



VOLUME 14, ISSUE 4

# CAMBODIA DEVELOPMENT REVIEW

A Publication of CDRI—  
Cambodia's leading independent  
development policy research institute

OCTOBER-DECEMBER 2010

\$4.00

## Review of Agricultural Policy and Policy Research<sup>1</sup>

Since the establishment of Cambodia's government and its first Legislature in 1993, the overarching priority of national strategies and development plans drawn up to execute the country's development has been to promote socio-economic development to lift the country's poor out of poverty and place Cambodia on a path of sustainable economic growth. As was then the case, the agricultural sector holds immense potential where productive gains could boost sustainable outputs – employment and income – to alleviate poverty. Government development policies, as such, address this sector as an engine for economic growth, food security, and poverty reduction. This article seeks to:

(i) review existing agricultural development and food security policies in Cambodia; (ii) assess the existing policy research on Cambodia's agriculture; and (iii) identify knowledge gaps and potential areas for future research to improve agricultural development and food security in the country.

### Cambodia's Agricultural Profile

Cambodia had been achieving impressive economic growth over the past decade before it was severely hit by the global economic crisis in 2009. Average gross domestic product (GDP) growth was 9.5 percent per annum in 1999-2008, the highest (at 13.3



*Agriculture must be diversified and adapted to the local condition: a yearly flooded village in Prek Khmeng commune, Kandal province*

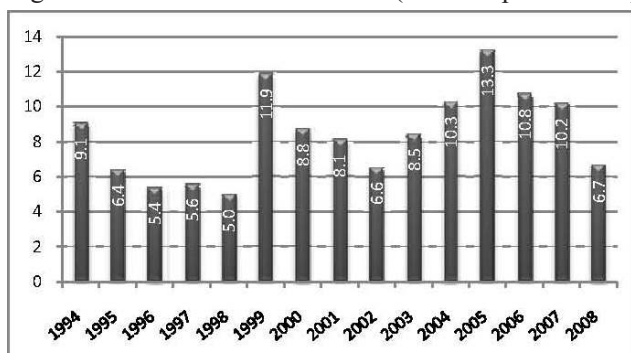
percent) being recorded in 2005 (Figure 1). This growth was made possible by an open economy and a stable macroeconomic environment, increased exports and foreign direct investment (FDI) and a low inflation rate of about 5.0 percent, except when inflation rose to about 22 percent in 2008 due to the sudden steep hike in food prices. However, growth

### In This Issue

|  |    |
|--|----|
| Review of Agricultural Policy and Policy Research.....   | 1  |
| Cambodia's Agricultural Strategy: Future Development Options for the Rice Sector .....         | 7  |
| Food Security and Nutrition in Cambodia: Patterns and Pathways: A Policy Discussion Paper..... | 12 |
| Policy Options for Vulnerable Groups: Income Growth and Social Protection .....                | 18 |
| Economy Watch—External Environment .....   | 23 |
| —Domestic Performance .....  | 25 |
| CDRI UPDATE .....  | 32 |

<sup>1</sup> This article is prepared by Dr Theng Vuthy, research fellow and programme coordinator for poverty agriculture and rural development (PARD), CDRI, and Mr Chhim Chhun, research assistant in the same programme. It is a summary of CDRI-IFPRI stocktaking policy discussion paper that reviews Cambodia's agricultural policy and policy research by CDRI research teams in 2010, funded by USAID.

Figure 1: GDP Growth 1994-2008 (constant prices 2000)

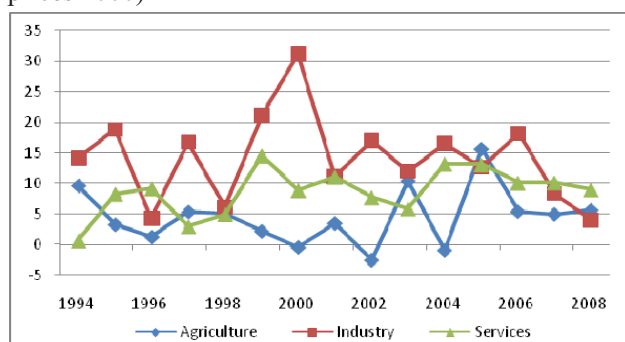


Source: NIS and National Accounts (2008)

has been narrowly based in four key leading sectors: garments, tourism, construction and agriculture.

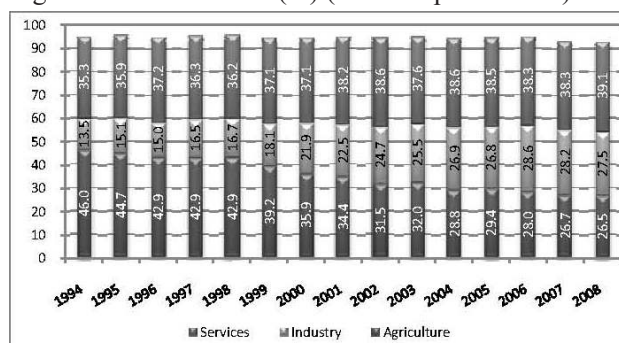
The foundations of the economy have since undergone profound transformation, with the agricultural sector ranking behind services and industrial sectors by 2006. The agricultural sector's share of GDP has been decreasing over time, but has remained a crucial part of Cambodia's economy, at about 27 percent of GDP in 2008 (Figure 2). Average growth rate was around 4.5 percent per annum over 1998-2008 (Figure 3), contributing about 2 percent to GDP growth over that period (Guimbert 2010). The reduction of value added in agricultural GDP was due to the significant increase of the industrial sector. The agricultural sector absorbed approximately 56 percent of the total employed labour force in 2007 (IMF 2009), and labour productivity improved by 2 percent from 1998 to 2007 (World Bank 2009). Growth has been driven by land, labour and productivity gains, but was erratic due to weather conditions until 2005, after which it became stable (Figure 3). This stability was due to the expansion of crop production which contributed 47.4 percent to agricultural GDP over 1998-2008. Rice is by far

Figure 3: Sectoral Growth of GDP 1998-2009 (constant prices 2000)



Sources: NIS and National Accounts (2008) and MAFF (2010)

Figure 2: Share of GDP (%) (constant prices 2000)



Source: NIS and National Accounts (2008)

the largest crop sub-sector, contributing about 26 percent of this sector's GDP over the same period (IMF 2004 & 2009).

### Policies to promote agricultural development

The Royal Government of Cambodia (RGC) articulates its agriculture policy in the Rectangular Strategy: "to improve agricultural productivity and diversification, thereby enabling the agriculture sector to serve as the dynamic driving force for economic growth and poverty reduction." Key elements of the agricultural development policy draw upon the Cambodian Millennium Development Goals (CMDG) 2003, the Socio-Economic Development Plan (SEDP-II) 2001-2005 and the National Poverty Reduction Strategy (NPRS) 2003-2005, and focus on 1) improving agricultural productivity and diversification; 2) land reform and mine clearance; 3) fishery reform; and 4) forestry reform (RGC 2004).

Complementing the agricultural development policy is Cambodia's National Strategic Development Plan 2006-10 (NSDP), which has the overall aim "to reduce poverty, and implement the government's Rectangular Strategy for the enhancement of the agricultural sector" (RGC 2006). The NSDP further stipulates the primary need to develop a national Strategy for Agriculture and Water (SAW) by 2006. However, SAW 2006-2010 was only completed in 2007, lagging one year behind the plan. The SAW laid out five programmes: institutional capacity building; food security; agriculture and agribusiness; water resources management; agricultural research and development (MAFF & MoWRAM 2007).

An Agricultural Sector Strategic Development Plan 2006-2010 formulated by the Ministry of Agriculture, Fisheries and Forestry (MAFF) also

outlines seven priority goals, and the constraints and actions to be taken to reach these goals. These include: 1) food security, productivity and diversification; 2) improving and strengthening agricultural research and extension systems; 3) market access for agricultural products; 4) institutional and legislative development framework; 5) land reform, land tenure and pro-poor land access; 6) fisheries reform; and 7) forestry reform (MAFF 2005).

Recently, the government launched a policy to promote paddy rice production and milled rice export. This policy refines the government's major strategic policy measures to promote agricultural development, with emphasis on a new pace and scale. The aim is to further strengthen the foundations for economic growth, accelerate poverty reduction, and improve the living standards of the Cambodian people. Towards this end, this latest policy adopts a three pronged-strategy: productivity enhancement, diversification and agricultural commercialisation (RGC 2010).

Other directives for agricultural development, food security and poverty alleviation include:

- The National Water Resource Policy
- Strategic Development Plan on Water Resources and Meteorology 2009-2013
- Circular No. 3 on Food Security and Nutrition in the Kingdom of Cambodia
- Statement of the government of Cambodia on the national fishery sector policy
- National Fisheries Sector Policy and Law on Fisheries (MAFF 2006)
- National Programme for Household Food Security and Poverty Reduction 2007-2011
- Strategic Framework for Food Security and Nutrition in Cambodia 2008-2012
- National Adaptation Programme of Action for Climate Change (NAPA)
- Law on Investment (5 August 1994)
- Law on Amendment on the Law on Investment (23 March 2003)
- Sub-Decree on Mortgage and Transfer of the Right over an Economic land Concession (29 Aug 2007)
- Royal Decree NS/RK/0609/009 (20 June 2009) to provide incentives for agricultural development in Cambodia.

### **Existing policy research and knowledge gaps**

Several policy research institutions exist in Cambodia, among which are the Supreme National Economic Council (SNEC), Royal University of Agriculture (RUA), CDRI, the Learning Institute (LI), WorldFish Centre, Economic Institute of Cambodia (EIC), and the Cambodia Institute of Development Studies (CIDS). Access to policy research papers in the public domain, however, is very limited, especially for public research institutes and 'think tanks'. This review of existing policy research focuses primarily on irrigation, agricultural crops, fisheries and livestock sub-sectors though some other related areas may also be discussed.

Water related policy research has covered governance issues, infrastructure, economic returns and some pilot studies of irrigation schemes. These studies found that low capacity of irrigation scheme leaders and weak institutions are the major constraints in most irrigation schemes. Many irrigation schemes were inappropriately designed, resulting in water scarcity which leads to imbalanced water distribution and conflict among water users. Some conflicts are resolved within the community, but others need intervention from provincial and national authorities (CDRI 2010). The participation of Farmer Water User Community (FWUC) members in fee payment, maintenance, ownership and water distribution was found to be critical to successful irrigation management. Research on groundwater in Cambodia is not yet available (Ros 2010). Groundwater could potentially provide a year round source of water for irrigation, and help mitigate the impact of drought and climate change on agriculture and food security.

Studies on agricultural trade between Cambodia and ASEAN, and between ASEAN and China, found that agricultural commodities such as livestock (pigs, cattle and buffaloes) and crops (rubber, cassava, maize, soybeans and rice) are mainly traded. This cross-border trade could help stabilise market prices and expand markets for Cambodian agricultural produce. However, Cambodia benefits least and is less competitive than other ASEAN countries since almost all commodity exports are raw products traded through informal routes. Thailand and Vietnam have advantage over Cambodia as they process many of the commodities imported from Cambodia and sell them on the world



market (Ballard & Thun 2007; Hing & Nou 2006; Hing & Thun 2009).

There is rich research on the relationship between economic growth and food security and poverty in Cambodia, employing cross-sectional and panel data analysis and qualitative methods. The studies show that poverty reduction is unlikely to be connected with economic growth, and that economic growth is not inclusive. Poverty and food insecurity remain high in the rural areas. Land ownership issues continue to be a significant determinant of poverty and food insecurity for Cambodian rural households. Large households with many dependent members, poor education and health are major internal determinants of poverty in rural communities. Poor access to public services such as education, health and vocational training, lack of access to credit, and poor infrastructure (road and irrigation) are the external determinants of rural poverty. Addressing needed improvements in the agricultural sector is critical if livelihoods and food security in rural areas are to be enhanced, while common property resources and wage labour opportunities serve as critical safety nets for the poor (So *et al.* 2010; Fitzgerald & So 2007; Ballard *et al.* 2007). The number of landless households is increasing markedly from year to year due to newly created families and the land market. The challenges and interaction between landlessness and food insecurity with social protection and vulnerability remain unknown.

Many policy research studies address inland fisheries issues in response to the government policy on fisheries sector reform. The performance and sustainability of fisheries co-management is constrained due to a lack of clearly defined property rights and resource boundaries and the absence of enabling legislation. This leads to conflicts between fisheries communities, and between fisheries and farming due to competition for different water resource use (Viner *et al.* 2006; So *et al.* forthcoming). The poor have yet to benefit from

access to fishing grounds. The average net income of a small fishing family is USD12 per trip in the open season and USD4.6 per trip in the closed season. However, if family labour is deducted from the net income, the real profit is only USD4.5 in the open season and USD1.6 in the closed season (Hap & Madhusudan 2009). Hydrology changes, sedimentation, agricultural development around the Great Lake, and the current fisheries communities' management capacity threaten the sustainability and environmental use of the Tonle Sap Lake (Chadwick *et al.* 2008). In addition, the water level of the Mekong River is about 5 metres lower and that of the Tonle Sap Lake is about 3 metres lower than a year ago due to dam construction upstream. The low water levels will have negative impacts on inland

fisheries ecology and habitats in Cambodia. The effects of lower water levels on inland fisheries population, fish breeding, and food security in Cambodia are as yet unknown. Comprehensive research on marine fisheries is not yet available.

Government policy on the livestock

sub-sector lacks clear direction. The sub-sector also has no strategic plan to guide research and development even though it plays an important role in food security and draught power for agricultural production. Cattle and buffaloes are used for draught power and meat consumption. Pigs and chickens are raised for saving and consumption. Pigs and chickens are actively traded within and between rural communities. Cattle and buffaloes are mostly traded informally with neighbouring countries (Ear 2005; FAO 2004). No recent policy research is available for the livestock sector, signifying an urgent need for research to improve the development of this sub-sector; a socio-economic study of livestock should be also prioritised.

Policy research has been conducted on improving the rice sub-sector and promoting rice export for the high potential that this crop holds for Cambodia's economic growth and food security. The promotion of agro-processing and agri-business will strengthen

**“ The performance and sustainability of fisheries co-management is constrained due to a lack of clearly defined property rights and resource boundaries and the absence of enabling legislation. This leads to conflicts between fisheries communities, and between fisheries and farming due to competition for different water resource use. ”**

this sub-sector for export. Current rice milling capacity in Cambodia is low (less than 10 tonnes per hour), and capacity is only one third of the paddy produced. Cambodia thus needs to increase milling capacity three fold in order to meet domestic demand. Rice also has huge potential for increased production and productivity if cultivation techniques could be improved and inputs – improved seeds, fertiliser and irrigation – were invested in. However, future growth in rice productivity is uncertain as there are many constraints e.g., low inputs such as lack of credit, irrigation, and improved seed; poor extension services; and poor rural roads (Tong & Puy 2010; Yu & Fan 2009).

### Potential future research areas

Several key research themes have been identified to frame potential future research areas and interests, though this framework may not be able to respond to all the knowledge gaps:

#### Water resources management

1. What potential does groundwater hold for irrigation both as an integral aspect of Cambodia's water balance, and as a substantial natural storage of water that could be available all year-round? What are the advantages and disadvantages of using groundwater for agricultural development and environment? What is the impact of groundwater on soil property and fertility in the long run?
2. How can surface water use of the existing irrigation scheme be made more efficient?
3. How can surface water users' participation in ownership and effective maintenance of irrigation schemes be strengthened? What is the economic return of investment in irrigation scheme maintenance?
4. What kinds of conflict exist around water scarcity and water resources allocation, and in what ways can these be resolved effectively?

#### Agricultural development and food security

1. How can agricultural research be expanded to promote agricultural growth? How can research institutions and technology users be more effectively linked? What is the best way to promote and encourage farmers to adopt new

production practices to increase productivity and food security?

2. What appropriate technology and inputs use would intensify productivity for small landholders to produce enough food? How can rice-based farming with limited irrigation capacity be diversified to promote rural livelihood and poverty reduction?
3. How can better land use planning and agricultural crops zoning be promoted to increase agricultural growth? How can the rice production area be expanded to increase agricultural growth and promote export? In what way can idle agricultural land be returned to productive use?
4. How can social land concessions for landless and near landless households be promoted? What are the risks and challenges to food security faced by landless households? What policies would be effective in reducing risk and food insecurity for landless households? What are the risks and challenges facing households in rural areas who face severe food insecurity?
5. How can the risks to agricultural production and food security be reduced under the threat of climate change? How can effective groundwater use be designed and promoted to reduce the threat to agricultural land?

#### Fisheries sub-sector development

1. What are the negative impacts of low river levels on fisheries ecology, habitats and productivity in Cambodia's inland fisheries sector? How can the change in river levels be managed to sustain fish ecology, habitats and productivity?
2. How can fisheries community development and capacity building for effective and sustainable management of natural fisheries resources for income generation, food security and poverty alleviation be promoted and strengthened?
3. How can aquaculture production be improved to reduce the threat to natural inland fisheries? How can aquaculture be promoted in rural areas far from inland fisheries to improve animal protein consumption and income?

#### Livestock sub-sector development

1. How can the livestock sub-sector be promoted to improve rural income and food security? What is

the integral relationship between livestock and agricultural production, rural household incomes and food security? What is the economic return from small scale livestock raising? What are the major risks and constraints of livestock raising faced by rural communities? How can these risks and constraints be mitigated?

2. How can a livestock market for small-scale producers be developed? What regulations are needed to improve the livestock market?
3. How can local swine production be improved to supply local market demand? What are the appropriate production practices to improve pig raising? What risks and constraints do pig producers face? What regulations and policies are in place to minimise the import of pigs and to promote local producers?

