

**INVESTING IN HUMAN DEVELOPMENT AND INDUSTRIALIZATION IN
EAST TIMOR: STRATEGIES FOR A SUSTAINABLE DEVELOPMENT**

By

Azevedo Lourenço da Costa Marçal

THESIS

Submitted to
KDI School of Public Policy and Management
in partial fulfillment of requirements
for the degree of

MASTER OF PUBLIC POLICY

2011

**INVESTING IN HUMAN DEVELOPMENT AND INDUSTRIALIZATION IN
EAST TIMOR: STRATEGIES FOR A SUSTAINABLE DEVELOPMENT**

By

Azevedo Lourenço da Costa Marçal

THESIS

Submitted to
KDI School of Public Policy and Management
in partial fulfillment of requirements
for the degree of

MASTER OF PUBLIC POLICY

2011

**INVESTING IN HUMAN DEVELOPMENT AND INDUSTRIALIZATION IN
EAST TIMOR: STRATEGIES FOR A SUSTAINABLE DEVELOPMENT**

By

Azevedo Lourenço da Costa Marçal

THESIS

Submitted to
KDI School of Public Policy and Management
in partial fulfillment of requirements
for the degree of

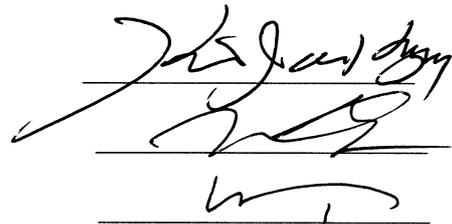
MASTER OF PUBLIC POLICY

Committee in charge:

Professor Joon-Kyung KIM, Supervisor

Professor Younguck KANG

Professor Taejong KIM



Approval as of _____ 2011

ABSTRACT

INVESTING IN HUMAN DEVELOPMENT AND INDUSTRIALIZATION IN EAST TIMOR: STRATEGIES FOR A SUSTAINABLE DEVELOPMENT

By

Azevedo Lourenço da Costa Marçal

Human development and economic growth are two important features to achieve a sustainable development and people's long term quality of lives. As human development is believed to be positively correlated with economic growth (World Development 2000), it is important to invest productively in both human and physical capitals, such as: education, health care, physical infrastructures, creating business environment (enterprises) to create jobs to improve people's quality of lives. East Timor's socio-economic condition shows that there is an urgency to improve human development by translating the progress of economy into people's real life. Statistics justifies that the Government of East Timor was very slow in allocating resources the critical sectors such as education, health and agriculture. This is considered as a great threat for the country's human development improvement. Another great concern is that the government also heavily relies on the country's non-renewable resources. The paper provides policy recommendations to the government in order to utilize the available resources productively to invest in human and physical capitals; and also to promote private sectors in order to create jobs and maintain human and economic developments in the long run.

Copyright by
© **Azevedo Lourenço da Costa Marçal**
2011

Dedicated to
Father José Caetano Marçal, Mother Maria Regina Guterres
My brothers and sisters

ACKNOWLEDGEMENTS

I would like to express my deepest sense of gratitude to the people who have provided their valuable time, excellent thoughts and generous support to this thesis. First of all, I would like to thank Prof. Kim, Joon-Kyung for his continuous assistance in providing me with countless support; and also the same sense of gratitude goes to Prof. Kang, Younguck and Prof. Kim, Taejong for their great contribution on providing me with very useful ideas and extraordinarily insightful feedbacks that have made this paper done. We also want to express our gratitude to the President of KDI School as well as the Dean and the distinguished faculty members of the KDI School. We also will always remember to appreciate the great support from our sponsor: KOICA for its outstanding contribution to our studies and life, in Korea. We are grateful also to all friends at the Students and Academic Affairs Division, Library, and other divisions for their continuous assistance and fruitful help.

Content

Cover Title Page	i
Cover Signature Page	iii
Abstract	iv
Copyright Page	v
Dedication	vi
Acknowledgements	vii
Content	viii

CHAPTER I: INTRODUCTION

Introduction.....	1
-------------------	---

CHAPTER II: INVESTING IN HUMAN DEVELOPMENT AND INDUSTRIALIZATION ARE KEY FACTORS TO ACHIEVE A SUSTAINABLE DEVELOPMENT: A LITERATURE REVIEW

A. Introduction	4
B. Interaction between Human Development and Economic Growth.....	5
C. Government's Responsible to translate Economic Growth into Human Development.....	9
D. Investing in necessary Tangible and Intangible Infrastructure	11
E. Summary.....	15

CHAPTER III: ANALYSIS OF THE ACTUAL STATUS OF SOCIO-ECONOMIC CONDITION IN EAST TIMOR

A. Introduction.....	17
B. Status of Human Development and Economic Growth in East Timor	17
C. Evaluation on Budget Allocation Status and what needs to be Improved	27
D. Summary	33

**CHAPTER IV: CHALLENGES ON HOW TO ALLOCATE PRODUCTIVELY
FINANCIAL RESOURCES TO ACHIEVE A SUSTAINABLE
DEVELOPMENT**

A. Introduction.....	36
B. Lessons from South Korea on Aid Management and Allocation	37
C. Financial Resources and its allocation Strategies in order to avoid Resource Curse.....	39
D. Particular Risk Factors for East Timor and Policy Options to Avoid the Risks.....	43
E. Enterprises and private sector developments for Promoting Industrialization in East Timor.....	45
F. Summary	47

CHAPTER V: CONCLUSION AND POLICY RECOMMENDATION

Conclusion and Policy Recommendation	50
References	56

CHAPTER I

INTRODUCTION

Every East Timorese deserves a life in dignity as people in other countries have. Almost majority of the people in East Timor have yet to realize a life in dignity to fully develop their human potential. Human development is very important and should be achieved through a people-center-approach of economic growth. Why a people-center-approach is important, because “it is about creating an environment in which people can develop their full potential and lead productive and creative lives in accord with their needs and interests” (IBON International 2007). Thus, this approach aims at bringing the focus of development back onto people.

In supporting to this idea UNDP (2005) also stated that “[t]he most basic capabilities for human development are to lead a long and healthy lives, to be knowledgeable, to have access to the resources needed for a decent standard of living..[;] [w]ithout these...many opportunities...remain inaccessible.” Thus, human development should be considered as an ultimate objective of economic development and in turn becomes an effective means for further growth of economy in the long-run.

Based on the assumption that both economic growth and human development can be positively correlated (World Development 2000), this paper wants to see how these two components will efficiently support each other in terms of providing a foundation for East Timor to design an efficient strategy for achieving sustainable human and economic developments.

In order to promote economic growth and human development this paper would suggest that it is critical important to make proper investment in both: human development and economic growth. In order to improve human development, there is

a need to invest much more in education (in order to increase adult literacy rate) and in health care (life expectancy at birth). On the other hand, promoting economic growth will need proper investment in infrastructure, provide incentives to develop private enterprises in order to maintain growth in the long run. All these efforts will have to be carried out by the government. Therefore, this paper, is trying to analyze the socio-economic situation in the country as well as analyzing the government's policy of allocating resources to the critical sectors of human and economic developments areas to evaluate whether the efforts of the government are on the right track or it needs to do more.

Therefore, this paper focuses on East Timor's case. In chapter three the author is going to present a brief overview on East Timor's socio-economic condition. From there we will see whether the investment strategy is done properly or not. At the end, the paper will evaluate the government's allocation of the financial resources to the critical sectors such as: education, health care and physical infrastructure. Moreover, we also will discuss the impact of the foreign aid to the human development formation in the country. In addition to that, it is also important to observe whether the government has provided incentives to the private enterprises in order to promote industrialization for increasing creating jobs and to enable the country to maintain economic development in the long run. This will be efforts to identify whether government has done proper strategy to achieve that goal. If not, how it can be developed?

In this study the author is doing a literature study on human development and economic development through working papers of some international organizations in East Timor includes government's statistics on socio-economic situation in the country. Finally, the paper is to provide recommendations to the government on how to

maintain the progress on human and economic developments and also to evaluate whether the allocation of financial resources is done in a productive way to improve people's lives.

CHAPTER II

INVESTING IN HUMAN DEVELOPMENT AND INDUSTRIALIZATION ARE KEY FACTORS TO ACHIEVE A SUSTAINABLE DEVELOPMENT: A LITERATURE REVIEW

A. Introduction

Human development is considered as a fundamental issue of development. Most industrialized countries are achieving high level of human development. On the contrary, many developing countries have very poor performance on human development. As we know, development area is very broad and therefore it is very difficult to measure all factors of development. Even so, UNDP through its Human Development Report in 1990 has brought to the world new indicators to measure people's quality of life. Before that people's well being was measured simply based on a single indicator like GNP (gross national product) per capita. Therefore, there were a lot of criticisms on GNP that it did not represent people's real life. Due to the concern, UNDP initiated additional two indicators to measure people's well being which are formulated into the Human Development Report. Human development report has three indicators that are used to measure the progress of human development for each country. These three indicators are called: adult literacy rate, life expectancy at birth, and people's standard of living which is measured by people's purchasing power through GNP per capita.

Due to its critical role as the measure of people's well being – despite the criticisms on its capacity to measure the whole aspect of human development – human development report still receives significant attention from policy makers, politicians, experts and economists around the world. This makes the achievement on human development becomes very important.

Therefore this paper, first of all, wants to analyze how human development

will be achieved through investing in both economic growth and human capital (in education and health) in order to maintain the progress of human development in a sustainable manner. In order to achieve human development in a sustainable way, it is important to link human development (HD) to economic growth (EG). Secondly, it is also important to identify how they both (HD and EG) can further enhance each other. In order to make a significant improvement in human development and a sustained economic growth, government's commitment plays major role in order to make proper investment to improve human development as well as maintaining a sustained economic development for the long run.

B. Interaction between Human Development and Economic Growth

Investing in human development (investing in people) can provide people with good quality of human capital that can sustain a long term development. Human capital (such as sufficient education and good health) will enable people to have access to resources needed to improve their human potentials and it will enlarge people's choices to choose a long and a healthy life, to have certain degree of knowledge and achieve a high standard of living (UNDP 1990). By having a high quality of human capital, will be great input to economic development in the long run. In contrast, economic progress is needed to provide resources to allow a sustainable improvement in human and economic developments. By doing so, it will empower people to be the subject as well as the object of development.

Therefore, it is very important to see how human development (HD) and economic growth (EG) can support each other, through following figure.

