security (e.g. less unemployed young men making trouble). Participants recognised that all sectors need basic infrastructure and gave many examples (e.g. agriculture needs water, defence needs communication, health depends on electricity and water, etc.).

Some of the participants also differentiated between the needs of rural and of urban East Timorese in regards to infrastructure. Transport and Communication was seen as important in terms of connecting people in the rural areas with information. The needs of rural and urban East Timorese were also differentiated in regards to Water. Participants recognised that people in urban areas generally have good access to drinking water and sanitation, whilst some people in the districts have none, and must walk long distances to access water. Electricity was, for some, not important to meet people's everyday basic needs (evidently in rural areas where they didn't have electricity), but rather more important for business.

7.3.3 Local development

There are two budget sectors that have the greatest potential to impact on local development, Agriculture, Forestry and Fisheries (or Agriculture), and Tourism and Development[170]. Appendix 12 reveals the comments participants made about these sectors. Agriculture was the most important of these sectors, according to participants. Repeatedly, participants pointed out that the majority of East Timorese people rely on Agriculture for their livelihoods (for example,

[170] In theory, Local Government might be a sector which would be expected to enhance local development, but the participants' comments about Local Government did not contribute to this discussion.

a District Community Leader called Agriculture 'the economy of the people'). Thus, improving Agriculture would benefit the majority of the population. Participants stressed that training farmers and fishermen could enable sustainable livelihoods, and opportunities for East Timorese people to be self-sufficient. Comments about Agriculture prompted participants to talk about the lack of support for the sector, and that the lack of jobs in rural areas is causing the population to flow to urban areas. Participants' responses indicated that Agriculture was fourth in order of relative importance. By contrast, in the order of the Government's actual increase in budget, Agriculture was seventh. The budget for Agriculture constituted 4.4% of the State's budget, which indicates why participants complained that funding for Agriculture was insufficient.

Tourism was regarded, by participants, as a sector that might also bring benefits at the local level, and also an industry that would provide revenue (from taxes) for the Government. Both sectors were expected to provide jobs, and develop industries alternate to the petroleum industry, thereby providing real opportunities for Timor-Leste to develop economically. Such opportunities were welcomed by participants, particularly as they were seen as being community-oriented, and providing potential for communities to be self-sufficient. However, providing additional funding to Tourism and Development was not a high priority for participants; it was only marginally more important than extra funding for Labour and Community, Transport and Communications, and Local Government. Rather, participants suggested that establishing the necessary infrastructure would enable an environment in which Tourism would thrive.

7.3.4 Disadvantaged groups

Consideration of four budget sectors generated comments from participants about the need to support specific groups of East Timorese; Agriculture, Labour and Community Integration, Local Government, and Youth and Sport. A selection of participants' comments about these sectors is provided in Appendix 13. Comments about the neglect of people's needs in rural areas were commonly heard when participants were faced with choices involving Agriculture or Local Government. Comments about Agriculture have already been discussed, in section 7.3.3, so they will not be explored further. After Agriculture, Labour and Community Integration was the most important of these sectors, although participants did not prioritise the need to increase funding to these sectors (other than Agriculture).

Participants' comments about Local Government indicated that resources available at the local level were minimal, and that the system and mechanisms of administration were not complete. These anomalies rendered rural communities, who may be reliant on the resources of Local Government, disadvantaged. The participants' comments about the question of funding to Local Government followed two trains of thought; either there was little benefit in increasing funding to Local Government (a centralised model), or participants desired an increased connection

between the Government and local communities (decentralisation). Some participants were eager for better communication and better service provision, from which they expected improvements to Local Government. They said that, under the current system, Local Government representatives had all the responsibility, but not enough power or finance. They were supportive of a model in which local communities were more involved in decision-making and argued that a connection with the community would lead to a more productive use of petroleum revenue; a bottom-up approach. Participants that were opposed to decentralisation argued that the scale of investment, needed to establish an effective administration at the local level, was disproportionate to the benefits it would provide.

Participants acknowledged there were groups that required specifically designed government support. Young people, veterans (and widows), and rural communities were the focus of the majority of this discussion, whilst comments about the needs of women, and children arose in discussion about Health services. Participants suggested young people required attention and support because they are idle, they represent a large portion of the population, and they are symbolic of the future of Timor-Leste. Others suggested their needs could be addressed by provided extra funding to Education. The needs of veterans were also identified by participants. Some participants believe veterans of the resistance should be paid, or that their commitment to Timor-Leste must be recognised in some way. Participants suggested that providing support to both young people and veterans was necessary to ensure security and stability in Timor-Leste. Since the research was completed the Government has established a fund for veterans and a community development scheme where funds are distributed to local community projects.

7.3.5 Security

The results of the Point*Wizard research indicate that participants do not advocate an increase in expenditure to Interior, Defence or Youth and Sport. These sectors were the least important to participants. The participants did, however, suggest that the Justice sector requires additional funding, and that improvements to the Justice sector will make Timor-Leste more secure. In comparison, the Government's lack of financial support to the Justice sector has been noted (on page 186). Participants' comments about all of the security-related sectors are presented in Appendix 14. Some participants did acknowledge that security is necessary, to encourage foreign investment. But, in general, they did not acknowledge any major issues for security at the time the research was conducted. Rather, they suggested that resources should be directed to resolving issues from the past (e.g. bringing those who perpetrated crimes against human rights, to justice).

Participants noted that Justice is a very weak institution. They talked about the fact that the East Timorese judges do not have the capacity to effectively run the courts. Mostly, their comments (particularly from participants who were themselves awaiting justice) were connected with the

lack of justice for serious crimes. They said that the time that courts take to resolve cases is long. Some participants also seemed to think that if people were educated, or there were no problems (crimes), there would be no need for the Justice sector.

In some cases, participants thought increasing expenditure on Defence was a waste of money. They suggested that diplomacy or negotiation was a better, and more cost effective, means of addressing conflict. In terms of ensuring Timor-Leste's security from an external aggressor, some suggested that would be impossible, that it would require too much expenditure to make it worthwhile. They acknowledged Timor-Leste would need to rely on international forces in the case of renewed conflict with Indonesia. Negotiation was also advocated in participants' comments about effective policing. They said that policing should be dealt with at the community level.

Participants who advocated the need for increased expenditure to Interior and Defence were mindful of the need to control borders, both land and maritime. Participants acknowledged that smuggling and drug trafficking took place. One participant stressed the problem of illegal fishing and suggested a naval boat was required. But, the majority of participants' comments about increasing funding were to mention that police and soldiers' salaries were too small. Other participants' comments included the need for funding for capacity development, and police training to make them more professional. They said that some police had bad habits which had come from Indonesian times, and a decision-maker said 'they need to understand [that] they work for the people, they are not above the people'. Participants also mentioned police were under-resourced. For example, they are unable to travel to the districts to attend to crimes, and some pay, themselves, for the petrol to run their motorbikes. Not one participant suggested that revenue should be used to fund the purchase of weapons.

7.4 Spending for sustainable development

The Point*Wizard research method asked participants to choose between two budget sectors at a time, and thus provided an understanding of the relative importance of increasing expenditure to 14 budget sectors. However, the participants' responses to the dilemmas posed by the Point*Wizard research also illustrate that the benefits to each sector, from increasing budget expenditure with petroleum revenue, are not isolated. Rather, the participants' comments suggest that improvements in one sector have flow-on effects. There are relationships, or connections, between the sectors and, together, these connections ultimately enable sustainable development. Figure 7.5 illustrates these linkages, and reflects the comments of the participants and depicts their priorities in terms of budget expenditure on the five sector groups.

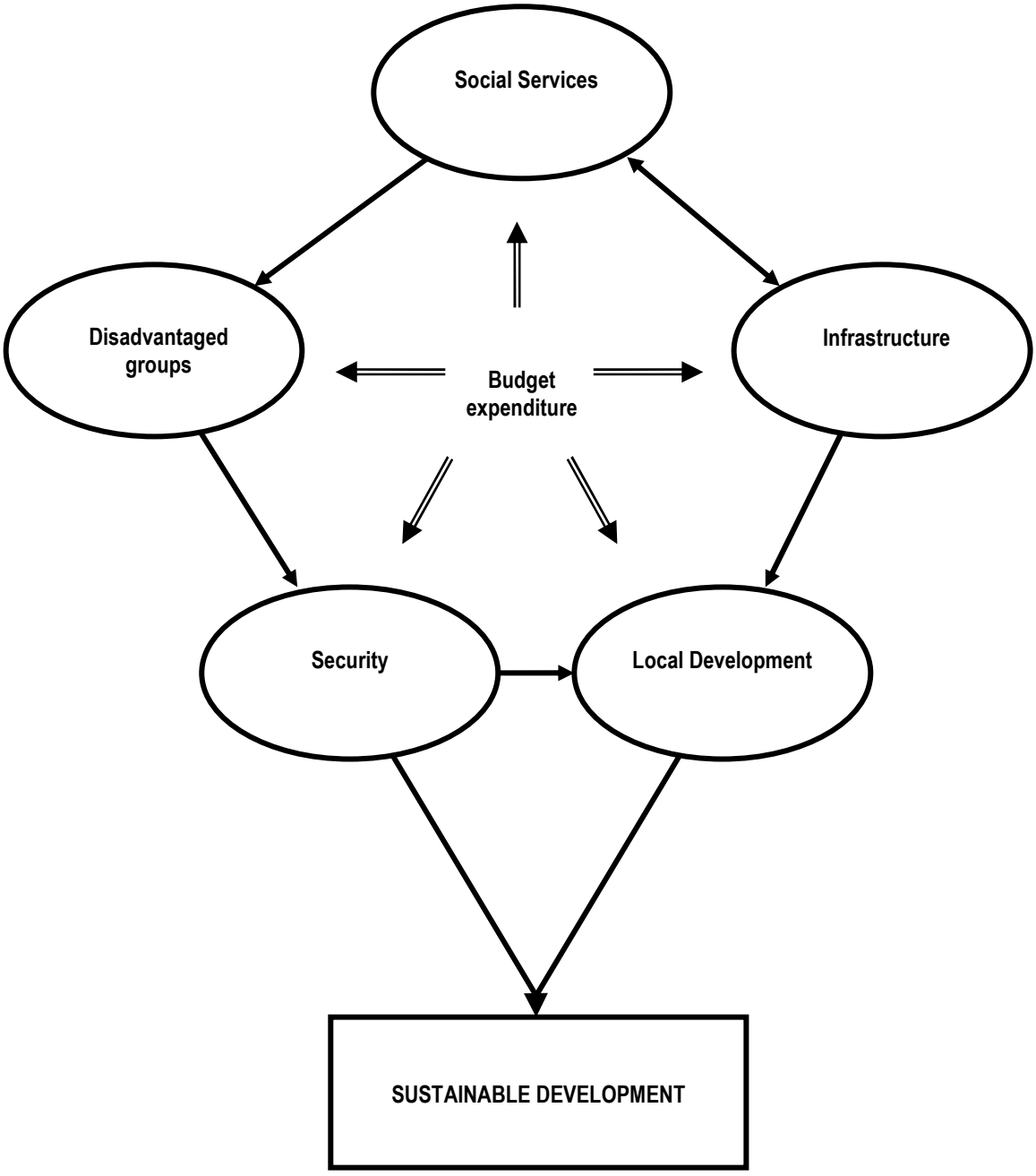

Figure 7.5 **Key linkages (between sectoral expenditure) for sustainable development in Timor-Leste**

At the centre of Figure 7.5 budget expenditure flows to all the sector groups, and the ultimate outcome of budget expenditure is sustainable development. Timor-Leste's Petroleum Fund is the primary source from which the State's budget is funded. This framework shows the importance of social services, or Health and Education, which has been reiterated throughout this chapter, by placing it at the apex of the figure. Participants identified Health and Education as the most basic of all the needs. Together, Health and Education provide the human resources without which all the other sectors, and any aspect of development (sustainable or otherwise)

will not eventuate. Infrastructure is also important in this framework. Participants stressed that improvements to Infrastructure generated benefits for Social Services so the arrow between these two sector groups is double-ended. According to participants, these sector groups are reliant on each other.

If the Government of Timor-Leste were to depict its actual expenditure in this way, the figure would look different. Although the Government's model might support the idea that Infrastructure and Social Services generate benefits to the other, the Government of Timor-Leste prioritises spending on Infrastructure. Despite its messages of a commitment to Health and Education, the Government of Timor-Leste's total spending on infrastructure (including capital) constitutes 30.3% of the Government of Timor-Leste's budget in 2006-07, whilst spending on Education and Health constitutes just 19.2% of the Budget. The total budgets for Health and Education increased by 80 and 92%, respectively, but the budget for Public Works increased by 447%, Transport and Communications by 122%, and Water by 129%. The majority of expenditure towards the Infrastructure sectors is towards capital expenditure. As discussed, the Government of Timor-Leste has been unable to execute its capital budget. Thus, participants' concerns that Timor-Leste's infrastructure be improved will be difficult to address unless budget execution is addressed. This problem will be explored further in the following chapter.

On the left side, Figure 7.5 also shows (via the arrow) that improvements to Social Services will result in improvements for Disadvantaged Groups (healthier, better educated East Timorese will be less disadvantaged). If East Timorese are less disadvantaged, this will result in improvements to Security, and improvements in Security will enable an environment in which Local Development (Agriculture, Tourism and Development) can occur. On the right side, the figure illustrates that improvements to Infrastructure will also result in better opportunities for Local Development. Together, Local Development and Security, and all the improvements that generate that environment, will lead to sustainable development. There are, of course, many other linkages to be made between the sector groups as their interconnectedness is complex, but this diagram simplifies that complexity and focuses on the most pressing connections as discussed by the participants. The figure, the research method, and the comments of participants, are based on the assumption that a budget allocated to their priorities might result in improvements to all sectors. However, the following chapter will illustrate that identifying which sectors require increased expenditure is not the solution to avoiding the resource curse in Timor-Leste, but just one part of it.

This chapter explored what participants consider to be the most important decision in managing Timor-Leste's petroleum revenue; how Timor-Leste's petroleum revenue should be spent. The participants clearly expressed a vision that the quality of life for East Timorese people would be better in the future, and petroleum revenue would be used to create that vision. Spending on

health and education was their biggest priority, but participants recognised that economic development depended on improvements to infrastructure. Participants favoured spending on social services and durable capital (infrastructure) over using petroleum revenue to fund consumable capital or individual payments (which most participants were determined to avoid) because they recognised that type of expenditure would have more sustainable benefits. In terms of choosing budget sectoral priorities, the order of participants' spending priorities differed from the Government's. Spending on Police, Youth and Defence were low priorities but this research was conducted prior to the crisis in 2006 and the results may be different today. Ultimately, the results of the research painted a picture of the interconnectedness of sectoral spending to achieve sustainable development.

Chapter 8 TIMOR-LESTE'S PETROLEUM REVENUE MANAGEMENT CHALLENGES

The challenges of managing petroleum revenue are many and varied. This chapter discusses what will jeopardise, and what will sustain development in Timor-Leste. Participants' concerns about how Timor-Leste's petroleum revenue will be managed in light of the quality of its institutions are explored. Chapter Four described some mechanisms that the Government of Timor-Leste has in place to manage its petroleum revenue. These mechanisms have not been tested over time, and thus the strength of the institutions is yet to be revealed. Chapter Six and Seven illustrated participants' opinions about those plans, and highlighted some potential weaknesses. Further, Chapter Three concluded that Timor-Leste's institutional landscape is not ideal for wise petroleum revenue management. The discussion indicated that levels of human and social capital in Timor-Leste are low. Chapter Two concluded that as the 'two caps' are essential to wise petroleum revenue management and, ultimately, sustainable development, so the low levels of the 'two caps' in Timor-Leste are particularly problematic.

There is not one simple way of addressing Timor-Leste's petroleum revenue management challenges. Through exploring participants' comments about the quality of Timor-Leste's institutions, a range of ideas about how Timor-Leste can avoid the curse has developed. This chapter explores the participants' thoughts about whether Timor-Leste will be a victim of the resource curse, and then focuses on what is considered to be the main objective in managing Timor-Leste's petroleum revenue challenges; enhancing accountability and responsibility. The 'two caps', human and social capital, are essential to enhancing accountability and responsibility. Government and civil society both have a role to play, and both are yet to grow into those roles. This chapter closes with brief insights into the way forward for Timor-Leste's petroleum revenue management. There are three key aspects that require attention if Timor-Leste is to avoid the resource curse; foreign advisers, investment in people, and transparency and information.

8.1 Timor-Leste's institutions and the resource curse

There is risk that Timor-Leste will be a victim of the resource curse. To avoid the resource curse, the Government has established institutions to manage Timor-Leste's petroleum revenue including, most significantly, the Petroleum Fund Law. But, these institutions have not been tested over time. They may turn out to be strong, or they might not prevent mismanagement of Timor-Leste's petroleum revenue. Some of the potential weaknesses in the institutions were identified, in Chapters Six and Seven. Participants made other comments about the quality of

Timor-Leste's petroleum revenue management institutions, some of which are presented in Box 8.1. The comments indicate that they thought the necessary institutions had been established, but that those institutions needed to be strengthened. The former Prime Minister, Mari Alkatiri, who was ultimately responsible for the design of Timor-Leste's petroleum revenue management institutions was aware that his government could do little to ensure that Timor-Leste's petroleum revenue would be managed wisely in years to come, rather they could just 'establish the conditions' (see Box 8.1). His and other participants' comments suggest institutions alone will not prevent the resource curse, and that Timor-Leste's success in managing their petroleum revenue depends especially, if not more, on the intentions of the individuals in power.

Box 8.1 Participants' comments about the quality of Timor-Leste's petroleum revenue management institutions

My Government will establish the legal framework, the policy, based on the Norway model as a reference, which is one of the best in the world. Tomorrow there will be others in power. We will have an election in a few years. We will establish the conditions. (Mari Alkatiri, Former Prime Minister)

You can't ensure it. You can implement World's Best Practice but you can't insure against bad decisions or systems failing when immediate needs occur versus long term interests... The institutions are still evolving and there are a lot of glib salesmen to sell you rubbish. (Male Foreign Adviser)

The institutions are there, we need to build on what we've got. (Male Foreign Adviser)

We are still very weak in controlling revenue from petroleum. (Male NGO)

Firstly the Tax Revenue Service and the TSDA can ensure wastage or misuse, leakages, don't occur. Second, the MoPF develop the savings policy. They can ensure the BPA [Timor-Leste's Central Bank] deposits the revenue in the right account, and doesn't go off overseas with it. They can also ensure that the BPA is working well… Then there are the oversight institutions. A Ministry of Petroleum would have responsibility for ensuring petroleum policy is sensible. Then there are the other oversight institutions such as the Office of the Prime Minister and the Inspector General. There is also the Audit Court function of the Constitution. These are broad based supports. The question is what happens if one of these institutions goes bad. (Male Foreign Adviser)

During the semi-structured interviews, participants were asked 'Will Timor-Leste avoid the resource curse?' Their responses are presented in Box 8.2 and revolve around the quality of Timor-Leste's petroleum revenue management institutions and the intentions of the decision-makers. Some of the responses indicated determination to avoid the resource curse. Jose Teixeira's (the Minister of Natural Resources, Minerals and Energy Policy) response indicated his intention was that Timor-Leste would avoid the resource curse, and comments of some of the foreign decision-makers indicated they were impressed with the former Prime Minister, Mari Alkatiri's intentions in this regard. Leadership from decision-makers on this issue is essential and politically necessary if they wish to retain power. However, a balance between

Box 8.2 Participants' responses to 'Will Timor-Leste fall victim to the resource curse?'

Decision-Makers

No! I am committed to [avoiding the resource curse]. It's not going to. As much as one can read the future. No. It will be a hell of a struggle. Perhaps a bigger struggle than the last 24 years. (Jose Teixeira, Minister of Natural Resources, Minerals and Energy Policy)

This is a very hard question. It depends on the system of the Government and the morals of the Government. Then it [the resource curse] can happen. It is like you said, the rich can get richer and the poor can get poorer, it depends on the system. (Male Decision-maker)

No. I hope not. Because we are learning from the experience of other countries. We understand what is going on. I am aware of that. (Male Decision-maker)

Foreign Decision-Makers

I doubt it. There is no perceivable enemy. If anything they will get the Dutch disease. The Petroleum Fund might help to prevent this. (Kadhim Al-Eyd, Former Resident Representative, IMF)

There are ways to avoid it. If Alkatiri has his way, they are heading in the right direction. (Male Foreign Adviser)

To some extent, it can't be untouched by it. There is a lot of good will from the international community – they could be a success story. Then there is the negative – they have a history of institutionalised corruption from the Indonesian administration, they are newcomers to nationhood. (Male Foreign Adviser)

Participants without a decision-making role

Depends. There are ways leading to it [the resource curse]. We are a weak democratic country… I hope that we can learn from the experience of other countries such as Nigeria, Angola and others… We do think we can avoid. We can turn it into bless (sic) instead of a curse. (Male NGO)

No. The problem for us is we don't want to be cowardly. How can we stand up and say we will be victims? ... Yes, but we won't stand up and wait to die. How absurd for us to do that when we have fought for so long. This is a silly question. We need to go and get good knowledge. If we don't use this knowledge then it is a problem. We can be victims of something else – globalization for example, yes. But we shouldn't be victims of something if we have the knowledge. Not this. No. Not victims from natural resources. We must see things with a deeper heart, with knowledge and references and information. 100% No. (Male Bureaucrat)

leadership and acknowledging the risks, which the foreign advisers do, rather than silencing dissent is another challenge for the decision-makers.

