



CAMBODIA CDEVELOPMENT REVIEW

A Publication of the
Cambodia Development Resource Institute

VOLUME 8, ISSUE 1

JANUARY-MARCH 2004

\$4.00

Evolution of Conflict Management During Electoral Periods

Caroline Hughes, CDRI external consultant examines the changes in the nature of conflict and its management during electoral periods in Cambodia.*

This year saw Cambodia's fourth electoral exercise since 1993, the third to be organised by Cambodian state institutions. In response to the interest generated by CDRI's study of conflict during the 1998 general elections, the Centre for Peace and Development commissioned a second study this year, offering a longitudinal analysis of the evolution of conflict management mechanisms over the course of three elections. In undertaking this task, the researchers had four aims. First, we aimed to compare the nature and causes of conflict escalation, and the effectiveness of mechanisms used to manage conflict, in 1998 and 2003, in order to model the process of conflict escalation. This provides a basis for formulating more effective conflict management mechanisms. Second, we aimed to investigate conflict and conflict management at the local level through fieldwork in case study communes, a research strategy that was not attempted in the study of the 1998 elections. Third, we focused particularly on the impact of longer-term processes of change that have taken place since 1998 – in particular, expanded civil society advocacy, the decentralisation of power to local government, and NEC reform – to evaluate their impact on conflict and conflict management. Fourth, we aimed to examine areas where limited reform has occurred, notably in the structure of access to the media, and to investigate the effectiveness of programmes sponsored by international agencies to address conflicts in this area.

Overall, the research team found that the level of conflict in 2003 was much reduced as compared to 1998. This was attributed to the following positive developments: greater participation by the major parties

* A full report of the study, which was funded by the Australian Government's AusAID, will be published as a CDRI Working Paper in March 2004.

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Despite flooded roads caused by torrential rains, Kompong Speu voters make their way to the

and by non-governmental organisations in electoral preparation, including the drafting of legal frameworks and regulations; a much more detailed and greatly improved legislative foundation for the elections; greater openness and accessibility in working practices on the part of national and local level election agencies; and greater involvement of the SRP and FUNCINPEC in local politics through their positions on commune councils. Equally, ongoing processes of consultation, including the Committee for the Prevention of Conflict in Cambodian Elections (COPCEL), which attracted the commitment of political actors from government, opposition, and non-governmental organisations alike, resulted in the 2003 elections being characterised by a

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greater willingness to have open discussions and take steps to manage conflict among national level political actors.

Despite these advances, conflict still arose in 2003, particularly following the release of the election results. This summary reports on conclusions drawn from the 2003 study, with respect to the modelling of conflict escalation in Cambodian Elections. Using the model developed, it summarises the researchers' evaluation of two programmes of institutional reform – reform of the NEC and decentralisation of power to elected commune councils – and their impact on the 2003 election.

Modelling Conflict Escalation in Cambodian Elections

CDRI's 1998 study proposed that conflict escalation occurred as a result of two inter-related factors: the weakness of institutions and a lack of a sense of political community among parties to conflict. Institutional weakness occurs when state agencies are lacking in either technical competence (as a result of inexperience, lack of resources, or poor leadership) or in political legitimacy (as a result of perceptions that they are biased, corrupt, abusive, or unrepresentative). A lack of a sense of political community among parties to conflict occurs when parties to conflict distrust one another, refuse to cooperate with one another, view one another as illegitimate participants in the political process, and, often, have fundamentally opposed perceptions of political events. These traits combine to fuel mutual suspicion and an unwillingness to seek compromise solutions to differences.

The relationship between institutional weakness and a sense of political community among political actors is complex. The two factors can be mutually strengthening, or can combine to form a vicious circle. Efficient action by authoritative institutions can provide just outcomes, promoting attachment and loyalty to the political community. At the same time, a strong sense of trust and cooperation among members of the political community allows the emergence of authoritative institutions that can act efficiently (see Fig.1). Conversely, poor trust and poor cooperation tends to undermine the abilities of institutions to work, and weak institutions which operate in an inconsistent or inefficient manner tend to fuel distrust between political actors and to reduce the level of political cooperation (Fig.2). In our case studies of conflict arising in 2003, we used this model for analysis, paying particular attention to the ways in which inadequate conflict management by institutions led to conflict escalation, as shown in Fig. 2.

Conflict management is very important in this proc-

ess. Both the 2003 and the 1998 studies showed that ineffective or illegitimate mechanisms for managing conflict are likely to increase distrust and fuel conflict escalation. On the other hand, effective and legitimate mechanisms for managing conflict can promote productive relationships between the various parties to conflict, and between parties and state agencies.

