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## Urban Land Titles, Formal Credit and SME Investment

Brett Ballard and Phim Runsinarith discuss the potential relationship between land titling, affordable credit and small and medium enterprise (SME) investment in three urban areas of Cambodia.\*

This article discusses the potential relationship between land titling, affordable credit and small and medium enterprise (SME)<sup>1</sup> investments in three urban areas of Cambodia. Data gathered in late 2005 in conjunction with CDRI's urban land titling baseline survey suggest that SMEs are a potentially important source of employment in Phnom Penh, Siem Reap and Serei Saophoan (Banteay Meanchey). The employment impact of land titles therefore may be significant to the extent that they stimulate increased SME investments in new start-ups and expansions by promoting a more secure sense of tenure and aiding access to more affordable credit.

The assumptions and predictions about the expected benefits of land titling programmes are primarily based on property rights theories that link investment incentives to secure tenure. The basic argument is that people are more likely to invest in economically productive activities when they are confident that they, or their heirs, will enjoy the benefits of such investments (Brandao and Feder 1996; Barzel 1997). In regard to poverty reduction, de Soto (2000) has also argued that the poor in developing countries possess substantial assets, albeit in the form of "dead capital"<sup>2</sup> that cannot easily be used for investment. Governments should therefore provide property ownership in the form of legal titles, which the poor can then use as collateral to secure credit for investments in housing improvements, SMEs or other productive activities.

According to these arguments, the use of formal land titles to govern land tenure must be understood as part of a market-based approach to urban development that takes place within a broad arena of formal institutions.

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A SME producing steel doors and windows on street 271, Phnom Penh

These institutions include formal credit arrangements and well-regulated real estate markets (e.g., land use master plans, enforced zoning) that underpin any robust business environment (Payne et al. 2007).

The urban land titling baseline survey was conducted in October–December 2005. In Phnom Penh municipality, 1663 households were surveyed in three of four urban districts and all three peri-urban districts.<sup>3</sup> Of these, 439 (28.4 percent) reported owning 470 SMEs, about 1.09

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SMEs per owner. In Siem Reap district, 536 households were interviewed in the urban commune of Sala Kamraeuk and the peri-urban commune of Siem Reap. Of these, 164 households reported owning a total of 192 SMEs, which

means that about 30.6 percent of the survey households operate an average of 1.17 SMEs. In and around Serei Saophoan town, 507 households were interviewed in the three communes of Kompong Svay, Preah Ponlea and Ou Ambel, where 241 households reported operating a total of 285 SMEs, an average of 1.18 SMEs per owner.

Table 1 shows that in all three urban areas, SME employment has increased since the businesses were initiated. In Phnom Penh, employment increased from 2.38 at the time of start-up to a current average of 3.13 employees, while in Siem Reap, employment has increased even more, from 3.42 to 3.78 per business. In Serei Saophoan, it has increased from 2.35 to 2.69. Given the definition of SMEs based on the number of employees, almost all the SMEs covered in the survey were in fact small businesses, while only a few could be considered medium. Assuming that the survey sample is representative of the general population, it would appear that the potential employment impact of SME development is significant.

It is therefore important to consider how these small businesses have been financed. Table 2 shows that in Phnom Penh, 91.9 percent of all sources of finance were "own sources". Siem Reap and Serei Saophoan had similarly high percentages of "own sources" financing at 86.1 percent and 85.0 percent respectively. In all three areas, informal moneylenders seemed to play almost no role in financing SMEs, while only a small number of loans were reported from commercial banks.

These observations raise the question of why so many small business owners continue to rely on own sources and family to finance business start-ups as well as to maintain or expand businesses. In a previous study, Kang (2005) concluded that a well-developed banking system may not be necessary for starting new businesses despite the conventional wisdom of traditional development economics. The security of contracts associated with borrowing from formal institutions may be offset by high levels of personal trust associated with informal

**Table 2: Sources of Business and Livelihood Expenditures**

Location	Own Sources		Family		Moneylender		Private Bank		Other		Total
	No	%									
Phnom Penh	440	91.9	29	6.1	1	0.2	4	0.8	5	1.0	479
Siem Reap	167	86.1	16	8.2	0	0	9	4.6	2	1.0	194
Serei Sophoan	256	85.0	26	8.6	0	0	7	2.3	12	4.1	301

borrowing.

Another possible factor is that investors may be unsure of or lack confidence in the viability of their venture. In Phnom Penh, for example, more than 81 percent of SME respondents who said that they were not seeking loans indicated that they either "strongly agreed" or "somewhat agreed" with the reason that expected profit from the business would not be higher than the interest on the loan. In Siem Reap, the figure was 75.5 percent.

Kang found that 70.1 percent of 648 surveyed SMEs ranked a lack of capital as the most significant constraint on business expansion, regardless of the location, size or type of enterprise. As the lack of capital seemed to be associated with an "insufficient accumulation of profit", Kang views the development of a sound banking system and legal security of contract as key components for solving these kinds of investment problems. In this sense, there is general agreement that better access to formal credit could and should play a larger role in financing capital investments.

In start-ups and expansion, collateral requirements are a constraint. Indeed, Kang found that 52 percent of 137 SMEs that sought a bank loan were refused, and of these, 60 percent were refused because of a lack of collateral. In the urban land titling study, among the Phnom Penh SMEs, 44.2 percent indicated that they "strongly agreed" or "somewhat agreed" that collateral requirements inhibited them from seeking commercial loans. About 30.5 percent also indicated that they "strongly agreed" or "somewhat agreed" that they had been refused a loan because of a lack of collateral. In Siem Reap, 45.1 percent indicated they strongly agreed or somewhat that collateral requirements prevented them seeking commercial loans.

This situation seems to be changing. According to recent discussions with bank officials, the number of loan applications and approvals has increased dramatically over the past year, especially for business expansions, including SMEs. According to anecdotal evidence, investors are still reluctant to borrow from commercial

banks for business start-ups because they are not willing to take loans when they are unsure of the returns on the investment. As a result, business start-ups continue to rely

**Table 1: SME Employment, by Location**

Location	No. of households	Permanent Workers		Daily Labour		Family Members		Total	
		Start	Current	Start	Current	Start	Current	Start	Current
Phnom Penh	436	239	310	59	125	739	929	1037	1364
Siem Reap	162	53	87	148	160	353	365	554	612
Serei Sophoan	241	53	92	36	46	477	511	566	649

primarily on own sources as well as on family and friends. However, once the business is up and running and owners see a steady and predictable flow of returns, they appear more willing to obtain loans from commercial banks to expand their businesses.

Such shifts in attitude about borrowing from commercial banks appear to be relatively recent. As the business climate in Cambodia improves and investors develop more trust in the banking sector, it is likely that the trend toward increased demand for credit for a variety of purposes will continue. Since commercial banks require “hard” land titles to secure such loans, it is quite likely that land titles will contribute to increased consumer and business borrowing. It is important to note, however, that such an increase probably could not be solely attributable to land titles; rather, such growth would represent the merging of several additional factors to form a virtuous cycle of development and growth. These would include business experience and skill (i.e., entrepreneurship), political stability and security, banks that want to lend and know how to do so (i.e., credit supply) and people’s institutional trust in banks. The development of credit markets and the business sector both seem to rely on many of the same factors regarding institutional trust. Once these factors are in place and functioning more efficiently, they will enable entrepreneurs to predict returns on investments with greater accuracy and reliability.

Other evidence from the urban land titling survey appears at first glance to support the observation that shifts may be occurring in attitudes toward borrowing from commercial banks. Table 3 summarises business-related loans and their sources. In Phnom Penh, of the 502 loans reported between the national election of 2003 and the end of 2005, 180 were for business start-ups, operations or expansions, 35.6 percent. In Siem Reap, 38.5 percent of all loans were for business-related purposes, while in

Serei Saophoan it was 33.8 percent. Of particular interest is the fact that Aceda Bank accounted for 41.1 percent of the business loans in Phnom Penh, while in Siem Reap it accounted for 48.0 percent. In Serei Saophoan, it was lower at 36.7 percent. When the micro-finance institutions (MFIs) are included, formal lending institutions appear to play a prominent role in financing business activities.

As the overall number of loans from all sources has increased steadily each year in all three urban areas, so has the number of loans from formal sources (i.e., MFIs and commercial banks). In Phnom Penh, the share of loans from the formal sector has increased from 37.5 percent in 2003 to 41.7 percent in 2005. However, even though the number of loans has increased each year in Siem Reap and Serei Saophoan, the share of loans from the formal sector has declined. In Siem Reap, the formal sector share of loans decreased from 54.1 percent in 2003 to 47 percent in 2005, even though the number of loans almost doubled.

There is, however, a seeming discrepancy in the data concerning business-related credit (Table 3) and SME financing (Table 2). The data concerning business loans suggest an increasing amount of borrowing from the formal sector, while the SME data show an almost negligible role of the formal sector in financing SME start-ups, operations or expansions. There are several possible explanations for this seeming discrepancy.

First, the data for all loans include all business-related activities, both small and large, some of which probably employ more than 10 individuals, while the SME data refer almost entirely to small enterprises that employ fewer than five individuals. It is more likely that larger businesses would require larger amounts of capital and would be more inclined to borrow from formal institutions. Larger businesses might also be better able to afford higher interest rates charged by commercial banks as well as to meet their strict repayment schedules than would SMEs.

Second, the data concerning credit cover only the period between the national election of 2003 and the end of 2005, while the data for SMEs cover the entire period since 1980. It should be kept in mind that even in the early 2000s, the banking sector was not much involved in loan activity. For example, a 2003 Mekong Project Development Facility paper suggested 15 reasons that banks had not been lending to SMEs until then.

**Table 3: Loan Sources for Business-Related Activities**

	Relative	Friend	Moneylender	NGO	MFI	Aceda	Total
Phnom Penh	147	32	97	23	27	172*	502*
Start-up	9	3	10	5	7	23	60
Inputs/Ops	14	2	4	2	1	16	40
Expansion	14	4	15	5	7	35	80
Siem Reap	49	7	37	5	26	71	195
Start-up	3	0	2	0	5	10	20
Inputs/Ops	4	0	4	0	2	6	16
Expansion	0	1	6	1	8	23	39
Serei Saophoan	23	5	54	7	15	41	145
Start-up	3	1	7	0	0	4	15
Inputs/Ops	3	0	6	1	4	4	18
Expansion	1	0	5	0	0	10	16

\* This figure includes 1 loan from Canadia Bank.

