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The Evolution of a Cambodian Election Process

Mr. Ok Serei Sopheak, Coordinator of the CDRI Centre for Peace and Development, and Chair of the COPCEL round table meetings, reflects on Cambodia's experience in building a democratic election process. *

As Cambodia prepares to engage in the National Election of July 2003, it is important to revisit Cambodia's recent experience and the lessons learned in the process of establishing democratic elections. Since the UN supervised election in 1993, Cambodia has organised two elections, the 1998 national election and the commune elections of February 2002. The challenges in both cases were not insignificant; armed conflict in 1997 threatened to set back the election process, and Cambodia did not achieve full peace and territorial integrity until 1998. Cambodia has nevertheless, surmounted what many in the international community — and Cambodians themselves — believed to be insurmountable challenges, and has continued to make steady progress.

With each new election experience, improvements have been made in aspects of the election process, for example in the legal framework, in voter education and registration, in the role of the media, and in campaigning. The management of the election process for both the national and commune elections have, from a technical standpoint, been generally recognised as credible by national and international observers. Also, the cost of Cambodian elections is on the decrease while the Cambodian contribution is increasing. That conflicts surrounding election issues are being more peacefully managed, or even prevented, is also encouraging. However, there remain serious concerns over some important issues. Among them, the reform of the National Election Committee (NEC), which has been the subject of passionate and intense debate.

There is a widely held perception, among Election Monitoring Organisations (EMO) and other



The Commune Council elections of February 2002 were seen as a significant improvement over previous elections. Here a voter has their finger inked after voting to prevent them from voting a second time.

stakeholders, that the actions of the Ministry of Interior (MOI) in selecting and proposing a new NEC has left many feeling powerless and frustrated, believing the government is attempting to control the NEC. Such a widely held perception impacts negatively on Cambodia and damages the credibility of the election process as Cambodia approaches the 2003 national election. It also undermines the efforts to mobilise the broad support needed from within and outside Cambodia for the successful implementation of Cambodia's many reforms. While recent experiences of the NEC reform may be seen as a setback, it is important not to lose sight of the

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* This article is based on discussions undertaken between the COPCEL coordinator and participants from the monthly roundtable COPCEL meetings.

broader picture, and of the positive developments that are taking root. It is equally important to recognise that there may be more than one-way to reach a desired endpoint. For example, discourse on the independence of the NEC has principally focused on the form of its composition, overlooking the fact that its credibility could also be built around a transparent process which provides opportunities for civil society and the wider public to contribute to the preparation of procedures and regulations to govern the next electoral process.

The Significance of the 2003 National Election

Every election is important in the process of democracy building, even though by themselves elections do not make a country more or less democratic. For Cambodia, next year's election will mark a turning point in several ways. To date Cambodian elections have been partly financed by the international community, and many countries, particularly Japan and the European Union are expected to grant some financial support for the 2003 election. It is reasonable to anticipate, however, that after 2003 Cambodia will most likely have to bear the significant, full cost of elections. Forward planning, to ensure sufficient resources to finance at least three elections, the Senate Election, the 2007 Communal Election and the 2008 National Election, will be critical for the newly elected government if it is to continue its commitment to the democratic process. In financial terms this will require an enormous effort on the part of Cambodian people. A peaceful, fair, and credible 2003 election will go a long way towards convincing people that the financial sacrifice is worth it. The cost of the 2002 commune election (\$16 million) was much lower than the 1998 election (about \$28 million), and it was even better managed. The cost of the 2003 election is expected to be lower still, as the Commune Councils will handle the registration of voters — which alone costs more than \$4 million. In this respect steady progress can be seen from one election to the next. The financial issue is an important one, as the decision to hold elections will be based upon a conscious choice of the Cambodian people, not on financial pledges from the international community.

The political landscape of the 2003 national election will be very different, and much more favourable than the UNTAC-organised 1993 election and the 1998 election, which was heavily influenced by the fighting of July 1997. Previously, the general climate was dominated by fear. Key political players were just returning from exile, and had inadequate time — just a few months — to prepare the crucial pre-election phase of their campaigns. Also the last of the Khmer Rouge did not surrender their weapons until December 1998. The situation in 2003 will be quite different with a stable and peaceful election environment, assisted by Cambodia's current socio-economic and political situation.

A large number of voters will be going to the polls as they reach 18 and will be able to exercise their voting rights for the first time. This could introduce a new dynamic into a political culture that will have to increasingly adapt and respond to this new constituency's hopes, views and impatient expectations. Whether political parties are sensitive to these changes, and have the capacity to respond, will be critical to the continuing evolution of the democratic process.

The 2003 national election can be measured therefore, as one step in a dynamic and continuously evolving process of democratic governance and will provide an opportunity to assess progress on a number of key issues such as reform of the NEC, voter registration, media campaigning, security, and vote counting.

NEC Reform

From the 1998 national election to the 2002 communal election all observers agree on at least one point: The NEC has succeeded in resolving major technical problems given limited timeframes. A point of discord, however, relates to the 'independence' of the NEC. From an NGO perspective there is concern that the NEC purports to be a referee, but is in fact also a player. In many countries around the world, members of the Election

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Committee are selected among lawyers who do not belong to any political party. In Cambodia, from 1997–2002, the composition of the NEC in fact reflected a spirit of consensus. Representatives came from the political parties (having seats in the National Assembly), the government (MOI), NGOs and members of the electorate. The public perception of a lack of independence in the NEC however, stems generally from four factors; a perception that NEC members representing political parties tend to put their own party's interests first; the role of the MOI in selecting NEC members gives the selection process a 'pro-government' label; the NEC position as 'referee' is unclear especially when dealing with the resolution of complaints where the NEC also acts as a player; finally, due to time and resource constraints in implementing its procedures, the NEC had to rely on the structure and competence of local authorities — perceived as politically biased — giving the impression that the NEC and local authorities are implementing the same agenda.

In preparing for the 2003 election, NEC reform figured at the top of everybody's agenda. It was interesting to note strong disagreement among key stakeholders on all issues but one; the reduction of the NEC composition from eleven down to only five or six members. The Cambodian People's Party (CPP) opted for all members to be 'independent'. FUNCINPEC and the Sam Rainsy Party (SRP) favoured a balance of power between the three political parties. FUNCINPEC proposed a 'two-all' formula with two representatives from each of the three main parties. The SRP preferred a 'two-plus-three' formula, with two non-party representatives (selected by

the King and NGOs), and three more representative, one from each of the three parties. For many months civil society conducted an intense lobby for five independent members proposed by a selection committee representing all interests. Issues such as how a selection committee would be appointed, as well as the time needed to resolve these issues raised many concerns. The two formulas proposed by FUNCINPEC and the SRP did not meet some concerns regarding the potential imbalance of voting power should there be a change of alliances in the NEC. This is a reality that cannot be ignored. An encouraging and positive aspect in all of this was the fact that there was real opportunity for extensive debate on all the issues. We must never take the birth of this new culture of dialogue for granted, however, as it has to be maintained and nurtured as much as possible.

At the time of this article, it appears that the MOI will propose a list of five dignitaries to the government and Parliament for consideration as NEC members. It would be ideal if in the future, a representative selection committee could nominate NEC members in a timelier manner. The question of independence should not only focus on the personality of NEC members, but should also be based on other important criteria such as public transparency of NEC operations, and transparency in preparation and implementation of rules and procedures in all phases of the election process. With constant vigilance and participation of key players, the concept of independence can gradually become a fact of life in the mind and the behaviour of the people.

Registration of Voters

During the last two elections in 1998 and 2002 this issue was one of the most controversial. The process was expensive, time consuming, politically sensitive, and technically laborious. The fact that up to two million voters were not registered, and that some parts of the implementation (especially information provided to eligible voters) relied on the assistance of local authorities, fuelled intense debate. Controversy related to the issue of residency (particularly for thousands of workers in factories), monks, and ethnic groups. As new voters (particularly the 18 year olds) register every year, registration procedures have to be flawless, ongoing and scrupulously implemented according to the spirit of the constitution and election laws.

During the last few months, there were long and intense debates on this issue. And there was an agreement. All key players have agreed that the registration of voters should be the permanent daily task of the new Commune Councils with assistance from the NEC. The fact that the huge majority of Commune Councils are now run by many political parties, provides a reasonable and realistic expectation that the registration process will be more transparent and accountable. Even so many problems need to be dealt with like the lack of experience

and resources, a limited timeframe for the next election, and the fact that national ID cards are still handled by the National Police. It is realistic to foresee that for the 2003 election, this issue will still be controversial, but it will only be a matter of time before the Commune Councils become completely equipped to deal with the problem. The objective should be a more flawless process for elections after 2003.

Media and the Election Campaign

During the 2002 Commune Election, there were two controversial issues. The first was what was considered 'public information' and therefore not limited to the timeframe of the official election campaign; the second was the broadcasting of the roundtable-debate between candidates and the Talk Show. With the first issue, the NEC procedures were not very clear about education materials, especially those prepared by many competent NGOs. Most of the materials were only authorised by the NEC to be distributed during the two-week timeframe set aside for the election campaign, although for voter education, information should have reached all those eligible long before that. On this particular point, based on the good cooperation and understanding already established among key players, the new NEC should seek to cooperate with relevant NGOs in working out an 'open principle' guideline allowing educational materials to reach the voters more widely. This approach would also save a lot of money for the NEC.

An unfortunate lesson to be learned was that in Cambodia's post-conflict society, anything relating to public exposure — required in good democratic practice — is still very difficult.

On the second issue, conflicts arose from unclear procedures and the reversal of decisions made by the NEC. Many national and international NGOs worked hard, investing finance, energy and a lot of time to prepare debates to be aired on radio and TV. These debates were often creative and introduced an impressive public participation into the democratic debate. An unfortunate lesson to be learned here was that in Cambodia's post-conflict society, anything relating to public exposure — required in good democratic practice — is still very difficult. A solution would be to increase dialogue to build mutual confidence and trust, and to establish acceptable 'game rules' agreed by all. We believe that these are not beyond the will and the mandate of the new NEC.

Security

If comparison is made with the fairly recent past, the security atmosphere surrounding periods of election has improved significantly. This statement does not ignore the fact that while the number of killings has decreased; a general atmosphere of fear unfortunately still persists. This is the result of a 'survival mentality' of some grassroots authorities and people, who as part of the legacy of war have been exposed to a culture of violence, physical fear, and political uncertainty for quite a long time. The huge circulation of small arms and the lack of a strict rule of law contribute to this atmosphere.

For this issue, consistent, widespread basic education, time, and clear-cut sanctions against perpetrators — whoever they are — would be determinant factors in decreasing the level of violence, particularly during election periods. During the 2002 election campaign, the MOI set up a competent task force to deal with this matter. It was very open in the manner in which it cooperated with civil society. It has shortened the period of investigation and sent the perpetrators to court. For next year's election and those afterwards, this task force should be maintained and strengthened. The general public should also be kept more regularly informed about the progress of cases pending. In this area, the debate on whether a criminal case is 'politically-motivated' or not, does not seem relevant as a crime is a crime and should not change the procedure of law enforcement. Unfortunately, a crime against a candidate during an election period does have a political impact.