The ways in which ineffective mechanisms for conflict management weaken the attachment of aggrieved parties to institutional actors, and thus fuel distrust between political parties, is examined in Fig. 3. Both the 1998 and 2003 studies showed that there are recurring differences in the ways that political parties interpret problems in electoral processes. Whereas one set of actors commonly views procedural difficulties as technical failures, another set of actors routinely regards them as "political tricks." This fundamentally different perception of events makes finding a conflict management mechanism that can address the concerns of both parties difficult. Where state agencies fail to find conflict management mechanisms that address both views, and only address one or the other interpretation, conflict escalation is more likely. Because the institutional process has only addressed one set of interpretations, this leaves the other parties with the belief that their concerns have not been considered. This in turn prompts decreased attachment to institutions and the electoral process, prompts greater distrust of political opponents, and decreases the fund of goodwill that is required for brokering compromise solutions.

This model offers predictions for the likely success of conflict management mechanisms with respect to particular conflicts. Drawing on case studies of conflict escalation from 1998 and 2003, the 2003 study suggested that the following criteria promote effective conflict management:

- There is agreement on the nature of the conflict
- There is agreement on appropriate mechanisms for managing conflict
- Managers of conflict have the appropriate powers to implement conflict management processes, even if this means punishing wrongdoers from other institutions
- There is agreement on the criteria for measuring success
- Mechanisms for managing conflict are efficiently implemented, transparent and accessible

When the converse of each of the above is true, conflict management is less likely to be effective.

Study of conflicts in the 2003 elections indicated that in the most fundamental conflicts that arose this year –

Fig 1. Institutions and Political Community: Virtuous Circle of Effective Conflict Management

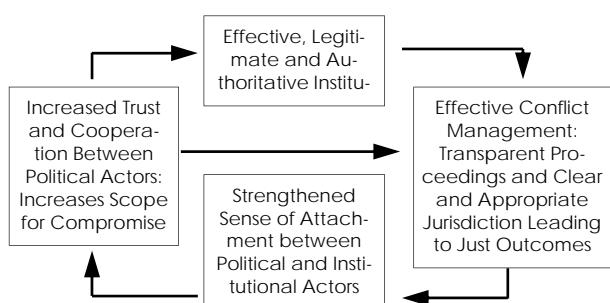
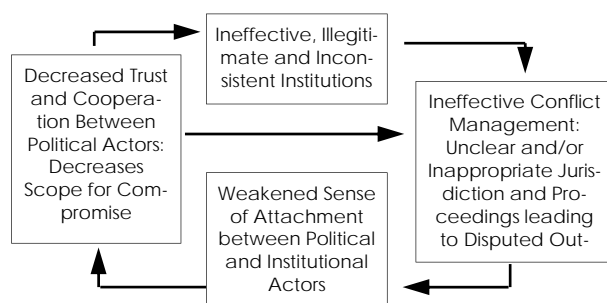


Fig 2 Institutions and Political Community: Vicious Circle of Ineffective Conflict Management



notably, conflicts over the level of security surrounding the elections; conflicts over the role of village chiefs; conflicts relating to voter registration; and conflicts over the handling of complaints by the NEC – this model accurately describes the process of conflict escalation which led to the rejection of results by the opposition parties after the election. The model thus helps us to evaluate the contribution of programmes of institutional change to strengthening conflict management during elections.

Institutional Change: NEC Reform

CDRI's 1998 study identified the process of formation of the NEC, its mandate, personnel, and mode of operations as significant obstacles to the effective management of conflict in the 1998 election. The NEC had been formed when some political parties were out of the country; its mandate and powers were unclear; its members at national level were overtly political, and at local level they were widely accused of bias; and its mode of operation suffered from both technical problems and a lack of attention to transparency, inclusiveness, or consistency of operation. For these reasons, the NEC remained weak, behaved inconsistently, and was perceived as illegitimate by many of the respondents to CDRI's study.

Between 1998 and 2003 a number of reforms were instituted, which addressed criticisms raised in 1998 and prompted new debates. The three sets of issues identified in the study of the 1998 election – impartiality, autonomy, and nature of working practices – remained salient for analysing debates over the reform of the NEC in 2002/3.

NEC Impartiality

Criticisms of NEC impartiality in 1998 centred on both the selection process, which entailed that members openly represented partisan or sectional interests, and on broader accusations that the agency was dominated by

the CPP and took direct orders from the party, both at national and local level. Changes in the make-up of the NEC in 2002 included a shift to independent members, rather than party nominees. Amendments to the election law required that members of PECs and CECs were to be reselected, according to stated, meritocratic criteria. The categories of local officials banned from serving on local election committees were expanded.

In response to these changes, new criticisms emerged. Critics charged that the new selection process for NEC, PEC and CEC members was not sufficiently transparent. NEC members were nominated by the Ministry of Interior (MoI); both the opposition party and election monitoring organisations claimed that as the MoI was controlled by the parties of government, FUNCINPEC and CPP, the selection process could not assure an impartial NEC. Criticisms of local level procedures included charges that positions were not sufficiently advertised; that consequently, the same individuals tended to be re-employed, nullifying the impact of reform; and that there were too few women on election committees, thus rendering them unrepresentative of the population.