Carpenter and Ouch (2006) argue that one of the main reasons for sluggish lending then was that banks did not want to lend. Since 61.8 percent of SMEs in Phnom Penh and 64.6 percent in Siem Reap were started before 2003, nearly all financing would have had to come from own or family sources.

A third, and perhaps more important, factor is that almost all reported loans from the commercial sector were from Aceda Bank, which has a branch presence throughout the country. In fact, only one loan was reported from Canadia Bank. Aceda's history as a micro-finance NGO whose lending practices are motivated by social objectives distinguish it from other commercial banks in Cambodia. If we take Aceda out of the formal banking sector, we see that other commercial banks have not been lending at all for any purposes, including business activities. As a result, except for the small number of loans reported from MFIs, most business activities are still being financed through informal sources, including moneylenders. The picture then looks very similar to that of SMEs concerning financing (i.e., mostly own sources and family, who generally provide interest-free loans with no collateral requirements). The only exception is borrowing from moneylenders who do charge interest. As SME operators appear to be concerned about interest rates relative to potential returns, they will avoid borrowing from moneylenders, while at least some larger businesses appear more willing to do so.

It appears then that, despite the anecdotal evidence concerning a shift in credit activity involving the formal banking sector, there is still a long way to go before SME investors fully embrace the traditional commercial sector and vice versa. Although the difficulties associated with collateral requirements may be substantially resolved with land titles, the data clearly suggest that SME investors also perceive other constraints in obtaining loans. As discussed above, business profitability relative to interest rates is especially important. Even Aceda's interest rates on small loans were still very high in 2004–2005.<sup>4</sup> This suggests that while land titles may indeed improve access to commercial loans by providing collateral, other constraints must also be addressed for the effects of land titles to be fully realised. Land titles are probably necessary, but they not sufficient to stimulate increased investment in SME start-ups and expansions.

### Conclusion

Although the credit data suggest that people have increased their borrowing from the commercial sector during 2003–2005 for a variety of purposes, including business, it may be too early to conclude that the propensity to borrow more from the formal sector is now expanding to SMEs. One reason for this is that reported commercial borrowing between 2003 and 2005 was solely limited to Aceda, which has a laudable albeit somewhat different

mission than other commercial banks. Nevertheless, anecdotal evidence suggests that such borrowing from at least one commercial bank has been increasing since the time of the survey at the end of 2005, beginning with increased borrowing for SME expansion. This is due to the fact that ANZ Royal Bank—a significant new entrant to the banking market—appears quite willing and able to lend to a wide range of clientele, including SMEs. Such borrowing may eventually also be used for start-ups, depending on the pace of developing institutional trust and the maintenance of a favourable business climate.

Since SMEs clearly represent important sources of employment, any increase in the number of SMEs or expansion in the size of current SMEs is likely to have an important impact on overall employment. Land titles are likely to play an important catalytic role by providing investors with a sense of secure tenure and providing collateral with which to access formal loans for start-ups and expansion. This hypothesis will be tested in the follow-up study to the baseline survey.

### Endnotes

1. In one study (Kang 2005), enterprises were divided into three categories: micro (one to two workers), small (three to five workers) and medium (10 to 100 workers).
2. "They have houses but not titles, crops but not deeds, businesses but not statutes of incorporation" (de Soto 2000: 7).
3. The survey did not include the district of 7 Makara.
4. See annual reports at [www.acedabank.com.kh](http://www.acedabank.com.kh).

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# Challenges in Water Resource Management for Farmer Water User Communities

*Kim Sean Somatra and Khiev Daravy report on a social assessment of water resource management in the Tonle Sap basin and discuss issues of water allocation, people's participation, irrigation system operation and maintenance and conflict resolution that can potentially affect local water governance.\**

*"Every year, growing rice is a gamble against the rain. You don't know what to expect."—A farmer in Srah Reang, Banteay Meanchey*

*"Cambodia's farmers are poor because they don't have water to irrigate their fields."—Commune council member, Srah Reang, Banteay Meanchey*

The above quotes capture an important aspect of the water problem in Cambodian agriculture, on which almost 80 percent of the population depend directly or indirectly. Realising the important role irrigation can play in national development, the government has focussed particular attention on irrigation, which has a great potential to benefit Cambodian farmers. Irrigation makes farmers less dependent on rain and brings more predictability and certainty to wet season rice production. At the same time, Cambodian farmers are now enjoying more cropping density, growing rice two or, in some cases, three times per year. With rice being the predominant staple, and sometimes cash crops, which is a big source of employment for Cambodian population, growth in this sector does not only mean economic growth but also better income distribution. In addition, irrigation has made it possible for farmers to grow a range of cash crops such as vegetables, watermelons and corn.

However, the construction of irrigation systems alone is not enough, and some issues related to governance need to be looked at if irrigation systems are to be successful. In this article, we report on a social assessment of water resource management associated with 18 irrigation schemes in the Tonle Sap basin. Based on our study's initial findings, the article discusses issues of water

allocation, participation, operation, maintenance and conflict resolution that can potentially affect local water governance.

## Background of FWUC

It is estimated that 90 per cent of the irrigation systems in Cambodia were built during the Khmer Rouge regime. Many of these were poorly designed, and after the collapse of that regime in 1979, most irrigation systems were neglected to the point that they became no longer functional, leaving the production of rice totally dependent on rainwater. Most rice fields are rain-fed, and rainfall is often irregular. A delay in rainfall at the beginning of the wet season causes disruption or even the failure of cultivation for the whole season. In addition, a small dry spell in the middle of the wet season, when rice plants most need water, can cause the crop to fail.

To mitigate problems of water supply and achieve more growth in agriculture, the government has emphasised irrigation, building infrastructure and strengthening the management system. Starting in 1993, the management of water resources has been transferred from the centrally managed system to local management. NGOs and donors introduced the concept of participatory irrigation development management (PIMD), which emphasises local participation. It requires decisions to be made at the lowest appropriate level, with full public consultation and involvement of users in the planning and implementation of projects (ICWE 1992). It is argued that involving local people in the development makes a project more politically and socially acceptable (Schumacher 1973; McDonald and Kay 1988; Ojendal 2000) because people can communicate their needs and make the work represent their interests. The outcome, it is argued, provides more sense of ownership among the local people (Moote et al. 1997). Technical traditional knowledge brought in by local people can be of major practical value for the management of water resources, whether it is water harvest, river basin management or irrigation.

Central to PIMD in Cambodia are farmer water user communities (FWUC), which are established to manage an irrigation scheme in a democratic manner. According to the law, farmers in the command area have to apply for membership in order to use water from the scheme and in doing so farmers agree to contribute by paying fees. In addition, FWUC are entitled to impose fines or prosecute people who interfere with or harm the interests of the FWUC or their members (MOWRAM, 2000). But it is not clear to what extent FWUC are compatible with existing arrangements shaped by local norms, beliefs, social capital (trust and networks) and politics. Ojendal (2000) warns that managing a resource that has always been free is "tricky", and whether local institutions such

\* Mr Kim Sean Somatra is research associate and Ms Khiev Daravy is research assistant at CDRI. This article is based on initial findings from the Water Resource Management Research Capacity Development Programme.

as FWUC can manage water in a manner that ensures economic growth, social equity and financial and environmental sustainability is a big question.

### **Findings**

#### ***Water Allocation within Schemes***

FWUC face great challenges in allocating water within the schemes among the farmer members—usually dry season rice farmers. Dry season in Cambodia lasts around three months, starting in December and finishing in March, and often there is not enough water to last through the cultivation period. Seeing their crop at stake as the water runs out, farmers want to extract as much water as they can into their fields before the river dries up, and this leads to fierce competition. In the case of the Trapeang Trabek scheme in Kompong Chhnang, the FWUC, in trying to make a fair allocation among its members, sought assistance from the commune council, which issued a letter instructing people to share water equally. But the farmers completely ignored the allocation arrangement, saying, “We eat rice. We do not eat paper”.

Water supply scheduling is also a big challenge for most of the FWUCs. One FWUC in Battambang, for example, from experience, comes up with an arrangement they think would best help them allocate water. The arrangement is that when the main water gate is open and there is water in the main canal, farmers located in the downstream are entitled to use water to cultivate their land first until their rice plants are big enough to withstand water. Then, people upstream could start to cultivate. But the plan has so far failed. The farmers just ignore the arrangement and the upstream people would build a makeshift dam across the canal to divert water to their field as soon as there is water coming while the FWUC could only watch helplessly.

#### ***Allocation of Water between Schemes***

Another challenge for FWUC is in water allocation between different irrigation schemes in the same catchment due to a mismatch between the catchment’s capacity and the demand for water. Irrigation schemes built during the 1980s and 1990s were designed, financed and constructed by different agencies such as the American Friends Service Committee and Programme de Rehabilitation et d’Appui au Secteur Agricole du Cambodge. In the example of Steung Chrey Bak catchment, Kampong Chhnang province, no comprehensive studies of catchments were conducted before designing individual schemes because during that time a large part of the country was still under the control of the Khmer Rouge and fighting in those areas was frequent. In most cases, schemes were built primarily to provide emergency supplementary water for wet season rice and for flood control. For security reasons, they were first built in the downstream part of catchments, in secure zones. As

peace and stability expanded, development activities and irrigation work also expanded. More schemes were added upstream, enabling people there to extract and exploit water. However, the upstream schemes mean a reduction in the quantity of water available to people downstream and the more schemes there are upstream, the less water there is downstream.

In addition to competition between schemes for supplementary water, expansion of dry season cultivation, made possible by irrigation, has led to direct competition within and between schemes. In principle there is a limited and agreed area that can be irrigated during the dry season from each scheme. In practice, it is often difficult to limit cultivation to this area.

Another challenge in allocating water between schemes is the problem of poor coordination and cooperation between FWUC. Water courses cut through different jurisdictions, flowing through different provinces, districts, communes and villages, which have their own FWUC. It is often not possible for FWUC to share information about what happens in each area, and they make decisions independently of each other. It is often the case that a decision of an upstream FWUC causes tremendous effects for a downstream FWUC. For example, an upstream FWUC sometimes retains all the water for its own use, causing a shortage downstream when rice needs water the most, while at other times releasing all the water would flood the area when rice is being harvested. The operations of each scheme are interconnected. This makes close cooperation between schemes in a catchment very important. FWUC, although responsible for different schemes in different jurisdictions, need constantly to communicate with one another to create a master plan for water.