Another theme in the participant's comments was the idea that Timor-Leste could avoid the resource curse because they had seen, or knew, what happened to other countries that exploited their natural resources and fell victim to the resource curse. Participants thought that they would learn from those countries' experience and avoid the resource curse. But, as Xanana Gusmão pointed out when he made opening remarks at the Workshop on Transparency and Accountability in the Governance of the Oil Sector, learning from others is not an easy journey:

> Sometimes we commit a folly in thinking that, because we know of other cases of corruption in other countries, this is already sufficient for us to feel immune against these social and political diseases. And when people from other countries help us by reminding us of this so that we can prevent it, we feel uncomfortable as though they were insulting us… Unfortunately, to create a culture of transparency and accountability, whether in state

> or private institutions, will always take longer than to build platforms for oil and gas explorations and pipelines. (Gusmão 2004b)

Gusmão's comment confirms the need to acknowledge the challenge of managing Timor-Leste's petroleum revenue and highlights the danger of being too sure.

The sentiment of other participants' responses ranged from hopeful to passionate. Timor-Leste becoming a victim of the resource curse was considered an absurdity to one participant, given the struggle Timor-Leste had been through to gain its independence. The passion of some of the other participants' comments was reminiscent of the East Timorese peoples' struggle for independence as if both were part of the evolution of their identity. Viewed in the context of participants' comments elsewhere in this thesis it appears that, having won that struggle, the East Timorese energy and drive have been re-directed towards fighting (Australia) for their rights to the petroleum resources. That determination is entwined with their struggle for true financial independence and their desire to avoid the resource curse. In other words, the determination of the East Timorese people, including the decision-makers, to ensure Timor-Leste's viability as a state, and to avoid the resource curse, is fierce.

The participants' comments about the resource curse reiterated statements made about the quality of Timor-Leste's institutions. The institutions are in place, but still weak being 'newcomers to nationhood', and in some cases over burdened. But, no matter how strong the institutions are, some rent-seeking[171] individuals may disregard the rule of law, or those in power may change it to meet their rent-seeking ends. Kadhim Al-Eyd explained that no matter what systems are put in place, the law can be changed, as he experienced in his home country of Iraq in the 1950s:

> Iraq is my country of birth. Oil and gas production began there in the late 1920s. The revenue went into the capital budget. Every penny went into that account – the money was spent on bridges and roads… In 1958 there was a coup and the king was killed. They began to buy weapons from Russia. All the money was being spent. The lesson here is that the law can be changed. (Kadhim Al-Eyd, Former Resident Representative, IMF)

But, Al-Eyd added that having the Petroleum Fund might help Timor-Leste to prevent the Dutch disease. Thus, the participants' comments suggest Timor-Leste's institutions alone will not prevent the mismanagement of petroleum revenue, or the resource curse. As one participant said, 'It depends on the system of the Government and the morals of the Government. Then it [the resource curse] can happen' (Male Decision-maker). Timor-Leste's institutions that have been established to enable accountability and responsibility in managing petroleum revenue depend on the intentions of the decision-makers for their success. Thus, whether Timor-Leste

[171] Rent-seeking was explained in Chapter Two, and is when an individual, or a group, searches for ways of benefiting by manipulating the institutional environment to their own (usually financial) advantage, as opposed to participating in established and legitimate means of creating wealth.

can avoid the resource curse depends on the human and social capital that is needed to strengthen and support those institutions.

8.2 Accountability and responsibility

Accountability and responsibility are key factors in the wise management of petroleum revenue. Timor-Leste's Petroleum Fund Law is an example of an institution established to avoid the resource curse, but without measures to ensure accountability and responsibility, the Petroleum Fund Law and other institutions designed to manage Timor-Leste's petroleum revenue will remain weak. Holding the decision-makers accountable is the responsibility of civil society, but a challenge for Timor-Leste is how to develop accountability and responsibility. The success of petroleum revenue management, in this regard, is dependent on stocks of human and social capital. This section begins by exploring participants' comments about problems that could be resolved by enhancing accountability and responsibility. Then, the relevance of human and social capital to an understanding of how Timor-Leste's petroleum revenue is managed is explained.

When participants discussed the kinds of problems that may negatively impact on the wise management of Timor-Leste's petroleum revenue they gave examples of both weak productive institutions and strong destructive institutions. Their comments are presented in Box 8.3 and Box 8.4 and they revolve around poor financial management and corruption, respectively. In terms of the relationship between natural resource revenue and the quality of institutions described in Chapter Two, such a scenario (having weak productive and strong destructive institutions) has the potential to render Timor-Leste resource cursed.

Box 8.3 presents some examples of poor financial management identified by participants. They identified problems with spending Timor-Leste's petroleum revenue because the State institutions are too weak to execute the Budget, and that the economy is not well developed enough to absorb expenditure. Chapter Three explained that, because of the weaknesses in government ministries, the Government has been unable to execute the Budget in its entirety. This has caused the State's liabilities to grow each year such that the 2006-2007 financial year began with US$48 million remaining unspent from previous years. Other participants were concerned about the ability of Timor-Leste's economy to absorb the revenue. Until Timor-Leste's economy develops further, there is only so much spending that can occur. The problem of budget execution means that the Government has a problem spending the petroleum revenue, but the problem of absorption means that spending too much would be detrimental. As one Foreign Decision-Maker pointed out it will be some time before spending too much becomes a problem. These kinds of problems indicate that some of Timor-Leste's productive institutions are weak.

Box 8.3 Participants' comments about poor financial management

Problems with budget

No. As you can see from the last budget. Some Ministers use less than 50%... That means that others spent over 50% because they ended up with a deficit. This shows we don't have the capacity for implementation. (Fernando 'Lasama' de Araujo, Partido Democratico)

In the last budget the National Electoral Commission was completely omitted because the Minister forgot to include them in the Budget. (Foreign Adviser Female)

The ability of Timor-Leste's economy to absorb expenditure

Money is not the problem. We will have a lot of it. The question is how to absorb it. (Jose Teixeira, Minister of Natural Resources, Minerals and Energy Policy)

In terms of spending, the proportion of what is to be spent needs to be determined… The best way to go is to spend as much as you can get up to the absorptive capacity of the economy and the Government. That is, as much as they can spend before money is being wasted… Right now, in Timor, consumption is not at the desired level. There is quite a large space in which spending can continue to occur before inflation occurs. How long that would last is another question. It takes about 1-2 years before money begins to be wasted. After that, absorptive capacity grows more slowly. At which point it is time to save some of that money. (Male Foreign Adviser)

According to participants, corruption is also a problem in Timor-Leste and thus, potentially, a problem for petroleum revenue management. Participants' comments about corruption, including examples of corruption, are presented in Box 8.4. Most of the participants were aware of the role of the Office of the Inspector General and mentioned that 51 cases of corruption had been investigated[172]. But, the existence of the Office of the Inspector General will not prevent corruption.

Participants gave many examples of corruption they had heard about. Institutions, such as Police, Defence, Border Control and the Justice system, were singled out as being vulnerable to corruption. Some of the examples were small-scale, but some participants indicated that corruption was large scale. Regardless of the scale, participants were concerned that the mentality of corruption is detrimental to Timor-Leste. The notion that corruption is an institutional legacy of the Indonesian occupation, as discussed in Chapter Three, was reiterated by participants. One participant said that a culture of corruption, collusion and nepotism (KKN) was developed during Indonesian times and to have 'someone at a high level doing favours for

[172] The Inspector General was a participant in this research and he said 'The Office of the Inspector General was established in July 2000… Since the beginning we wanted to guarantee transparency and accountability. The main objective of the Inspector General's office is to ensure transparency and accountability in the Government of Timor Leste. The functions of the office include: to make investigation, to make inspection, to conduct outreach (campaign, workshop, to show what happens when there is corruption, to conduct training). We are very optimistic.' (Mariano Lopes da Cruz, Former Inspector General)

Box 8.4 Participants' comments about corruption

Examples of corruption

Police as law enforcement – some are involved in trafficking, smuggling, goods, cigarettes, mobile phones, women… Border control. Some are involved in bribes. The law would put them in jail for 2.5-5 years but then they would be free again. FDTL are like the Indonesians, involved in business. (Male NGO)

Yes, it [corruption] is large scale… Bad governance. I have a fear that the institutions will be further weakened. The courts, the parliament – they don't have the necessary checks and balances. Trafficking will increase. East Timorese women will be trafficked out of the country in the future. An issue, now, that has the potential to be resolved is the abuse of power within the police force. They have organised sex rings within the police and there has been harassment of prostitutes. (Foreign Adviser Female)

The judicial system is bad. The rule of law sees cases as projects. They manage cases according to their own interests/point of view. The courts are not a place for selling truth and justice. They are corrupt people from the prosecutors to the judges. They are all corrupt. (Male Church Leader)

Scale of Corruption

If in the tender those that are in power facilitate family members or friends impeding or causing those who have the right to tender… this is corruption and this is creating the mentality of corruption. If a container arrives at customs. If there is a delay in clearing and there is another $200. Creates a corrupt society. Now we can't say corruption is millions of dollars but this form of life, will come to produce all of this in the future. (Xanana Gusmão, Citizen of Timor-Leste)

Its like blood – it is in everyone? We can't cut it out completely but we can make it close to zero. There are regulations. I think the possibility is 50/50. (Male Bureaucrat)

Corruption is going to be a continuing problem and associated with that is reduced opportunities for equality and as a result an increase in the gap between rich and poor. The upper middle class will have opportunities but others won't. (Foreign Adviser Female)

Indonesian Mentality

Corruption is the most important issue. This problem came from Indonesian times. It is generational. We must talk openly to resolve this issue. (Female Bureaucrat District)

Timor is a new country. Transparency measures are not yet in place. Let me see into the mentality of the people. Indonesia is the most corrupt country. A patriarchal society. Bad things were carried out by them. (Male NGO)

Because of the heritage of Indonesian occupation, culture was developed around having a patronage, someone at a high level doing favours for you, not following the proper process – KKN [corruption, collusion, and nepotism]. (Foreign Adviser Female)

The Limits of Legislation

Corruption is related to mentality. Even if there is good legislation. (Male NGO)

Corruption starts at the bottom and goes right to the top. Enforcement is required. If they do it and they get caught then there should be penalties. It is the only way. To show that you are not immune. What has happened to these everyday Jo Bloggs? The Customs Officers that have been caught? Have they been prosecuted? Or did they just lose their job? (Decision-maker Female)

you' was common in the past and has carried through to independence. Despite the Government's talk about addressing this problem of corruption, and that they have established mechanisms such as the EITI, participants were concerned that not enough was being done to address the problem. Xanana Gusmão was concerned that even small-scale corruption perpetuates this mentality of corruption and could create a corrupt society. Another participant felt corruption would be an ongoing problem that had flow-on effects and would reduce

opportunities due to an increasing gap between rich and poor. Thus, there is little doubt from the participants' perspective that corruption is a strong destructive institution that needs to change.

As discussed in Chapter Two, corruption is one of the destructive informal institutions, and these are often the most difficult to change. Participants noted that it will take time to change the mentality of corruption ('it is generational'), but expressed optimism that corruption would be prevented. They acknowledged that legislation, alone, can not prevent corruption, particularly if the institutions responsible for prosecution are weak, and some participants were concerned about the lack of justice in this regard. Two participants made comments that indicated they did not have faith in the justice system to prosecute instances of corruption, and they were not sure that the penalties were appropriate. Their comments suggested that they were unsure whether abuses had been prosecuted and that they thought corruption would not be addressed unless prosecution was meaningful. As noted in Chapter Four, only ten of 78 reports of maladministration have been prosecuted. Overall, the participants' comments and the quality of the institutions of the Office of the Inspector General, and the Office of the Ombudsman for Human Rights and Justice (discussed in Chapter Four) do not instill confidence that allegations of corruption are being responded to adequately. Enhancing accountability and responsibility may weaken the destructive institution of corruption and strengthen Timor-Leste's productive institutions over time. Human and social capital are essential to that transformation. Without them the Government and civil society do not have the necessary knowledge and desire to ensure that the Government is accountable and that civil society has a responsibility to hold them to account.

8.2.1 Human capital

Timor-Leste's stocks of human capital are limited, and this is a challenge which, if not addressed, could lead to the resource curse. Chapters Three and Four highlighted several examples of a lack of human capital within Timor-Leste's institutions. Chapter Two explained that human capital, in the form of a group of highly competent senior bureaucrats, is common to countries that have successfully avoided the resource curse (see page 26). Thus, Timor-Leste's apparent lack of human capital may be detrimental to its plans to avoid the resource curse. The participants in this research also talked about the lack of human capacity in responding to questions about how Timor-Leste should manage its petroleum revenue. As explained in Chapter Two, human capital is the stock of knowledge, skills, experience, and training within individuals. When participants in this research talk about a lack of human capacity, the assumption has been made that they do not mean that individuals do not have the ability to learn, but that Timor-Leste's stock of knowledge and skills, or human capital, has not yet been developed.

Participants referred to a lack of human capital, or capacity, in general. But, there are different forms of human capital which will need to be developed in different ways. In order to manage Timor-Leste's petroleum revenue wisely, stocks of human capital must be developed throughout the Government bureaucracy so that petroleum revenue can be spent wisely. Small stocks of human capital in the Government are a reflection of the lack of experience of most of the civil servants. Rarely have civil servants worked in positions where they have held responsibility or authority for the management of government programs and expenditure (as discussed in Chapter Three). There are also very few individuals who have experienced working as a Parliamentarian or a Minister. So, most East Timorese are on a steep learning curve in their respective positions.

Human capital is also needed in terms of investing Timor-Leste's petroleum revenue, as discussed in previous chapters. For example, the people responsible for managing the Petroleum Fund's investments on behalf of the Central Bank require the capacity to do that. Some participants identified the current level of skill as basic, and some recognised that a more technical set of skills and knowledge will be required to run the country, specifically in regard to petroleum revenue management. During the semi-structured interviews, participants were asked if the Government had the capacity to manage Timor-Leste's petroleum revenue and their responses varied. Box 8.5 presents a selection of the participants' responses. Some thought the Government lacked the capacity, whilst others recognised that the capacity to learn exists and were optimistic that even if individuals did not have the skills and experience, they had the appropriate intentions and that leadership was important. Some participants suggested that human capital would be created through experience, and one participant said 'I think if there is money there they will have the capacity to manage it' (Female Bureaucrat), thereby intimating that a demand for human capital would somehow create a supply of it. Overall, participants gave the impression that they were determined to manage Timor-Leste's revenue well because it belonged to them, and they were responsible for the outcome.

Human capital is also required more broadly, in terms of an understanding of the management of petroleum revenue within civil society. The development of human capital amongst civil society is important because individuals outside of the Government have a responsibility to hold the Government to account. The low levels of literacy and poor formal education services mean that stocks of human capital (particularly in terms of understanding petroleum revenue management) in civil society are even smaller than within government. But, if Timor-Leste is to avoid the resource curse, greater knowledge and understanding of petroleum revenue management in civil society, both within NGOs, the media and more generally, is needed. As at March 2007, Timor-Leste has US$1.2 billion in the Petroleum Fund. The chance that this revenue will be mismanaged will be much diminished if the media and civil society pay attention to what happens to it, and what is happening to the institutions and individuals that make decisions about it. The problem of a lack of human capital in civil society is more difficult

to address because donors are not as interested in supporting and training non-government organisations, local media or the public in general, as they are state institutions.

Box 8.5 Participants' responses to 'Do you think the Government has the capacity to manage the petroleum revenue?

Leadership is the most important thing. Good policies and good procedures. We can develop the capacity of institutions and we also need to develop the capacity of individuals – their integrity, skills, knowledge and courage. (Male Foreign Adviser)

You must understand this is a new government. They don't have the experience. But 'they make an effort'. (Male Bureaucrat)

Yes, I believe that they have. I believe in the good will of each person. But the mechanism has to be worked out. (Male NGO)

I believe [they have the capacity]. I have confidence in them, in Alkatiri. They are working hard to rebuild the system because it was destroyed. From '99 until the transition. This is the first time the people have managed on their own. We are the owners of this country. It is a learning process. (Male Decision-maker)

This is a hard question because I like to give people the benefit of the doubt. I have question marks. On the one hand I would like to think they could manage the funds well. They are still at a learning phase in terms of capacity. (Foreign Adviser Female)

When we have experience it is a good teacher (Male Decision-maker)

The funds from the donors are transparent so we have a lot of experience to manage this issue. (Female Bureaucrat District)

They misuse the money because of lack of capacity. They don't have any accountability. (Male Church Leader)

Before no one cared about money because it came from elsewhere. Now we are responsible for our own funds. (Mariano Lopez da Cruz, Former Inspector General)

The danger of a lack of human capital, particularly in the Government, is that petroleum revenue is more likely to be mismanaged or misappropriated (as per the examples at the beginning of this section). Participants suggested that the lack of human capital (of all kinds) should be considered before decisions are made about Timor-Leste's petroleum revenue. When participants talked about decisions, such as 'when should Greater Sunrise be exploited?', 'should a pipeline be built to Timor-Leste?', and 'should a National Oil Company be established?' they referred to the State's capacity to do those things being an essential prerequisite. There were some participants who doubted the Government's capacity to manage the revenue from petroleum resources successfully and they thought it might be better to wait until capacity had developed, and corruption had been dealt with, before some projects proceeded. For example, Xanana Gusmão said the best time to exploit Greater Sunrise 'would be when the State has the capacity to manage that money' (Xanana Gusmão, Citizen of Timor-Leste), and Mari Alkatiri said 'If we had $1.2 billion it could be a disaster for this country. I say could, not would. The management capacity is weak. There would be corruption' (Mari Alkatiri, the former Prime Minister). As it turns out, the Petroleum Fund now has well over

US$1 billion, and despite that the State does not have the local human capital to manage the money to the extent that it would like, and Xanana Gusmão recently advocated spending more of it (Fitzpatrick 2007).

8.2.2 Social capital

Chapter Two confirmed the contribution of social capital to the wise management of natural resource revenue. Social capital is an essential component of both destructive and productive institutions which affect natural resource revenue management. Chapter Three exposed a lack of linking social capital in Timor-Leste. That is, there is suspicion and a lack of trust between the Government and civil society. At the same time, bonding social capital appeared to be well supplied in Timor-Leste. But, the bonds amongst family members and gangs have perpetuated destructive institutions, such as corruption, nepotism and violence as a means of expressing political dissent. Thus, this section explores participants' comments about social capital, in terms of their confidence, or trust, in the Government and decision-makers and the level of engagement between government and civil society.

The participants' comments surrounding the relationship between civil society and government, and the opposition and government, indicate a lack of bridging social capital and, in particular, a destructive sense of differentiation between 'us' and 'them' (the others). In Chapter Two, Offe and Fuchs (2002) were quoted as saying trust is the 'absence of fear or suspicion concerning the likely behaviour of others'. The comments of participants presented in Box 8.6 indicate suspicion, and a lack of trust of others. One participant said it is 'an East Timorese thing' (Decision-maker Female). Although some participants had confidence in the Government, they were mostly bureaucrats. Other participants expressed a lack of confidence in the Government. This is not surprising given Timor-Leste's institutional history. Being colonised by Portugal, occupied by Indonesia, and administered by the United Nations, the East Timorese have a history of being governed by 'others' and the word '*malae*' (foreigner) is often used in a derogatory way. Timor-Leste's history has played a big part in the strengthening of bonds between group members because it was necessary for individuals to generate these kinds of networks of trust in order to survive. At the same time, they learned to mistrust those in power because the vested interests of the decision-makers did not always lie with the East Timorese. These are informal institutions or behaviours which will take time to change.