NEC Autonomy

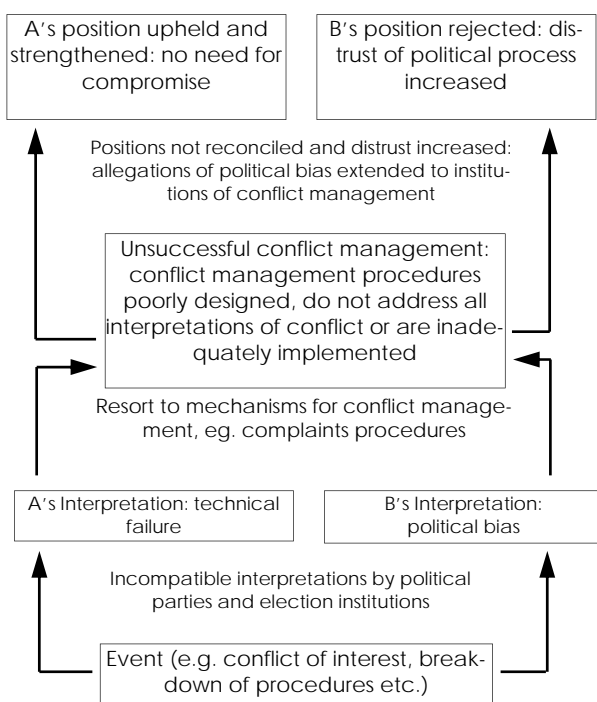
Criticisms of NEC autonomy in 1998 centred on the claims that, first, NEC jurisdiction was unclear or inadequate; and that second, even where the NEC had jurisdiction in a particular case, other institutions prevented the NEC from operating effectively and authoritatively. These criticisms were also made of PECs and CECs. In 2003, the NEC's powers were spelled out in much more detail in the amended election law. In particular, greater attention was paid to spelling out the different roles of local authorities and local election committees. The use of codes of conduct to guide the behaviour of different kinds of political and state actors made the different roles of different parties much clearer.

Although these efforts improved the situation, there is still considerable misunderstanding of what the NEC's jurisdiction actually is, and also considerable dispute about what it should be. In certain areas, such as security, the NEC's jurisdiction was limited. Criminal offences were the province of the Ministry of Interior. However, research in 2003 showed that CECs sometimes tried to manage conflicts which should have been left to the police as they involved crimes; in other cases, political actors criticised the NEC for failure to take action over events such as political killings which were beyond their jurisdiction. Equally, the role of the NEC in handling post-election complaints remained a hotly disputed question. A number of political actors argued that the NEC's jurisdiction here was too wide – that the NEC should not be in a position to adjudicate complaints directed against its own personnel.

Other problems with the NEC's jurisdiction were illuminated by, for example, the inability of the NEC to enforce media codes of conduct. The law did not give the NEC the power to punish violators of codes of conduct, rendering these only shakily effective in limiting the activities of political actors. The law did not give the NEC direct power over village chiefs either, with the result that the NEC had to ask the Ministry of Interior for assistance in addressing allegations of vote-buying or intimidation by village authorities.

In addition to this, allegations continued to be raised

Fig. 3: Model of Conflict Escalation: Poor Conflict Management Promotes Distrust



that the NEC took orders from the CPP; some political actors continued to attribute almost every deficiency in NEC operations to this. At local level, also, there was criticism of the reliance of the NEC on village chiefs to spread information to the population, and claims that the recruitment of teachers onto the CECs entailed that CEC officials could be easily intimidated by the local authorities that employed them for most of the year. Election monitors also claimed that PEC and CEC officials were disproportionately associated with the CPP.

NEC Technical Competence

The technical competence of the NEC was a major issue in 1998 – the first election organised by a Cambodian state agency since the war – but by 2003 it had reduced in importance. The greater experience of election officials led to greater competence, although this also entailed that any hitches that did occur were more likely to be blamed on political factors. Complaints in 1998 that processes were not transparent or inclusive were addressed to an extent by NEC efforts at greater openness. At national level, this included weekly meetings with political parties, NGOs and media representatives, regular NEC attendance at the COPCEL forum, and greater attention to rapid release of information to the press. At local level, also, weekly meetings with political party campaigners were held at CEC offices to pass on information from above, to receive complaints and to discuss issues arising with respect to the campaign or election.

These efforts were widely praised before the election, by interviewees for this study. However, after the election, the competence of the NEC in handling complaints was widely criticised. As in 1998, the complaints process proved to be one of the most controversial parts of the election. Although complaints procedures were specified in much greater detail in both law and regulations in 2003, than in 1998, critics continued to allege difficulty in submitting complaints due to official high-handedness, or unreasonable requirements regarding the provision of evidence in support. Critics also charged the NEC with a lack of flexibility and transparency in decision-making over whether to accept complaints. The NEC's power to dismiss complaints against itself was also criticised.

Outcomes of NEC Reform

Despite some very great improvements, the NEC remained an object of controversy in 2003, particularly with respect to its performance after the election. NEC operations before the elections were very much more widely praised in 2003 compared to 1998. Opposition parties and election monitoring organisations continue to distrust the impartiality and autonomy of CECs, although at local level all the major parties engaged with the CECs' programme of activities.