#### ***Participation***

The success of local management of water depends on people’s participation, which, according to the literature, can bring practical technical knowledge and, more importantly, make people feel a sense of ownership. However, trying to get farmers to participate in the management or to make use of water from the schemes is probably as hard as trying to allocate water among them in times of scarcity.

FWUC experience great challenges in trying to get people to participate. In some areas, after irrigation schemes were built or restored, there is plenty of water in the system, but farmers do not make use of it. In some areas, FWUC, trying to get local people to participate, also face farmers’ long-standing traditions. Traditionally, they grow wet season rice in a very relaxed manner. According to FWUC in Kompong Thom, when growing wet season rice, farmers only plough the field and spread the seeds, and do nothing else until harvest time. By comparison, dry season rice requires farmers to spend a

lot more time in the field to control water and ward off animals, which by tradition are let loose in the dry season. At the same time, there is more cost involved; farmers have to pay water fees which they would not have to pay for wet season rice. Dry season rice also requires more fertiliser.

Despite all the extra work and extra costs, there is no guarantee of success, because farmers later face destruction by pests. In the wet season almost all of the land is cultivated, so destruction caused by pests is relatively small. Dry season rice covers a much smaller area, which means that pest destruction is high because the number of pests per cultivated area is higher. As one agricultural extension officer in Pursat put it, "Growing dry season rice is like opening a restaurant for rats".

In other areas, such as Pursat and Siem Reap, farmers do not use irrigation due to extreme poverty. Some farmers cannot make use of irrigation schemes because, instead of growing dry season rice, they go to work as labourers in the city, collect firewood or collect marble, things that can quickly produce cash. The effect of poverty can also be observed in poor people selling their land for a high price and buying another plot that is cheaper but distant from an irrigation area.

Whether it is because of tradition or extreme poverty, the fact that people are not using irrigation or paying irrigation fees has a serious impact on the overall performance and success of FWUC. FWUC depend heavily on the contributions of members. The FWUC law, Article 24, calls for farmers who benefit from the schemes to pay user fees. But historically, Cambodians grew rice relying entirely on rainwater and never paid water fees, so the idea of having to pay to use water is sensitive, and politics makes it worse. Local leaders of political parties use irrigation as an object of political manipulation. People are told not to pay the fees because the state builds the irrigation scheme and it is built for the people to use. Another aspect of political influence on irrigation is that before an election people are asked to vote for a party that promises to abolish irrigation fees. How does fee collection affect the functioning and sustainability of FWUC?

### *Operation*

Technical flaws in the design of schemes are great challenges for FWUC operations and maintenance. In the case of Trapeang Thma in Banteay Meanchey, the main water gate was a log-stop door. People could regulate the amount of water flowing to their rice field by manually adding or removing the wooden door. But at the last restoration, the door was modified and is now automatic. This door is supposed to regulate water by itself in order to reduce the workload of the FWUC, but it has not worked properly. According to the local FWUC, the door would lower itself when there was too much water in the

reservoir, but it could not rise up to retain water at the desired level. The new door tends to empty the reservoir and flood rice fields downstream.

In addition, the ability of FWUC to provide adequate water supplies to farmer members is constrained by physical conditions. Most irrigation schemes are incomplete. Trapeang Thma, for example, has only the reservoir, while the main channel is badly damaged, and there is no tertiary channel system in place. Likewise, the main canal that brings water to the Srah Reang scheme in Banteay Meanchey is also badly damaged. According to the chief of the FWUC there, the main canal is broken at 13 different places due to a severe flood the previous year. Because of the bad condition of the canal, the FWUC could not respond to the needs of farmers on time. One farmer member said, "Last year I requested water from the FWUC in November, and they went to the commune upstream to negotiate the release of water. At the same time, I started to cultivate my land, and then we waited for the water to come. We waited and we waited. Finally, water came, one month after I sowed the rice seed. It was too late. The crop was already dead."

In water governance, limited resources are also a big constraint. The expected sources of revenue of the FWUC are funds from the government, NGOs, irrigation fees and FWUC business activity. But revenue from government, NGOs and business activity has been little or nothing, and FWUC can barely collect the irrigation service fees. With limited revenue, FWUC fail to perform their functions effectively because the committee members are paid only 10,000 to 20,000 riels per annum, barely enough to cover the cost of gasoline of one trip to negotiate with the commune upstream, not to mention that every time they travel, they use their own means of transportation.

In addition, the farmer members do not make the committee members' lives any easier. As discussed earlier, the amount of water available in a scheme, either too little or too much, is determined by the schemes upstream, but people put the blame only on the FWUC in their own area. One committee member said: "In one cultivating season, we get cursed three times. We get cursed when there is a water shortage that damages crops. We get cursed when flood water from upstream damages crops, and we get cursed when we go to collect the irrigation service fees".

This poses a serious threat to the sustainability of FWUC membership, as captured by a comment by one FWUC committee member in Kompong Chhnang who said, "Perhaps we should quit, because we do not get money for our service, but blame". The FWUC in Thnal Dach, Banteay Meanchey, for example, had five committee members, but now only three remain. The same thing is true of FWUC in Kamping Puoy, Battambang, Kamping, Pursat, Me Tuek, Pursat, and Tang Krasang,

Kompong Chhnang. The chief of the FWUC in Tang Krasang put it: “Before, the committee members were enthusiastic about irrigation management, but now everyone is de-motivated because there is no pay”.

### ***Maintenance***

FWUC also suffer from a lack of resources to maintain schemes. Irrigation schemes are prone to damage by erosion, flooding, animal destruction and theft of components such as steel bars and wooden doors. Often the cost of maintenance exceeds the financial ability of FWUC, whose revenue depends on irrigation fees that they can hardly collect, if at all.

What is worse is that FWUC are sometimes required to fix schemes located in other territories. The FWUC in Srah Reang, for example, is responsible for maintaining Pou Pir Daeum scheme, upstream. The main canal that brings water to their area cuts through Pou Pir Daeum and is broken in many places. However, farmers in Pou Pir Daeum do not grow dry season rice, so they are not interested in fixing the canal, leaving the responsibility in the hands of the Srah Reang FWUC.

Some FWUC have attempted to incorporate building of irrigation systems into commune council planning, but experience shows that the chance of irrigation being included in commune development plans is very slim. “We have tried to incorporate irrigation into the commune development plan, but irrigation cannot defeat roads”, said one FWUC member in Kompong Chhnang.

### ***Conflict and Resolution***

The literature on conflict resolution in water management in Cambodia is very limited, but international experience shows that conflicts between water users arise as a result of decentralisation (UNDP 2006). Most local conflicts concern allocation of water between schemes, and they occur between late February and early March, when farmers need water for their dry season rice. For example, in 2006 dry season rice in Trapeang Trabaek, Kompong Chhnang, was growing very well until there was a water shortage in late February. With limited information about the water flow regime, farmers in this area felt that the shortage was caused by the FWUC and people upstream, who envy their prosperity from dry season rice. “So they stopped all water from flowing downstream”, said the farmers downstream.

However, there is no clear regulatory framework (Sakhon and Lyda 1996), at least not yet, to resolve conflicts, and in most cases farmers and their FWUC use personal solutions to solve their problems. For example, seeing their crops in jeopardy, the farmers raised money among themselves for the FWUC to travel to Tang Krasang to negotiate the release of water. Negotiations are usually informal. If any FWUC needs water, it takes along food and wine when it goes to negotiate.

The release of water upstream does not often guarantee that it reaches the scheme downstream. People tend to think that when water flows through their jurisdiction, it belongs to them, and they have the right to do with it whatever they want. In Kompong Thom, Kompong Chhnang and Banteay Meanchey, farmers build makeshift dams to divert water into their fields, causing disruptions to water governance arrangements. However, FWUC have not been able to order the removal of the dams.

### **Conclusion**

Management challenges faced by FWUC can take root in the design stage, raising a question of whether management and governance of schemes can be addressed early on. At the same time, it is interesting to ask broader questions on the political economy of irrigation. Why are projects built where they are? Why don't farmers respect the legitimacy of FWUC? Is an FWUC a real local water-governing institution with legal support, or is it just a precondition of some sort? Finally, what are the reasons for the lack of coordination and cooperation between different FWUC, and what can be done to make them happen? Only when these issues are addressed will it be possible to talk about effective water management by FWUC.

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# Agricultural Trade within the GMS: A Perspective on Agricultural Development in Cambodia

*Thun Vathana, Sok Sina and Chhay Pidor discuss the current situation of regional trade in agricultural goods and linkages to agricultural development in Cambodia, investigate the future prospects of regional agricultural trade and make policy recommendations to promote agricultural trade in the GMS.\**

## Introduction to Socio-Economic Background of the GMS Countries

The Greater Mekong Sub-region (GMS) covers an area of about 2.3 million sq km with a population of 262 million. The GMS consists of six member economies: Cambodia, Lao PDR, Myanmar, Thailand, Vietnam and Yunnan province of China. The six countries share the 4200-km Mekong River, the world's 10th longest river. The GMS is rich in natural resources, with a wide variety of minerals, the potential for hydropower, forest and fish resources and fertile soil.

Agriculture's contribution to the economy ranges from 11 percent in Thailand to almost half of production in Myanmar (Table 1). Although agriculture still represents a significant share in the GDP of the GMS countries, each country has sought to shift its economic structure into manufacturing and services. With the exception of Thailand, which has had a free-market economy for decades, the GMS economies were previously centrally planned and characterised by state-owned means of production. Five of the six GMS economies are now undergoing a transition to a market base and opening their economies to foreign participation, but the process is slow in Myanmar for political reasons.

With a large labour force and increasing income per capita, the GMS is both an attractive production base and a potential market. Companies in east Asia are increasingly shifting labour-intensive manufacturing operations to the GMS to make use of its competitive wages, surplus of employable people and increasingly skilled labour force.

In international trade, the GMS as a whole has a slight deficit in trade balances, import values exceeding export values. The three non-Indochinese countries, however, have positive balances. The GMS countries export a range of products, but most are concentrated in a few areas. Textiles are a common export for Indochina, with export shares ranging from 13.3 percent in Vietnam to 76.9 percent in Cambodia. To increase trade, the GMS countries are committed to open their economies and undergo structural reforms under the ASEAN Free Trade Agreement (AFTA) and the Early Harvest Programme. Except for Myanmar and Laos, the GMS countries are full members of the World Trade Organisation (WTO).