## References

- Ballard, B., C. Sloth, W. David, I. FitzGerald, K.A.S. Murshid, Hansen, Phim, R. & Lim, S. (2007), *We are Living with Worry All the Time: A Participatory Poverty Assessment of the Tonle Sap*
- Ballard, B. & Thun, V. (2007), *Livestock Production and Veterinary Services in Cambodia*, ADR 2006/07
- CDRI (2010), *Empirical Evidence of Irrigation Management in the Tonle Sap Basin: Issues and Challenges*, WP 48
- Chadwick M. Juntopas M. & Sithirith M. (2008), *Sustainable Tonle Sap: An assessment of Development Challenges Facing the Great Lake*, The Sustainable Mekong Research Network
- Sophal Ear, S. (2005), *The Political Economy of Pro-poor Livestock Policy in Cambodia*, PPLPI WP No. 26 FAO Pro-Poor Livestock Policy Initiative
- FAO (2004), *Review of the Livestock Sector in the Mekong Countries Livestock Sector Report: Cambodia-Lao-Thailand-Vietnam*
- Fitzgerald, I. & So, S. (2007), *Moving Out of Poverty Study? Trends in Community Well-Being and Household Mobility in Nine Cambodian Villages*
- Guimbert, S. (2010), *Cambodia 1998-2008: An Episode of Rapid Growth*, World Bank Policy Research Working Paper 5271
- Hap N. & Madhusudan B. (2009), *Economics and Livelihoods of Small-scale Inland Fisheries in the Lower Mekong Basin: A Survey of Three Communities in Cambodia*. Water Policy 11 Supplement 1, 31–5
- Hing, V. & Nou, K. (2006), *Early Harvest Programme: Implication for Cambodian Agriculture*, CDRI, Phnom Penh
- Hing, V. & Thun, V. (2009), *Agricultural Trade in the Greater Mekong Sub-Region: The Case of Cassava and Rubber in Cambodia*, CDRI WP 43
- IMF (2004 & 2009), *Cambodia: Statistical Appendix*, IMF Country Report No. 04/330 & No. 09/48
- MAFF (2005), *Agricultural Sector Strategic Development Plan 2006-2010*
- MAFF & MoWRAM (2007), *Strategy for Agriculture and Water 2006-2010*
- NIS (2008), *National Institute of Statistics-National Accounts (NIS-NA) 2008*
- RGC (2004), *Rectangular Strategy for Growth, Employment, Equity and Efficiency*
- RGC (2005), *National Strategy Development Plan 2006-2010*
- RGC (2010), *Policy Document on Promotion of Paddy Rice Production and Export of Milled Rice*
- Ros, B (2010), *Farmer Participation and the Success of Farmer-managed Irrigation Systems: A Case Study of the O-treng Farmer Water User Community, Kampong Speu Province*, CDRI Annual Development Review 2009/2010
- Sovannarith S., D.R. Blake, Kosal M. & Sour K. (forthcoming), *Conflict and Collective Action in Tonle Sap Fisheries: Adapting Institutions to Support Community Livelihoods*, CDRI WP 49
- So S., Tong, K. & Theng, V. (2010), *Poverty Dynamics Study*, CDRI report for the World Bank on Longitudinal Poverty Study in Cambodia
- Tong K. & Puy P. (2010), "Promoting Export of Cambodia's White Gold", *Cambodia Development Review*, Vol. 14, Issue 2, CDRI, Phnom Penh
- Viner K., M. Ahmed, T. Bjorndal & K. Lorenzen (2006), *Development of Fisheries Co-management in Cambodia: A case Study and its Implications*, WorldFish Centre, Discussion Series No. 2
- World Bank (2009), *Sustaining Rapid Growth in a Challenging Environment*
- World Bank (2010), *Emerging Stronger from the Crisis*
- Yu B. & Fan S. (2009), *Rice Production Responses in Cambodia*, IFPRI Discussion Paper 00939

# Cambodia's Agricultural Strategy: Future Development Options for the Rice Sector<sup>1</sup>

## Introduction

This paper focuses on the role of the rice sector in Cambodia's agricultural strategy. The paper first reviews the performance of the rice sector and rice-related government policies and interventions, and then identifies the potential for and constraints to future development of the rice sector. Against the background of a broad agricultural strategy, the paper further explores the options and possible future development path for rice by comparing the current situation in Cambodia with the early development stage of its two neighbours, Thailand and Vietnam. Although both Thailand and Vietnam are rice growing and exporting countries, they have quite different rice development strategies. The paper concludes by suggesting further research topics that emphasise Cambodia's comparative advantage, and proposing a comparative study of different development paths in rice development and agricultural diversification. Such comparisons may provide more options to inform Cambodia's agricultural development strategy in the future.

Cambodia has undergone dramatic economic transformation, with an impressive average gross domestic product (GDP) growth rate of 9.8 percent over the period 2000-08, exceeding that of most countries in the region (World Bank 2009). This rapid growth was accompanied by remarkable performance in the agricultural sector, which grew at 5.6 percent per year on average in the same period. Nevertheless, Cambodia's economy is still highly dependent on agriculture, which contributes close to one-third of national GDP and employs more than half of the total labour force (World Bank 2009).

## Rice Sector Performance and Rice Promotion Policies

Rice is the dominant crop in Cambodian agriculture. It occupies more than 80 percent of cultivated land and is the most important agricultural export commodity. Rice is also the main source of crop value added and the major driver of agricultural growth. As the staple of the traditional diet, rice provides more than three quarters of daily energy intake for the average Cambodian. Therefore, rice has played and will continue to play a strategic role in income growth, poverty reduction, and national and household food security.

Recognising the important role of rice, the Cambodian government has prioritised this sector and rice production appears in government strategy and planning documents wherever agriculture is mentioned. Yield improvement through intensification (such as irrigation and fertiliser use) has been highlighted as the top priority for promoting agricultural growth, rather than further expansion of the farmed land area. According to the Cambodia Agriculture and Agribusiness Support Programme (CAASP), rice production is set to reach 6 million tonnes in 2010, and predicted to rise further to 7.5 million tonnes by 2020 (MAFF & MOWRAM 2008). This growth will be propelled by increasing yield from 2.5 tonnes per ha in 2007 to an anticipated 3.0 tonnes per ha in 2020. At the same time, the harvested rice area is projected to decline slightly but the proportion of irrigated land is expected to increase to 20 percent.

With strong government support, rice production has grown rapidly since 2003. Non-irrigated wet season rice accounts for more than 75 percent of total rice production, and growth in wet season rice output was primarily responsible for more than doubling yield during 1994-2008. Rapid growth in rice production has turned Cambodia from a net rice importer to an exporter. Cambodia's rice export recorded 1.5 million tonnes in 2007, contributing 10 percent of the country's total export value.

<sup>1</sup> This paper is prepared by Bingxin Yu, research fellow, and Xinshen Diao, senior research fellow, at the International Food Policy Research Institute. It is based on a policy discussion paper prepared for the Cambodia Food Security Roundtable Stocktaking on 4 November 2010.



Despite the impressive growth in rice production and exports, however, only a small portion of rice production goes to foreign markets, substantially below the export levels of Vietnam and Thailand.

### Future Rice Growth Potential and Constraints

Cambodia has huge potential to increase rice production. The country is known for its abundant agricultural land and water resources. Such natural resource potential has been underutilised: less than 30 percent of potential arable land is under cultivation, and a much smaller portion of area suitable for irrigation is actually irrigated (Pech & Sunada, 2008). Therefore, cultivated area expansion and irrigation development could be straightforward ways of increasing rice production. Productivity is another source of rice development potential as average rice yields in Cambodia remain below the levels in Thailand and Vietnam. Rice yield could be substantially increased through the adoption of crop intensification techniques, including both increased fertiliser use and better farming practices.

Although Cambodian rice production holds great potential, the country needs to overcome a series of constraints to realize it. In the literature, inadequate fertiliser use and under-developed irrigation

facilities are seen as the most binding constraints. Fertiliser is actually widely used by the majority of rice farmers in Cambodia, and the Cambodian Socio-economic Surveys (CSES) 2004 and 2007 report that chemical fertiliser was applied to 77-78 percent of wet season and 87-94 percent of dry season paddy area (Table 1). However, the quantity of fertiliser applied is quite low, below the nationally recommended rate (Blair & Blair 2010). Calculated from CSES data, together with an estimate of the average fertiliser price paid by farmers, fertiliser use was about 72 kg per ha for wet and 105 kg per ha for dry season paddy in 2004. Lack of sufficient irrigation facilities is another major constraint to rice development, making the sector weather dependent. Approximately 11.5 percent of wet season rice and 50 percent of dry season rice areas were irrigated in 2004 (Table 1). The amount of fertiliser used and the irrigated area share of the total rice area fell as input prices surged and farmers enjoyed favourable weather in 2007.

### Rice in Broad Agricultural Development Strategy

While rice will continue to play an important role in Cambodia's future agricultural growth, it is necessary

Table 1: Fertiliser use in Cambodia

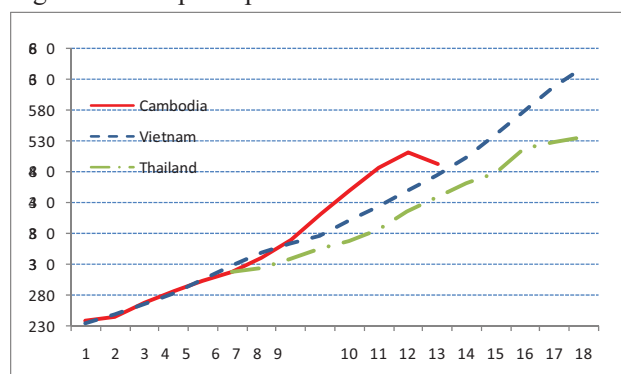
|   | Wet season paddy |        | Dry season paddy |         |
|---|------------------|--------|------------------|---------|
|   | 2004             | 2007   | 2004             | 2007    |
| Share of plots (%)                        | 86.8             | 84.1   | 14.3             | 15.9    |
| Share of total cultivated land (%)        | 60.9             | 79.2   | 10.8             | 20.7    |
| In paddy plots                            |                  |        |                  |         |
| Share of plots using fertiliser (%)       | 77.5             | 76.8   | 81.5             | 86.9    |
| Share of area using fertiliser (%)        | 76.9             | 78.5   | 87.2             | 93.5    |
| Average fertiliser expense (riels per ha) | 101,426          | 84,871 | 148,265          | 222,666 |
| Average plot area (ha)                    | 0.9              | 0.9    | 1.0              | 1.3     |
| International urea price (USD per tonne)* | 200              | 415    | 200              | 415     |
| Farmer price (USD per tonne)**            | 350              | 600    | 350              | 600     |
| Average exchange rate (riels to USD)***   | 4021             | 4032   | 4021             | 4032    |
| Calculated fertiliser use (kg per ha)     | 72.1             | 35.1   | 105.4            | 92.0    |
| Share of plots using irrigation (%)       | 14.9             | 9.4    | 40.9             | 38.4    |
| Share of area using irrigation (%)        | 11.5             | 8.1    | 50.1             | 36.0    |

Note: fertiliser use in quantity is not reported in the survey. \* IFDC (2008); \*\* CDRI (2008) urea price was USD350-510 per tonne, and diammonium phosphate (DAP) price was USD450-1,080 in provincial markets in 2007; \*\*\* IMF (2009).

Sources: Authors' calculation from CSES 2004 and 2007 (National Institute of Statistics).



Figure 1: GDP per capita in constant 2000 US dollars



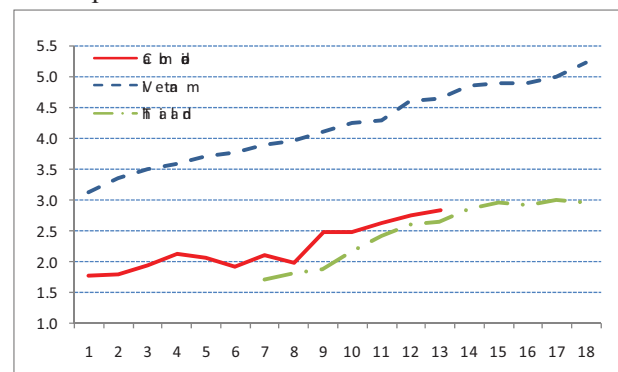
Notes: The value of x-axis is: 1 for 1997 and 13 for 2009 in Cambodia, 1 for 1991 and 18 for 2008 in Vietnam, 6 for 1960 and 18 for 1972 in Thailand.

Source: World Bank (2009).

to put the rice sector in a broad development context to identify better options for its further development. Rice played a similarly important role in Thailand's economic development in the early 1960s and 1970s and in that of Vietnam in the 1990s as it does in Cambodia today. A comparison between Cambodia's present situation and similar development stages in Thailand's and Vietnam's past helps us identify practical options for Cambodia's rice sector.

We chose 1997 as the initial year for Cambodia with a per capita income of USD239 (in constant 2000 US dollars). Vietnam attained a similar level of per capita income in 1991. Thailand's per capita income already reached USD317 in 1960, a level that Cambodia reached in 2002. Figure 1 presents the per capita GDP comparison among these three countries. For comparison purposes, year 1 in the figure represents 1997 for Cambodia and 1991 for Vietnam, while the graph for Thailand starts at the sixth year, which represents 2002 for Cambodia and 1960 for Thailand. Cambodia's recent growth, measured in per capita income, has been more rapid than that of its neighbours when they started at a similar income

Figure 2: Rice Yield Trends in the Three Countries, tonnes per hectare



Notes: The value of x-axis is: 1 for 1997 and 13 for 2009 in Cambodia; 1 for 1991 and 18 for 2008 in Vietnam; and 7 for 1961 and 18 for 1972 in Thailand.

Source: Authors' calculation from FAO (2010).

level in the past. For example, Cambodia reached per capita income of USD370 in 2004 (in seven years) and USD511 in 2008 (in 11 years). It took Vietnam seven years to increase its per capita income from USD235 in 1991 to USD364 in 1998, and 13 years to achieve a per capita income level of more than USD500. While the recent global recession slowed Cambodia's economic growth in 2009, growth is

expected to recover in 2010 and 2011 (ADB 2010), and the gap in per capita GDP between Cambodia and Vietnam will likely decrease in the next decade. While the growth recovery in Cambodia may not rely heavily on rice—which has been less affected by the global recession than the Cambodian garment and tourist sectors—agriculture, particularly rice, is still important to the country's future

growth in many respects. An examination of agricultural shares shows that the path of structural transformation in Cambodia more resembles that of Thailand than Vietnam.

A comparison of current rice yields in Cambodia, Thailand, and Vietnam reveals that while Cambodia's rice yield is only half that of Vietnam, there is only a modest 10 percent yield

**“ Rice played a similarly important role in Thailand's economic development in the early 1960s and 1970s and in that of Vietnam in the 1990s as it does in Cambodia today. A comparison between Cambodia's present situation and similar development stages in Thailand's and Vietnam's past helps us identify practical options for Cambodia's rice sector. ”**

Table 2: Simulation Results of Rice Output Increase by Area Expansion and Input Intensification

| Season                            | Current land or input use | Current output (000 ton) | Land expansion or input increase (% of current level) | Simulated increases in land or input use | Output elasticity in terms of land/ input | Output increase (tonne) |
|-----------------------------------|---------------------------|--------------------------|---|--|---|-------------------------|
|                                   | (1)                       | (2)                      | (3)   | (4)                                      | (5)                                       | (6)                     |
| <i>Area<sup>1</sup></i>           |                           |                          |   |  |   |                         |
| Wet                               | 2,110.0                   | 2,828                    | 10  | 211.0                                    | 0.683                                     | 193,180                 |
| Dry                               | 373.0                     | 827                      | 10  | 37.0                                     | 0.625                                     | 51,678                  |
| <i>Fertiliser use<sup>2</sup></i> |                           |                          |   |  |   |                         |
| Wet                               | 72.1                      | 2,828                    | 50  | 108.2                                    | 0.100                                     | 141,420                 |
| Dry                               | 105.4                     | 827                      | 10  | 115.9                                    | 0.203                                     | 16,785                  |
| <i>Irrigation<sup>3</sup></i>     |                           |                          |   |  |   |                         |
| Wet                               | 11.5                      | 2,828                    | 100   | 23.0                                     | 0.152                                     | 49,441                  |
| Dry                               | 50.1                      | 827                      | 10  | 55.1                                     | 0.213                                     | 8,823                   |

Notes: 1 Area for columns (1) and (4) is measured in 1,000 ha

2 Fertiliser use for columns (1) and (4) is measured in kg/ha

3 Irrigation for columns (1) and (4) is measured in percentage of total cultivated areas.

Sources: Authors' calculation from CSES 2004, Yu and Fan (2010), and FAO (2010).

gap between Cambodia and Thailand. Although Vietnam is often used as an example to argue the yield potential in Cambodia, the two countries have significant differences in initial conditions, and rice yield in Cambodia follows a similar path to that of Thailand (Figure 2).

Thailand's experience merits more attention from Cambodia in designing its rice development strategy. First, Cambodia and Thailand share similar natural resource conditions, as both countries are relatively land abundant by regional standards. Second, fertiliser application rate and irrigation coverage are low in Thailand compared with Vietnam.

Thailand's competitiveness in the world rice market is less related to yield improvement, as its increased production is the result of both area expansion and yield improvement. Third, one unique feature of Thailand's rice sector is its diversification to meet

different demands from foreign markets. High-quality Thai rice often targets developed country markets or consumers in developing countries with relatively higher income, while low-price rice has helped Thailand penetrate rice markets in many African countries. Cambodian rice

**“ Cambodian rice varieties cultivated for export receive a high price premium due to superior taste and quality preferred by upmarket consumers. The Thailand experience suggests that instead of emphasising productivity simply measured by rice yield, the focus of Cambodia's rice strategy should be to increase rice competitiveness by exploring export opportunities such as targeting niche markets and cultivating different varieties for different types of consumers in foreign countries. ”**

varieties cultivated for export receive a high price premium due to superior taste and quality preferred by upmarket consumers. The Thailand experience suggests that instead of emphasising productivity simply measured by rice yield, the focus of Cambodia's rice strategy should be to increase rice competitiveness by exploring export opportunities such as targeting niche markets

and cultivating different varieties for different types of consumers in foreign countries.

Results from a simulation exercise based on the estimated supply response to increased use of inputs and expansion of cultivated land area also highlight

Cambodia's comparative advantage. The results indicate that, given Cambodia's current situation, output increase through area expansion could be substantially larger than output increase through the intensification of modern inputs use. The results further confirm that the comparative advantage of Cambodia's rice sector lies in its abundant land resources; therefore, policies focusing on rice yield alone might not be the most effective way to make rice more profitable for farmers.