The NEC's performance continues to be undermined by a lack of clarity regarding its engagement with other institutions. In particular, the activities of the Ministry of Interior – responsible for the selection of NEC members, for security, and for disciplining local officials – need to be made much more transparent and accountable, to match the efforts of the NEC in this regard.

Equally, the clear support of the Ministry of Information, in dealing with the media, would make the NEC's position much stronger and more effective. Much greater engagement by these two institutions in the kinds of processes of transparency and accountability adopted by the NEC would constitute a major contribution to conflict management at election times.

Institutional Change: Decentralisation

The decentralisation of power to elected commune councils is significant in that local authorities – particularly at the commune level – were sharply criticised in 1998 for engagement in illegal activities such as vote-buying, intimidation, confiscation of voter cards, organising forced induction ceremonies to draft new members into the CPP, and using state resources to campaign. The election of multi-party commune councils in 2002 should in theory have introduced political pluralism at this level of government, thus preventing these kind of abuses of power. This hypothesis was investigated by the researchers through local level research in five case study communes in Takeo, Kampot, Battambang, and Kompong Cham provinces.

In our case study communes, we found that the positive political impact of decentralisation included an institutionalised role for the three main parties in most communes, for at least eighteen months before the 2003 election. This represented a considerable improvement compared to 1998. The winning of positions on commune councils legitimised the presence of activists supporting the three main parties in most communes, permitting the main parties to extend their networks. This significantly increased the institutional strength of the opposition SRP, in particular. We

also observed that in some communes, twelve months experience of working together with rival political parties as partners had alleviated distrust and promoted friendly relations between parties, although the extent and robustness of this effect is difficult to measure precisely.

However, there were also important limits to the political impact of decentralisation. First, many commune councillors, particularly from FUNCINPEC and the SRP, but also from CPP, are inexperienced and thus do not wield the authority that they should, towards each other and towards, for example, village chiefs. Commune councils have not yet started to implement policies, because funds have not been allocated to them, so there is little experience of practical problem-solving to draw on. This limits the extent to which they have developed strong working practices and relations with the local community, as opposed to relations with their political parties. Commune councils have few resources with which to act on election-related issues. In some communes, SRP and FUNCINPEC councillors reported that they were excluded from influence by their CPP colleagues. In some communes also, village chiefs appeared to report directly to the district level or to their political party, bypassing commune councils.

The positive observable effects of decentralisation on the election process in 2003 included greatly expanded freedom to campaign in the communes during the elec-

Despite some very great improvements, the NEC remained an object of controversy in 2003, particularly with respect to its performance after the election.

tion compared to 1998; and much less criticism of the political role of commune chiefs compared to 1998 (but greater criticism of other local authorities, especially village chiefs). However, the inexperience of commune councils affected their ability to fulfil their new function of registering voters, and this became a significant source of conflict after polling day. Furthermore, the inexperience of FUNCINPEC and SRP councillors, and of these parties in organising strong networks at local level, limited their ability to compete with the CPP's sophisticated organisational strategies in the communes. This was particularly important as these parties later claimed that their supporters had not been given sufficient information by state agents about registering and going to vote. Whereas the CPP effectively mobilised its supporters on polling day, FUNCINPEC and SRP were much less adept at this.

Consequently, a number of conflicts remained unresolved at local level. These included complaints over the alleged registration by commune clerks of illegal "foreign" voters; complaints over unequal distribution of information to supporters of different parties; complaints that CECs were partisan to the CPP; complaints that villagers were intimidated by village chiefs and afraid to discuss politics freely; and complaints that polling and counting station staff did not respond appropriately to problems and complaints.

It is too soon to assess the long-term impact of decentralisation, but the most important short-term effect has been to expand freedoms for party activists in most communes. However, we found that commune councillors from different parties still have profoundly different points of view on the situation vis-à-vis intimidation, political partisanship on the part of local authorities and election committees, vote-buying, and access to information. This suggests that a strong sense of political community and cooperation is lacking at local level between party representatives, and that problems may arise in the future in achieving cross-party consensus on commune issues.

Complaints over unequal capacities of different political parties in informing, assisting and mobilising their voters to go and vote escalated into a serious conflict following polling day. Less experienced commune councillors, and particularly those from newer parties, need assistance to become local leaders, helping to inform and mobilise villagers even where resources are lacking. Other organisations should also be encouraged to participate in this. The NEC must address the issue of partisanship in information flows to villagers by expanding its own programme of voter education.

Conclusions: Institutional Reform and the 2003 Election

Compared to 1998, we found that the following aspects of institutions had improved, strengthening the sense of attachment between political and institutional actors, and decreasing distrust between political parties:

1. Broader participation in drafting and passing the election law and regulations greatly increased the legitimacy of the legal framework, and, consequently, strengthened the legitimacy of institutions and processes also.
2. Greater detail in the election law and regulations greatly increased the transparency of decision-making

and reduced the scope for discretionary activity on the part of institutions which promotes distrust on the part of political parties.