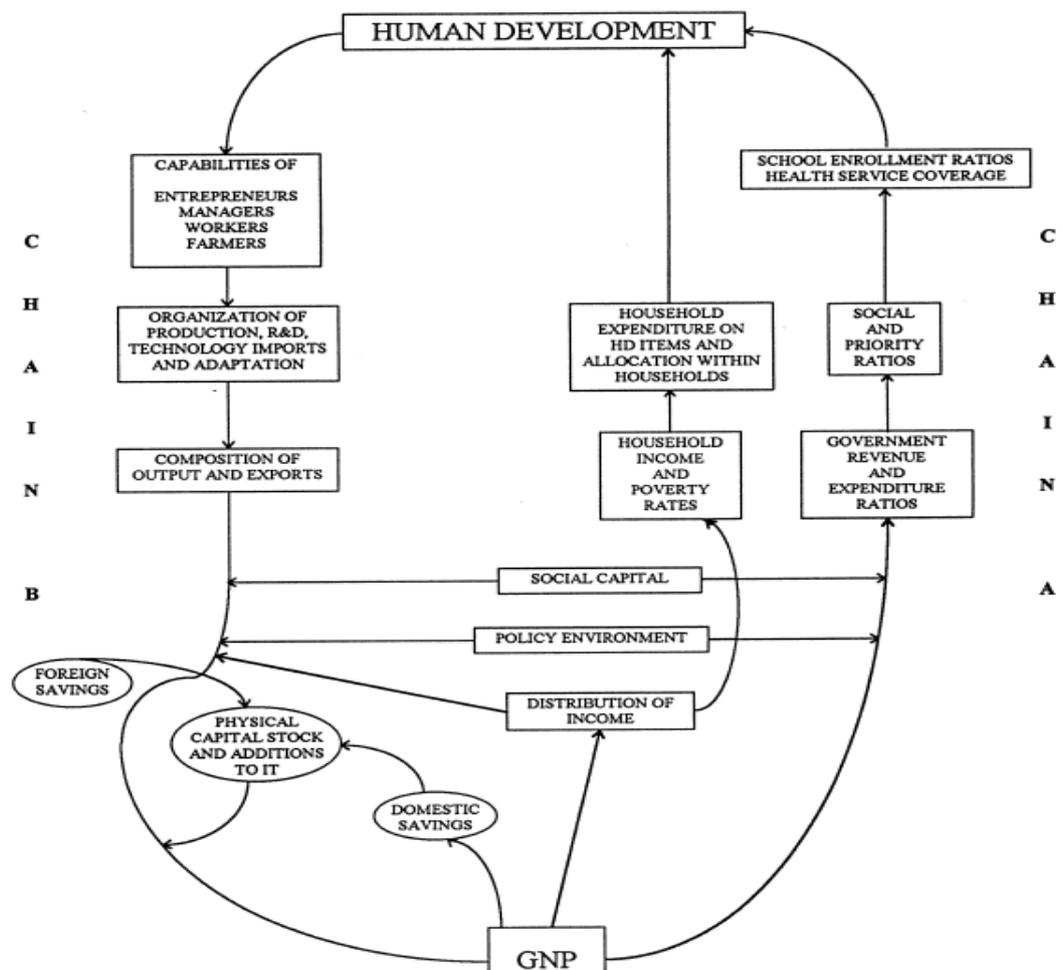


Figure 2.B.1.: The HD-GNP cycle

Source: World Development [Vol. 28, No. 2.] 2000

The World Development (2000) explained by using above figure, that there are two chains which clarify connection between human development (HD) and economic growth (EG). The World Development added that the cross country regressions show a significant relationship in both directions. Public expenditures on health and education serve as important intermediary variables in the chain of economic growth (EG) to human development (HD) (Chain A).

On the other hand, the investment rate and income distribution are significant in the human development (HD) to economic growth (EG) chain

(Chain B). The World Development (2000) viewed human development as the central objective of human activity and economic growth as potentially a very important instrument for advancing it. It said that achievements in human development themselves can make a critical contribution to economic growth.

The World Development (2000) stated that GNP contributes to human development mainly through household and government activity; civil society: through community organizations and other non-governmental organizations (NGOs). The same level of GNP can lead to very different performance on human development according to the allocation of GNP among and within these institutions and variations in their behavior. On the other hand, higher level of human development, affects the economy through enhancing people's capabilities and consequently their creativity and productivity.

Nevertheless, the World Development (2000) concludes that “countries initially favoring economic growth lapse into the vicious category, while those with good human development and poor economic growth sometimes move into the virtuous category. Where choice is necessary human development should be given sequencing priority.” This means that, the priority should be given primarily on human development by investing more on human capital: education, health and nutrition as well as access to basic necessities. This entire thing will provide people with sufficient resources to participate in encouraging economic growth. To have a sustainable development, of course economic growth is also important because it can further enhance human development for higher level in the long run.

The idea on the importance of human development (HD) suggested by the World Development (2000) is supported also by Amartya Sen, a Nobel Laureate in Economics and Mahbub Ul Haq a founder of human development report. Sen (World

Development 2000) stated that economic measure like GNP only measures commodities and goods; it therefore, does not measure people's life and their freedom. Therefore he said that the quality of human life is only reflected in the human development report, not in GNP. Moreover, he said, that people should be enabled to have their freedom of choice and ability to access resources to pursue their life. For example enable them to have enough medicine and to have opportunity of going to school can also take the form of having the culture of freedom to pursue a life with dignity and freedom. This idea is also supported by Mahbub Ul Haq (World Development 2000), a founder of Human Development Report, by saying that increasing human development is a much more than rise or fall of national income.

Thus to achieve a high level of human development we really have to prioritize human development (HD) and consider it as the proper measurement indicator for people's well being rather than merely having a good economic performance. It means that although to achieve economic growth (EG) is important for long term sustainable development, human development (HD) needs to be prioritized as it is directly related to people's life and well being.

Many economists, nowadays, also have been arguing that income per capita (GDP or GNP) is only an economic activity and it is considered as a poor and insufficient indicator to measure people's well being. Following is the critics of Joseph Stiglitz, an economist and a Nobel Laureate in economics, towards GDP:

The big question concerns whether GDP provides a good measure of living standards. In many cases, GDP statistics seem to suggest that the economy is doing far better than most citizens' own perceptions. Moreover, the focus on GDP creates conflicts: political leaders are told to maximize it, but citizens also demand that attention be paid to enhancing security, reducing air, water, and noise pollution, and so forth – all of which might lower GDP growth. The fact that GDP may be a poor measure of well-being, or even of market activity, has, of course, long been recognized. But changes in society and the economy may have heightened the problems, at the same time that advances in economics and statistical techniques may have provided opportunities to improve our metrics.

For example, while GDP is supposed to measure the value of output of goods and services, in one key sector – government – we typically have no way of doing it, so we often measure the output simply by the inputs. If government spends more – even if inefficiently – output goes up (The Wall Street Journal 2009).

Therefore, to meet a high achievement in human development (HD) we need to go beyond GDP and economic growth (EG). In order to improve people's quality of life, as mentioned earlier, does not merely rely on economic activity but it has to do with investing in people (education and health).

C. Government is responsible to translate economic growth into human development

It has been said that both economic progress and human development are positively correlated (World Development 2000); which means that increasing in one can further enhance the other. However, it is also argued that economic progress and human development have no automatic link. UNDP through its first Human Development Report (HDR) in 1990 has tried to show that the link between human development and economic growth is not automatic. UNDP provides an example of seeing the performance of countries which have high economic growth but have poor performance on human development. On the contrary, it also presented country that has poor economic performance but was able to achieve higher human development. For instance UNDP presented the case of Sri Lanka, Brazil and Saudi Arabia (as shown in the following table), that high or low GNP does not necessarily determine how they contribute to human development (life expectancy at birth and adult literacy rate).

Table 2.C.1.: Human Development and GNP

Country	Per Capita Income (GNP) 1987	Life Expectancy (1987)	Adult Literacy (1987)
Sri Lanka	\$400	71 years	87%
Brazil	\$2,020	65 years	78%
Saudi Arabia	\$6,200	64 years	55%

Source: UNDP-HDR 1990

Based on the data provided, and as UNDP-HDR (1990) concluded that even though Sri Lanka has GNP \$400 which is almost five times smaller than of Brazil's GNP, and 15.5 times smaller than GNP of Saudi Arabia; its life expectancy at birth was higher at 71 years (as of 1987) and adult literacy was 87% (as of 1987) compare to Brazil which only had 65 years of life expectancy with 78% of literacy rate; and Saudi Arabia which had 64 years of life expectancy with 55% of literacy rate.

Therefore, Haq was right in saying that GNP does not necessarily represent how other component of human development, such as life expectancy at birth and adult literacy rate will be improved. What matters here is how economic growth is managed and distributed for the benefit of the people; because, some countries do better in human development even with low income per capita. It means that they have directed more of their economic resources towards human progress.

On the other hand, those with high income per capita have not translated yet their income into human progress. This can encourage countries with low income that even in the absence of satisfactory economic growth or a relatively even income distribution, countries can achieve significant improvements in human development through well-structured public expenditures (UNDP-HDR 1990). This idea is very similar with Stiglitz's concern on GDP as a poor measure of human well being. The similarity is that the number of income per capital tells nothing about people's well being which includes life expectancy and literacy rates as components of human

development.

Consequently, UNDP-HDR (1990) made a claim that “the link between economic growth and human development is not automatic.” Thus, in order to make impressive achievement in human development level we need to have a well-structured social policies and expenditures that should be really allocated to improve human development (HD).

Therefore government's commitment and its political will are highly challenged to make balance between economic growth (EG) and human development (HD) progress. One of the alternatives is that, the government needs to work with non-state actors and markets to address innovation and coordination while minimizing negative government externalities (e.g., incompetence and corruption). A solution to this challenge should include an incentive system that uses markets and institutions to provide rewards based on individuals' contributions to society in a competitive setting.

D. Investing in necessary tangible and intangible infrastructures

In order to translate economic development into human development and vice versa, the government should focus on investing in human and physical capitals as called tangible and intangible infrastructures. Intangible infrastructure includes investing in people, in their education and health in order to provide opportunity to develop themselves for a better life. On the other hand, investing in a tangible infrastructure means provide roads, transportation, telecommunications, technologies, water, airports, seaports, and so on.

The spending priorities are very important for advancing human development rather than the volume of expenditure. Therefore, there must be an overall strategy of development in order to better achieve human development.

To answer a question on how to translate economic growth into human development is by investing in people (education, health and nutrition), infrastructure and promoting industrialization. Education is considered as a key ingredient for economic and social development. Investment in people is more critical and profitable than any other types of investment. It improves standard of living through a sustained growth. Therefore, it is critical important that investment in education can improve productivity of labors. On the contrary, those who are denied access to education service today also remain denied access to national wealth in the future, because they have less capacity to be productive and so to compete for a better life.

Investment in education, consequently, can be a way to accumulate human capital, which is key factor for sustained economic growth and to enhance national well being. Education, especially basic education (primary and secondary) also contributes to poverty reduction by increasing the productivity of the poor labors (World Bank 1995). Basic education also helps in providing people with basic knowledge on reducing fertility, improving health, and equipping people to participate actively in their economic and political activities. In addition, education contributes to strengthen the institution of civic society, to national capacity building, and good governance. All of these are critical elements in effective implementation of sound economic and social policy.

Numerous studies indicate, as stated by the World Bank (1995), that earning is higher when individuals have higher human capital, as measured by their education and health status. We know that investment in education contribute significantly to economic growth; that means the benefit for whole society is higher than individual return. Indeed, if the private returns on the human capital investment lower than social return, individuals are likely to make lower than socially optimum level.

However, it is argued that success in education performance alone does not guarantee for sustained economic growth. Education contributes to economic growth, but by itself will not generate growth. The strongest growth comes about when investment in both human and physical capital takes place in accordance with economies demand for specific required skills. Economic growth is explained partly by stock of labor and physical capital. A large improvement of growth steams from improvement in quality of labor force, including increased education and better health, together with technological progress (World Bank 1995).

Besides, human and physical capitals, we also need package of healthy economic policies that mostly focus on international trade, foreign technology acquisition, stable political environment, investment on R&D, and empowerment. It is clear that all countries, which have managed persistent growth in income, have also had large increase in the education and training of their labor force and technological acquisition.

As we have argued that investment in education is important for the human development advancement, and so with investment in health. Because investment in health, according to UNDP-HDR (2007), can reduce the cost of disease, increase labor productivity and reduce population growth (fertility rates). Thus, investments in health can have a significant economic return.

Griffin and McKinley (1992) stated that the strong complementarities between expenditures on health and education are a case in point. Students, who enjoy good health, also benefit from an increased ability to learn. At the same time, people who enjoy a good education also are likely to know how best to maintain good health. Causality thus runs in both directions, hence a reallocation of public expenditure to both primary health care and primary education can have a beneficial impact on each

area of activity which is mutually reinforcing (Griffin & McKinley 1992). Therefore, it is critical important that public expenditure is allocated in contributing to human capital formation (health and basic education).