The purpose of this article is to discuss the current situation of regional trade in agricultural goods and linkages to agricultural development in Cambodia. It also investigates the future prospects of regional agricultural trade and makes policy recommendations to promote agricultural trade in the GMS. The scope of this study is limited to Cambodia; information on other GMS countries serves only for comparison. The article is divided into four sections. Section 1 provides an introduction and the socio-economic background of the GMS. Section 2 discusses the linkages between trade and agricultural development. Section 3 discusses reasons that developing countries should focus on regional trade. Section 4 concludes the article and presents policy recommendations.

## Trade and Development

### *A Historical Background*

The role of international trade in economic development has received the attention of economists, policy makers, politicians and large multinational corporations for centuries. International trade has existed for hundreds of years, but trade infrastructure was poor most of that time. Money, goods and credit markets had developed to facilitate trade and colonial expansion by the 16th and 17th centuries. At that time, the economic doctrine known as mercantilism encouraged exports but discouraged imports. As a result, there was a wide range of restrictive trade policies, including import tariffs, licences and export subsidies.

However, when the Industrial Revolution spread in the late 1700s, mercantilist ideas were increasingly questioned because raw materials for expanding outputs to be exported could not be supplied by domestic production, and therefore the country needed to relax its trade policy towards imports of raw materials. In the early 1800s a strong movement toward economic liberalisation began, with the unilateral removal of trade restrictions in the United Kingdom (the world's leading economic power at the time) starting with the repeal of its Corn Laws in 1846, ending the world's first major price-support programme for agricultural commodities. Britain then sought worldwide trade liberalisation, with some

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**Table 1: Socio-Economic Situation of the GMS Countries**

	Cambodia	Laos	Myanmar	Thailand	Vietnam	Yunan	GMS
	2006	2006	2006	2006	2006	2005	2005/6
Area, '000 Km <sup>2</sup>	181.04	236.80	678.50	514.00	329.56	394.10	2334.00
Population, Mn	14.10	6.52	47.37	65.23	84.16	44.50	261.89
GDP/capita, US\$	419.00	425.18	202.64	3161.85	723.45	982.00	1251.85
GDP, Mn US\$	5931.00	2773.00	9600.00	206,259.24	60,883.56	42,395.20	327,842.00
Agriculture, %	28.10	43.40	50.00	10.70	20.40	18.90	15.30
Industry, %	28.70	30.60	15.00	44.60	41.50	41.76	42.38
Services, %	43.20	26.00	35.00	44.70	38.10	39.34	42.31
Exports, Mn US\$	3693.00	982.20	3560.00	130,583.42	39,826.00	2641.58	81,286.20
Imports, Mn US\$	4749.00	1376.00	1980.00	128,606.12	44,891.00	2096.64	183,698.77

Source: compiled and calculated by authors based on various sources, 2007

success. World trade was relatively free until World War I, with selective protectionist policies (Norton and Alwang 1993). Trade was further stimulated by advances in transportation and communications.

Industries, including agriculture, that had expanded during the war suffered slack demand and falling prices after the war. Governments during the 1920s and 1930s attempted to protect these industries by introducing protectionist policies that the world is still struggling to remove today. The cost of protectionism can be high, and developing countries are concerned about it because they need to increase their exports in order to earn foreign currency to repay debts (Riddell et al. 2002). Persistent protectionist policies for agricultural commodities are especially evident in the failure of the negotiations at the WTO. Each country claims that foreign commodities compete unfairly and that their own particular product is essential for the domestic economy and farmers' well-being. Thus it is argued that government, as protector of the public interest, should provide safeguards against imports, even though it claims to support free trade.

### *Effects of Trade*

In neither the media nor academia is there a common view on the effects of free trade. Discussions about trade often involve two opposing positions: one is that exports from more developed countries in particular cause problems for developing countries, and the second is that open trade is necessary for economic development. Proponents of the negative view of trade argue that as developing countries become more integrated into the world economy, they open themselves to increased exploitation by the more developed countries and by wealthy elites within their own countries. Proponents of the more positive view of trade argue that it facilitates development because it permits more efficient use of resources. A country can benefit if it exports what it can produce more cheaply than others and imports items that others can produce more cheaply. Some scholars argue that free trade provides prosperity

to both importing and exporting countries only if both countries are at the same stage of economic development; otherwise it creates winners and losers. Losers are mainly importing countries that are less efficient and therefore less competitive. Winners are exporting countries that have efficient production methods.

The traditional model of free trade, which was based on assumptions of constant returns and perfect competition, has lost its original importance due to the empirical fact that increasing returns (economies of scale) and imperfect competition explain most of today's movement of goods. Paul Krugman (2003), the founder of the new trade theory, and others argue that trade is not necessarily a result of comparative advantage. Instead, it can be a result of increasing returns or economies of scale, that is, of a tendency to lower unit costs with large output. Economies of scale encourage countries to specialise their production and trade even in the absence of differences in their resources or technology. In the real world, economies of scale are more likely a result of imperfect rather than perfect competition. The government can play a role in creating economies of scale by supporting domestic firms' research and development. A large expenditure for research and development is regarded by the new trade theory as well as by the new growth theory (endogenous growth theory) as a reliable source of external economies (external effects).<sup>1</sup> In some circumstances, economies of scale are a result of strategic trade policies that governments use to support firms in international competition. Subsidies for research and development, dumping and tariffs are well-known measures used in today's strategic trade policies.

Trade will not take place if the transportation costs are higher than differences between countries' unit costs. Transportation costs pose obstacles to trade and tend to have effects on the size and location of companies. In his centre-periphery model, Krugman (1991) comes to the conclusion that high transportation costs will

force producers to choose production locations close to markets, and this leads to a large and concentrated production centre that ends up with increasing returns. High transportation costs will bring trade to a halt and break the relationship between centre and periphery. Low transportation costs will facilitate trade and bring benefit to the trading countries. Prosperity increases with reduced transportation costs.

Trade under imperfect competition, to a large extent, serves to explain most trade disputes. Trade in agriculture, in particular, remains the biggest stumbling block to trade liberalisation in the WTO as well as in the AFTA, even though the economic contribution of agriculture to GDP around the world has sharply declined in the last few decades. In developed countries, agriculture accounts for only 1.8 percent of GDP, but this sector remains the most protected (Martin and Anderson 2006: 3). This section discussed the effects of trade on the development of countries involved in it. The following section focusses on trade policy in the GMS and discusses why the GMS needs to promote regional trade.

### **Trade Near or Trade Far?**

#### ***Trade Policy in the GMS***

As mentioned earlier, agriculture plays an important economic and social role in the GMS countries. Moreover, all GMS countries realise the need to increase agriculture in order to reduce rural poverty, as agreed in the GMS agriculture ministers' meeting on 10 April 2007 in Beijing.<sup>2</sup> Agricultural trade, especially an export orientation, helps solidify the role of agriculture in development. This is particularly true when a country manages trade with a focus on employment-based growth.

While trade is essential to agricultural development and poverty reduction, there is a variety of agricultural trade strategies depending on resource endowments, history, food security, sources of government revenues, balance of payments, the ability of commodities to penetrate into different markets etc. Nowadays most developing countries encounter impediments to agricultural trade. Major impediments to GMS agricultural trade with developed countries such as Japan, Europe and the United States are in three categories: (1) long distances to markets and poor trade infrastructure, (2) tariffs, non-tariff barriers and safeguard measures and (3) external demand constraints and market instability.

*Long distances to markets and poor trade infrastructure:* The GMS countries are relatively far from potential markets in developed countries. Long-distance transportation involves high costs and so reduces the competitiveness of traded commodities. Moreover, limited financial and technical support for improving trade infrastructure, together with the small volume of exports from each individual GMS country, makes per-item transaction costs higher than for bulk

exports. Furthermore, poor infrastructure and inefficient institutions may increase transportation costs. Under such circumstances, short-distance trade, including trade within the GMS countries, is more beneficial than long-distance trade.

*Tariffs, non-tariff barriers and safeguard measures:* The simplest trade policy is a tax levied on imported goods, a tariff. Tariffs, one of the oldest trade policies, have traditionally been used as a source of government revenue and a means to raise the cost of imports and thus protect producer prices. High tariffs are still levied on agricultural commodities by developed countries like Japan, Europe and the United States. Not to speak of different subsidies that developed country governments allocate to their farmers, they have also used non-tariff barriers and safeguard measures to limit imports of cheap agricultural commodities from developing countries. Thus promoting local agricultural markets (in the GMS countries) is a reasonable strategy to develop agriculture in these countries.

*External demand constraints and market instability:* Generally, prices of primary commodities become inelastic when per capita income increases. Additional exports may cause a fall in world prices of commodities with inelastic demand. Therefore developing countries are concerned that their primary products face relatively inelastic demand in developed countries. As well, there is empirical evidence that developed countries are more protective of their primary than of their industrial commodities. Developed countries tend to support farm gate prices above market equilibrium levels in the hope of supporting farm incomes, generally resulting in restriction of imports. Meanwhile developing countries tend to discriminate against agriculture, resulting in high volatility of farm gate prices, which leads to an unstable supply of commodities.

Due to the above constraints and while WTO negotiations on agricultural trade liberalisation are still far from success, GMS countries should consider improving trade within the region, rather than focussing on markets in developed countries. While physical infrastructure in the GMS is being improved, each country should consider and specialise in commodities for which it can have the greatest cost advantage and import others that it cannot produce cheaply. At the same time, all GMS countries should work together as one regional body to make agriculture more competitive and to export to different regions.

#### ***A Development Perspective on Some Agricultural Commodities in Cambodia***

Trans-national road corridors are being upgraded under the GMS.<sup>3</sup> GMS countries have taken major steps to open their borders by agreeing to trade facilitation measures, including single-stop inspections at major border crossings.

Cambodia signed a memorandum of understanding (MOU) with Thailand to facilitate cross-border movements starting in 2006 at Poipet-Aranyaprathet. Cambodia and Vietnam signed an MOU to start similar arrangements at Bavet-Moc Bai in mid-2006.

The GMS cross-border transport agreement, which entered into force in November 1999, was originally a trilateral agreement between Laos, Thailand and Vietnam, and was joined by Cambodia in 2001, China in 2002 and Myanmar in 2003. The agreement aims at cross-border facilitation on movements of commodities and people, with focuses on issues such as single-stop inspections and easy provision of visas. Easier cross-border movement is one key to attracting Vietnamese and Thai agribusiness to invest in agriculture in Cambodia. The two commodities which have received attention from investors are rubber and cassava. These two products are produced in Cambodia, exported to both Thailand and Vietnam and then re-exported to China after processing and packaging. Informal movement of cattle from Thailand to Cambodia for local use and for re-export to Vietnam was noticed even before the MOU with the two countries. McNaughton (2004) estimates that the export of live cattle from Cambodia to Vietnam, Thailand and Malaysia in 2002 was 10 times higher than recorded. After 2005, there seem to have been fewer informal movements across international borders, probably the result of trade facilitation.