3. The working practices of the NEC at national level, particularly before polling day, and particularly increased accessibility to political parties and NGOs, were important in strengthening the attachment between political and institutional actors.
4. This was also true, but to a lesser extent, at local level, in the communes we visited.
5. The emergence of multi-party commune councils has given the SRP a much stronger presence at local level which encourages the attachment of the SRP to the electoral process.

We found that the following aspects of institutions undermined the sense of attachment between institutional and political actors, increasing distrust and reducing the scope for effective conflict management:

1. Serious continued weaknesses in institutions other than the NEC: for example, a lack of trust in the Ministry of Interior particularly by the opposition parties; the illegitimacy of village chiefs who have not been elected in twenty years; the inexperience of commune councillors. Particularly problematic is the continued perception, by a variety of political actors, of state institutions such as the police and the courts as abusive, politically biased, and corrupt.
2. Serious limits to the jurisdiction and powers of the NEC in certain areas: for example, vis-à-vis the media and village chiefs, and other institutional or official violators of electoral codes of conduct. This is made worse by the tendency of the NEC and CECs to adopt conflict management strategies which emphasise a lack of confidence in their own powers – e.g. through continued resort to reconciliation rather than punishment.
3. Continued lack of supervision of the NEC itself, e.g. through the creation of an independent body to appoint NEC members and an independent body to handle complaints.
4. Lack of transparency in certain key aspects of electoral procedure, e.g. appointment of PECs and CECs and handling of complaints.
5. Design of conflict management procedures focused on parties, not always taking into account rights-based perspectives.

Prahoc and Food Security: An Assessment at the *Dai* Fisheries

CDRI Researchers, Bruce McKenney and Prom Tola examine the importance of *Prahoc* as a protein source in food security for the Cambodian poor.

Prahoc is a fermented fish paste commonly viewed as the second most important staple food for rural Cambodians, after rice. Made from small, low-value fish and eaten cooked, raw, or mixed into soups, *prahoc* provides a critical low-cost source of protein in the Cambodian diet. Moreover, as a fermented product, *prahoc* can be stored for several months without spoiling. This makes it a reliable (and ready-made) source of protein throughout the year, even when it is no longer fishing season. Despite the important role of *prahoc* in food security, research on this subject has thus far been minimal (especially compared to rice). Some key issues include increasing understanding about how *prahoc* contributes to rural livelihood strategies, assessing trends in *prahoc* commercialisation and trade, and identifying current or potential future threats to *prahoc* supply and affordability.

To explore these issues, the CDRI Natural Resources and Environment programme conducted research at the *dai* fisheries¹ of Kompong Luong, Kandal province during January-March 2003. Each year during this period of fish migration, the *dai* along the Tonle Sap River (5-30 km north of Phnom Penh) catch about 15,000 tonnes of fish, much of which are *trey riel*, *slek russey*, and other species used to make *prahoc*. Thousands of farmers come to the *dai* fisheries, especially in January, to purchase fish and make an annual supply of *prahoc*. CDRI surveyed 55 family-scale *prahoc* makers at the *dai* and interviewed a number of key informants involved in production and trade, including commercial *prahoc* makers, commercial fish sauce makers, and boat and truck transporters. Due to the limited scope of research, the modest objective of this study is to provide an initial assessment of key issues and highlight areas that may warrant policy interventions and/or more in-depth research in the future.

Farmers at the *Dai* Fisheries

Of the 55 people making *prahoc* at the *dai* surveyed for this study, all identified themselves as rice farmers. On average, they own one hectare of rice land and produce only about one tonne of rice annually for a household of six. Most come from the surrounding provinces of Kandal, Kompong Speu, and Kompong Chhnang, but some have travelled from the more distant provinces of Prey Veng and Svay Rieng. The annual trip to the *dai* to make *prahoc* is a long-running tradition – most have been coming every year for more than a decade.

Usually two or three members from a household make the trip to the *dai* after completing their rice harvest. Those from nearby provinces generally stay for 2-3 days, but people coming from Prey Veng and

Svay Rieng often stay for longer periods in order to try and earn income as labourers at the *dai*. Whereas in the past farmers travelled to the *dai* by oxcart and exchanged rice for fish, it is currently much more common to travel by group in a truck and pay for fish with cash. Only about 20 percent of farmers reported purchasing fish through rice exchange alone, and an additional 20 percent bought fish using a combination of rice and cash.

Food security remains the dominant reason that farmers come to the *dai*; only about one-third of farmers reported that they plan to sell *prahoc*, and the amounts they plan to sell are small (about 50 kg on average). As shown in Table 1, 80-90 percent of farmers indicated that they come to the *dai* because they lack fish for *prahoc* making in their village and they want to ensure that they have *prahoc* for year round household consumption. About half the farmers added that it is cheaper for them to come make *prahoc* than to buy it from traders in their village. Although about 40 percent of the farmers said that they enjoy the tradition of coming to the *dai* each year, this is not a major factor in their decision to make the trip.

