Social Protection and Chronic Poverty in Cambodia: What types of Social Protection interventions reduce chronic poverty?

Ippei Tsuruga

September 2009

Master of Arts in Poverty and Development (MAPOV02)
INSTITUTE OF DEVELOPMENT STUDIES
Brighton, East Sussex BN1 9RU
England

Table of Contents

Abbreviations and acronyms

NGO	Non-Governmental Organisation
CCT	Conditional Cash Transfer
CDHS	Cambodia Demographic and Health Survey
GDP	Gross Domestic Product
JFPR	Japan Fund for Poverty Reduction
MoP	Ministry of Planning
SRM	Social Risk Management
CPRC	Chronic Poverty Research Centre
UNTAC	United Nations Transitional Authority in Cambodia
CMAC	Cambodian Mine Action Centre
UNDP	United Nations Development Programme
HEFs	Health Equity Funds
PAP	Priority Action Program
ADB	Asian Development Bank

Abstract

This dissertation aims to consider the potential of Social Protection interventions against chronic poverty in Cambodia. Through an asset-based approach in order to identify the chronic poor and their major coping strategies against common shocks, this study attempts to suggest an effective social protection framework for the reduction of chronic poverty in the county. Effective interventions to reduce chronic poverty need to achieve two different levels of goals in each period of time: namely, sustaining household livelihood by providing stable income in the short-term and increasing their own capacity for sustainable income generation in the long-term; and conditional cash transfers might have the potential for success.

Chapter 1 Introduction

Despite its significant economic growth and human development, Cambodia still faces a number of challenges in poverty and vulnerability reduction. The country's poverty elimination policies appear to expect the positive effect that economic development brings; and the dramatically increasing economy has, in fact, contributed to reducing poverty for the past decade. The impact of growth, however, might not have been equally delivered to all regions and households. Phnom Penh, the capital, has an extremely low level of poverty, while any other areas of the nation still have much higher levels of poverty. Considering this unequal extent of the poverty reduction process in the transitional economy, it seems to be very important to assist those who cannot gain benefits from the growth, and escape from poverty for a long time due to their living circumstances such as geographical constraints and household structures, although they might benefit in the future by improving access to basic infrastructure.

This dissertation explores the potential of social protection interventions against chronic poverty in Cambodia. In terms of contribution to both social scientific knowledge and policy debate, it is of value that this study tries to identify who to target and how to assist them to escape from chronic deprivation through social protection instruments in Cambodia because few literatures are available on this subject area in the region; and effective interventions which directly target chronically poor households seem not to be recognised. As an approach of social protection to chronic poverty, I will suggest a different idea from the Social Risk Management (SRM) framework of the World Bank, which provides a crucial view of accumulating capacity of households in the context of reduction in vulnerability and risk.

Firstly, I will discuss the link between chronic poverty, vulnerability and social protection, followed by the conceptual framework of this research. Secondly, a poverty profile will find out who lives in chronic poverty and why they cannot escape from the long-term deprivation. Next, existing social protection programmes will be analysed in terms of the impact on chronic poverty. Finally, I will suggest more effective and feasible interventions towards chronic poverty alleviation.

Chapter 2 Framework

2.1 Link between Chronic Poverty, Vulnerability and Social Protection

Chronic Poverty

Chronic poverty is commonly defined by capability deprivations for a certain period although there is controversial debate as regards the detail of its definition (Hulme and Shepherd 2003, p.404). In this paper, chronic poverty is defined as a target of social protection by satisfying both of two conditions: living below the defined poverty line for a long period, and not having a source of stable income. In order to recognise poverty dynamics in the future as well as in the past, I would like to add the latter condition to the former condition, as being the common definition of chronic poverty. The first definition has often been used to describe the term 'chronic poverty'. Hulme et al. (2001, p.10-14) characterise the chronic poor by two categories: 'always' poor and 'usually' poor. According to their definition, households are recognised as living in chronic poverty if their mean expenditure is below the poverty line for a long time. Moreover, considering the duration of poverty, it is argued that five years might be appropriate for identifying chronic poverty because the duration is commonly accepted as a long period of time, and a common year gap between data collections (Hulme et al. 2001 and Aliber 2001). This definition of chronic poverty contributes to adding the concept of time to poverty. More specifically, this condition of living below the poverty line for a long time identifies chronic poverty by the past condition of households.

The latter condition of the definition may be crucial to identifying whether or not the poor have potential to escape from deprivation in the future. This definition is particularly important when it comes to identifying destitute populations who need assistance. Unless households own a productive source of sustainable income, it might hardly be expected of them to be able to escape from long-term poverty. Alternatively, this condition can be replaced by 'not having productive assets', which includes physical assets such as: land, tools and livestock, and human capital such as: labour, education and health. Investing in land or livestock can generate income in the shorter term, and enhancing education can bring sustainable income in the future. The Chronic Poverty Report (2004, p.42) favourably argues that lacking

access to assets pushes those people who are already poor into deeper and more severe poverty when a shock takes place.

Furthermore, the level of productivity seems to be affected by a variety of other circumstances as well. The report (2004, p.7) argues that the long-term poor can be divided into two categories based on whether or not they are economically active. On the one hand, those persistent poor who are commercially non-active might be affected by health, age, physical or mental disability. On the other hand, those who are economically active but cannot graduate from poverty for a long time possibly have disadvantages in the conditions of their employment; access to productive assets themselves; or social barriers such as discrimination. In addition, access to basic infrastructure: roads, market, credit, safe water, sanitation, hospitals and schools can affect the productivity of households.

Thus, chronic poverty is defined by satisfying the condition of living below the defined poverty line for a long period without having a source of stable income. In accordance with this definition above, households with fewer productive assets and living in long-term poverty are chronically poor. Considering the standard of duration, five years can be perceived as long-term and also reasonable in practical terms to identify chronic poverty. Moreover, a variety of economic and social circumstances affect the status of chronic poverty by constraining the productivity of households.

Vulnerability

Vulnerability may be a key obstacle for many poor households to achieving sustainable livelihoods. Commonly, vulnerability is defined by availability of coping strategies, exposure to contingencies and managing ability. There are two major sources of literature for a common explanation of vulnerability. Dercon (2001, p.5) argues that vulnerability refers to the available options and ability of households and individuals to deal with risks. He points out that households with fewer choices to cope with risks might be forced to select options, which spoil their sustainable livelihood. Also, according to Chambers (2006, p.33), vulnerability is determined by exposure to risks, shocks and stresses, and a lack of ability to manage them without experiencing damaging loss: namely, how often households encounter risks and shocks, and how well they can deal with them. Summarising these definitions, Dercon (2006, p.2) describes vulnerability as a condition of ‘insecurity’ with ‘potential

harm', and a 'threat' of poverty and destitution: in other words, risks and uncertainty can have potential to harm sustainable livelihoods of households. Speculating about these definitions, in this paper, vulnerability refers to the availability of coping strategies, exposure to risks and shocks, and managing ability, and may disturb sustainable the livelihoods of households.

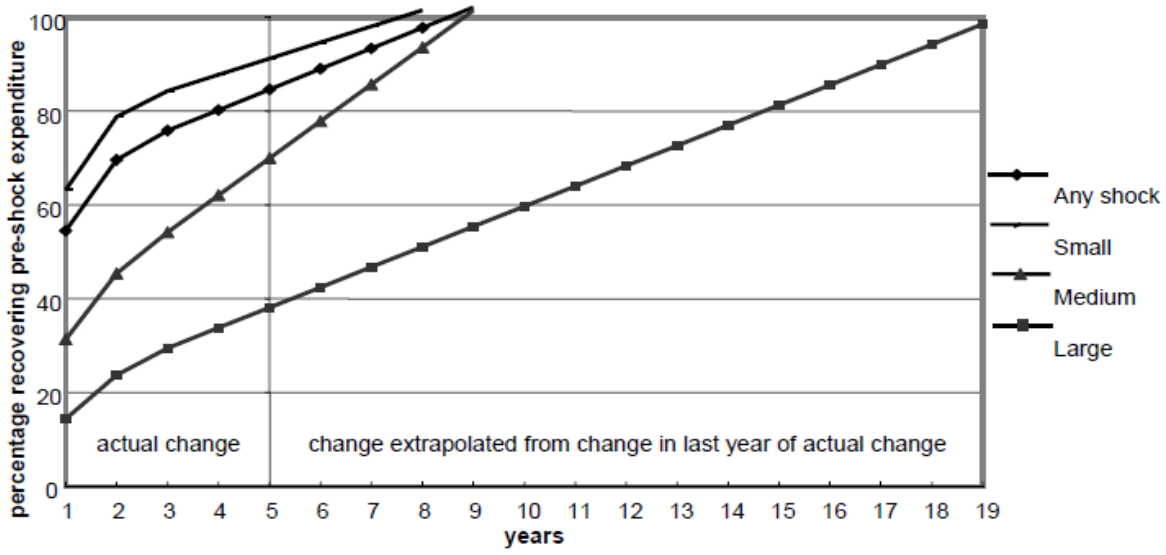
Chronic Poverty and Vulnerability

As discussed, the link between vulnerability and poverty is identified many times in literature but there is little empirical research available on the relationship between vulnerability and chronic poverty. Through revisiting this literature, however, I argue that vulnerability appears to affect chronic poverty in two ways: pushing those who are already poor into chronic poverty and the chronic poor into deeper poverty.

Firstly, vulnerability may contribute to pushing the already poor households into chronic poverty. The Chronic Poverty Report (CPRC 2008, P.vii) lists five major traps of chronic poverty: 'insecurity', 'limited citizenship', 'spatial disadvantage', 'social discrimination', and 'poor work opportunities'. These traps create vulnerability to a variety of risks and shocks, which can be an entry point to a vicious cycle of long-term poverty. In particular, the term 'insecurity' was also used to describe vulnerability by Dercon, as introduced above. In addition, according to the report, the chronic poor tend to live in circumstances of insecurity, with limited assets and rights to cope with shocks, and their coping strategy when experiencing shocks is more likely to be that they relinquish long-term benefits for short-term livelihood. To sum up the views of the previous literature, vulnerability, i.e.: low availability of coping strategies, exposure to risks and shocks, and managing ability, contributes to generating chronic poverty.

Next, vulnerability may also deepen chronic poverty. The work of Barrientos (2007, p.5-6) provides empirical studies on this issue. He explains the relationship between vulnerability and poverty traps by using the study on the link between shocks and chronic poverty, conducted by Jalan and Ravallion (2001, p.28). This study discovers that larger shocks tend to lead to a deeper initial fall in expenditure and more time being required to recover from a shock, in rural China (Figure 1). Barrientos argues that large shocks might result in longer-term poverty because it

Figure 1: Recovering from a shock-induced drop in consumption



Source: Barrientos (2007) and Jalan and Ravallion (2001)

takes several years or decades to recover from a shock, but most households can eventually gradually recover. His argument is sound, and drawn from the assumption that the recovery trend during the survey period will last after the survey period; however, there is an important clarification missing in this study and analysis, namely, the nature of shocks. His assumption ignores the possibility that another shock might take place during the recovery period. There may be significant differences in frequency between different types of shocks. For example, illness, food shortage or harvest failure might more often occur than other types of shocks in some communities. These frequent shocks may continuously harm the poor households before they have a chance to recover from the first shock. In this case, frequent shocks can potentially push the poor into chronic poverty even though the initial impact of shocks is small. Hence, it may be possible to argue that households might suffer more severe effects from shocks, once they fall into chronic poverty. Agreeing with this statement, Barrientos et al. (2005, p.20) argue that the chronic poor are more liable to suffer from crucial risks and vulnerability and have fewer options to manage them, which forces them to stay in poverty. Thus, vulnerability appears to have a crucial connection to chronic poverty. High levels of vulnerability may not only force the already poor households to enter a vicious cycle of long-term poverty, but also worsen the livelihood of the chronic poor.