This mistrust of others has remained and today leads to suspicion, ill-founded accusations, and rumours, particularly from members of political parties opposing each other. Political campaigning requires parties and candidates to differentiate themselves in order to win votes, and thus expressing suspicion or mistrust of other candidates, and instilling fear in voters that causes them to cast their vote in support of the candidate are expected. The election campaigns in Timor-Leste, between April and June 2007, provided a forum for candidates to express

discontent that petroleum revenue had not reduced the level of poverty or improved basic services in Timor-Leste to a large extent. A number of candidates (e.g. Fernando 'Lasama' de Araujo and Xanana Gusmão) differentiated themselves from Fretilin, the ruling party, by declaring they would spend the revenue from the Petroleum Fund.

Box 8.6 Participants' comments about perception and suspicion

> It is an East Timorese thing – they are suspicious, they think the money will be spent on a few individuals. (Decision-maker Female)
>
> The interesting thing is that there is the assumption that anyone who has the opportunity to steal will do so. There are questions about the 'exactness of measurement'. They are very suspicious of the oil companies and have questioned the integrity of the data and information coming from the oil companies. Parliamentarians and others ask 'How do you prevent oil companies from stealing?' For example, how do we know that the amount of oil being produced by the oil companies is what they are really taking out of the ground? I explained to them about the technology that is used to monitor these things. That the measurement of the meters is certified. That there are neutral controllers. That there are international companies who specialise in this. That this is a joint activity, one person is paid by both sides. That the joint partners are just as interested in metering. There is tremendous suspicion. They think that everyone who could steal does… This is part of the problem; there is a tendency to think that anyone who has the power to steal will do so. (Einar Risa, Commissioner and former Executive Director, TSDA)
>
> Sometimes what they think is KKN [Corruption, Collusion and Nepotism] is not related to corruption – for example, if they don't like the Government's policy they say it's KKN but I explain to them it's not KKN. Corruption is when the officer abuses their power for the benefit of others, their relatives or friends. (Mariano Lopez da Cruz, Former Inspector General)
>
> I don't have confidence in the current government because they will mismanage the revenue. (Maria Paixão, Partido Social Democrata)
>
> Not at all [in response to 'Do you have confidence in the Government?']. (Fernando 'Lasama' de Araujo, Partido Democratico)

These elections followed a period of unrest that began with the crisis in 2006. The crisis arose because of the ineffectiveness of some state institutions, such as the Police and Defence, and generated protest marches campaigning for the removal of government, in particular, the Prime Minister Mari Alkatiri, who one participant suggested was 'very, very good. But he is perhaps not open enough' (Male Foreign Adviser). The protestors were not pleased with the Government's progress, but they appeared not to be interested in addressing their concerns diplomatically or democratically. Rather a divisive East-West (of Timor-Leste) distinction was generated and violence was the protestors' mode of expression. To make matters worse, many of the perpetrators of the violence have not been bought to justice. The lack of resolution and justice for victims of the crisis and many events of the past (including crimes against humanity perpetrated by senior Indonesian officials) encourages criminal behaviour. The way in which formal institutions have been abused or subverted for political purposes has destroyed many people's respect for the rule of law which does not augur well for Timor-Leste's future. The

lack of justice perpetuates mistrust of decision-makers and further erodes stocks of social capital. Instead of formal resolution of grievances and open debate about social issues, the most recent period in Timor-Leste's history (2006-2007) has been characterised by a lack of civil society's participation in the formal institutions of state. However, the participants in this research have clearly stated they would prefer government and civil society engage with each other to make decisions.

When participants were asked about the process by which petroleum revenue management decisions should be made in Timor-Leste, their responses overwhelmingly supported the need to include civil society and to improve engagement between citizens and the Government. Box 8.7 presents a selection of the participants' comments about consultation and participation in decision-making. Participants made suggestions that the Government should be open to criticism, respect minority opinions and create space for dialogue with the people. The participants intimated this was their vision of the future, and that this kind of consultation and participation in decision-making did not happen now. Yet, the Government has attempted to involve civil society in making decisions about Timor-Leste's petroleum revenue.

Box 8.7 Participants' comments about consultation and participation in decision-making

They will have beams of light in their faces because of their participation. (Male NGO)

We will need a few key people as watchdogs. We need an active community that is continually watching government. (Decision-maker Female)

It is necessary to involve the local community… Government should make a public meeting. Listen to the people. Take what they say into account in their decision-making. Inform the people and let them have their say. Informed. Involved… We need to dialogue with the people and respond to their questions. (Male NGO)

A process which involves… not just the Government. It will involve the people of Timor Leste. The most important part is involvement of civil society. The board [for managing petroleum revenue] should be a group of everybody… But the Government itself is not enough. Should be alongside civil society. These are the two key elements. You can't separate them. (Male Decision-maker)

We need to consult with civil society. NGOs. Representations of religion, catholic and others. After their input… How do they input? We will have open consultation. This is done in two ways. In government we can talk to people who you have influence with. You can express your opinion. The other way is like in Portugal it is called *Caixa General* and in Indonesia it is called *Kotak Pos* 1000 [a suggestion box]. Citizens can say what he or she thinks about development. (Male Decision-maker)

My party makes participatory democracy. People should be consulted for this decision… Have a draft. Socialise to the people. Hear their comments. Parliamentarians should be alive, talk to the people, and not sit in their office. (Fernando 'Lasama' de Araujo, Partido Democratico)

The plans outlined in Chapter Four illustrate that the Petroleum Fund Law was developed through a process of consultation, and that the Government responded to the positive feedback from the submissions in support of the Government's proposed Petroleum Fund Consultative

Council (which provides a formal mechanism for consultation in the management of Timor-Leste's petroleum revenue). However, as discussed in section 2.3.3, providing the mechanisms by which citizens can participate in decision-making does not necessarily result in participation. In the case of the Petroleum Fund consultation, there were few East Timorese who had the skills and knowledge to participate in the process (because of a lack of human capital in civil society). Rather, the consultation was a socialisation[173] of the Government's plans for managing Timor-Leste's petroleum revenue (Drysdale 2007). Instead of being open and responsive to civil society's feedback about their plans (other than the Consultative Council) and engaging in a genuine debate about the options for managing Timor-Leste's petroleum revenue, the Government ensured that the process was representative, and that everyone learned about how the Government planned to manage their petroleum revenue. Some participants suggested that consultation was not useful if a lack of human capital meant that civil society was unable to participate in meaningful way. Further, some suggested that the Government should make decisions without consultation if civil society did not understand. One bureaucrat explained that consultation may lead to instability if participants did not have the capacity:

> There are two schools of thought [as to whether civil society should be involved in decision-making]. One [is] open management. But not everything can be open. Some has to be closed. In a country like East Timor, 90% don't understand. They will react. There will be instability. So we need to use closed management. There is no need to involve society. We can involve society in the end, in the audit process, through an independent body. (Male Bureaucrat)

In this sense, a lack of human capital could impact on the potential to generate social capital and some participants effectively suggested that the imbalance of human capital between government and civil society is potentially destructive. However, if the Government's attempts to consult are not effective as a form of consultation, but do build knowledge about petroleum revenue management in civil society then this positive outcome should be acknowledged. If civil society benefit from the Government's attempts to consult in this way, consultation may have the added benefit of building social capital between government and civil society. Ultimately, the participants' desire is that civil society and government can engage meaningfully and respectfully to openly debate and make decisions about Timor-Leste's petroleum revenue.

[173] 'Socialisation' is a term commonly used by East Timorese which could be defined as a process of community learning or increasing the capacity and knowledge of the community.

8.3 The way forward

This research has highlighted many ways in which Timor-Leste is vulnerable to the resource curse. As of March 2007 Timor-Leste's Petroleum Fund held US$1.2 billion, which is a relatively huge financial reserve that presents opportunities for Timor-Leste to develop sustainably. But, the Petroleum Fund also presents temptation for those who would divert the resources to meet their own ends, and detract from the benefits to the greater good. The decision-makers, the people that work in government and the people that hold them to account face many challenges in developing the human and social capital necessary to manage Timor-Leste's petroleum revenue wisely. The stakeholders will need to work together to manage the risks inherent in a huge influx of natural resource wealth. This chapter closes by focussing on three aspects of petroleum revenue management that are not the only means for Timor-Leste to avoid the resource curse, but will contribute significantly on the journey; foreign assistance, investment in people, and transparency and justice. These topics are considered in brief but each one is worthy of further research.

8.3.1 Foreign advisers

The lack of human capital within Government in Timor-Leste was evidenced in section 8.2.1. One way of temporarily resolving the lack of human capital in State institutions is to employ foreign advisers, to work with, and to transfer their knowledge and skills to, local staff. Timor-Leste's institutions have benefited from foreign assistance of this form for almost eight years, and participants expect that Timor-Leste will require foreign advisers to develop human capital for years to come. However, one indicator of the success of skills and knowledge transfer is a decline in the number of foreign advisers (suggesting that the capacity of the local staff has developed such that they are confident to do the job they were working with the foreign adviser to do). In other words, supplementing local human capital with foreign human capital is only a short-term solution, and should be designed as such.

Box 8.8 presents a selection of participants' comments about the need for foreign assistance to support and develop Timor-Leste's human capital. Timor-Leste can, and has, purchased the assistance of foreign advisers with their own financial capital. One foreign adviser pointed out that with foreign assistance they can increase their human capital, and be more effective in managing their petroleum revenue as a result. Overall, participants recognise that Timor-Leste will benefit from foreign personnel working alongside East Timorese, particularly in technical and managerial areas, but they have some concerns about the quality of the assistance. One participant explained (using an example of providing assistance to agriculture) that they want to ensure the assistance that is provided is sustainable, so that Timor-Leste can manage its own administration one day:

> You can give money to agriculture but you also have to increase their capacity. A lot of people come and talk about agriculture, but they make Timor a guinea pig, they are not telling the people how to develop their skills. They have basic capacity but how can they increase it. Not just fisheries and forests. Not only talking. We have to increase the capacity of the people. This is the way to teach people how to be independent. (Female NGO)

Box 8.8 Participants' comments about foreign advisers

Foreign advisers can support and develop Timor-Leste's human capital

At the Ministerial level they do [have the capacity to manage petroleum revenue]. We can buy the skills we don't have. And we are doing that. (Jose Teixeira, Minister of Natural Resources, Minerals and Energy Policy)

There is not enough capital in this country. In terms of human resources, they must rely on money and skills from outside[174]. (Einar Risa, Commissioner and former Executive Director, TSDA)

Yes, it can [manage the petroleum revenue], it doesn't matter who does it. (Kadhim Al Eyd, Former Resident Representative, IMF)

Yes, they do [have the capacity to manage petroleum revenue], with help. They will need help for a long time to come. (Male Foreign Adviser)

They will need foreign assistance for many generations to come, based on experience of other countries. In effect, they are starting from a lower position than Korea in the 1950s. Because of their lack of human resources. Yes, this is the key issue [human resources], Education… They will [develop their capacity], with the assistance of foreigners. (Male Foreign Adviser)

Quality of foreign advisers

What they are going through now is small relative to what's going to happen. Their national capacity is not big enough. They will need international advice for at least 10 years. I am bothered by short term funding. The grant has been wasted by looking for the next grant… No [they don't have the capacity]… They need experience to have the capacity to implement these programs. They will need a continuing expat presence. Experience is critical. (Male Foreign Adviser)

I hope that those people are not here for their own interests but to make a good program. (Female Bureaucrat)

Not all foreign advisers are hired on the basis of their ability to train somebody to do their job, but to do that job themselves, and this model does not encourage sustainability. Further, participants explained that foreign advice that does not take into account the local needs and aspirations does not encourage East Timorese independence. Participants made comments of frustration about the quality of assistance, such as 'This system does not reflect the heart and soul of the East Timorese people. Most of the systems are photocopied from other countries. They don't reflect our ideas. We are not politically or economically independent' (Male Church Leader). These ideas and comments expand on a common theme throughout this thesis; that the participants' have a desire for Timor-Leste to be truly independent, culturally, politically and

[174] In reviewing this comment in 2007, Einar Risa said 'The country is no longer in great need of money from the outside. This statement about money was valid two years ago'.

financially. Thus, a challenge for the donors is to provide assistance and advice that works towards that end.

8.3.2 Investment in people

Relying on foreign assistance to develop human capital to manage petroleum revenue within state institutions is one option but using foreign advisers is not the solution to developing human capital more generally. The lack of human capital, discussed earlier in this chapter, will be resolved, partially, by prioritising investment in people and the most obvious way to do that is to invest in the formal education sector. In Chapter Seven, the participants clearly articulated that spending petroleum revenue on education was a priority[175]. The objective here is not to articulate how the formal education sector should be improved, as others have done (e.g. Supit 2007; World Bank 2003b). Rather, the focus is on acknowledging that improvements to the education sector will ultimately enhance petroleum revenue management in Timor-Leste. At the most basic level, improving formal and vocational education services in Timor-Leste will result in a more literate, educated population, which will have the capacity to observe and articulate their opinions about the Government's decisions in relation to petroleum revenue management. As described in Chapter Three, Timor-Leste's low literacy rate and the numbers of East Timorese with a basic high school education affect many aspects of society.

The 2006 crisis highlighted the problem of the large numbers of unemployed young males. Although a high school education would not resolve the unemployment problem (for many reasons including that jobs must be created to meet the demand) it would reduce the problem of these young men having nothing to do whilst they are of school age (which undoubtedly exacerbates their frustration). Improving education would also reduce the potential for instability in this way. Increasing literacy and reducing the potential for instability are key factors in avoiding the resource curse in Timor-Leste.

The benefits that will flow from better education in the tertiary sector will also dramatically enhance the kind of human capital that is needed within government (to manage petroleum revenue) and within civil society (to hold the Government to account). As discussed previously, Timor-Leste is desperately in need of a 'bureaucratic mafia' or a highly-trained and experienced senior civil service. This will take some time to generate, and the tertiary sector in Timor-Leste is far from a priority in the eyes of the Government or donors, who began by focussing on primary education, and are now designing assistance to the education sector around vocational education and tailoring high school education to vocational needs (e.g. Cole 2007). Thus, at this time East Timorese with the ability to undertake tertiary education must suffer poorly resourced

[175] A desire to prioritise spending on education is not unique to Timor-Leste. On Australia's Insight television program (Brockie 2007) a discussion about how the Government should spend its $10.6 billion budget surplus revolved around the need to fund better education services.

East Timorese universities or seek scholarships to attend universities overseas (primarily in Indonesia and Australia). Timor-Leste's greatest challenge in terms of their human capital, currently, is that the pool of well tertiary-educated is so small that the most talented are highly sought after and often job-transient. That is, individuals with skills and knowledge are drawn in several directions and their investment in organisational knowledge is limited[176]. A number of the participants, particularly talented government bureaucrats, confided that they wanted to leave their position to do further study. This commendable desire for personal development occurs at the short-term expense of the institutions which they serve, but theoretically will benefit the institutions to which they return once they have finished their study. The challenge for government and non-government organisations is to foster that personal development and retain the organisational knowledge concurrently.

Developing human capital within civil society is difficult because the members of civil society are not bound within a small number of institutions, their numbers are greater and their needs are broad. Civil society is made up of many formal and informal institutions. The most relevant to management of Timor-Leste's petroleum revenue include non-government organisations, community organisations and the media (print, radio and television). Donors have contributed to capacity development in civil society by establishing programs which have different approaches and vary in terms of their success (e.g. *Belun* is an East-East Timorese NGO that seeks to bolster civil society in Timor-Leste and is supported by USAID, amongst other donors, and the East Timor Community Assistance Scheme[177], is a program funded by AusAID). Some programs provide funds, whilst others are more involved in the day-to-day business of supporting NGOs (such as the Australian Volunteers International program). Providing funds assistance to struggling NGOs is welcomed, but to create a vibrant and engaging civil society longer-term programs are needed that target individuals. A program which teaches leadership or one which initiates long-term mentoring relationships would be beneficial in developing human capital on an individual basis (as foreign advisers do in state institutions). This approach contrasts with the short-term funding of organisations approach, but is worth considering given the need for individuals to lead and drive those organisations. Further research into the needs of civil society in Timor-Leste is required to seek creative solutions to the problem of how human capital in civil society can be developed.

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[176] For example, Joao Saldanha and Dionisio Babo Soares, both with PhDs, have turned away from academic endeavours into politics. Saldanha left the Timor Institute of Development Studies (a non government institute for research and training) and heads the Republican Party, whilst Soares was doing research with the Asia Foundation and has since taken up a position as the Co-Chairman of the Commission for Truth and Friendship, and is the Secretary General of the CNRT Party (National Congress for the Reconstruction of East Timor).

[177] ETC.AS is a Small Grants Scheme that supports community initiatives throughout East Timor, with a particular focus on building the capacity of community based organisations in financial and activity management. In 2002-03, ETC.AS supported 54 activities. The main sectors supported were water supply and sanitation, education and agriculture. (The Parliament of the Commonwealth of Australia 2003)

8.3.3 Transparency and information

The suspicion and mistrust that exists between Government and civil society (highlighted in section 8.2.2) is the most significant challenge that Timor-Leste faces in managing its petroleum revenue wisely. Chapters Two and Four described the importance of transparency, and provision of information, in managing Timor-Leste's natural resource revenue, and avoiding the resource curse. If information is not made available or if the information made available is not genuine, or subverts the truth (or is perceived to), an environment in which the Government is always perceived to be undermining the good of the people will prevail. That environment may lead to ongoing conflict. For this reason it is important to focus on, and to improve, the relationship between the Government and civil society in Timor-Leste.

This research has explained there are several mechanisms by which information, about how petroleum revenue is managed in Timor-Leste, is provided. Those mechanisms need to be tested and strengthened, but there are many other mechanisms and institutions that could be created to enhance transparency and accountability in the wise management of Timor-Leste's petroleum revenue. For example, the flow of information between government and civil society could be enhanced through government information offices, throughout all districts, that are well resourced and networked to supply information and respond to questions and queries about government services, including the process of managing petroleum revenue. Once the mechanisms are in place it is necessary to assist civil society to participate in those mechanisms. For example, the Ministry of Planning and Finance now publishes its Treasury accounts on line so citizens can observe annual budget execution. However, citizens need to develop the knowledge to interpret those reports (which is where the development of human capital is important). Further, the publication of the report is not an end in itself. If the citizen wants to question or discuss the information, who do they approach? The process and the relationship (between Government and civil society) are not static; they will continually transform and will develop over time.

The participants' comments confirmed the importance of transparency and information, as they expressed 'hunger' for information and desired the opportunity to observe the management of Timor-Leste's petroleum revenue. Some of their comments are presented in Box 8.9. The research was conducted prior to the promulgation of the Petroleum Fund Law so some of the participants' concerns have since been addressed. For example, the participants wanted to know how much revenue there was, and how it was being invested. This information is now supplied in the Central Bank's quarterly reports. The non decision-makers were aware of institutions that enhance transparency and accountability, such as EITI and Publish What You Pay, and there was a sense that the participants expected that financial mismanagement, corruption in particular, would be prevented if petroleum revenue was managed transparently.

Box 8.9 Participants' comments about transparency and information

> Transparency is necessary. We have to know how much revenue there is. Information should be available to the public… The Ministry of Finance tells us how much revenue in presentations. They need to explain this to the public. What is the distribution? Why is it being used to fund the recurrent budget? Who made this decision? ... It is in the Manhattan Bank. But they don't explain how much interest we get. This should be published… We need indicators to monitor. To count, to assess development. To fix the process. Government has to open the doors. (Male NGO)
>
> Everything is published. Maybe like a book… Again, publish what you pay. That's the way it [financial mismanagement] will be prevented… To be transparent. Every citizen can have access to the accounts. Every penny taken out should be the concern of the people. (Male Decision-maker)

The keys to the relationship between Government and civil society are a commitment to openness and transparency, and an intention to work together. Open debates and a willingness to discuss options (a two-way dialogue rather than presenting one option for 'consultation') would be significant steps in building trust and creating social capital and the comments of decision-makers, presented in Box 8.10, indicate that the Government intends to manage Timor-Leste's petroleum revenue openly and transparently. However, trust will only be created if the State institutions lead by example, rather than denouncing individuals or groups with alternative opinions and perpetuating an 'us' and 'them' mentality[178]. In recent times there have been several instances when the course of action taken by officials has not instilled confidence in the people. The Government's failure to publicise the IMF's report on the Petroleum Fund is one example, and the former President Xanana Gusmão's speech which exacerbated tensions between easterners and westerners, and was careless if not destructive, is another[179].

The relationship between government and civil society in Timor-Leste wears the institutional scars of history, but the real protection of Timor-Leste's wealth lies in responding to the challenges that have been outlined. Those challenges are not well understood, difficult to define and require further investigation and research in order to address them. Yet it is clear that the Government must provide the institutions and the mechanisms by which civil society can then accept responsibility and hold the Government to account. How that ultimately happens, how long it will take, and whether they will be successful, is not known. These are Timor-Leste's biggest challenges in avoiding the resource curse and striving for sustainable development.