Prahoc Making and Consumption

Making *prahoc* involves several steps. First, farmers purchase fresh fish from traders, who have brought fish to the riverbank from *dai* operating in the river. After purchase, farmers cut off the fish heads and load the fish into a bamboo basket. These fish are then taken to the river where, through a process of stepping on the fish in the basket and dipping/stirring in the river, the fish fat and intestinal materials are removed. Removal of heads, fat, and other materials reduces the original fresh fish weight by about half (e.g., 100 kg of fresh fish becomes 50 kg of fish processed for *prahoc*). The final step is to mix in salt with the processed fish in a jar and allow a period of about a month for fermentation before eating. On average, salt represents about 30 percent of *prahoc* weight (e.g., 50 kg of processed fish would become 65 kg of *prahoc* after salt is added). Although both women and men are involved in the making of *prahoc*, women play a more dominant role. Usually it is women (and sometimes their children) who do the processing activities, while men play a greater role in loading and carrying the fish back and forth from the riverbank.

Farmers at the *dai* fisheries were asked about their household *prahoc* consumption in 2002 and the amount of *prahoc* they were making for 2003. All make enough *prahoc* to support year round consumption. Only rarely do they purchase additional *prahoc* during the year (although they may consume fish and

Table 1: Why Farmers Come to the *Dai* Fisheries

Factors in Decision to Travel to <i>Dai</i> Fisheries	% of Respondents*
Good availability of <i>prahoc</i> here; lack of fish for <i>prahoc</i> making in my village	89
To make sure my family has <i>prahoc</i> for year round consumption	82
Cheaper cost of <i>prahoc</i> as compared to purchasing from traders in village	55
Enjoy the annual social and cultural occasion	38
Plan to sell some <i>prahoc</i> – income generation	33

*Based on survey of 55 farmers; multiple responses allowed.

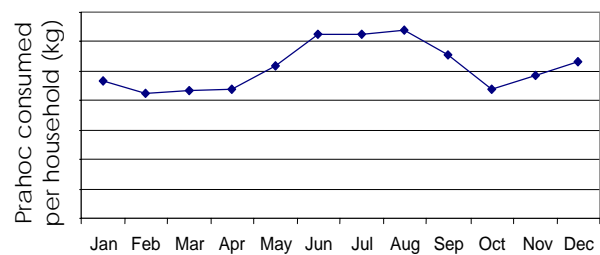
other aquatic resources caught in rice paddies). On average, *prahoc* consumption in 2002 was 62 kg per household (or 10.1 kg per person). As shown in Figure 1, consumption was fairly constant throughout the year, though peak consumption periods occur during rice transplanting and harvesting seasons. As farmers tend to be most busy during these periods, *prahoc* represents an economical “fast food”. It can also be easily used in meals during times that farmers exchange labour – the owner of the rice field being transplanted or harvested is responsible for providing meals. For 2003, farmers were making an average of 95 kg of *prahoc* for household consumption (or 15.7 kg per person), significantly more than what was consumed in 2002. This amount is probably best viewed as a maximum consumption estimate for the year, since it is likely that some farmers will find the need to sell a portion of their *prahoc* during the year (even though this is not currently planned).

Prahoc Costs

Prahoc remains a remarkably low-cost food and protein source. In 2003, the average cost for a farmer to make *prahoc* at the *dai* was R360 (or \$0.09) per kg. Even when farmers' other *prahoc*-making costs are taken into account, such as transportation to/from the *dai*, the cost of *prahoc* amounts to just R515 per kg (or \$0.13). This is only slightly more than the price of paddy rice per kg and somewhat less than the price of milled rice per kg. Protein sources other than *prahoc* are not affordable for most Cambodian farmers. For example, a kilogram of lower quality pork with fat is typically priced around R4000-8000 (\$1-\$2) per kg. Chicken prices are similar. Thus, *prahoc* prices would have to rise dramatically before farmers would consider substituting away to other meat sources. This is especially true given the commonly held view that farmers have a strong preference for the taste of *prahoc* over other meats.

Rising *prahoc* costs and the lack of affordable alternative protein sources suggest the potential for food security problems in the future. At the *dai* fisheries, the cost of fish for *prahoc* rose by 60 percent from 2001 to 2003 (Table 2). Although a sharp drop in the price of salt helped to mitigate the impact of higher fish prices in 2003, salt prices are unlikely to drop to such an extent again. Salt prices were about R500 per kilo in both 2001 and 2002, but the price

Figure 1: Average Household Consumption of *Prahoc* in 2002



fell to an average of about R220 in 2003. This appears to be the result of increasing imports of cheap (likely non-iodised) salt from Vietnam that undercut prices for iodised salt produced under the control of salt producers in Kampot.² Farmers also indicated that, after seeing high salt prices at the *dai* in the past, many now bring cheaper salt from their village.

A Declining Supply of Fish?