2.2 Conceptual Framework

I have argued that vulnerability contributes to creating and deepening chronic poverty, which refers to living below the defined poverty line for a long time, and not having a source of stable income. From a social protection perspective, possible intervention can be to decrease vulnerability of the already or potentially chronic poor households in order to prevent them from falling into a vicious cycle of long-term poverty or worsening their poverty status.

My working definition of social protection is derived from Devereux and Sabates-Wheeler (2004, p.4; 2007, p.25; 2008, p.70-71). They developed four categories of social protection instruments by utilising terminology introduced by Guhan (1994): 'provision measures', which provide assistance to escape from deprivation such as social assistance for disability and social service for orphanages; 'preventive measures', which prevent deprivation, including social insurance or a safety net for the economically vulnerable; 'promotive measures', which improve income and capability; and 'transformative measures', which attempt to achieve social justice and avoid exclusion. In this study, for the purpose of social protection to reduce vulnerability, a trap of chronic poverty, the perspective of social protection is particularly close to intervention, which achieves the goals of 'provision' measures in the short term and 'promotive' and 'preventive' measures in the long term. In other words, these interventions need to be designed to target those vulnerable to chronic poverty or the already chronic poor with following goals and functions.

The final goal of social protection is to achieve sustainable livelihood for those vulnerable to chronic poverty and the already chronic poor. The short-term impact can be to bring livelihood to the beneficiaries up to the poverty line, by providing stable income. The long-term impact can be to increase the capacity and capability of households for sustainable livelihood, by enhancing physical assets and human capital. These different functions in each period are due to nature of chronic poverty: namely living below the poverty line for a long period and not having a source of stable income. Households who have a daily problem of insufficient expenditure might urgently need cash or in-kind transfers, and need gradually to build capacity to sustain their livelihood; therefore, there are different aims in the short-term and the long-term. Moreover, a function of 'preventive measures', including a safety net,

seems to be necessary to prevent those who used to live in chronic poverty from falling into long-term poverty again in the future. Thus, social protection intervention, in this study, means to sustain the livelihood of the vulnerable to chronic poverty and the already chronic poor by improving their capacity as well as ensuring regular income. From this perspective, this intervention may imply 'provision' measures in the short term and 'promotive' measures in the long term prior to 'preventive' measures.

Furthermore, social protection in this study seeks a different approach from the SRM framework by the World Bank (World Bank 2000, p.137; Holzmann and Jorgensen 2000, p.14-15; Holzmann and Jorgensen 1999, p.8). On the one hand, the SRM framework focuses on how to manage risks. Holzmann et al. (2003, p.5) argue that the poor are most liable to be exposed to a variety of risks such as: natural; manmade; health and political risks; and also have the fewest means of coping with these risks; therefore, the provision of risk management instruments to the poor is important for sustainable development. On the other hand, the focus of social protection here is more on enhancing the capacity of households prior to shocks. In particular, the chronic poor tend chronically to have obstacles to sustaining their livelihood, so transferring cash before shocks, for example, might provide the chronic poor with an opportunity not only to prepare for coping with future shocks but also to generate extra income. Hence, this intervention can protect the chronic poor from shocks and decrease vulnerability by accumulating physical assets and human capita, which increase livelihood and productivity.

Chapter 3 Poverty Profile of Cambodia

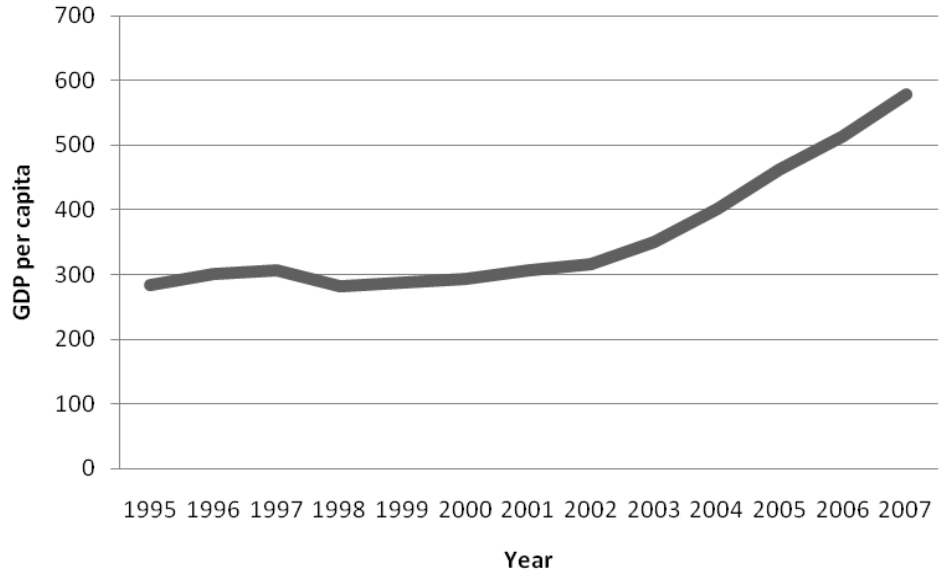
3.1 Growth to Chronic Poverty Reduction

Growth to Poverty Reduction

The growth pattern which resulted in the dramatic progress of the economy may have contributed to leaving some people behind in terms of the development, and unequally reducing poverty based on different regions or household characteristics in Cambodia. The country has experienced a great degree of economic growth particularly over the past decade after the devastating civil war

terminated by the intervention of the United Nations Transitional Authority in Cambodia (UNTAC) in 1992. There was a rapid and stable increase in the gross domestic product (GDP) per capita by 7.9 per cent per annum on average, from US$ 284 in 1995 to US$ 578 in 2007 (Figure 2; Table 1). As a result of this positive

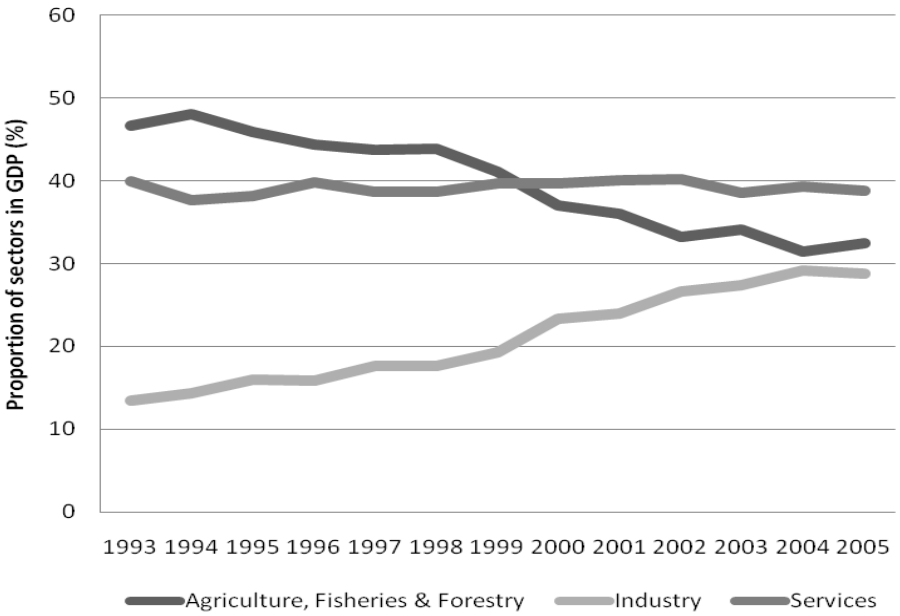
Figure 2: Trend of GDP per capita in Cambodia



Source: World Bank (2007)
Note: Value in US$

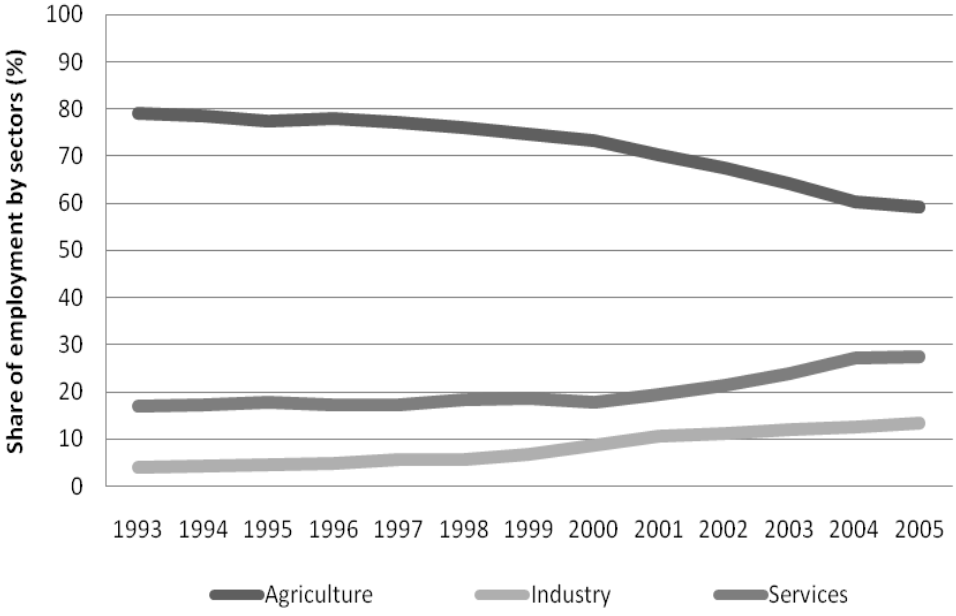
growth of the economy, the poverty headcount ratio decreased from 39 per cent to 28 per cent between 1993 and 2004 (MoP 2006, p.48); however, the degree of poverty reduction seems to be unequal across the nation. The poverty headcount ratio decreased to 4.6 per cent by 6.8 points in Phnom Penh, to 20.5 per cent by 16.1 points in other urban areas, and to 33.7 per cent by 9.4 points in rural areas between 1993 and 2004. Although there were significant drops in poverty rates over the entire nation, the rural areas, where 85 per cent of the population lives, still have a noticeably higher level of poverty. This imbalance in poverty reduction can be affected by the unfavourable sectoral patterns of growth for rural households. In fact, the growth has been led mainly by the industry and service sectors rather than agriculture: an average, annual growth rate in each sector was 35 per cent; 12 per cent and 6 per cent, respectively, between 1993 and 2005 (Figure 3; Table 2 and 3).