In the GMS agriculture ministers' meeting on 10 April 2007 in Beijing, all ministers reaffirmed the importance of agriculture for poverty reduction because millions living in rural areas depend on agriculture for their livelihoods. They vowed to continue to support the work of the WGA. The agricultural work being carried out under the umbrella of GMS cooperation seems to be effective, to contribute to increased trade and to induce exchanges of agricultural technology. For example, many Cambodian agricultural technicians were trained by China, Thailand and Vietnam in aquaculture, animal husbandry, cross-border animal disease control and prevention and land use. China, which is more advanced in agricultural technology, has committed to provide practical agricultural training needed by GMS countries. Although Cambodia faces some constraints within the GSM agricultural development programme due to high competition in some commodities from more advanced countries, especially Thailand and Vietnam, agricultural development can be assisted through capacity building and export opportunities. However, a rosy future for some major Cambodian agricultural commodities (e.g. cassava and rubber) is visible and while for some other commodities will depend on improving the export competitiveness of major agricultural commodities.

### Conclusion

Trade is not a panacea for development, but without it the development perspective is gloomy. We argue "no trade, no development," but there is a need for Cambodia to improve its international competitiveness through enlarging and specialising its production.

A necessary condition for trade is competitive products. However, this condition is meaningless if transportation costs are higher than differences in prices of goods between trading countries. High transportation costs harm all kinds of trade. Once a country is competitive in production and transportation costs are low, access to foreign markets is required.

For the development of Cambodian agriculture, there are some potential products for export, e.g. cassava, rubber and rice. More export opportunities for those commodities are foreseeable with improvement of productivity and marketing infrastructure. The increasing market in the GMS will be a stimulant for trading these kinds of products. While regional markets are available, Cambodia should consider reducing transaction and transportation costs. This together with improving productivity, this will increase agricultural trade and incomes of people living from agriculture.

### Endnotes

1. These effects have long been ignored by classical growth theory.
2. The GMS Tenth Ministerial Conference in November 2001 initiated the Working Group on Agriculture (WGA) to serve as an advisory body to GMS ministerial-level conferences on agricultural issues. An inception workshop was held in July 2002, followed by annual meetings. The WGA's mission is to reduce poverty in the GMS through partnerships with rural communities to promote agricultural trade, food security and sustainable livelihoods.
3. The ADB has assisted the GMS since its inception in 1992.

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## Economy Watch—External Performance

### World Economic Growth

US real GDP increased by 1.9 percent in the year to first quarter 2007, compared to 3.1 percent in the year to fourth quarter 2006. This primarily reflected an increase in imports, a decrease in exports and federal government spending and a deceleration in personal consumption expenditure. The real GDP of the euro zone in first quarter 2007 was 3.0 percent higher than in the same period a year earlier and 0.6 percent higher than in the previous quarter. Japanese real GDP grew by 2.2 from a year earlier and by 0.6 percent compared to the previous quarter.

The Chinese economy in the first quarter was 11.1 percent larger than a year earlier. Growth continued to be industry-led with valued added growing at 13.2 percent, compared to 9.9 percent in services and 4.4 percent in agriculture. Investment and trade continued to be the main drivers of this growth. The real GDP of South Korea in the first quarter was 4.0 percent higher than a year earlier and 0.9 per cent up on the previous quarter. The real GDP of Taiwan and Hong Kong in first quarter 2007 were 4.1 percent and 5.6 percent higher, respectively, than a year earlier.

The Malaysian economy grew by 5.3 percent in the year to first quarter 2007. Growth in this quarter was broad based, with all major sectors of the economy, except mining, registering growth. The services sector and stronger expansion in the construction sector were the key contributors to this growth. Singapore's real GDP was 6.0 percent larger in first quarter 2007 than a year earlier. Manufacturing and construction grew by 6.1 percent and 7.0 percent, respectively, while services grew by 6.1 percent. Thai real GDP in the year to first quarter 2007 grew by 4.3 percent. Net exports and government expenditure were the stimulants of this growth, while household consumption expenditure and total investment went down. Agriculture grew by 4.3 percent, more than in the previous quarter (1.9 percent), mainly due to a rise in crop and fishery production, while the non-agricultural sector grew by 4.3 percent, compared to 4.6 percent in the year ending in the previous quarter.

### World Inflation and Exchange Rates in International Markets

In the first quarter of 2007, consumer prices in the US accelerated to a 2.4 percent annual rate of increase, from 1.9 percent in the fourth quarter. This was due to higher charges for food, medical care, housing and energy. In the euro zone, the inflation rate was 1.9 percent, up from 1.8 percent a quarter earlier. This increase reflects upward pressure on prices from higher input costs and energy prices, along with the recent German VAT increase. In Japan, consumer prices drop by 0.1 percent in the year to the first quarter. This largely reflected a drop in telecommunications costs. However, the rate of change would be close to zero if petroleum products and other special factors were excluded.

In foreign exchange markets, the US dollar's movement was mixed against other currencies. Against the yen, the dollar traded at 119.4 JPY/USD, appreciating from 117.8 in the previous quarter. This development was associated with market expectations regarding monetary

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*The prices of maize, palm oil, soybeans, rice and gasoline rose, while the prices of crude oil and diesel went down. Palm oil sold at USD552.06/tonne, up from USD494.92 in fourth quarter 2006, while maize and soybeans sold at USD154.33/tonne and USD255.33/tonne, respectively.*

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policy in Japan. Against the euro and the Chinese yuan, the US dollar exchanged at 0.76 EUR/USD and 7.76 CNY/USD, depreciating from 0.78 EUR/USD and 7.86 CNY/USD in the fourth quarter of 2006. The weakness of the dollar is largely driven by a market reaction to evidence of a moderation in US economic growth, while robust economic growth continues in many other large economies and in selected ASEAN countries.

### Commodity Prices in World Markets

In first quarter 2007, the prices of maize, palm oil, soybeans, rice and gasoline rose, while the prices of crude oil and diesel went down. Palm oil sold at USD552.06/tonne, up from USD494.92 in fourth quarter 2006, while maize and soybeans sold at USD154.33/tonne and USD255.33/tonne, respectively. The price of white rice, Thai 100% B second grade, in the Bangkok market was USD294.17/tonne, up from 279.10 in fourth quarter 2006. The price of gasoline in first quarter 2007 increased by 1.7 percent from the previous quarter to US 71.71 cents/litre, while the prices of crude oil and diesel went down from the previous quarter, by 3.9 percent and 1.1 percent, respectively. Crude oil sold at USD54.21/barrel and diesel at US 45.61 cents/litre.

*Prepared by Hing Vutha and Phim Runsinarith*

## Economy Watch—External Performance

**Table 1. Real GDP Growth of Selected Trading Partners, 2001–2007 Q1 (percentage increase over previous year)**

	2001	2002	2003	2004	2005	2006*	Q2	Q3	2006 Q4	2007 Q1
Selected ASEAN countries										
Cambodia (revised)	8.0	6.5	8.5	10.0	13.5	10.8	-1.6	-	-	-
Indonesia	3.8	3.8	4.9	5.1	5.6	5.4	5.2	5.5	6.1	-
Malaysia	0.5	5.6	5.4	7.0	5.2	5.9	5.9	5.8	5.7	5.3
Singapore	-2.3	2.6	1.4	8.5	5.7	7.7	8.0	7.1	7.0	6.0
Thailand	1.9	6.1	6.9	6.0	4.5	4.8	4.9	4.7	4.2	4.3
Vietnam	6.0	6.7	7.0	7.5	8.4	8.1	-	-	-	-
Selected other Asian countries										
China	7.5	8.1	9.9	9.5	9.6	10.5	11.3	10.4	10.7	11.1
Hong Kong	0.5	5.0	3.2	8.3	6.5	6.6	5.2	6.8	7.0	5.6
South Korea	3.0	6.1	3.0	4.7	4.7	5.0	5.3	4.8	5.0	4.0
Taiwan	-2.2	4.2	3.1	5.7	4.1	4.6	4.6	5.0	4.0	4.1
Selected industrial countries										
Euro-12	1.4	0.7	0.5	1.8	1.5	2.7	2.4	2.6	3.3	3.0
Japan	0.4	0.4	2.6	3.4	2.5	2.1	2.2	2.7	2.3	2.2
United States	1.2	2.4	3.1	4.4	3.7	3.3	3.5	3.3	3.1	1.9

\* preliminary est. Sources: *Economist*, countries' national statistics offices and central banks and ADB's Asia Regional Information Centre

**Table 2. Inflation Rate of Selected Trading Partners, 2001–2007 Q1 (percentage increase over previous year—period average)**

	2001	2002	2003	2004	2005	2006	Q2	Q3	2006 Q4	2007 Q1
Selected ASEAN countries										
Cambodia	-0.6	3.2	1.2	4.0	5.8	4.7	4.5	4.9	3.4	3.0
Indonesia	11.5	13.2	8.3	8.3	10.5	13.4	15.5	14.9	6.1	6.4
Malaysia	1.4	1.8	1.1	1.6	3.1	3.7	4.1	3.6	3.1	2.6
Singapore	1.0	-0.4	0.5	1.7	0.5	1.0	1.2	0.7	0.6	0.5
Thailand	1.7	0.6	1.8	2.7	4.5	4.7	6.0	3.6	3.3	2.4
Vietnam	-0.4	3.8	3.1	7.8	8.2	-	-	-	-	-
Selected other Asian countries										
China	0.9	-0.7	1.2	3.9	1.8	1.5	1.4	1.4	1.8	2.6
Hong Kong	-1.3	-3.0	-2.6	-0.4	1.1	2.2	2.1	2.3	2.2	1.7
South Korea	4.4	2.7	3.5	3.5	2.8	2.4	2.3	2.5	2.4	2.0
Taiwan	-0.01	-0.2	-0.3	1.6	2.3	0.6	1.5	-0.3	-0.1	1.0
Selected industrial countries										
Euro-12	2.6	2.2	2.1	2.2	2.2	2.1	2.3	2.1	1.8	1.9
Japan	-0.6	-0.9	-0.3	Nil	-0.3	0.5	0.7	0.6	0.3	-0.1
United States	2.8	1.6	2.3	2.7	3.4	3.2	4.0	3.3	1.9	2.4