### Future Research for Agricultural Strategy

Since Cambodia had already reached national level food self sufficiency in the late 1990s, a continuous emphasis on increasing rice production might result in an oversupply of rice and missed market opportunities in high value rice varieties and other high value crops. More research needs to focus on how Cambodia could exploit its comparative advantage by exporting high quality rice with higher value added. It is important to examine the trade-offs between different rice development goals, such as yield increase versus diversified and high quality rice development. In addition, Cambodia could draw valuable lessons from Thailand's experience in promoting agricultural research and development to improve the quality and taste of rice varieties. Such research needs to take into consideration the impact of different rice development strategies on poverty, food security and nutrition at household level.

Research on crop diversification is also important for Cambodia's agricultural strategy. Upland crops like cassava and maize have potential for generating more income for farmers, supporting food security in some areas, and expanding the agricultural export earnings base. Related experiences and lessons of other Southeast Asian countries are worth studying. Crop diversification research should focus not only on production, but also on diversification. Experiences from other Southeast Asian countries suggest that diversified food production can lead to consumption diversification which has helped to improve rural households' nutritional status. The relationship between production diversification, consumption diversification, and nutrition improvement deserves more detailed study in the future.

In summary, developing an evidence-based agricultural strategy requires research to better

understand Cambodia's comparative advantage and the available options to explore this advantage. It also requires a better understanding of the interactions between different growth options and growth outcomes in terms of income generation for the poor, food security and nutrition improvement. Finally, it requires prioritisation and sequencing of public investment to promote agricultural growth.

### References

- ADB (2010), *Asian Development Outlook 2010: Macroeconomic Management beyond the Crisis*, (Mandaluyong City, Philippines: Asian Development Bank)
- Blair, G. and N. Blair (2010), *Soil Fertility Constraints and Limitations to Fertiliser Recommendations in Cambodia*, paper presented at the 19th World Congress of Soil Science, Soil Solutions for a Changing World, 1 – 6 August 2010, Brisbane, Australia
- CDRI (2008), *Impact of High Food Prices in Cambodia: Survey Report*. Phnom Penh, (Cambodia: Cambodia Development Resource Institute)
- CSES (2004; 2007), *Cambodia Socio-Economic Survey* (Phnom Penh, Cambodia: National Institute of Statistics)
- FAO (2010), FAOSTAT, <http://faostat.fao.org/> (accessed September 2010)
- IFDC (2008), [http://www.eurekalert.org/pub\\_releases/2008-02/i-wfp021908.php](http://www.eurekalert.org/pub_releases/2008-02/i-wfp021908.php)
- IMF (2009), *Cambodia: Statistical Appendix*, Country Report No. 09/48 (Washington D.C.: International Monetary Fund)
- MAFF & MOWRAM (2008), *Strategy for Agriculture and Water: Cambodian Agricultural and Agribusiness Support Programme* (Phnom Penh, Cambodia: Ministry of Agriculture Forestry and Fisheries and Ministry of Water Resources and Meteorology)
- Pech, S. & K. Sunada (2008), *Population Growth and Natural Resources Pressures in the Mekong River Basin*, *Ambio* 37(3): 219-224
- World Bank (2009), *World Development Indicator* (Washington, D.C.: World Bank)
- Yu, B. & S. Fan (forthcoming), *Rice Production Response in Cambodia*, *Agricultural Economics*, No. doi: 10.1111/j.1574-0862.2010.00522.x

# Food Security and Nutrition in Cambodia: Patterns and Pathways

## A Policy Discussion Paper<sup>1</sup>

### Introduction

South and Southeast Asia have undergone rapid economic growth in recent years, fuelled by the miraculous rise of China and India. Thanks to this regional transformation, Cambodia's economic development has benefited from close links with its direct neighbours, Vietnam and Thailand, and other countries in the region such as China. Vietnam, Thailand and China are important trade partners for Cambodia, and Vietnam and Thailand have also provided employment opportunities for Cambodians through cross-border migration. Moreover, Cambodia has kept a close eye on the progress and development setbacks in both Vietnam – a rapidly emerging economy, and Thailand – a middle income country that experienced sustainable rapid growth over the four decades before the Asian crisis.

Against the background of regional economic integration and interaction, Cambodia's development and its associated effects on food security and nutrition improvement are better understood in comparison with those of other South and Southeast Asian countries. In addition, the experiences of other Asian countries in their earlier stages of development and the pathways they took to achieve contemporary success can provide relevant information to assess Cambodia's current stage of development and predict the opportunities and challenges the country may face in the future.

This paper provides an overview of Cambodia's food security and nutrition situation from a regional development perspective. It attempts to understand the current situation within the context of economic transformation and to identify common and different patterns between Cambodia and other countries in the region. Lessons learned from these countries might help to design effective development strategies and practical food security and nutrition interventions in Cambodia.

The rest of the paper is organised into three parts. The next section presents a conceptual framework, which emphasises interactions and linkages of factors that affect food security and nutritional status at both macro and micro levels, for food and nutrition security analysis from a development strategy perspective. The second section analyses the current situation of Cambodia's food security and nutritional status relative to other South and Southeast Asian countries and development trends. Available data and various key development and nutrition indicators are used to highlight the role of economic growth as a driver of food security and better nutrition. The last section concludes.

### Conceptual Framework and Drivers of Food Security

The contemporary concept of food security offers a useful and comprehensive framework for analysing people's food and nutritional status and understanding the key drivers. The present day common definition of food security was adopted at the World Food Summit of 1996: food security is achieved "when all people, at all times, have physical, social and economic access to sufficient, safe and nutritious food to meet their dietary needs and food preferences for an active and healthy life" (FAO 1996). To achieve such a situation requires concerted action at individual, household, national, regional, and global levels (FAO 1996). At the World Food Security Summit in 2009, the international community reaffirmed this concept and emphasised that "the nutritional dimension is integral to the concept" (FAO 2009). This multi-dimensional and integrated definition of food security underlines this paper.

Figure 1 presents a conceptual framework for analysing food security as a priority of a country's development strategy. Exploring effective strategies and policy instruments to achieve food security as defined by the World Food Summit requires a comprehensive and integrated approach that considers the cross-sector and multi-level nature of the food insecurity problem. Resultant from the

<sup>1</sup> This paper is prepared by Olivier Ecker and Xinshen Diao, of the International Food Policy Research Institute. It is based on a policy discussion paper prepared for the Cambodia Food Security Roundtable Stocktaking on 4 November 2010.



serious impacts of the recent global economic crises, we extend the existing frameworks – focused on the household and individual issues of food access and nutrition – by incorporating the macroeconomic dimension. The framework outlines pathways in the food security system through which policies and other interventions on the one hand and external shocks such as economic crises and climate-related disasters on the other are channelled to impact on people's nutritional status as well as the key factors determining nutrition outcomes. It also shows that changes in people's nutritional status affect not only individual and household well-being, but also economic development and the formation of societies at community and national levels.

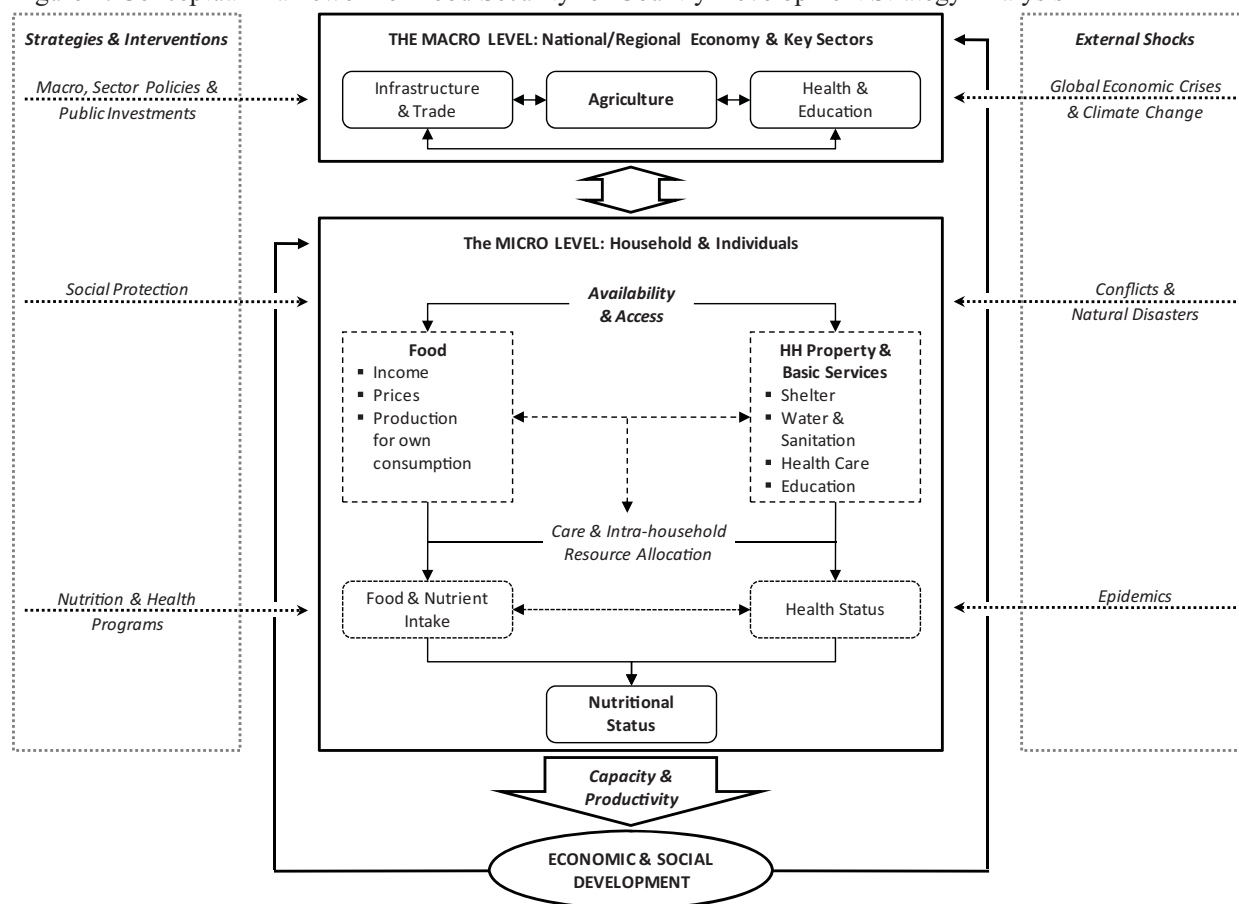
The framework differentiates food security at the national and subnational levels – the macro level, and at the household and individual levels – the micro level. Macro-level food security should not be misunderstood as food self-sufficiency; rather, it refers to the balance of food supply and demand for a particular country or region

where food needs in terms of both quantity and quality can be met through domestic production or available and affordable imports or both (as is usually the case). Thus, macro-level food security is determined by the structure and performance of the domestic economy and certain key sectors in particular. Micro-level food security is determined by household and all individual members of the household access to sufficient and nutritious food as well as the availability of household properties and access to basic (public) services affecting individual nutrition and health. Access is mostly constrained by economic means, i.e. (absolute) poverty.

### Food Security and Nutrition in Development

Historical evidence shows that economic growth generally leads to improvement in human nutrition, while the most obvious and direct pathway from economic growth to improved nutrition is via household income. If growth leads to higher income at household level, people should (other things being equal that is) be able to consume more food

Figure 1: Conceptual Framework of Food Security for Country Development Strategy Analysis



Source: compiled by the authors

with higher nutritional value. This results in the improvement of nutritional status for a majority of the population. However, this trickle-down effect can be interrupted at different levels and at different points. Another possibility by which growth can result in better nutrition outcomes is public policy interventions. Economic growth generates more government revenue and enables the government to design food and nutrition programmes or to expand public health and education services.

The vast differences in nutrition status and nutrition improvement over time among developing countries show that some countries' growth trickles down more than others', and that some governments have been more successful in leveraging economic growth for better nutrition outcomes, while others were less successful and a few even failed. Successful countries are those that have developed an effective policy package fostering high and stable income growth benefiting the poor, combined with interventions targeting the most vulnerable population groups. Although such a mix of policy options must be designed to fit country-specific conditions, successful countries that share similar initial conditions tend to have common patterns and follow similar pathways.

### ***Cambodia's state of development and food security in the regional context***

We first look at the current situation of development and food security in Cambodia and identify which years other South and Southeast Asian countries

had achieved similar states. China, Lao People's Democratic Republic (PDR), Thailand, Vietnam, India, and Bangladesh are chosen for the comparison. The development indicator at macro level is gross domestic product (GDP) per capita, and micro-level indicators are those that are commonly used to identify poverty, hunger, child malnutrition, and child mortality. The data are compiled from various public sources, including the World Development Indicators (WDI 2010), the Food Security Statistics database of the Food and Agriculture Organisation (FSS 2010), and the Global Database of Child Growth and Malnutrition of the World Health Organisation (GDCGM 2010).

Cambodia has experienced rapid economic growth since 1993, especially since the turn of the millennium (Naron 2009). Between 1993 and 1998, GDP grew by 6.3 percent annually and by an average of 9.5 percent per year between 1999 and 2008. Nonetheless, Cambodia remains a low-income country with an average per capita income of USD500 in 2008 (Table 1, first panel). Among the countries compared in this study, only Lao PDR and Bangladesh have lower per capita income levels. While 2008 per capita income in Vietnam and India is modestly higher, per capita income in China is four times and that in Thailand five times higher than in Cambodia. India reached Cambodia's current income level just a few years earlier in 2003 with Vietnam close behind in 2004; China reached per capita income level of USD500 in 1993 and Thailand reached the same in 1970.

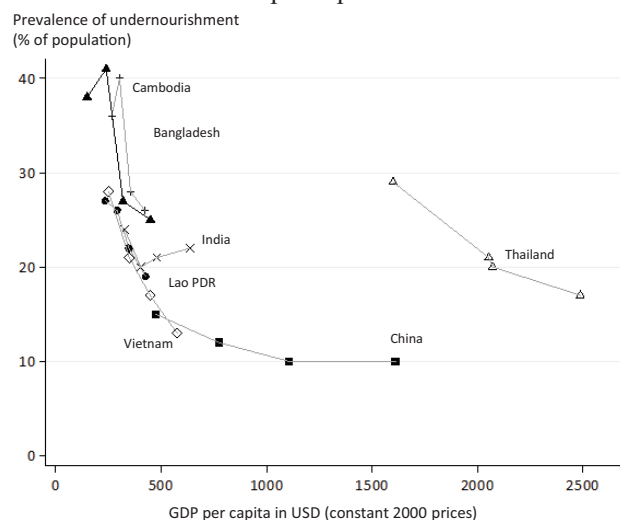
Table 1: Comparison of Cambodia's Development and Food Security Status

|                        | GDP per capita<br>(constant 2000 USD) |                        | Poverty headcount<br>ratio at USD1.25<br>a day (% of<br>population) |                        | Prevalence of<br>undernourishment<br>(% of population) |                        | Prevalence of child<br>stunting (% of<br>children under 5) |                        | Under-5 mortality<br>rate (per 1,000) |                        |
|------------------------|---------------------------------------|------------------------|---|------------------------|--|------------------------|--|------------------------|---------------------------------------|------------------------|
|                        | 2008                                  | Comparable<br>state in | 2005-<br>07   | Comparable<br>state in | 2005-<br>07  | Comparable<br>state in | 2006-<br>08  | Comparable<br>state in | 2008                                  | Comparable<br>state in |
| Cambodia               | 511                                   |                        | 26  |                        | 25   |                        | 40   |                        | 90                                    |                        |
| Bangladesh             | 462                                   | -                      | 50  | -                      | 26   | -                      | 43   | -                      | 54                                    | 2000                   |
| Lao PDR                | 475                                   | -                      | 44*   | -                      | 19   | 1997                   | 48   | -                      | 61                                    | 1999                   |
| Vietnam                | 647                                   | 2004                   | 21  | 2004                   | 13   | 1994                   | 36   | 2002                   | 14                                    | <1975                  |
| India                  | 718                                   | 2003                   | 42  | -                      | 22   | 1992                   | 48   | -                      | 69                                    | 2001                   |
| China                  | 1,965                                 | 1993                   | 16  | 2002                   | 10   | <1992                  | 22*  | n.a.                   | 21                                    | 1974                   |
| Thailand               | 2,640                                 | 1970                   | 2   | <1981                  | 17   | 1994                   | 16   | <1987                  | 14                                    | 1973                   |
| East Asia<br>& Pacific | 1,760                                 | 1991                   | 17  | 2002                   | 12   | <1992                  | 27   | const.                 | 29                                    | 1976                   |
| World                  | 6,007                                 | n.a.                   | n.a.  | n.a.                   | 14   | n.a.                   | 35   | n.a.                   | 67                                    | 1992                   |

Note: \* Estimates are from 2002; n.a. means not available

Sources: WDI 2010, FSS 2010, GDCGM 2010.

Figure 2: Relationship between Prevalence of Undernourishment and per capita GDP



Note: The data are from 1992, 1997, 2002, and 2007.

Sources: WDI 2010, FSS 2010.

Income inequality in Cambodia, measured by the GINI coefficient, has been worsening during the country's period of rapid growth. In 1994, the GINI coefficient was 0.38, and in 2007, it was 0.44 – one of the highest coefficients among South and Southeast Asian countries. In spite of the rapid increase in income inequality, poverty declined tremendously but it still affects more than one fourth of Cambodians today. While progress has been made in both rural and urban areas, poverty rates in rural areas remain significantly higher. Fast economic growth in urban areas and relatively slow progress in rural poverty reduction might have contributed to increasing countrywide income inequality. Poverty in Cambodia is about half as prevalent as in Bangladesh and about two-thirds as prevalent as in India and Lao PDR (Table 1, second panel).

Despite setbacks during the Asian crisis, Cambodia managed to bring down the prevalence of undernourishment from 38 percent in 1992 to 25 percent in 2006 – a similar proportion as affected by poverty. However, unlike poverty, the prevalence of undernourishment (or hunger, as frequently referred to), i.e. the percentage of people consuming less than the minimum requirement of calories, is almost the same as in Bangladesh and only slightly higher than in India (Table 1, third panel). On the other hand, the prevalence of undernourishment is lower in Lao PDR than in Cambodia even though Lao PDR has a higher level of poverty and lower level of per capita income than Cambodia does.