Figure 3: Share of sectors in GDP



Source: National Institute of Statistics of Cambodia (2006)

Figure 4: Share of employment by sectors



Source: National Institute of Statistics of Cambodia (2006)

In terms of location, it can be identified that these leading sectors tend to concentrate in urban areas. For instance, manufacturing and trade industries are based in Phnom Penh and the tourism industry flourishes in urban areas of Siem Reap (World Bank 2009). Although these industries have generated more employment opportunities recently (the employment of industry accounts for 13 per cent; and service sector for 28 per cent (Figure 4; Table 4)), 59 per cent of the population were still involved in the agricultural sectors in 2005. Therefore, the urban-oriented growth pattern seems to create a different extent of poverty reduction between urban and rural regions. Agreeing with this argument, Engvall and Kokko (2007, p.23) argue that low levels of agricultural development limited economic growth and poverty alleviation in rural Cambodia.

Growth to Chronic Poverty Elimination

The economic growth may not have efficiently reduced chronic poverty. There are three major reasons to be considered: access to markets and assets; uneven education opportunities; and household conditions. Firstly, a chronic lack of access to markets and assets appears to disadvantage rural households in participating in the market economy and possessing productive assets for a sustainable livelihood. The long-lasting civil war utterly ruined the country's infrastructure and left farmers a vast amount of useless land with a number of unexploded ordinances and landmines, and the process of rural development was also not as fast as that of urban reconstruction. There is only 17 per cent of the total land area of 18.1 million hectares available for agricultural farmers due to geographical conditions; in other words, rural households are unable to access most of the land (Engvall and Kokko 2007, p.11). In particular, households in the north-eastern mountainous regions live with less access to available land due to a large number of unexploded ordinances as well as its poor access to the markets; and people in Krong Pailin also lack access to safe land due to landmines (CMAC 2003). Having disadvantages in access to not only the markets due to distance but also cultivatable lands, households, especially in these areas, may not be able to join the economy efficiently. Also, other mountainous provinces in the northern regions have poor infrastructure to access the markets. As a negative effect of these disadvantages, the regions listed above can be recognised as the poorest regions in

Cambodia, with the poverty headcount ratio of more than 46 per cent on average in 2004 (MoP 2006, p.55). Having identified that households in these areas also have chronic problems of access to productive land and markets, this link between access and poverty status in Cambodia helps to explain the argument of the Chronic Poverty Report that the chronic poor are likely to live in areas with a lack of agricultural potential and access to the main markets (CPRC p.xii). Hence, lack of access to markets and productive assets may contribute to depriving the poor households of the benefit from growth.

Secondly, inconsistent education opportunities seem to restrict the transfer from growth to chronic poverty reduction. The civil war and its urban-biased development policies have contributed to leading lower levels of educational development in rural and remote areas; and the low standards of education have exacerbated human capital accumulation for sustainable livelihood of households in the future. The Khmer Rouge regime destroyed the education systems and facilities as well as executing millions of people between 1975 and 1979. According to Haynes (2009, p.68), the regime selected people with higher education including teachers for execution, and even Buddhist monks, the *sangha*, who played an important role in education in Cambodia. At the national level, the impact of this execution for the country was to lose a foundation of the education sector to enhance productivity, as well as productive labour itself. Moreover, school buildings often needed to be reconstructed because they were liable to be utilised as execution sites or other military facilities. As a consequence of this destruction of the education sector, it appeared to become an urgent issue for the post-conflict regime to rebuild educational facilities and systems to accumulate human capital. In fact, the country demonstrated significant achievements in educational reconstruction: school construction and improvement in primary education. There was a dramatic increase in the number of primary schools from 4,665 units in 1990, through 5,274 in 2000, to 6,476 in 2007 (Dy and Ninomiya 2003, p.15; MoP 2008, p.ix). Moreover, the net primary enrolment rate reached the high standard of 99 per cent in 2005, rising from 69 per cent in 1991 (UNDP 2007). By this significant progress, the educational development in Cambodia might be described as a success story in comparison with other poor nations. However, the country may not have managed to deal with disparity in education opportunities in terms of finance, although it did

achieve the improvement in access to schools in terms of distance. According to the Cambodia Human Development Report (MoP and UNDPC 2007, p.27-28), the average years of education in Phnom Penh were 6.4 while those in rural areas were only 3.2, lower than the average of 3.7 in the whole country in the years 2003 and 2004. In addition, the net admissions rate, which presents primary school attendance as a percentage of the relevant age group, shows large inequality between regions. For example, the rate shows much lower standards in the north-eastern regions: 57 points in Rattanak Kiri and 69 points in Steung Treng, compared to the average of 83 per cent in the year 2005 and 2006. These survey data show that children in some areas spend more time in completing primary education or even dropping out. This reflection may imply that households cannot afford to keep sending children to school due to financial constraints, and give up future opportunities of income generation as a result of lack of education. Thus, despite the improvement in access to school facilities, educational disparity, especially in terms of finance, still appears to limit the impact of growth on chronic poverty reduction in some of the rural regions.

Thirdly, the impact of growth on the economically inactive or weak households seems to be limited. Depending on the characteristics of households, they may be unable to participate in economic activities efficiently. Those households can possibly have a high dependency ratio, female heads, and disabled or elderly members; in other words, households with less labour might gain limited benefits from the increasing employment opportunities by the economic growth. In the Cambodian context, many households have experienced injuries to and the loss of family members due to conflict-related reasons. For instance, Zimmer et al. (2006, p.336) discover that 43 per cent of adults aged sixty or older have experienced the death of children during the Khmer Rouge period; the surviving women are likely to have lost a spouse and not to remarry; and the older adults are more liable to have had a son rather than daughter killed during the period. Although their study did not recognise significant effects of those losses on the current living arrangements, support, and poverty status of the elderly, it can still be possible to hypothesise that those losses might affect current economic well-being and vulnerability of the household or its relatives if fewer children need to have responsibility for more

household members. Therefore, these types of households might have more risks and vulnerability to poverty, and the growth may not eliminate these risks.

Thus, the economic growth may not efficiently contribute to reducing chronic poverty from the viewpoints related to access to markets and assets; uneven education opportunities; and household characteristics.

3.2 Why target Chronic Poverty but not Poverty in general?

The focus on chronic poverty can provide two different benefits: productivity and efficiency. Firstly, targeting chronic poverty can benefit the chronic poor and the country by making those households more productive. The chronic poor households are often unable to contribute to the economic growth and receive positive effects from the growth; namely they stay out of the economic system due to lack of access to markets, assets and education or due to a variety of other reasons. Therefore, although the rapid economic growth has decreased poverty in Cambodia, the growth may not benefit the chronic poor households and reduce vulnerability to chronic poverty as argued above; however, once these households gain the capacity to generate a sustainable livelihood and to reduce their vulnerability, they might be able to participate in the economic activities more actively. For example, households might enhance their economy in the future if they do not have to sell their productive assets to pay for treatment, or withdraw their children from school in order to send them to work, and these improvements can also contribute to the country's economy. Hence, targeting chronic poverty might not only enhance livelihoods of those households but also the economy of the nation.

Secondly, targeting chronic poverty can contribute to making poverty reduction more efficient. The focus on the length of poverty status helps divide poverty into transient poverty and chronic poverty. These two types of poverty have different features. On the one hand, the transient poor can probably achieve the capacity to escape from poverty but might have vulnerable characteristics to poverty. On the other hand, the chronic poor are more likely to lack the ability to increase their productivity, so that they stay in poverty for a long time. This distinction may allow the policy-makers to understand whether or not households are able to escape from poverty themselves. Furthermore, identifying the characteristics of the chronic

poor can assist in the analysis of who has more probability to fall into long-term poverty. Thus, the focus on chronic poverty may allow the policy-makers to distinguish the households who need assistance most, which helps to prioritise the more urgent poor sectors of the population to support.

From these points, the focus on chronic poverty may result in enhancing productivity of those households and the nation, and make poverty reduction policies more efficient.

3.3 Why Social Protection rather than other projects?

Social protection measures may have potential to provide assistance for the already chronic poor or those vulnerable to a vicious cycle of long-term poverty to promote and sustain their livelihoods. I have argued that the economic growth could not equally provide benefits for households who have particular characteristics or live in certain areas; and their constraining factors are likely to be chronic problems such as: lack of access to cultivatable land due to landmines or less able-bodied labour. This vulnerability does not allow those households to accumulate assets and enhance education for their sustainable livelihoods; therefore, lowering this vulnerability might yield capacity to sustain their livelihoods and opportunities to contribute to the economic growth. This argument is supported by empirical studies. It is reported that agricultural development and social protection are two of the major factors for achieving the making of the impact of economic growth on chronic poverty reduction more efficient; and enhancing education can improve agricultural productivity (CPRC 2008, p.x). As the report addresses the importance of other development projects such as agricultural development, it cannot be argued that social protection measures are more crucial for chronic poverty reduction. It may be rather important to add an approach of social protection to the growth-led poverty elimination strategies in the context of Cambodia: namely social protection can promote economically excluded populations into the economic development process of the country. As a consequence, economic growth and poverty reduction might be more productive; and the enhanced economy can also increase sustainability of social protection measures in terms of financial affordability of the government.

3.4 Chronic Poverty in Cambodia

In this section, I am going to conduct an asset-based assessment of chronic poverty and vulnerability. Through this assessment, I will derive possible social protection interventions against chronic poverty in Cambodia. There are three major questions in this analysis. The first interest is what types of shocks are the most harmful or common for Cambodian households, although there is a critical limitation of such data availability. Next, it is also of interest to grasp how households with different levels of assets react when they face those shocks. The final question is why each household, particularly the vulnerable, tends to choose certain coping strategies. If the circumstances or characteristics of households force them to choose those strategies, which might not be good options for them, there appears to be room for interventions. I will discuss a methodology of an asset-based approach, followed by construction of an asset index, recognition of the chronic poor and the vulnerable, their coping strategies against shocks, and possible interventions, in order.

3.4.1 Source of Data

There may be two different approaches to identifying chronic poverty: one is an approach that focuses more on the first definition of chronic poverty, living below the poverty line for a long time. In this approach, chronic poverty can be identified by looking at the past poverty status of households, and then characteristics of those households can be recognised, which is useful for proposing interventions. Therefore, this approach often requires rigorous panel data of income or expenditure of households. This method can imply both advantages and disadvantages. There is a problem of constraint in data availability since conducting this data collection is costly, while the results would be more rigorous.

The other approach focuses more on the second definition of chronic poverty; namely, identifying vulnerability to chronic poverty by looking at static profiles of households such as asset ownership. In this approach, the main idea of interventions can be that if households firmly have a source of stable income, they might experience the potential to escape from chronic poverty. In this study, due to

a lack of rigorous data of income or expenditure in Cambodia, I would like to use the latter approach to identify, which people live in chronic poverty.