Vote Counting and Complaints

The experience of this year's commune elections, proved that counting votes and handling complaints on voting day, with the cooperation of officials running the polling stations, and observers from NGOs and political parties, was one of the most improved aspects of voting. From the technical point of view, counting at the polling station remains more practical than counting at any other location. Concerns regarding fear, due to a small number of voters in one polling station, do not stand up to scrutiny. Certainly, if counting were conducted at the commune level the fear factor would still exist. In addition, the transport of the ballot boxes and late counting conducted by tired officials and observers would create more problems than solutions. If for some reason however, counting has to be at the commune level for the 2003 election, the procedures should be adjusted accordingly so that the process can still be smoothly implemented. It should not be forgotten that problems and mistakes are great teachers, provided that lessons are learned and more appropriate mechanisms are proposed.

This process would also be greatly improved if new NEC procedures could strictly implement the principle that those lacking official credentials, not be present at polling stations; this is especially true for officials from the local authority. To further improve the process, another important principle would be if an authority higher than the NEC, the Constitutional Council for example, handled complaints filed against the NEC (particularly at the Commune and Provincial Election Committee levels). This should also specifically include complaints relating to the commune election, as there is a short provision dealing with this issue in the National Election Law, but nothing in the Communal Election Law.

Conflict Prevention Approach

In February 1999, CDRI undertook research on the "Nature and Causes of Conflict Escalation in the 1998 National Election". The result of this research was presented to the public in June 1999, during a two-day conference that recommended a conflict prevention mecha-

nism in the Commune Election. The MOI and other stakeholders were quick to provide support to the proposed conflict prevention process. As early as August 1999, the first monthly roundtable meeting of Conflict Prevention in the Commune Election (COPCEL) took place.

It was held at CDRI with participation from government representatives, major political parties, the NEC, the media, women's representative groups, NGOs, and representatives from the donor community. Month after month without interruption, many key issues, such as those mentioned above were debated. Before the Commune Election in February 2002, thirty-one COPCEL meetings had been facilitated by CDRI. In terms of building trust and promoting dialogue and a culture of peace, COPCEL has been recognised as so important that participants unanimously voted to maintain the mechanism to serve the National Election in July 2003. Following a Cambodian lecture on the COPCEL experience, at a regional Conflict Resolution seminar in Thailand, a Canadian expert on Conflict Resolution commented that:

"COPCEL is a great model in the area of Conflict Prevention that should profoundly inspire all of us". The COPCEL acronym has been maintained and now stands for 'Conflict Prevention in Cambodian Elections'. There will have been 47 COPCEL meetings before the 2003 election, presenting a unique and rich experience in a post-conflict situation.

After the energy invested in the COPCEL mechanism, the major lesson learned has been that the transformation of a culture of violence into one of non-violence and peace through dialogue and trust building is possible. It needs a great deal of patience, mutual respect, and time from key players over the long process of nation building. But as nations cannot be built overnight, neither can enduring social peace.

Conclusion

In building democratic mechanisms, that include an election process as one of its principle components, no quick or fixed solution should be expected. It is a dynamic process with everybody continuously adjusting his or her contribution. As already mentioned, whatever problems have been encountered, there are many structural achievements that as a post-conflict society we should feel proud of. All key players, particularly those from the civil society have contributed very significantly to strengthening the process. We strongly believe that to continue progress, we must maintain and promote the habit of dialogue, which constitutes an inalienable part of the culture of peace. The road ahead is still long and full of obstacles and there is no reason for being self satisfied or complacent. But there is no reason why we should minimise our great achievements in the election process, the most critical area for democratic governance. Perhaps we should just occasionally stop and take the time to reflect on our past experiences and the lessons we can learn from them.

The Impact of Flooding and Drought in Cambodia

CDRI interviewed His Excellency General Nhim Vanda, Senior Minister and First-Vice President of the National Committee for Disaster Management. Based on the interview, this article offers a preliminary assessment of the damages caused by flooding and drought for three consecutive years, and the responses of the Royal Government of Cambodia and the International Community to this year's disaster.

The floods in 2000, were reported by the National Committee for Disaster Management (NCDM), to be the worst in 70 years. Three hundred and forty seven lives were lost and the Council of Ministers estimated US\$ 150 million worth of physical damage. The following year Cambodia was once again subject to floods, but this time other parts of the country also experienced drought. This caused the deaths of a further 61 people and an additional cost of US\$ 36 million.

In May 2001, the NCDM stated that; *'The floods [of 2000] may have been exceptional compared to the past, but they will not be exceptional in terms of the future. Climate change and consequent rises in sea level and increase in river flow is likely to render the floods of 2000 the norm not the exception'*.¹ In 2002, Cambodia experienced the third successive year of natural disaster.

This article is an initial assessment of the damage caused by the combined flood and drought of 2002, and the response of the government and the international community. As 2002 is the third successive year that Cambodia has faced natural disaster, this article is placed in the context of the impact on development. The article concludes with some general recommendations for integrating risk reduction strategies into development policies.

The Extent of the Drought and Flood in 2002

In August this year, the NCDM reported that throughout Cambodia 55 Districts consisting of 551 communes had been affected by drought, which was the worst in two decades.² The worst affected provinces were Prey Veng, Battambang, Kandal, Kompong Cham, Kompong Speu, Pursat and Takeo. The United Nations Office for the Coordination of Humanitarian Affairs (OCHA) reported that by mid-September,

rice had been planted in only 1,237,604 ha out of a normal 1,929,000 ha (64%).³ Some of the area planted was later affected by flooding.

While eight provinces in Cambodia were facing drought, provinces located along the Mekong River experienced floods due to heavy rains throughout South-east Asia; on August 19, 2002 the Mekong River reached a 30-year high in Thailand.⁴ The NCDM reports that the worst affected provinces were Stung Treng, Pursat, Kratie, Kompong Cham, Kandal, Prey Veng and Takeo. Estimates given by the International Federation of the Red Cross (IFRC) stated that 16,341 families had moved to higher ground as a result of the flooding.⁵ As of the 25th September, OCHA reported that two districts in Takeo, three in Prey Veng and two in Kandal were still flooded. Table 1 shows the number of people and hectares affected by the flood and drought of 2002. The table also indicates how people in some provinces faced the combined impact of both drought and flood, and that some areas of land were affected by both disasters.

The Government Response

The National Committee for Disaster Management

The NCDM was established in 1994 as a result of Cambodia's experience of a series of natural disasters. The NCDMs structure is established by a 1999 Sub-Decree and includes representatives from the government ministries. At the Provincial level the NCDM includes Provincial Governors and provincial level departments as members of the Provincial Committee for Disaster Management (PCDM). At the District level, District Chiefs and relevant district level officers are designated members of the District Committee for Disaster Management (DCDM). Importantly the Sub-Decree also defines the role and membership of the Cambodian Red Cross (CRC) and its representation in the Committees.

Aid agencies reported that the government responded quickly to the flood and drought, by providing food assistance (IFRC). On the 22nd August, the NCDM together with members of the international community conducted a joint damage and needs assessment on the flood situation in Stung Treng and Kratie provinces. Following this assessment the Prime Minister formally

Table 1. The Number of People and Hectares Affected by the Drought and Flood of 2002

Province	Number of People		Number of Hectares	
	Flood	Drought	Flood	Drought
Prey Veng	439,541	198,396	27,292	19,995
Battambang		341,573		43,548
Kandal	335,062	146,540	4,012	9,032
Kompong Cham	300,728	183,667	2,204	10,214
Kompong Speu		483,181		3,027
Pursat	44,163	244,398	2,515	11,252
Svay Rieng		20,931		5,790
Takeo	198,690	398,654	14,414	8,346
Stung Treng	25,247		2,383	
Kratie	96,533		5,725	
TOTAL	1,439,964	2,017,340	58,545	111,204

Source: The National Committee for Disaster Management (October 2002)

issued a declaration on the 'Disaster Situation' on 23rd August. The government mobilised the Cambodian Royal Armed Forces (RCAF) and supplied rice, fuel, sandbags, mobile houses and other supplies as part of its emergency response.

As of 23rd August⁶ the NCDM reported that the government had provided 1,900 mt of rice (20% destined for free distribution) 1 million litres of gasoline, 50–60,000 sandbags, and 3,000 mt of rice seed provided by the Ministry of Agriculture, Fisheries and Forestry (MAFF). The CRC identified 3,499 families for distribution of initial humanitarian assistance. The IFRC reports that disaster preparedness measures did make a difference and that in Kratie for example, the PCDM was proactively working with the DCDM in relocating people to safe areas. In addition, line ministries and the NCDM promptly initiated public education on food and water safety, and were responding to outbreaks of animal and human disease as necessary.

The Response of the International Community

The response of the International Community has been broad based in nature, ranging from emergency coordination and food distribution, to disaster management and coordination. Among many agencies, UNDP (through the UN Disaster Management Team, UNDMT), ECHO and OXFAM assisted in the required coordination effort, while CARE, UNICEF and CONCERN provided basic water and sanitation facilities for 16,341 families (the majority of whom have now returned home according to the NCDM). NGOs such as CONCERN, ZOA, World Vision and CARE among others, procured rice seed, and FAO provided 3,000 mt of rice seed to the MAFF. Food for Work (FFW) has been an important initiative whereby people receive daily rations of food in return for labour-intensive agricultural construction projects. In early July, WFP invited 10 NGOs to submit project proposals to support vulnerable individuals in disaster-prone and food insecure communities with effective FFW interventions. The 2–3 month projects — which will rehabilitate ponds, wells, roads, dams canals and dikes — will be implemented between September 2002 and January 2003.

Coordination efforts have not simply been aimed at providing short-term emergency relief but also to build capacity for mid and long-term, national disaster mitigation strategies. Among many agencies, the IFRC, UNDP, WFP, UNOCHA and ECHO have been assisting the government to develop the institutions and strategic plans necessary to mitigate the impact of natural disasters, to enhance emergency response in the case of disaster, and to manage rehabilitation needs.

Economic Impact in 2002

While the government and international community has responded to the twin disaster of 2002, the economic

impact will still be significant particularly as regards damage to agricultural production. The NCDM estimates that the combined flood and drought have affected over 3.4 million people in 2002 and that up to 1 million could face a food shortage. Provisional estimates from the MAFF made in late August, place the economic cost of the drought alone at more than \$38 million dollars. In addition, \$1.5 million dollars worth of seedlings and rice paddy are estimated to have been destroyed mostly by the drought. This estimate was prepared before the worst of the flooding.