Cambodia has also achieved notable success in reducing child malnutrition over the past two decades. While 59 percent of all children under five were stunted and 43 percent were underweight in 1996, the proportion declined to 40 percent for stunting and 29 percent for underweight in 2008.<sup>2</sup>

Consistent with the income level, child malnutrition in Cambodia is higher than in Vietnam, China and Thailand, but is less widespread than in Lao PDR, Bangladesh and India (Table 1, fourth panel).

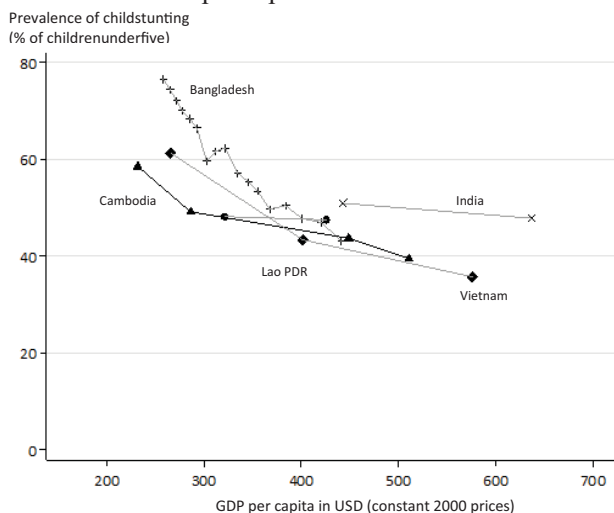
However, the mortality rate among Cambodian children under five is the highest among the comparison countries (Table 1, fifth panel). Although progress in reducing child mortality has gathered pace, particularly since 2000, 90 out of 1,000 Cambodian children died from malnutrition, poor health or other preventable causes in 2008. In 1990, 117 out of 1,000 children did not reach their fifth birthday. Hence, Cambodia seems unlikely to meet the fourth Millennium Development Goal of reducing the under-five mortality rate by two thirds between 1990 and 2015.

### ***Economic growth as driver of food security and nutrition***

We now compare Cambodia's development with the development of other countries and discuss which direction Cambodia is likely to take in the future. As per capita GDP and household income increase, poverty decreases, and human development indicators generally improve. However, the progress of growth and nutrition improvement can be different, as country comparisons reveal. Given that the stage of development matters for comparing countries' success in leveraging economic growth for improving nutrition, we relate nutrition outcome indicators to GDP levels at different points in time.

<sup>2</sup> Three anthropometric indicators are commonly used to identify child malnutrition. These indicators are height-for-age, weight-for-age, and weight-for-height. Children are considered as moderately and severely stunted, underweight, or wasted, if their height-for-age z-scores, weight-for-age z-scores, or weight-for-height z-scores are below certain critical values. These three indicators have different implications for child nutrition and cannot be used interchangeably (WHO 1995). In the following, we focus on stunting, because the height-for-age indicator is most appropriate to capture persistent malnutrition and to account for the interaction between health and nutrition.

Figure 3: Relationship between Prevalence of Child Malnutrition and per capita GDP



Note: The data are from different years between 1987 and 2008.

Sources: WDI 2010, GDCGM 2010.

Figure 2 presents changes in the prevalence of undernourishment relative to economic growth for Cambodia and other South and Southeast Asian countries over time. It shows that, in general, undernourishment declines with increased income level. Moreover, the speed of such decline is relatively rapid at the income level where per capita GDP is below USD500. This is true over the entire time period for Cambodia, Bangladesh, Lao PDR, and Vietnam; it is only partially true during an early growth period for India. India is the only country in which the prevalence of undernourishment rose against more rapid income growth in the recent period. Although Cambodia managed to significantly reduce hunger during the early growth period, progress in reducing hunger has started to slow down recently.<sup>3</sup>

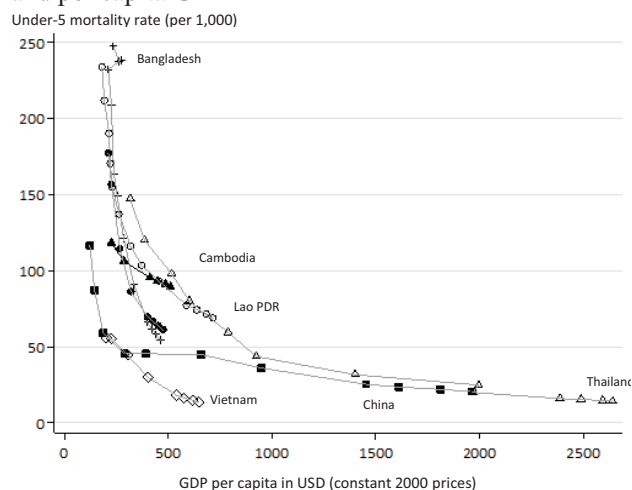
In China and Vietnam, the relationship between undernourishment and income level is very similar, as the curves representing the two countries perfectly form a single trend. Thus, it seems that Vietnam's future in terms of the relationship between hunger reduction and income growth can be closely predicted from China's past. While for Thailand per capita income at the starting point of the curve is the highest among the selected countries, the prevalence of undernourishment in Thailand is much higher than it was in China when China reached a similar

per capita income level at the end point of the curve. Although the pace of hunger reduction in Thailand is faster than in China relative to the pace of income growth, at a much higher income level, Thailand's prevalence of undernourishment is surprisingly higher than in China.

Figure 3 presents the prevalence of child malnutrition against the level of per capita income for Cambodia and four other countries over time. Starting from different initial levels for both per capita income and prevalence of child malnutrition, almost all countries managed to reduce child malnutrition during growth, with the exception of Lao PDR where child malnutrition barely changed when per capita income increased from USD300 to more than USD400. The comparison shows that, at a similar level of income, the prevalence of child malnutrition differs significantly across the five countries. When per capita income was below USD300, the prevalence of child malnutrition in Cambodia was the lowest, lower than both Bangladesh and Vietnam at similar income levels. However, when per capita income increased from USD300 to more than USD400, Vietnam significantly lowered its prevalence of child malnutrition, while the curve for Cambodia is much flatter than that for Vietnam in this period, indicating that similar growth of per capita income from USD300 to USD400 has had a smaller impact on child malnutrition in Cambodia than in Vietnam.

When per capita income was low, the prevalence of child malnutrition was highest in Bangladesh.

Figure 4: Relationship between Child Mortality Rate and per capita GDP



Note: The data are from the same years between 1960 and 2008.

Sources: WDI 2010, GDCGM 2010.

3 The spikes in the curves for Cambodia and Bangladesh mark the effects of the Asian crises in 1997.



However, with modest income growth, raising per capita income from USD250 to USD400, Bangladesh rapidly reduced its prevalence of child malnutrition. Bangladesh's success in reducing child malnutrition is a result of major investments in target programmes. On the other hand, at the per capita income level close to USD500, India had the poorest nutrition status for younger children. Moreover, when per capita income increased to more than USD600 at the end period of the curve for India, its prevalence of child malnutrition declined only modestly.

Finally, Figure 4 plots the child mortality rate on per capita GDP over time. Similarly to the result shown in Figure 1, the child mortality rate declines rapidly with growth when per capita income level is below USD500. After the mortality rate falls to 50 per 1,000 children and income rises to more than USD500 per capita, the reduction in child mortality slows. The only exception is Vietnam where child mortality continued to fall rapidly when the 50-per-1,000 mortality rate was reached and per capita income reached more than USD500. At the income level below USD500, the curve for Cambodia is flattest among the selected countries. This suggests slow progress is being made towards improving well-being among the weakest children in Cambodia.

### Conclusion

Despite high economic growth and remarkable progress in reducing poverty, hunger and malnutrition in recent years, Cambodia remains one of the poorest countries in South and Southeast Asia, with one of the highest prevalence rates of undernourishment and child malnutrition. This paper's country comparison suggests that Cambodia's stage of development and food security is similar to that of Lao PDR and Bangladesh today, Vietnam in the early 2000s, and Thailand in the late 1970s. The trends show that Cambodia has largely followed the pathways of Vietnam and China, where high economic growth has trickled down and substantially reduced hunger and child malnutrition, in contrast to India, where development has bypassed the malnourished population. However, in recent years, Cambodia has departed from the successful pathway of Vietnam and China – a pathway in which growth and better nutrition outcomes have occurred simultaneously.

In addition, income inequality has increased along with growth and the population growth rate is still high. These factors challenge Cambodia's progress towards food security and improved nutrition, especially when economic growth slows down as a consequence of the recent global recession.

Therefore, more efforts are required to bring Cambodia back to the effective pathway of Vietnam and China and to better leverage growth for universal food security and improved nutrition outcomes in the future. While growth in Bangladesh is more modest than in Cambodia, Bangladesh's experiences suggest helpful models for Cambodia, as in Bangladesh more targeted actions have resulted in major improvements in child malnutrition.

### References

- FAO (Food and Agriculture Organisation of the United Nations) (1996), World Food Summit: Rome Declaration on World Food Security, <http://www.fao.org/docrep/003/w3613e/w3613e00> (last accessed October 2010)
- FAO (2009), Declaration of the World Summit on Food Security in Rome, [http://www.fao.org/fileadmin/templates/wsfs/Summit/Docs/Final\\_Declaration/WSFS09\\_Declaration.pdf](http://www.fao.org/fileadmin/templates/wsfs/Summit/Docs/Final_Declaration/WSFS09_Declaration.pdf) (last accessed 11 October 2010)
- FSS (Food Security Statistics) (2010), Database of the Food and Agriculture Organisation of the United Nations, <http://www.fao.org/economic/ess/food-security-statistics/en/> (last accessed October 2010)
- GDCGM (Global Database of Child Growth and Malnutrition) (2010), Database of the World Health Organisation, <http://www.who.int/nutgrowthdb/en/> (accessed October 2010)
- Naron, H. C. (2009), *Cambodian Economy: Charting the Course of a Bright Future – A Survey of Progress, Problems, and Prospects* (Phnom Penh)
- WDI (World Development Indicators) (2010), Database of the World Bank, <http://data.worldbank.org/> (last accessed 11 October 2010)
- WHO (World Health Organisation) (1995), Physical Status: The use and Interpretation of Anthropometry, report of a WHO expert committee, WHO Technical Report 854 (Geneva: WHO)

# Policy Options for Vulnerable Groups: Income Growth and Social Protection<sup>1</sup>

## Introduction

The extensive damage to Cambodia's physical, social and human capital during two decades of war is an important cause of poverty that has led to vulnerability among Cambodian people, especially the rural poor. Other contributing factors include social exclusion, lack of access to public services and limited employment opportunities. In addition, insufficient agriculture sector growth and the narrowly based rural economy make the majority of rural people highly susceptible to risks and shocks that can push them into extreme poverty. For example, recent contraction in Cambodia's main growth sectors – garments, tourism and services – due to the global economic crisis resulted in job losses and diminished remittances. The downturn directly affected workers and their families and exacerbated their vulnerability to income and consumption shocks.

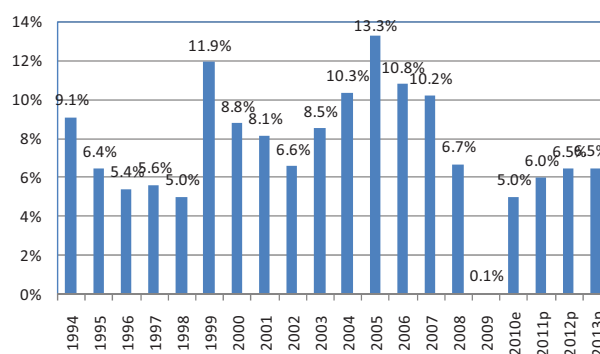
This article aims to provide an overview of the interaction between growth, poverty, vulnerability and social protection, building on existing literature and recent data and statistics. Specifically, this study: (1) identifies vulnerable groups and causes of vulnerability, (2) reviews the existing social protection activities being undertaken by government and its partners, (3) discusses the effectiveness of the existing social protection programme, and (4) sets out policy options for vulnerable groups in terms of income growth and social protection as well as the knowledge gap.

1 This article was prepared by Sothorn Kem, research associate, and Khiev Pirom, research assistant, in the Poverty, Agriculture and Rural Development Programme (PARAD), CDRI. The authors thank Miss Gov Kim Hong, intern, and Mr Chhim Chhun, research assistant, at PARAD for their substantial assistance with the literature search.

2 Ministry of Economic and Finance

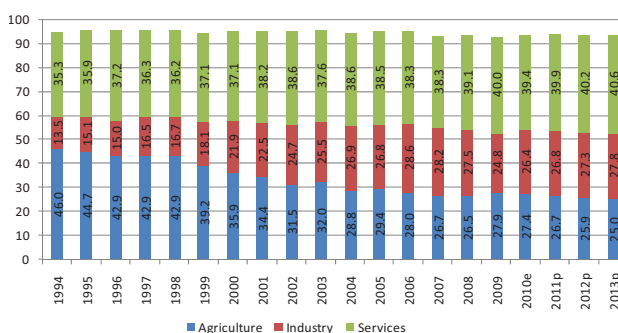
3 GDP per capita increased from USD285 in 1997 to USD593 in 2007 (data from IMF). According to the poverty trends assessment of the World Bank in 2009, the Gini coefficient (a measure of income inequality) for the whole country rose sharply from 0.396 in 2004 to 0.431 in 2007.

Figure 1: GDP Growth (1994-2013 at 2000 price)



Source: Data from MoEF<sup>2</sup>

Figure 2: Sources of Growth by Sector (1994-2013)

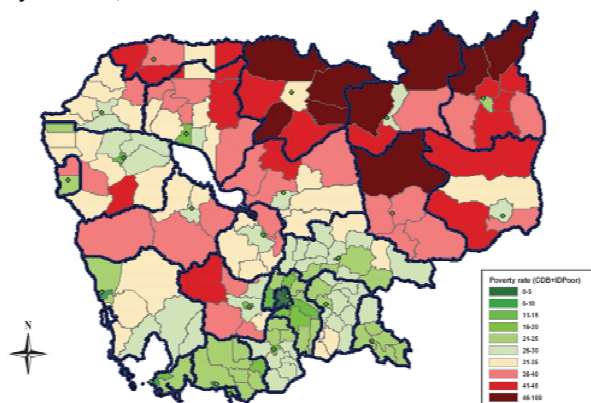


Source: Data from MoEF

## Links between Growth, Poverty and Vulnerability

Poverty in Cambodia is characterised by low income and consumption, poor nutritional status, low educational attainment, lack of access to public services and economic opportunities, vulnerability to shocks, and exclusion from economic, social and political processes. Average GDP growth rate of 9.5 percent per annum for the period 1999-2008 (Figure 1) has profoundly transformed the country, enabling society to progress with key national development strategies in poverty reduction, livelihood improvement, higher education level and better health status. However, economic growth is largely urban based and the benefits have been unevenly distributed, driving inequality increasingly higher (World Bank 2007).<sup>3</sup>

Figure 3: Distribution of Household Poverty Rate (%) by district, 2009



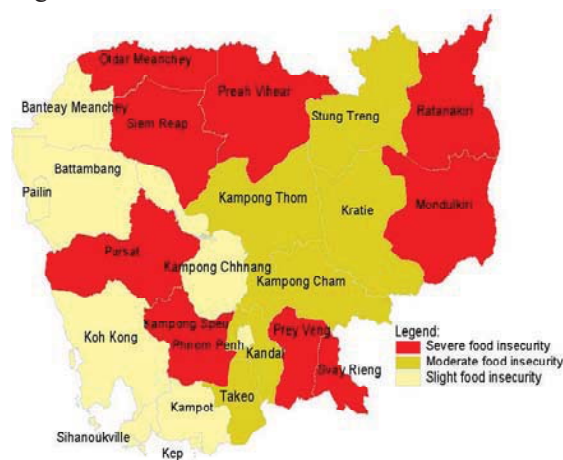
Source: Commune Database 2003-2008, MoP  
Map by NCDD PST M&E unit, 2009

High inequality constrains sustained economic growth and acts as a brake on poverty reduction efforts, or may even be detrimental to growth itself and lead to social polarisation and instability (World Bank 2006a). Eighty percent of Cambodia's total population of 13.4million are dependent on the rural economy where growth is particularly low and insufficient (Figure 2).<sup>4</sup> This pattern of growth has so far brought little in the way of significant benefits to the majority of people, especially in rural areas. This also means that the rural poor remain highly exposed to different vulnerabilities and risks from various sources. Many poverty studies suggest that exposure to risk and shocks is one of the main determinants that make households more vulnerable and keep them trapped or even deeper entrenched in poverty (Fitzgerald *et al.* 2007; Ballard *et al.* 2007; So 2009; Kem *et al.* 2010).

4 Foreign direct investment (FDI) has been concentrated in the industry and services sectors while the agriculture sector is still suffering from under-investment and under-development. MoEF data show that agriculture's share of GDP has declined since 1994 (Figure 2). Cambodian rice productivity of 2.8 tonnes per ha in 2009 was the lowest in the region (MAFF 2010).

5 The MPI is an index of acute multidimensional poverty; it reflects deprivations in very rudimentary services and core human functioning. This index reveals a different pattern of poverty than income poverty as it highlights a different set of deprivations. The MPI has three dimensions—health, education, and standard of living—and uses ten indicators to measure poverty. A household is identified as multidimensionally poor only if it is deprived in a combination of indicators where the weighted sum exceeds 30 percent of deprivation.

Figure 4: Food Insecure Areas



Source: FAO 2007

### Who are the Vulnerable? Why are they so Vulnerable?

The forthcoming National Social Protection Strategy (NSPS), defines vulnerable people as (1) those living below the national poverty line, (2) those who cannot cope with shocks and or have a high level of exposure to shocks (people living under or near the poverty line tend to be the most vulnerable), and (3) infants and children, women, girls of reproductive age, food-insecure households, ethnic minorities, the elderly, the chronically ill, people living with HIV/AIDS and people with disabilities. Using this definition, the vulnerable groups and the factors and underlying causes that make them vulnerable were identified.