We have seen the importance of investing in intangible infrastructure such as education, health care and empowerment; however, it is also extremely important to invest in tangible (physical) infrastructure such as: roads, bridges, ports, telecommunications, technologies and so on. Technological change is the main means of economic growth. Development and adoption of new technology are primarily means by which scientific and technological advances are adopted not only to meet human and social needs and expand new opportunities, but also to sustain and improve international competitiveness and economic growth.

However, this seems difficult to be implemented if there is market failure. In order to respond to that concern intervention of government is essential to coordinate the market failure. In this case, Joseph Stiglitz (2000) says that market failure and distributive consideration justify government's intervention. Experience from East Asian countries shows that government and market have not been mutually exclusive but have worked together in promoting economic growth. For instance, in Japan when government privatized all factories to merchants and high government officials in 1885, large capitalist (Zaibatsu) worked as hand in hand with government for long period. Similar thing happened in South Korea especially on government's close relationship with the *Chaebols* since Korea's early stage of development (Rodrik 1995). The government participation in acquisition, assimilation, and diffusion of western technology, provision of social overhead capitals, subsidizing key industries and train technicians and sent them to private factories to help running modern equipment contributed for fast success and sustainable development.

Thus, investing in technology and industry can provide skilled people with jobs and can maintain economic growth for the long run that can help improve people's living standard as well as increase countries' competitiveness at the global level.

E. Summary

As stated earlier, the main focus of this paper is to present literature review on how human development and economic growth are correlated to each other. We have defined that human development is about putting people at the center of development, especially to provide people with opportunities to develop their human potential by having access to the resources needed. We also have discussed about the link between human development and economic development, which support each other. For example a country achieves high economic progress will provide resources to upgrade human capital and in turn high quality of human capital will further maintain economic growth.

However, some economists argue that there is no automatic link between the two (EG and HD). Which means economic progress will not automatically affect to human development; same as human development (like education) cannot automatically create high growth in economy. Therefore government's policy is needed to link these two to have maximal use of them. Government's proper policy is needed to translate the progress in economy into people's everyday lives. Reversely, it can also utilize human capital to further enhance economic growth. To translate the progress means to allocate resources productively to invest in people (education, health), infrastructure, R&D and technology. By doing so, both human and physical capitals will further enhance each other to provide better opportunity for people to

realize their potential and freedom in order to achieve better life.

In chapter three and beyond, the author is going to analyze the socio-economic status of East Timor to provide relevant policy recommendations to the government to better improve people's lives.

CHAPTER III

ANALYSIS OF THE SOCIO-ECONOMIC CONDITION IN EAST TIMOR

A. Introduction

We have discussed in previous chapter that there is a strong positive correlation between human development (HD) and economic growth (EG). It is stated that both human development and economic growth can further enhance each other. We also have seen that there is no automatic link between the two. Therefore, the author would like to highlight that the role of government is important in promoting and linking both economic growth and human development to provide people with opportunity through appropriate investment in human and physical capitals for a sustainable development.

The focus of this chapter is to identify how East Timor performs in terms of human and economic developments. Moreover, this is also to evaluate how much the Government of East Timor as well as international community were trying to promote both human development and economic progress in the country. This will also focus on how government's policies have favored to human development and economic growth; and how the resources were allocated to invest in improving human development and maintaining stable economic performance in the long run. Lastly, it is also important for the government to promote private enterprises in order to stimulate economic activities that will enable people to take part in the development.

B. Status of Human Development and Economic Growth in East Timor

After 450 years of Portuguese colonization and 24 years of Indonesia's invasion, East Timor ended up with a great displacement and destruction. Especially

after Indonesia's occupation, approximately 70% of the economic infrastructure was devastated; and around 250,000 people (out of 1.1 million people) moved into West Timor, Indonesia (Encyclopedia of the Nations 2010). UNDP (2009) said that human security was still fragile with chronic vulnerabilities, poverty, malnutrition, unsustainable livelihoods, human rights abuses, poor health, and natural disasters.

In addition, the Government's statistic also shows that the vast majority of its 1.1 million people are still severely challenged, in terms of human development, hungry and dependent on a finite natural resource base for their livelihoods. The non-oil economy remains stagnant or in decline, and nearly 40 percent of people live below the national poverty line of US\$0.55 a day (DNE 2008). Significantly, East Timor's overwhelmingly young population is expected to double within 15 years (UNDP-MDGs 2009); and youth already face high unemployment, low skills levels and lack of opportunities for participation in Timorese society (SEFOPE 2008). All these issues imply serious challenges to achieve a sustainable human and economic development. Therefore, the government and international community, through many different channels of aid, are mostly responsible for helping to bridge the gap of poverty and vulnerable life to the sustainability.

According to UNDP-HDR 2011, Timor-Leste's HDI value for 2010 is 0.502, placing it in the medium human development category, with a ranking of 120 of the 169 countries reporting in the 2010 Global HDR. Table below reviews Timor-Leste's progress in each of the HDI indicators, giving values for 2005 and 2010.

Table 3.B.a. Timor-Leste's HDI Trends from 2005-2010

Timor-Leste: Human Development Index Trends, 2005-10					
Year	Life expectancy at birth	Expected Years of Schooling	Mean years of schooling	GNI per capita (PPP US\$)	HDI value
2005	59.7	11.2	2.8	1,167	0.428
2010	62.1	11.2	2.8	5,303	0.502

Source: UNDP-HDR 2011

UNDP (2011) stated, as shown in the above table, that from 2005-10, Timor-Leste's life expectancy at birth increased by more than two years, whilst mean years of schooling and expected years of schooling remained the same in this period and during the same period, Timor-Leste's GNI *per capita* increased by 228 percent.

Based on 2010 data, UNDP (2011) stated that Timor-Leste's HDI ranking is above other countries in the Southeast Asian region such as the Lao People's Democratic Republic (122), Cambodia (124), Myanmar (132) and Papua New Guinea (137). Timor-Leste is also ranked higher than most Sub-Saharan African countries, notably Kenya (128), Nigeria (142), Angola (146) and Mozambique (165). Within the medium human development category, Timor-Leste's 2010 HDI of 0.502 is below the average of 0.650, but its overall ranking indicates substantial progress since 2005, when its HDI value of 0.428 placed it within the low human development category. Its ranking at independence, in 2002, was 0.375.

Following table, details HDI progress annually, from 2002-104. Much of this progress is attributable to increases in per capita income boosted largely by oil revenues, and to a lesser extent to the other, non-income areas of the HDI.

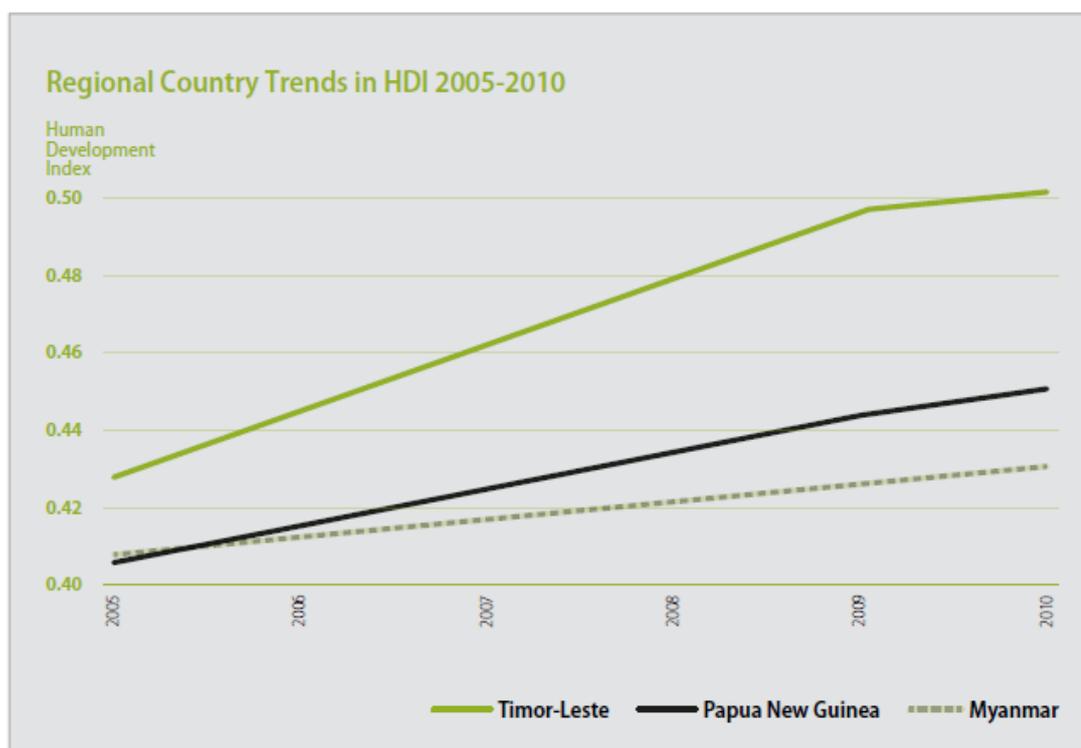
Table 3.B.b. Timor-Leste's HDI Trends from 2005-2010 on HDI Value

Timor-Leste: Human Development Index Trends, 2005-10									
	2002	2003	2004	2005	2006	2007	2008	2009	2010
HDI Value	0.375	0.375	0.401	0.428	0.445	0.471	0.492	0.497	0.502

Source: UNDP-HDR 2011

Long-term HDI progress can profitably be assessed relative to a country's neighbors, both in relation to geographical location and HDI value. In 2005, for example, Timor-Leste, Papua New Guinea, and Myanmar had approximate HDI values for countries in the East Asia and Pacific region. During 2005-10, however, their paths diverged markedly, as illustrated in figure below.

Table 3.B.c. Regional Country Trends in HDI 2005-2010



Source: UNDP-HDR 2011

The Inequality Adjusted Human Development Index

The Human Development Index is an average measure of basic human development achievements in a country. As with all averages, the HDI does not provide a means for assessing inequality in the distribution of human development across the population at the country level. The 2010 Global HDR introduces an *inequality-adjusted HDI* (IHDI), a new measure taking into account inequality in all three dimensions of the HDI by ‘discounting’ each dimension’s average value according to its level of inequality. The IHDI is thus a measure of the average level of human development that a country has achieved in the three HDI dimensions, given the existing inequality in distribution of achievements and the level of aversion to inequality which is set at low level of 1. The ‘loss’ in potential human development due to inequality is given by the difference between the HDI and the inequality-adjusted human development index (IHDI), and can be expressed as a percentage. Timor-Leste’s HDI for 2010 is 0.502. However, UNDP (2011) said that when this value is discounted for inequality, the HDI falls to 0.334, a loss of 33 percent due to inequality in the distribution of the dimension indices. Comparisons with other countries in the region show that inequality on the dimension indices is relatively higher in Timor-Leste. For example, the Lao Democratic People’s Republic has an HDI of 0.497, falling to an inequality-adjusted HDI of 0.374, (a 25 percent reduction). Cambodia has an HDI of 0.494, inequality-adjusted to 0.351 (a 29 percent reduction), and Vietnam at 0.572, has an inequality adjusted HDI of 0.478 (a 16 percent reduction) Timor-Leste scores higher on the inequality-adjusted HDI than most Sub-Saharan African countries, with for example Kenya at 0.320, Nigeria at 0.246, Angola at 0.242, and Mozambique at 0.155 (UNDP-HDR 2011).