Rice

The NCDM estimates that 134,926 ha of rice were damaged by the drought, with an additional 40,027 ha damaged by flooding (this is even greater than the estimates provided by the NCDM for damage to areas of land, outlined in Table 1). 41,490 ha of rice-crop were totally destroyed and 93,436 ha of rice were particularly damaged. Additionally 16,246 hectares of seedlings were damaged, as were 3,186 hectares of subsidiary crops. Even when the rice crop is only partially damaged however, the impact of the drought on wet-season rice will be in lower productivity. The impact on rice production is likely to lead to food insecurity after 2–6 months dependent on whether the rice is early, mid or late maturing varieties. There will be an additional impact when the area is mono-cropped and when the family is already poor or suffering financially from the impact of the floods and droughts in 2000 and 2001. Flooding has had a mixed impact on wet-season rice crops dependent on the severity and length of the flooding.

Livestock

The NCDM reports that 1,222 animals died as a result of the drought and an additional 889 died as a result of the floods. The major impact on livestock will be a lack of feed, as rice straw is the staple feed for cattle and buffalo in Cambodia. In fact when grazing is restricted during the early wet season, it is the only form of fodder. The result of the drought, especially when followed by flooding is likely to be the loss of grazing land, resulting in animal starvation and the low value of these animals when sold

Damage to Infrastructure

Initial reports from the NCDM indicate that the flood damaged 767 km of secondary road and just less than 9 km of national road. More than 14,000 homes were also damaged, and this will have a major impact on peoples savings. Additionally, 165 bridges were damaged, as were 391 culverts and just under a thousand irrigation schemes. Finally 129 schools and 7 health centres were damaged. Damage to irrigation schemes will have an additional, direct impact on food production. Damage to infrastructure will generally result in increased transportation costs and this will have an impact on the price of

products. There are no estimates yet for the damage to infrastructure but the costs are likely to be very considerable. Ministries are collating figures, but there remains a lot of work to be done to finalise the total cost.⁷

Long Term Consequences

Impact on Food Security and Livelihoods

Approximately 77 percent of Cambodia's cultivated rice areas are entirely dependent on rainfall as a source of water and an additional 11 percent depend on rainfall and supplemental irrigation. Rural livelihoods are already facing pressure from a number of sources. There is a decline in fisheries and forest resources as a result of overexploitation. The rural population is growing, land plots are being subdivided sometimes uneconomically, and concession systems have restricted access to some fertile land. The incidence of three years of successive flood and drought will certainly compound the problems that rural communities are facing.

Early indications from the PCDMs indicate that the cumulative effects of three years of consecutive floods and the recent drought which have destroyed crops, productive land, roads and drainage systems will have a disastrous impact on household economies and the food basket of Cambodia.⁸ Although figures are not yet available for the total cost of the twin disasters in 2002, the NCDM stated that because of the combination of drought and flood, the situation may be worse than that of 2000.⁹

Short term food insecurity is severe and this will have long term consequences: the NCDM estimates that 154,069 families are in need of food as a result of the drought and 89,852 families (living inside and outside the safe areas) need food as a result of the flood. IFRC indicates that in their effort to cope, people have gone increasingly into debt and are migrating to the major towns. In terms of earnings, CDRI surveys of vulnerable workers in August 2002 indicate that the daily earnings of rice workers have dropped by a significant 25.8% compared to May this year. Compared to the same period last year, earnings are 14.8% lower.

Long term food security will also be a problem with the IFRC indicating that rice seed for the next crop is currently being consumed as food. Although there has been no long-term needs assessment yet, the NCDM food security sub-group will be studying specific food needs and long term planning for food security.

The Impact on Rural Development

Although efforts have been made to improve farming techniques and promote new varieties of seeds and fertilisers, no perceptible progress has been made since 1999 largely because of the successive floods and droughts. In 2000, the flood destroyed 374,107 hectares. In 2001, irregular rainfall and serious floods in the Me-

kong River basin damaged approximately 250,000 hectares of rice crop. In 2002, estimates by the NCDM indicate that 169,749 ha have been either damaged or lost due to the flood and drought. Studies undertaken by CDRI (Sok, Sik and Chea, 2001) indicate that extension of irrigation systems, better distribution of new land brought under the plough and improvement in marketing systems would significantly increase crop production in Cambodia.

Consequences to Development

The World Meteorological Organisation (WMO) predicted in a press release of the 28th August 2002, that the current El Niño event will persist into early 2003 and that this is almost certainly linked with the current floods in Asia. The WMO calls for proactive measures to reduce vulnerability and strengthen mitigation capacities. To be sustainable, therefore, long-term development programmes need to take into account the impact of successive natural disasters. This is especially true for poverty eradication programmes in Cambodia when dealing with a vulnerable rural community whose livelihood is so dependent on weather patterns. While this article does not calculate the actual direct or indirect costs associated with the weather patterns of 2000–2002, some general impacts can be suggested.

Government reports for 2000–2001 indicate that the floods directly cost just under \$200 million dollars, a significant amount of which will have been in reconstruction; estimates for 2002 are not yet finalised. There is a cost associated with an increase in reconstruction and the loss or damage to infrastructure development. Money and effort spent directly on reconstruction and rehabilitation is not necessarily synonymous with development. The indirect costs in terms of temporary loss of health facilities and schools, and the physical effort in reconstruction and rehabilitation can not be estimated. The weather patterns will certainly have impacted on food security, not just in the short term, but probably in the longer term, especially if savings have been reduced or destroyed. Food shortage is also likely to increase dependence on natural resources, encouraging the further exploitation of degrading resources. As the poor often have little choice but to exploit the natural environment, they are thereby increasing the risk of their own exposure to natural disasters especially floods and droughts. It is evident that floods and droughts also have impacted on rural-urban migration patterns with many poor farmers abandoning their former livelihood.

Strategies for Development Policies to Reduce Vulnerability to Disasters

Based on research papers produced as a result of the International Decade for Natural Disaster Reduction

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(IDNDR, 1990–99) key activities for mitigating the impact of disasters can be suggested. These are:

Capacity Building and strengthening of Institutional Arrangements

Risk reduction should be factored into institutional development for a wide range of functions, principally for disaster-related legislation; land-use regulation; building codes and environmental protection. This includes development of sustainable management for forest and water resources.

Advocacy for integration of risk reduction in national development plans

Risk assessments and risk reduction should be instrumental in the planning of the environment, finance, transport, construction, agriculture, education and health sectors. For agricultural programmes it is recommended that specific regard should be given to food security and promotion of agricultural methods that reduce hazard related losses.

Public Awareness Programmes

Education on sustainable development needs to be focussed on schools, professionals, community leaders and community based organisations.

Development and implementation of comprehensive development and land use plans

This would assist in identifying the most suitable land use for vulnerable areas. In the Cambodian context this is particularly relevant to the ongoing land titling and cadastral process.

Development of Early Warning Systems

These are more than technological instruments to submit early warning alerts. EWS should include mechanisms for identification of the hazard and combine efforts by all sectors to plan ahead and build peoples capacity to

respond rapidly and to identify increasing vulnerabilities in their communities.

Continued research on the relationship between climate, natural hazards and related socio-cultural and environmental vulnerability

It is evident that there is a close correlation between the trends of increased demographic pressure, escalated environmental degradation, increased human vulnerability and environmental disasters.¹⁰ Research programmes at the national and international level should be facilitated. Existing research institutes should factor the relationship between the environment and human development into their research programmes.

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CAMBODIA'S ANNUAL ECONOMIC REVIEW 2002, ISSUE 2

Sok Hach and Sarthi Acharya

This is the second issue in the series titled *Cambodia's Annual Economic Review* and provides a detailed examination of Cambodia's economic performance for 2001. The first issue in this series was released last year and examined the year 2000.

This issue of the *Review* commences with an overview of the broad developments in the Cambodian economy in 2001, along with a brief short term forecast for the years 2002 and 2003. The *Review* then presents a detailed report on Cambodia's economy which examines Cambodia's economic performance, prices and money, public finance, balance of payments, investments and capital accumulation, employment and earnings, poverty and decentralised development.

As part of CDRI's commitment to undertake research that contributes to the formulation of sustainable development policies and strategies, the *Review* includes a study of the emerging private sector in Cambodia. The *Review* presents findings from case studies of ten Cambodian businesses, outlines the problems they faced and discusses the solutions they found. The *Review* then includes policy recommendations that could help the developing private sector in Cambodia.

CDRI hopes that this publication will become a ready reference for policy analysts and decision makers both inside and outside the government, as well as to interested parties abroad.

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Farm Size, Productivity and Earnings

Dr Sarthi Acharya, CDRI's Research Director and Chan Sopha a CDRI researcher, present a paper which assesses the productivity and income of farms based on a range of different farm sizes. *

Crop productivity in Cambodia is presently among the lowest in the Southeast Asian region. Rice yields here have always been low — for example, when in the 1960–70s, Taiwan, Korea, the Philippines and Indonesia were achieving productivity levels in excess of 3–3.5 tonnes per hectare — Cambodia never exceeded two tonnes. Multiple cropping has not yet caught up either as controlled irrigation is still limited to less than 10 percent of the cropped area.¹ In this regard, Cambodian agriculture could be categorised as low input agriculture, largely dependent on the bounties of nature.

Factors of low productivity, rising population, land atomisation, and high seasonal fluctuations, either individually or in combination, affect food security. In this respect, modernisation of agriculture and scientific land reforms are paramount. The first step in this direction is to understand the nature of technical and economic patterns in Cambodian agriculture; its productivity, incomes, costs, and similar factors. This article, attempts to contribute a better understanding of these issues using data drawn from a survey of 1,000 rural households, undertaken by CDRI over two phases in 2001. This paper particularly aims to answer the following questions:

- What is the nature of the relationship between farm size and productivity?
- What is the relationship between productivity, profitability and farmers' incomes?

Farm Size and Productivity

The debate on farm size and productivity dominated literature on land reforms and land economics in Asia over several decades in the latter part of the 20th Century. The general proposition was that small farms, under the present endowments and means available to farmers, were more efficient than larger ones (reaping a higher yield per hectare). If lands were more equitably distributed, in smaller sizes, productivity would rise as would employment and food security.

The logic for smaller farmers being more productive in Asia is as follows:²

1. Given the spectrum of choices (in fact there are few

* The article is derived from a CDRI study of nine villages and is the result of a full report on Land and Food Security, prepared by CDRI with financial assistance from DFID.

modern methods that would help reap economies of scale) small farmers use better techniques and exercise superior managerial control;

2. Although land tenancy impedes productivity, since small farms have relatively low incentive to rent out land, their yield rates are higher;
3. Family labour and other family-owned inputs are applied more intensively in small farms, irrespective of the level of marginal productivity, thereby raising yield rates;
4. The crop pattern and intensity chosen by small farmers is of higher value; and
5. Small plots are usually sub-divisions of highly fertile lands and it has been possible to fragment them economically in the course of inter-generational land transfers.

So far, not much is known about the applicability of these propositions for Cambodian agriculture, except that not all of them apply in all locales at all times. It has been found in field studies that many smaller plots are *hired out*. This is either because they yield insufficient incomes, or smaller farmers do not necessarily have the means for cultivation. Hiring out is also facilitated by the fact that the cropping pattern does not change very much in Cambodia: rice is grown in almost all seasons.³

Table 1 draws an empirical relationship between farm size and productivity and includes data for both wet and dry seasons crops. Farms have been grouped according to their size range (statistical distribution).