### **More than one quarter of the population are living below the poverty line**

An estimated 27.4 percent of Cambodian households were still living under the poverty line by the end of 2009 (Ministry of Planning (MoP) 2009). Using the multidimensional poverty index (MPI)<sup>5</sup>, however, the poverty rate in Cambodia stood as high as 54 percent, representing around 7.7 million people (Alkire *et al.* 2010). The 2007 Cambodia Socio-Economic Survey (CSES) poverty headcount index notes that the poverty rate was 0.83 in Phnom Penh and 21.85 in other urban areas, suggesting that 7.8 percent of the poor in Cambodia are living in urban areas (World Bank 2009). In the rural areas, poor households are mainly scattered in remote provinces such as Ratanakiri, Mondulakiri, Kratie,

Steung Treng, Preah Vihear and some provinces around the Tonle Sap Plain (Kampong Thom, Siem Reap, Pursat) (Figure 3). An FAO study in 2007 consistently identified most of these provinces as food insecure areas<sup>6</sup> (Figure 4), with 2.6 million people likely facing food deprivation (World Food Programme (WFP) 2007). Within this proportion, the 2005 Cambodia Demographic and Health Survey (CDHS) found that 43 percent of children aged 0 to 5 were chronically malnourished (stunted), 28 percent were underweight, and 8 percent were acutely malnourished. This places Cambodia with a Global Hunger Index (GHI)<sup>7</sup> of 21.2 in 2009, an alarming rate despite the country's record rice sufficiency.

The poor are extremely vulnerable to both idiosyncratic and covariant shocks.<sup>8</sup> Idiosyncratic shocks that are generally faced include non-epidemic illness, accident, death of family member, loss of livestock, indebtedness, theft, violence, household level crop damage, business failure, income shock in the form of unemployment or falling income. When struck by covariant shocks, such as natural disasters (e.g. flood, drought), widespread (endemic or epidemic) disease, social conflict (land conflict, reduction of natural resources stock), and economic crisis, the poor seem to be the hardest hit

of all groups in society.

Vulnerable groups in society also include (1) the urban poor, (2) people living with HIV/AIDS, (3) children and youth, (4) old people, (5) people with disability, (6) ethnic minorities, and (7) women headed households and girls of reproductive age. These groups experience different levels of idiosyncratic or covariant shocks, or even a combination of both.

Most vulnerable groups experience different levels of idiosyncratic or covariant shocks, or even a combination of both. The World Bank study on 'Risk and Vulnerability of People in Cambodia'

**“ Most vulnerable groups experience different levels of idiosyncratic or covariant shocks, or even a combination of both.**

**The World Bank study on 'Risk and Vulnerability of People in Cambodia' (2006b) examines the relative vulnerability of various groups based on exposure to risks and capacity to manage them. ”**

(2006b) examines the relative vulnerability of various groups based on exposure to risks and capacity to manage them. Its findings reveal that children and youths, who form the biggest proportion of the total vulnerable population and characteristically have poor nutritional status, are involved in some of the worst kinds of wage labour, are poorly educated and lack the skills and opportunities to get decent jobs. People with disability and the urban poor rank second and third in terms of vulnerability and their

ability to manage risk, followed by the elderly, ethnic minorities, female headed households and garment workers. Studies by So (2009), Kem *et al.* (2010) and Ngo *et al.* (2010) also point out that due to low capacity to cope with shocks from the economic downturn, vulnerable groups and their families, especially women headed households, become more vulnerable to income and consumption shocks, pushing them deeper into poverty. Hence, whatever strategies might help reduce vulnerability and risk of exposure to shocks among the most vulnerable are considered appropriate direct ways

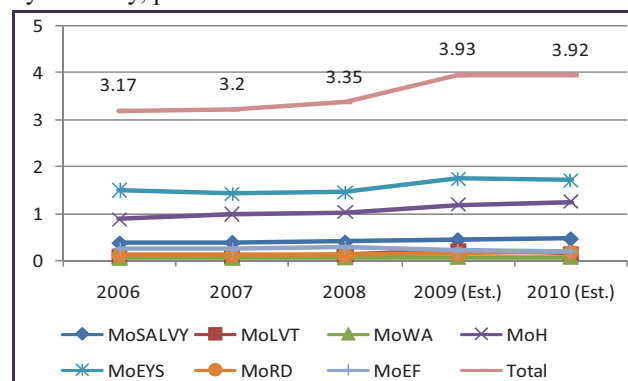
<sup>6</sup> Food insecurity exists when people are undernourished due to the physical unavailability of food, lack of social or economic access to adequate food, and or inadequate food utilisation (WFP 2005).

<sup>7</sup> In 2009, the GHI of Cambodia's neighbouring countries such as Vietnam was 11.9, Lao 19.0, and Thailand 8.2; all of them stand at a better rate than Cambodia.

<sup>8</sup> Idiosyncratic shocks affect some individuals or households but not others; covariant shocks affect many people at the same time.



Figure 5: Government Expenditure on Social Protection by Ministry, percent of GDP



Source: MoEF 2010

to fight poverty and boost a more sustainable and equitable pattern of growth.

### Social Protection and Vulnerability Reduction

Social protection is sometimes approached as a “system” to address both covariant and idiosyncratic vulnerabilities (Davies *et al.* 2008; Vakis 2006). Putting social protection or social safety nets in place to support vulnerable groups becomes one of the priority options.

The government is mandated by the Constitution and several laws to provide a range of social safety nets to the people. Social protection related objectives are also prioritised in the comprehensive National Strategic Development Plan (NSDP). Under NSDP, a number of policies and action plans have been adopted by related ministries and institutions. The diversity of social protection programmes for the poor aims to address issues of vulnerability and human capital development. The major social protection programmes identified under the NSDP are social security services, National Social Safety Net Fund, vocational training, Scholarship for

the Poor, School Feeding Programme and Take Home Rations, Health Equity Fund, Community-based Health Insurance, Nutrition Programme, Emergency Relief, Public Work Programme, Social Land Concession, Rural Drinking Water Supply and Sanitation and Micro or Area-based Schemes.

Although government expenditure on social protection is increasing, it is still low compared to other countries in the region (Figure 5). At the same time, the government’s development partners’ disbursements for the safety net project reached USD51million in 2010. Of the total 1,500 NGOs, almost half are currently running programmes related to social protection. Despite these massive efforts and pro-poor targeting, social protection still does not reach a large proportion of the population in need of support. The effectiveness and sustainability of social protection programmes have been undermined by limited resources, lack of clear coherent strategy and targeting procedure, or the prioritisation of programmes being based on development partners’ interests.

### Conclusion, Policy Options and Potential Research Areas for Effective Social Protection

**“ The effectiveness and sustainability of social protection programmes have been undermined by limited resources, lack of clear coherent strategy and targeting procedure, or the prioritisation of programmes being based on development partners’ interests. ”**

Poverty, growth inequality, social exclusion and lack of access to public services and opportunities are the main causes of vulnerability. Vulnerable people experience different shocks at different levels. It was consistently found

that all groups are highly vulnerable and less able to manage whenever they are struck by shocks. A wide range of social protection interventions to address poverty and reduce vulnerability have been delivered. The set of interventions, despite its diversity, is truly inadequate in scale such that social support has yet to reach large groups of vulnerable people. The limitations of social protection programmes could be a barrier to social

cohesion, human capital development, livelihood improvement and broad based equitable growth and ultimately, poverty reduction. Seeking an approach for effective social protection is almost equal to the search for a comprehensive effective approach to address poverty. To ensure effective social protection, the following areas should be focussed on : (1) addressing poverty and vulnerability in rural areas by diversifying the rural economy, in which case, boosting agriculture sector growth should be prioritised; (2) prioritising the current limited social protection that targets those whose needs are most immediate or the most vulnerable groups, such as young people or the elderly; (3) ensuring better coordination among institutions, for example, through the comprehensive use of a generic targeting procedure such as ID-Poor or other approaches such as the multidimensional poverty index to target beneficiaries; (4) conducting more research to provide updated information and monitor changes and impacts of social protection in the future that could provide critical inputs for effective social protection delivery to reduce risk and vulnerability.

## References

- Alkire, Sabina & Maria Emma Santos (2010), *Cambodia Country Briefing*, Oxford Poverty and Human Development Initiative (OPHI) Multidimensional Poverty Index Country Briefing Series,, Oxford Poverty and Human Development Initiative website [www.ophi.org.uk/policy/multidimensional-poverty-index/mpi-country-briefings/](http://www.ophi.org.uk/policy/multidimensional-poverty-index/mpi-country-briefings/) (retrieved 27 August 2010)
- Ballard, B. M. Sloth, C. Wharton, D. Fitzgerald, I. Mushid, K.A.S. Hansen, K. K. Phim, R. Lim, S. (2007), *We Are Living with Worry All the Time: A Participatory Poverty Assessment of the Tonle Sap* (Phnom Penh: Cambodia Development Resource Institute)
- Davies, M. Leavy, J. Mitchell, & T. and Tanner (2008), *Social Protection and Climate Change Adaptation* (Brighton: Institute of Development Studies at the University of Sussex)
- FAO (Food Agriculture Organisation) (2007), *Mapping of Food Security and Nutrition Situation and On-going Field Agent Efforts in Cambodia* (Phnom Penh: FAO)
- Fitzgerald, I., So, S., Chan, S., Kem, S., & Tout, S. (2007), *Moving Out of Poverty? Trends in Community Well-being and Household Mobility in Nine Cambodian Villages* (Phnom Penh: Cambodia Development Resource Institute)
- IFPRI (International Food Policy Research Institute) (2009), *Global Hunger Index: The Challenge of Hunger- Focus on Financial Crisis and Gender Inequality* (Washington DC: Dublin)
- Kem, S. Theng, V. & Chhim, C. (forthcoming in 2010), *Rapid Assessment of Impact of Global Financial Crisis on Poor and Vulnerable People: Round 4* (Phnom Penh: Cambodian Development Resource Institute)
- MoP (Ministry of Planning) (2009), *Poverty and Select CMDGs, Maps and Charts 2003-2008, preliminary results of CDB-based Research and Analysis Project* (Phnom Penh: MoP)
- Ngo, S. & Chan, S. (2010), *More Vulnerable: The Implication of the Economic Downturn on Women in Cambodia* (Phnom Penh: Oxfam Research Report)
- So, S. (2009), *Informal Risk Management and Safety Net Practices in Economic Crisis in Cambodia: Experiences of Poor and Vulnerable Workers and Households*, Annual Development Review, (5) (Phnom Penh: Cambodian Development Resources Institute) pp. 83-112
- Vakis, R (2006), *Complementing Natural Disasters Management: The Role of Social Protection*, Discussion Paper No. 0542 (Washington, DC: World Bank)
- WFP (World Food Programme) (2005), *Food Security Atlas of Cambodia* (Cambodia: World Food Programme)
- World Bank (2007), *Sharing the Growth: Equity and Development Report 2007* (Phnom Penh: World Bank for the Cambodia Development Cooperation Forum)
- World Bank (2009), *Poverty Profile and Trend in Cambodia: Findings from the 2007 Cambodia Socio-Economic Survey (CSES)* (Poverty Reduction and Economic Management Sector Unit, East Asia and Pacific Region, World Bank)
- World Bank (2006a), *Cambodia: Halving Poverty by 2015? Poverty Assessment 2006* (Phnom Penh: World Bank)
- World Bank (2006b), *Managing Risk and Vulnerability in Cambodia: An Assessment and Strategy for Social Protection* (Washington DC: World Bank)

## Economy Watch—External Environment

This section focuses on the major world economies and economies in east Asia during the second quarter of 2010.

### World Economic Growth

In the second quarter of 2010, real GDP growth in Indonesia was 6.2 percent year on year, the fastest pace since the third quarter of 2008. Strong growth in demand from China contributed to Indonesia's GDP. Malaysia's GDP growth went down to 8.9 percent, while growth in Singapore increased to 18.7 percent, the second fastest growth since records have been kept in Singapore. The Singapore government also revised GDP growth in the first quarter from 16.0 percent to 17.4 percent. Thailand's GDP growth contracted to 9.1 percent. The slowdown was due to anti-government protests that brought Bangkok's commercial centre to a standstill between March and May. GDP in Vietnam grew by 6.4 percent year on year, up from 5.8 percent in the first quarter of 2010. This was based on the expansion of garments, the service sector, agriculture and the foreign-invested sector, including the oil and gas industry.

Year-on-year growth in China dropped to 10.3 percent from 11.9 percent in the first quarter of 2010. Consumption contributed 3.9 percentage points, gross fixed capital formation 6.6 percentage points and net exports 0.6 percentage points to the rate of growth. Year-on-year growth in Hong Kong dropped to 6.5 percent, South Korea to 7.1 percent and Taiwan to 11.4 percent. Japan's growth dropped to 2.4 percent, while in the US, year-on-year growth accelerated to 3.0 percent. The increase in real GDP was caused primarily by a sharp expansion in imports, acceleration in inventory investment and a pick-up in consumer spending for services.

### World Inflation and Exchange Rates

During the second quarter of 2010, deflationary pressures remained evident in Japan, while inflation increased in many countries. In Indonesia, the inflation rate was 4.4 percent, accelerating from 3.6 percent in the first quarter. This was due to higher food prices after the end of the main harvest season. Inflation in Malaysia remained low at 1.7 percent, and in Singapore it was 3.2 percent, up from the previous quarter's 0.9 percent. Consumer inflation in Thailand was 2.1 percent and in China 2.7 percent. Year-on-year consumer prices in Hong Kong rose by 2.1 percent, compared to 1.9 percent in the previous quarter. In South Korea, inflation was 2.6 percent and in Taiwan 1.1 percent, while in Japan it remained negative at -0.9 percent. Euro zone inflation was 1.5 percent and in the US it was 1.8 percent.

During the same period, the rupiah appreciated against the US dollar by 1.5 percent from the preceding quarter, the ringgit appreciated by 3.9 percent, the Singapore dollar by 2.9 percent and the Thai baht by 1.7 percent, while the Vietnamese dong depreciated 0.9 percent. The Hong Kong dollar depreciated against the US dollar by 0.3 percent, the South Korean won by 1.9 percent, the euro by 9.7 percent and the yen by 1.6 percent, but the Chinese yuan appreciated by 0.9 percent, and the Taiwan dollar by 0.1 percent.

### Commodity Prices in World Markets

During the second quarter, the prices of maize and soybeans dropped slightly from the previous quarter. Maize (US No. 2) declined by 3.4 percent to USD157.4/tonne. Rubber SMR 5 went down by 0.7 percent to USD3083.7/tonne, rice (Thai 100%) by 18.5 percent to USD461/tonne and soybeans (US No.1) by 0.5 percent to USD371/tonne. Crude oil rose by 1.7 percent to USD77/barrel, gasoline by 1.0 percent to USD0.54/ℓ and diesel fuel by 2.3 percent to USD0.55/ℓ.

*Prepared by Sry Bopharath*

# Economy Watch—External Environment

**Table 1. Real GDP Growth of Selected Trading Partners, 2004–2010 (percentage increase over previous year)**

|                                | 2004 | 2005 | 2006 | 2007 | 2008 | 2009<br>Q1 | Q2   | Q3   | Q4   | 2010<br>Q1 | Q2   |
|--------------------------------|------|------|------|------|------|------------|------|------|------|------------|------|
| Selected ASEAN countries       |      |      |      |      |      |            |      |      |      |            |      |
| Cambodia                       | 7.7  | 13.4 | 10.6 | 10.2 | 6.8  | -          | -    | -    | -    | -          | -    |
| Indonesia                      | 5.1  | 5.6  | 5.4  | 6.3  | 6.1  | 4.4        | 3.9  | 4.2  | 5.4  | 5.7        | 6.2  |
| Malaysia                       | 7    | 5.2  | 5.9  | 6.3  | 4.6  | -6.2       | -3.9 | -1.2 | 4.5  | 16.9*      | 8.9  |
| Singapore                      | 8.5  | 5.7  | 7.7  | 7.7  | 1.1  | -10.1      | -3.5 | 0.8  | 4.0  | 17.4*      | 18.7 |
| Thailand                       | 6    | 4.5  | 4.8  | 4.9  | 2.6  | -7.1       | -4.9 | -2.8 | 5.8  | 12.0       | 9.1  |
| Vietnam                        | 7.5  | 8.4  | 8.1  | 8.5  | 6.2  | -          | -    | -    | -    | 5.8        | 6.4  |
| Selected other Asian countries |      |      |      |      |      |            |      |      |      |            |      |
| China                          | 9.5  | 9.6  | 10.5 | 11.9 | 9.0  | 6.1        | 7.9  | 9.1* | 10.7 | 11.9*      | 10.3 |
| Hong Kong                      | 8.3  | 6.5  | 6.6  | 6.4  | 2.4  | -7.8       | -3.8 | -2.2 | 2.6  | 8.0*       | 6.5  |
| South Korea                    | 4.7  | 4.7  | 5.0  | 4.9  | 2.2  | -4.4       | -2.2 | 0.4  | 6.1  | 8.1        | 7.1  |
| Taiwan                         | 5.7  | 4.1  | 4.6  | 5.2  | 0.1  | -10.2      | -7.5 | -1.3 | 8.4* | 14.6*      | 11.4 |
| Selected industrial countries  |      |      |      |      |      |            |      |      |      |            |      |
| Euro-12                        | 1.8  | 1.5  | 2.7  | 2.9  | 0.9  | -2.5       | -4.8 | -4.7 | 0.1  | -          | -    |
| Japan                          | 3.4  | 2.5  | 2.1  | 2.0  | -0.7 | -9.1       | 0.6  | -4.7 | -1.4 | 4.4*       | 2.4  |
| United States                  | 4.4  | 3.7  | 3.3  | 2.2  | 1.1  | -2.6       | -3.9 | -2.5 | 0.1  | 2.4*       | 3.0  |

Sources: International Monetary Fund, Economist and countries' statistic offices. \* Updated data