Thus, the UNDP's Human Development Index in 2009 ranked East Timor at 162nd out of 182 countries. However, in 2010 the HDI again reported that East Timor has moved from low level of human development towards medium level of human development from the rank of 162nd (out of 182) to 120th (out of 169). This is really a great achievement in one hand, however on the other hand the statistics must be able to reflect the real life of the people especially how this number will explain the quality of life of the people. The poverty and unemployment for example remain high and it is hard to be explained by the figure of human development index. Therefore it seems that future human and economic developments remain challenged.

Following tables show the status of Human Development: adult literacy rate (education), life expectancy at birth (health), and living standard/purchasing power (GDP per capita [PPP]) in a bit detail.

B.1. Education

Following table is cross country data on adult literacy rate by percentage at age 15 and beyond. Following table shows the status of the East Timor's adult literacy rate compare to other countries.

Table 3.B.1.1. East Timor's Adult Literacy Rate in 2007 compared to other countries

H - Human development index 2007 and its components; Adult literacy rate (% aged 15 and above)		
HDI Rank	Country	2007
30	Brunei Darussalam	94.9
159	Togo	53.2
160	Malawi	71.8
162	East Timor	50.1

Source: UNDP-HDR 2009

The table (3.B.1.1.) shows that the status of adult literacy rate (% aged 15 and above) is only at 50.1% (UNDP-HDR 2009). This illustrates how East Timor should try its best to pay more attention on education sector.

As primary and secondary enrolment which considered as basic and compulsory education for every citizen due to their critical contribution to the improvement of human quality, government has tried to invest more in these sectors. Following is the performance of school enrolment and attendance ratio from 2003-2008 by male and female.

Table 3.B.1.2. East Timor's percentage of enrolment and attendance ratio of male & female in primary & secondary school

Education from 2003-2008	Male (%)	Female (%)
Primary school enrolment ratio (gross)	94	88
Primary school attendance ratio (net)	76	74
Secondary school enrolment ratio (gross)	53	54

Source: UNICEF 2010

Above table presents the gross and net primary and secondary school enrolment and attendance ratio. The table presents that the percentage of students enroll (gross) in primary school are at 94% (male) and 88% (female); however, only 76% (male) and 74% (female) are able to attend (net) the class. On the other hand, those who enroll (gross) in secondary school 53% (male) and 54% (female) are less than those enroll in primary. The numbers of secondary students who are able to attend the class (even no data provided) are possible to be lesser than the number of secondary school enrolment of 53% and 54%; as it was also true with enrolment and attendance ratio in primary school.

Therefore, the concern is that students are willing to study but due to the lack of access to the resources and facility might have impeded them to attend the class. It is shown by the number of school enrolment that is high but the attendance is lesser than the number of students registered.

B.2. Life Expectancy

Table 3.B.2.1. East Timor's Life Expectancy Level from 1980-2010

LOW HUMAN DEVELOPMENT (OR DEVELOPING) Life Expectancy										
HDI rank	Country	1980	1985	1990	1995	2000	2005	2006	2007	2010
162	East Timor	34.7	41.8	45.8	51.3	56.2	59.7	60.2	60.7	62.1

Source: UNDP-HDR 2009

Life expectancy at birth, as a component of human development, is rated at 62.1 years (as of 2010). Besides life expectancy, there is another concern on child mortality in East Timor that can explain the status of health in general in East Timor. Following table shows the status of early childhood mortality rates:

Table 3.B.2.2. East Timor's Early Childhood Mortality Rates by years

Early childhood mortality rates						
Neonatal, postneonatal, infant, child, and under-five mortality rates for five-year periods preceding the survey, Timor-Leste 2009-2010						
Years preceding the survey	Approximate calendar years	Neonatal mortality (NN)	Postneonatal mortality (PNN) ¹	Infant mortality (${}_1q_0$)	Child mortality (${}_4q_1$)	Under-five mortality (${}_5q_0$)
0-4	2004/2005-2008/2009	22	22	44	20	64
5-9	1998/1999-2002/2003	30	38	68	32	98
10-14	1992/1993-1996/1997	35	47	82	36	115

¹ Computed as the difference between the infant and neonatal mortality rates

Source: Government of East Timor (DHS 2010)

The table (3.B.2.2.) shows that there were reductions in child mortality over time. It gives impression that the policy makers as well as international organizations who advocate for improving nutritional consumption and reduce child mortality have worked hard to meet this level of achievement. However, more tasks should be done to improve that achievement because as shown from the year of 2004/2005-2008/2009, even though the number has being reduced but the range of 22 to 64 of under-five-year-old child mortality rate (as shown in the table (3.B.2.2.)) is still a big issue to be tackled generously. Above and beyond child mortality rates over time, following is another effort that shows early child mortality rates by socioeconomic

characteristics.

Table 3.B.2.3. East Timor's Early Childhood Mortality Rates by Socioeconomic Characteristics

<u>Early childhood mortality rates by socioeconomic characteristics</u>					
Neonatal, postneonatal, infant, child, and under-five mortality rates for the 10-year period preceding the survey, by background characteristics, Timor-Leste 2009-2010					
Background characteristic	Neonatal mortality (NN)	Postneonatal mortality (PNN) ¹	Infant mortality (₁ q ₀)	Child mortality (₄ q ₁)	Under-five mortality (₅ q ₀)
Child's sex					
Male	28	31	59	28	85
Female	24	29	53	24	75
Residence					
Urban	21	21	42	20	61
Rural	28	33	60	28	86
District					
Aileu	27	29	56	21	76
Ainaro	31	46	77	22	97
Baucau	11	18	30	12	42
Bobonaro	27	23	50	36	85
Cova Lima	37	38	76	21	95
Dili	21	18	39	22	60
Ermera	24	46	70	34	102
Lautem	36	33	69	31	98
Liquica	31	37	68	35	101
Manatuto	31	19	50	20	69
Manufahi	44	19	62	25	86
Oecussi	25	41	66	27	92
Viqueque	23	29	52	24	74
Mother's education					
No education	27	34	60	32	90
Primary	27	32	58	26	83
Pre-secondary	24	31	55	24	78
Secondary	28	21	48	14	62
More than secondary	9	12	21	8	28

¹ Computed as the difference between the infant and neonatal mortality rates

Source: Government of East Timor (DHS 2010)

It was stated in the previous chapter that both education and health have casual relationship, which means improve in one can further enhance the other. Therefore, above table (3.B.2.3.) shows that the level of mother's education affects to the number of early child mortality. This will encourage people to more focus on adult literacy (especially mother's literacy) in order to reduce child mortality, improve quality of health, and increase nutritional consumption.

It was reported by the Times of India (October 2010) regarding global hunger

index, that “[t]he economic performance and hunger levels are inversely correlated. For example in South and Southeast Asia, Bangladesh, India, Pakistan and [East Timor] are among countries with hunger level considerably higher than their gross national income (GNI) per capita.”

B. 3. Standard of Living/purchasing power

Table 3.B.3. East Timor's Economic Growth from 2007-2010

Year	GDP real growth rate	GDP per capita (PPP)	GDP (PPP)
2010	7.9% (IMF)	US \$5,303 (UNDP-HDR 2010)	
2009	7.2%	US \$2,400	US \$2.744 billion
2008	12.8%	US \$2,300	US \$2.554 billion
2007	8.4%	US \$2,100	US \$2.265 billion

Source: CIA 2009 (table is constructed by the author)

Economic growth many times is used to measure people's purchasing power and living standard. Above table shows how economic progress was going on in East Timor since past four years. In fact, despite its economy performed very well in the last four years, “[t]here has been little change in poverty conditions and the poor are highly vulnerable to any shocks in the economy” (UNDP-MDGs 2009, p.20). Because, even though the country's economic growth performed at the double digit, still it has not been reported that the growth has contributed to reduce poverty and provide more jobs. Still the number of unemployment and poverty remain high. When the number of unemployment is high the poor people cannot be able to survive when the price of basic needs are continuously high. With this condition poor people will not afford to improve their living condition and so as to send their children to school. Therefore, even though there has been much improvement in economic performance, the number does not explain much on the real life of the people.

In order to help improved people's lives much more significantly, economic growth should be linked with following four basic pillars of human development:

“equity, sustainability, production and empowerment” (Human Development Foundation 2010). The equity is defined as an idea of fairness for every person; that we each have the right to an education and health care. In addition, sustainability is also considered as an important factor for maintaining a short-term up to the long-term development. Furthermore, the government needs more efficient social programs for its people such as creating jobs for unemployed workers to help them to be more productive. Lastly and most importantly by empowering people to realize their potential in order to be able to work for themselves; and also at the same time helping the powerless such as women and elderly to be able to live in a more reasonable life.

C. Evaluation on Budget Allocation Status and what needs to be improved

Following are the figure of money spent on human development in East Timor from 2008 to 2010.

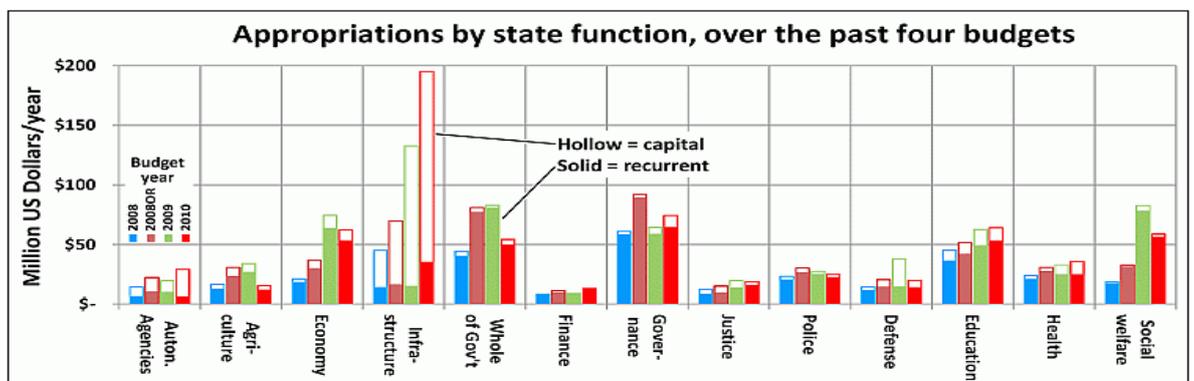


Figure 3.C.1. Budget allocation by sectors

Source: La’o Hamutuk 2010

From above figure (3.C.1.) seems that three important sectors such as education, health and agriculture were ignored. Following figure shows how they have being neglected over time.

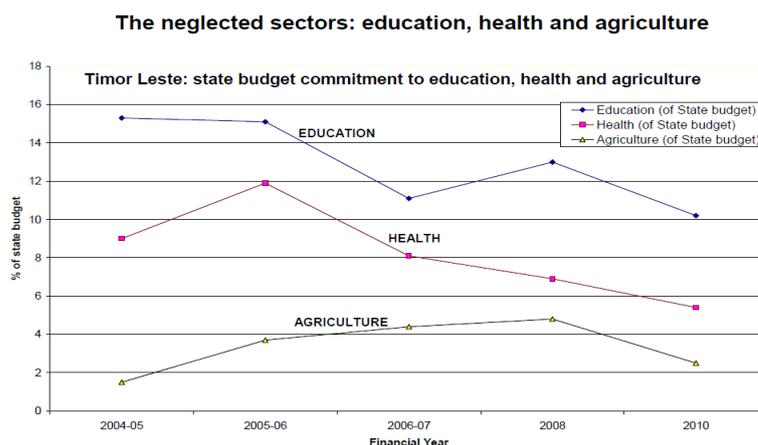


Figure 3.C.2. The neglected sectors: education, health and agriculture

Source: Tim Anderson 2010

Above figure explains how resources were allocated to the components of human development. The figure says that during the period of 2004-2010 the government of East Timor has reduced its commitment to education and health as well as to agriculture which is not in favor of the majority people (70%) who are identified as subsistence farmers.