This study is based on a dataset of household survey from the Cambodia Demographic and Health Survey 2005 (CDHS 2005), conducted by the National Institute of Public Health, the National Institute of Statistics and ORC Macro (2006), across 14,243 households, comprising a nationally accumulated sample of 16,823 women and 6,731 men age from 15 to 49. The original purpose of the research was to develop updated and reliable data on a variety of non-economic indicators such as: fertility; infant, child and maternal mortality; maternal and child health; nutrition; HIV and AIDS; and gender equality. By utilising this dataset in this study, I attempt to analyse vulnerability to chronic poverty in Cambodia through an asset-based approach. The crucial challenges of this study are to identify the most vulnerable people; and to what extent and why they are vulnerable to staying in poverty for a long time since there is a recognised link between asset possession, vulnerability and chronic poverty.

3.4.2 Methodology: Asset-based approach

This analysis will target households who lack assets to sustain their livelihood, as the most urgent populations for interventions, and construct an asset index employing a standard weight to identify those destitute persons.

Firstly, in such a situation as Cambodia, which lacks panel data of household economy to assess poverty and vulnerability, an asset-based approach may be useful to identify not only who the vulnerable households to chronic poverty are, but also to what extent they are vulnerable. Moser (1998, p.37) argues that an asset-based analysis can capture poverty dynamics by identifying the capabilities of the poor to utilise their resources to decrease their vulnerability. Households with a different type or amount of assets can practise different coping strategies when they face shocks. Carter and Barrett (2005) develop an asset-based approach to recognise poverty traps and chronic poverty by focusing on asset ownership. Through their asset-based approach, they argue that it is possible to observe a distinction between the structurally poor and the stochastically poor. The structurally poor are households who own insufficient assets to sustain their livelihood above the

poverty line. The stochastically poor are households who own enough assets to raise their economy above the poverty line, but were below the poverty line during a survey period by chance. Due to the purpose of my research to identify the chronic poor who need assistance, discovering the structurally poor seems particularly more important. Hence, this study attempts to recognise the structurally poor, who have insufficient assets to achieve a sustainable livelihood, as a prioritised target of assistance.

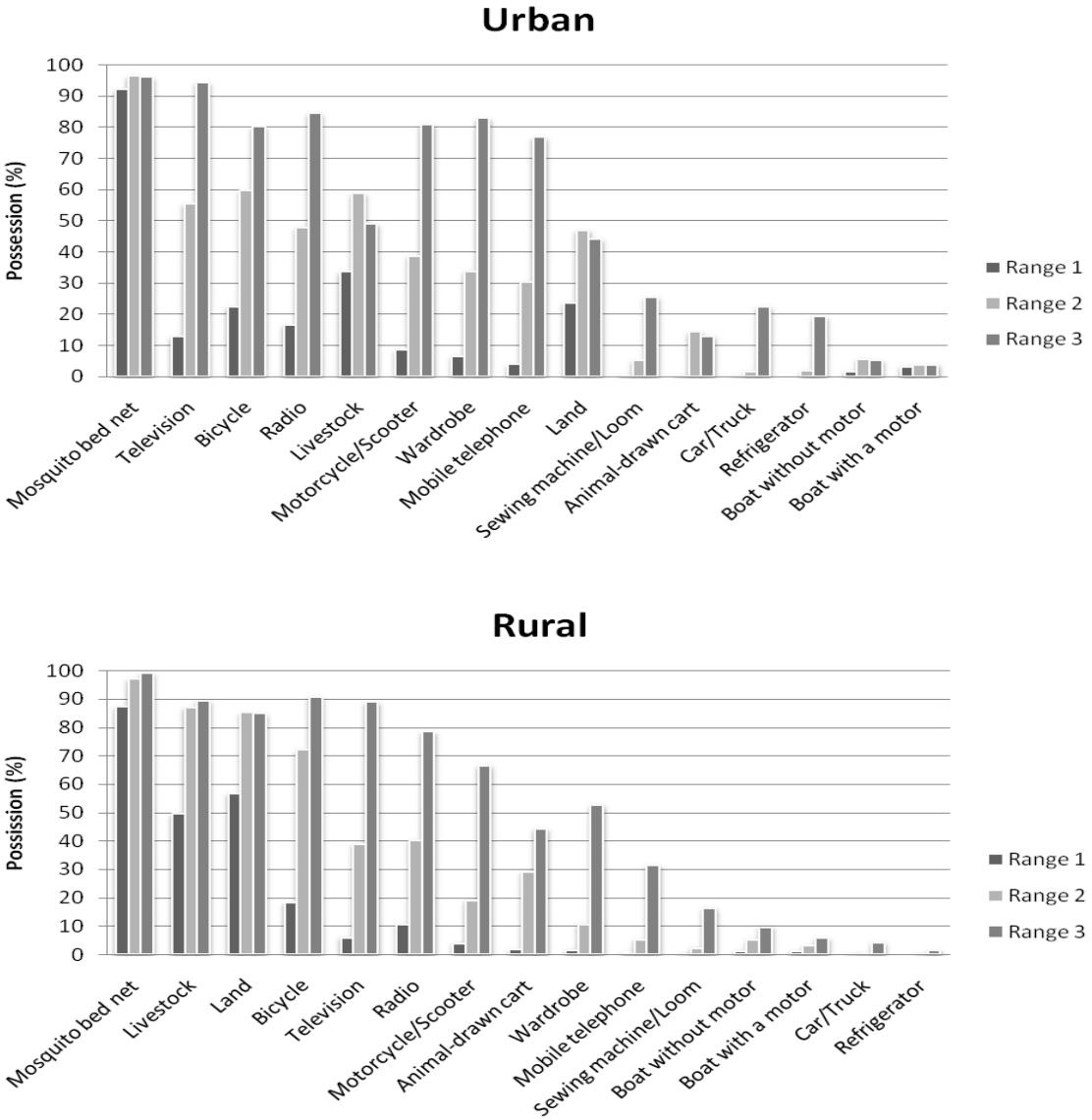
Next, considering the concrete process, the methods of conducting the asset-based approach are various and controversial. For instance, Moser and Felton (2007) construct an asset index with differential weights for each asset endowment. Their asset index is based on a combination of three parts, including prices, unit values and principal components analysis. Sorting every asset component into different categories, they compute weights of each segment of assets; therefore, their asset index is generated with value judgement. On the other hand, Chaturvedi and Greeley (2007, p.21) point out that there are advantages and disadvantages in utilising weights. As Moser and Felton demonstrate, the use of weights, which are calculated through complicated processes, possibly leads to statistically more significant results; however such value judgement can lead to another discussion of whether or not the weights are right in reality. From this doubtful perspective, Chaturvedi and Greeley do not apply weights for any assets in their asset index. Similarly, their method of a standard weight can also invite criticism from the point of view of asset value, because TV sets and carpets, with different prices, are awarded the same weight in this case. Answering this criticism, they hypothesise that if a household owns more sophisticated assets, the household is more likely to possess basic assets as well. Thus, there are controversial debates about the methods of practising the asset-based approach. In this study, I am going to employ a standard weight for every asset.

3.4.3 Construction of asset index

An asset index is constructed by using the same portfolio of fifteen types of assets as adopted by the CDHS 2005 (Figure 5; Table 5): including mosquito bed nets; livestock; land; bicycles; televisions; radios; motorcycles or scooters;

wardrobes; animal-drawn carts; mobile telephones; sewing machines or looms; boats without a motor; boats with a motor; cars or trucks; and refrigerators. As stated, the asset index employed a standard score for all assets in order to avoid value judgement by applying subjective weights for each asset; in other words, the more varied assets households own rather than possessing many of a single type of asset, the higher asset scores they have. After distributed asset scores, each household will be divided into five groups by asset score ranges; the first range is up to 3; the second range is between 4 and 6; the third range is between 7 and 9; the fourth range is between 10 and 12; and the fifth range is between 13 and 15.

Figure 5: Asset ownership by the asset score range



Source: Cambodia Demographic and Health Survey 2005
Note: Own calculation using household datasets from CDHS 2005

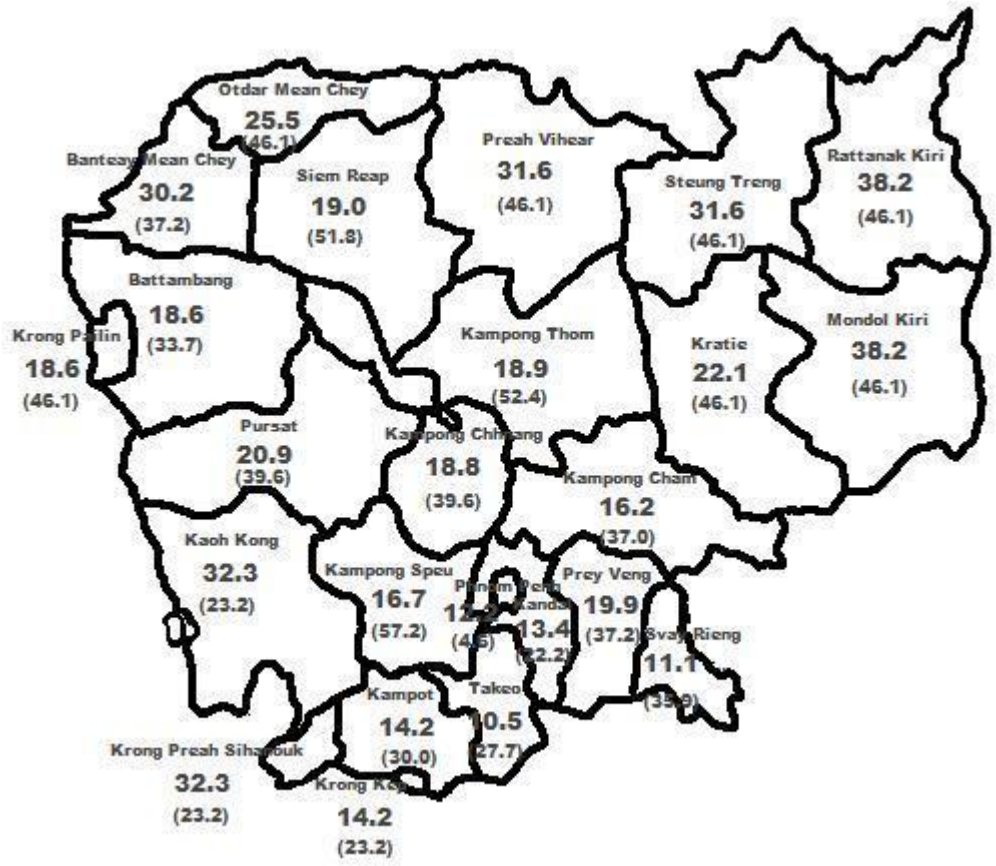
3.4.4 Who lives in chronic poverty?