For the wet season crop, in which the input application is generally low, productivity measured as the rice-yield (tonnes per hectare, Table 1) is the highest in the smallest farms at 1.82 tonnes per hectare. There is a gradual fall in the yield rate as the farm size increases. The classical thesis suggested for Asia — that smaller farms are more productive — holds for Cambodia, as seen from the wet-season crop. This result is expected since the majority of Cambodian farmers still use traditional, subsistence-oriented cultivation methods. Another reason is that better quality lands are split into smaller plots, as revealed by data on land prices: smaller plots are priced higher than larger ones when measured on the basis of unit area.

The dry-season crop (Table 1) shows results that deviate from those for the wet season. The largest farms

Factors of low productivity, rising population, land atomisation, and high seasonal fluctuations, either individually or in combination, affect food security.

Table 1: Productivity by Farm Size, Rice Cultivation, 2001

Productivity	Farm Size Groupings (ha)				All
	>0-0.5	>0.5-1	>1-2	>2	
Wet season crop					
Sample farms	225	133	225	64	495
Mean area (ha)	0.34	0.84	1.69	3.99	1.15
Production (tonnes)	0.56	1.10	1.84	2.71	1.17
Yield (tonnes/ha)	1.82	1.29	1.08	0.75	1.43
Dry season crop					
Sample farms	95	70	68	44	277
Mean area (ha)	0.33	0.83	1.61	3.40	1.26
Production (tonnes)	0.81	2.16	4.30	9.17	3.33
Yield (tonnes/ha)	2.62	2.65	2.65	2.69	2.65

have the highest yield, though the difference between the large and small farms is not very high. Perhaps the inverse relationship between farm-size and productivity is disturbed because the dry crop is usually grown under controlled irrigation conditions, and farmers practise more modern methods of cultivation and crop husbandry. These arguments are supported by the fact that absolute yield rates are also generally higher in the dry season than the wet season.

Table 1 also indicates that total rice production (hence availability) with the smaller landholders is much lower despite higher productivity, at least in the wet season crop. This indicates that being efficient does not necessarily guarantee freedom from hunger. In this respect, seen in the context of food security, small farms are not always the most desirable. Instead, it is important to identify *how small, small farms should be* to ensure food security. This is an important lesson for land reforms.

In summary, it appears as if the farm size-productivity relationship holds with conditions of farming using traditional methods — wet season farming in this case. It tends to either break down or weaken when modern methods of farming are introduced — as with dry season farming. Next, considerations of food security impel one to look beyond productivity alone.

Profitability of Crops

If an agricultural economy is integrating into the market system, as with Cambodia, profits and profitability are very meaningful propositions from the point of view of a *farmer*. In this case profit is defined as the amount left after cost deductions, meaning all material costs and hired labour costs. Capital costs or land costs in these settings are impossible to evaluate. Thus, profit is the return on land, capital and personal labour.

Table 2 provides data on profitability, defined as profit per household, profit per hectare, profit per tonne of rice, and profit per riel of production for both wet and dry season rice crops.

The last two rows for the wet season crop present the most perfect forms of profitability, namely profit as a proportion of production.⁴ The profitability for the wet season crop (given as a percentage) is quite large in farms of all sizes: it is the highest in the farms of 0.5–1 hectare size, followed by the smallest farms in the 0–0.5 hectare range. Only in the largest farm size (> 2 ha) is profitability half the average. A similar pattern is seen for the '000 riels/tonne category for the wet season crop. While the general thesis of smaller farms — which yield more and are more profitable — is not being challenged, a point of caution must be raised. Smaller plot holders do not necessarily pay-out for all inputs: they provide significant input from their own resources, principally labour; and this does not get counted as a paid-out cost. This could partly be a reason for the smaller farms appearing more profitable.

Profitability is shown as the net income in riels per hectare, for both wet and dry season rice crops. If the economies of scale are neutral, then profitability per

hectare and profitability per unit output would show a perfect correspondence. Since this cannot be ascertained, this data has been presented separately ('000 riels/ha for both wet and dry season crops).

Again for the wet season crop, the smaller plots yield a higher income *per hectare*. However, *incomes* derived from the farming of smaller plots ('000 riels/household for the wet season crop) are distinctly lower than incomes derived from farming larger plots. The earlier conclusion, that under rain-fed conditions smaller farms are technically more efficient, is still echoed here in the form of their yielding higher *per hectare* incomes. However as indicated earlier, households owning smaller plots possess less food and earn lower *disposable* incomes.

Profitability ratios for the dry-season rice crop suggest a considerable drift from the classical 'farm size-productivity' and 'farm size-profitability' relationships. The profitability percentage (percentage of production for the dry season crop) is the highest for the *largest sized* farms. The 0.5–1 hectare group and then the 1–2 hectare group follow. While these numbers are not very different from each other, the profitability in the smallest group of farms, i.e. <0.5 hectare, is distinctly low: about half as much as that in the other size groups. The pattern is similar for profitability per tonne of paddy ('000 riels/tonne for the dry season crop) though a slight difference in the order has crept in because prices are not uniform across farms and villages.⁵

Profitability per hectare ('000 riels/ha for the dry season crop) is also higher in the larger farms than in the smaller ones. The positive association between profitability with farm size is not exact, but the general pattern holds. Dry season cultivation, therefore, negates the superiority of smaller farms. Generally data presented in Table 2 (especially '000 riels/household for the dry season crop) substantiate the earlier findings that households owning larger farms earn more in the dry season.

All this data supports the view that while under low-input farming conditions, small farms may be more productive and yield higher output per hectare; land fragmentation is harmful to the incomes and food security of farmers. Next, as low input farming gives way to more

Table 2: Profitability by Farm Size, Rice Cultivation, 2001

Profitability	Farm Size Groupings (ha)				
	>0-0.5	>0.5-1	>1-2	>2	All
Wet season crop					
Sample farms	225	133	73	64	495
'000 riels/household	129	264	341	371	227
'000 riels/ha	395	322	209	101	309
'000 riels/tonne	214	231	177	95	197
Percentage of production	68	71	58	31	63
Dry season crop					
Sample farms	95	70	68	44	277
'000 riels/household	107	325	589	1355	469
'000 riels/ha	179	393	362	293	305
'000 riels/tonne	93	147	134	141	122
Percentage of production	29	51	49	52	43

intensive use of fertilisers, controlled irrigation and modern variety seeds, even the yield advantage of the small farms is lost.

Productivity and Profitability Associations

Should high crop yield rates be accompanied by high profitability, implying more income to farmers? Under normal conditions this relationship should be strong and positive unless market prices drastically change against primary products, or farms operate in zones where there are high diseconomies. Elasticity values were calculated to examine some finer points of this proposition.

The elasticity values represented as rows 1 and 2 in Table 3, suggest that a 10 percent increase in land yield, (profit/household) would increase to only 4.4 percent for wet-season cultivation and 8.8 percent for dry season cultivation. An increase in productivity — particularly in the wet season crop — would thereby increase the farmers household income much less than in proportion to the yield rate. The fact that incomes *per household* rise at a much slower rate than incomes *per hectare* with growth in land productivity, suggests that a change in yield rates is associated with some reorganisation of land ownership — there is most likely land fragmentation;⁶ It is apparent that this is why increased yield rates do not provide commensurate incomes to farmers.

Elasticity values of profit per hectare with the yield rates (Rows 3 and 4, Table 3) show values close to one in both the wet and dry season crops implying that incomes per hectare expand in proportion to yield rates.

Finally, the elasticity of income derived *per tonne* of rice with the yield rate produces no significant relationship for the wet-crop, but for the dry crop, there is an 11 percent increase in the profit per tonne with a 10 percent increase in the yield rate. It is suggested that if the dry crop yield increases, the unit cost would decrease, thereby raising the competitiveness of the crop; a relationship that does not hold for the wet crop.

Summary

This article examines the relationships between farm size, productivity and profitability. It is concluded that smaller farm sizes are generally, though not exclusively, more productive in terms of yield rates. They yield more in the wet season in the case of rice cultivation, but in

the dry season this relationship weakens. Since wet season rice cultivation requires little other than labour, and labour is in abundance in many of the villages, there is more intense application of human resources producing higher yields. In contrast, dry season crops are more carefully nurtured with applications of multiple inputs, and small plot holders are not necessarily in possession of, or capable of applying these inputs. With these factors taken into account the small plot size-productivity relationship weakens.

Small farms offer better incomes *per hectare*, particularly in the wet season, but do not yield better incomes to households. In the dry season, even this relationship weakens. While land productivity and profit per hectare are closely synchronised, the elasticity of household income to the land yield rate is less than one. Land fragmentation is the reason for this with better quality lands simply being fragmented faster.

The results presented in this article indicate the negative consequences of excessive land fragmentation. The article also outlines the virtues — or lack of virtues — inherent with small farms. Cambodia, like many other parts of Southeast Asia, is a traditional small farm oriented economy. However, with changing technologies and agricultural market integration, the traditional wisdom and traditional models may no longer be sustainable.

Cambodia is a traditional small farm oriented economy. However, with changing technologies and agricultural market integration, the traditional wisdom and traditional models may no longer be sustainable.

Endnotes

1. The figure on controlled irrigation has been obtained from the Ministry of Agriculture, Forestry and Fisheries.
2. These results have been derived from data sets pertaining to East, Southeast and South Asia. A succinct discussion on farm size and productivity can be seen in Acharya (1995).
3. See for instance, Kim, Chan and Acharya (2002).
4. This measure is so referred because it reflects the technical capacity of an enterprise or a farm.
5. There are two obvious reasons why prices are different: First, different farmers sell their crops at different times, secondly there are regional variations.
6. Field inquiries suggest that better quality land is fragmented faster, which is in line with the proposition that 'Small plots are usually subdivisions of highly fertile lands'.

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Table 3: Elasticity Values of Profitability with Yield Rates

Wet crop: with profit/household	0.44
Dry crop: with profit/household	0.88
Wet crop: with profit/ha	1.01
Dry crop: with profit/ha	0.94
Wet crop: with profit/production	0.14
Dry crop: with profit/production	1.10

Economy Watch – External Environment

Recent economic data suggest that economic recovery in the US and East Asia is rather slow. Although the Euro Area experienced some signs of economic recovery, this was only in the second quarter of 2002. Meanwhile, share prices in Wall Street continued to plummet. The Federal Reserve left its key interest rates unchanged at 1.75% in a bid to spur investments. Against major currencies, the US dollar continued to lose its value, though at a slow pace. Consumer price inflation in the US and Euro Area stabilised at under 2% in the second quarter of 2002, though Japan continued to experience negative inflation. Prices of some specific commodities in the international markets have been rising.