There has been disengagement to human development by reducing its commitment to education and health, as show by figure (3.C.2.). Budget for education since 2004 until now is always decreasing and never increase from 15% of annual budget falls to 10%. Similar thing happens to the budget for health sector, which was 9% in 2004, and increased to 12% in 2005, but started from 2006 it continuously declined until 5.5% in 2010. For agricultural sector, it shows that the Government was not really serious on investing in agriculture even though it should be very important for 70% of the population who are working in agriculture sector.

As the country of East Timor is still in the recovery stage after great displacement in 1999 immediately after referendum; and again due to the military, political and social crisis in 2006, the Government subsidized imported rice from Vietnam, China and Indonesia in order to meet domestic demand for food. Because

the imported rice was too much, the country suffers a huge trade deficit. Following is the figure shows the fact of huge trade deficit since 2008 up to 2010.

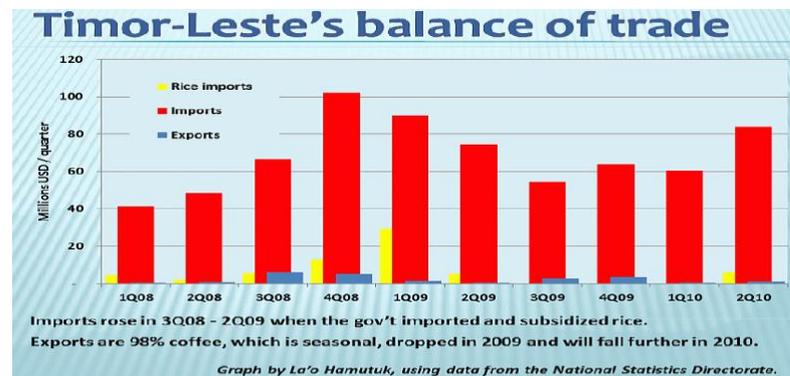


Figure 3.C.3. East Timor's Trade balance

Source: La'o Hamutuk 2010

Even though the country suffers from trade deficit by its huge import policy on rice, the Government still does not take this issue seriously especially by not commit in investing in agriculture in order to increase agriculture sector (as shown in figure 3.C.1. and 3.C.2). The figure (3.C.3.) illustrates the actual status of East Timor's trade from the first quarter of 2008 up to second quarter of 2010. The main reason of deficit was because huge rice importation to the country. This has impacted also on the 70% of population who are farmers. There is no alternative import substitution policy taken by the government to empower the farmers and to promote agriculture sector in order to reduce such deficit. By ignoring alternative import substitution policy, it would discourage farmer and continuously could give negative impact on national economy especially national income, people's purchasing power and low productivity.

La'o Hamutuk (2010) stated that it was difficult to analyze how much government spending was in the domestic economy, as a significant part was paid to import materials (such as rice and construction materials) and to foreign companies. (During 2007-2008, East Timor's trade deficit grew by \$54 million). However, the

amount of the \$300 million government spending increases, from which the amount that entered the local economy is probably more than the \$100 million growth in non-oil GDP. It means that the *non-government* economy is smaller in 2008 than it was in 2007. This could mean that domestic economic activity which formerly served private purposes is now being purchased by the government, or that the private sector is actually shrinking, albeit more slowly than the Government sector is growing. How can this be considered strong economic growth?

Therefore, La'o Hamutuk (2010) is concerned about East Timor's policymakers who are basing their decisions on a mirage of a growing non-oil sector, when that growth actually consists almost entirely of government spending, 98.2% of which is financed by oil revenues. If they ignore the petroleum dependency and the fact that private sector relies on government spending of oil revenues, they condemn East Timor's people to increasing poverty after the oil money runs out.

Table 3.C. International Assistance to East Timor in the past 10 years from 1999-2009

Table 1. Assistance allocated to Timor-Leste, July 1999 – June 2009				
In most cases, the amount spent or received is listed, rather than what was promised or budgeted. All dollar amounts in millions of U.S. dollars-of-the-day, without adjusting for inflation.				
Form of assistance	Year	Amount	Came into TL economy	
United Nations Missions (most for int'l staff, soldiers, logistics, etc.)		\$2,353	6.4%	\$151
UNAMET	1999	92	5.0%	5
UNTAET	1999-2002	1,430	5.4%	77
UNMISSET	2002-2005	302	5.4%	16
UNOTIL	2005-2006	22	10.0%	2
UNMIT	2006-2009	507	10.0%	51
International military forces (Not including UN PKF, which are listed above)		\$750	0.7%	\$5
Interfet (paid by contributing countries and Japan)	1999-2000	250		
International Stabilisation Force (ISF, mostly paid by Australia)	2006-2009	500 ^o		
TFET (Trust Fund for East Timor) (Donor money managed by WB and ADB)	2000-2005	\$170	20%	\$34
Donor budgetary support (Donor direct grants to TL government budget)	See Table 2	\$204	50%	\$102
Bilateral and multilateral donor projects	See Table 2	\$1,730	15%	\$260
Grand total		\$5,207	10.6%	\$552

Year*	Donor projects	Budget support	State expen- ditures	Non-oil domestic revenue [#]	Petrol. revenue spent	Petrol. revenue saved	Non-oil GDP ⁺	Imports	Exports
1999	82	26	n.a.	2	0	0	126 ⁺	n.a.	n.a.
2000	152	32	n.a.	14	14	0	288	n.a.	n.a.
2001	197	23	n.a.	20	11	0	335	n.a.	n.a.
2002	202	33	69	19	29	0	313	n.a.	n.a.
2003	199	35	67	29	41	0	306	n.a.	n.a.
2004	189	34	71	34	64	205	309	114	7
2005	105	10	93	37	85	366	332	102	8
2006	150 (est.)	11	137	41	260	733	321	88	9
2007 (6 mo)*	99	0	56	20	40	633	398	199	8
2008	223	0	480	45	396	2004	499	258	13
2009 (6 mo)‡	132 (proj.)	0	181	43	200	817	295 ⁺	164	2
Total	\$1,730	\$204	\$1,154	\$304	\$1,140	\$4,758	\$3,523	\$925	\$ 46

Data compiled by La'o Hamutuk from many sources, including UN General Assembly reports; OECD online database; RDTL budgets, execution reports, and papers for Development Partners' Conferences (RDTL Ministry of Finance); Petroleum Fund Quarterly Reports (BPA), *Review of Development Cooperation in Timor Leste* (NORAD, 2007), *Economic Impact of Peacekeeping* (Carnahan et. al., Peace Dividend Trust, 2005); *Independent Analysis of UN Contributions to Timor-Leste Economy* (Peace Dividend Trust, 2007).

Source: La'o Hamutuk 2010

La'o Hamutuk (2010) has calculated that between mid 1999 to mid 2009, bilateral and multilateral agencies spent approximately \$5,200 million (5.2 Billion) U.S. dollars on assistance programs related to East Timor. Of this, only about one tenth, approximately \$550 million, entered East Timor's economy. Even it is difficult to obtain consistent, complete or accurate data, above figures can estimate on how money has been spent. Money goes through many channels, including trust funds, budgetary support for the East Timorese Government, UN Missions, foreign military forces, and donor managed projects inside and outside government agencies. Figures from donors and recipients differ, and the government has been inconsistent in reporting aid received over the years. At least 20% of promised donations are never delivered, and budget execution always falls short of the amount planned.

Unfortunately, only a small fraction of this money came here to support the East Timor economy. Nearly 90% of it was spent on international salaries, foreign soldiers, overseas procurement, imported supplies, consultants, overseas administration, etc. La'o Hamutuk (2010) estimates that only \$550 million entered

East Timor.

Inefficiency in aid allocation occurs due to the involvement of many actors and donors in aid management and allocation. It makes the aid allocation more complicated. International assistance to the Timor-Leste is a complex problem, difficult to understand, because. Each donor and actor has its own fiscal system, political interests, ideology and program. International Assistance also comes not only as cash, but also as foreign experts, imported equipment, etc.

Aid in Timor-Leste has involved a lot of actors such as World Bank, International Monetary Fund (IMF), Asian Development Bank (ADB), UN Agencies, International Development Agencies, international NGOs and local NGOs. Each actor has their programs, and each program has different funding sources. Many of the foreign actors have been criticized because of their lack of consultation with Timorese government and civil society, refusal to allow local people to participate, and having programs with no long-term analysis. The most active and powerful have been UNMIT, World Bank, Asian Development Bank, UN Agencies and International Development Agencies.

Theoretically, the donors are motivated by humanitarian reasons to give assistance to Timor-Leste because Timor-Leste is the poorest country in Asia. But in reality, bilateral aid has been used as a tool to promote donors' interests, such as regional stability and to advance markets, support donors' domestic economies, advance their culture, and create conditions that our government has to obey. In the end this is what we call "tied aid."

In the reality, even though our government signs contracts, the donors' government agencies have more power to control the money than the East Timorese government. In some bilateral projects, the government is not allowed to make

decisions, and is limited to ceremonial functions only. Furthermore, donor government agencies have no legal obligation to be accountable and transparent to local people. That is why it's unreasonable to expect that their actions will benefit local people, unless it also benefits the donor's interests.

The fact that international assistance reflects the point of view of donor countries, the donor countries view the population as a sick man who needs a remedy, who doesn't know how to develop his own country. The view has persisted throughout the nation-building process, limiting the participation of Timorese people since the beginning.

Thus, if the international community and donors do not change the way they spend money, there will be no significant improvement in people's lives from money that they send. All resources will be inefficiently wasted on unproductive things.

On the other hand, the concerns of international community and the donors on corruption cases and the level of transparency and accountability in the country will diminish the trust in the country's ability to manage the fund. Therefore, it is very important to set up a public accounting court as well as improving public finance in order to guarantee transparency and accountability so that it can enable the country to effectively execute resources more productively and effectively.

D. Summary

We have seen the socio-economic status of East Timor especially on human development and economic development. In terms of human development government has done some progress on education and health, however, evidence shows that there are still a number of concerns to be taken into account by the government. Especially the allocation of resources to education, health and agriculture

which are counted as critical areas in human capital advancement, were not considered seriously by the government. The reduction of annual budget from 2004 to 2010 on these vital sectors is negative sign that shows government's disengagement on the priority areas.

Moreover, much of international aid was claimed to be allocated ineffectively by the La'o Hamutuk (2010). Most of the money was unorganized and was spent ineffectively. There was no evidence that the money was spent on neither human development nor economic development for the country's citizens. Most of the money was spent "on" East Timor but not "in" East Timor. Many foreign advisors were highly paid, included with many researches they have done "on" East Timor (neither "in" East Timor nor "for" East Timor). There was no evidence that the aid was used for reduction of poverty and improving people's quality of life.

Therefore, the international community and donors must change the way they spend money, so that the money can be utilized and allocated efficiently and productively for improving people's lives. On the other hand, the concerns of international community and the donors on corruption cases and the level of transparency and accountability in the country will diminish the trust in the country's ability to manage the fund. Consequently, it is very important improve country's public institutions in order to provide better controlling mechanism in supporting the execution of resource to the prioritized areas.

Apart from international assistance, the limited and non-renewable resources from oil and gas revenues are now the major source of the government's revenue and annual budget. The Government seems not very serious on developing non-oil economic activities to balance the huge trade deficit of imported rice from abroad. During the last ten years (1999-2009), East Timor earned \$5,611 million from selling

oil and natural gas, as well as \$287 million from investing its Petroleum Fund (La'o Hamutuk 2010). Since independence in May 2002, the East Timorese government has spent \$1,140 million from petroleum revenues, as well as \$204 million in budgetary support from donors and \$292 million raised with domestic taxes and fees (La'o Hamutuk 2010). If other sectors of the economy have not grown much larger by then, people will starve. In order to avoid such kind of thing, there must be a strong government commitment and initiative to utilize and invest those resources in a more productive and sustainable manners.