According to data from the Department of Fisheries, the total fish catch at the *dai* fisheries has been quite stable over the past decade (between about 11,000 and 17,000 tonnes). Only in 1998-99 did the catch dip below this range to a little under 9,000 tonnes (Table 3). The catch of fish species used for *prahoc* has largely tracked the total catch, ranging from about 40-60 percent of the catch, except for in 2001-02 and 2002-03. During these past two years, this ratio dropped to about 20-25 percent. This surprising drop in fish species for *prahoc* appears to be the main factor behind higher fish prices over the past two years. However, this may not be the case. Fish biologists suggest that such a rapid decline in these species is not likely. As smaller species that reproduce rapidly, these fish tend to compete well in heavily fished areas compared to larger species with longer reproductive cycles. Thus, the more typical trend for catch composition is to see a decline in larger species and an increase smaller species. They suggest that perhaps there has not been a drop in the catch of these species, only a data collection problem.

Increasing Demand for Fish

Whether the supply of fish species for *prahoc* has truly declined will remain a point of debate, but there is little doubt that demand for these species by commercial actors and exporters is increasing and contributing in some measure to rising fish prices. As shown in Figure 2, a number of interests compete for fish from the *dai* fisheries, including farmers, commercial fish processors, commercial fish sauce makers, fish transporters serving domestic markets, and fish exporters to Vietnam. Fish sales are either made directly from *dai* owners to the boats of exporters and fish sauce makers (whose facilities are along the river), or through traders who bring fish from the *dai* to the riverbank for sale to farmers, transporters, and commercial fish processors. After heads and fat are removed from fish by commercial processors, the fish are sold to commercial *prahoc* makers and transporters.

Commercial and trade activities at the *dai*

Table 2: Cost for Farmers to Make *Prahoc* at *Dai* Fisheries

Prahoc Costs	2003		2002		2001	
	Riels	US\$	Riels	US\$	Riels	US\$
Fish Price (kg) ^a	201	\$0.05	155	\$0.04	126	\$0.03
Fish Costs – 65 kg <i>prahoc</i> ^b	20,100	\$5.09	15,500	\$3.92	12,600	\$3.19
Salt Price (kg)	218	\$0.06	507	\$0.13	521	\$0.13
Salt Costs – 65 kg <i>prahoc</i>	3,270	\$0.83	7,605	\$1.93	7,815	\$1.98
Total <i>Prahoc</i> Costs ^c	23,370	\$5.92	23,105	\$5.85	20,415	\$5.17
<i>Prahoc</i> Cost per kg	360	\$0.09	355	\$0.09	314	\$0.08
Fish as % of <i>Prahoc</i> Costs	86%	67%	62%			

^a Farmers primarily purchased sleuk russey species to make *prahoc* in 2003 because this was the main *dai* catch. In 2001 and 2002, trey riel species made up most of the *dai* catch. If available, farmers prefer trey riel. ^b On average, farmers made 65 kg of *prahoc* per household in 2003. This requires 100 kg of fresh fish (equal to 50 kg processed fish) and 15 kg of salt. ^c Farmers also pay for transportation to/from *dai* fisheries, to stay along the riverbank overnight, and for equipment and materials. In 2003, these costs amounted to about R10,000 (\$2.50) per household. When added to fish and salt costs, this raises the average cost of *prahoc* to about R515 (\$0.13) per kg.

fisheries have increased significantly in recent years. For example, at the Kompong Luong *dai*, the number of commercial fish processors using machines to remove fish heads and fat has grown dramatically, from 2-3 processors in the mid-1990s to about 30-35 processors in 2003. During the peak catch periods, each of these machines can process 5-15 tonnes per day. Along with greater processing capacity, transporters indicate that the number of trucks transporting fish (both processed and unprocessed) from the *dai* to domestic markets has steadily increased over the past few years. Many of the transporters bring fish directly to village markets in the surrounding provinces for sale to farmers. Where this distribution is reaching new markets and consumers, it has the effect of expanding overall demand for fish. Greater demand for fish as inputs to products other than *prahoc*, namely fish sauce, may also be putting pressure on fish prices, but this study could not determine trends in this area. Finally, export demand for fish appears to be on the rise. Key informants note a significant increase in the number of boats exporting fish from the *dai* fisheries to Vietnam. These boats, which can carry 20-70 tonnes of fish, were observed at the Kompong Luong *dai* during research, but no estimate of the number of boats or export tonnages was possible.

Despite the greater commercial activity and increasing distribution of fish from the *dai* to rural areas, farmers are likely to continue making their annual trip to the *dai* for many years to come. First, farmers note that they come to the *dai* after their rice harvest when they have little else to do and few alternatives for productive use of their time. Second, although fish distribution is improving, many farmers indicate that they can only ensure their annual *prahoc* supply by travelling to the *dai*. Lastly, farmers want

to make their own *prahoc* to ensure quality. They note that the quality and taste of commercially made *prahoc* is often substandard due to the overuse of salt and poorer fish quality (e.g., heads and fat not properly removed).