[178] Although it is natural in the political arena to differentiate one's party from the opposition, this differentiation should not extend to other relationships.

[179] The United Nations (United Nations 2006) called this speech, by Xanana Gusmão, 'divisive'.

Box 8.10 Participants' comments about the Government's efforts to provide information

> It is important to help people understand. Give them information so they can make informed decisions. (Jose Teixeira, Minister of Natural Resources, Minerals and Energy Policy)
>
> We hold meetings at the TSDA and have information sessions on the first Friday of each month. We advertise in the press with an invitation and give a presentation on a particular topic each month… Very many of people's concerns are based on misinformation. The information sessions are very important. The TSDA has never refused participating in public forums, we always go. (Einar Risa, Commissioner and former Executive Director, TSDA)
>
> The way the system works here is very transparent… The Production Sharing Contracts will be public documents. This will be the first country in the world to do this. (Einar Risa, Commissioner and former Executive Director, TSDA)

This chapter brings the discussion of the problem of managing Timor-Leste's petroleum revenue wisely to a close. The mechanisms for managing Timor-Leste's petroleum revenue may not sustain development in Timor-Leste because wise petroleum revenue management also depends on good governance. Thus, the intentions of the decision-makers are paramount in avoiding the resource curse. As the framework on which this research was based suggests, human and social capital are crucial to the quality of institutions in Timor-Leste and therefore the lack of the 'two caps' will affect management of petroleum revenue in Timor-Leste. For this reason, continued assistance in the form of foreign advice, a focus on investing in people, a whole-hearted commitment to transparency and the open transmission of information are the means by which Timor-Leste should move forward and avoid the resource curse.

Chapter 9 CONCLUSION

This thesis presents original research that has explored whether existing institutional mechanisms to manage petroleum revenue can enable Timor-Leste's sustainable development. A generic framework for understanding the relationship between institutions and natural resource revenue was developed. A thorough analysis of Timor-Leste's formal and informal institutions, and mechanisms for managing petroleum revenue, were presented and the problem of managing Timor-Leste's petroleum revenue was illuminated with the opinions of East Timorese and foreign advisers (both with and without a decision-making role). This research makes substantial contributions to the field of knowledge about the challenges of managing a natural resource boom in Timor-Leste. This concluding chapter highlights four aspects of the unique contribution this research has made to understanding how Timor-Leste might manage its petroleum revenue to achieve sustainable development.

9.1 Analysis of the institutional aspects of the resource curse

A major contribution of this research is to the literature that explores the institutional aspects of the resource curse which, until now, has been limited. An exploration of the challenges of managing a natural resource boom revealed that the traditional view of the institutional aspects of resource curse was that natural resource wealth affected the quality of institutions. In some countries an influx of resource revenue had resulted in corruption, conflict and the mismanagement of natural resource revenue. Yet, other countries institutions were less affected by an influx of revenue and the pre-condition of institutions appeared to be a key factor in avoiding the resource curse and sustaining development. Thus, a framework for a more holistic understanding of the relationship between institutions and natural resource revenue was developed, and a deeper analysis of the institutional aspects of the resource curse was possible. Scholars who engage in the resource curse debate will find much in this research which adds to their understanding of its institutional aspects, particularly as this framework is illuminated with the practical experiences of the Timor-Leste model and the views of a broad range of people (both within and external to the petroleum revenue management decision-making process).

Institutional quality can affect the management of natural resource revenue. Strong productive institutions support, whilst strong destructive institutions and weak productive institutions may hamper wise petroleum revenue management. Institutions that are cursed need to be distinguished from those that might be resource cursed. That is, corruption, conflict and revenue mismanagement may exist independent of natural resource wealth. A state may create mechanisms and institutions to manage its petroleum revenue wisely, but it would need to

weaken any pre-existing destructive institutions if it was to avoid the resource curse. Unfortunately, people who benefit from destructive institutions (e.g. corruption or rent-seeking) are likely to behave in ways that perpetuate those institutions, and weakening those institutions (particularly informal ones) is more difficult and takes time. Productive institutions such as transparency and accountability (or mechanisms to enhance them) can counteract or retard the progress of these destructive institutions. The resource curse literature explores these themes in only a general way. However, this research has contributed to a deeper analysis of what determines institutional quality. East Timorese decision-makers should be mindful of these issues as they further develop current and establish new petroleum revenue management mechanisms.

The framework developed by this research and repeated in Figure 9.1 proposes that human and social capital are key determinants of institutional quality, and therefore essential to wise petroleum revenue management. Discussion of the problem of a lack of human capital in managing natural resource wealth has entered the resource curse literature. Low levels of human capital, particularly in government institutions, mean that the skills and knowledge to invest and spend petroleum revenue need to be developed and, if the lack of human capital is not addressed, petroleum revenue may be mismanaged. A lack of human capital in civil society is also problematic, because without an understanding of how petroleum revenue should best be managed, civil society can not hold a government to account.

The problem of a lack of social capital in managing natural resource wealth has been less commonly discussed in the resource curse literature. Social capital is the stuff that generates the will to participate. Bonding social capital (between family members and close friends) and linking social capital (between government and civil society) are most relevant to the petroleum revenue management discussion. Close connections to family and friends can have negative effects if corruption and nepotism are accepted ways of doing business. An over supply of this form of social capital can affect the wise management of petroleum revenue. A lack of linking social capital means that government and civil society's will to meaningfully engage with each other in the transparent and accountable management of petroleum revenue does not exist. Thus, the framework this research is based on reflects the importance of human and social capital in understanding the relationship between natural resource revenue and institutions. A state may establish potentially productive institutions to manage petroleum revenue but, if human and (linking) social capital are in short supply, the bureaucrats may find the institutions difficult to maintain, and civil society may find it difficult to participate in those institutions.

Clearly, these are issues of importance to Timor-Leste. The Government acknowledges the lack of human capital within its bureaucracy. The lack of human capital in civil society is less-widely acknowledged and there are fewer donor-funded programs that address this issue. More critically, the problem of a lack of social capital between Government and civil society should

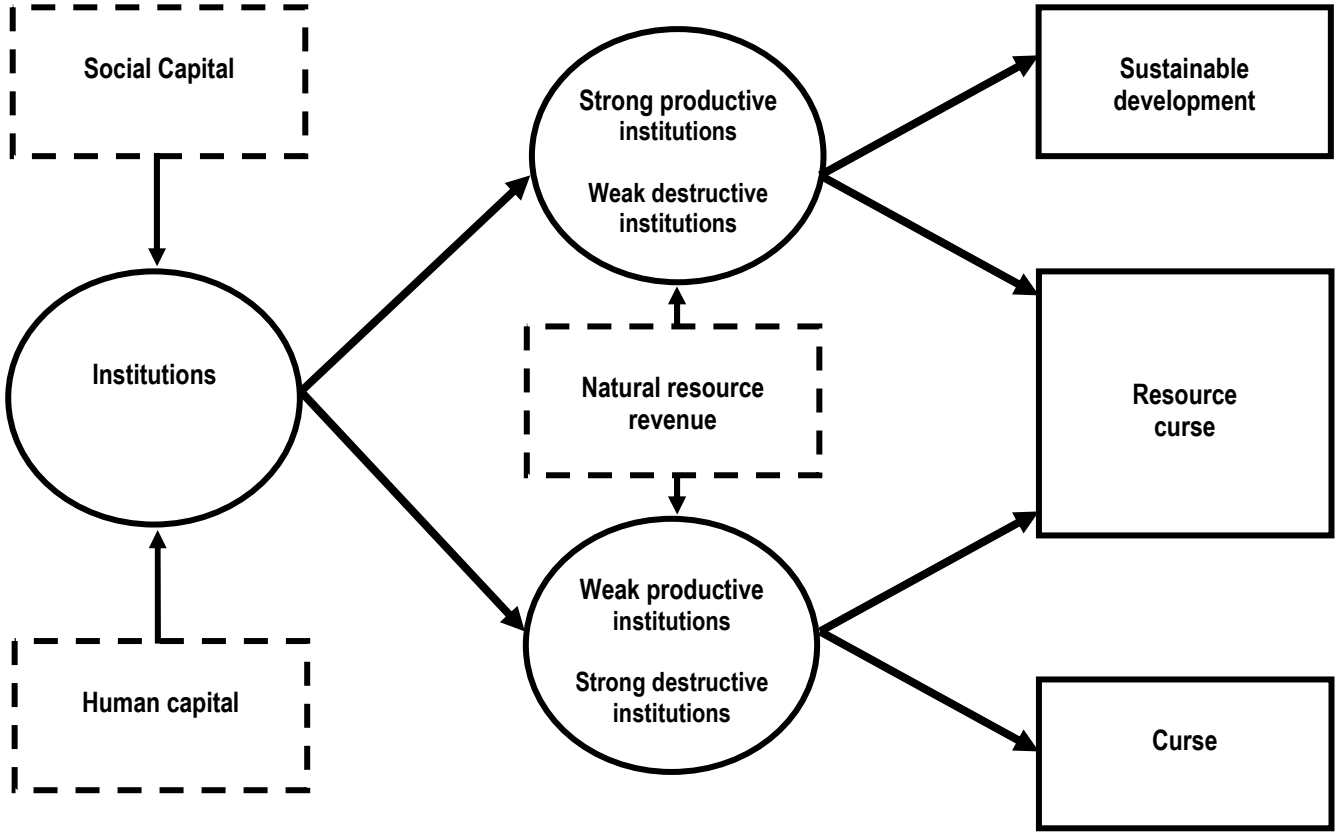

Figure 9.1 **A framework for understanding the relationship between natural resource revenue and institutions**

be addressed if petroleum revenue is to be managed wisely, and ultimately to sustain Timor-Leste's development.

9.2 Timor-Leste's unique case

Timor-Leste's case presents a unique opportunity for a nation to learn from the experience of countries that have been cursed by natural resources, and to manage their petroleum revenue wisely. This thesis offers great insights into Timor-Leste's informal and formal institutions which provide the backdrop to its petroleum revenue management challenges. In particular, the Government of Timor-Leste's plans for managing its petroleum revenue, which it is so heavily reliant on, are provided in detail. This knowledge is explored within the context of the framework for understanding the relationship between institutions and natural resource revenue, and is also used to inform and analyse the opinions of the research participants. In many ways, Timor-Leste's plans for petroleum revenue management are wise and, potentially, sustainable. Thus, in the same way that Timor-Leste can learn from the mistakes of other countries, those countries may learn from the good example Timor-Leste appears to be providing.

A great effort has been made by the Government of Timor-Leste to avoid the resource curse. Great care has been taken to design the institutions that will manage petroleum revenue based on best practice and in consultation with stakeholders. Although it was almost five years from the time Timor-Leste received its first petroleum royalty payment until its Petroleum Fund Law was promulgated, the Government attempted to be thorough in the process of establishing a petroleum fund. The road to a petroleum fund included a five stage process of consultation over ten months. Timor-Leste's Petroleum Fund Law is the cornerstone of its model of petroleum revenue management, but other institutions are also relevant (e.g. Timor-Leste's Central Bank, the Office of the Inspector General and the Provedor of Human Rights). Governed by these institutions Timor-Leste's petroleum revenue may, in theory, be managed wisely.

The thesis provides a detailed analysis of these institutions and the different components of the Petroleum Fund Law, their strengths and their weaknesses. The Petroleum Fund Law integrates the Petroleum Fund with the State Budget. All petroleum revenue is deposited into the Petroleum Fund and can only be withdrawn for use through the State Budget. The Petroleum Fund Law also requires that Parliament is informed of the value of Estimated Sustainable Income[180] prior to its decision about how much revenue should be withdrawn from the Petroleum Fund. This mechanism may reduce the volatility of the flow of petroleum revenue, which will assist Timor-Leste to plan its expenditure strategically, rather than in reaction to external factors. These aspects of Timor-Leste's petroleum revenue management, along with

[180] Estimated Sustainable Income is the amount of revenue that can be withdrawn from the Petroleum Fund such that an equal amount could be withdrawn every year thereafter.

some strong fiscal policies (e.g. the Government has a policy of not taking a loan from an international financial institution) are encouraging. But, the mechanisms Timor-Leste has in place are untested and, regardless of their potential strength, they alone can not ensure protection against the resource curse.

The effects of Portuguese colonisation, Indonesian occupation, United Nations' administration, and years of poverty, are evident in Timor-Leste today. Timor-Leste gained independence only in May 2002 so its formal state institutions are weak, but some of its most destructive informal institutions are strong. The execution of the State Budget is a problem (in the last financial year only 30% of the Capital and Development budget was executed), as is the fact that informal institutions, such as corruption and violence as a means of dispute resolution, are ingrained in the East Timorese way of life. These institutional factors will affect expenditure of Timor-Leste's petroleum revenue, and the responses of the research participants confirmed this analysis.

9.3 A participant driven vision for Timor-Leste

The challenges of managing Timor-Leste's petroleum revenue were illuminated with the opinions of East Timorese and decision-makers (East Timorese and foreign advisers) in this research. Qualitative and quantitative research methods were used to interview 67 people. Although the sample is small and selective and therefore does not claim to represent the larger population, it includes the (then) President and the (then) Prime Minister of Timor-Leste, and East Timorese from a variety of stakeholder groups (e.g. young people, women, teachers, health workers, academics, etc.), and thus the research offers important preliminary evidence on issues that are crucial to Timor-Leste's sustainable development.

Participants were questioned about their vision for the future of Timor-Leste and how their petroleum revenue should be invested and spent. A unique software application (Point*Wizard) was used to elicit participants' preferences in regards to which sectors petroleum revenue should be spent on, and which petroleum revenue management decisions were most important. Their comments, in response to the dilemmas posed to them, revealed a vision for Timor-Leste's petroleum revenue management that is unprecedented. On the eve of Timor-Leste's 2007 parliamentary election, the insights offered by this research are a timely and rich resource that should be considered by the incoming decision-makers. The views of East Timorese expressed in this research (both the decision-makers and those outside of government) also offer a rich resource for citizens of other countries struggling to manage their natural resources wisely.

Above all, Timor-Leste's policy makers should heed the overwhelming message expressed by participants; that they want to participate in petroleum revenue management decision-making. This research highlights the importance of building social capital, and therefore the essential

nature of a good and genuine relationship between Government and civil society. This relationship is crucial to the generation of successful petroleum revenue management outcomes and the political sustainability of whichever political party holds power. The research provides comments from non-decision-makers on a range of important petroleum revenue management decisions, thereby providing exactly the information the decision-makers need to consider in determining whether current and proposed policies indicate the will of the people. In recognising the value of listening to and considering the effect (political or otherwise) of their decisions, the outcomes for policy-makers and the East Timorese people will be enhanced.

The results of this research reveal that what Timor-Leste's petroleum revenue is spent on is the most important decision the Government makes. The participants imagined that spending petroleum revenue would improve the quality of their lives, and that the sectors most in need of increased expenditure were health and education. Given a choice, participants preferred spending petroleum revenue on social services, rather than infrastructure (such as roads and electricity). This preference is striking and one that the new East Timorese government should consider. Yet the opinions of Xanana Gusmão and Fernando 'Lasama' de Araujo expressed in this research show a preference for spending on infrastructure as a priority:

> In the first years we need to create infrastructure, agricultural, medium and small scale industry so that people can be productive. In this way I believe the money that will come from the depths of the sea shall be well applied and well spent. (Xanana Gusmão, Citizen of Timor-Leste)
>
> We need infrastructure. First we need good roads all over. (Fernando 'Lasama' de Araujo, Partido Democratico)

To allocate funds to population-wide programs may be less politically rewarding in comparison to the electoral rewards a party may win by funding highly visible infrastructure projects such as roads and bridges. However, in a country such as Timor-Leste where the majority of the population lacks quality basic health and education services, spending natural resource revenue on infrastructure (whilst health and education services show little development) may disenchant voters further. Participants explained they were in favour of investing in health and education because they could envisage its long-term benefits and contribution to human capital. By contrast, participants were very much against the idea of using petroleum revenue to fund individual or royalty payments, as they could not see any sustainable benefits from such a plan. At the time the research was conducted, Xanana Gusmão said 'I am against [individual payments]. The State can not be seen as a paternal state. The people, themselves, must become productive. This is stupidity.' (Xanana Gusmão, Citizen of Timor-Leste).

Participants also held strong opinions about some key petroleum revenue management decisions that indicate Timor-Leste's true autonomy (politically, financially and strategically) is of great importance to them. How budget expenditure is financed was the most important of six decisions about saving and investing Timor-Leste's petroleum revenue. The majority of participants (79%) preferred to use Timor-Leste's petroleum revenue to fund State budget

expenditure, as opposed to seeking a loan from an international financial institution. Further analysis showed that East Timorese participants without a decision-making role in petroleum revenue management were even more adamant that Timor-Leste should avoid taking a loan (90% preferred to fund budget expenditure using petroleum revenue). There is a clear mandate from the participants in this research that the policy of remaining debt-free should be maintained, and the new government would do well to heed this message.

Another petroleum revenue management decision that revealed the passion with which the East Timorese fought for their country's independence was the issue of when to exploit the Greater Sunrise petroleum field. Since the research was conducted the Government of Timor-Leste has agreed with the Government of Australia that resolution of a permanent maritime boundary between the two countries will be deferred for at least 50 years. Thus, it is not surprising that only two of the eleven decision-makers (18%) ranked 'when maritime boundaries with Australia are resolved' as their choice for when Greater Sunrise should be exploited. In contrast, eight of ten participants (80%) without a decision-making role did. On this issue the research revealed a difference between the opinions of the decision-makers and the participants without a decision-making role. This decision can not readily be reversed by the new Government, but a forthcoming decision (that was not canvassed in this research) that will certainly elicit local views that favour financial independence is the choice of where Greater Sunrise petroleum is processed. This is a decision that the East Timorese people will have strong views about and the new government is encouraged to consult widely if they do have any power to influence the outcome of the operating petroleum company's decision.

9.4 Sustaining Timor-Leste's development

Timor-Leste chose to exploit its natural resources and convert that natural capital into financial capital so that it might sustain its development. Sustainable development implies that the needs of both current and future generations are met. Timor-Leste's Petroleum Fund was designed to ensure that some of the benefits from exploiting their petroleum resources today will be available to future generations. But, this research has revealed that weaknesses in some of Timor-Leste's productive institutions, and some strong destructive institutions, may jeopardise Timor-Leste's sustainable development. Avoiding the resource curse is one of the greatest challenges Timor-Leste will face.

The lack of human and social capital currently available to Timor-Leste must be addressed. The research has reiterated the problem of the Government of Timor-Leste's budget execution, and until the lack of human capital within the Government bureaucracy is addressed, sustainable development will not be possible. But, these things take time and poverty can not wait. Short-term solutions (such as increased foreign advice and support) will be required to resolve the problems of budget execution, and provide tangible improvements to people's quality of life. In

this way, the current levels of dissatisfaction with the progress of the Government may reduce the potential for conflict. As the skills and knowledge, both within government and in civil society, increase and the relationship between government and civil society improves, productive institutions will be strengthened.

The Government must retain and strengthen its resolve to address corruption and nepotism, and other destructive institutions, and thus their commitment to the Extractive Industries Transparency Initiative should be maintained. The research participants clearly indicated that mechanisms to enhance transparency and responsibility were needed. The level of knowledge of the participants about the resource curse and their understanding of the value of transparency and access to information shows that civil society in Timor-Leste is well-placed to build the human capital needed to hold the government to account. Participants recognised that increased investment in education (both formal and otherwise), and continued foreign advice and support, were ways in which Timor-Leste could build its human and social capital, to ensure that its petroleum revenue is managed wisely. This level of awareness is possibly unprecedented in other natural-resource dependent developing countries. With improvements to transparency and accountability, openness on the part of the Government, and better access to information, in conjunction with increased participation by civil society, the destructive institutions can be weakened. Further research in these areas is crucial.

At this time Timor-Leste is not developing sustainably, it is unable to service the needs of its current generation, let alone provide for its future generations. But, the institutional weaknesses and problems are not (yet) a result of Timor-Leste's natural resource wealth. Rather, its history has cursed Timor-Leste. This curse is not a permanent one. Petroleum resources present an opportunity to develop a revenue base that Timor-Leste can use to counter the negative influences of the past, and to strive towards sustainable development. Timor-Leste has a most productive and positive force on its side which may assist it to achieve its goal, the fierce determination of its people to overcome the challenges they face, against all odds.