The structurally poor appear to be identified in the lowest quintile of the asset index. Looking at the results of the indicator, approximately one fifth of households are in the bottom quintile; and mosquito bed nets are the most popular assets across the nation as 96 per cent of households own them. There are some differences in common assets between urban and rural regions. In urban areas, televisions and bicycles are the second and third most popular assets on average: 62 per cent and 61 per cent respectively; however, this trend does not apply to those in the lowest quintile. Only 13 per cent of them own televisions and 23 per cent of them possess bicycles; and livestock and land are the most popular assets following mosquito bed nets. Considering the second quintile, there are more various combinations of assets to be observed at much higher levels of asset possession than that of the first quintile. For instance, there are more than 30 per cent difference in televisions and bicycles between the bottom two quintiles. This may imply that the structurally poor households in urban areas have much lower affordability to purchase these assets by comparison with the second bottom quintile. In rural areas, both livestock and land appear to be the second common assets in most of the quintiles. Even at the lowest quintile, this trend does not change although the levels of ownership are very low; 50 per cent for livestock and 57 per cent for land. This result may be a part of the consequence that most households in rural areas are involved in agricultural activities. Thus, about 20 per cent of households across the country are ranked in the bottom quintile, and their asset ownership is limited. These households cannot be described as having enough productive assets to sustain their livelihoods. Hence, they are identified as the structurally poor and the most vulnerable populations to chronic poverty. Therefore, in this study, I recognise the structurally poor, at the bottom quintile of the asset index, as the already or potentially chronic poor; and call both of them ‘the chronic poor’.

In order to identify where the chronic poor live, I have created the asset poverty map based on the proportion of the first quintile of the asset index (Figure 6). The asset poverty map does not always correlate the poverty map based on poverty headcount ratio. This is partly because the asset index is created for assessing risks and vulnerability to chronic poverty but not static poverty status. For example, 52

per cent of households in Siem Reap live in poverty, and 19 per cent of the total households are the chronic poor: in other words, about one-fifth of households might already live in chronic poverty or have high risks since they do not have enough assets to sustain livelihood. Therefore, the asset poverty map indicates where the chronic poor live.

Figure 6: Asset Poverty Map in Cambodia



Source: Cambodia Demographic and Health Survey 2005 and Ministry of Planning (2006)
Note: The upper lines show the proportion of the first quintile of asset index; the lower lines demonstrate poverty headcount ratio.

In terms of geographical locations, the chronic poor are particularly concentrated in mountainous regions including areas from the Northeast to Northwest and some of the Southwest provinces. In each province of Mondol Kiri, Rattanak Kiri, Steung Treng, Preah Vihear, Otdar Mean Chey, Banteay Mean Chey, Kaoh Kong and Krong Preah Sihanouk, over a quarter of households are classed as chronic poor. These regions share common features of poor access to the economic centre of the country, Phnom Penh, and underdeveloped forestry. Despite having developed a port for trade, the Southwest areas still have a long underdeveloped coastline. The Northeast regions have the majority of aboriginal populations, and a vast area of useless lands with unexploded ordinances. Hence, these regions, which lack access to the market or assets, have higher proportions of the chronic poor households.

Considering gender, female-headed households are approximately twice as likely as to live in chronic poverty (Table 6). 33 per cent of female-headed households are classified as chronic poor, compared to 17 per cent of male-headed and an average of 21 per cent. This statistical result can be explained by the view that the female-headed households have less labour and productivity to generate income, or social discrimination. For a deeper explanation, further research may be required in this specific subject area of gender in Cambodia.

Furthermore, the correlation between impairment and asset ownership cannot be recognised; and there are no large differences in proportions of households who have impaired members, by asset quintiles: namely, the hypothesis that households with disabled members are more vulnerable due to less productivity is not proven from this analysis. This result may be because the relationship between households and those relatives are generally very close in Cambodian local communities; and they support each other by transferring gifts in order to mitigate disadvantages in impairment; therefore, the impact of impair might not become exaggeratedly visible.

3.4.5 Why unable to escape from chronic poverty?

In order to understand the mechanism whereby the chronic poor are unable to escape from a vicious cycle of long-term poverty, I will summarise the general trend of common shocks and coping strategies in Cambodia by drawing on previous

studies on the risk and vulnerability assessment, followed by the analysis of shocks and coping strategies of the chronic poor by utilising the household dataset.

Common shocks in Cambodia: Impact of human diseases

In terms of a remarkable type of shock, human diseases seem to constitute of the most critical shocks among Cambodian households. Despite data constraints on types of shocks and risks in Cambodia, the World Bank research (2006, p.16-19) provides some ideas of the most widely recognised shocks. According to the research, harvest failure, illness and death of household members are the most serious shocks for Cambodian households. These shocks are closely related to one another. Harvest failure can lead to a lack of nutrition for household members, which might cause illness. Also, human diseases can result in the death of household members. These shocks affect household livelihoods by depriving their labour, and force those households to pay for health treatment, which might not lead not only to selling productive assets even with very low prices or borrowing with high interests but also to losing their precious labour. In fact, some households are identified as entering a vicious cycle of poverty as a consequence of borrowing rice at as high an interest rate as 100 per cent, which exceeds their productivity (2006, p.32). Particularly, for most poor people, their own bodies are their major assets (Chambers 2006, p.37), so the effects of these health-related shocks appear more exaggeratedly in the poorer households. Furthermore, it can be hypothesised that the sickness of breadwinners affects other household members or especially women because in practical terms, workers need more nutrition (Lucas et al. 2008, p.33). Diseases affecting the workforce in households result not only in a reduction of their income but also increase expenditure on health care. Hence, it may be possible to argue that human diseases are a beginning and a consequence of a poverty vicious cycle in Cambodia; therefore, illness is a commonly recognised type of shock, with a number of links to other risks and shocks.

Having identified diseases as one of the most critical shocks for Cambodian households, it is worth considering the impact of different types of diseases. There may be two major categorisations to be considered: temporary and chronic diseases. Firstly, the major feature of temporary illness is that people can recover in a shorter length of time. Therefore, households might be able to cope more easily with these

diseases because they can often predict how long it takes for a member to recover from illness. In this case, they can have expectation of future income, which allows them to borrow for health care or purchase other consumables during a period of sickness of their household members; however, these types of diseases can also develop into catastrophic as well as minor cases. The poor and vulnerable households may not be able to send sick members to health centres nor pay for appropriate treatment and nutritious food, which contributes to a worsening of their health status. Moreover, the impact of its frequent incidence might lead to a negative spiral of livelihood. As argued, illness is one of the most common shocks among Cambodian households; therefore, households are always at risk of encountering this sort of shock, and need to save or build capacity to deal with such risks. Hence, temporary sickness may become a chronic problem for Cambodian households due to the risks of leading to catastrophic cases and its frequency.

Secondly, chronic diseases may harm livelihood more directly for a long time. The major problem here is not only that those households have to keep paying for treatment but also that they cannot predict how long it will take to recover in order to work for their sustainable livelihood. The impact on livelihood is similar to a minor illness in that both decreasing productivity and increasing expenditure are inevitable; but the only difference is that the impact of chronic diseases last longer, and those sufferers cannot be guaranteed to recover due to poor medical standards of Cambodia. Furthermore, money-lenders might, although it is difficult to prove, hesitate to assist those households with chronically ill breadwinners due to no guaranteed date to recoup their loan. Lacking a guarantee of future income generation might limit their access to credit as well. Hence, households with chronically ill members may suffer continuously deteriorating livelihood and have problems of access to credit.

Common coping strategies

Across the nation, withdrawing children from school in order to send them to work appears to be a popular coping strategy when shocks are encountered. The report (World Bank 2006, p.33) argues that helping family finances is the primary reason for 75 per cent of children to stop schooling; and 90 per cent of children involved in labour work within the household while the rest work outside and earn

one US dollar a day, accounting for 28 per cent of household income on average. Moreover, it is reported as an extreme case that some of those families who lack productive assets to gain food even sell their daughters in exchange for food, due to the fact that commercial sex is recognised as the easiest and only way for some marginalised populations to sustain food security. Therefore, children appear to be recognised as an important element of the labour force, even productive assets, for Cambodian households. In addition to this general trend, there seem to be more and varying options of coping strategies by geographical features, since all regions have different types of risks and other natural circumstances. In rural areas, households are more likely to sell their livestock or land whereas in urban areas, households tend to start begging or running small businesses (2006, p.28-29). As a specific example, the sale of land is more popular in Rattanak Kiri; and immigration to Thailand as daily labour or to beg is common in Banteay Mean Chey and Battambang.

Shocks and coping strategies of the chronic poor

Having reviewed previous studies on a common trend of shocks and coping strategies in Cambodia, I am going to analyse shocks and coping strategies of the chronic poor. In terms of the type of shock, I will focus on illness and injury due to data constraints when dealing with other types of shock and the importance of these shocks in Cambodia. In order to proceed with the analysis, the following three major issues will be focused upon in order: exposure to shocks, availability of coping strategies and affordability of coping strategies. Firstly, the chronic poor seem to have high exposure risks to illness and injury. Table 7 shows the proportion of households who had a sick or injured person in the past thirty days by asset ranges. Although it could be possible to hypothesise that poorer people have more risks facing shocks, the data does not present a statistically significant relationship between exposure to risks and asset levels in both urban and rural areas; however, illness and injury can be identified as a frequent shock at any asset level of households in Cambodia. More than about half of households on average had members become ill or injured just in the past month, including the highest point of 59 per cent in the first quintile in rural areas. Moreover, there is also no significant difference in the extent of illness and injury between each asset level. As a possible

hypothesis, such frequent occurrences can have a larger impact on the poorer economy when all households are almost equally exposed to the shocks. Hence, the chronic poor households may have a high exposure risk to illness and injury in absolute terms, which forces households to pay for treatment.

Availability of coping strategies for the chronic poor is the second concern. There are three major findings to be emphasised namely: the hypothesis that selling assets is the first coping strategies for households with fewer assets is not applied for the case of the chronic poor to deal with illness or injury; households with fewer assets are more liable to access credit to gain cash when they experience illness or injury; and the chronic poor are more likely to access credit as the extent of illness or injuries becomes worse. Firstly, although the World Bank (2006, p.31) reports that selling assets is the first coping strategies for households with fewer assets, my analysis shows that the statement cannot be applied to the case of the chronic poor to deal with illness or injury in Cambodia. From the table for 'source of money for transport and treatment in last 30 days' (Table 8), it can be seen that using their own source of wages or pocket money and savings is the most popular source for expenditure of health-related shocks, accounting for around 80 per cent of all types of money sources on average, whereas sale of assets is one of the least common ways of gaining cash, at below 3 per cent. These types of sources belong to households. On the other hand, drawing money from either a gift or a loan are passive strategies, in other words: households rely on other people or even need to pay back later. Therefore, these coping strategies are less reliable and sustainable particularly when faced with frequent shocks like illness or injury. Nonetheless, households with fewer assets are more likely to require cash from sources other than their own assets or savings in both urban and rural areas. In the first quintile, 22 per cent and 27 per cent of households respectively in urban and rural areas attempt to procure cash from someone else, as compared with only 9 per cent and 12 per cent of households in the third quintile. This trend can be a reflection of extremely low levels of asset ownership. Households, particularly in the lowest quintile, probably cannot afford even to sell their own assets to mitigate the impact of shocks. In fact, some of them do not even possess lands or livestock although they are involved in agriculture, as already presented. Therefore, even though they own limited numbers of these productive assets, the priority to sell those assets might be lower because

these are the only assets which generate income for those marginalised households. Thus, households with fewer assets are more likely to require external sources of cash rather than to sell their limited assets. This finding implies that the chronic poor, in particular, are vulnerable from the point of view that they rely more heavily on external sources and are forced to choose unsustainable coping strategies due to a lack of capacity including assets.