World Economic Growth

In the second quarter of 2002, the US economy appeared to confirm the Federal Reserve's confidence about economic recovery. According to the *Economist*, labour productivity grew and non-farm output per hour increased at an annual rate of 1.1% in the second quarter. The US enjoyed an expansion in its industrial production by 0.2% in the year ending in July 2002. GDP in the US grew by 2.1% in the second quarter of 2002 compared to 1.7% in the first. Compounded by corruption scandals and fears of a possible war with Iraq, the US stock markets tumbled significantly in September. Despite this, economists foresee positive growth due to increasing investment in durable goods (whose orders rose by 8.7% in July). Additionally, the US has enough options for exercising various monetary and fiscal policy instruments due to a low rate of inflation and a budget surplus.

Economic recovery continued to falter in the Euro Area, compounded by a strong Euro and slackening stock markets. GDP in the Euro Area grew by 0.6% in the year ending in the second quarter of 2002. According to the *Economist*, the Economic Climate Index for the Euro Area fell in the third quarter. According to surveys conducted by purchase managers, growth in both manufacturing and services nearly ground to a halt in August. Retail sales fell by 0.9% while industrial production shrunk to 1.2% by June 2002. The three biggest economies of Europe experienced marginal growth. In the year ending in the second quarter of 2002, the German economy grew by 0.1%, the French by 1.0% and the British by 1.2%; all slower than anticipated.

In Japan, there are some signs of recovery. GDP grew at a higher than expected annual rate of 1.9% in the second quarter. The main growth engine was a surge in exports, especially to the US and Asia. In the year ending in July, Japan achieved a surplus trade balance worth US\$ 83.8 billion. In the first half of 2002, companies stepped up production and consumer spending showed a welcome, if weak, sign of revival. Machinery orders, a widely watched indicator of capital spending, posted their first quarterly rise of the year in the April-June period; climbing by 7.1% over the previous quarter according to the *Far Eastern Economic Review*. Aver-

age household spending rose at annual rate of 1.1% in the second quarter of 2002. Despite this, there was concern that domestic consumer spending and business investment will not be able to fill the gap if the export demand falters. Economists forecast a 1.1% GDP growth in the fourth quarter of 2002 and 1.1% growth for 2003.

In Asia's emerging economies, e.g. China, South Korea, Singapore, Malaysia and Thailand, there was some recovery in the first half of 2002. In the year ending in the second quarter of 2002, China achieved a GDP growth of 8%, South Korea 6.3%, Singapore 3.9%, Malaysia 3.8% and Thailand an estimated 3.5%. Large public spending spurred growth in China, especially in the first half of the year. Public spending may not be maintained for long though, and exports will have to rise if China is to maintain its high growth momentum. According to the *Far Eastern Economic Review*, there might be a slight slowdown in export growth towards the end of the year as economic recovery in the US is slow. A recent survey predicts China's GDP will grow in the range of 7–8% for the whole of 2002.

Thailand's economic recovery may slacken because government spending, which was to pump prime the economy, might have to be reined in. Consumer spending, which was sparked by low interest rates, may also level off soon. The engine of recovery in Thailand lies in private investment and exports. According to the Bank of Thailand, there is less hope of increase in private investment owing to the fact that most private Thai banks are still reluctant to extend credit for new investments. Prospects for an export-led recovery are uncertain due to competition from low-cost producers in China and a possible double-dip recession in the US.

World Inflation and Exchange Rates in the International Markets

Inflation in the US remained low, rising by just 0.1% between June–July 2002. Prices were just 1.5% higher, in July 2002, compared to a year ago. According to the *Economist*, inflationary pressure remained concentrated in medical care and the education sector, while prices were falling in many other sectors such as clothing and automobiles. In the year ending in August 2002, inflation in the Euro Area rose by 2.1%, which was above the European Central Bank's ceiling of 2%. However, this could drop over the next year owing to weak growth. In Japan, consumer prices continued to fall. In July, consumer prices were 0.8% lower than a year ago, while producer prices fell by 2.2% over the same period. Both China and Singapore experienced a decline in prices, of 0.9% and 0.4% respectively, while consumer prices in South Korea rose by 2.4 percent and in Malaysia by 2.1% in the year ending in July. Inflation in Thailand remained low at 0.3% in the year ending in August.

The dollar has lost value against major currencies in the face of corporate scandals in the recent past. In July, the dollar was valued at its lowest, trading at 1.009Euro/dollar and 117.66Yen/dollar. In August, the dollar be-

Economy Watch—External Environment

gan to gain strength against key currencies, when it was priced at 1.02 Euro and 119.25 Yen, against the European and Japanese currencies, respectively.

Commodity Prices in the World Markets

During the period January–July 2002, there was an upward trend in commodity prices in the world markets.

The price of first quality rice in Bangkok rose by 4%, trading at US\$198/tonne, while the soybean price increased by 18%, trading at US\$221.7/tonne. Likewise, the price of rubber in Malaysia rose steeply by 48% to US\$859.21/tonne. Finally, the price of petrol in the US increased by 41%, trading at 19.98 cents/litre.

Prepared by Dr. Kang Chandararat

Table 1. Real GDP Growth of Selected Trading Partners, 2000–2002 (percentage increase over the previous year)

	2000		2001				2002		2000	2001
	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q1-Q4	Q1-Q4
Selected ASEAN countries										
Cambodia	-	-	-	-	-	-	-	-	5.5	5.3
Indonesia	5.1	5.2	4.0	3.5	3.5	4.1	2.5	3.5	4.8	3.8
Malaysia	7.7	6.6	3.2	0.5	-1.3	-0.5	1.1	3.8	8.6	0.5
Singapore	10.4	10.5	4.5	-0.9	-5.6	-7.0	-1.7	3.9	9.9	-2.3
Thailand	2.6	3.1	1.8	1.9	1.5	2.1	3.9	3.5	4.3	1.8
Vietnam	-	-	-	-	-	-	-	-	6.8	6.0
Selected other Asian countries										
China	8.2	7.3	8.1	7.8	7.0	6.6	7.6	8.0	8.0	7.5
Hong Kong	10.8	6.8	2.5	0.5	-0.3	-1.6	-0.9	0.5	10.5	0.3
South Korea	9.3	4.6	3.7	2.7	1.8	3.7	5.7	6.3	8.8	3.0
Taiwan	6.6	4.1	1.1	-2.4	-4.2	-2.7	0.9	3.0	6.0	-2.1
Selected industrial countries										
Euro-11	3.3	3.0	2.5	0.2	1.3	0.6	0.1	0.5	3.4	1.2
Japan	0.5	2.5	0.2	-2.9	-0.5	-1.9	-1.6	-1.2	1.7	-1.3
United States	5.2	3.4	2.7	1.2	0.6	0.4	1.5	2.1	4.9	1.2

Source: The International Monetary Fund and The Economist

Table 2. Inflation Rate of Selected Trading Partners, 2000–2002 (percentage increase over the previous year)

	2000		2001				2002		2000	2001
	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q1-Q4	Q1-Q4
Selected ASEAN countries										
Cambodia	-1.4	0.5	-0.8	0.1	-0.4	-0.6	3.4	3.3	-0.8	-0.4
Indonesia	5.7	8.8	9.1	11.1	12.1	12.7	14.5	12.6	3.7	11.3
Malaysia	1.5	1.7	1.5	1.6	1.4	1.2	1.5	1.9	1.5	1.4
Singapore	1.5	2.0	1.7	1.7	0.8	-0.2	-0.9	-0.4	1.4	1.0
Thailand	2.2	1.6	1.8	2.6	1.7	1.1	0.6	0.2	1.5	1.8
Vietnam	-2.2	-0.4	-1.4	-0.8	-	-	-	-	-1.7	0.0
Selected other Asian countries										
China	0.3	0.6	1.3	1.6	0.8	-0.1	-0.5	-0.7	0.3	1.0
Hong Kong	-2.9	-2.2	-1.8	-1.3	-1.1	-1.3	-2.7	-3.1	-3.7	-1.5
South Korea	3.2	2.9	4.3	5.3	4.3	3.4	2.5	2.7	2.3	4.3
Taiwan	1.0	2.0	-1.0	-0.0	-0.5	-0.6	-0.1	-0.1	1.4	0.5
Selected industrial countries										
Euro-11	2.5	2.7	2.5	3.1	2.7	2.2	2.5	2.0	2.3	2.6
Japan	-0.7	-0.5	-0.1	-0.5	-0.8	-1.0	-1.4	-0.9	-0.6	-0.5
United States	3.5	3.4	3.4	3.4	2.7	1.9	1.2	1.3	3.4	2.9

Source: The International Monetary Fund and The Economist

Table 3. Exchange Rates of Selected Trading Partners Against the US Dollar, 2000–2002 (period averages)

	2000		2001				2002		2000	2001
	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q1-Q4	Q1-Q4
Selected ASEAN countries										
Cambodia (riel)	3,912	3,906	3,925	3,932	3,953	3,932	3,910	3,916	3,871	3,935
Indonesia (rupiah)	8,712	9,297	9,780	11,242	9,558	10,365	10,078	9,076.6	8,422	10,236
Malaysia (ringgit)	3.80	3.80	3.80	3.80	3.80	3.80	3.80	3.80	3.80	3.80
Singapore (S\$)	1.73	1.74	1.75	1.81	1.77	1.83	1.83	1.81	1.72	1.79
Thailand (baht)	40.9	43.3	43.2	45.4	44.8	44.3	43.77	42.78	40.1	44.4
Vietnam (dong)	14,120	14,423	14,556	14,670	14,999	15,084	15,142	15,231	14,168	14,827
Selected other Asian countries										
China (yuan)	8.28	8.28	8.28	8.28	8.27	8.28	8.28	8.28	8.28	8.28
Hong Kong (HK\$)	7.79	7.79	7.80	7.80	7.79	7.80	7.80	7.80	7.79	7.80
South Korea (won)	1,115	1,167	1,272	1,306	1,295	1,290	1,319	1,273	1,131	1,291
Taiwan (NT\$)	32.8	32.1	32.4	34.6	34.6	34.7	35.1		31.8	34.1
Selected industrial countries										
Euro-11 (euro)	1.10	1.15	1.08	1.15	1.11	1.12	1.15	1.09	1.09	1.12
Japan (yen)	108	110	118	123	121	125.5	133.3	127.6	108	122

Source: The International Monetary Fund and The Economist

Table 4. Selected Commodity Prices on the World Market, 2000–2002 (period averages)

	2000		2001				2002		2000	2001
	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q1-Q4	Q1-Q4
Hardwood (logs) - Malaysia (\$/m3)	192.1	186.0	171.0	163.8	159.4	146.2	137.6	153.0	190.1	160.1
Hardwood (sawn) - Malaysia (\$/m3)	592.7	529.8	507.0	492.2	482.0	471.8	479.7	493.0	599.2	488.3
Rubber - Malaysia (\$/ton)	712.2	696.6	632.0	628.9	597.7	549.4	622.3	754.0	720.7	602.0
Rice - Bangkok (\$/ton)	185.4	185.1	182.0	164.7	170.4	173.3	193.7	196.6	203.7	172.6
Soybeans - USA (\$/ton)	200.7	209.0	202.0	186.7	205.6	188.0	179.9	189.8	211.3	195.6
Crude oil - Dubai (\$/barrel)	27.6	27.5	24.0	25.1	23.9	18.2	19.9	24.3	26.1	22.8
Gold - London (\$/fine ounce)	276.5	269.2	264.0	267.7	274.7	278.4	281.0	280.9	279.0	271.2

Source: The International Monetary Fund and The Economist

Economy Watch – Domestic Performance

The Cambodian economy performed reasonably well during the first six months of 2002 (on a year to year basis), despite a slight decline in garment exports during the same period. The tourism sector showed improvement and foreign fixed investments exhibited an upward trend. After stagnating for two years the construction sector also showed clear signs of recovery. According to government forecasts, Cambodia's GDP is expected to grow at a rate of between 5–5.5 percent during 2002, although this target may need to be revised downwards keeping in view the severe, two-month long drought that has affected agriculture in many provinces in the country. The drought might also affect the livelihoods of a large number of people, since more than 70 percent of the workforce earns its livelihood from agriculture and allied activities. Monetary performance appeared reasonable during the first half of 2002. The average exchange rate of the Cambodian riel against the US dollar remained stable with the riel trading at around 3,912 riels per dollar during the first half of 2002. On a year to year basis, the consumer prices of 'all items' rose slightly to 3.3% in Phnom Penh. Inflation, however, is well within the limit of 5% set by the government for 2002. At the end of June 2002, Cambodia's gross foreign reserves with the National Bank of Cambodia (NBC) stood at US\$617.9 million, equivalent to a four month import of goods and services.