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APPENDICES

Appendix 1 Comparison of 2005-2006 and 2006-2007 recurrent budgets

	2005-06 Recurrent Total	% 05-06 Recurrent Budget	2006-07 Recurrent Total	% 06-07 Recurrent Budget	US$ difference	% difference
President of the Republic	595	0.70%	1,266	0.67%	671	-0.03%
National Parliament	1,268	1.48%	2,451	1.30%	1,183	-0.19%
Office of the Prime Minister and the President of the Council of Ministers	3,782	4.42%	3,675	1.94%	-107	-2.48%
Ministry of Defence	8,180	9.56%	12,390	6.56%	4,210	-3.01%
Office of the Secretariat of State for Council of Ministers	678	0.79%	1,265	0.67%	587	-0.12%
Ministry of State Administration	3,214	3.76%	11,429	6.05%	8,215	2.29%
Ministry of the Interior	1,368	1.60%	1,849	0.98%	481	-0.62%
Ministry of the Interior (PNTL)	8,470	9.90%	10,923	5.78%	2,453	-4.12%
Ministry of Development	453	0.53%	9,103	4.82%	8,650	4.29%
Secretary of State of Youth and Sport	259	0.30%	784	0.41%	525	0.11%
Ministry of Justice	4,176	4.88%	3,375	1.79%	-801	-3.10%
Ministry of Agriculture, Forests and Fisheries	3,880	4.54%	11,237	5.95%	7,357	1.41%
Ministry of Education and Culture	16,608	19.42%	24,561	13.00%	7,953	-6.42%
Ministry of Health	10,305	12.05%	15,634	8.27%	5,329	-3.77%
Ministry of State for Labour and Community Reintegration	611	0.71%	9,332	4.94%	8,721	4.22%
Ministry of Foreign Affairs and Cooperation	2,652	3.10%	5,537	2.93%	2,885	-0.17%
Ministry of Planning and Finance	6,716	7.85%	31,119	16.47%	24,403	8.62%
Ministry of Transport and Communications	1,636	1.91%	2,782	1.47%	1,146	-0.44%
Ministry of Natural Resources, Minerals and Energy Policy	6,718	7.85%	17,732	9.38%	11,014	1.53%
Ministry of Public Works	2,319	2.71%	8,187	4.33%	5,868	1.62%
Tribunals	503	0.59%	774	0.41%	271	-0.18%
Banking and Payments Authority (2005-06 only)	240	0.28%	-	-	N/A	N/A
Public Prosecution Office (2006-07 only)	-	-	279	0.15%	N/A	N/A
Ombudsman for Human Rights and Justice	83	0.10%	401	0.21%	318	0.12%
Public Broadcasting Service of Timor Leste	826	0.97%	2,863	1.52%	2,037	0.55%
Total Recurrent Expenditure Excluding Autonomous Agencies	**85,540**		**188,948**			

All figures are US$'000

Appendix 2 Timor-Leste's Petroleum Fund Law

LAW 8/2005
Promulgated by the President on 3 August 2005
This is an unofficial translation of the Portuguese version.

PETROLEUM FUND LAW

Preamble

This Act establishes a Petroleum Fund which seeks to meet with the constitutional requirement laid down in Article 139 in the Constitution of the Republic. Pursuant to this provision, petroleum resources shall be owned by the State, be used in a fair and equitable manner in accordance with national interests, and the income derived therefrom should lead to the establishment of mandatory financial reserves.

The Petroleum Fund shall contribute to a wise management of the petroleum resources for the benefit of both current and future generations. The Petroleum Fund shall be a tool that contributes to sound fiscal policy, where appropriate consideration and weight is given to the long-term interests of Timor-Leste's citizens.

Efficient planning and proper execution of public sector budgets are key components of a sound management of the petroleum wealth. The Petroleum Fund is to be coherently integrated into the State Budget, and shall give a good representation of the development of public finances. The Petroleum Fund shall be prudently managed and shall operate in an open and transparent fashion, within the constitutional framework.

This Act lays down the key parameters for the operation and management of the Petroleum Fund. The Act governs the collection of and management of receipts associated with the petroleum wealth, regulates transfers to the State Budget, and provides for Government accountability and oversight of these activities.

Therefore, pursuant to Article 139 of the Constitution and for the purpose of establishing a fund of income from the exploitation of non-renewable petroleum resources for the needs of both current and future generations,

Pursuant to Article 92 of the Constitution of the Republic, the National Parliament enacts the following to have the force of law:

Chapter I – General Provisions

Article 1
Citation

This Act may be cited as the Petroleum Fund Act.

Article 2
Definitions

2.1 In this Act, unless the context requires otherwise:

(a) "Central Bank" means the authority to be established under Section 143 of the Constitution of the Republic or, until such authority is established, the Banking and Payments Authority;
(b) "Code" means the Petroleum Mining Code and the Interim Petroleum Mining Code agreed and adopted by Timor-Leste and Australia under Article 7 of the Treaty, as amended, varied, modified or replaced from time to time, and regulations made and directions given under it;
(c) "Estimated Sustainable Income" for a Fiscal Year means the amount determined in accordance with the formula set out in Schedule 1;
(d) "Exchange of Notes" means:
    (i) Exchange of Notes Constituting an Agreement between the Government of Australia and the United Nations Transitional Administration in East Timor, of 10 February 2000; or
    (ii) Exchange of Notes Constituting an Agreement between the Government of Timor-Leste and the Government of Australia, of 20 May 2002.
(e) "Fiscal Year" means the period of twelve (12) months from 1st July to 30th June;
(f) "Independent Auditor" means an internationally recognised accounting firm appointed for the purpose of auditing the Government accounts as set out in the Timor-Leste law until the administrative, tax and audit courts is established, or thereafter an internationally recognised accounting firm appointed pursuant to Article 34;
(g) "Investment Manager" means the Central Bank and any person appointed as external Investment Manager under Article 12;
(h) "Minister" means the Minister in charge of finances;
(i) "Parliament" means the National Parliament of Timor-Leste;
(j) "Payer" means any entity on whom there is an obligation pursuant to this Act to make a payment into the Petroleum Fund;

(k) "Petroleum" has the same meaning given to it in the Petroleum Act;
(l) "Petroleum Act" means the Petroleum Act, as amended, varied, modified or replaced from time to time, and regulations made and directions given under it;
(m) "Petroleum Authorisation" means:
  (i) an access authorisation, a petroleum contract, a prospecting authorisation or a seepage use authorisation, or any agreement made in respect of such an authorisation or contract, granted or entered into under the Petroleum Act; or
  (ii) an authorisation or production sharing contract, or any agreement made in respect of such an authorisation or contract, granted or entered into under the Code;
(n) "Petroleum Fund" means the Petroleum Fund for Timor-Leste established under Article 5;
(o) "Petroleum Fund Receipts" has the meaning given to it in Article 6;
(p) "Petroleum Operations" means authorised activities under a Petroleum Authorisation;
(q) "State Budget" means the State Budget referred to under Section 145 of the Constitution of the Republic;
(r) "Tax Revenue" means any tax or duty imposed under Timor-Leste law;
(s) "Timor-Leste" means the Democratic Republic of Timor-Leste; and
(t) "Treaty" means the Timor Sea Treaty between the Government of Timor-Leste and the Government of Australia signed on 20th May 2002, as amended, varied, modified or replaced from time to time.

2.2 All terms in the present Act that are defined in the Timor-Leste law on budget and financial management have the same meaning given to it in that law.

Article 3
Material Scope of the Act

This Act shall provide for the establishment and management of the Petroleum Fund, and the procedural rules relating thereto.

Article 4
Inconsistencies

For the purposes of this Act, in the event of any inconsistency between the provisions of the Act and the provisions in the law of Timor-Leste on budget and financial management, or between the provisions of the Act and the terms of a Petroleum Authorization, the provisions of the present Act shall prevail.

Chapter II – The Petroleum Fund for Timor-Leste

Article 5
Petroleum Fund for Timor-Leste

5.1 There is hereby established a fund known as the Petroleum Fund for Timor-Leste.
5.2 The Petroleum Fund shall have an earmarked receipts account, held by the Central Bank in compliance with Articles 14 and 15, into which the Petroleum Fund Receipts set out in Article 6 are credited.
5.3 Transfers from the Petroleum Fund shall be made only in accordance with Articles 7 to 10.
5.4 The details concerning the account referred to in Section 5.2, and the State Budget account referred to in Section 7.1, shall be made public through the publication of the operational management agreement to which Section 11.3 refers.

Article 6
Petroleum Fund Receipts

6.1 The following amounts are Petroleum Fund gross receipts:
(a) the gross revenue, including Tax Revenue, of Timor-Leste from any Petroleum Operations, including prospecting or exploration for, and development, exploitation, transportation, sale or export of petroleum, and other activities relating thereto;
(b) any amount received by Timor-Leste from the Designated Authority pursuant to the Treaty;
(c) any amount received by Timor-Leste from the investment of Petroleum Fund Receipts;
(d) any amount received from direct or indirect participation of Timor-Leste in Petroleum Operations; and
(e) any amount received by Timor-Leste relating directly to petroleum resources not covered in paragraphs (a) to (d) above.

6.2 In the event that Timor-Leste participates in Petroleum Operations indirectly, as provided for in paragraph 6.1(d), through a national oil company, the receipts of the Petroleum Fund shall include the following:
(a) any amount payable by the national oil company as tax, royalty or any other due in accordance with Timor-Leste law; and
(b) any amount paid by the national oil company as dividend.

6.3. From the amount received in accordance with Section 6.1, the Central Bank shall be entitled to deduct, by direct debit of the Petroleum Fund account, any reasonable management expenses, as provided for in the operational management agreement referred to in Section 11.3.

Article 7
Transfers

7.1 Subject to Section 6.3, the only debits permitted to the Petroleum Fund are electronic transfers made in accordance with this present article, as well as Articles 8 to 10, to the credit of a single State Budget account.
7.2 The total amount transferred from the Petroleum Fund for a Fiscal Year shall not exceed the appropriation amount approved by Parliament for the Fiscal Year.
7.3. Subject to Article 8 to 10, transfers from the Petroleum Fund by the Central Bank in the Fiscal Year, shall only take place after publication of the budget law, or any subsequent changes thereto, in the *Jornal da República*, confirming the appropriation amount approved by Parliament for that Fiscal Year.

Article 8
Requirements for Transfers

No transfer shall be made from the Petroleum Fund in the Fiscal Year unless the Government has first provided Parliament with reports:

(a) specifying the Estimated Sustainable Income for the Fiscal Year for which the transfer is made;
(b) specifying the Estimated Sustainable Income for the preceding Fiscal Year; and
(c) from the Independent Auditor certifying the amount of the Estimated Sustainable Income in paragraphs (a) and (b) above.

Article 9
Transfers Exceeding the Estimated Sustainable Income

No transfer shall be made from the Petroleum Fund in a Fiscal Year in excess of the Estimated Sustainable Income for the Fiscal Year unless the Government has first provided Parliament with:

(a) the reports described in paragraphs 8.(a) and 8.(b);
(b) a report estimating the amount by which the Estimated Sustainable Income for Fiscal Years commencing after the Fiscal Year for which the transfer is made will be reduced as a result of the transfer from the Petroleum Fund of an amount in excess of the Estimated Sustainable Income of the Fiscal Year for which the transfer is made;
(c) a report from the Independent Auditor certifying the estimates of the reduction in Estimated Sustainable Income in paragraph (b) above; and
(d) a detailed explanation of why it is in the long-term interests of Timor-Leste to transfer from the Petroleum Fund an amount in excess of the Estimated Sustainable Income.

Article 10
Transfers for Purposes of Refund of Tax

If required under the law of Timor-Leste, transfers from the Petroleum Fund are exceptionally permitted for purposes of refund of tax, in the event of overpayment of tax under paragraphs 6.1(a) and 6.2(a). This amount represents a reduction of the Petroleum Fund Receipts, and shall not be considered as part of the appropriation approved under Section 7.2.

Chapter III – Petroleum Fund Investment and Protection

Article 11
Management of the Petroleum Fund

11.1 The Government is responsible for the overall management of the Petroleum Fund.
11.2 The Minister shall not make any decisions in relation to the investment strategy or management of the Petroleum Fund without first seeking the advice of the Investment Advisory Board in accordance with Article 16.
11.3 The Minister shall enter into an agreement with the Central Bank for the operational management of the Petroleum Fund and the Central Bank shall be responsible for the operational management of the Petroleum Fund.
11.4 The Petroleum Fund shall be managed prudently in accordance with the principle of good governance for the benefit of current and future generations.

Article 12
External Investment Managers

12.1 The Central Bank may propose to the Minister, either of its own motion or at the request of the Minister, the appointment of one or more external Investment Managers to be responsible for managing the investment of amounts in the Petroleum Fund.
12.2 The Central Bank may select and appoint an external Investment Manager proposed under Section 12.1 only if the Minister is satisfied that:

(a) the external Investment Manager is a legal person with sufficient equity capital and adequate guarantees and insurances against operational risks;
(b) the external Investment Manager has a sound record of operational and financial performance; and

(c) the references and reputation of the external Investment Manager in the field of fund management are of the highest standard.

12.3 The Central Bank shall be responsible for the tendering procedures required for any appointment made pursuant to Section 12.1, as well as for the contracting of any other professional services under the operational management agreement referred to in Section 11.3, and shall in doing so comply with the substantive provisions of Timor-Leste law.

12.4 The procedures for terminating a contract with an external Investment Manager shall be laid down in the operational management agreement referred to in Section 11.3.

12.5 The duty of the Investment Manager is to maximise the return on the Petroleum Fund investments having regard to appropriate risk as indicated by the investments permitted under Articles 14 and 15, any subsidiary legislation under this Act, any instructions by the Minister and the operational management agreement referred to in Section 11.3.

Article 13
Quarterly Reports on the Petroleum Fund

13.1 The Central Bank shall present to the Minister quarterly reports on the performance and activities of the Petroleum Fund no later than twenty (20) days after the end of each quarter.

13.2 The Central Bank shall provide for the publication of its reports no later than forty (40) days after the end of the quarter.

13.3 The Central Bank shall ensure that in releasing, or allowing access to, such reports measures are taken to prevent the disclosure of confidential information.

Article 14
Investment Rules

14.1 Not less than ninety per cent (90%) of the amounts in the Petroleum Fund shall be invested only in qualifying instruments described in Article 15.

14.2 Not more than ten per cent (10%) of the amounts in the Petroleum Fund may be, in accordance with all procedures laid down in this Act, invested in financial instruments other than those mentioned in Section 15.1, provided that such instruments are:

(a) issued abroad;
(b) liquid and transparent;
(c) traded in a financial market of the highest regulatory standard.

14.3 The range of instruments included as qualifying instruments in Section 15.1 shall be reviewed by the Government, and approved by Parliament, at the end of the first five (5) years of the Petroleum Fund existence, having regard to the size of the Petroleum Fund and the level of institutional capacity.

Article 15
Qualifying Instruments

15.1 Subject other provisions of this present article, a qualifying instrument is:

(a) a debt instrument denominated in United States Dollars that bears interest or a fixed amount equivalent to interest, that is:
    (i) rated Aa3 or higher by the Moody's rating agency or rated AA– or higher by Standard & Poor's rating agency; and
    (ii) issued by or guaranteed by the World Bank or by a sovereign State, other than Timor-Leste, provided the issuer or guarantor is rated Aa3 or higher by the Moody's rating agency or rated AA– or higher by Standard & Poor's rating agency; or
(b) a United States Dollars deposit with, or a debt instrument denominated in United States Dollars that bears interest or a fixed amount equivalent to interest issued by:
    (i) the Bank for International Settlements;
    (ii) the European Central Bank; or
    (iii) the Central Bank of a sovereign State, other than Timor-Leste, with a long-term foreign currency rating of Aa3 or higher by the Moody's rating agency or AA– or higher by the Standard & Poor's rating agency;
    (iv) a bank designated by Moody's rating agency with a long-term foreign currency rating of Aa3 or higher or designated by Standard & Poor's rating agency with a long-term foreign currency rating of AA– or higher.

15.2 The Investment Manager shall dispose of an instrument if it ceases to be a qualifying instrument because of a change in the rating of the instrument or the issuer of the instrument within one month of the instrument ceasing to be a qualifying instrument.

15.3 The average interest rate duration of Petroleum Fund qualifying instruments under Section 15.1 shall be less than six (6) years.

15.4 A derivative instrument is a qualifying instrument only if:
(a) it is solely based on instruments that satisfy the requirements of Section 15.1; and
(b) its acquisition reduces the financial exposure to the risks associated with the underlying instrument or instruments.

Article 16
Investment Advisory Board

16.1 There is hereby established an Investment Advisory Board that is responsible for:
(a) developing for the Minister performance benchmarks of desired returns from, and appropriate risks of, the investments of the Petroleum Fund;
(b) advising the Minister on the investment instructions that the Minister shall provide to the Investment Managers of the Petroleum Fund appointed pursuant to Article 12;
(c) advising the Minister on the performance of the external Investment Managers and making recommendations to the Minister on the appointment or removal of external Investment Managers; and
(d) advising the Minister on the need for changes in the overall investment strategy or management of the Petroleum Fund, including the making of recommendations as to such changes.

16.2 Subject to Article 18, the Minister shall seek the advice of the Investment Advisory Board before making a decision on any matter relating to the investment strategy or management of the Petroleum Fund.

16.3 Any advice given by the Investment Advisory Board on investment strategy or management of the Petroleum Fund shall take into account:
(a) the overall objective that the Petroleum Fund be a fund of income from the exploitation of non-renewable petroleum resources for the benefit of current and future generations;
(b) the current conditions, opportunities and constraints in investment markets, and the constraints under which the Central Bank and other key institutions in Timor-Leste operate; and
(c) the need to ensure that sufficient amounts are available when needed for transfers referred to in Article 7.

16.4 The Investment Advisory Board shall determine the rules of procedure under which it operates.

Article 17
Organisation of the Investment Advisory Board

17.1 The members of the Investment Advisory Board shall be:
(a) the Director of Treasury;
(b) the Head of the Central Bank;
(c) two persons appointed by the Minister with significant experience in investment management; and
(d) one other person appointed by the Minister.

17.2 The Central Bank shall provide the secretariat for the Investment Advisory Board and any support required by the board to carry out its functions.

17.3 The Minister shall provide, in accordance with Timor-Leste law:
(a) a person to sit on the secretariat of the Investment Advisory Board; and
(b) appropriate remuneration for the members of the Investment Advisory Board appointed under paragraphs 17.1(c) and 17.1(d).

17.4 The members of the Investment Advisory Board shall, on occasion of taking and vacating office, submit a declaration concerning their assets and income from property and capital, including information relating to their bank accounts.

Article 18
Absence of Advice from the Investment Advisory Board

18.1 The non-provision of advice by the Investment Advisory Board, within fifteen (15) days of the request, or within such longer time period as may be determined by the Minister having regard to the nature of the advice sought, shall not constitute an impediment for the Minister to make a decision.

18.2 If, having regard to the nature and urgency of the decision to be taken, there is insufficient time to seek the advice of the Investment Advisory Board, in relation to a particular decision, the Minister shall make a decision without first seeking the advice of the Investment Advisory Board.

18.3 If the Minister makes a decision under Section 18.1 or 18.2, the Minister shall immediately report the making of the decision to the Investment Advisory Board.

18.4 The Minister shall reexamine the decision having regard to any subsequent advice provided by the Investment Advisory Board.

Article 19
Release of Advices of the Investment Advisory Board

19.1 When required by Parliament, the Government shall without delay provide Parliament with all advices given thereto by the Investment Advisory Board.

19.2 The Minister shall ensure that in releasing, or allowing access to, advices given thereto, measures are taken to prevent the disclosure of confidential information.

Article 20
No Encumbrances on the Assets of the Petroleum Fund

20.1 Any amount that is invested pursuant to Articles 14 and 15 shall, at all times, remain the property of Timor-Leste.
20.2 Any contract, agreement or arrangement, to the extent that it purports to encumber the assets of the Petroleum Fund, whether by way of guarantee, security, mortgage or any other form of encumbrance, is null and void.

Chapter IV – Supervision of the Petroleum Fund

Article 21
Maintenance of Petroleum Fund Accounts and Records

21.1 The Director of Treasury is responsible for maintaining the Petroleum Fund accounts and records in accordance with the International Accounting Standards in force, to reflect the operations and financial condition of the Petroleum Fund.
21.2 The Director of Treasury shall submit to the Minister quarterly management information reports and analyses on the performance and activities of the Petroleum Fund no later than twenty (20) days after the end of each quarter.
21.3 The Director of Treasury is responsible for reporting on the performance and activities of the Petroleum Fund for the purpose of the annual financial statements of Timor-Leste.

Article 22
Internal Audit

The accounts, records and other documents relating to the Petroleum Fund shall be audited every six months by the bodies responsible for internal audits of each of the entities involved.