In chapter four there will be discussion on challenges and policy implications that the East Timorese Government should take into consideration in order to allocate limited resources more efficiently and giving more priority to the investment of human capital advancement. In the next chapter we will discuss also how East Timor can benchmark South Korea's experience of utilizing foreign aid for human capital formation and technological acquisition in order to provide better strategy for long term sustainable human and economic developments.

CHAPTER IV

CHALLENGES ON ALLOCATING PRODUCTIVELY FINANCIAL RESOURCES AND PROMOTING INDUSTRIALIZATION FOR A SUSTAINABLE DEVELOPMENT

A. Introduction

We have found out in chapter two that there is no automatic link between human development and economic growth. Therefore, government's role is very important to facilitate in linking human development and economic growth in order to contribute in improving people's lives. In chapter three we have seen that the Government of East Timor has tried to connect the link, however, there is no sufficient and proper allocation of resources to meet the concerned human development issue. Statistics from chapter three shows that adult literacy and life expectancy rates are still very low. The resources allocated to these sectors were not proportional and inefficient. There were reasonable resources but incompetency in allocating the resources has impeded the effectiveness of its allocation to invest in a more productive manner.

In the first part of this chapter, the author wants to show the experience of South Korea, which was before as an extremely foreign aid dependent country, could be able to transform into a very advanced country in terms of human and economic developments. Here Koreans' experience of utilizing limited financial resources can be very good example for many other developing countries. East Timor as one of those developing countries, even it has its own natural resources (such as oil, gas and coffee), it needs to learn from Koreans on how to allocate resources in a productive and sustainable manner.

In the second part and beyond, the author wants to show the challenges faced by East Timor due to extremely dependent on its non-renewable resources from oil

and gas revenues to be well aware on the negative consequences when these non-renewable resources are not allocated in a productive and sustainable way. Thus, South Koreans' experience of productive and effective allocation of resources can be a good model for East Timor. Finally, the author wants also to discuss on the role of private and public enterprises in promoting industrialization in the country in order to achieve a sustainable development for the long run.

B. Lessons from South Korea on Aid Management and Allocation

People are nowadays very skeptical about the impact of foreign aid to developing countries. Stories from many developing countries sometimes show how such kind of skeptical view on ODA is true. However, South Korea's experience has been a very unique and insightful lesson for many developing countries.

Korea has received a huge amount of aid from the USA, Japan and multilateral agencies at its early stage of development. During and immediately after the Korean War (1950-1953), Koreans were in a very critical situation. Without foreign aid and without a serious engagement and commitment of the political leaders, Korea would have not been developed as now.

According to the statistics, South Korea had received a huge amount of money from the USA: 12.6 billion from 1946-1976; from Japanese reparations fund was US\$ 800 million¹; and 579.2 million was from UN (multi-donors) for the period of 1945-1959. The USA has mainly provided aid especially in addressing starvations and hungers in the forms of consumption goods and materials, agriculture facilities, fertilizers and military supports (Kim & Lee 2010).

¹ A total of reparations fund from Japan: US\$ 800 million: 300 million as grant, 200 million as Japanese governmental loans and 300 million as commercial loans to Korean private sector (Kim 1987).

Even though there was not much money provided for investment in physical infrastructure, the South Korean Military Government under President Park, Chung-hee insisted to develop their own heavy and chemical industries in order to build up a strong military and a wealthy nation. These goals had motivated the President to design a five-year economic development plan which was very well implemented in investing heavily on heavy and chemical industries and physical infrastructures projects.

The economic development plan of the President Park, which focused on investing heavily on heavy and chemical industries, was considered as a very ambitious strategy and it was not very much supported by the USA, the World Bank and some Korean citizens. The plan was considered as too unrealistic with Korea's situation as being an agrarian country at that time. However, the South Korean Military Government still insisted and committed itself to borrow money and to use foreign aid gently in order to finance a five-year economic development plan with seriously focused on infrastructure development and manufacturing. One of the efforts was trying to normalize its diplomatic ties with the Japanese Government in order to borrow money from Japan as well as to receive the Japanese reparation fund to finance heavy industries and physical infrastructures. Consequently, the Japanese ODA and loans were utilized very carefully to build up POSCO, Gyeongbu [Seoul-Pusan] express way, Soyang River dam, bridges, purchase of raw materials, and support vocational training.

Thus, the President Park's government had prioritized very much on building up physical infrastructure, heavy and chemical industries through the very well managed of Japanese reparation funds, and from foreign loans in an incredibly productive manner. Even there were many opponents who did not support this

ambitious plan, the successful implementation and achievement of the plan have become an effective stepping stone for Korean's economy for a sustainable development.

Therefore, what kind of lessons East Timor can learn from South Korea is a productive financial allocation, political will and a strong leadership commitment on development. To make a productive allocation means investing in human resources, physical infrastructure, heavy and chemical industries, exports oriented and labor intensive policy as well as technological acquisition. Moreover, the experience of promoting public-private partnership in technological acquisition, R&D, physical infrastructure investments, is another great example to be applied in East Timor because it will enable the country to grow in a sustainable way as well as to be able to compete in the global arena.

C. Financial Resources and its allocation strategies in order to avoid “resource curse”

East Timor, like many developing countries, receives foreign assistance (ODA) since 1999 post-referendum. Although today the country still receives foreign aid, the amount is not that significant as it was in 1999 until 2004, because it has been receiving its own oil and gas revenues from 2004. However, the fact that these types of resources are non-renewable, they may bring a threat of “resource curse” in the future. The figure (4.C.1) explains that the country is relying heavily on its petroleum revenue, while other sources of revenues are extremely very low. This type of dependency on the non-renewable resources is very risky for future sustainability. Therefore there is a need to invest those resources in a very wise and productive manner. Following is the figure that shows how East Timor receives its existing and

future resources.

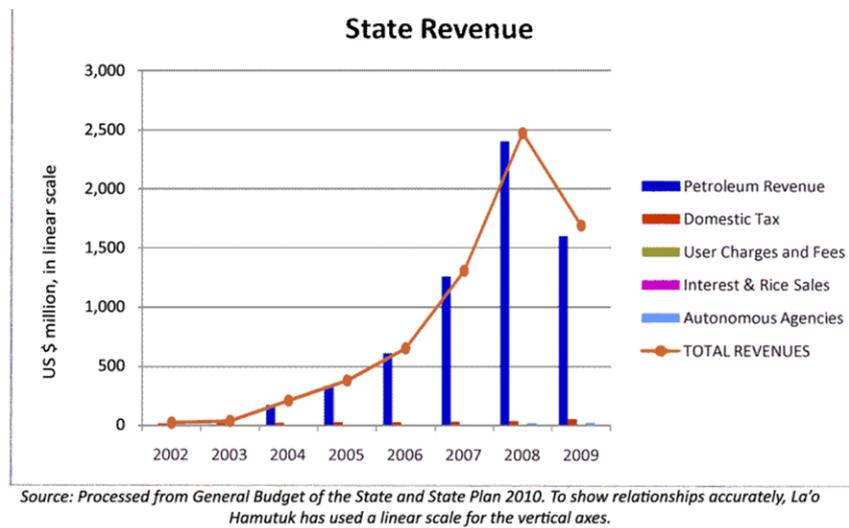
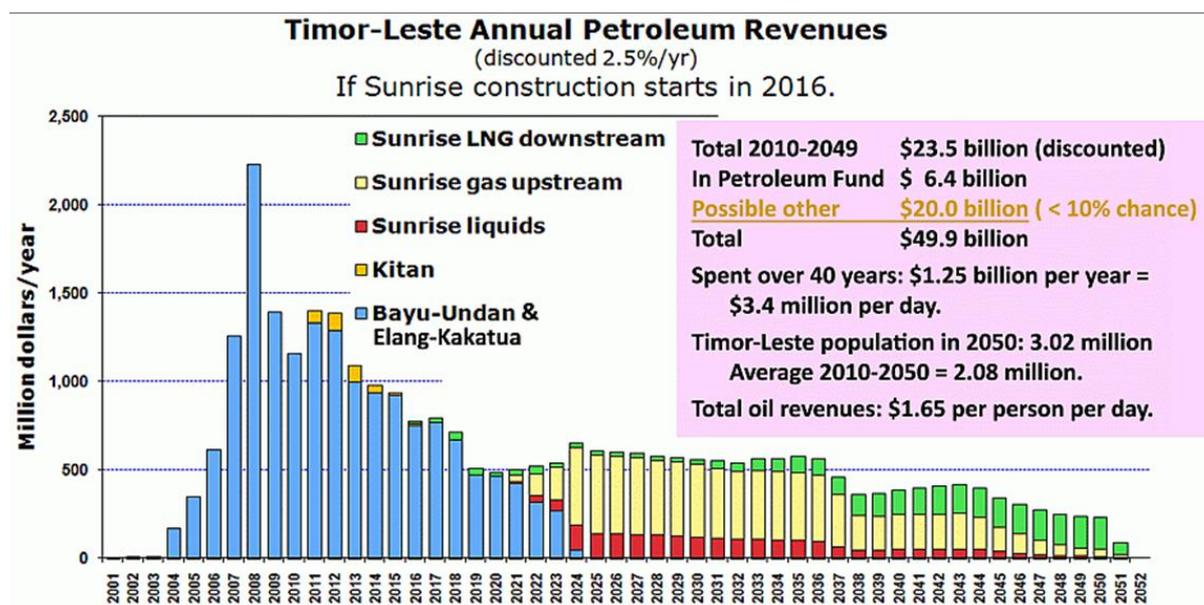


Figure 4.C.1. East Timore's State Revenue

Source: La'o Hamutuk 2010

As stated earlier, an extreme dependency on petroleum fund is very risky because it is unsustainable for long term period. Therefore, there is a need for the government to invest in a productive way such as investing in human and physical capitals: education, health and infrastructure. When human capital is upgraded it would be a great asset for people to be more productive especially when it comes to a labor intensive strategy.

Following figure (4.C.2) illustrated how East Timor relies heavily on its oil revenues. The figure also shows how that dependency will lead the country into trouble when there is no alternative policy designed to make proper investment to allocate productively those resources in order to avoid resource curse and bring prosperity and sustainability to its citizens.



Graph by La'o Hamutuk based on government and company estimates.

Figure 4.C.2. East Timor's Annual Petroleum Revenue

Source: La'o Hamutuk 2010

According to La'o Hamutuk (2010) East Timor's petroleum reserves are small and finite. Even if East Timor succeeds in bringing the Sunrise gas pipeline to the country's soil, and even if current exploration finds new oil or gas deposits to develop, its total oil revenues are likely to be less than \$50 billion. If the oil revenues are squandered on ill-considered infrastructure projects, avoidable imports, or handouts to troublesome groups, most of our people will not benefit.

La'o Hamutuk (2010) said that government's spending does not consider the sustainable spending limits in the Petroleum Fund, as they are largely being ignored. If some money is saved for the future, they could continue to draw on our petroleum wealth for longer than 40 years, but at an even lower level than \$1.65/person/day. If the Petroleum Fund Law is revised and money is invested at higher risk, both the level and the duration could be less or more.

Therefore, this paper wants to encourage government to see the importance of investing in human and physical capitals to avoid unnecessary resource curse which

can be easily handled if those money can be gently allocated in a more productive way. In that way it can lead in achieving sustainable human and economic developments for long term period. In order to achieve sustainable human and economic developments, the government should promote a people-centered-strategy of economic growth. It means that the Government should manage on potential financial resources allocation (from aid and oil revenue) in a more productive and sustainable way to support upgrade human resources to achieve further human and economic development.