Sources: International Monetary Fund, *Economist* and National Institute of Statistics

**Table 3. Exchange Rates of Selected Trading Partners, against US Dollar, 2001–2007 Q1 (period averages)**

	2001	2002	2003	2004	2005	2006	Q2	Q3	2006 Q4	2007 Q1
Selected ASEAN countries										
Cambodia (riel)	3916.3	3912.1	3973	4016.3	4092.5	4103.2	4095.3	4125.0	4111.3	4046.7
Indonesia (rupiah)	10,261	9311	8577	8938	9705	9134	9115	9122	9125	9107
Malaysia (ringgit)	3.80	3.80	3.80	3.80	3.79	3.67	3.65	3.67	3.62	3.50
Singapore (S\$)	1.79	1.79	1.74	1.69	1.66	1.59	1.59	1.58	1.56	1.53
Thailand (baht)	44.4	42.9	41.5	40.2	40.2	37.9	38.1	37.7	36.5	33.9
Vietnam (dong)	14,725	15,280	15,510	-	15,859	15,994	15,964	16,015	16,077	-
Selected other Asian countries										
China (yuan)	8.28	8.28	8.28	8.28	8.19	7.97	8.01	7.97	7.86	7.76
Hong Kong (HK\$)	7.80	7.80	7.78	7.79	7.78	7.77	7.76	7.78	7.78	7.81
South Korea (won)	1291	1251	1192	1145	1024	955	949	955	938	939
Taiwan (NT\$)	33.8	34.5	34.4	33.6	32.1	32.5	32.2	32.8	32.8	32.9
Selected industrial countries										
Euro-12 (euro)	1.12	1.06	0.89	0.80	0.80	0.80	0.80	0.78	0.78	0.76
Japan (yen)	121.5	125.4	115.9	108.2	110.2	116.4	114.5	116.3	117.8	119.4

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

**Table 4. Selected Commodity Prices on World Market, 2001–2007 Q1 (period averages)**

	2001	2002	2003	2004	2005	2006	2006			2007
							Q2	Q3	Q4	Q1
Maize (USNo.2)—USA (\$/tonne)	81.18	89.98	95.42	110.65	89.19	111.04	99.95	108.67	140.18	154.33
Palm oil—north-west Europe (\$/tonne)	259.13	353.91	402.03	427.47	381.32	433.85	397.87	446.85	494.92	552.06
Rice (Thai 100% B)—Bangkok (\$/tonne)	160.81	178.59	182.22	221.67	262.88	282.00	283.86	289.91	279.10	294.17
Soybeans (US No.1)—USA (\$/tonne)	163.89	182.58	218.86	262.03	224.25	213.88	207.02	207.38	230.17	255.33
Crude oil—Dubai (\$/barrel)	22.8	23.9	26.8	33.5	50.14	61.58	65.03	67.00	56.39	54.21
Gasoline—US Gulf Coast (cents/litre)	19.5	19.1	23	30.9	42.19	47.70	55.89	52.70	41.02	41.71
Diesel (low sulphur No.2)—US Gulf Coast (cents/litre)	18.72	17.85	21.63	29.48	44.35	51.35	55.89	55.66	46.11	45.61

Sources: Food and Agriculture Organisation and US Energy Information Administration

## Economy Watch—Domestic Performance

### Main Economic Activities

Falling private investment project approvals in the first quarter of 2007 limited domestic economic performance because this sector is a strong driver of economic development. However, construction project approvals and tourist arrivals both increased from the previous quarter, while the trade deficit rose considerably.

Investment project approvals totalled USD497.5 m, a decrease of 49 percent from the preceding quarter. Investment approvals for agriculture dropped by 88 percent to USD19.1 m and for services by 55 percent to USD335.7 m, while approvals for industry increased by 86 percent to USD142.7 m. Investment project approvals for the agriculture sector were wholly agro-industrial in this period. Of the industry investment approvals, projects for the garment sub-sector were 26 percent or USD36.6 m, an increase of 41 percent from the preceding quarter. Tourism projects were the major driver in services investment approvals, which amounted to USD140.3 m, a fall of 56 percent. In first quarter 2007, 25 projects were approved, of which two were in agriculture; this sector will require 1965 new workers. Industrial approvals were for 17 projects, which will absorb 29,789 workers. Services approvals were six projects, requiring 3575 workers. Compared to the same quarter in 2006, the value of total fixed asset investment approvals doubled. Project approvals in services increased by six times the value in first quarter 2006 and in industry increased by four times, while project approvals in agriculture decreased 85 percent. Competitive advantages for investment in Cambodia are low production costs as well as exports to both the US and EU are not entitle to quota restriction. Most garment factories today have foreign owners; of the value of total fixed asset investment approvals in first quarter 2007, 57 percent was for applications by foreign investors.

Construction project approvals in Phnom Penh were valued at USD90.4 m in the first quarter of 2007, an increase of 16 percent from the previous quarter. Flat construction approvals increased by 10 percent to USD59.9 m and villa and house construction approvals by 12 percent to USD10.9 m. Compared to the same quarter of 2006, total construction approvals rose by 34 percent, of which the approvals for flat constructions increased by 50 percent and villas and houses by 7.9 percent. Actual construction in Phnom Penh in 2006 was valued at USD306.6 m (685 projects), of which 86 percent sought prior authorisation to build from Phnom Penh Municipality and the rest were built without seeking authorisation.

Cambodia's trade deficit increased by 18 percent from the preceding quarter, to USD83.1 m. Exports declined for the second consecutive quarter after a rise

in third quarter 2006, and imports also went down after increasing for several quarters. In first quarter 2007, total exports decreased by 3.9 percent to USD707.8 m. Garment exports, which include clothing, shoes and other textile products, dropped by 5.4 percent to USD677.5 m. Both wood and fish exports increased by 30 percent, to USD2.1 m and USD0.7 m respectively, while rubber exports decreased 20 percent to USD8.4 m. Cambodian total exports increased by 17 percent from the same quarter of 2006, garment exports rising by 20 percent while agricultural exports fell by 13 percent.

Imports to Cambodia decreased by 2.0 percent from the preceding quarter to USD790.9 m, after rising for three quarters. Food, beverage and tobacco imports decreased by 1.6 percent to USD42.3 m, while construction materials rose by 24 percent to USD44.1 m. Gasoline imports increased by 4.4 percent to USD15.7 m and diesel imports by 18 percent to USD31.9 m. By volume, gasoline imports rose by 20 percent to 50,850 tonnes and diesel imports by 21 percent to 115,740 tonnes. Total imports went up by 15 percent compared to the same quarter of 2006.

Visitor arrivals to Cambodia in first quarter 2007 were 550,813, an increase of 6.7 percent from the previous quarter and 20 percent from the same quarter of 2006. Visitor arrivals by air increased by 36 percent from the same quarter in 2006 to 373,594. Siem Reap International Airport received 43 percent of total arrivals by air and 59 percent of total visitors to Siem Reap. Arrivals by land were 162,547, a decrease of 3.8 percent from the same quarter last year, while arrivals by water increased 13 percent to 14,672. Holiday arrivals were 90 percent of the total arrivals. South Korea topped the list of visitors with 118,597, followed by Japan, the USA and Taiwan.

### Public Finance

The state budget reporting process was changed in January 2007, according to the Ministry of Economy and Finance (MEF). The components of current expenditure are now reported under the headings wages; government purchases; subsidies and social assistance; and other services, instead of spending by ministries, as reported previously. There are few changes in the presentation of current revenue in the MEF's report. In January, the only data available for first quarter 2007, the government budget surplus was KHR65.4 bn, compared to a deficit of KHR128.7 bn in the same period in 2006. Total revenue collection was KHR258.0 bn in January, of which tax revenue was 86 percent or KHR222.5 bn. Domestic taxes, which include income, profit, turnover, taxes on specific goods and services and other taxes, were 68 percent of total tax revenue. Tax on international trade, which

## Economy Watch—Domestic Performance

comprises duties on import and exports, was KHR72.2 bn. Non-tax revenue was KHR35.5 bn or 14 percent of total revenue collection; property income was 8.2 percent of total non-tax revenue and sale of government goods and services was 85 percent. Capital revenue was nil in January.

Budget expenditure amounted to KHR101.7 bn in January. Current expenditure was KHR25.8 bn, of which government wages were 53 percent, subsidies and social assistance 15 percent and financial charges 6.2 percent. In the same period, capital expenditure was KHR76.0 bn; most was funded externally and only 1.8 percent was financed domestically.

### Inflation and Foreign Exchange Rates

Overall prices in Phnom Penh in first quarter 2007 dropped by 0.6 percent from the previous quarter. Transportation and communication fell by 1.1 percent, food, beverages and tobacco by 2.0 percent and clothing and footwear by 0.5 percent, while housing and utilities increased by 0.2 percent, medical care by 0.3 percent and personal care by 0.6 percent. During the dry season, in the first quarter of 2007, overall prices increased by 2.9 percent compared to the same quarter in 2006; medical care increased by 2.4 percent, food, beverages and tobacco by 3.0 percent; clothing and footwear by 3.5 percent and transportation and communication by 5.2 percent.

The riel appreciated after depreciating in third quarter 2006 and appreciating in the fourth quarter; the exchange rate between the riel and US dollar in the first quarter 2007 was 4063 riel/USD, an appreciation of 1.6 percent from the preceding quarter. Against the Thai baht, the riel depreciated by 0.8 percent, trading at 113.7, while against the Vietnamese dong, it appreciated by 1.1 percent to 24.6 riels per 100 dong. Compared to the same quarter last year, the riel increased against the US dollar and Vietnamese dong by 0.8 percent and 3.2 percent, respectively, while it depreciated by 10.0 percent in trading with the Thai baht.

### Monetary Developments

Net domestic assets consist of domestic credit and "other". "Other" usually is negative, being liabilities of the banking system; this component usually causes net domestic assets to have a negative sign also. In first quarter 2007, net domestic assets were negative KHR263.1 bn, an improvement of 66 percent from the same quarter in 2006, while "other" worsen by 16 percent to KHR3155.2 bn. In the same period, domestic credit increased by 43 percent to KHR2892.1 bn, of which government credit increased by 7.4 percent to KHR298.0 bn and private credit by 46 percent to KHR4067.7 bn, while government deposits

rose by 43 percent to KHR1473.5 bn. Net foreign assets went up by 26 percent from the same period in 2006 to KHR8056.3 bn. Net assets of the banking system provided total liquidity (M2) of KHR7793.2 bn, an increase of 36 percent from first quarter 2006. M2 comprises liabilities of the banking system, namely currency outside banks, which rose by 24 percent to KHR1733.6 bn; riel bank deposits, which fell by 3.9 percent to KHR154.8 bn; and foreign currency deposits, which climbed 42 percent to KHR5904.7 bn.