The next finding is that the chronic poor are more likely to access credit as the extent of illness or injury becomes more serious. Correlating to the extent of illness or injury, there is a clear trend in source of money for transport and treatment both in urban and rural regions (Table 9). The more serious the illness experienced by household members in the bottom quintile, the more reliant they are on external sources of gifts from relatives or friends and loans rather than their own savings or selling assets, in order to mitigate the impact of the shocks. There is a great rise in access to external sources from 8 per cent to 48 per cent in urban areas; and similarly, from 16 per cent to 44 per cent in rural areas. In particular, the increase in the proportions of households who have access to loans is remarkable by 31 per cent in urban areas and 25 per cent in rural areas. Furthermore, another noticeable point is that the frequency of ‘mild’ and ‘moderate’ illnesses is similarly high, but there is a large increase in usage of external sources as a coping strategy against these two levels of shock. For instance, although only 8 per cent of households rely on external sources in urban areas to cope with ‘mild’ diseases, 26 per cent of those do so with moderate sickness. As the frequency of these two levels of illness is almost identical, it may be possible to argue that the risks to debt become much greater when the chronic poor even subtly worsen their health condition from levels of 'mild' to ‘moderate’. Moreover, there is a certain correlation between the extent of illness or injury and the popularity of the sale of assets as a coping strategy among the chronic poor in rural areas, rising from 0.7 per cent to 4.3 per cent as the extent of shocks becomes more serious, although the priority is still low. As argued, selling assets in this asset level implies crucial risks for sustainable livelihoods, since these households might sell their limited productive-assets. Thus, households with fewer assets are more likely to rely on external sources to cope with illness or injury, and particularly to access credit as the degree of these shocks becomes more serious, which leaves their future livelihood in debt. Such an unsustainable coping strategy

against common shocks like illness or injury may harm and worsen their livelihood, and this vicious cycle of shocks and coping strategies appears to be affected by a lack of assets and savings.

Finally, low levels of affordability and accessibility for treatment may worsen their health conditions. Although there is not a significant difference in the cost of treatment between the second and third quintile, the large amount of increase can be recognised by 7,000 riel per month between the first two quintile groups (Table 10 and 11). Those with the fewest assets spend the smallest amount on health care: this result seems to imply that they can afford to pay for such treatment less. Furthermore, lower accessibility to health facilities appears to worsen their health conditions and livelihood. There are gaps in the cost of round-trip transport by asset ranges. The fourth and highest quintile shows the largest expenditure on transport and the second and third quintiles present the lowest costs, whereas the bottom quintile indicates 700 riel higher than these lowest groups. The asset-rich groups might use more expensive transport than others. On the other hand, it can be possible to explain the higher costs of the lowest group in a different way. Because it is hard to expect that the most deprived populations use more luxurious transport than those in the higher quintile groups, they may have less accessibility to health facilities, which costs them more. This poorer accessibility seems to suggest a more important implication than the small difference identified in transport costs. Longer distances may make households hesitate to visit health centres, particularly if the extent of the illness is not very serious. However, as seen, the probability of 'moderate' sickness is as high as that of 'mild' illness; and the risks of debt become much higher as health conditions worsen: in other words, hesitation to visit health centres by lower accessibility possibly contributes to the remaining negative effects for future livelihood. In addition, their poor affordability may also make them hesitate to access treatment at the early stage of illness. Thus, lower affordability and accessibility for treatment appear possibly to worsen the household economy in the long term.

Summarising this section of shocks and coping strategies of the chronic poor, it may be identified that they live in a vicious cycle of long-term poverty. Although there is little difference in exposure to illness or injury, available options for the

structurally poor are more likely to be limited to unsustainable strategies. Also, lower affordability and accessibility for treatment force them into the vicious cycle.

Chapter 4 Existing Social Protection Schemes and Chronic Poverty

4.1 Do any programmes reduce chronic poverty?

There are some recognised social protection schemes aimed at decreasing the risk of falling into a vicious cycle of long-term poverty and enhancing human development; however, the impact on the chronic poor seems to be limited because there are no effective social protection schemes which attempt to reduce the risk to chronic poverty through an accumulation of household capacity. In other words, almost any of these programmes assists the chronic poor to sustain their livelihood in the short term by providing stable income and helping build up capacity to cope with future shocks in advance, although the existing social protection schemes can contribute to mitigating the impact of shocks, diminishing risk to chronic poverty, or increasing human capital for future income generation.

Firstly, The Health Equity Funds (HEFs), fee-waiver schemes for health services funded by various donors, may not efficiently provide benefits for the chronic poor. The scheme aims to assist the poor to make access to public hospitals and to reduce disparity in health services created by an implementation of user fees (Cook 2009, p.36; Barrientos and Holmes 2007, p.30). Although the purpose of user fees was to increase the quality of health services, it caused catastrophic expenditure for the poor: namely, the poor became obliged to pay more for health care (Jonsson 2008, p.171; Annear et al. 2008, p.189; Men and Meessen 2008, p.410). In order to assist the poor, the HEFs reimburse the costs of treatment and return transport of the poor who are targeted according to the result of means tests regarding their income, assets and other measures, at the community or at health facilities (Ir et al. 2008, p.386). As a result, the scheme successfully implements to more than one third of district hospitals and other public health centres (Meessen et al. 2008, p.471; Jacobs and Price 2008, p.441); however, in terms of targeting and coverage, a large proportion of the chronic poor may be excluded. One of the reasons seems to be that the HEFs support the poor visiting public sectors. The usage of public hospitals is remarkably low in Cambodia although it might increase in

the future, thanks to the HEFs. In fact, only 4 per cent of the chronic poor use district hospitals and more than 70 per cent of them visit the private sector for health treatment and advice for a month. This implies that only 6 per cent of the chronic poor use the public sector although more than 55 per cent of them face illness or injury (Table 12). This result may be a reflection of the view that the chronic poor tend to live in remote areas where they might be far from public health facilities and might not trust public health-services due to their low quality. Moreover, lack of support for opportunity costs may contribute to discouraging the chronic poor from visiting such health services. In this case, opportunity costs mean the amount of money which people can earn if they choose to work instead of travelling to health facilities. For the chronic poor, missing just one working day seems to have a significantly adverse effect on their livelihood; therefore, they might not attempt to access any health services until sickness becomes serious as argued before. Hence, the impact of the HEFs on chronic poverty appears to be very limited because the scheme does not efficiently cover the private health sectors, to which a majority of the chronic poor attempt access during a period of sickness, and provide opportunity costs.

Next, there are two major social protection schemes on education. Firstly, the Priority Action Program (PAP), introduced in 2000, appears to increase enrolment to schools in Cambodia, by reducing the burden on households of education costs, but may not efficiently benefit the poor to maintain their children in school. This government effort of a fee waiver for school registration can be positively evaluated due to its great contribution of a large improvement in primary enrolment and high coverage to 24 provinces and 183 districts over the nation (Barrientos and Holmes 2007, p.30). However, this scheme does not support any subsidies to households for other education-related costs such as: transportation and pocket money, as the World Bank reported (World Bank 2005, p.12, p.72); and these costs can constitute part of the reason that households cannot afford to send their children to school. In particular, the costs of transportation can increase the burden on households in mountainous regions where many chronic poor live. These unsubsidised costs can possibly create drop-out risks, which limit growth and sustainability of the household's livelihood in the future; and it can be a part of the cause of chronically deprived household's economy. Hence, the PAP may not efficiently contribute to

maintaining children of the poor in school, which is essential for their sustainable livelihood in the future.

As another example of social protection in education, the Targeted Assistance for Education of Poor Girls and Indigenous Children funded by the Japan Fund for Poverty Reduction (JFPR), a conditional cash transfer (CCT) scheme for human development, seems to provide some idea for tackling chronic poverty reduction by social protection intervention, although the scheme does not aim directly to benefit the chronic poor but to increase the number of girls enrolling in secondary schools. This programme targets girls and indigenous children according to four criteria: poverty and socio-economic status; drop-out risk; distance to school; and parents' attitude towards education; and it transfers the estimated amount of equivalent cash to the direct costs of education and transport, between US$ 45 and US$ 90, for students enrolling in lower secondary schools (ADB 2005). Moreover, the scheme covered 15 per cent of lower secondary schools in Cambodia and provided no more than forty-five scholarships per school (Filmer and Schady 2008, p.582-583). As a result, it is estimated that the scheme dramatically improved the enrolment and attendance of the beneficiaries by 30 per cent. This positive effect may be evaluated from the point of view that the scheme took costs of transport into account; therefore, more households could maintain their children in school education.

However, there seems to be an important missing focus of opportunity cost at the CCT scheme as well as the PAP. As argued, effective social protection interventions, which deal with chronic poverty, need to aim at achieving two different levels of goals in each period of time: namely, sustaining household livelihood by providing stable income in the short-term and increasing their own capacity for sustainable income generation in the long-term. In the case of this CCT scheme here, the transfers do not include an amount of money which labour children earn for livelihood of the poor households. Therefore, if the CCT scheme provides equivalent income to the opportunity costs in order to sustain livelihood in short-term, the programme may more effectively include the chronic poor and demonstrate greater impact on elimination of long-term poverty, since child labour is identified as an important source of household livelihood in Cambodia. Nevertheless, in terms of project finance, it might not be easy to combine the CCT scheme with another cash transfer of opportunity costs. In fact, the smaller scale of a similar CCT project in

Sen Sok, outside Phnom Penh, estimates sufficient cash, for the extremely poor households to maintain children in school, at US$ 440 to US$ 620, including opportunity costs of child labour (Second Hand Japan 2009). Thus, it may be critical for social protection interventions to include both a supplement for livelihood in the short term and capacity building in the long term. Existing social protection schemes particularly miss the crucial perspective of opportunity costs for reducing chronic poverty.

4.2 Financing Social Protection in Cambodia

In this section, I will focus on governmental finance for social protection intervention in order to discuss efficiency of the government-led social protection finance. Although the expenditure on social interventions dramatically rose to US$ 38 million, accounting for 10 per cent of actual expenditure of the Cambodian government in 2003, most of this was spent on pensions, allowances and wages for civil servants, veterans and their families; while the majority of programmes which attempt to decrease vulnerability of the poor are supported by foreign funds (Chan 2004, p.9). There are two major criticisms to be considered: the schemes have a bias towards targeting those who are favour of the government but not necessarily the poor and the vulnerable; and these interventions are even insufficient for the beneficiaries to sustain their livelihood. Retirement pensions for civil servants benefit 22,000 retired civil servants receiving an average of US$ 17.5 per month, which represents an average of US$ 0.58 per person per day. Each child and spouse of the deceased civil servants receives about US$ 1 per month. It is argued that the amount of transfers is not enough to sustain the livelihood of those recipients, by comparison with the national poverty line of US$ 0.5 per day. Similarly, pensions for veterans provide 471,252 recipients insufficient transfers of US$ 29 per beneficiary per annum on average; and a similar amount of cash for beneficiaries of the retirement pensions for civil servants programme. Furthermore, those recipients can receive only half of their expected payments due to unofficial payments (2004, p.10).