Economic Activity

Cambodia's agricultural sector, which represents 30% of the country's economic product, is likely to face setbacks due to the severe drought of July and August, during the 2002 wet-season. This sector was also hit hard during 2000 and 2001, when devastating floods affected large parts of the country. In 2002, the drought hit a number of provinces, notably Battambang, Prey Veng, Pursat, Takeo and Kompong Cham. Other affected areas are located in Kompong Speu and Kandal provinces. According to the Ministry of Agriculture, Forestry and Fisheries (MAFF), rice planting at the beginning of the current wet-season was completed in only about 25% of the total area normally sown. At the same time, some areas are facing flooding due to the swelling of the main rivers, the Mekong and Tonle Sap. The combination of floods and drought can inflict considerable damage to agriculture. The MAFF says that it needs 5,000 tonnes of rice seeds immediately, to re-sow those areas where the crop has been destroyed by natural disaster.

The Garment industry continues to play an important role in Cambodia's economic development and poverty alleviation. The industry contributed about 12.5% to Cambodia's GDP in 2001 and employed around 200,000 workers — mostly young women who hail from the provinces. Cambodia's garment exports are critically dependant upon global markets, particularly the US and EU markets, to which most of the apparel is shipped. Despite the fact that the world economy has shown some signs of revival it has not yet fully recov-

ered and this slow, halting recovery is unfavourable to Cambodia's garment exports. According to data on exports obtained from the Ministry of Commerce, US \$503.5 million worth of garments were exported during the first half of 2002 (a fall of 2% compared to amounts exported in the same period last year). The US markets absorbed 72% of the exports from Cambodia, EU markets took 26%, with the remainder being shipped to other markets. Exports to the EU markets have continuously risen in the recent past, while exports to US markets appear to have stagnated owing to recession in that economy. Garment exports in 2002 were expected to grow by at least 10% over the previous year, an expectation based on the rapidly growing exports to EU markets. It is yet to be seen whether, and to what extent, the garment industry performs and exports during the rest of the year.

Tourism, Cambodia's other promising sector, is steadily gaining international status and recognition. According to the World Tourism Organisation, tourist arrivals to Southeast Asia rose by about 15% in the first half of 2002 compared to the same period in the previous year. Cambodia also benefited from this increase. According to Cambodia's Ministries of Tourism and Interior, the sector continued to grow during the first half of 2002: the total tourist arrival in the first half of 2002 was 390,245 persons, 20% more than the number who arrived in the same period last year. Of the total tourist arrivals, 255,596 visitors entered Cambodia by air (a 9% increase over the first half of 2001) and the other 134,649 came into the country using waterways and roads. Of the total visitors flying into Cambodia, 67% came through Phnom Penh and the rest through Siem Reap. Seen from data released by the Ministry of Economy and Finance (MEF), revenues earned from tourism amounted to US \$2.2 million in the first six months of 2002. This excludes the indirect revenues that result from the many activities associated with tourism.

The Construction Industry, which employs about 2% of Cambodia's labour force, exhibited distinct signs of recovery after a two-year slump. Data released by the Department of Cadastre and Geography of the Municipality of Phnom Penh, show that during the first half of 2002, 384 construction projects were approved for the city of Phnom Penh (compared to 316 projects approved in the same period last year — a 22 percent rise). Approvals for mansion construction accounted for 54 projects; for apartment construction, 219 projects; and for commercial buildings, 43 projects. Approvals for mansion construction rose by 54%, for apartments by 16% and for commercial buildings by 7%. CDRI's surveys in August 2002 show that the average daily wage rates of skilled construction workers rose from 12,375 riels–12,675 riels between August 2001–02, and for unskilled construction workers from 5,625 riels–6,525 riels. This two-point comparison of wage data, however, may not be sufficient to indicate an increase in the demand for labour as a result of a revival in the industry.

Economy Watch—Domestic Performance

Inflation and Foreign Exchange Rates

According to the National Institute of Statistics, consumer-price inflation in Phnom Penh was 3.3% for the 12-month-period ending in June 2002. Food prices increased by 1% while the price of energy fell by 0.02% in the year ending in June 2002. The Housing and Utilities Index, however, rose by 10.34% between June 2001–02. This rise is the main reason for the rise in inflation. Despite a slight increase in consumer prices and growth in the money supply (M1), the Cambodian riel was stable against the US dollar; it traded at an average rate of 3,912 riels per US dollar in the first half of 2002, with little deviation. The riel devalued slightly against the Thai baht, though it gained some ground against the Vietnamese dong.

Petrol sold at 2,100 riels (US\$0.54) per litre and diesel at 1,465 riels per litre (US\$0.37). Despite petroleum prices remaining unchanged during the entire first half of 2002, the absolute prices of petrol and diesel remained high in Cambodia in comparison with neighbouring countries. Meanwhile, the average price of gold in Phnom Penh rose by about 10%, to US\$35.3 per *chi* (one *chi* = 0.12 ounce), in the first half of 2002 (compared to US\$32 per *chi* in the same period last year).

Poverty Situation – Earnings of Workers

CDRI's survey of vulnerable workers conducted in August 2002, indicates that compared to May 2002, the daily earnings of workers in four categories of work have risen, while in the other six they have fallen. Compared to August 2001, daily earnings increased in eight categories of work and fell in two categories. November 2001 was the worst month in recent times with earnings being the lowest for all categories. Since then there has been an overall improvement: the minimum earning per day rose from 2,358 riels in November 2001 to 3,440 riels in August 2002, the maximum from 9,866–12,695 riels, and the mean, from 5,919–7,515 riels. The minimum, maximum and mean earnings in August 2002, however, were all lower than in May 2002. Inequality in earnings between different occupations fell marginally between 2001–02.

In August 2002, only cyclo drivers, garment workers, motor-taxi drivers and skilled construction workers earned more than US\$2 per day (a notional poverty indicator drawn to indicate the moderately poor). Waitresses, scavengers and rice field workers did not earn much more than US\$1 per day (below US\$1, people are indicated as severely poor). Scavengers and rice field workers earned higher amounts in May 2002, but their daily earnings were lower in August 2002. Compared to November 2000 the nominal daily wages of rice field workers and skilled construction workers were lower in August 2002; while for the other categories they had more than recovered.

By August 2002, the daily earnings of cyclo drivers

had fallen by 4.5 percent since May 2002, and 1.7 percent since August 2001. Over a relatively long period (since November 2000) there appears to be no discernible trend, though the average went up somewhat in 2002 compared to last year (average of first three quarters only, as earnings in the fourth quarter of 2001 were exceptionally low and excluded from the calculation in the whole section). Porters experienced a 13 percent increase in their daily earnings in August 2002 compared to May 2002 and a 5.7 percent increase compared to August 2001. Seen over a longer 1–2 year term, the daily earnings of porters exhibit a weak, rising trend. In November 2000 they earned 6,893 riels, the average for 2001 was 7,182 riels, and the average for 2002 was 7,171 riels.

Both skilled and unskilled construction workers have experienced a fall in their daily earnings since May 2002. The former experienced a 8.3 percent fall while the latter, a 6.5 percent fall. Although their daily earnings increased by 3 percent and 16 percent respectively, between August 2001–02. Seen in the longer term, the earnings of skilled workers (November 2000–02) showed a 12.3 percent rise. The earnings of unskilled construction workers, however, fell from an average 7,128 riels in November 2000–01 to an average 6,821 riels in 2002. The lull in construction activity in the recent past appears to have had more affect on the unskilled workers than the skilled. At the same time, it appears that the benefits of the recent revival in the industry are yet to trickle down to the labour market.

Moto-taxi drivers experienced a 5.6 percent decline in their daily earnings in August 2002 compared to May 2002, though in comparison with August 2001 they gained by 7 percent. Seen in the longer term of 2 years, their average daily earnings rose from 10,870 riels in November 2000–01 to 12,575 riels in 2002, a 15 percent increase. Small vegetable vendors and waiters/waitresses experienced an increase in earnings of 2 percent and 15.7 percent respectively in August 2002 compared to May 2002. Small traders gained about 3 percent in their daily earnings in August 2002 compared to a year before, while waiters/waitresses gained by a significant 57.5 percent in this period. In the longer term of 2 years, small traders have lost somewhat (by 4 percent), while waiters /waitresses have experienced some handsome gains (38 percent).

Garment workers experienced an 11 percent increase in their daily earnings between May 2002 and August 2002, and a 7 percent increase between August 2001–02. Seen in the longer term of 2 years, there has been a rise of 5.5 percent in their daily earnings.

The daily earnings of scavengers fell by 19 percent in August 2002 compared to May 2002, although they have risen by about 28 percent since a year previously. Seen in the longer term of 2 years, daily earnings of scavengers have risen by 19 percent. Rice workers, the only rural workers in the sample, experienced a huge decrease of 25.8 percent in their daily earnings in

Economy Watch—Domestic Performance

August 2002 compared to May 2002. Compared to August 2001, there has also been a fall of 14.8 percent. It appears that the impact of the recent drought is already being felt by this category of worker. Seen in the longer term of 2 years, there was a slight increase, but the rise may have been due to a kink in the data — earnings in May 2002 were unusually high.

In general, vulnerable workers appears to face a large volatility in their earnings. Their daily earnings fluctuate from one quarter to another, and in certain occupations they tend to also drop below a dollar a day. Only when there is some kind of sustained labour demand — or a social pressure as in the case of garment workers — can some stability be achieved.