### Poverty Situation—Real Daily Earnings of Vulnerable Workers

In May 2007, real daily earnings of the 10 groups of vulnerable workers increased by 16 percent to 8240 riels compared to the same period in 2006 (see table). However, unskilled workers' earnings decreased by five percent and rice field workers' by one percent.

Daily earnings of motorcycle taxi drivers increased by 47 percent relative to the same period in 2006, to 12,800 riels. The increase was due to more time worked i.e., 11 hours a day, and greater demand. Sixty percent of interviewees rented accommodation, 10 percent stayed with relatives, and others had homes in or surrounding the city. Moreover, 95 percent of motorcycle taxi drivers said that their families were now better off, while the other five percent had experienced no improvement since they began working in the city. Forty-five percent of motorcycle taxi drivers have worked more than five years, 37.5% worked from 3 - 5 years and 17.5% less than three years. Ninety-five percent reported that their earnings were insufficient to finance a new business if they left their present job.

The real daily earnings of skilled construction workers rose 21 percent compared to the same period last year. Sixty-eight percent of skilled workers indicated that the number of construction projects in the city had increased rapidly, so there was more work than last year. Skilled workers spent approximately 3500 riels for daily food and about 130,000 riels per month. Ninety-five percent of skilled workers were from rural areas, and 45 percent were single. In contrast, the daily earnings of unskilled workers declined by 5 percent compared to May 2006. Seventy-seven percent of interviewees said that the reason their earnings declined was an increasing number of workers. However, 38 percent of unskilled workers expressed the view that their families were better off since they came to work in the city.

Daily earnings of scavengers were 5533 riels, a 23 percent increase compared to the survey last year and 22 percent higher than three months ago. The prices of scrap increased during the three months to May, 60 percent of

## Economy Watch—Domestic Performance

scavengers reported. Ninety-five percent said that from their earnings they could not save enough to set up a new business. Forty-three percent of scavengers borrowed money from middlemen or NGOs when their families lacked food or suffered illness.

Cyclo drivers' earnings rose by eight percent, from 8546 riels a year earlier to 9250 riels. Cyclo drivers spent more time, about 11 hours per day, to improve their earnings. Some others had permanent clients, who were usually traders in markets. Despite this, most cyclo drivers complained that they could not save enough to establish another business. Fifty-five percent said that their family's livelihood was the same, 10 percent said that it was worse, and 35 percent said it was better in this occupation.

The daily earnings of small vegetable traders were 8950 riels, a 38 percent increase compared to May 2006. Eighteen percent of small traders were single; they played an important role in helping to support their families. Most small traders reported that their families were better off since they began trading.

Daily earnings of garment workers rose by 6 percent compared to a year earlier, from 7860 riels to 8350 riels. Most said that they worked more than 48 hours per week. Forty-six percent reported that they can earn from USD56 to USD70 per month, and 26 percent earned over USD70 per month. The survey found that 35 percent of garment workers have worked for the same business for more than five years, 39 percent have worked from 2 – 5 years, 12 percent have worked one to two years and 14 percent have one year. Thirteen percent of garment workers responded

that they can save some money to support their families, while the others provided only temporary support.

The surveys of waitresses/waiters revealed that their daily earnings fell by one percent compared to May 2006. Fifty-seven percent sent some money home to support their families; therefore, most of their families had an improved livelihood.

The daily earnings of rice field workers remained stable compared to the same period in 2006, at 4530 riels. Seventy percent of rice field workers indicated that their families' lives had continued at the same level. Sixty-five percent spent most of their earnings on food, and the others spent most of their income on health care. Additionally, 43 percent said that they borrowed money from landowners, to be paid back with their labour.

*Prepared by Pon Dorina and Phann Dalis*

*Continued from page 20* **Update ...**

(Analysing Development Issues-Cooperation Committee for Cambodia), on 30 August CDRI co-hosted a research dissemination workshop on people's responses to natural disasters. CDRI also co-hosted the IDRC All Partner Forum on 12-13 September to improve the coordination and focus of the IDRC research assistance to Cambodia.

The Moving Out of Poverty Study was finalised and printed in September. A new project on trade and the environment, funded by the Geneva-based Trade Knowledge Network, was begun in September.

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## Economy Watch—Indicators

**Table 1. Private Investment Projects Approved, 1999–2007**

	1999	2000	2001	2002	2003	2004	2005	2006				2007
								Q1	Q2	Q3	Q4	Q1
	Fixed Assets (USD m)											
Agriculture	63.9	9.8	0.4	40.3	3.7	12.3	26.8	126.5	216.9	0.0	154.6	19.1
Industry	162.6	109.4	105.2	67.7	137.2	189.2	912.6	40.1	76.9	171.7	76.6	142.7
. Garments	67.7	81.5	26.5	27.2	68.1	133.9	152.0	30.5	9.6	23.2	26.1	36.6
Services	222.6	150.1	118.4	145.3	168.4	92.0	155.5	60.7	2,043.2	94.5	740.7	335.7
. In telecommunications	171.8	79.8	73.8	47.1	124.1	55.9	102.6	0.0	26.2	3.5	315.3	140.3
Total	449.1	269.2	224.0	253.3	309.3	293.5	1094.9	227.3	2,337.0	266.2	971.9	497.5
Total	-	-	-	-	-	-	-	90.7	928.1	-88.6	265.1	-48.8
Total	-47.6	-40.0	-16.8	13.1	22.1	-5.1	273.0	-52.2	2331.2	-34.1	715.4	118.9

Including expansion project approvals. Up to June 2006. Source: Cambodian Investment Board

**Table 2. Value of Construction Project Approvals in Phnom Penh, 1999–2007**

	1999	2000	2001	2002	2003	2004	2005	2006				2007
								Q1	Q2	Q3	Q4	Q1
	USD m											
Villas and houses	20.0	16.4	15.9	23.4	20.0	30.3	45.5	10.1	5.7	7.6	9.7	10.9
Flats	290.5	174.8	167.8	179.9	91.6	167.6	204.2	39.9	51.8	67.1	54.5	59.9
Other	16.4	14.2	12.6	16.6	87.3	65.6	109.1	17.4	24.7	20.8	13.9	19.5
Total	326.9	205.4	196.3	219.9	198.9	263.5	358.8	67.4	82.2	95.5	78.2	90.4
Total	-	-	-	-	-	-	-	-6.2	22.2	16.1	-18.1	15.6
Total	18.7	-37.2	-4.4	12.0	-9.5	32.5	36.2	-36.5	-21.2	24.8	8.9	34.2

Source: Department of Cadastre and Geography of Phnom Penh municipality

**Table 3. Exports and Imports, 1999–2007**

	1999	2000	2001	2002	2003	2004	2005	2006				2007
								Q4	Q1	Q2	Q3	Q4
	USD m											
Total exports	941.1	1056.2	1268.2	1453.2	1708.1	2108.1	644.8	603.2	652.5	807.5	736.7	707.8
Of which: Garment	554.0	962.1	1202.2	1355.8	1628.4	2027.0	601.0	568.5	632.4	782.0	716.0	677.5
. To US	486.0	714.1	840.9	943.4	1099.8	1270.9	408.1	402.5	438.6	522.8	483.2	499.1
. To EU	-	228.1	323.3	356.3	414.7	590.8	145.3	110.6	142.2	188.1	160.1	106.3
. To rest of the world	68.0	19.9	38.0	56.1	113.8	165.3	47.5	55.3	51.6	71.0	72.8	72.0
Agriculture	-	94.2	66.0	97.3	79.7	81.2	43.8	34.7	20.2	25.5	20.7	30.3
. Rubber	-	29.6	25.9	29.7	35.1	38.3	13.4	7.8	9.8	13.6	10.2	8.4
. Wood	-	32.9	22.3	16.0	10.2	11.1	2.0	2.1	2.3	2.5	1.7	2.1
. Fish	-	5.4	6.0	4.3	2.8	10.6	6.6	1.9	1.0	1.6	1.4	0.7
. Other	-	26.2	11.8	47.4	31.6	21.3	21.9	22.9	7.0	7.7	7.5	19.0
Total imports	1237.4	1417.7	1501.4	1707.8	1824.9	2149.0	691.1	690.7	774.9	784.3	807.1	790.9
Of which: Gasoline	-	-	-	25.9	33.2	30.2	10.7	10.9	12.4	13.1	13.2	15.7
Diesel	-	-	-	100.8	109.6	109.4	21.1	32.5	32.2	30.1	27.2	31.9
Construction materials	-	-	-	12.9	80.8	95.3	26.2	37.0	39.1	42.5	35.8	44.1
Other	-	-	-	1568.2	1601.3	1914.0	633.1	610.3	691.2	698.5	731.0	699.2
Trade balance	-296.3	-361.5	-233.2	-254.6	-116.8	-40.9	-46.3	-87.5	-122.4	23.2	-70.4	-83.1
Total garment exports	-	-	-	-	-	-	-15.3	-5.4	11.2	23.7	-8.4	-5.4
Total exports	-	-	-	-	-	-	-11.7	-6.4	8.2	23.7	-8.8	-3.9
Total imports	-	-	-	-	-	-	9.3	-0.03	12.2	-1.6	5.9	-2.0
Total garment exports	47.0	74.0	24.9	12.8	20.1	24.5	15.5	27.8	27.1	10.2	19.1	19.2
Total exports	20.0	12.2	20.1	14.6	17.5	23.4	18.3	30.3	26.7	10.6	14.3	17.3
Total imports	11.3	14.6	5.9	13.7	6.9	17.8	26.1	32.6	15.6	20.9	16.8	14.5

Import data include tax-exempt imports. Sources: Department of Trade Preferences Systems, MOC and Customs and Excise Department, Ministry of Economy and Finance

**Table 4. Foreign Visitor Arrivals in Cambodia, 1999–2007**

	1999	2000	2001	2002	2003	2004	2005	2006				2007
								Q1	Q2	Q3	Q4	Q1
	Thousands of passengers											
By air	262.9	351.7	408.4	523.0	456.0	626.1	856.5	275.4	204.4	224.2	325.0	373.6
By land and water	104.8	114.7	196.5	263.5	245.0	428.9	565.1	181.9	153.6	146.4	191.0	177.2
Total	367.7	466.4	604.9	786.5	701.1	1055.0	1421.6	457.3	358.0	370.6	516.0	550.8
Total	-	-	-	-	-	-	-	9.9	-21.7	4.1	39.2	6.7
Total	28.3	26.8	29.7	30.0	-10.9	50.5	34.7	20.2	21.2	14.7	24.1	20.4