Expenditure on these schemes seems to be inevitable politically for the current government, and largely constrains the budget of social interventions, although these programmes may be inefficient in terms of reducing poverty and

vulnerability. Also, beneficiaries of these schemes are predicted to include those who do not need assistance to live, whereas the amount of transfers is not even sufficient for other beneficiaries as well as excluded poor households. As a budget and social policy implication, it may be possible to argue that success in reducing chronic poverty and absorbing those excluded populations from economic activities can lead to more economic growth and tax revenue; and these may help scale up these insufficient pension schemes as well as the interventions for the chronic poor itself. Hence, reforming these inefficient schemes of pensions and setting up or funding interventions for reducing vulnerability to chronic poverty may be one of the possible strategies for the country to start tackling chronic poverty through a social protection framework.

Chapter 5 Conclusion: Social Protection targeting Chronic Poverty

Urban-biased growth pattern and growth-oriented poverty reduction have left chronically marginalised populations behind the dramatic development, particularly in mountainous areas or agricultural sectors due to inequality in access to markets, assets and education, and vulnerable household characteristics to participating in economic activities. In such a transitional economy, economic productivity and poverty reduction efficiency can be more efficient when the chronic poor sustain their livelihood and participate in the market economy of the country.

As major findings, I have identified approximately one-fifth of households in the poorest asset quintile as already or potentially chronically poor due to lack of expectation for sustainable livelihood; more of those concentrate in mountainous and some coastal regions; and there is a higher probability of female-headed households to live in chronic poverty. Moreover, the impact of human diseases seems to be one of the most common shocks, and contributes to creating a vicious cycle of long-term poverty in Cambodia, since this type of shock is likely to force the poor to withdraw children from school in order to send them to work, as well as to deprive them of household labour or treatment costs. As a coping strategy against the shock of illness and injury, households with fewer assets are more likely to require cash from external sources rather than sell their own assets or use their savings. Also, the chronic poor more often access credit as the degree of sickness and injury becomes

more serious. These coping strategies against such frequent shocks may greatly disturb sustainable livelihood due to a risk of leaving debt to future livelihood; and this vicious cycle of shocks and coping strategies appears to be affected by a lack of assets and savings.

Regarding existing social protection programmes, the CCT scheme designed by the JFPR appears to present the potential of a cash transfer scheme to tackle chronic poverty while the impact of the HEFs on chronic poverty seems to be limited since they do not effectively cover residential areas and demands of the chronic poor; and the PAP does not efficiently provide a positive effect on the chronic poor since it is not designed for maintaining children in school. For the achievement of effective chronic poverty elimination, it may be one of the possible strategies to design a social protection scheme, which directly targets the chronic poor to build capacity by transferring stable income, or to reconsider the existing schemes efficiently to include the chronic poor. In terms of project finances, two major pension schemes for civil servants and veterans could be more effective; and the generated budget surplus can be used for a social protection programme targeting the chronic poor.

Bibliography

Aliber, M. (2001) Study of the Incidence and Nature of Chronic Poverty and Development Policy in South Africa: An Overview. *Background Paper*, Vol. 3, Manchester, Chronic Poverty Research Centre

Annear, P.L., Bigdeli, M., Eang, R.C. and Jacobs, B. (2008) Providing access to health services for the poor: Health equity in Cambodia. In: Meessen, B., Pei, X., Criel, B., and Bloom, G. eds. *Health and social protection: experiences from Cambodia, China and Lao*, pp.189-225

Asian Development Bank (ADB) (2005) *Japan Fund For Poverty Reduction (JFPR) 9028-CAM: Targeted Assistance for Education of Poor Girls and Indigenous Children, 2002*. [Online] Available from: www.adb.org/gender/practices/education/cam002.asp [accessed 8 September 2009]

Barrientos, A. (2007) Does vulnerability create poverty traps? *CPRC Working Paper*, Vul. 76

Barrientos, A. and Holmes, R. (2007) *Social Assistance in Developing Countries Database*. Vol. 3, Manchester, Brooks World Poverty Institute and Overseas Development Institute

Barrientos, A., Hulme, D. & Shepherd, A. (2005) Can Social Protection Tackle Chronic Poverty? *The European Journal of Development Research*, Vol. 17 (1) pp.8-23

Cambodian Mine Action Centre (CMAC) (2003) *CMAC Five Year Strategic Plan*. [Online] Available from: www.camnet.com.kh/cmac/FiveYearStrategic.htm [accessed 31 August 2009]

Carter, M. R. and Barrett, C. B. (2004) *The Economics of Poverty Traps and Persistent Poverty: An Asset-based Approach*. [Online] Access from: www.basis.wisc.edu/live/persistent%20poverty/Carter%20Barrett.pdf [accessed 29 June 2009]

Chambers, R. (2006) Editorial Introduction: Vulnerability, Coping, and Policy. *IDS Bulletin*, 37 (4), pp.33-40.

Chan, S. (2004) Towards Understanding Social Protection in Cambodia. *Cambodia Development Review*, Vol. 8 (4) pp.9-13, Phnom Penh, Cambodia Development Resource Institute

Chaturvedi, M. and Greeley, M. (2007) *Microfinance in Afghanistan: a baseline and initial impact study for MISFA*. Microfinance Investment Support Facility for Afghanistan [Online] Available from: www.misfa.org.af/file.php?id=14 [accessed 22 June 2009]

Chronic Poverty Research Centre (CPRC) (2004) *The Chronic Poverty Report 2004-05*. Manchester

Chronic Poverty Research Centre (CPRC) (2008) *The Chronic Poverty Report 2008-09: Escaping Poverty Traps*. [Online] Available from: www.chronicpoverty.org/pubfiles/CPR2_whole_report.pdf [accessed13 Aug 2009]

Cook, S. (2009) *Social Protection in East and South East Asia: A Regional Review*. *Social Protection in Asia Working Paper*, Vol. 2

Dercon, S. (2001) *Assessing Vulnerability to Poverty*. Jesus College and CSAE, Department of Economics, Oxford University.

Dercon, S. (2006) Vulnerability: a micro perspective. *QEH Working Paper Series*, Vol. 149

Devereux, S. and Sabates-Wheeler, R. (2004) Transformative Social Protection. *IDS Working Paper*, Vol. 232

Devereux, S. and Sabates-Wheeler, R. (2007) Social Protection for Transformation. *IDS Bulletin*, Vol. 38 (3), pp.23-28.

Devereux, S. and Sabates-Wheeler, R. (2008) Transformative Social Protection: The Currency of Social Justice. In: Barrientos, A. & Hulme, D. eds., *Social*

Protection for the Poor and the Poorest: Concepts, Policies and Politics, New York, Palgrave macmilan, pp. 64-84.

Dy, S.S. & Ninomiya, A. (2003) Basic Education in Cambodia: The Impact of UNESCO on Policies in the 1990s. *Education Policy Analysis Archives,* Vol. 11 (48) pp 1-21 [Online] Available from: http://epaa.asu.edu/epaa/v11n48/ [accessed 9 July 2009]

Engvall, A. & Kokko, A. (2007) Poverty and land policy in Cambodia. *Stockholm School of Economics Working Paper 233*

Filmer, D. and Schady, N. (2008) Getting girls into school: Evidence from a scholarship program in Cambodia. *Economic development and cultural change*, Vol. 56(3), pp.581-617

Guhan, S. (1994) Social Security Options for Developing Countries. *International Labour Review*, Vol. 133 (1), pp.35-53.

Holzmann, R. & Jorgensen, S. (1999) *Social Protection as Social Risk Management: Conceptual Underpinnings for the Social Protection Sector Strategy Paper*. The World Bank, Washington D.C.

Holzmann, R. and Jorgensen, S. (2000) Social Risk Management: A new conceptual framework for Social Protection, and beyond. *Social Protection Discussion Paper*, Vol. 6, Washington D.C.

Holzmann, R., Sherburne-Benz, L. & Tesliuc, E. (2003) *Social Risk Management: The World Bank's Approach to Social Protection in a Globalizing World*. The World Bank, Washington D. C.

Hulme, D. and Shepherd, A. (2003) Conceptualizing Chronic Poverty. *World Development*, Vol. 31 (3), pp.403-424

Hulme, D., Moore, K. & Shepherd, A. (2001) Chronic poverty: meanings and analytical frameworks. *CPRC Working Paper*, Vol. 2, Manchester, Chronic Poverty Research Centre

Ir, P., Decoster, K., Hardeman, W. Horemans, D. and Damme, W.V. (2008) Challenges in identifying the poor: An assessment of household eligibility for Health Equity Fund after four years of pre-identification in Oddar Meanchey, Cambodia. In: Meessen, B., Pei, X., Criel, B., and Bloom, G. eds. *Health and social protection: experiences from Cambodia, China and* Lao, pp.385-407

Jacobs, B. and Price, N. (2008) A Comparative Study of the Effectiveness of Pre-Identification and Passive Identification for Hospital Fee Waivers at a Rural Cambodian Hospital. In: Meessen, B., Pei, X., Criel, B., and Bloom, G. eds. *Health and social protection: experiences from Cambodia, China and* Lao, pp.437-468

Jalan, J. and Ravallion, M. (2001) Household Income Dynamics in Rural China. *World Bank Working Paper*, Vol. 2706

Jonsson, K. (2008) Policymaking in transitional economies: poverty reduction and health care in Cambodia and Laos. In: Meessen, B., Pei, X., Criel, B., and Bloom, G. eds. *Health and social protection: experiences from Cambodia, China and* Lao, pp.157-186

Lucas, H., Shijun, D. and Bloom, G. (2008) What do we mean by 'major illness'? The need for new approaches to research on the impact of ill-health on poverty. In: Meessen, B., Pei, X., Criel, B., and Bloom, G. eds. *Health and social protection: experiences from Cambodia, China and Lao*, pp.29-53

Meessen, B., Chheng, K., Decoster, K., Heng, T.L. and Chap, S.C. (2008) Can public hospitals be pro-poor? The health equity fund experience in Cambodia. In: Meessen, B., Pei, X., Criel, B., and Bloom, G. eds. *Health and social protection: experiences from Cambodia, China and Lao*, pp.469-490

Men, C.R. and Meessen, B. (2008) Community Perceptions of Pre-identification Results and Methods in Six Health Equity Fund Areas in Cambodia. In: Meessen, B., Pei, X., Criel, B., and Bloom, G. eds. *Health and social protection: experiences from Cambodia, China and* Lao, pp.409-436

Ministry of Planning (MoP) (2006) *A Poverty Profile of Cambodia 2004*. Phnom Penh, Royal Government of Cambodia

Ministry of Planning (MoP) (2008) *Mid-Term Review 2008 on National Strategic Development Plan 2006-2010*. Phnom Penh

Ministry of Planning (MoP) and United Nations Development Programme Cambodia (UNDPC) (2007) *Cambodia Human Development Report 2007*.

Moser, C. O. N. (1998) Reassessing urban poverty reduction strategies: The asset vulnerability framework. *World Development*, Vol. 26 (1), pp.1-19

Moser, C. O. N. and Felton, A. (2007) The Construction of an Asset Index Measuring Asset Accumulation in Ecuador. *CPRC Working Paper*, Vol. 87, Washington D.C., The Brookings Institution

National Institute of Public Health, National Institute of Statistics [Cambodia] and ORC Macro (2006) *Cambodia Demographic and Health Survey 2005*. Phnom Penh, Cambodia and Maryland, USA.