Monetary Developments

Cambodia's Central Bank continued to release money supply (M1) into the markets through the first half of 2002. According to the National Bank of Cambodia (NBC), the total liquidity (M2) rose by 33% compared to the same period last year reaching 2,648 billion riels at the end of the second quarter of 2002. Of the total liquidity, approximately 70% was in the form of foreign currencies, mainly the US dollar, and the remaining 30% was in the riel. Money supply meanwhile, reached 748 billion riels at the end of the second quarter of 2002; this was 37.5% higher compared to the same period last year. Of the total money supply, 711 billion riels were in circulation in the market, and 37 billion riels were demand deposits with the commercial banks. Despite expansion in the money supply of riels, the value of the riel against the US dollar has remained stable over the past six months.

By the end of the first half of 2002, the net foreign assets of the banking sector rose dramatically, by 29 percent over the last year, to reach 3,614 billion riels. This rise is an indication of a growing outflow of Cambodian savings. Net claims on the government, meanwhile, rose to 165 billion riels by the end of the second quarter of 2002. Overall monetary performance, nonetheless, showed signs of stability during this period.

Public Finance

According to the MEF, total domestic revenues were 791 billion riels during the first half of 2002, about 87% of the planned target. Although the amount raised was short of the target, the revenue mobilisation in the first six months of 2002 was 3% higher compared to the same period in 2001. The main reason for the increase in government revenues during this period was the growth in non-tax revenues. Revenues from quota and export license, royalty fees and levies from seaport activities exhibited a steep rise. Incomes from value-added tax also rose to 206 billion riels in the first half of 2002,

a slight increase over the same period in 2001. Capital revenues obtained from privatisation of government-owned assets and government land sales increased to 15 billion riels in first half of 2002, from just 5 billion riels at the end of the first half of 2001. Capital receipts exceeded their target by 20% during the first half of 2002. Revenue mobilisation in recent times has shown continued progress despite criticism from some corners that large amounts are being lost due to smuggling and tax evasion. The reasons for increase in revenues are the stiffer revenue mobilisation mechanisms introduced by the MEF in recent years.

Meanwhile, total expenditure during the first half of 2002 reached 1,160 billion riels (128% of the target). Official transfers and concessional loans offset the consequent deficits. Military spending was around 153 billion riels (unchanged since the first six months of 2001), while spending for health and education nearly doubled.

Private Investment and Employment

Since 18 months ago when the US and other major economies began to experience recession, there has been a decline of foreign direct investment (FDI) in Cambodia and other Southeast Asian countries. A full-fledged recovery remains illusive, despite some recent indicators of economic revival observed in different parts of the world. The Council for the Development of Cambodia (CDC) approved 18 investment proposals worth US\$50.9 million in fixed assets during the first half of 2002. Of these, US\$ 23 million are meant for garment manufacture and related activities. Despite a 25% decline in the number of investment project approvals, the value of fixed assets apparently increased by 28% in 2002 compared to 2001. The Cambodian government continues to encourage investments in the garment sector because of its large labour absorption. Cambodia would experience healthier economic growth if labour-intensive industries grew rapidly.

Foreign Aid and External Debt

Foreign aid continues to play a crucial role in the economic sustainability and development of Cambodia. During the Consultative Group meeting held in Phnom Penh (19–21 June 2002), international donors pledged US\$635 million in aid to Cambodia for 2002 (31% more than the government requested). Aid pledges rose by 13% in 2002, in comparison to the pledges made at the Tokyo Consultative Group meeting held in June 2001. Aid disbursements to Cambodia have risen gradually since 1992 and on average, donors have disbursed 75% of their total aid pledges. Of the total disbursements (1992–2001) 83% have been grants and the remainder, concessional loans.

By Chea Huot, Pon Dorina and Sarthi Acharya

Economy Watch—Indicators

Table 1. Cambodia: Main Macro-economic Indicators, 1994–2001

	1994	1995	1996	1997	1998	1999	2000	2001
GDP at current prices (billions of riels)	6,256	7,176	8,271	9,125	10,795	11,797	12,149	12,724
GDP at current prices (millions of dollars)	2,435	2,915	3,131	3,042	2,841	3,088	3,149	3,234
GDP per capita (dollars)	225	262	273	258	234	248	247	247
Growth rate of real GDP (1993 prices)	5.3	7.6	6.7	0.7	2.9	6.8	5.5	5.3
Agriculture	4.8	9.2	2.9	2.2	0.1	1.4	-2.4	0.7
Industry	7.3	11.8	19.5	0.6	16.8	12.6	16.7	11.2
Service	5.3	4.7	6.0	-0.6	0.1	9.4	7.5	6.1
Inflation (in riels, final quarter basis)	17.8	3.5	9.0	9.1	12.6	0.0	0.5	-1.3
Riel/dollar parity (annual average)	2,569	2,462	2,641	3,000	3,800	3,820	3,859	3,935
Budget revenue (percentage of GDP)	9.4	9.0	9.1	9.7	8.7	11.2	11.7	12.0
Budget expenditure (percentage of GDP)	16.1	16.7	17.4	13.8	14.4	16.4	17.3	18.4
Current public deficit (percentage of GDP)	-1.4	-0.8	-1.2	0.7	-0.2	1.6	1.6	1.3
Overall public deficit (percentage of GDP)	-6.7	-7.8	-8.4	-4.2	-5.7	-5.2	-5.6	-6.3
Exports of goods (percentage of GDP)	19.6	29.1	23.1	28.7	32.1	33.9	44.2	46.4
Imports of goods (percentage of GDP)	30.0	41.4	39.4	40.9	49.3	48.2	54.4	56.9
Trade balance (percentage of GDP)	-10.4	-12.3	-16.3	-12.2	-17.2	-14.3	-10.2	-10.5
Current account balance (percentage of GDP)	-9.1	-12.7	-15.3	-10.4	-15.5	-11.6	-7.2	-6.7
External contribution to the economy (percentage of GDP)	16.5	20.9	20.4	13.8	17.5	15.6	14.5	13.2
Total savings (percentage of GDP)	18.2	21.6	26.7	21.6	25.3	22.8	19.3	18.3
Gross foreign reserves (months of imports)	1.5	1.7	2.1	2.4	3.2	3.8	4.7	5.5
Population (million)	10.8	11.1	11.5	11.8	12.1	12.5	12.8	13.1
Labour force (percentage of population)	41.1	41.2	41.4	41.6	41.9	42.2	42.5	43.0

Sources: CDRI, Compiled from Government data

Table 2. Destination of Garment Exports, 1994-2002

	1994	1995	1996	1997	1998	1999	2000	2001				2002
	Q1-Q4	Q1-Q4	Q1-Q4	Q1-Q4	Q1-Q4	Q1-Q4	Q1-Q4	Q1	Q2	Q3	Q4	Q1
	Millions of dollars											
United States	0.0	0.02	0.1	26.8	74.1	121.5	187.5	189.3	192.9	198.0	212.9	158.7
Rest of the world	1.0	6.6	19.6	30.0	20.5	17.0	58.8	62.8	68.8	102.7	89.0	73.7
Total	1.0	6.6	19.7	56.8	94.5	138.5	246.3	252.1	261.7	300.7	301.9	232.4
	Percentage change over previous year											
Total	-	560	200	187	66	47	78	29	16	0.5	13.8	-7.8

Source: Ministry of Commerce, Department of Trade Preferences Systems (1994-2000, quarterly average)

Table 3. Passenger Arrivals by International Flights at Pochentong and Siem Reap Airports, 1994-2002

	1994	1995	1996	1997	1998	1999	2000	2001				2002
	Q1-Q4	Q1-Q4	Q1-Q4	Q1-Q4	Q1-Q4	Q1-Q4	Q1-Q4	Q1	Q2	Q3	Q4	Q1
	Thousands of passengers											
Tourist visas	27.9	38.7	55.3	46.3	38.1	44.9	57.4	64.6	53.2	53.5	58.1	67.3
Business visas	7.1	10.6	15.8	13.9	10.7	16.0	20.6	20.0	23.2	20.9	18.3	18.1
Official visas	3.3	3.9	3.2	3.6	4.4	8.8	4.8	3.8	4.7	4.6	5.9	5.7
Total Pochentong	38.3	53.2	74.3	63.8	53.2	69.7	82.7	88.4	81.1	79.0	82.3	91.1
Total Siem Reap	-	-	-	-	2.6	7.15	33.4	41.9	23.6	30.5	36.6	54.7
	Percentage change over previous year											
Total Pochentong	29.7	38.9	39.7	-14.1	-16.6	31.0	18.7	8.2	12.2	8.2	-4.6	3.1
Total Siem Reap	-	-	-	-	-	175	367	111	59	52	13.7	30.5

Sources: Ministry of Economy and Finance and Ministry of Tourism (1994-2000, quarterly average)

Table 4. Consumer Price Index (CPI), Exchange Rates and Gold Prices, 1994-2002 (period averages)

	1994	1995	1996	1997	1998	1999	2000	2001				2002
	Q1-Q4	Q1-Q4	Q1-Q4	Q1-Q4	Q1-Q4	Q1-Q4	Q1-Q4	Q1	Q2	Q3	Q4	Q1
	Consumer price index (percentage change over previous year)											
Provinces	-	-	-	6.1	16.3	6.2	5.4	4.8	1.3	-1.1	-1.6	-3.4
Phnom Penh - All Items	-0.5	7.8	7.1	8.0	14.8	4.0	-0.8	-0.8	0.1	-0.4	-1.3	3.4
- Foods	-13.4	4.9	7.6	6.7	14.1	7.6	-3.3	-2.6	-2.2	-2.4	-3.8	-0.6
- Energy	-1.2	19.4	20.7	20.0	15.1	3.5	6.6	0.5	1.5	-3.0	-3.4	-0.4
	Exchange rates, Gold and Oil prices (Phnom Penh market rates)											
Riel per US dollar	2,582	2,479	2,666	3,029	3824	3832	3,879	3,925	3,931	3,953	3,932	3,910
Riel per Thai baht	102	99	105	98	88	101	96.3	88.5	86.6	88.2	88.7	89.3
Riel per 100 Vietnamese dong	23.5	22.3	24.0	25.6	28.6	27.8	27.4	26.9	26.8	26.4	26.1	25.8
Gold prices (US dollar per chi)	45.8	45.9	46.3	40.4	36.0	34.0	33.3	32.0	32.0	33.6	33.0	34.6
Price of Diesel (Riels/litre)	750	716	779	883	1,065	1,105	1,329	1,483	1,533	1,550	1,517	1,480
Price of Gasoline (Riels/litre)	698	847	1,118	1,378	1,613	1,760	2,113	2,100	2,100	2,100	2,033	2,100