**Table 2. Inflation Rate of Selected Trading Partners, 2004–2010 (percentage price increase over previous year—period averages)**

|                                | 2004 | 2005 | 2006 | 2007 | 2008 | 2009<br>Q1 | Q2   | Q3    | Q4    | 2010<br>Q1 | Q2   |
|--------------------------------|------|------|------|------|------|------------|------|-------|-------|------------|------|
| Selected ASEAN countries       |      |      |      |      |      |            |      |       |       |            |      |
| Cambodia                       | 4.0  | 5.8  | 4.7  | 10.5 | 19.7 | 4.3        | -4.8 | -3.0  | 1.7   | 7.0        | 4.1  |
| Indonesia                      | 8.3  | 10.5 | 13.4 | 6.4  | 10.1 | 8.5        | 5.6  | 2.78  | 2.6   | 3.6        | 4.4  |
| Malaysia                       | 1.6  | 3.1  | 3.7  | 2.0  | 5.3  | 3.7        | 1.3  | -2.23 | -0.2  | 1.3        | 1.7  |
| Singapore                      | 1.7  | 0.5  | 1.0  | 2.1  | 6.5  | 2.1        | -0.5 | -0.4  | -0.3  | 0.9        | 3.2  |
| Thailand                       | 2.7  | 4.5  | 4.7  | 2.2  | 5.5  | -0.2       | -2.8 | -2.1  | 1.9   | 3.7        | 2.1  |
| Vietnam                        | 7.8  | 8.2  | 7.7  | 8.3  | 23.3 | 15.1       | 6.2  | 2.6   | 4.6   | 7.5        | -    |
| Selected other Asian countries |      |      |      |      |      |            |      |       |       |            |      |
| China                          | 3.9  | 1.8  | 1.5  | 4.8  | 5.9  | -0.6       | 1.5  | -1.26 | 0.7   | 2.1*       | 2.7* |
| Hong Kong                      | -0.4 | 1.1  | 2.2  | 2.0  | 4.3  | 1.7        | -0.1 | -0.9  | 1.3   | 1.9        | 2.1  |
| South Korea                    | 3.5  | 2.8  | 2.4  | 2.5  | 4.6  | 3.9        | 2.8  | 2.0   | 2.4   | 2.7        | 2.6  |
| Taiwan                         | 1.6  | 2.3  | 0.6  | 1.8  | 3.2  | 0.0        | -0.8 | -1.3  | -1.3* | 1.3*       | 1.1  |
| Selected industrial countries  |      |      |      |      |      |            |      |       |       |            |      |
| Euro-12                        | 2.2  | 2.2  | 2.1  | 2.1  | 3.3  | 1.0        | 0.9  | -0.34 | 0.4   | 1.1        | 1.5  |
| Japan                          | Nil  | -0.3 | 0.5  | 0.1  | 1.4  | -0.1       | -1.0 | -2.2  | -2.0  | -1.2       | -0.9 |
| United States                  | 2.7  | 3.4  | 3.2  | 2.9  | 3.8  | -0.2       | -0.9 | -1.6  | 1.4   | 2.3        | 1.8  |

Sources: International Monetary Fund, Economist and National Institute of Statistics. \* Updated data

**Table 3. Exchange Rates against US Dollar of Selected Trading Partners, 2004–2010 (period averages)**

|                                | 2004      | 2005      | 2006      | 2007      | 2008      | 2009<br>Q1 | Q2        | Q3        | Q4        | 2010<br>Q1 | Q2        |
|--------------------------------|-----------|-----------|-----------|-----------|-----------|------------|-----------|-----------|-----------|------------|-----------|
| Selected ASEAN countries       |           |           |           |           |           |            |           |           |           |            |           |
| Cambodia (riel)                | 4016.30   | 4092.50   | 4103.20   | 4062.70   | 4054.20   | 4108.00    | 4128.60   | 4164.40   | 4163.10   | 4180.11    | 4209.02   |
| Indonesia (rupiah)             | 8938.00   | 9705.00   | 9134.00   | 9419.00   | 9699.00   | 11,630.80  | 10,225.00 | 9887.00   | 9472.44   | 9266.93    | 9,132.00  |
| Malaysia (ringgit)             | 3.80      | 3.80      | 3.70      | 3.30      | 3.30      | 3.60       | 3.50      | 3.50      | 3.40      | 3.37       | 3.24      |
| Singapore (S\$)                | 1.69      | 1.66      | 1.59      | 1.51      | 4.58      | 1.51       | 1.45      | 1.44      | 1.39      | 1.40       | 1.36      |
| Thailand (baht)                | 40.20     | 40.20     | 37.90     | 32.22     | 33.36     | 35.29      | 33.98     | 33.96     | 33.30     | 32.90      | 32.33     |
| Vietnam (dong)                 | 15,777.00 | 15,859.00 | 15,994.00 | 16,030.00 | 16,382.00 | 16,954.00  | 17,801.00 | 17,841.00 | 18,472.00 | 18,825.67  | 18,993.00 |
| Selected other Asian countries |           |           |           |           |           |            |           |           |           |            |           |
| China (yuan)                   | 8.28      | 8.19      | 7.97      | 8.03      | 6.94      | 6.84       | 6.83      | 6.83      | 6.83      | 6.83       | 6.77      |
| Hong Kong (HK\$)               | 7.79      | 7.78      | 7.77      | 7.80      | 7.78      | 7.75       | 7.75      | 7.75      | 7.75      | 7.76       | 7.78      |
| South Korea (won)              | 1145.00   | 1024.00   | 955.00    | 929.04    | 1137.23   | 1412.50    | 1273.90   | 1239.04   | 1167.77   | 1143.97    | 1166.04   |
| Taiwan (NT\$)                  | 33.60     | 32.10     | 32.50     | 32.85     | 31.54     | 34.00      | 33.10     | 32.77     | 32.29     | 31.93      | 31.90     |
| Selected industrial countries  |           |           |           |           |           |            |           |           |           |            |           |
| Euro-12 (euro)                 | 0.80      | 0.80      | 0.80      | 0.70      | 0.84      | 0.76       | 0.71      | 0.70      | 0.68      | 0.72       | 0.79      |
| Japan (yen)                    | 108.20    | 110.20    | 116.40    | 117.80    | 102.46    | 93.72      | 95.95     | 93.58     | 89.78     | 90.73      | 92.20     |

Sources: International Monetary Fund, Economist and National Bank of Cambodia

**Table 4. Selected Commodity Prices on World Market, 2004–2010 (period averages)**

|   | 2004    | 2005    | 2006    | 2007    | 2008    | 2009<br>Q1 | Q2      | Q3      | Q4      | 2010<br>Q1 | Q2      |
|---|---------|---------|---------|---------|---------|------------|---------|---------|---------|------------|---------|
| Maize (USNo.2)—USA (USD/tonne)                        | 110.65  | 89.19   | 111.04  | 149.08  | 218.15  | 183.12     | 171.16  | 146.85  | 168.13  | 162.88     | 157.41  |
| Palm oil—north-west Europe (USD/tonne)                | 427.47  | 381.32  | 433.85  | 707.68  | 912.23  | 636.53     | 719.35  | 659.16  | 732.33  | N/A        | N/A     |
| Rubber SMR 5  | 1276.90 | 1430.50 | 1996.30 | 2202.30 | 2586.30 | 1439.77    | 1638.77 | 1924.80 | 2536.03 | 3105.90    | 3083.73 |
| Rice (Thai 100% B)—Bangkok (USD/tonne)                | 221.67  | 262.88  | 282.00  | 305.36  | 615.32  | 522.13     | 499.45  | 307.31  | 569.00  | 565.67     | 461.33  |
| Soybeans (US No.1)—USA (USD/tonne)                    | 262.03  | 224.25  | 213.88  | 294.59  | 460.41  | 434.40     | 420.10  | 411.18  | 390.43  | 372.68     | 370.95  |
| Crude oil—OPEC spot (USD/barrel)                      | 33.50   | 50.14   | 61.58   | 69.25   | 95.44   | 42.34      | 57.46   | 68.32   | 73.86   | 75.73      | 77.00   |
| Gasoline—US Gulf Coast (cents/litre)                  | 30.90   | 42.19   | 47.70   | 53.58   | 62.22   | 31.97      | 43.11   | 46.92   | 49.64   | 53.87      | 54.43   |
| Diesel (low sulphur No.2)—US Gulf Coast (cents/litre) | 29.48   | 44.35   | 51.35   | 55.51   | 76.20   | 34.17      | 40.51   | 46.46   | 51.03   | 53.87      | 55.13   |

Sources: Food and Agriculture Organisation and US Energy Information Administration



## Economy Watch—Domestic Performance

### Main Economic Activities

In the second quarter of 2010, fixed asset investment approvals decreased 57 percent. Agriculture dropped by 75 percent compared with the previous quarter, to USD41.4m, and industry by 78 percent to USD54.5m. However, service sector approvals grew 36 percent. During the same quarter, the value of construction approvals increased nearly three times to USD202.1m. Compared with the previous quarter, villa and house approvals increased 47 percent, other approvals 92 percent and flat approvals by 1046 percent. If the investment approvals are fully implemented, they could create 23,846 jobs.

Visitor arrivals in the second quarter declined by 21 percent compared with the previous quarter, to 537,465. Holiday arrivals dropped by 22 percent to 465,830, business arrivals by 2.0 percent to 35,203 and other arrivals by 24 percent to 36,432. Among ASEAN countries, Vietnamese arrivals escalated 33 percent from the preceding quarter to 122,981. This was the sixth consecutive quarter of increased Vietnamese arrivals. Thai arrivals rose to 22,270 and Malaysian arrivals to 20,382.

During the same period, garment exports increased by 17 percent compared with the previous quarter, to USD505.4m. The expansion was due to exports to the “rest of the world” increasing 28 percent to USD112m, to Japan rising 25 percent to USD54.8m, to the EU increasing 13 percent to USD115.9m and to the US increasing 11 percent to USD85.2m. Exports to ASEAN dropped by 12 percent to USD37.5m. The total of agricultural exports declined by 78 percent compared with the previous quarter. Rubber dropped by 62 percent and wood by 79 percent, while other agricultural exports remained stable. Fish exports escalated from USD0.81m to USD51.2m. In the second quarter, gasoline imports contracted by 21 percent to USD17.3m, and construction material imports by 6.9 percent to USD13.5m. Cement imports declined by 4.0 percent from the previous quarter to USD53.2m, while steel imports declined by 4.7 percent to USD7.2m. Fabric imports expanded by 49 percent to USD17.8m, while tractor imports declined by 13 percent to USD2.5m. Fertiliser imports dropped 3.0 percent to USD13m, while

diesel increased by 10.1 percent to USD49.6m and other imports by 62.5 percent to USD94.4m.

### Public Finance

Current revenue declined 13 percent compared with the previous quarter. Tax revenue rose 4.5 percent, and non-tax revenue dropped 57 percent. Capital revenue decreased 1.9 percent. However, capital expenditure expanded 142 percent from the previous quarter and current expenditure increased by 40 percent. Wages increased 46 percent, subsidies and social assistance increased 19 percent, and other current expenditures dropped 18 percent. Foreign financing rose 176 percent, while domestic financing contracted 54 percent.

### Inflation and Foreign Exchange Rates

In the second quarter, the consumer price index rose 4.1 percent year on year, food and non-alcoholic beverages rose 3.6 percent and transportation 8.7 percent. In the same quarter, the riel depreciated 0.7 percent against the US dollar and 2.3 percent against the Thai baht, while it appreciated 0.9 percent against the Vietnamese dong. Gold sold at USD142.9 per chi, an increase of 6.7 percent. Diesel traded at KHR3835/ℓ, an increase of 6.5 percent, and gasoline was KHR4358/ℓ, an increase of 4.7 percent.

### Monetary Developments

Total liquidity (M2) in the second quarter rose to KHR18,267bn from KHR17,234bn in the previous quarter. Riels in circulation dropped 2.8 percent to KHR2942bn, and riel deposits soared 43 percent to KHR173bn. During the same period, foreign currency deposits rose 7.5 percent to KHR14,787bn. Net foreign assets increased 6.2 percent to KHR16,482bn due to an increase in foreign assets of 1.0 percent to KHR18,487bn and an increase of foreign liabilities 6.0 percent to KHR2006bn. Net domestic assets increased 3.8 percent to KHR1785bn. Domestic credit rose to KHR9499bn and other liabilities to KHR7713bn.

### Poverty Situation

In August 2010, CDRI's survey found an increase in real daily earnings of seven types of vulnerable workers among the 10 groups, compared to the same

month last year. Cyclo drivers, porters, waitresses, small vegetable traders, motor taxi drivers, rice-field workers and garment workers found a better situation, while the other three groups' earnings decreased.

The average daily earnings of cyclo drivers increased 8.5 percent from the same month last year to KHR8393. Eighty-seven percent of cyclo drivers came from the provinces. Most of them spent six months a year working as cyclo drivers, after they produced a rice crop. Cyclo drivers spent an average of KHR4822 for their daily living, an increase of 13 percent compared to the same month last year. They saved around KHR3000 per day to support their families.

The average real daily earnings of vegetable traders increased by 0.7 percent compared to last year, to KHR8380. Their earnings have increased in each survey since November 2009. However, 67 percent of vegetable traders were short of capital to run their business; therefore most of them were in debt.

The average real daily earnings of motor taxi drivers increased to KHR10,544, 10.2 percent higher than in the same month last year. Normally, motor taxi drivers spent KHR5000 for food and then sent money home to support their families. Seventy percent of them said that the money they sent home was only for food, 19 percent said it was for running

a business, 3 percent for paying debt and 8 percent to pay for study. Fifty-two percent of the drivers reported that their living condition was better since they began this occupation, 28 percent that it was constant and 20 percent that it was worse.

The real daily earnings of scavengers declined to KHR6450—by 9 percent compared to the same month last year. Ninety percent of these interviewees reported that the decrease was due to an increased number of scavengers and lower rubbish prices. Eighty-seven percent of scavengers did not save but just survived from hand to mouth. Seventy-five percent reported that their families were in debt because of food shortages or illness. Eighty-eight percent of scavengers came from rural areas, and 67 percent of all scavengers had no land.

The real daily earnings of skilled construction workers decreased by 1.6 percent from August 2009, to KHR11,722. Sixty percent of workers interviewed reported that the decline was due to an increase in skilled construction worker numbers. After spending on food of KHR4300 per day, skilled construction workers could save KHR168,000 a month to send home; 57 percent said that their families were better off since they came to work in Phnom Penh.

The average real daily earnings of garment workers increased 14.3 percent from the same month last year. Increased working hours, which went up from 53 to

60 hours a week, were the main reason. Moreover, 50 percent of garment workers reported that their earnings increased compared to 2008, 18 percent of them that they stayed the same, 19 percent were not certain, and the other 13 percent said that their earnings decreased. Garment workers' food consumption increased by 25 percent to KHR5800 a day and they could save an average KHR52,600 per month for sending home.

### Cambodia Development Review—2010 Subscription Rates

#### Domestic Subscription (Individual)

☐ English edition (\$14) ☐ Khmer edition (5,000 riels) Payment by ☐ cash or ☐ local cheque (please add \$2 to cover bank charges for processing local cheques). Total payment enclosed.....

#### Domestic Subscription (Discount Price for Bulk Orders—Five Copies)

☐ English edition (\$60 for five copies) ☐ Khmer edition (20,000 riels for five copies) Payment by ☐ cash or ☐ local cheque (please add \$2 to cover bank charges). Total payment enclosed.....

#### International Subscription (Individual)

☐ Thailand, Laos, Vietnam ☐ English edition (\$25)\* ☐ Khmer edition (\$15)\*  
☐ Asia and Europe ☐ English edition (\$30)\* ☐ Khmer edition (\$20)\*  
☐ Americas and Africa ☐ English edition (\$35)\* ☐ Khmer edition (\$25)\*

\* Subscription includes postage. **Payment options:**

1. By Telegraphic Transfer – Please add \$10 for bank charges to the above Total Cost.

Transfer to: Account Name: CDRI  
 Account Number: 133451  
 Bank Name: ANZ Royal Bank  
 Bank Address: Phnom Penh, Cambodia  
 Swift Code: ANZBKHP  
 Receiver Correspondent Bank: JP Morgan Chase Manhattan Bank, New York  
 Swift Code: CHASUS33  
 CHIP UID 004966

2. By Cheque – Please add (overseas) \$50 for bank charges to the above Total Cost. Please make Cheque payable to CDRI, attach it to this invoice and send in to Publications.

Title: ☐ Mr ☐ Ms ☐ Dr ☐ Other .....

First name: ..... Last name: ..... Position: .....

Organisation / Company: .....

Address (CCC Box if applicable): .....

City / Province: ..... Country: .....

Telephone: ..... Fax: .....

e-mail: ..... ☐ Tick to receive regular information about CDRI publications via e-mail

To subscribe, please fill in this form and return it to CDRI with your payment. Do not send cash through the post.  
 You will need to inform the Publishing Department at CDRI if your contact details change.