Source: Ministry of Tourism

## Economy Watch—Indicators

**Table 5. National Budget Operations on Cash Basis, 1998–2007 (Billions of riels)**

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007		
									Q2	Q3	Q4	Q1*
Total revenue	920	1326	1528	1530	1744	1764	2126	2625	731.5	732.2	1199.2	258.0
Current revenue	-	-	-	1521	1728	1733	2107	2474	726.9	716.8	844.4	258.0
Tax revenue	676	956	1096	1096	1227	1220	1577	1911	558.6	565.8	661.3	222.5
Customs duties	376	432	376	376	424	395	513	5,73	151.7	157.2	200.0	-
Domestic tax	-	-	-	-	-	-	-	-	-	-	-	150.3
Taxes on international trade	-	-	-	-	-	-	-	-	-	-	-	72.2
Non-tax revenue	204	348	424	424	501	513	530	563	168.3	151.0	183.1	35.5
Forest exploitation	20	36	28	29	15	7	2	3	0.7	0.3	0.9	-
Posts & telecommunications	88	108	124	122	123	120	94	123	30.0	11.7	30.0	-
Property income	-	-	-	-	-	-	-	-	-	-	-	2.9
Sale of goods and services	-	-	-	-	-	-	-	-	-	-	-	30.3
Capital revenue	36	12	8	9	16	31	19	152	4.6	15.4	354.7	0.0
Total expenditure	1348	1788	2332	2332	2948	2757	2932	3295	1012.0	924.0	1078.4	101.7
Capital expenditure	368	624	976	977	1388	1171	1163	1328	386.6	317.2	349.8	76.0
Current expenditure	980	1164	1356	1355	1560	1586	1769	1967	625.4	606.9	728.7	25.8
Education and Health	132	280	344	343	454	473	518	351	202.3	150.1	281.3	-
Defence and Security	448	464	404	405	438	411	423	451	116.7	155.3	170.1	-
Other ministries	332	412	636	637	668	702	828	1165	306.4	301.5	277.3	-
Wages	448	518	517	509	587	615	640	711	210.3	230.6	240.6	13.7
Subsidy and Social assistance	-	-	-	-	-	-	-	-	-	-	-	4.0
Overall balance	-428	-462	-804	-802	-1,204	-993	-806	-706	-280.5	-191.9	120.7	65.4
Foreign financing	268	416	768	766	1,249	886	864	1127	333.3	228.6	296.5	78.8
Domestic financing	112	60	36	37	-45	106	148	-396	-52.8	-36.7	-417.2	-261.3

\* Provisional for 2007. \* ខែ វិច្ឆិកា ឆ្នាំ 2007.

**Table 6. Consumer Price Index (change), Exchange Rates and Gold Prices (period averages), 1999–2007**

	1999	2000	2001	2002	2003	2004	2005	2006	2007			
								Q1	Q2	Q3	Q4	Q1
Consumer price index (percentage change over previous year)												
Provinces	5.8	5.4	-0.1	0.9	4.4	14.4	16.4	15.8	12.0	8.5	7.2	4.3
Phnom Penh - All Items	4.0	-0.8	0.2	3.3	1.1	3.9	5.8	6.1	4.5	4.9	3.4	3.0
- Foods	7.6	-3.4	-2.5	1.8	1.5	6.4	8.6	10.6	6.3	5.8	3.3	3.0
- Transportation	3.5	6.6	-4.2	0.3	4.9	9.7	11.4	9.7	10.0	10.1	6.8	5.2
Exchange rates, gold and oil prices (Phnom Penh market rates)												
Riels per US dollar	-	3840.8	3916.3	3912.1	3973.3	4016.3	4119.7	4094.8	4106.6	4145.3	4129.4	4063.0
Riels per Thai baht	-	95.8	88.2	91.1	95.8	99.9	102.6	103.5	108.0	110.3	113.0	113.7
Riels per 100 Vietnamese dong	-	27.1	26.6	25.6	25.6	25.5	25.8	25.4	25.0	24.9	25.0	24.6
Gold prices (US dollars per chi)	36.0	33.3	32.8	36.8	41.4	46.3	54.0	64.2	72.2	73.0	72.8	77.7
Diesel (riels/litre)	1,065	1105	1329	1521	1508	2088	2633	2867	3110	3333	3250	3067
Gasoline (riels/litre)	1,613	1760	2113	2084	2150	2833	3442	3767	4000	4200	4050	3750

Sources: CDRI, Ministry of Planning, Ministry of Economy and Finance.

**Table 7. Monetary Survey, 1999–2007 (end of period)**

	1999	2000	2001	2002	2003	2004	2005	2006	2007			
								Q1	Q2	Q3	Q4	Q1
Billions of riels												
Net foreign assets	2019	2589	3080	3737	4027	4797	5475	6410	6682	6958	7224	8056
Net domestic assets	-576	-759	-876	-849	-698	-467	-450	-699	-637	-497	-282	-263
Net claims on government	103	3	-75	-119	-128	-209	-421	-755	-831	-892	-953	-1176
Credit to private sector	763	898	936	1059	1337	1817	2394	2778	2997	3288	3628	4066
Total liquidity	1443	1830	2204	2888	3329	4330	5025	5711	6045	6461	6942	7793
Money	531	540	609	813	937	1153	1323	1449	1512	1563	1658	1794
Quasi-money	912	1290	1595	2075	2392	3177	3702	4262	4533	4898	5285	5999
Percentage change over previous year												
Total liquidity	17.3	26.8	20.4	31.0	15.2	30.0	16.1	27.0	30.6	29.4	38.2	36.5
Money	-2.2	1.7	12.8	33.5	15.3	23.0	14.7	20.9	24.4	22.2	25.3	23.9
Quasi-money	32.7	41.4	23.6	30.0	15.2	32.8	16.6	33.6	32.8	31.9	42.7	40.7

Source: National Bank of Cambodia.

**Table 8. Real Average Daily Earnings of Vulnerable Workers (at constant November 2000 prices)**

	Daily earnings (riels)										Change over previous year (%)					
	2000		2003		2004		2005		2006		2007		2006		2007	
	Nov	May	Nov	May	Nov	May	Nov	May	Nov	May	Nov	May	Nov	May	Nov	May
Cyclo drivers	7594	8572	7614	7469	8546	6063	7393	6534	9245	-5	-17	8				
Porters	6233	6676	6895	6545	7375	5238	7045	6010	9798	9	-8	33				
Small vegetable sellers	5256	6532	6947	6000	6492	5197	6125	6125	11178	-27	-1	38				
Scavengers	2718	3944	4446	4416	4512	4266	3903	4530	5533	-19	-9	23				
Waitresses*	2111	4932	4448	4426	4243	4292	4498	4078	5150	16	-13	21				
Rice field workers	4198	4177	4139	4365	4541	4137	4653	4126	4278	10	0	0				
Garment workers	6701	9577	9277	8816	7860	9264	8957	11146	8347	3	21	6				
Motorcycle taxi drivers	8610	10092	9204	8201	8790	6744	8386	9144	12886	-13	3	47				
Unskilled construction workers	5399	6558	6382	5918	6407	6028	5263	5094	6075	-21	-15	-5				
Skilled construction workers	13127	13111	12679	10316	9833	9466	10215	10146	11892	-9	-14	21				

\* 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.

## CDRI UPDATE

### Management

On 2–4 July 2007, CDRI's executive director, Larry Strange, participated in a conference organised by the Stanley Foundation, a private US think-tank, on "Aid, Trade and Infrastructure: Economic Dimensions of New Power Dynamics in South-East Asia" in Siem Reap. Other Cambodian delegates included Prince Norodom Sirivudh, chair of the Cambodian Institute for Cooperation and Peace (CICP), the co-organiser, Pan Sorasak, secretary of state, Ministry of Commerce, and Dr Hang Chuon Naron, secretary general of the Ministry of Economy and Finance and chair of CDRI's board of directors, and Roland Eng, ambassador at large, Ministry of Foreign Affairs. The Stanley Foundation will prepare policy briefs, based on the conference discussion, advocating a more effective engagement by the US in south-east Asia, particularly targeting policy makers in the new US administration in late 2008–early 2009.

CDRI's board of directors held its mid-year meeting on 11 August 2007. The board supported CDRI management's recommendation of a stronger focus in the remainder of the 2006–10 strategic plan on the dissemination and impact of CDRI's research and policy products, in accessible Khmer language forms, especially to national and sub-national government, the private sector and civil society. In a related decision, the board endorsed the establishment of "friends" and "distinguished fellows" of CDRI, which will acknowledge the contribution of the many eminent people within Cambodia and internationally who have significantly contribute to its work, and also better utilise their advice and support. The board also endorsed plans for the Cambodia Outlook Conference, to be held in late February 2008, again in partnership with ANZ Royal, on the proposed theme of "Mobilising Cambodia's

Resources—Human, Natural, Financial—for Quality Development, Growth and Prosperity".

As part of its commitment to ensuring the effective dissemination of research findings to civil society organisations in Cambodia, on 31 August CDRI collaborated in the organisation of an issue briefing workshop on "Rural Livelihoods Transformed in Response to Disasters and Shocks" in partnership with the Analysing Development Issues Project of the Cooperation Committee for Cambodia, presenting some of the findings of CDRI's recent participatory poverty assessment of the Tonle Sap and Moving Out of Poverty studies.

In Phnom Penh on 12–13 September, CDRI and the Community Based Natural Resource Management Learning Institute co-hosted the International Development Research Centre (IDRC)'s Cambodia All Partners Forum, bringing together all IDRC's Cambodian partners to discuss a coordinated approach to meeting Cambodian development research needs. IDRC has been a long-standing and very supportive partner of CDRI, particularly on issues of regional and sub-regional economic integration and trade, and natural resources and the environment, both in Cambodia and more broadly in the Greater Mekong Sub-region and south-east Asia.

### Research Update

The Development Analysis Network met in Phnom Penh on 20–21 August to discuss fieldwork methods in research tracing the market chains of rubber, cassava and livestock. On 29 August, the Governance Unit held an inception workshop to launch the research programme on governance and public sector reform. With ADI/CCC

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