National Institute of Statistics of Cambodia (2006) *Cambodia Statistical Year Book 2006*. [Online] Available from: www.nis.gov.kh/nis/yearbooks/Yearbook06.htm [accessed 11 September 2009]

Second Hand Japan (2009) *News Letter*. Vol. 57 [Online] Available from: 2nd-hand.main.jp/news_letter/second_57.pdf [accessed 9 September 2009]

United Nations Development Programme (UNDP) (2007) *Human Development Report 2007/2008*. New York.

World Bank (2000) *World Development Report 2000/2001*. Washington D.C.

World Bank (2005) *Cambodia: Quality Basic Education for All.* The World Bank [Online] Available from: siteresources.worldbank.org/INTEAPREGTOPEDUCATION/Resources/cambodia_efa_jan05.pdf [accessed 9 September 2009]

World Bank (2006) *Managing Risk and Vulnerability in Cambodia: An Assessment and Strategy for Social Protection*. Washington D.C.

World Bank (2007) *World Development Indicators*. The World Bank, Washington D.C.

World Bank (2009) *Sustaining Rapid Growth in a Challenging Environment: Cambodia Country Economic Memorandum (draft)*. Washington D. C.

Zimmer, Z., Knodel, J., Kim, K.S. and Puch, S. (2006) The Impact of Past Conflicts and Social Disruption on the Elderly in Cambodia. *Population and Development Review*, Vul. 32 (2) pp. 333-360

List of Figures

List of Tables

Appendix

Table 1: Economic Growth in Cambodia

Year	GDP per capita	Annual growth rate
1995	284.3	N/A
1996	301.3	6
1997	307.6	2.1
1998	281.1	-8.6
1999	288.1	2.5
2000	293.1	1.7
2001	307.2	4.8
2002	316.6	3.1
2003	350.1	10.6
2004	401.6	14.7
2005	462.5	15.2
2006	513.7	11.1
2007	578	12.5

Source: Own calculation using the indicators from the World Bank (2007)
Note: Value in US$

Table 2: Generation of income by economic activity

	All Industries	Agriculture, Fisheries & Forestry	Industry	Services
1993	7429.2	3469.6	995.1	2964.5
1994	8125.3	3901.6	1163.9	3059.8
1995	8605.1	3947.9	1372.5	3284.7
1996	9077.6	4027	1441.3	3609.3
1997	9616.8	4204.5	1687.9	3724.4
1998	10222.1	4473.5	1807.9	3940.7
1999	11602.6	4763	2238.4	4601.2
2000	12503.9	4624.1	2911.5	4968.3
2001	13409.5	4824.3	3221.7	5363.4
2002	14125.6	4685.3	3764.4	5676.9
2003	15319.7	5230.3	4195.4	5893
2004	16897.4	5324.4	4932.5	6640.5
2005	19281.7	6243.8	5557.4	7480.5
Annual Growth rate (%)		**6.2**	**35.3**	**11.7**

Source: National Institute of Statistics of Cambodia (2006)
Note: Value in billion riel. US$ 1 =4242 riel.

Table 3: Share of sectors in GDP (%)

	Agriculture, Fisheries & Forestry	Industry	Services
1993	46.7	13.4	39.9
1994	48	14.3	37.7
1995	45.9	16	38.2
1996	44.4	15.9	39.8
1997	43.7	17.6	38.7
1998	43.8	17.7	38.6
1999	41.1	19.3	39.7
2000	37	23.3	39.7
2001	36	24	40
2002	33.2	26.6	40.2
2003	34.1	27.4	38.5
2004	31.5	29.2	39.3
2005	32.4	28.8	38.8

Source: National Institute of Statistics of Cambodia (2006)

Table 4: Share of employment by sectors (%)

Year	Agriculture	Industry	Services
1993	79.2	3.9	16.9
1994	78.4	4.3	17.3
1995	77.5	4.7	17.7
1996	77.9	4.9	17.3
1997	77	5.6	17.4
1998	75.9	5.7	18.4
1999	74.7	6.7	18.6
2000	73.4	8.8	17.8
2001	70.2	10.6	19.4
2002	67.4	11.3	21.4
2003	64.2	12	23.8
2004	60.3	12.6	27.1
2005	59.1	13.4	27.5

Source: National Institute of Statistics of Cambodia (2006)

Table 5: Asset ownership by the asset score range

	Asset score range (Urban)					
	1	**2**	**3**	**4**	**5**	**Total**
Mosquito bed net	92.3	96.5	96.2	98.3	100	**95.6**
Television	12.9	55.5	94.5	100	100	**61.8**
Bicycle	22.5	59.9	80.3	96.7	100	**60.7**
Radio	16.6	47.9	84.6	94.2	100	**55.8**
Livestock	33.7	58.9	49	62.5	100	**50.6**
Motorcycle/Scooter	8.6	38.7	81	95.8	100	**49.2**
Wardrobe	6.5	33.9	83	98.3	100	**47.5**
Mobile telephone	4	30.5	76.9	96.7	100	**43.5**
Land	23.8	47	44.2	78.3	100	**42.6**
Sewing machine/Loom	0.8	5.2	25.5	70	100	**13.8**
Animal-drawn cart	0.6	14.4	13.1	17.5	0	**11.3**
Car/Truck	0.2	1.8	22.6	61.7	50	**10.9**
Refrigerator	0	2	19.3	42.5	50	**9.1**
Boat without motor	1.8	5.7	5.3	7.5	100	**4.9**
Boat with a motor	3.3	3.8	3.9	9.2	100	**4**

	Asset score range (Rural)					
	1	**2**	**3**	**4**	**5**	**Total**
Mosquito bed net	87.5	97.2	99.4	100	100	**95.8**
Livestock	49.8	87.2	89.6	94.9	0	**80.3**
Land	56.9	85.4	85.2	93.5	100	**79.7**
Bicycle	18.4	72.2	91	97.2	100	**66.2**
Television	6.1	39.1	89.1	98.6	100	**45.5**
Radio	10.7	40.4	78.7	94.9	100	**44.6**
Motorcycle/Scooter	4.1	19.2	66.8	95.8	100	**29.1**
Animal-drawn cart	1.8	29.2	44.4	57.5	100	**27.8**
Wardrobe	1.7	10.8	52.9	94.4	100	**20.7**
Mobile telephone	0.9	5.3	31.6	84.1	100	**12.3**
Sewing machine/Loom	0.4	2.4	16.4	53.3	100	**6.4**
Boat without motor	1.4	5.4	9.8	17.8	100	**5.9**
Boat with a motor	1.3	3.2	5.9	15	100	**3.7**
Car/Truck	0.1	0.6	4.3	21.5	100	**1.8**
Refrigerator	0	0.2	1.5	9.8	100	**0.6**

Source: National Institute of Statistics of Cambodia (2006)

Table 6: Sex of household head by the asset score range (%)

	Asset score range						
	1	2	3	4	5	Total	Sample
Male	16.9	51.4	29	2.7	0	100	11032
Female	32.7	49.3	16.8	1.2	0	100	3187
Total	20.5	50.9	26.2	2.3	0	100	14219

Source: Cambodia Demographic and Health Survey 2005

Table 7: Sick or injured person in household in last 30 days (%)

	Asset score range					
	1	2	3	4	5	Total
Urban	55	51	45.9	45.8	50	49.9
Rural	59.4	59	53.7	46.7	100	57.6

Source: Cambodia Demographic and Health Survey 2005

Note: Numbers show the proportion of households who had a sick or injured member by the asset score ranges in each region. For example, 55 per cent of the poorest households in urban areas had a sick or injured person in the past month.

Table 8: Source of money for transport and treatment in last 30 days

Urban / Rural	Asset score range					
	1	**2**	**3**	**4**	**5**	**Total**
(a) Wages/pocket money	45.2	53.2	63.6	72.5	100	55.5
	37.1	39.8	48.5	52.1	0	41.5
(b) Gift from relative/friend	6.4	5.6	2.2	0	0	4.5
	8	4.1	5	4.3	0	5.1
(c) Savings	29.8	27.5	24.5	23.5	0	26.9
	31.3	36.3	35	30.9	0	34.9
(d) No interest loan	7.1	5	3.8	2	0	5
	8.8	5.8	3.2	1.1	0	5.7
(e) Interest loan	8	4.5	2.9	0	0	4.6
	10.3	8.1	3.6	2.1	0	7.4
(f) Sale of assets	1	2.2	1.1	0	0	1.5
	2.2	3	2.9	4.3	100	2.8
(g) other	2.6	2	1.8	2	0	2.1
	2.3	2.8	1.7	5.3	0	2.5
Own sources:	76	82.9	89.2	96	100	83.9
(a)+(c)+(f)	70.6	79.1	86.4	87.3	100	79.2
External sources:	21.5	15.1	8.9	2	0	14.1
(b)+(d)+(e)	27.1	18	11.8	7.5	0	18.2
Sample	312	603	445	51	1	1412
	1108	3135	1327	94	1	5665

Source: Cambodia Demographic and Health Survey 2005

Note: Upper line shows the proportion of households in urban areas; the lower lines demonstrate the proportion of households in rural areas.

Table 9: Source of money for transport and treatment in last 30 days in the poorest quintile

	Mild	Moderate	Serious
(a) Wages/pocket money	54.5	41.2	29.5
	48	31.7	26.2
(b) Gift from relative/friend	3	8.1	11.4
	7.1	8.3	9.8
(c) Savings	32.6	30.9	18.2
	34.1	31.1	24.4
(d) No interest loan	1.5	9.6	15.9
	4.9	11.2	11.6
(e) Interest loan	3.8	8.1	20.5
	3.5	12.2	22
(f) Sale of assets	0.8	1.5	0
	0.7	2.7	4.3
(g) other	3.8	0.7	4.5
	1.6	2.9	1.8
Own sources:	87.9	73.6	47.7
(a)+(c)+(f)	82.8	65.5	54.9
External sources:	8.3	25.8	47.8
(b)+(d)+(e)	15.5	31.7	43.4
Access to Loan:	5.3	17.7	36.4
(d)+(e)	8.4	23.4	33.6
Sample	132	136	44
	425	518	164

Source: Cambodia Demographic and Health Survey 2005

Note: Upper line shows the proportion of households in urban areas; the lower lines demonstrate the proportion of households in rural areas.

Table 10: Cost of round-trip transport to health facilities per month

	Asset score range				
	1	2	3	4	5
Mean	4796.544	4125.94	4151.423	6589.912	150000
Sample	1331	3404	1652	136	2

Source: Cambodia Demographic and Health Survey 2005
Note: Value in Riel. US$ 1 =4242 riel.

Table 11: Cost of treatment per month

	Asset score range				
	1	2	3	4	5
Mean	28624.85	35613.1	36721.7	43905.17	350000
Sample	1408	3710	1750	149	2

Source: Cambodia Demographic and Health Survey 2005
Note: Value in Riel. US$ 1 =4242 riel.