# Economy Watch—Domestic Performance

Table 1. Private Investment Projects Approved, 2003–10

|                             | 2003                                    | 2004  | 2005   | 2006   | 2007   | 2008    | 2009  | 2009  | 2009  | 2009   | 2010   | 2010  |
|-----------------------------|---|-------|--------|--------|--------|---------|-------|-------|-------|--------|--------|-------|
|                             |   |       |        |        |        |         | Q1    | Q2    | Q3    | Q4     | Q1     | Q2    |
|                             | Fixed Assets (USD m)                    |       |        |        |        |         |       |       |       |        |        |       |
| Agriculture                 | 3.7                                     | 12.3  | 26.8   | 498.0  | 135.6  | 92      | 175.3 | 0.0   | 176.1 | 94.4   | 165.7* | 41.4  |
| Industry                    | 137.2                                   | 187.9 | 914.6  | 365.3  | 709.1  | 724.9   | 257.7 | 39.4  | 60.6  | 685.5  | 247.7  | 54.5  |
| <i>. Garments</i>           | 68.1                                    | 132.6 | 174.4  | 89.4   | 170.7  | 142.8   | 16.4  | 35.0  | 21.9  | 14.2   | 13.1   | 21.3  |
| Services                    | 168.4                                   | 91.8  | 155.5  | 2939.1 | 1742.5 | 10003.2 | 495.6 | 0.0   | 150.2 | 3475.8 | 89.5   | 121.6 |
| <i>. Hotels and tourism</i> | 124.1                                   | 55.9  | 102.6  | 345.0  | 1048.3 | 8758.1  | 254.1 | 0.0   | 150.2 | 0.0    | 3.78   | 14.0  |
| Total                       | 309.3                                   | 292.0 | 1096.9 | 3802.4 | 2587.2 | 10570.9 | 928.6 | 39.4  | 386.3 | 4255.7 | 502.9  | 217.5 |
|                             | Percentage change from previous quarter |       |        |        |        |         |       |       |       |        |        |       |
| Total                       | -                                       | -     | -      | -      | -      | -       | -41.2 | -95.7 | 882.0 | 1001.7 | -91.2  | -56.8 |
|                             | Percentage change from previous year    |       |        |        |        |         |       |       |       |        |        |       |
| Total                       | 22.1                                    | -5.6  | 275.6  | 246.6  | -32.0  | 308.6   | 266.5 | -99.0 | -91.5 | 169.3  | -59.8  | 452.0 |

Including expansion project approvals. Source: Cambodian Investment Board. \*Updated data

Table 2. Value of Construction Project Approvals in Phnom Penh, 2003–10

|                   | 2003                                    | 2004  | 2005  | 2006  | 2007  | 2008  | 2009  | 2009  | 2009  | 2009  | 2010  | 2010  |
|-------------------|---|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
|                   |   |       |       |       |       |       | Q1    | Q2    | Q3    | Q4    | Q1    | Q2    |
|                   | USD m                                   |       |       |       |       |       |       |       |       |       |       |       |
| Villas and houses | 20.0                                    | 30.3  | 45.5  | 33.1  | 79.1  | 154.7 | 32.1  | 6.7   | 2.2   | 9.8   | 5.1   | 7.5   |
| Flats             | 91.6                                    | 167.6 | 204.2 | 213.3 | 297.2 | 221.6 | 95.2  | 18.9  | 6.3   | 28.0  | 11.1  | 127.2 |
| Other             | 87.3                                    | 65.6  | 109.1 | 76.8  | 259.6 | 740.9 | 53.7  | 36.7  | 12.2  | 29.0  | 35.2  | 67.4  |
| Total             | 198.9                                   | 263.5 | 358.8 | 323.3 | 635.8 | 1117  | 181.1 | 62.3  | 20.7  | 66.8  | 51.4  | 202.1 |
|                   | Percentage change from previous quarter |       |       |       |       |       |       |       |       |       |       |       |
| Total             | -                                       | -     | -     | -     | -     | -     | -48.5 | -65.6 | -66.8 | 222.7 | -23.1 | 293.2 |
|                   | Percentage change from previous year    |       |       |       |       |       |       |       |       |       |       |       |
| Total             | -9.5                                    | 32.5  | 36.2  | -9.9  | 96.7  | 75.7  | 31.9  | -55.8 | -95.7 | -81.0 | -71.6 | 224.4 |

Source: Department of Cadastre and Geography of Phnom Penh municipality

Table 3. Foreign Visitor Arrivals, 2003–10

|                   | 2003                                    | 2004   | 2005   | 2006   | 2007   | 2008   | 2009  | 2009  | 2009  | 2009  | 2010  | 2010  |
|-------------------|---|--------|--------|--------|--------|--------|-------|-------|-------|-------|-------|-------|
|                   |   |        |        |        |        |        | Q1    | Q2    | Q3    | Q4    | Q1    | Q2    |
|                   | Thousands of visitors                   |        |        |        |        |        |       |       |       |       |       |       |
| By air            | 456.0                                   | 626.1  | 856.5  | 1029.0 | 1296.5 | 1239.4 | 335.2 | 221.2 | 247.2 | 308.1 | 371.5 | 260.9 |
| By land and water | 245.0                                   | 428.9  | 565.1  | 672.9  | 718.6  | 881.9  | 287.1 | 243.0 | 240.2 | 279.5 | 312.2 | 276.6 |
| Total             | 701.1                                   | 1055.0 | 1421.6 | 1701.9 | 2015.1 | 2121.3 | 622.3 | 464.2 | 487.4 | 587.6 | 683.7 | 537.5 |
|                   | Percentage change from previous quarter |        |        |        |        |        |       |       |       |       |       |       |
| Total             | -                                       | -      | -      | -      | -      | -      | 7.7   | -25.4 | 5.0   | 20.6  | 16.4  | -21.4 |
|                   | Percentage change from previous year    |        |        |        |        |        |       |       |       |       |       |       |
| Total             | -10.9                                   | 50.5   | 34.7   | 19.7   | 28.4   | 5.3    | -3.4  | 2.2   | 9.4   | 1.7   | 9.9   | 15.8  |

Source: Ministry of Tourism

Table 4. Exports and Imports, 2003–10

|                               | 2003                                    | 2004   | 2005   | 2006   | 2007   | 2008   | 2009   | 2009   | 2009   | 2009   | 2010   | 2010   |
|-------------------------------|---|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
|                               |   |        |        |        |        |        | Q1     | Q2     | Q3     | Q4     | Q1     | Q2     |
|                               | USD m                                   |        |        |        |        |        |        |        |        |        |        |        |
| Total exports                 | 1787.8                                  | 2189.4 | 2452.5 | 2920.4 | 3160.1 | 3206.9 | 568.94 | 558.11 | 618.84 | 648.87 | 496.06 | 519.21 |
| Of which: Garments*           | 1708.1                                  | 2108.1 | 2352.8 | 2810.8 | 3050.2 | 3097.8 | 462.2  | 492.4  | 535.5  | 579.3  | 433.3  | 505.4  |
| <i>. To U S</i>               | 1101.8                                  | 1281.7 | 1555.6 | 1851.7 | 1959.9 | 1913.0 | 88.0   | 88.1   | 89.3   | 80.1   | 76.7   | 85.2   |
| <i>. To EU</i>                | 419.2                                   | 593.1  | 506.9  | 603.0  | 660.9  | 693.4  | 108.6  | 128.3  | 125.7  | 113.8  | 102.5  | 115.9  |
| <i>. To ASEAN</i>             | 60.8                                    | 55.4   | 70.7   | 80.4   | 90.3   | 99.6   | 51.0   | 55.1   | 62.1   | 152.1  | 42.7   | 37.5   |
| <i>. To Japan</i>             | 18.3                                    | 23.0   | 25.0   | 40.6   | 30.1   | 26.5   | 110.9  | 112.8  | 149.3  | 128.3  | 124.1  | 154.8  |
| <i>. To rest of the world</i> | 108.0                                   | 154.9  | 194.6  | 235.1  | 309.0  | 365.3  | 103.7  | 108.1  | 109.1  | 105.0  | 87.3   | 112.0  |
| Agriculture                   | 79.7                                    | 81.3   | 99.7   | 109.6  | 109.9  | 109.1  | 106.74 | 65.71  | 83.34  | 69.57  | 62.76  | 13.81  |
| <i>. Rubber</i>               | 35.1                                    | 38.3   | 36.7   | 41.5   | 41.0   | 35.8   | 11.79  | 8.27   | 15.08  | 16.49  | 11.94  | 13.81  |
| <i>. Wood</i>                 | 10.2                                    | 11.1   | 10.3   | 8.6    | 8.7    | 3.4    | 0.55   | 0.5    | 0.64   | 1.83   | 2.75   | 4.48   |
| <i>. Fish</i>                 | 2.8                                     | 10.6   | 10.1   | 5.9    | 3.2    | 2.3    | 0.83   | 0.85   | 1.11   | 1.2    | 0.81   | 0.56   |
| <i>. Other</i>                | 31.6                                    | 21.3   | 42.6   | 53.6   | 57.0   | 67.6   | 93.57  | 56.09  | 66.51  | 50.05  | 47.26  | 51.15  |
| Total imports*                | 1824.9                                  | 2148.9 | 2513   | 512.2  | 554.8  | 1010.9 | 173    | 177.8  | 148.8  | 133.2  | 139.3  | 174.8  |
| Of which: Gasoline            | 33.2                                    | 30.2   | 40.2   | 38.8   | 58.7   | 70.1   | 16.8   | 15.6   | 19.3   | 19.4   | 22.0   | 17.3   |
| Diesel                        | 109.6                                   | 109.4  | 93.1   | 113.0  | 122.8  | 113.5  | 34.2   | 40.0   | 46.0   | 43.1   | 44.7   | 49.6   |
| Construction materials        | 80.8                                    | 95.3   | 134.7  | 56.5   | 69.0   | 77.8   | 13.8   | 14.8   | 15.7   | 13.3   | 14.5   | 13.5   |
| Other                         | 1601.3                                  | 1914.0 | 2245   | 303.9  | 304.3  | 749.5  | 108.2  | 107.4  | 67.8   | 57.4   | 58.1   | 94.4   |
| Trade balance                 | -37.1                                   | 40.5   | -60.5  | 2408.2 | 2605.3 | 2196   | 395.94 | 380.31 | 470.04 | 515.67 | 356.76 | 344.41 |
|                               | Percentage change from previous quarter |        |        |        |        |        |        |        |        |        |        |        |
| Total garment exports         | -                                       | -      | -      | -      | -      | -      | -16.0  | 6.5    | 8.8    | 8.2    | -25.2  | 16.6   |
| Total exports                 | -                                       | -      | -      | -      | -      | -      | -1.7   | -1.9   | 10.9   | 4.9    | -23.6  | 4.7    |
| Total imports                 | -                                       | -      | -      | -      | -      | -      | -6.5   | 2.8    | -16.3  | -10.5  | 4.6    | 25.5   |
|                               | Percentage change from previous year    |        |        |        |        |        |        |        |        |        |        |        |
| Total garment exports         | 20.1                                    | 23.4   | 11.6   | 19.5   | 8.5    | 1.6    | -5.4   | -7.0   | -11.4  | 5.3    | -6.3   | 2.6    |
| Total exports                 | 17.5                                    | 22.5   | 12.0   | 19.1   | 8.2    | 1.5    | 12.1   | -5.5   | -3.0   | 12.1   | -12.8  | -7.0   |
| Total imports                 | 6.9                                     | 17.8   | 16.9   | -79.6  | 8.3    | 82.2   | 30.9   | -67.5  | 0.0    | -28.0  | -19.5  | -1.7   |

Import data include tax-exempt imports. Sources: Department of Trade Preferences Systems, MOC and Customs and Excise Department, MEF (web site). Updated data

**Table 5. National Budget Operations on Cash Basis, 2003–10 (billion riels)**

|                                 | 2003   | 2004   | 2005   | 2006   | 2007   | 2008    | 2009   |        |        |        |        | 2010   |
|---------------------------------|--------|--------|--------|--------|--------|---------|--------|--------|--------|--------|--------|--------|
|                                 |        |        |        |        |        |         | Q1     | Q2     | Q3     | Q4     | Q1     | Q2     |
| Total revenue                   | 1764.0 | 2126.0 | 2625.0 | 3259.2 | 1146.1 | 5290.0  | 1101.7 | 1252.7 | 1184.7 | 1346.1 | 1536.8 | 1341.1 |
| Current revenue                 | 1733.0 | 2107.0 | 2474.0 | 2881.8 | 1141.6 | 5210.7  | 1097.7 | 1245.7 | 1174.9 | 1337.7 | 1526.4 | 1330.9 |
| Tax revenue                     | 1220.0 | 1577.0 | 1911.0 | 2270.9 | 965.2  | 4409.9  | 947.4  | 1096.5 | 999.5  | 1224.1 | 1094.1 | 1143.8 |
| Domestic tax                    | -      | -      | -      | -      | 661.8  | 3248.4  | 712.0  | 838.7  | 731.8  | 808.5  | 820.3  | 890.9  |
| Taxes on international trade    | -      | -      | -      | -      | 303.5  | 1161.5  | 235.4  | 257.8  | 268.0  | 303.4  | 273.7  | 253.0  |
| Non-tax revenue                 | 513.0  | 530.0  | 563.0  | 610.9  | 176.4  | 800.8   | 150.3  | 149.2  | 176.1  | 225.7  | 432.4  | 187.1  |
| Property income                 | -      | -      | -      | -      | 13.6   | 78.0    | 13.1   | 9.7    | 27.5   | 14.3   | 237.0  | 20.2   |
| Sale of goods and services      | -      | -      | -      | -      | 124.3  | 424.7   | 93.5   | 100.9  | 91.7   | 121.9  | 108.4  | 102.9  |
| Other non-tax revenue           | -      | -      | -      | -      | 38.5   | 298.2   | 43.7   | 38.6   | 56.5   | 89.5   | 84.0   | 61.0   |
| Capital revenue                 | 31.0   | 19.0   | 152.0  | 377.4  | 4.5    | 79.3    | 4.0    | 7.0    | 9.8    | 8.4    | 10.4   | 10.2   |
| Total expenditure               | 2757.0 | 2932.0 | 3295.0 | 4174.7 | 1689.7 | 6297.8  | 1650.6 | 1766.1 | 2089.5 | 1877.1 | 2129.4 | 2154.8 |
| Capital expenditure             | 1171.0 | 1163.0 | 1328.0 | 1638.1 | 807.4  | 2574.4  | 693.6  | 607.1  | 759.2  | 634.9  | -      | 913.0  |
| Current expenditure             | 1586.0 | 1769.0 | 1967.0 | 2536.8 | 882.3  | 3809.0  | 752.4  | 1064.7 | 1290.4 | 1332.3 | 831.8  | 1168.1 |
| Wages                           | 615.0  | 640.0  | 711.0  | 822.0  | 362.6  | 1397.0  | 327.4  | 515.5  | 526.6  | 642.5  | -      | 545.6  |
| Subsidies and social assistance | -      | -      | -      | -      | 194.2  | 927.1   | 217.3  | 185.9  | 272.6  | 195.6  | 213.3  | 253.2  |
| Other current expenditure       | -      | -      | -      | -      | 325.5  | 1384.9  | 207.7  | 363.2  | 491.2  | 494.3  | 449.6  | 369.3  |
| Overall balance                 | -993.0 | -806.0 | -706.0 | -915.6 | -543.6 | -1007.8 | -548.9 | -513.4 | -904.8 | 90.2   | -592.6 | -813.7 |
| Foreign financing               | 886.0  | 864.0  | 1127.0 | 1360.7 | 741.5  | 2055.1  | 507.8  | 326.7  | 484.5  | -531.0 | 270.8  | 746.0  |
| Domestic financing              | 106.0  | 148.0  | -396.0 | -445.1 | -185.8 | -127    | -310.3 | 236.5  | 316.4  | 406.4  | 422.8  | 194.1  |

Source: MEF web site.

**Table 6. Consumer Price Index, Exchange Rates and Gold Prices (period averages), 2003–10**

|                               | 2003  | 2004   | 2005   | 2006   | 2007   | 2008   |        |        |        |        | 2009   | 2010   |
|-------------------------------|---|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
|                               |   |        |        |        |        |        | Q1     | Q2     | Q3     | Q4     | Q1     | Q2     |
| (October-December 2006:100)   | Consumer price index (percentage change over previous year)   |        |        |        |        |        |        |        |        |        |        |        |
| Phnom Penh:                   | 1.1   | 3.9    | 5.8    | 4.7    | 5.8    |        | 4.3    | -4.8   | -3.0   | 1.7    | 7.0    | 4.1    |
| - All Items                   |   |        |        |        |        | 19.7   |        |        |        |        |        |        |
| - Food & non-alcoholic bev.   | 1.5   | 6.4    | 8.6    | 6.4    | 9.9    | 33.1   | 6.1    | -5.2   | -2.7   | 1.8    | 7.8    | 3.6    |
| - Transportation              | 4.9   | 9.7    | 11.4   | 9.1    | 5.8    | 19.4   | -13.0  | -16.5  | -13.8  | 2.4    | 12.9   | 8.7    |
|                               | Exchange rates, gold and oil prices (Phnom Penh market rates) |        |        |        |        |        |        |        |        |        |        |        |
| Riels per US dollar           | 3973.3  | 4016.3 | 4119.7 | 4119.0 | 4062.7 | 4058.2 | 4111.6 | 4128.6 | 4164.4 | 4157.3 | 4180.1 | 4209.0 |
| Riels per Thai baht           | 95.8  | 99.9   | 102.6  | 108.7  | 122.8  | 123.5  | 116.6  | 119.2  | 122.9  | 126.0  | 127.0  | 129.9  |
| Riels per 100 Vietnamese dong | 25.6  | 25.5   | 25.8   | 25.1   | 25.0   | 24.8   | 23.6   | 23.3   | 23.5   | 23.0   | 22.3   | 22.1   |
| Gold (US dollars per chi)     | 41.4  | 46.3   | 54.0   | 70.6   | 83.2   | 105.9  | 105.6  | 110.7  | 123.2  | 133.8  | 133.9  | 142.9  |
| Diesel (riels/litre)          | 1508.0  | 2088.0 | 2633.0 | 3140.0 | 3262.3 | 4555.2 | 2873.7 | 3056.9 | 3867.0 | 3381.9 | 3599.5 | 3835.1 |
| Gasoline (riels/litre)        | 2150.0  | 2833.0 | 3442.0 | 4004.0 | 4005.0 | 4750.8 | 3112.6 | 3452.4 | 3371.1 | 3940.2 | 4163.0 | 4358.7 |