Article 23
Annual Report

23.1 The Government shall submit an Annual Report for the Petroleum Fund for a Fiscal Year to Parliament, at the same time as the annual financial statements of that year are submitted to Parliament.
23.2 The Annual Report referred to in Section 23.1 shall be published by Government within fifteen (15) days of its submission to Parliament.

Article 24
Information Contained in the Annual Report

24.1 The Annual Report for the Petroleum Fund shall be prepared in a manner that makes it readily adaptable for public information, and shall contain in particular the following information for the Fiscal Year for which the Report is prepared:

(a) audited financial statements certified by the Independent Auditor, comprising:
    (i) an income and expenditure statement;
    (ii) a balance sheet, including a note listing the qualifying instruments of the Petroleum Fund, valued at market value;
    (iii) details of all appropriations and transfers from the Petroleum Fund; and
    (iv) notes to the financial statements, as appropriate;
(b) a report signed by the Minister describing the activities of the Petroleum Fund in the year, including all advice provided by the Investment Advisory Board, any reports prepared by the Independent Auditor under Article 35 and drawing attention to particular issues or matters that may be of concern or interest to Parliament;
(c) a statement by the Director of Treasury drawing attention to any accounting issues or practices arising from the Report that may materially affect the interpretation of amounts or activities shown within it;
(d) the income derived from the investment of Petroleum Fund assets during the Fiscal Year compared with the income of the previous three Fiscal Years;
(e) a comparison of the nominal income on the investment of Petroleum Fund assets with the real return after adjusting for inflation;
(f) a comparison of the income derived from the investment of Petroleum Fund assets with the benchmark performance indices provided to the Minister pursuant to Section 16.1;
(g) a comparison of the Estimated Sustainable Income for the Fiscal Year with the sum of transfers from the Petroleum Fund for the year;
(h) in the event of Government borrowings, the liabilities shall be reflected in the presentation of Petroleum Fund accounts so as to give a true representation of the past and expected future development of the Government's net financial assets and rate of savings; and

(i) a list of persons holding positions relevant for the operation and performance of the Petroleum Fund, including:
  (i) the Minister;
  (ii) the Director of Treasury;
  (iii) the members of the Investment Advisory Board;
  (iv) the external Investment Managers;
  (v) the Head of the Central Bank; and
  (vi) the members of the Petroleum Fund Consultative Council.

24.2 The sources of the information described in Section 24.1, whatever their form, and including all reports and statements, shall be annexed to the Annual Report in unedited form.

Chapter V – Petroleum Fund Consultative Council

Article 25
Petroleum Fund Consultative Council

25.1 There is hereby established a Petroleum Fund Consultative Council.

25.2 The Petroleum Fund Consultative Council shall, of its own motion or at the request of Parliament:
(a) advise Parliament on matters relating to the performance and operation of the Petroleum Fund;
(b) advise Parliament on appropriations from the Petroleum Fund as set out in Section 30.2; and
(c) in the context of the budgetary process, advise Parliament on whether the appropriations of the Petroleum Fund are being used effectively to the benefit of current and future generations.

Article 26
Composition of the Petroleum Fund Consultative Council

The Petroleum Fund Consultative Council shall comprise the following members, all of whom are nationals of Timor-Leste:
(a) former Presidents of the Republic;
(b) former Speakers of the Parliament who have effectively been in office for at least three (3) years;
(c) former Prime Ministers who have effectively been in office for at least three (3) years;
(d) former Ministers in charge of finances who have effectively been in office for at least three (3) years;
(e) former Heads of the Central Bank who have effectively been in office for at least three (3) years;
(f) two members appointed by Parliament, elected in accordance with the rules laid down by Parliament;
(g) two members appointed to represent civil society non-profit organisations;
(h) a member appointed to represent the private business sector; and
(i) a member appointed to represent religious organisations.

Article 27
Appointment and Tenure of Members

27.1 The term of office of the members of the Petroleum Fund Consultative Council is five (5) years, and it is not renewable.

27.2 The term of office of the members mentioned in paragraphs 26.(a) to 26.(e) shall be served from the end of their office, in accordance with procedures to be laid down by Parliament.

27.3 The members of the Petroleum Fund Consultative Council referred to in paragraphs 26.(g) to 26.(i) shall be freely appointed by the concerned organisations, duly registered in accordance with Timor-Leste law, under procedures to be laid down by Parliament.

27.4 If no appointment can be made to the Petroleum Fund Consultative Council pursuant to paragraphs 26.(a), 26.(b) or 26.(c), the President of the Republic, the President of Parliament, and the Prime Minister, respectively, shall appoint one member to fill such a vacancy. Any member of the Consultative Council appointed under this paragraph shall cease his or her functions as soon as the appointment of the member in question becomes possible under paragraphs 26.(a), 26.(b) or 26.(c).

27.5 Members of Parliament or of Government may not be appointed under paragraph 26.(f).

27.6 The members of the Petroleum Fund Consultative Council shall, on occasion of taking and vacating office, submit a declaration concerning their assets and income from property and capital, including information relating to their bank accounts.

Article 28
Limitations

28.1 A person shall not be appointed as a member of the Petroleum Fund Consultative Council if the person:
(a) has been removed from office;
(b) has been declared bankrupt or insolvent; or
(c) has been convicted of a criminal offence.

28.2 Members of the Petroleum Fund Consultative Council have security of tenure and, unless otherwise provided for by law, may not be suspended, retired or removed from office.
28.3 The appointment of a member of the Petroleum Fund Consultative Council ceases if the member:
(a) is declared bankrupt or insolvent;
(b) is convicted of a criminal offence; or
(c) is unfit for office.
28.4 Until such time as specific procedures for the removal of a member under paragraph 28.3(c) are established under the general law, the procedures applicable for the removal of judges shall apply.

Article 29
Economic Advisor to the Petroleum Fund Consultative Council

Subject to approval by Parliament, the Petroleum Fund Consultative Council may select and appoint as its international adviser for economic and financial matters, for a period of two (2) years, an academic or professional of the highest reputation and competence.

Article 30
Functioning of the Petroleum Fund Consultative Council

30.1 In conducting its activities, the Petroleum Fund Consultative Council shall take into account:
(a) the overall objective that the Petroleum Fund be a fund of income from the exploitation of non-renewable petroleum resources for the benefit of current and future generations; and
(b) the principles for the operation of the Petroleum Fund as outlined in this Act.
30.2 When:
(a) the Government introduces legislation to Parliament to appropriate an amount from the Petroleum Fund, and
(b) the amount the legislation would appropriate in the Fiscal Year is greater than the Estimated Sustainable Income of the Petroleum Fund for the Fiscal Year,
the Petroleum Fund Consultative Council shall submit, in a timely manner, as decided by Parliament on a case by case basis, an advice to Parliament on the Government's proposed appropriation.
30.3 The non-provision of advice by the Petroleum Fund Consultative Council, within the time period decided by Parliament, shall not constitute an impediment for Parliament to make a decision.
30.4 For purposes of advising Parliament, the Petroleum Fund Consultative Council shall consult widely in the community and, to this end, shall hold an annual forum on issues relating to the Petroleum Fund.
30.5 The Petroleum Fund Consultative Council shall determine the rules of procedure under which it will operate, and its decisions shall only be valid if taken by majority, with a quorum of six (6) members.
30.6 Parliament shall provide adequate funding for the operations of the Petroleum Fund Consultative Council, including appropriate remuneration for members of the Petroleum Fund Consultative Council, through the budgetary appropriation for the operation of Parliament.

Article 31
Release of Information

31.1 Parliament shall provide for the publication of the advices of the Petroleum Fund Consultative Council, including minority opinions, within thirty (30) days of having been provided.
31.2 Parliament shall ensure that in releasing, or allowing access to, advices of the Petroleum Fund Consultative Council, measures are taken to prevent the disclosure of confidential information.
31.3 The Minister and/or the Head of the Central Bank shall furnish the Petroleum Fund Consultative Council with information it requests on any aspect of the operation or performance of the Petroleum Fund for the purpose of its monitoring of the Petroleum Fund.
31.4 In dealing with the information furnished under Section 31.3, the Petroleum Fund Consultative Council shall ensure that measures are taken to prevent the disclosure of confidential information.

Chapter VI – Transparency

Article 32
Transparency as a Fundamental Principle

32.1 The management of the Petroleum Fund shall always be carried out, and the related duties of all relevant parties shall be discharged, with the highest standard of transparency.
32.2 Information or data whose disclosure to the public could, in particular:
(a) prejudice significantly the performance of the Petroleum Fund;
(b) be misleading, as it relates to:
(i) incomplete analysis, research or statistics;
(ii) to frankness and candour of internal discussion;
(iii) the exchange of views for the purposes of deliberation; or

(iv) the provision of confidential advice;
(c) significantly affect the functioning of the Government;
(d) amount to the disclosure of confidential communications;
(e) substantially prejudice the management of the economy;
(f) substantially prejudice the conduct of official market operations; or
(g) result in or lead to improper gains or advantages;

may be declared as confidential. The declaration of confidentiality shall, taking into account the principle of transparency and the right of the public as regards to access to information, provide a clear reasoning on the motives for treating such information or data as confidential.

32.3 Any information that is kept confidential at the time at which it could have been published, as well as the reasoning for having been treated as confidential, shall be made available to the public, upon request, when the reasons for confidentiality are no longer valid, and in any case after five (5) years from the date at which it could have been published.

32.4 In the exercise of its functions and competences, and as provided for in this Act, Parliament, the Government, the Minister, Central Bank, Investment Advisory Board and the Petroleum Fund Consultative Council shall take all necessary measures to ensure transparency mechanisms and free access to public information.

32.5 The Minister shall ensure that this Act, any subsidiary legislation made thereunder, any instructions relating to the Petroleum Fund, the operational management agreement referred to in Section 11.3 and the reports referred to in Articles 8 and 9 are readily available to the public within thirty (30) days of having been finalised.

Article 33
Payments into the Petroleum Fund Account

For all purposes of Timor-Leste law, an obligation to make a payment into the Petroleum Fund shall not be treated as discharged until the amounts have been deposited, integrally and unconditionally, into the Petroleum Fund earmarked receipts account.

Article 34
Independent Auditor

34.1 Without prejudice to the jurisdiction of any court, there shall at all times be appointed an Independent Auditor, which shall be an internationally recognised accounting firm, selected and appointed by the Government.

34.2 The selection and appointment of the Independent Auditor shall be made in accordance with the procurement procedures established under Timor-Leste law.

34.3 The Independent Auditor appointed under this Act shall remain in function for the contracted period, unless the contract is terminated for serious misconduct or serious breach of contract, or if the Independent Auditor's conduct otherwise prejudices the performance of the Petroleum Fund.

Article 35
Payments made as Petroleum Fund Receipts

35.1 The Independent Auditor shall prepare a report for the Minister of all payments made, or that should under this Act have been made, as Petroleum Fund Receipts for each Fiscal Year.

35.2 The Independent Auditor may require any Payer to provide any information, and to deliver proof of any facts which may be necessary for the full discharge and performance of the Independent Auditor's duties under this Act.

35.3 The Independent Auditor's report shall state the aggregate amounts of payments made as Petroleum Fund Receipts for each Payer for the Fiscal Year.

35.4 If the Independent Auditor concludes that there is a discrepancy between payments made and those which should have been made, and which cannot be explained, the Independent Auditor shall refer the matter to the Minister. In referring the matter to the Minister, the Independent Auditor shall provide all information that the Independent Auditor possesses regarding the discrepancy in question.

Article 36
Reports of the Independent Auditor

36.1 The Minister shall provide for the publication of the Independent Auditor's report, in particular through the Annual Report.

36.2 The Independent Auditor shall ensure that in preparing the report measures are taken to prevent the disclosure of confidential information.

Chapter VII – Penalties

Article 37
Scope of the Chapter

The provisions included in this Chapter are without prejudice of criminal and civil liability under general law.

Article 38
Non-Compliance with an Obligation to Publicise Information

Whoever fails to comply with any obligation to publicise information, provided for in this Act, or leads someone else to fail to comply with, or in any manner hinders or leads someone else to hinder the compliance with, such an obligation, shall be punished by imprisonment for a period up to two (2) years or fine of not less than fifty (50) days.

Article 39
Misleading Information

39.1 Whoever gives information that is materially false or misleading, or knowingly includes or permits to be included, in any report or document, information that is materially false or misleading, shall be punished by imprisonment for a period up to three (3) years or fine of no less than seventy five (75) days.
39.2 An attempt is punishable.

Article 40
Hindering the Exercise of Powers by an Auditor

40.1 Whoever, directly or indirectly, in any measure or by any means, hinders or leads someone else to hinder the exercise of powers by an auditor under this Act, shall be punished by imprisonment for a period from three (3) months to four (4) years or fine of not less than one hundred (100) days.
40.2 An attempt is punishable.

Article 41
Accessory Penalties

In relation to the crimes provided for in this Act, the following accessory penalties may be applied:

(a) Termination of contracts;
(b) Publication of the conviction and sentence; and/or
(c) Other injunctive relief as may be necessary taking into account the circumstances of the case in question.

Article 42
Liability of Legal Persons, Corporations and Other Legal Entities

42.1 Legal persons, corporations or any other legal entities, including those without juridical personality, are liable for contraventions provided for in this Chapter when committed by its organs or representatives in its name and in the collective interest.
42.2 The liability is excluded where the agent has acted against express orders or instructions properly issued.
42.3 The liability of the entities mentioned in Section 42.1 does not exclude the individual liability of the respective agents.
42.4 The entities mentioned in Section 42.1 are jointly and severally liable, as provided for in civil law, for the payment of any fines or compensations, or for the fulfillment of any obligations, derived from the facts or with incidence on matters covered by the scope of this Act.

Article 43
Fines to Legal Persons, Corporations and Other Legal Entities

43.1 In the case of legal persons, corporations or any other legal entities, including those without juridical personality, the daily rate for fines corresponds to an amount between one United States Dollar (USD $1.00) and two thousand United States Dollars (USD $2,000.00), as determined by the court, taking into account the economic and financial circumstances of the legal person, corporation or other legal entity.
43.2 If the fine is applied to an entity without juridical personality, its payment will be guaranteed by the entity's assets and, in the event of non-existence of such assets or under-capitalisation, jointly and severally, the assets of each of the partners or shareholders of the entity.

Article 44
Subsidiary Legislation

General criminal law, both substantive and adjective, as well as the relevant administrative legislation, are applicable in a subsidiary manner, with the required adaptations, to the extent necessary to give effect to the provisions of this Chapter.

Chapter VIII – Ombudsman for Human Rights and Justice

Article 45
Complaints to the Ombudsman for Human Rights and Justice

44.1 Any person, legal and natural, may lodge a complaint with the Ombudsman for Human Rights and Justice, on any matters covered by the scope of this Act, in accordance with general law.
44.2 Any recommendations forwarded by the Ombudsman for Human Rights and Justice to the competent authorities, on any matters covered by the scope of this Act, shall be treated as a matter of urgency.

Chapter IX – Transitional and Final Provisions

Article 46

Implementation of Organizational Structure

46.1 All appointments necessary for the effective functioning of the Investment Advisory Board shall be made within three (3) months of the entry into force of this Act.

46.2 All appointments necessary for the effective functioning of the Petroleum Fund Consultative Council shall be made within six (6) months of the entry into force of this Act.

Article 47

Subsidiary Laws and Regulations

The Government and the Minister may make regulations for the effective carrying out of the provisions of this Act, including regulations of a transitional nature consequent upon the making of this Act.

Article 48

Opening Balance of the Petroleum Fund

48.1 The opening balance of the Petroleum Fund is the total amount of the payments received by Timor-Leste, up to the commencement of the present Act, as *First Tranche Petroleum*, from the Joint Authority pursuant to the terms of the Exchange of Notes, or from the Designated Authority pursuant to the terms of the Treaty, increased by such amount, if any, as determined by the Government.

48.2 A report on the determination of the opening balance of the Petroleum Fund shall be provided with the first quarterly report presented under Article 13.

Article 49

Entry into force and application

49.1 This Act enters into force on the day following its publication in the *Jornal da República*.

49.2 This Act applies to Fiscal Years commencing on or after 1 July 2005.

49.3 Until the implementation of the organizational structure under this Act is fully completed, and in no case for a period of more than six (6) months starting from the date of entry into force of this Act, only the provisions that do not require the intervention of the organic structure to be constituted shall apply.

Approved on 20 June 2005.

The President of Parliament,

Francisco Guterres “Lu-Olo”

Schedule 1
Calculating Estimated Sustainable Income for a Fiscal Year

I. Estimated Sustainable Income for a Fiscal Year is the maximum amount that can be appropriated from the Petroleum Fund in that Fiscal Year and leave sufficient resources in the Petroleum Fund for an amount of the equal real value to be appropriated in all later Fiscal Years as determined in accordance with the formula in paragraphs II and III below.

II. Estimated Sustainable Income for a Fiscal Year is calculated according to the following formula:

r × Petroleum wealth

where:

r is the estimated average real rate of return, or real interest rate, on Petroleum Fund investments in the future and, for the purposes of these calculations, shall be 3.0%.

III. In this Schedule, 'Petroleum wealth' is calculated according to the following formula:

V + present value (R0, R1,..., Rn) = $V + \sum_{t=0}^{n} \frac{R_t}{(1+i)^t}$

where:

V is the estimated value of the Petroleum Fund at the end of the prior Fiscal Year

R0,R1, etc. are the published budget projections for expected annual Petroleum Fund Receipts minus investment returns for that Fiscal Year (R0) and future Fiscal Years (R1, etc.)

i is the estimated nominal yield on a U.S. government security, averaged over the years in which Petroleum Fund Receipts are expected

n is the number of years until no further Petroleum Fund Receipts are projected to be received.

IV. All assumptions upon which the calculations made pursuant to paragraphs II and III above are based shall be clearly identified and explained, and any changes made in these assumptions in subsequent calculations shall be clearly pointed out.

V. All assumptions made shall be prudent, reflect international best practice and be based upon internationally recognized standards.

VI. The amount determined in accordance with the formula in paragraphs II and III above shall be certified by the Independent Auditor.

Appendix 3 Participant details survey

1. Gender ☐ Male ☐ Female
1a. Age ☐ 18-25 ☐ 25-40 ☐ 40-60 ☐ 60+
1b. Do you have children? ☐ Yes ☐ No
1c. Do you have grandchildren? ☐ Yes ☐ No
2. Where do you currently live? ☐ Dili ☐ District of ……
3. Since 1975 until now, where have your lived most of the time?
☐ East Timor ☐ Indonesia ☐ Australia ☐ Portugal ☐ Other……
3a. What languages do you speak?
☐ *Tetum* ☐ Indonesian ☐ Portuguese ☐ English ☐ Mambae
☐ Makassae ☐ Other ……
4. In the past 10 years, what kind of work have you done?
☐ Government ☐ NGO ☐ Student ☐ Other ……..
Details:
5. How would you describe your current income level for one year?
☐ Earning < $1 per day
☐ Earning $365 - $520 per annum
☐ Earning $520 - $1500
☐ Earning $1500 - $3000
☐ Earning $3000-$10,000
☐ Earning $10,000
☐ Other ……..
6. Level of education
☐ No education ☐ Completed primary school ☐ Completed secondary school
☐ Completed Bachelor Degree ☐ Completed Masters Degree ☐ Completed Doctorate
☐ Other ……

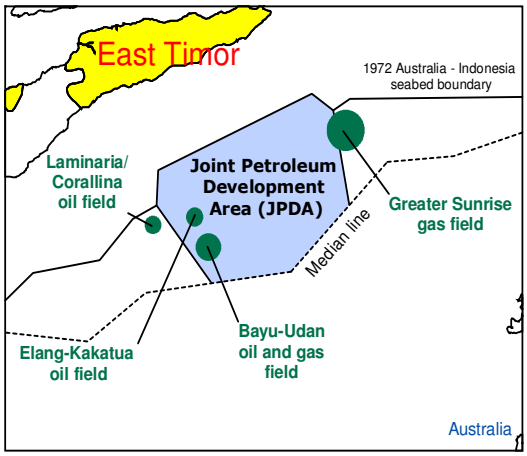
Appendix 4 Participant information sheet

WILL PETROLEUM REVENUE SUSTAIN TIMOR-LESTE?

This information sheet gives insight into the problem of the resource curse & Timor-Leste's petroleum revenue management plan.

The problem

Many countries exploit their natural resources (petroleum, forests, minerals, etc.) as these industries appear to be an easy way to make money. Government decision-makers hope they will develop their economies and improve the lives of their people using this money. Unfortunately, in most cases, the opposite happens. More often than not, countries that exploit their natural resources experience a decline in economic growth; in some countries, the rich people get richer and the poor people get poorer. This happens for a number of reasons; it may be because of the fiscal policy of the government, it may be there is a lack of capacity to manage the revenue, it may be because the money is wasted or mismanaged. For these and other reasons, it will be a challenge for Timor-Leste to use the revenue from petroleum wisely but Timor-Leste has the opportunity to avoid the resource curse.