Sources: CDRI, IMF, NIS, Ministry of Planning, Ministry of Economy and Finance

Economy Watch-Indicators

Table 5. Average Daily Earnings of Workers, 1997-2002

	Daily earnings (riels)									Change from last year (%)		
	1997	2000	2001			2002			2001	2002		
	Pre-Jul	Aug	Nov	Feb	May	Aug	Nov	Feb	May	Nov	Feb	May
Cyclo drivers	12,250	9,511	8,398	8,200	9,568	9,057	6,262	9,450	9,375	-25.4	15.2	-2.0
Porters	9,675	8,068	6,893	7,300	7,058	7,189	5,000	8,137	6,675	-27.5	11.5	-5.4
Small vegetable sellers	7,050	6,611	5,813	6,400	7,386	6,670	5,096	6,062	6,712	-12.3	-5.3	-9.1
Scavengers	4,155	4,186	3,006	3,900	2,670	2,686	3,393	3,350	4,231	12.9	-14.1	58.5
Waitresses*	-	2,250	2,335	2,600	2,600	2,683	2,358	3,543	3,652	1.0	36.3	40.5
Rice-field workers	-	4,443	4,184	4,100	3,613	4,500	3,618	3,916	5,167	-13.5	-4.5	43.0
Garment workers	-	8,500	7,410	8,300	7,500	9,165	8,968	7,772	8,775	21.0	-6.4	17.0
Motorcycle-taxi drivers	-	11,044	9,522	10,000	12,050	10,559	9,791	14,327	11,978	2.8	43.3	-0.6
Unskilled construction workers	-	8,220	5,970	7,500	8,261	5,625	4,841	7,025	6,912	-18.9	-6.3	-16.3
Skilled construction workers	-	14,891	14,517	11,200	10,306	12,375	9,866	11,530	13,850	-32.0	2.9	34.4

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

Table 6. Monetary Survey, 1994-2002 (end of period)

	1994	1995	1996	1997	1998	1999	2000	2001		2002		
	Q1-Q4	Q1-Q4	Q1-Q4	Q1-Q4	Q1-Q4	Q1-Q4	Q1-Q4	Q1	Q2	Q3	Q4	Q1
	Billions of riels											
Net foreign assets	391	550	881	1,172	1,550	1,961	2,589	2,733	2,807	2,951	3,080	3,366
Net domestic assets	59	99	31	-109	-435	-591	-759	-834	-821	-827	-877	-959
Net claims on government	143	148	128	54	141	111	3	-69	-82	-73	-75	-152
Credit to private sector	237	293	435	637	682	731	898	905	947	992	936	976
Total liquidity	450	650	912	1,063	1,116	1,370	1,831	1,899	1,985	2,124	2,204	2,408
Money	200	279	329	385	466	515	540	548	544	569	610	676
Quasi-money	250	371	583	678	655	855	1,291	1,351	1,441	1,555	1,594	1,731
	Percentage change from previous year											
Total liquidity	35.1	44.3	40.3	16.6	4.9	22.7	33.6	9.6	8.4	18.5	20.4	26.8
Money	-1.9	39.5	17.9	17	21	10.5	4.9	-0.4	-0.4	5.4	13.0	23.4
Quasi-money	93.2	48.1	57.2	16.4	-3.4	30.5	51.0	14.2	12.1	24.2	23.5	28.1

Source: National Bank of Cambodia.

Table 7. National Budget Operations on Cash Basis, 1994-2002 (billion riels)

	1994	1995	1996	1997	1998	1999	2000	2001		2002		
	Q1-Q4	Q1-Q4	Q1-Q4	Q1-Q4	Q1-Q4	Q1-Q4	Q1-Q4	Q1	Q2	Q3	Q4	Q1
Total revenue	148	161	187	220	230	329	382	366	400	360	403	423
Tax revenue	91	111	134	149	169	239	274	263	291	261	281	252
Customs duties	70	80	86	87	94	108	94	98	105	83	90	81
Non-tax revenue	56	47	44	68	51	87	106	100	107	97	120	156
Forest exploitation	22	13	7	9	5	9	7	10	9	8	2	1
Post & Telecommunications	15	14	16	21	22	27	31	23	28	30	41	34
Capital revenue	0	2	10	3	9	3	2	3	2	2	2	15
Total expenditure	252	300	360	315	324	448	583	472	547	578	735	469
Capital expenditure	84	128	157	113	92	156	244	217	239	253	268	208
Current expenditure	168	172	203	202	245	291	339	255	308	325	467	261
Education and Health	23	25	31	32	33	70	86	27	47	52	217	34
Defence and Security	98	106	102	105	110	116	101	63	88	89	165	36
Other Ministries	48	41	71	65	83	103	159	59	139	167	272	91
Overall deficit	-105	-139	-173	-95	-95	-119	-201	-106	-147	-218	-332	-46
Foreign financing	108	140	170	111	67	104	192	184	189	205	188	341
Domestic financing	-3	-1	3	-16	28	15	9	-77	-43	-13	144	-294

Source: Ministry of Economy and Finance: Quarterly average (1994-2000, quarterly average)

Table 8. Investment Projects Approved, 1994-2002*

	1994	1995	1996	1997	1998	1999	2000	2001		2002		
	Q1-Q4	Q1-Q4	Q1-Q4	Q1-Q4	Q1-Q4	Q1-Q4	Q1-Q4	Q1	Q2	Q3	Q4	Q1
	Number of investment projects											
Total	46	51	75	34	35	24	24	11	13	12	12	9
Garment	27	30	36	12	21	11	13	4	7	6	2	5
	Registered capital (millions of dollars)											
Total	116.0	89.0	97.8	69.5	104.1	61.7	25.6	5.1	15.2	15.2	93.4	10.9
Garment	26.8	28.0	39.2	8.6	22.9	13.9	6.4	1.0	6.0	8.8	2.0	6.6
	Fixed assets (millions of dollars)											
Total	303.0	76.2	186.7	190.4	212.3	118.5	66.6	10.1	29.1	16.5	161.7	27.2
Garment	25.1	25.4	39.6	9.7	30.2	19.9	19.2	5.7	8.2	10.0	2.0	20.3

Source: Cambodian Investment Board (1994-2000, quarterly average). * Including existing investment expansion projects

Glossary-Terms Used in This Issue

Wet Season Rice រដូវវស្សារ

Rice grown in the wet or rainy season, between May and January (depending on the variety). These are usually 6 month-maturing, traditional varieties.

Dry Season Rice រដូវប្រាំង

Rice grown during the dry season in lowland areas using irrigation systems. Grown between December and April. These are usually 3 month-maturing, hybrid varieties.

Elasticity ភ័យវិ

An economic term describing the demand for a product and the degree to which this changes in response to a change in circumstances.

Disaster គ្រោះមហន្តរាយ

An event defined as a serious disruption of the functioning of society, causing widespread losses which exceed

the ability of the affected society to cope using its own resources.

Mitigation កាត់បន្ថយ

Measures taken to limit the adverse impact of natural disasters and related environmental and technological disasters.

El Niño

The El Niño weather system refers to an above-average warming of water in the Eastern Pacific that occurs every four to five years and distorts wind and rainfall patterns, leading to floods and droughts.

Food Insecurity គ្មានស្រូវស្រេច

The risk of not having sufficient food, or income to buy food, to maintain livelihoods.

(Continued from page 20)

tested in schools in Phnom Penh and one province. At the end of September, CPD staff went to Kompong Chhnang to start the pilot test process with monks, teachers and students.

Library

The CDRI Library holds 7,210 titles of books in the database. A library volunteer, Ms. Sann Socheata, started working at the library on 16th September and was recruited to replace Ms. Tuy Chak Riya. The CDRI Library initiated a WINISIS Group for discussing, shar-

ing and solving problems arising in the use of this software. The third meeting of the WINISIS Group was held at CDRI on 25th September 2002.

Publications

English language publications included, *Land Transactions in Cambodia, An Analysis of Transfers and Transaction Records (WP22)*; *Natural Resources and Rural Livelihoods in Cambodia: A Baseline Assessment (WP23)*, and *Cambodia's Annual Economic Review – 2002 (CAER02)*. WP 23 is currently being prepared for publication in Khmer as well as CAER02.



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CDRI Update

Management

The CDRI local-committee of Board of Directors met in July for the Mid-Year Review Meeting. The Board of Directors endorsed CDRI's plans to undertake a long-term research and capacity development programme to support the processes of devolution and deconcentration in Cambodia. The research agenda is elaborated in a research framework, *Understanding Decentralisation in Cambodia*, and recruitment of a research team is under way. The programme is expected to start in November 2002. CDRI staff participated in a staff retreat in Sihanoukville from September 2-6, 2002 which focused on *Strategic Life Management*. At the end of September, CDRI bid farewell to Dr. Sarthi Acharya, Research Director who completed his mission at CDRI and resumed his teaching post at Tata Institute in India. We are grateful for his valuable contribution to CDRI. The search for a new Research Director has been initiated with an anticipated start date of January 2003. CDRI welcomed two new research staff: Ms. Henny Andersen, Senior Economist/ Poverty Monitoring Specialist who joined CDRI in July and will provide technical support to the Poverty Monitoring and Analysis Unit in the Ministry of Planning; Mr. Chea Yim was appointed as a researcher in CDRI's Natural Resources and Environment Programme.

Research

A seminar was held on July 23 to discuss and disseminate findings from *Natural Resources and Rural Livelihoods in Cambodia: A Baseline Assessment* (Working Paper 23). Upcoming research activities for the Natural Resources and Environment Programme include field studies of the fish and resin trade. Two reports drafted under the Land and Food Security Project are being reviewed and findings from these reports will be pre-

sented at a seminar in November 2002. A seminar was held on August 28 to discuss and disseminate findings from *Cambodia's Annual Economic Review-2002*. The DAN field studies on off-farm and non-farm employment have been completed. Findings will be presented at a conference in Hanoi in December 2002. A meeting of the Research Forum was held at CDRI on October 4 to discuss a range of on-going research activities including studies of social capital in Cambodian villages, NGO management approaches, fruit and vegetable marketing, and opportunities for improved research linkages and information flow. CDRI entered into a partnership with the Institute of Developing Economies (Japan) to conduct studies on the garment and silk weaving sectors. A Forum, jointly organised by the Senate Commission on Banking and Finance and CDRI, was held on October 9 at the Senate Conference Room to discuss the impacts of the 2002 drought and floods and strategies to assist the affected population.

Centre for Peace and Development

In preparation for the national election in July 2003, the monthly COPCEL roundtable meetings are now focusing on security, the registration of voters by the new Commune Councils, and the media. In August, the CPD training team conducted a 5-day training on "*Working Together for Peace and Development*" in Srey Snam district, Siem Reap province. In September, the third module of *Working for Peace* was successfully completed, and included a presentation of lessons learned from reconciliation in South Africa. The first working draft of the *Peacebuilding Lexicon* is expected to be ready around November, with the first meeting of stakeholders planned for the end of this year. The dissemination of the illustrated book "*Buddha as Peace-Maker*" has been successful. The books will be pilot

(Continued on page 19)

កម្ពុជា វិទ្យាស្ថាន អភិវឌ្ឍន៍ និង ការងារ កម្ពុជា វិទ្យាស្ថាន អភិវឌ្ឍន៍ និង ការងារ កម្ពុជា វិទ្យាស្ថាន អភិវឌ្ឍន៍ និង ការងារ

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