Sources: NIS, NBC and CDRI

**Table 7. Monetary Survey, 2003–10 (end of period)**

|                          | 2003                                 | 2004    | 2005    | 2006    | 2007     | 2008     | 2009     |          |          |          |          | 2010     |
|--------------------------|--------------------------------------|---------|---------|---------|----------|----------|----------|----------|----------|----------|----------|----------|
|                          |                                      |         |         |         |          |          | Q1       | Q2       | Q3       | Q4       | Q1       | Q2       |
|                          | Billion riels                        |         |         |         |          |          |          |          |          |          |          |          |
| Net foreign assets       | 4027.0                               | 4,797.0 | 5,475.0 | 7,224.0 | 10,735.0 | 10,345.0 | 11,222.0 | 12,611.0 | 13,869.0 | 14,655.0 | 15,514.6 | 12,610.9 |
| Net domestic assets      | -698.0                               | -467.0  | -450.0  | -282.0  | 576.0    | 1513.3   | 1,266.0  | 1,249.0  | 1,042.0  | 1,573.0  | 1,720.0  | 1,785.3  |
| Net claims on government | -128.0                               | -209.0  | -421.0  | -953.0  | -1816.0  | -2987.0  | -3048.0  | -2889.0  | -2463.0  | -2252.0  | -2484.8  | -2362.7  |
| Credit to private sector | 1337.0                               | 1817.0  | 2394.0  | 3630.0  | 6386.0   | 9894.0   | 9814.0   | 10,129.0 | 10,127.0 | 10,532.0 | 11,146.7 | 11,859.1 |
| Total liquidity          | 3329.0                               | 4330.0  | 5025.0  | 6942.0  | 11,311.0 | 11,858.0 | 12,488.0 | 13,859.0 | 14,912.0 | 16,228.0 | 17,234.5 | 18,267.1 |
| Money                    | 937.0                                | 1153.0  | 1323.0  | 1658.0  | 2052.0   | 2399.0   | 2545.0   | 2695.0   | 2773.0   | 3120.0   | 3148.5   | 3115.1   |
| Quasi-money              | 2392.0                               | 3177.0  | 3702.0  | 5285.0  | 9259.0   | 9459.0   | 9942.0   | 11,164.0 | 12,139.0 | 13,108.0 | 14,086.0 | 15,152.0 |
|                          | Percentage change from previous year |         |         |         |          |          |          |          |          |          |          |          |
| Total liquidity          | 15.2                                 | 30.0    | 16.1    | 38.1    | 62.9     | 4.8      | 3.7      | 9.1      | 18.7     | 36.9     | 38.0     | 6.0      |
| Money                    | 15.3                                 | 23.0    | 14.7    | 25.3    | 23.8     | 16.9     | 6.5      | 9.2      | 18.7     | 30.1     | 23.7     | -1.1     |
| Quasi-money              | 15.2                                 | 32.8    | 16.6    | 42.8    | 75.2     | 2.2      | 2.9      | 9.1      | 18.7     | 38.6     | 41.7     | 7.6      |

Source: National Bank of Cambodia

**Table 8. Real Average Daily Earnings of Vulnerable Workers (base November 2000)**

|                                | Daily earnings (riels) |             |             |             |        |        |             |        |        | Percentage change from previous year |             |        |
|--------------------------------|------------------------|-------------|-------------|-------------|--------|--------|-------------|--------|--------|--------------------------------------|-------------|--------|
|                                | 2007                   | 2007<br>Nov | 2008<br>Nov | 2009<br>May | Aug    | Nov    | 2010<br>Feb | May    | Aug    | Feb                                  | 2010<br>May | August |
| Cyclo drivers                  | 8075                   | 9675        | 12628       | 8896        | 7738   | 7446   | 9413        | 9570   | 8393   | 10.3                                 | 7.6         | 8.5    |
| Porters                        | 8588                   | 9119        | 9005        | 10,319      | 8159   | 9566   | 9953        | 9340   | 10,500 | -5.0                                 | -9.5        | 28.7   |
| Small vegetable sellers        | 8220                   | 8552        | 9926        | 9764        | 8323   | 7647   | 7826        | 8062   | 8380   | 2.8                                  | -17.5       | 0.7    |
| Scavengers                     | 5422                   | 5727        | 4652        | 6637        | 7087   | 4693   | 6238        | 7407   | 6452   | 21.7                                 | 11.6        | -9.0   |
| Waitresses*                    | 4482                   | 4643        | 4327        | 4346        | 4574   | 5568   | 5131        | 5380   | 6418   | 19.8                                 | 23.8        | 40.3   |
| Rice-field workers             | 5516                   | 6426        | 8697        | 7126        | 5785   | 5003   | 5358        | 6260   | 6177   | -23.9                                | -12.2       | 6.8    |
| Garment workers                | 7568                   | 7240        | 6554        | 6691        | 7410   | 7745   | 7557        | 7491   | 8470   | 11.9                                 | 12.0        | 14.3   |
| Motorcycle-taxi drivers        | 10,634                 | 11,872      | 15,691      | 12,148      | 9569   | 9696   | 11,302      | 10,274 | 10,544 | -3.0                                 | -15.9       | 10.2   |
| Unskilled construction workers | 6155                   | 7777        | 8779        | 9956        | 9444   | 8132   | 7699        | 9013   | 11,722 | 25.9                                 | -9.5        | -1.6   |
| Skilled construction workers   | 11,154                 | 11,286      | 12,710      | 13,688      | 11,918 | 13,011 | 11,924      | 11,928 | 8733   | 1.3                                  | -12.9       | -7.5   |

\* Waitresses' earnings do not include meals and accommodation provided by shop owners. Surveys on the revenue of waitresses, rice-field workers, garment workers, unskilled workers, motorcycle taxi drivers and construction workers began in February 2000. Source: CDRI



*Continued from page 32* **CDRI Update**

*UN LDC IV*, co-hosted by the Centre for Policy Dialogue of Bangladesh, the OECD Development Centre and UNDP, and held in Dhaka, Bangladesh.

On 9 December CDRI hosted its annual review meeting with the Swedish International Development Agency (Sida) to review the institute's overall performance and major research outputs in 2010, and that of its Democratic Governance and Public Sector Reform Programme, for both of which CDRI has received strong ongoing support from Sida, and to discuss future CDRI and Sida research and policy priorities and arrangements for the extension of Sida's support for 2011-15.

In mid-December the Executive Director led a delegation of representatives of the Greater Mekong Subregion Development Analysis Network (GMS-DAN), the collaborative network of development policy research institutes in Cambodia, Laos, Thailand, Vietnam and Yunnan province of China, currently coordinated by CDRI with support from the Rockefeller Foundation, to the Asian Development Bank headquarters in Manila, to explore a possible future strategic partnership. He then represented CDRI at the Rockefeller Partners Conference on *Overcoming Inequities in Asia* held in Bangkok.

**Research**

The following research and related activities took place over the period October to December 2010:

**Democratic Governance and Public Sector Reform Programme (DGPSR)**

Ten projects were undertaken and one workshop was held. For *Analysing the Cambodian State: In Search of a Path to Development Success*, the study team held a reading discussion and wrote the first draft report. An article based on the *Qualitative Impact Assessment of One-Window Service*, a commissioned project funded by the World Bank, has been written for inclusion in the Annual Development Review 2010-11. A workshop to present the team's findings on the *Gender Power Analysis* project, commissioned by the International Centre for Local Democracy, Sweden, was held; comments received are being worked on and the report will be finalised at the end

of December. A site visit to Kampong Chhnang for the *Catchment Governance: Cooperation Dilemmas in Appropriating Irrigation Water* project was made on 2-4 December. The framework for the working paper on *Irrigation Governance*, a collaborative project with the NRE Programme, was finalised; the first full draft should be ready by April 2011 and publication is anticipated for June 2011.

The project *Public Sector Reforms in Building Good Governance of Irrigation Water in Cambodia: The Gap between Policy and Practice* is on hold because team members have been working on the *Water Resources Management Research Capacity Development Programme* in collaboration with NRE. For the project *Deconcentration and Decentralisation in Cambodia: The Dichotomy between Centralisation and Decentralisation*, the team is writing chapter 4 of the working paper "Analysis of Decentralisation & Deconcentration in the Context of Cambodian Hybridity". Fieldwork for the project *Irregular Migration in Cambodia: Challenges and Policy Responses* was completed in collaboration with the ETRC Programme; the team is analysing the data and writing the first draft report which is scheduled for completion by the end of 2010. The study team for the *Baseline Survey of Sub-national Government: Towards a Better Understanding of Decentralisation and Deconcentration Reform in Cambodia* is finalising the sampling design and questionnaire. Finally, the team is working on the literature review and identification of assessment indicators for the project *Developing Impact Assessment Methodology for Mine Action in Cambodia*.

**Economy, Trade and Regional Cooperation Programme (ETRC)**

Eight research projects have been carried out. The *Vulnerable Worker Survey* and *Provincial Price Survey* are progressing well. The first draft report on *Poverty and Environment Links: A Case Study from Rural Cambodia*, the second component of the Poverty Network Project, has been submitted to the Asian Development Bank for comment and the research team presented preliminary findings at the regional conference on "The Environment of the Poor: In the Context of Climate Change and the Green Economy" held in New Delhi, India, on 24-26 November. The first draft report for *Different*

*Streams, Different Needs and Impact: Managing International Labour Migration in ASEAN* is in progress and will be ready for review early next year and preparations for the technical workshop to be held in Manila, the Philippines, in January 2011 are in hand.

The *Growth Diagnostic* project is in good progress; the first draft report has been submitted to the North-South Institute (Canada) for further comments and the consultation workshop on the three countries' report (Cambodia, Lao PDR and Vietnam) was held on 16 December. The report on the *Analysis of International Investment in the Agricultural Sector of Cambodia* is being drafted and fieldwork to supplement desk review data is scheduled for the third week of December. The reports on *Major Challenges along the Growth Trajectory: Structural Transformation and the Role of Government* and *Search for Growth Potential and Evaluation of Growth Potential in Cambodia* are being revised based on comments received from the Korea Development Institute and other participants during the interim reporting and policy practitioners' workshop held in Seoul, Korea in October. Two manuscripts – *Costs and Benefits of Cross-Country Labour Migration in the GMS* and *Assessing China's Impact on Poverty Reduction in the Greater Mekong Sub-region*, comprising the sixth and the eighth series of GMS country studies by the Development Analysis Network, are being finalised for international publication by ISEAS. CDRI is currently identifying strategic partners to support DAN from 2011 onwards.

The Development Research Forum (DRF) third annual symposium on “*Research and Policy Response to Cambodia's Recovery and Development*”, held in Phnom Penh on 9-10 September, was an outstanding success: it gained greater recognition from a broad spectrum of stakeholders in the development field and contributed significantly to promoting policy-research links, enhancing development knowledge sharing and generation, and deepening development research networks in Cambodia. The DRF also published its *Scoping Study: Research Capacities of Cambodia's Universities* in both English and Khmer languages and continues to provide support to university seminars, collaborative research grants

and special research interest groups. The programme has been awarded two new projects: *Global Financial Crisis and Vulnerability in Cambodia* funded by the International Development Research Centre; and *Analysing Chronic Poverty in Rural Cambodia: Evidence from Panel Data* funded by the East Asian Development Network. *Global Financial Crisis and Vulnerability in Cambodia* is a two-year project being undertaken in collaboration with the Supreme National Economic Council, the National Institute of Statistics, the Council of Ministers and the Royal University of Phnom Penh.

### **Natural Resources and Environment Programme (NRE)**

The team continued working on three main research projects – the governance, physical and economic components of the *Water Resources Management Research Capacity Development Programme*. The working paper on irrigation governance for the governance component is almost complete, the hydrological analysis working paper and the policy brief for the physical component are being published, and the working paper on the value of water in farming for the economic component has been finalised. The project team organised three provincial workshops in Kampong Thom, Pursat and Kampong Chhnang aimed at disseminating the research results and receiving feedback from stakeholders, as well as the national workshop and the seventh consultative committee meeting for effective and sustainable water resources management held in Phnom Penh on 8-9 December.

The working paper for the project *Tropical Forests for Poverty Alleviation – from Household Data to Global Analysis* has been drafted and sent out for comments. The team for the *Building Community Capacity for Poverty Reduction Initiatives in the Tonle Sap Basin* project drafted the survey results on commune capacity and readiness. The team continued its efforts to collect material for the Tonle Sap Resource Centre (housed at the CDRI library) and to make these resources more available. The project team has identified more communes around Tonle Sap Lake for scaling up its survey activities.

### Poverty, Agriculture and Rural Development Programme (PARD)

Three projects have been completed, namely: *Poverty Dynamics Study*; *Building Resilience of Community Fisheries in the Tonle Sap Lake: Collective Action and the Capacity to Manage Resource*; and *Assessing the Socioeconomic Effects of the GMS-Southern Coastal Corridor and GMS-Communicable Disease Control*.

The team continued working on four ongoing projects. For the *Stocktaking on Food Security, Nutrition, and Agricultural Development Policy in Cambodia* project, two reports have been written and six papers were presented and distributed at the Round Table with representatives of key government institutions, donor agencies, and non-governmental organisations held on 4 November. Preliminary field visits to Svay Rieng, Battambang, and Siem Reap for the project *Impact Assessment of Farmer Organisations on Food Security for the Rural Poor* were undertaken and the inception report was revised according to comments from the World Bank and AusAID. Literature and national datasets are being reviewed for the *Development of Impact Assessment Methodology for Mine Action Sector in Cambodia* project to identify gaps and relevant indicators for impact assessment. The literature review for the *Policy Coherence for Agriculture and Rural Development* project is also underway and the research design, including the case studies from which analyses will be drawn, is being finalised. A preparation meeting to finalise the research framework and research instrument for the key informant interviews was held in London on 23-26 November.

### Social Development Programme (SD)

Three projects were carried out. The final manuscript for *Improving Health Sector Performance: Institutions, Motivations and Incentives*, a collection of papers presented at the international health conference organised by CDRI in collaboration with the Oxford Policy Institute in April 2010, has been sent to the publisher for review; this publication is funded by the University Research Co., LLC. The project team is preparing a paper on *Catastrophic Payments for Health Care of Households* for the EQUITAP<sup>1</sup> initiative funded by AusAID and has submitted the preliminary results of the analysis to the coordinators for feedback. The sampling design and questionnaire for the *Baseline Survey of Sub-national Government: Towards a Better Understanding of Decentralisation and Deconcentration Reform in Cambodia*, a joint project with the DGPSR Programme, are being finalised.

The successful course on “Working Together for Peace and Development” conducted by the Peace Building Training Programme in Rotonak Mondol district, Battambang province focused mainly on land conflict, the core issue in this district. Drawing on CDRI research findings, the team also carried out a Training Needs Assessment in Kampong Klaing commune, Soutr Nikom district, Siem Reap province. This will be the basis for a training course on “Conflict Management, Resolution, and Good Governance” to be held in this community in mid-December. The team also ran a training course on “The Role of the Press in Peace Building” for journalists from the mass media and local press associations.

<sup>1</sup> EQUITAP stands for Equity in Asia-Pacific Health Systems and is the collaborative effort of more than fifteen research teams in Asia and Europe engaged in examining equity in national health systems in the Asia-Pacific region. The collaboration involves the development of methodological tools, and actual assessment of the performance of national health systems.

## CDRI UPDATE

## Management

On 18-19 October CDRI's Executive Director attended the ISEAS Regional Conference held in Singapore on the theme *Greater Mekong Subregion: From Geographical Corridor to Socioeconomic Corridor* to present the topic *Cambodia, Its Development and Subregional Integration in the GMS - A Work in Progress*.

Over the period October to December, CDRI continued to develop its new Cambodia 2020 Research Strategy which will set longer term research and policy priorities to underpin its Strategic Plan 2011-15, both of which will be presented for discussion and endorsement at the next full board meeting on 17 March 2011. These will also be utilised during 2011 as tools in advocating more coordinated programme-based support for CDRI's research and dissemination from Cambodia's development partners and other sources of funding and institutional collaboration.

On 16-19 November CDRI held its 2010 planning retreat – the final event in the programme of activities for CDRI's 20<sup>th</sup> anniversary (1990-2010), involving all management and staff, in Siem Reap. The retreat comprised six sessions:

- A changing Cambodia – opportunities and challenges for CDRI
- Review of the major goals of CDRI's 2006-10

Strategic Plan – What did we achieve? What did we not achieve well enough? What are the lessons for the future?

- CDRI's Cambodia 2020 Research Strategy – major themes, questions and issues
- Major achievements of all programmes and units in 2010; priorities and issues for the 2011-15 Strategic Plan
- The way forward for CDRI – How do we want CDRI to be different in 2015? Priorities for the next stage of CDRI's institutional strengthening and succession management
- Why is CDRI important? How can we express our commitment to CDRI and its future? Final ideas and suggestions for the future.

The outcomes of the rich discussion at the retreat will be reflected in the new Cambodia 2020 Research Strategy and CDRI Strategic Plan 2011-15.

In November the vacancy for the position of Director of Research was re-advertised, locally and internationally, to attract a broader field of suitable qualified candidates. Interviews will be held in early 2011. Further details are available on the CDRI website.

On 24-26 November the Executive Director represented CDRI at the *International Dialogue on Exploring a New Global Partnership for Least Developed Countries (LDCs) in the Context of the*

*Continued on page 29*



**CAMBODIA DEVELOPMENT REVIEW**  
A Publication of CDRI—  
Cambodia's leading independent  
development policy research institute

Volume 14, Issue 4 (October-December 2010)

Cambodia Development Review is published four times a year in simultaneous English- and Khmer-language editions by the Cambodia Development Resource Institute in Phnom Penh.

Cambodia Development Review provides a forum for the discussion of development issues affecting Cambodia. Economy Watch offers an independent assessment of Cambodia's economic performance.

Cambodia Development Review welcomes correspondence and submissions. Letters must be signed and verifiable and must include a return address and telephone number. Prospective authors are advised to contact CDRI before submitting articles, though unsolicited material will be considered. All submissions are subject to editing. CDRI reserves the right to refuse publication without explanation.

Responsibility for the ideas, facts and opinions presented in the Cambodia Development Review rests solely with the authors. Their opinions and interpretations do not necessarily reflect the views of CDRI.

## CDRI's Contact Details

☎ 56, Street 315, ☎ PO Box 622, Phnom Penh, Cambodia  
☎ (855-23) 881-701/ 881-384/ 012 867 278; ☎ (855-23) 880-734  
e-mail: [cdri@wicam.com.kh](mailto:cdri@wicam.com.kh) / [pubs@cdri.forum.org.kh](mailto:pubs@cdri.forum.org.kh)  
website: <http://www.cdri.org.kh>



9 789995 052058

Publisher: CDRI  
Managing Editor: YOU Sethirith,  
Production Editor: OUM Chantha  
Cover Photograph: CDRI's staff courtesy

Printing: Japan Printing House, Phnom Penh

© 2010 CDRI. All rights reserved. No part of this publication may be reproduced, stored in a retrieval system or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without written permission from CDRI.

ISBN 978-99950-52-05-8