Thus, it is important for East Timor, as a new country, to have proper national strategies to address efficiently to the poverty and unemployment issues in the country. To invest in a proper way means to prioritize resources allocation for investment in human and physical capital especially in education, health care, individual and institutional capacity building, and infrastructure, and so on. Those are the things that will be great assets for achieving a more productive and sustainable human and economic development. Because human development and economic development are positively correlated, therefore, as we mentioned in chapter II, increasing in human capital will be regarded as an important input into economic growth; and economic growth also in turn provides the resource to achieve further human development.

Furthermore, efforts on poverty reduction will also increase higher per capita income and increase quality of life through an accessible healthcare service and education. The main purpose of this paper is challenging the government to take alternative solution for its limited resources by investing in human and physical capital for the long-run sustainable human and economic developments.

D. Particular Risk Factors for East Timor and Policy Options to Avoid the Risk

Beyond the general challenges, there are some particular risk factors for East Timor. When looking at the state expenditures over time as the following figure (4.D.) indeed provides a reminder for the government, that even every year the petroleum fund is decreasing since 2008,² in contrast the state budget (that is taken from petroleum revenue) keeps going up while other non-oil revenue increase very slowly.

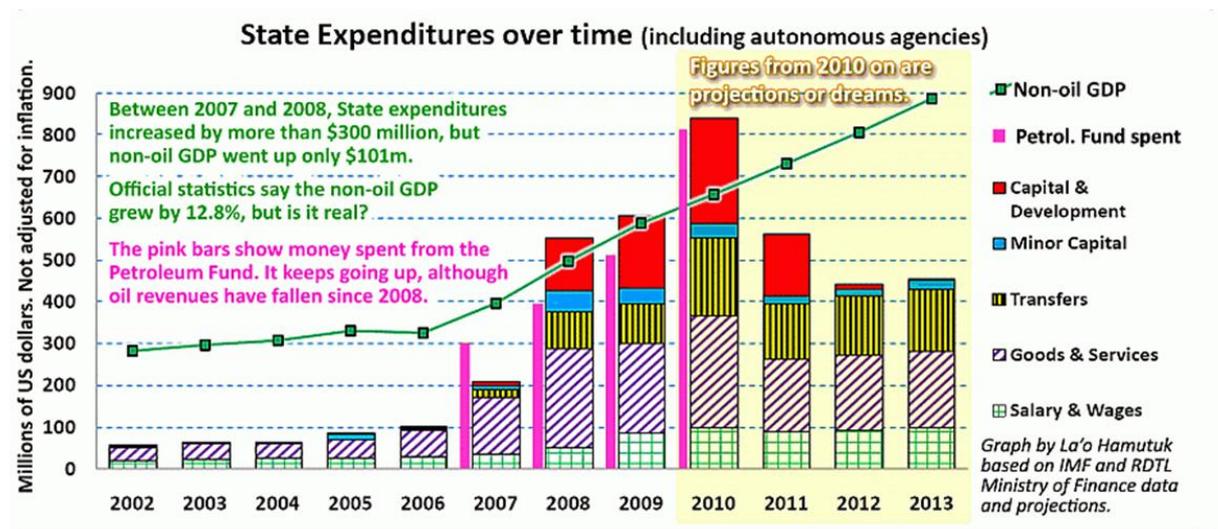


Figure 4.D. State Expenditure over time

Source: La'o Hamutuk 2010

La'o Hamutuk (2010) stated that the Government's spending is growing faster than the domestic economy. It said that East Timor's non-oil economy is stagnant and probably shrinking. Furthermore, it added that with about 95% of government revenues coming from oil and gas, what kind of economy will we have after the oil and gas is used up?

Besides the spending history over time, the figure (3.C.3.) shows East Timor's trade deficit over the last three years due to its huge importation of rice from

² Please see figure 4.C.2. East Timor's Annual Petroleum Revenue

overseas. This importation is necessary when the country is in a starvation and in food shortage problem and it is of course recommended to do so for the short term. However, government does not take this issue as a priority and does not even care about how many farmers are made worse off by such policy. Therefore there is a need to implement at least an import substitution policy of rice and investing more in agriculture in order to maintain food security in the country in order to balance the current budget deficit suffered by the country.

During 2008 and 2009, the Government responded to a temporary escalation in market rice prices by spending almost \$100 million for imports (La'o Hamutuk 2010), mainly rice, for people's daily needs. We are concerned that subsidized rice importation is becoming permanent. Although the 2010 budget promised that was \$42 million to phase this program out completely after this year, has not been met yet.

East Timor's economy is extremely import-dependent, partly because our agricultural and industrial sectors are not yet able to meet the needs of the people and private sector. During 2009, for example, the economy imported \$283 million worth of goods, while producing only \$8 million in non-oil exports, nearly all coffee. This trade imbalance is only possible because of oil revenues, and is not sustainable (La'o Hamutuk 2010).

Due to the huge trade deficit, subsidizing rice imports should be allowed only temporary. If Timor-Leste doesn't give strong support to increasing local agricultural production, people will go hungry when the oil money runs out. Government should think about the long term, when declining oil revenues will no longer be able to subsidize imports for people's necessities. The state should strengthen agriculture sector today, with the goal of food sovereignty: people must be able to produce what they need to eat.

East Timor's economy is weak, but the people are fortunate enough to have some oil wealth which could improve people's lives and develop their economy for the day, less than a generation from now, when their only producing oil and gas field will run dry. If it is not done, their children will still live in poverty, wondering what their parents were thinking when they spent the nation's entire non-renewable resource birthright without creating an economy to replace it.

Therefore, Luta Hamutuk (2010) has reminded government to be aware of its tendency from making quick decisions about spending, without careful thought. It was because the more money was allocated for public transfers than for capital investment. If the budget doesn't prioritize long-term capital investment while oil and gas revenues are still high, Timor-Leste will fall into the resource curse in the future, when petroleum revenues drop or the oil and gas runs dry.

E. Enterprises and private sector developments for Promoting Industrialization in East Timor

Actually the Government is maximizing public expending heavily to promote private sectors. Unfortunately the overall expenditure is financed by oil and gas revenues which are categorized as a non-renewable resource. Therefore, it is a great challenge for the government to think about better alternative in order to avoid unnecessary resource curse.

As suggested above that the most important thing to be prioritized is investing seriously in education, health care and physical infrastructure. However, in addition to that, the government needs to promote also private enterprises in order to increase country's capability to compete in a global level. In order for a country to compete in

the global level, government has to allow international technological acquisition and promote industrialization.

The next question could be on how to finance? To answer this question, the author thinks that it is not a big problem because the country indeed has enough resources to finance those mega projects (industrialization and technological acquisition). As it has been discussed earlier, that there are a lot of resources from petroleum revenues, from international assistance as well as a little from the government's fiscal revenue, so the problem here is not whether there are resources or not, but whether there is a strong leadership commitment or not to utilize those resources in a more productive and sustainable manner.

It would be better for East Timor to learn from South Korea's leadership model to free the country from poverty and resource curse. If infrastructure is in place, the foreign direct investment (FDI) can flow into the country.

Another area that should be developed in order to promote industrialization is private and public enterprises. It is very important for a country to have an integrated public-private partnership in terms of developing industries and manufacturing in the country, because enterprises are the key factors for industrialization.

If there is a will and commitment to develop private sector and industrialization, the next question would be how to develop. In these regards, the author would suggest that the ability to adapt foreign technology would be a great opportunity to increase national competitiveness in order to compete at the global level. This can also help the country to be self-sufficient and independent country economically and politically. As the government would try to develop private sectors, the adaptation capacity will be done by private enterprises. From which, the

government can promote industrialization successfully; because, without the role of enterprise, it is not possible to promote industrialization.

Preconditions for industrialization are: infrastructure, human capitals as well as political stability in the country. After meeting these preconditions, as mentioned earlier, it is very important to stimulate economy by encouraging the role of public and private enterprises in order to push the economy works.

F. Summary

As stated earlier that due to the potential threat of the resource curse in the future, East Timor should try to invest its natural resources specially oil and gas in a more productive way. In order to do so, South Korean's experience of allocating financial aid from foreign aid, can be a great model to be applied in East Timor's case.

A strong political will and commitment of the political leaders and the policy makers are critical in orienting a country's way for development and its future. In terms of allocation of the financial resources, South Korea has done a tremendous work by investing heavily in heavy and chemical industries, physical infrastructure and human capital development. This can be great lesson for East Timor to consider its main revenue which comes from oil and gasses to invest in a more productive and sustainable manner in order to avoid resource curse in the future. Korea had done so in utilizing the limited foreign aid and loans to achieve a dream of strong military and wealthy nation, in a sustainable way. This was possible because of the proper development policy strategy that gave way to the development.

To the concern of the increasing number of government spending which is considered beyond the spending limit of the oil revenues, which can be a great threat the country's future, could be dealt with gently and productively investing in human

and physical capitals, such as: education, health, infrastructure, manufacturing and agriculture sectors. A huge trade deficit can be dealt with promoting import substitution for short term period, by expanding domestic agriculture product. However, for long term, it needs an export promotion strategy (an outward looking) of economy in order to maintain a high growth of economy and sustainable development. This will require a serious investment in physical infrastructure, labor intensive strategy and technological transfers and acquisition.

Furthermore, the government needs to promote also private enterprises in order to increase country's capability to compete in a global level. In order for a country to compete in the global level, government has to allow international technological acquisition and promote industrialization.

The next question could be on how to finance? As it has been discussed earlier, that there are a lot of resources from petroleum revenues, from international assistance as well as a little from the government's fiscal revenue, so the problem here is not whether there are resources or not, but whether there is a strong leadership commitment or not to utilize those resources in a more productive and sustainable manner.

It would be better for East Timor to learn from South Korea's leadership model to free the country from poverty and recourse curse. If infrastructure is in place, the foreign direct investment (FDI) can flow into the country. Other areas that should be developed in order to promote industrialization are private and public enterprises. It is very important for a country to have an integrated public-private partnership in terms of developing industries and manufacturing in the country, because enterprises are the key factors for industrialization. Preconditions for industrialization are: infrastructure, human capitals as well as political stability in the country. After

meeting these preconditions, as mentioned earlier, it is very important to stimulate economy by encouraging the role of public and private enterprises in order to push the economy works.

As the Prime Minister has drafted a national Strategic Development Plan (SDP) for the period of 2011-2030, that envisions massive expenditures in physical infrastructure but ignored human resources, especially health and education. If they do not use their own people to develop the nation, they will have nothing left when the expensive projects built by foreign companies deteriorate or become white elephants (La'o Hamutuk 2010).

In conclusion, in order to achieve sustainable human and economic developments and to improve people's life, the East Timorese Government should make proper investment. Concerning on the financial resources to finance the investment project which is mainly from the on-renewable resources (oil and gas revenues) and from foreign aid (which is just temporary); the country should be able to allocate them in a more productive way.

In the next chapter the author will summarize the whole idea of the paper, make conclusion and provide policy recommendations to the Government of East Timor in order to make proper investment for achieving a sustainable human and economic developments.

CHAPTER V

CONCLUSION AND POLICY RECOMMENDATION

This chapter consists of two main parts. First part is the summary and conclusion of the concept and evidence found throughout this study on human development and economic growth of East Timor's specific case. Second part of the paper is to provide specific policy recommendation to the Government of East Timor on how to achieve sustainable human and economic developments. The policy recommendation is especially to contribute in providing ways to make proper investment on tangible and intangible infrastructures as well as industrialization to better improve both human and economic developments in a sustainable way. It would be possible if the government tries to learn from the recommendation to improve its budget execution policy in order to allocate effectively available financial resources through investing in education, health care and physical infrastructure as well as technological acquisition.