Timor-Leste's petroleum revenue

This is a map of the petroleum fields of the Joint Petroleum Development Area (JPDA). Bayu-Udan is already being exploited and providing revenue to Timor-Leste. Timor-Leste is also currently negotiating with Australia to share the resources of Greater Sunrise and exploitation will then depend on the identification of potential LNG (Gas) customers (by Woodside Petroleum) and other industrial requirements.

This research* will identify the most crucial challenges for Timor-Leste in managing its natural resource wealth and make recommendations to improve natural resource wealth management that address those challenges. One of the challenges for Timor-Leste is the capacity of their nascent institutions to manage their natural resource wealth. The literature shows that the strength of institutions is a key to avoiding the resource curse. Other challenges for Timor-Leste include deciding how much to save and how much to spend, how to save, when to spend and what to spend their natural resource wealth on.

In June and July 2004 I interviewed 28 Timorese political and community leaders and decision-makers (both Timorese and Foreign) and talked with them about their vision for the future of Timor-Leste. I have used their insights and what I have learned from reading the academic literature to develop the questions in this second round of interviews. In July and August 2005 I will use Point*Wizard software (www.pointwizard.com) to elicit the preferences of participants in terms of budget allocation and administrative decisions regarding petroleum revenue management. The opinions of participants will be compared to elicit any correlation between institutional or demographic groups.

The Government of Timor-Leste has established a Petroleum Fund Act and the aim of this Act is to make wise use of their natural resource wealth. This research may add value to the mechanisms already in place by suggesting improvements and additional measures that reflect the input of the people of Timor-Leste that participate in the interviews.

Student's background

Jenny Drysdale has a Masters of Environmental Science (Monash University), and has worked in development and financial management. Jenny worked in Timor-Leste from July 2000 until March 2002 and established an office for Australian Volunteers International, worked in environmental protection and local government (finance officer), and developed an environmental management framework for the Rural Development Project. In Australia Jenny worked with Friends of Baucau – where communities in Melbourne raised funds to support the development of a Friendship and Learning Centre in Baucau (and other projects).

For further information or to participate in this research please contact Jenny Drysdale (ph +670 727 9447 or email jennifer.drysdale@anu.edu.au)

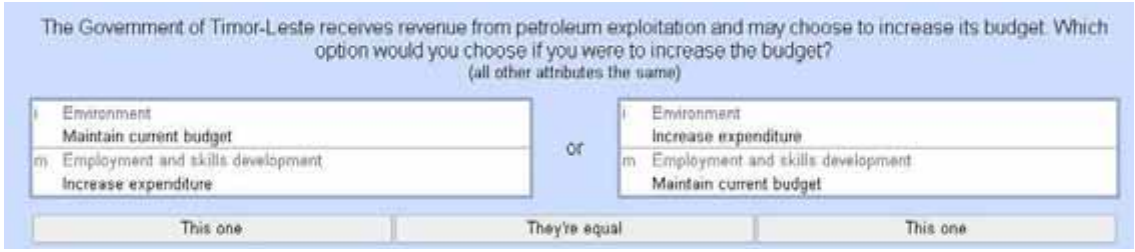
* This research does not cover the issue of maritime boundaries.

Appendix 5 Point*Wizard Interview (Part One) Supporting Information for Participants

Part One - Budget Allocation

The Government of Timor-Leste receives revenue from petroleum exploitation and will spend some of it to maintain the current budget (in place of Development Partners funds). The Parliament may also choose to increase the Government's budget.

In Part One you will be asked to choose (or trade-off) between two options. In the first option, expenditure of one budget item will be maintained and the other increased. In the second option, expenditure of the first budget item will be increased and the other maintained. For example:

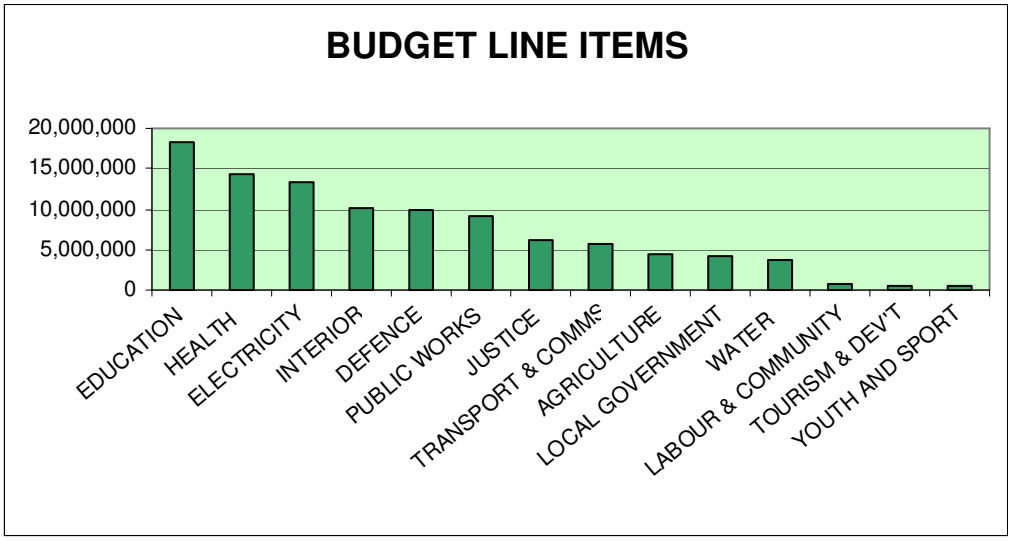


You will be asked to make approximately 35-40 choices like this one. You will be encouraged to talk about your decisions and your comments will be recorded. Part One will take between 20 – 30 minutes to complete. At the end of Part One you will be shown a ranking of the budget items based on the preferences you have expressed.

The budget items that will be included in the choices presented to you are:

Agriculture, Forestry & Fisheries	Justice	Tourism and Development
Defence (FDTL)	Labour and Community Integration	Transport and Communications
Education	Local Government	Water
Electricity	Interior (Police, Immigration, etc.)	Youth and Sport
Health	Public Works (Roads, Buildings, etc.)	

If you would like to know a little bit more about the Budget, the following table presents the relative expenditure of some of the budget categories in 2005-06. Note, not all of the budget categories are used in this research.



Appendix 6 Point*Wizard Interview (Part Two) Participant Questionnaire

In Part Two you will be asked to choose (or trade-off) administrative decisions. These are decisions that might be made in the development of a Petroleum Fund model. Some of these decisions have already been made by the Government of Timor-Leste. These are complex decisions and some information is provided below. If you do not understand please do not hesitate to ask questions.

The software used in the interview needs to be tailored to your preferences. Please number the categories according to your preference (i.e. 1 is your first preference, 2 is your second preference, and so on).

As in Part One, you will be asked to make approximately 35-45 choices and encouraged to make comments on your decisions. Part Two will be more difficult and take longer (30-40 minutes).

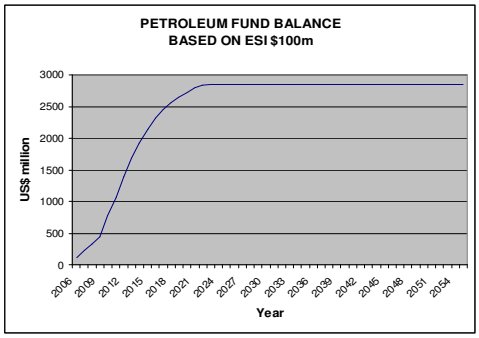
1. The Petroleum Fund should be (rank 1-2)

The Government of Timor-Leste has established the Petroleum Fund Act. An alternative would be to establish the Petroleum Fund in the Constitution.

- ☐ Enshrined in the Constitution
- ☐ Established through an Act of Parliament

2. The amount of revenue withdrawn from the Fund

The 2005-06 Budget states the Estimated Sustainable Income that can be withdrawn from the Petroleum Fund each year is $100 million. This is based on the assumption that only Bayu-Undan is exploited. On this basis we assume if $100million is withdrawn from the Fund each year, once the petroleum fields are exhausted the Fund will remain stable forever. If, on the other hand, more than $100 million is withdrawn from the Fund in any single year, the Fund will eventually diminish to nothing. If less than $100 million is withdrawn from the Fund in any single year, the value of the Fund will increase overtime. Right now, the Government plans to spend less than $100 million because they argue the Government does not have the capacity to spend that much yet.



The amount of revenue withdrawn from the Fund each year should be (rank 1-3)

- ☐ More than $100 million
- ☐ Less than $100 million
- ☐ $100 million

3. The Petroleum Fund should be financially invested in (rank 1-3)

Note: There are no East Timorese financial institutions (e.g. banks).

- ☐ Timor-Leste and Overseas
- ☐ Overseas

4. Petroleum revenue should be invested in financial assets denominated in (rank 1-2)

- ☐ Euros
- ☐ US $
- ☐ Euros and US $

Appendix 6 **continued**

5. Investment of the Petroleum Fund

The Petroleum Fund Law says that, in the first five years, 90% of the Fund will be invested conservatively (it will earn low interest, around 3%, but will also have a very low risk of loss) and 10% will be invested in a wider range of investments. These investments will have the chance to earn higher interest (more than 3%), but they have a higher risk of loss also.

In the first five years the Petroleum fund should be financially invested as follows: (rank 1-3)

- [ ] More than 10% should be invested in a wider range of investments (higher risk)
- [ ] 90% should be invested conservatively, 10% in a wider range of investments (as in the PF Law)
- [ ] 100% should be invested conservatively (risk-averse)

6. Exploiting Greater Sunrise

There are four options in the scenario used in this interview. One option is to exploit Greater Sunrise in 2010. This is the earliest possible date of exploitation expected by Woodside based on the need to identify customers and develop rigs, etc. A second option is 2025, which is based on the assumption that Bayu-Undan will be exhausted by then (i.e. that no petroleum revenue will be coming in after this time if Greater Sunrise is not ready to go ahead). A third option is when maritime boundaries are resolved. It is not known when maritime boundaries will be resolved. The fourth option (After 2055) represents a date in the future when the next or future generations will make decisions about petroleum revenue.

Greater Sunrise should be exploited (rank 1-4)

- [ ] After 2055 (when future generations can decide)
- [ ] When maritime boundaries with Australia are resolved
- [ ] In 2025
- [ ] In 2010

7. Petroleum revenue should be spent on (rank 1-4)

- [ ] Individual payments to all East Timorese citizens*
- [ ] Consumer durable capital expenditure (e.g. cars, computers purchased by and for Government use)
- [ ] Social services (e.g. health, education)
- [ ] Durable capital expenditure/Physical infrastructure (e.g. roads, electricity, ports)

* "Individual payments to all East Timorese citizens" means a 'royalty' payment (of the same amount to each person) such as they have in Alaska (all Alaskan citizens get a share of the interest earned from their Petroleum Fund). If this option is taken it means there is less (or no) money to spend on the Budget.

8. Budget expenditure should be financed by (rank 1-2)

- [ ] Withdrawing from the petroleum fund (i.e. not relying on loans)
- [ ] Borrowing money from an international financial institution (e.g. the World Bank or the IMF)

Appendix 7 Semi-structured interview quantitative data analysis (example results)

PARTICIPANT DETAILS	% All Participants Yes	% East Timorese Yes	0002	0003	0010
Government/Foreign/ Church/NGO/Political opposition			Govt	Foreign	Govt
Woman/Man			Woman	Man	Man
Rural/Urban			Rural	N/A	Urban
Decision-maker/No direct role			No role	D-M	D-M
Children?			Yes	N/A	No
ISSUES OF IMPORTANCE TO PARTICIPANTS					
Education is an important issue	89	96	Yes	(Yes)	Yes
Want quality of life to improve	82	96	Yes	-	Yes
Health is an important issue	75	83	Yes	-	Yes
Poverty is an issue	75	83	Yes	-	Yes
Economic development is an issue	75	74	Yes	Yes	Yes
HRD (capacity building) is an issue	71	70	Yes	-	Yes
Foreign assistance is required in future	46	39	-	Yes	Yes
National security is an issue	39	48	Yes	-	Yes
Roads and access are an issue	25	30	Yes	-	-
Water supply is an issue	21	26	Yes	-	-
The environment is an issue	21	26	-	-	-
Electricity supply is an issue	14	17	Yes	-	-
Gender equality is an issue	11	13	Yes	-	-
SPENDING AND SAVING PETROLEUM REVENUE					
Some revenue should be saved	75	74	Yes	Yes	Yes
Petroleum revenue should be used to fund the Budget	46	39	(Yes)	Yes	(Yes)
Revenue should be spent on agriculture	46	57	-	No	Yes
Petroleum revenue should be used to create employment/jobs	29	30	-	-	Yes
Petroleum revenue expenditure should have sustainable benefits	21	22	Yes	-	-
Petroleum revenue should be used to generate income or develop small business	18	22	-	-	Yes
DECISION-MAKING AND INSTITUTIONAL CHALLENGES					
Good governance or consultation is required	79	83	Yes	-	Yes
East Timorese institutions need to be strengthened	68	65	Yes	Yes	Yes
New institutions need to be created	68	74	-	-	Yes
Transparency in decision-making is required	61	57	Yes	Yes	-
Parliament should be involved in decision-making	61	61		Yes	Yes
There is corruption in the Government now	57	52	Yes	-	-
Has confidence in/trusts the Government	46	43	-	(Yes)	No
Government has the capacity to manage revenue	46	43	Yes	Yes	No
Community should share responsibility for decision-making	43	48	-	-	Yes
Need to diversify industry	32	35	-	-	Yes
Corruption comes from Indonesian times	29	26	Yes	-	-
Establish a petroleum ministry	25	17	-	-	(Yes)
Showed confidence in Mari Alkatiri	14	13			Yes
Establish a National Oil Company	14	13	-	-	Yes
Timor Leste will be a victim of the Resource Curse	7	4		-	Yes

Appendix 8 Participants' vision of Timor-Leste's future

Improved health and education

- Life is already different no doubt. In my time I had to walk 12 kilometres to school, from Comoro to Balide. Children now have better access to schools and if the schools are still far away they have access to means of transport… East Timor is now part of the global world. We have communications in the form of television and radio. Previously it was even difficult to get access to radio. Today we have 'parabola' (satellite dish)… So the differences are already big, but still there are challenges. What I would like is for children, particularly in rural areas, to have better education, better healthcare, water and sanitation, power and roads. We still have a long way to go. Every child must eat three meals a day. This is our aim. Children must start thinking about their future. (Mari Alkatiri, former Prime Minister)
- [In the future] They [children will] have enough protein. [There will be] Good schools, not just number, but quality. Mortality can be reduced… Life expectancy should be higher. (Fernando 'Lasama' de Araujo, Partido Democratico)
- I hope that they [children in the future] will have a better understanding of the world. That they will embrace the world. Take the benefits of globalisation. They will know that Timor is part of the world. They will have access to more information about the outside world… East Timorese society will be less dominated by the Catholic Church. The future will be a place where children are not hampered in their imagination. (Jose Teixeira, Minister of Natural Resources, Minerals and Energy Policy)
- [Spend petroleum revenue on] education and health, not physical/infrastructure. Forget about road building. It needs to be spent on human development. (Jose Teixeira, Minister of Natural Resources, Minerals and Energy Policy)
- School attendance will be free. My wife will have better access to health… People will have longer life expectancy. (Male NGO)
- Economy for children to go to school. Better education, better health, better food/nutrition, and time for relaxation. (Male NGO)
- Health services provided will be sufficient. Secondly, but most importantly, education. In the long term this sector will develop, but we need to speed up the skilling up of East Timorese so they develop the capability to run this country. The education system will take longer to develop, but you need a small segment of society to face the challenges of globalization. Then they can transfer their technological acquaintance to others whilst waiting for the education system to catch up. (Male Decision-maker)
- Education and health. Better nutrition. The amount of health service that is provided will be increased so that people can be really healthy. Secondly, proper/good education which means proper class sizes, books available, and parents can afford to pay for their children to go to school, to buy books. So that the school has a good curriculum. (Male Decision-maker)
- Yes, I think [the lives of children in the future] will be different to mine. We can give them food to increase their intelligence at school. We will develop our children. Develop Timor-Leste. Develop education, health and food. These are the priorities. We will develop our country for the future... For example, the Ministry of Health gives education for the family about health and this increases their nutrition. (Male Decision-maker)
- Life in the future is better than now… Everybody will be able to read and write in 20 years' time. In 20 years, everyone will have access to education in rural areas. The quality of education will be increased. Health will be the same. People will have long life. Life expectancy will be higher… Maternal health will be better. Mortality rates will be lower. (Male Bureaucrat)
- In the future there will be better education, health, roads, [and] infrastructure. It won't change overnight. It will take time. (Male Decision-maker)
- All children today must go to Primary school… It [the future] will be different. It must be. I have a plan for my children, they will do Masters. (Female Bureaucrat District)
- I would like them to have a much better life than me. How? Because in my childhood I didn't have a good education. (Male Decision-maker)

Appendix 8 Participants' vision of Timor-Leste's future (continued)

Poverty reduction and economic development

- I want the life I didn't have. Timor shouldn't be poor like it is today. It is not just about getting a lot of money, but I dream and the people will have open minds, they will give a global contribution. (Bishop Nascimento, Church Leader)
- We should use the [petroleum] revenue to create some company or factory to create jobs for the unemployed. What kind of factory? In Portuguese times they used to make orange juice and soap... We can create a factory for coconut oil because we get our oil supply from other countries now. We have lots of fruit so we can make juice. (Maria Paixão, Partido Social Democrata)
- After 20 years there will be less poverty. (Female District Bureaucrat)
- Our first priority is poverty reduction. Our other priority is to enhance the economy. (Male Decision-maker)
- Poverty reduction. We won't have people living in poverty. (Male Bureaucrat)
- Economic independence is important. We need to increase the amount of paid work. People work without being paid which means they can not pay for their children to go to school. Everyone needs to get paid for the work that they do. Because they can't use what they earn to pay for their children to go to school. I want a situation where people can make money. In the agriculture sector or the tourism sector. These sectors need to develop. (Male Decision-maker)
- Broadly speaking, eradication of poverty. This will be an issue to a lesser extent than now… There will still be vulnerable groups though. (Male Bureaucrat)
- Firstly I would be concerned with private activity. First poverty reduction. (Male Bureaucrat)
- We are not a big country. We need to develop other resources, such as improving conditions for fishermen. By resourcing them with skills and equipment. This will increase the national income. Or other examples include agriculture. We are working from a minimal base now. (Male NGO)

Improved infrastructure

- Imagine a situation where you have good roads, good sanitation, [and] good schools for the children... Good circulation of food… A good airport to attract tourism. Good port to get revenue for the country. Enough water. (Fernando 'Lasama' de Araujo, Partido Democratico)
- We must manage the natural resources for the (benefit of the) future of Timor Leste… There will be a better standard of electricity, water, roads, and infrastructure. This will come from the revenue from natural resources. (Female District Bureaucrat)
- In rural areas we will have access to everything. In terms of roads, water and sanitation, environment… (Male Bureaucrat)
- In the future there will be a good supply of electricity, water supply. (Female District Bureaucrat)
- There will be no blackout of power. There will be power all night. (Male NGO)
- The Economy. To some extent infrastructure. Transportation system, sports, recreation and other facilities. (Male Decision-maker)
- Development issues... When we talk about economy it's important to talk about agriculture. (Young Male)
- To create national infrastructure. I want to dream of good agriculture. People need good roads to establish good production… Secondly, we need power, all night… Third, water and good sanitation… We should have a few savings. The money should be spent through the Budget on projects. (Male Bureaucrat)

Appendix 8 Participants' vision of Timor-Leste's future (continued)

Better quality of life

- When I was small our parents did not have opportunities. They sacrificed their lives. We wanted things, but they didn't have the power to give them to us. There was a lot of hunger. We wanted a good house. We wanted to play with toys, but there was no time. We would like a better life. (Bishop Nascimento, Church Leader)
- Reality [now] is very difficult. The economy is not good. People have no money. Without money they can not get good food, go to hospital, buy medicine, [or] go to school. The future will be better. These things will develop. (Male Bureaucrat)
- Of course, I would like life to be better. Not like the Australian standard. (Male Decision-maker)
- In 20 years we will see the results from petroleum revenue. It is my party's opinion that in 20 years to come the community will be middle class… All of them? Not all, but about 50%. Until now East Timorese did not have a good life. 80-90% are poor. In two years' time we can use the revenue to improve people's lives. (Maria Paixão, Partido Social Democrata)
- As we know, from the National Development Plan, people will have good conditions for life in 2020. They will have a good tax system so that people can have a good house, eat three meals a day, children can go to school… Have access to communication [TV from other countries]. (Male Decision-maker)
- In my dreams, I think life will be different in 20 years, it will be better. We will have everything we need. Everyone will have access to social justice. Better health, education, better life. (Young Male)
- They [my children in the future] will have a small family. They want a good life. The children look at others and realise that children of larger families have a difficult life economically. (Female Bureaucrat District)
- I have a vision for how the petroleum money will be spent. I imagine all people will have better houses. It would be sad if you saw good houses springing up in just some areas, like around here [Farol]. I would like to see it progress right through [to the districts]. (Niny Borges, TSDA)