The paper begins with an analysis of the essential features of a human development strategy which regards to human development as the objective of development. It is a way to fulfill the potential of people by enlarging their capabilities, and this necessarily implies empowerment of people, enabling them to participate actively in their own development (Griffin & McKinley 1992). This is what we called by a people centered-strategy and not a goods centered or production centered strategy of development.

We have seen that human development is considered as a fundamental issue of development and it receives very extraordinary attention of policy makers and international communities. As we have mentioned earlier that the purpose of this

paper is to see the link between human development and economic development, it indeed tries to provide some conceptual framework on the link between human development and economic growth. We have found out that there was a link between the two, which was said that both have positive relationship and therefore they each can improve each other. Which means that, improving in one can further enhance the other.

Nevertheless, it was also argued by some economists that, even the link indeed exists, it does not work automatically. This means that economic progress will not automatically affect to human development. On the other hand, it is also true that to have a high level of education does not mean that it will automatically create high growth in economy. Because the progress will only be achieved when the policy is in place to make the system works in order to gain economic progress. This implies to the government's critical role on promoting and achieving human development and economic growth.

Therefore government's policy is needed to link human development and economic growth to have greatest use of them and further to translate the progress in economy into people's everyday lives. Reversely, it can also utilize human capital to further enhance economic growth. To translate the progress means to allocate resources productively by investing in people (education, health), infrastructure, R&D and technology acquisition. By doing so, both human and physical capitals will further enhance each other to provide better opportunity for people to realize their potential and freedom in order to accomplish better life.

This paper also evaluates socio-economic condition in East Timor especially on human development and economic development. It found out that in terms of human development government has done some progress on education and health.

However, evidence also shows that there are still a number of concerns to be taken into account. Especially the allocation of resources to education, health and agriculture which are counted as critical areas in human capital advancement, were not considered seriously by the government. The reduction of annual budget from 2004 to 2010 on these vital sectors as argued by Tim Anderson (2010), in chapter three, is a negative sign that shows the government's disengagement on the critical sectors which is very much related to human capital formation.

The author has also found out about the challenges that the government may face regarding the concern on the country's extreme dependant on non-renewable resource (oil and gas). This is not in fact a problem in itself, but the problem exists on the way the country utilizing it. Almost 95% of country's annual budget is relied heavily on petroleum revenue which is allocated not very productively. By not prioritizing investment in education, health and infrastructure is a big problem for the country's sustainable development in the long run.

Therefore the paper wants to provide following policy recommendations on how to improve the existing condition of the socio-economy in East Timor in order to have a sound policy which is more favourable to people's well being. Based on above findings and conclusions, the author wants to propose strategy for development and to suggest guidelines for use by national policy makers in constructing development strategies to prioritize human development through a productive investment in both human and economic developments.

Following are policy recommendations for the government to improve human development and maintain economic growth: As we know that there are many ways to advance human development, and therefore we need to think about alternative strategies. However, any strategy that is offered should pay cautious attention to the

reallocation of public expenditure to more productive sectors such as education, health care and infrastructure and also doing necessary institutional reforms.

Firstly, based on the concerns that the country's main revenues are from non-renewable resources, it is therefore very important to make productive and sustainable investment in critical sectors such as education, health care, and physical infrastructure. However, based on the analysis conducted on human development achievement in the past, it is still long way to go to achieve better human development and quality of life to the people of East Timor. As we have seen that the annual expenditure for critical sectors like: education, health care, agriculture and physical infrastructure has been declining over time, will make it difficult to improve human development. Therefore, it is necessary to give priority to the **reallocation of public expenditure**. Therefore human development is partly about changing spending priorities within the public sector itself (Griffin & McKinley 1992). It means that, according to Griffin and McKinley (1992), to promote human development it can be done by reallocating government expenditure without the need to raise additional revenue through taxation or other sources of revenue. Hence it will be necessary to build political support for human development by creating effective coalitions of potential beneficiaries. They added that, human development is not politically neutral; it is not a technocratic solution to development problems; it requires broadly based popular support.

Therefore, Griffin and McKinley (1992) suggested that the implementation of the strategy will require a change in the composition of government spending. It is needed to reduce to a minimum the percentage of the budget earmarked for activities which do not contribute to development. This includes spending on the military and internal security (which often has little to do with defending the state from external

enemies). The revenues thus saved should be used to raise the proportion of expenditure devoted to human development, including greater spending on education and training, basic health and nutrition, fresh water supplies, and so on.

Griffin and McKinley (1992) added that, human development should not be used by the government as a justification for adding more to an existing framework, that is, for spending more and taxing more. Rather human development should be interpreted as requiring the government to do something different. It is not enough to use existing resources wisely, we must also add to the existing resources through human capital formation. Again it is misleading to think of spending on education, health, occupational safety, maternal care, etc., as social services; rather they should be seen as contributing to human capital formation.

It is argued by UNDP (2007) that the return on expenditure on primary health care and preventive medicine is higher than the return on investments in hospitals and curative medicine. Again, the return on basic vocational training and apprenticeship programmes is higher than the return on expenditures intended to produce lawyers, highly qualified business managers and certified public accountants.

Secondly, Griffin and McKinley (1992) added that human development strategies are likely to be **less intensive in the use of foreign aid** than more conventional alternatives. The reason for this is that human development strategies require less imported capital equipment than alternative strategies and in general have lower demands for foreign exchange. Given that foreign finance is likely to be less readily available in future than in the past, this characteristic of human development is to be welcomed. It is absolutely true for the developing countries, whether they like it or not, will be forced by circumstances to become more self-reliant, less dependent on foreign assistance. Those countries that choose a human development strategy will

find themselves in the happy situation of having changed a necessity into a virtue and they will thereby enjoy an added bonus.

Thirdly, as it was discussed before that East Timor suffers a trade deficit due to the huge rice and construction materials importation into the country. Therefore, it is important for the government to think about alternative policy to **promote import substitution** by expanding domestic agriculture product to **minimize rice importation** from abroad. However, in the long run, it needs an **export promotion strategy** (an outward looking) of economy in order to maintain a high growth in the economy and in turn will improve human development. This implies to investing heavily in physical infrastructure as well as technological transfers and acquisition.

Fourthly, we have discussed the importance of investing in human and physical capital formation. Thus, it is also necessary to discuss the role of **enterprises to promote industrialization**. As we have seen also in chapter four that government should be able to develop private sector, encouraging public and private enterprises in order to promote industrialization. However the preconditions for industrialization are: human capital, physical infrastructure, investment climate, tax and incentive policy and so on. Therefore, the preconditions need to be linked to the government's strategic development plan and its public spending priority in order to improve human development as well as to promote industrialization.

REFERENCES:

Anderson, Tim. *The Petroleum Fund and Development Strategy in Timor-Leste*. A Report for Timor-Leste's Petroleum Fund Consultative Council. Dili. 2010.

CIA. *The World Fact book*. 2010. Retrieved on July 29th, 2010, from:

<https://www.cia.gov/library/publications/the-world-factbook/geos/tt.html>

Direcção Nacional de Estatística (DNE): National Direction of Statistics. Timor-Leste Survey of Living Standards 2007. Dili: Gráfica Nacional. 2008.

Easttimorlegal.blogspot. 2009. *East Timor State Budget 2009*. Retrieved on August 2nd, 2010, from: <http://easttimorlegal.blogspot.com/2008/12/east-timor-state-budget-2009.html>

Encyclopedia of the Nations. 2010. *East Timor Economy*. Retrieved on August 1st, 2010, from: <http://www.nationsencyclopedia.com/Asia-and-Oceania/East-Timor-ECONOMY.html>

Euro News, 22 Sep 2010, *The Headache of UN Aid Distribution*, Retrieved on September 23, 2010, from: <http://www.euronews.net/2010/09/22/the-headache-of-un-aid-distribution/>

Griffin, Keith and McKinley, Terry. 1992. *Towards a Human Development Strategy*. Retrieved on March 18th, 2011 from: http://hdr.undp.org/en/reports/global/hdr1992/papers/keith_griffin_terry_mckinley.pdf

Human Development Foundation. *The Human Development Concept*. 2010.

Retrieved on July 29th, 2010, from:

<http://www.hdf.com/dotnetnuke/humandevelopment/Introduction.aspx>

IBON International. *Primer on Development and Aid Effectiveness*. 2007. Retrieved on July 29th, 2010, from:

http://www.realityofaid.org/downloads/primer_on_aid_effectiveness.pdf

Kim, Hosup. 1987. Policy-making of Japanese Official Development Assistance to Korea: 1965-1983. Seoul.

Kim, Joon-Kyung & Lee, Chung. 2010. Finance and Economic Development in Korea. Seoul.

La'o Hamutuk. 2010. Timor-Leste Basic Economic.

<http://laohamutuk.blogspot.com/2010/10/timor-leste-basic-economics.html>

Rodrik, Dani. 1995. *Getting Interventions Right: How South Korea and Taiwan Grew Rich*. Economic Policy.

Secretario de Estado da Formação Profissional e Emprego (SEFOPE): Secretary of State for Professional Training and Employment. *National Employment Strategy*. Dili: Government of Timor-Leste. 2008.

Stiglitz, Joseph E. 2000. *Economics of the Public Sector*. Third Edition. New York: W.W. Norton & Company.

Tempo Semanal. 2010. *Referendum Package*. Retrieved on August 1st, 2010. From: <http://temposemanaltimor.blogspot.com/2010/03/pakote-referendum-timor-leste-exclusive.html>

The Times of India. October 2010.

The Timor-Leste Demographic and Health Survey (DHS) 2009-2010. Preliminary Report. National Statistic Directorate. Government of Timor-Leste. Dili, Timor-Leste. 2010.

The World Bank. 1995. *Development in Practice: Priorities and Strategies for Education: A World Bank Review*. Washington D.C.

The World Development Vol. 28, no.2, pp. 197-219. *Economic Growth and Human Development*. Great Britain: Elsevier Science Ltd. 2000.

The Wall Street Journal, September 14, 2009, 9:53 AM ET, Retrieved on 21 October 21, 2010: <http://blogs.wsj.com/economics/2009/09/14/sarkozy-adds-to-calls-for-gdp-alternative/>

UNDP. *Human Development Concept*. 2005. Retrieved on August 3rd, 2010, from: <http://hdr.undp.org/en/humandev/>

UNDP. Human Development Report (HDR) 1990. New York: Oxford University Press. 1990.

UNDP. Human Development Report (HDR) 2009. *Overcoming Barriers: Human Mobility and Development*. New York: Palgrave Macmillan. 2009.

UNDP. Human Development Report (HDR) 2010. *The Real Wealth of Nations: Pathways to Human Development*. 20th Anniversary Edition. UNDP New York. 2010.

UNDP. National Human Development Report Rwanda 2007. *Turning Vision 2020 into Reality, from recovery to sustainable human development*. Rwanda. 2007.

UNDP. *Report on the Millennium Development Goals (MDGs) in Timor-Leste*. Dili: UN Compound. 2009.

UNDP. Timor-Leste Human Development Report (HDR) 2011. *Managing Natural Resources for Human Development. Developing the Non-Oil Economy to Achieve the MDGs*. UNDP Timor-Leste, Dili. 2011.

UNDP. *UN Development Assistance Framework (UNDAF) 2009-2013*. 2009.

Retrieved on August 1st, 2010, From:

<http://www.tl.undp.org/undp/UNDAF/00%20Undaf%20December%20181208.pdf>

UNICEF. Timor-Leste Statistic compiled by UNICEF. 2010. Retrieved on August 22nd 2010, from:

http://www.unicef.org/infobycountry/Timorleste_statistics.html#69

Worako, Tadesse Kuma (Thesis). 1999. *Government Policy in Human Capital Accumulation and Technology Transfers: the case of Korea*. Korea: KDI School of

Public Policy and Management.