More secure

- There will be a big difference. For me, because during my life 20 years ago I didn't have access to have a job in Indonesian times as I was on the blacklist. Not only that, but it was difficult for us to walk around during the day. We gave information to people in the middle of the night. We couldn't sleep. We had no medical treatment, no food. We had to cook for ourselves. No support. (Male Bureaucrat)
- They [children in the future] won't have war. The impact of war is deep-rooted into the psychology and my psychology and I am still dealing with it. This is a legacy of war. The children [of the future] will be peacefully playing, enjoying their childhood, getting along. They will have more time to play instead of being dragged along because of work. They have toys to play with. Comic books, Peter Pan, Cinderella, rather than working selling oranges. "Give me lolly". I don't want to see children still in the street washing UN cars. No more tale of two cities. Heaven and hell. Equitable, [so that the] difference is not so huge. (Male NGO)
- We lived in the time of occupation. We didn't have the same opportunities. We went to school, but we couldn't concentrate because we were always worried about our families. These days, they [children] only have to think about school. (Male Decision-maker)
- I have had in my mind, for a long time, that my generation is a lost one. We didn't grow up normally. We didn't have a healthy environment. We did not have opportunities for education. We lost these. This was a very conflict situation. The only thing we know is conflict. (Male Church Leader)
- Stability [is an issue]. Relations with other countries. If you don't create the good conditions… In terms of stability there is internal and external stability. For example, internally there is CPD-RDTL [inferring they cause instability]. (Young Male)

Appendix 9 Variation in government spending between 2005-06 and 2006-07

Selected Budget Items	05-06 Total US$,000	06-07 Total US$,000	US$ m difference	Order of Government's Actual Increase	Participants' Order of Relative Importance	Places between participants' & government's order	Percentage increase between 05-06 & 06-07	Percentage of 06-07 Budget
Defence	9,780	24,390	14,610	3	14	**11**	149%	7.7
Water[181]	3,788	8,673	4,885	12	3	**9**	129%	2.7
Justice[182]	6,227	5,698	-529	14	6	**8**	-8%	1.8
Local Government	4,149	14,599	10,450	6	11	**5**	252%	4.6
Public Works	9,142	50,010	40,868	1	5	**4**	447%	15.8
Health	14,305	25,721	11,416	4	1	**3**	80%	8.1
Agriculture, Forestry & Fisheries	4,450	14,009	9,559	7	4	**3**	215%	4.4
Electricity[181]	13,324	24,545	11,221	5	7	**2**	84%	7.8
Tourism and Development	453	9,353	8,900	9	8	**1**	1965%	3.0
Labour & Community Integration	864	9,997	9,133	8	9	**1**	1057%	3.2
Interior	10,184	15,552	5,368	11	12	**1**	53%	4.9
Education	18,220	35,004	16,784	2	2	**0**	92%	11.1
Transport & Communications	5,734	12,743	7,009	10	10	**0**	122%	4.0
Youth & Sport	442	2,984	2,542	13	13	**0**	575%	0.9

[181] 'Water' and 'Electricity' are the relevant components of the budget for the Ministry of Natural Resources, Minerals and Energy Policy.

[182] 'Justice' includes Justice, Tribunals, Provedor of Human Rights and Justice, and the Public Prosecution Office.

Appendix 10 Selected comments made by participants about social services

On Social Services

- They're equal [Education & Health]. The two ministries go hand in hand. You need to educate people to understand and make life choices and that affects the health situation. If people aren't healthy they don't learn. (Jose Teixeira, Minister of Natural Resources, Minerals and Energy Policy)
- One thing I will say for Timor Leste is that there is a great deal of sympathy from donors. They [Timor-Leste] can still attract a great deal of aid. They can get funding for health and education. You should analyse the donor's direction; they won't give money to power or roads. The Government should therefore focus on the less sexy issues. (Kadhim Al-Eyd, Former Resident Representative, IMF)

On Health

- Health because half the East Timorese are under nutrition and [there is a] lack of medicine, [and] health facilities and even the budget for health infrastructure is not there, so that alone. Clinics are not enough. People can not afford to go to hospital. (Male Academic)
- Increased quality of health means the Government can develop a sense of justice and equity, and develop healthy society, and therefore reduce social tension, and therefore don't need to increase budget for Interior. (Male Decision-maker)
- Many clinics are still broken, there is no ambulance… When the ambulance doesn't work, people die. (Male District Bureaucrat)
- They were doing research in Becora about a whole family with AIDS, but they had to stop the research because there were no drugs. Not enough hospitals, clinics, no doctors. (Female NGO)
- Health because they need medicine. Many die, not enough doctors and nurses in the clinics. Sometimes people in the district die because there are no doctors. (Female District NGO)
- Health is fairly well funded and is attracting a lot of extra-budgetary funding from bi-lateral and multilateral donors. (Female Foreign Adviser)

On Education

- Without good Education there will be no justice. (Female NGO)
- When education is no good the East Timorese people can not know about environment… If people are educated they will know how to use the water and take care of the forests so they don't cut down the trees. (Female District Health Worker)
- Education because it is more important if we want to have a good country. To have a technological country like the US or G8. Human resources are important. If we have human resources we have knowledge and then tourism will be developed by the human resources. (Male Decision-maker)
- Education at the moment is stuck. It's not systematically developed to meet the needs. Need to focus on vocational training rather than education to respond to the demands of foreign investment and skills competitiveness. (Male Decision-maker)
- Education because there are not enough resources. Many students, not enough teachers. Sometimes no chairs, no chair for teacher also. They have to sit on the ground. (Female District Teacher)

Appendix 11 Selected comments made by participants about infrastructure

On Electricity

- Electricity because it's one of the main elements of economic infrastructure. If you don't have power then the economy can't work and you won't be able to attract investment. (Male Academic)
- Easy. Electricity because it's the key if you want to have tourism. No electricity no tourists. It's a key. (Male Decision-maker)
- Now we must have electricity even in the rural areas. If they have [electricity] then their children can read [at night] and [they] will be able to compete with the students in the city. In our remote area they only use kerosene. If electricity is in the rural areas they can use electricity to increase their economy. (Male Decision-maker)
- Without having stable electricity supply you don't get any industrial development. The other thing is, as it is now, 'everybody' has generators. From a macro-economic perspective that's an extremely expensive way of supplying electricity to the country. (Einar Risa, Commissioner and former Executive Director, TSDA)
- Electricity because infrastructure in the rural areas is totally lacking. There is not one district that has electricity 24 hours, 7 days a week and a lack of electricity is the single most important constraint to business development and employment creation outside Dili. (Female Foreign Adviser)
- Electricity because if they have electricity they can have small business, it's important, like they are selling ice. (Female District NGO)
- Electricity because power goes off in the middle of a pregnancy. (Male NGO)
- If you don't have electricity there is no problem, but if you don't have water that is a priority. (Male NGO)

On Public Works

- Electricity is one key for the investment element, but Public Works is also a key for investment. I want to invest in Timor-Leste to have good roads and good infrastructure, but [they] can't forget about the power. (Male Bureaucrat)
- Public works first because you need infrastructure first. If you have good infrastructure, tourism will come. (Businessman)
- Public Works because roads are dangerous in the rural areas and access to districts is important. [The quality of roads is] cutting opportunities. (Female Decision-maker)
- Public Works because [improvements will] increase access and movement of the population, especially roads. The country, during the rainy season, is practically isolated so roads and infrastructure, in general, is important. (Male Decision-maker)
- Many people want to go to hospital or to the market, but if the roads are not good they can't. From Indonesian times until now they never fixed the road. (Male District Bureaucrat)
- Public Works because many people can get jobs [in Public Works]. All people can do it [work in Public Works]. All people can't do [work in] Tourism, only rich people can. (Male District Farmer)
- Public Works because they should fix the streets because the streets are bad. Mobile clinics need to get around. Roads in *suco*s [villages] are not good. [This is a] Problem for health when they want to go to *suco* and give treatment. (Female District Health Worker)
- Best to spend it on Public Works because one day the mineral [sic. Petroleum] will be finished and so the money should be spent on developing tourism or Agriculture. (Young Male District Veteran)

On Transport and Communications

- Transport and Communication because [they] are necessary before one can develop tourism. (Male Decision-maker)
- Transport because if we have a problem ...they can only walk... they can't go quickly. For example, in the districts in the *suco* [village] if there is a problem, and we have transport we can go there and resolve it. For example, when people beat each other and kill each other they can come quickly and tell the police. (Female District Health Worker)
- Communication is principal [sic.] for everyone. So that everyone can know what's going on, and Transport is good so that everyone can do something quickly. (Female District Health Worker)
- Government should be in the business of trying to establish a reasonable level of infrastructure so the private sector can develop. (Male Foreign Adviser)
- And the reason for Communication is so that all of the districts have Communications. Not only telephone, but internet so we can communicate with the districts. (Male NGO)

Appendix 11 Selected comments made by participants about infrastructure (continued)

On Water

- Water because it is the key element for life. You need [water] for drinking, for food, for cooking, everything. Water is the centre of life. Also [we need] clean water for sanitation. (Male Bureaucrat)
- Water is more important because they [people in the districts] have to go to the river. They [go there to] have a shower, and they take water for cooking from the river. (Female District Bureaucrat)
- If you don't have water then you don't have tourists. (Male District Community Leader)
- Water because we can not live without water and people need water for sanitation otherwise they'll get sick. (Female District Health Worker)
- Water is important because if you don't have water you can't make Agriculture. Water gives all of people life and they need water for Agriculture to plant everything. If there is no water we will die. And especially in Baucau we don't have water at home so we need to buy. (Female District NGO)
- You just reminded me I just came back from Ainaro and I saw people walking 7km to get the water so it is more important. (Female NGO)

Appendix 12 Selected comments made by participants about local development

On Agriculture, Forestry and Fisheries

- We need to increase this [expenditure to Agriculture] to have self-sufficiency in terms of feeding the people because if you have good food and good conditions, the rest [will] come by. (Businessman)
- Agriculture because we can spend now and train our farmers and fishers to enable them to be competitive. It will reduce their needs in the future. (Male Decision-maker)
- Agriculture doesn't rely so much on budget, but the capacity of the people to use infrastructure. (Male Decision-maker)
- Agriculture because you need to develop the economy of the people so agriculture is the priority. (Male District Community Leader)
- Agriculture because we have a lot of land which is not productive. So the Government can develop. We want to prepare product for industry; sugar and oranges, so we need money to plant. (Male District Teacher)
- Agriculture because people are hungry and the Government must increase the Budget to fix their land or to buy some equipment. (Female District NGO)
- You can give money to Agriculture, but you also have to increase their capacity. A lot of people come and talk about Agriculture, but they make Timor a guinea pig, but they are not telling the people how to develop their skills. They have basic capacity, but how can they increase it. Not just fisheries and forests. Not only talking. We have to Increase the capacity of the people. This is the way to teach people how to be independent. (Female NGO)
- Those people that make coffee, for example, they need a new machine because they are using traditional [methods]. (Young Female)
- Agriculture because if they put into agriculture then they can grow something to sell it outside. Because the money from oil will be finished one day and we will need Agriculture to replace it. (Young Male District Veteran)

On Tourism and Development

- Tourism can be supported by private [investment], both local and external. (Businessman)
- Tourism because if we develop this industry we can get income from this industry. (Female District Bureaucrat)
- Tourism because in Aileu there is no place for children so every Sunday when they come back from mass after they have lunch they have to go to the farm [to work]. It's better if the Government build somewhere for the children to play rather than go to the farm. (Female District Bureaucrat)
- Tourism because Tourism can support government by contributing taxes. (Male District Community Leader)
- Tourism because it will develop the economy. [It] Has a relation with [the] economy. All of our things like Tais [locally produced textiles] we can sell… The Government can fix the place and Tourism can give money to the poor people. (Male District Teacher)
- Tourism because it can also help our country because people will come from outside and spend money. Many tourists come from outside and give income. (Young Female District)
- Tourism because although both options have a direct and positive impact on social development, Tourism is an activity that will bring a bigger value-added service, Agriculture and fisheries belong to an economy of subsistence that will do little for an increased development of Timor-Leste. (Male Foreign Adviser)
- Tourism because it may become, if well developed, one of the main, if not the main, source of non-petroleum income for this country and this country should not rely totally on petroleum industry as it is a capital intensive activity rather than a labour-intensive activity. (Male Foreign Adviser)

Appendix 13 Selected comments made by participants about disadvantaged groups

On Labour and Community

- Labour because I am a worker and I give importance to other people working. I like to develop with the communities and see the people's different vision and how they come together and how they mobilise and organise to make use of the capacity that they have. (Female District Bureaucrat)
- Labour because first is the issue of the Veterans, second is the issue of improving and developing the skills of our workforce. Social welfare, if it is increased, will reduce conflict. (Businessman)
- Labour and Community should be maintained because if we give more and more they will ask for more. If we give a little they will use it to sustain their life. (Male Decision-maker)
- We have to take care of the veterans because they saved our lives for independence. (Female District Health Worker)
- Labour because government needs to provide recognition for veterans of the resistance and by recognition I mean medals, plaques or certificates or something that gives a physical rather than a monetary or economic except for a very small group who have served long or are vulnerable [who should receive a monetary benefit]. (Female Foreign Adviser)
- Labour because now we don't have a big industry, but for the future I can see outside companies coming here. For example, like Maritime Central they didn't pay extra time and they fire the people. (Male NGO)
- Labour because most employees lack capacity in terms of how to do their job. It is important to re-train them and upgrade their skills so they can not just work in this way forever, but change, and get more wages based on their skills, to improve their living conditions, little by little. (Male Union Leader)
- Some people retired already from the Army. They should be paid every month, because in my village there are too many people retired from the Army in Portuguese times, and it's difficult for them to pay for their children to go to school because they have no money, and they are old, and some people lost their hands so they can not do anything. (Young Female)
- I choose Labour because the veterans are not the young generation and they already gave their life to save this country and we have to give them something and pay them some respect (Young Male District Veteran)

On Youth and Sport

- Youth because 60% of East Timorese are under 18 years old. You have to invest a lot in youth, creating new opportunities and activities for them to be involved/involve them and also because they are mostly unemployed. (Male Academic)
- Youth because they will become the future of Timor-Leste. If you have good youth from now you can see a good future. (Male Bureaucrat)
- So many youths are unemployed and therefore you need to organise sports or youth activities to prevent the youth from going into activities that may destabilise the country. (Male Decision-maker)
- Youth because they are the future of our nation. If you don't give them time to develop themselves we will create a gap for problems to occur. If you don't increase their capacity or train them, you will have problems, like they are drunk. (Male Decision-maker)
- Young people are important. We need to create entrepreneurial spirit, social violence and promote community service and work ethics. Give them Electricity and they will watch TV. (Jose Teixeira, Minister of Natural Resources, Minerals and Energy Policy)
- When youth are strong - morals, knowledge, skills - they will be a competitive labour force for future development. (Male NGO)

Appendix 13 Selected comments made by participants about disadvantaged groups (continued)

On Local Government

- Decentralisation is required. Development at the local level. Huge difference in terms of expenditure of the Government [between central spending and spending at the local level]. (Female Decision-maker)
- Local Government because it empowers the people to make decisions at a local level, increases community integration and what you call the informal system of control which reduces the need to increase the Justice budget. (Male Decision-maker)
- Local Government because it is closer to the people than Police. (Male Decision-maker)
- Local Government needs to be empowered to make decisions on their priorities and it also, indirectly, helps Tourism because Tourism will be affected positively. I'm thinking about Local Government being able to collect taxes and decide its priorities which includes job creation and therefore tourism, but in a more integrated way. (Male Decision-maker)
- Local Government because Local Government has no resources. We need to increase their capacity, with equipment, and offices for Local Government, so they can give orientation to the community. (Female District Bureaucrat)
- Local Government because they need more funds to help the community and [to increase the] capacity for them to run activities at the district level. Management of Local Government is low so they can't maintain the assets, cars, buildings, etc. The level is low. (Male District Teacher)
- Local Government because they take responsibility [for] all of [the] situations in [the] districts. (Young Female District)
- Local Government because the principle of involving people in decision-making. The concept of subsidiarity where you try to make decisions appropriate to the community. (Male Foreign Adviser)
- Local Government - I know everyone criticises the Government for being too centralised, but maybe in the next 10 years. But for now I prefer centralised government because the human resources do not have the capacity yet. I remember when the money from Treasury went to Ermera was stolen. In Cuba they have central training for civil servants and they work because they want to work for the people. (Male NGO)
- Local Government because it's very important in terms of administration to increase the capacity of Local Government like the *Chefe de Suco* [Chief of the Village]. Increase their capacity, then they can understand the whole picture of how to run the Government, and be the link between the centre and the local and process of making decisions, more active participation in decision-making. (Male Union Leader)

Appendix 14 Selected comments made by participants about security

On Defence

- Defence, by definition, is demanding. If you increase the Budget for Defence it is never-ending. A can of worms. [The] Demand is ongoing. Often this is what kills developing countries. The Defence budget ends up becoming a political liability. (Male Decision-maker)
- Our political defence is our diplomatic defence. (Male Decision-maker)
- Defence is equally important specifically for the navy because we need to show there is a presence of the East Timorese navy there in order to prevent illegal fishing. Since we became independent there are many illegal fisheries. They come and take it and there is no means of stopping them. I'm not talking about war, a fleet of war ships, I just mean to protect our borders in the sea. (Foreign Decision-maker)
- We have good relations with Indonesia so we don't need Defence. (Female NGO)
- When they increase the Budget for Defence that has to be to increase the education/capacity of FDTL. (Female NGO)
- We don't need money for guns. (Male NGO)
- Defence because their salary is not enough. (Young Female)
- I don't think Defence really needs money because Timor already has the UN here. So it is better to spend money on other things. So if there is a problem the world will help. (Young Male District Veteran)

On Interior

- Interior because the security system is still very weak and the country is easily the prey of illegal smuggling, drug trafficking and money laundering and could create instability because then you can expect briberies and thugs and gangs. (Male Academic)
- We don't need too much police. It's better to have less police and give it to the people to take care of their security. Community policing rather than spend too much money on that [Interior]. (Male Decision-maker)
- Police need to be trained properly and understand how to deal with law and order in the community so there is some form of law and order, but they also need to understand [that] they work for the people, and they are not above the people. (Decision-maker Female)
- Interior because we have security problems. You can have good transport, but if you don't have security the people will not come, they will stay home, East Timorese people will not feel free and secure to walk, to do business and all for the foreign people and they won't come and invest their money. (Male Decision-maker)
- They have enough police. Present number will be sufficient to maintain security in this country. (Male Foreign adviser)
- Interior because the police don't get enough salary, it is just $85 and this is not enough for your family. They work late which is just voluntary if there is a big problem. (Female District NGO)
- Interior need to increase the capacity of police to be professional. (Female NGO)
- Interior because the police should be working with community. So they can understand what is happening in the community. In Vemasse police are people in the community. (Male NGO)
- Police because police also have small salaries. Also because they have to pay for oil for their motorbike in the districts. (Young Female)

On Justice

- Justice because [it is] known as the weakest institution therefore we need to improve it. Plus Justice is also important for other social and economic activities to run well. (Male Decision-maker)
- Justice because until now I saw a lot of Justice that is not resolved and many things happened that we need to resolve. (Male District Community Leader)
- Justice because if we have any problems we can know which person does the wrong thing and which one is right. (Female District Health Worker)
- The people that don't have good education will ask for justice, but if we have good mentality and good education we don't need justice. (Male District Health Worker)
- Justice because it's at a poor level and investors need to know there is a rule of law they can rely on. (Male Foreign Adviser)
- Justice needs a lot more investment. Right now because of the time lost during the UN period when they took the whole justice sector in a path that has proven not to result in the creation of a credible judicial system. (Jose Teixeira, Minister of Natural Resources, Minerals and Energy Policy)
- Justice because her family were victims and until now there is no justice. (Female District NGO)
- Justice because if justice doesn't have good conditions, some people have lack of capacity and the people's problems are not resolved. Many people are still in Becora [prison] because the decisions have not yet been made. (Male NGO)