Conclusions and Recommendations

While prices of fish species used in *prahoc* have increased substantially over the past two years, there is no crisis at present. However, if the trend of rising prices were to continue over the longer term, rural Cambodians will find *prahoc* increasingly expensive. And there do not appear to be alternative sources of protein that come anywhere close to the affordability and popularity of *prahoc*. Commercialisation of activities at the *dai* fisheries can be positive for food security (by saving farmers money) if larger scale processing brings down costs, quality control can be improved, and distribution channels reach surrounding rural areas in a comprehensive manner. At the moment, these are big challenges since commercial *prahoc* making costs are about equal to farmers' costs, quality control is minimal, and many farmers still indicate that they must come to the *dai* because fish for *prahoc* making are not available in their area.

Because this study is an initial assessment, recommendations focus on areas that may deserve greater investigation and attention in the coming years. They are presented below.

- **Monitor prices of fish species used in *prahoc*, especially during the peak catch period in January.** If prices continue to climb, greater investigation should be made to determine export levels, since exports reduce domestic supply, which in turn can result in higher domestic fish prices.³ Likewise, additional supervision of data collection methods is recommended over the next few years to ensure data quality and to help clarify the degree to which a declining fish supply may be affecting fish prices. Given the importance of *prahoc* to food security, such monitoring and data quality assurance measures are warranted. Just as rice deficits are tracked to identify food insecure areas, measures should also be taken to identify threats to *prahoc* supply and affordability.
- **Keep constraints to a minimum for trade and distribution of *prahoc* and related fish species (processed and unprocessed).** In other sectors where commercial activities have grown, there has been a tendency among government institutions

Figure 2: Trade of small, low-value fish from the *dai* fisheries

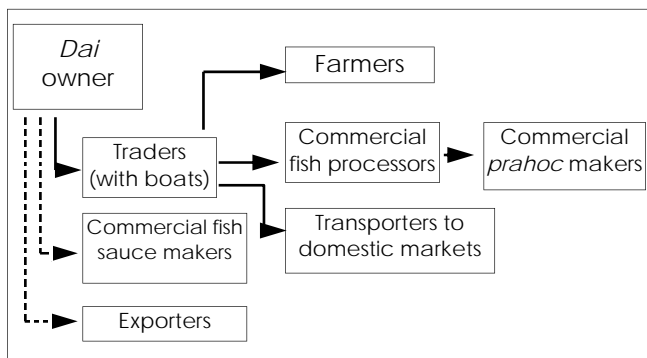


Table 3. Catch of Fish Species for Making *Prahoc* Compared to Total Catch at *Dai* Fisheries

Continued on page 12

Dai Catch	Fish Catch at the <i>Dai</i> Fisheries (in tonnes) by Year ^a								
	1994-95	1995-96	1996-97	1997-98	1998-99	1999-00	2000-01	2001-02	2002-03
Fish species for making <i>prahoc</i> (January only) ^c	8,396	2,881 ^b	5,741	4,044	2,349	5,344	3,291	1,712	1,887
Fish species for making <i>prahoc</i> (Season)	N/A	9,041	8,534	5,880	4,183	5,799	7,095	2,906	3,189
Total catch at <i>dai</i> fisheries (Season)	N/A	14,429	16,835	14,605	8,894	11,438	14,974	14,332	12,427
% of fish for <i>prahoc</i> out of total catch (season)	N/A	63%	51%	40%	47%	51%	47%	20%	26%

^a Data for year and season reflect catch for six months from October to March. Catch data for 1994-95 are based on a study by the Department of Fisheries and Mekong River Commission (Lieng et al. 1995). All other years reflect estimates by the Department of Fisheries (1995-2003). ^b These data reflect the catch for December and January combined. ^c Fish species for making *prahoc* include *trey riel*, *riel tob*, *riel awngkam*, and *sleuk russey*. January is the month when most farmers come to the *dai* fisheries to make *prahoc*.

Phnong Villagers Adapt to Decline in Natural Resources

Natural resource exploitation over the past decade has had severe consequences for Monduliri province. In a CIDSE Cambodia study John P. McAndrew, Mam Sambath, Hong Kimly, and Ky Bunthai examine the effects of natural resource decline on the livelihoods of Phnong villagers in two provincial communes.*

Since the early 1990s the opening up of the Cambodian economy and the drive to fund political and military power bases have had far reaching consequences for Monduliri province in northeast Cambodia. Legal and illegal logging, and the unregulated hunting of wildlife have diminished the rich natural resources of the province. Rapid inward migration likewise has the potential to exacerbate the decline. As natural resources become more circumscribed, indigenous people are forced to make adaptations that determine the very survival of their way of life. This article focuses on changes that have taken place in two Phnong communes in Monduliri province as a result of increased market activity and diminished natural resources: Dak Dam commune in Ou Reang district and Srae Preah commune in Keo Seima district.

Research Methods

The field research for the study was conducted during several intervals from November 2002 to March 2003. Three primary research methods were used: a household survey, key informant interviews, and participatory rural assessments (PRAs). The research team consisted of four CIDSE Cambodia staff, one Provincial Department of Rural Development (PDRD) counterpart staff, and seven Phnong interviewers. In all, the team was composed of eight men and four women, although not everyone worked together at all times. CIDSE staff from other provinces assisted in the PRAs in Srae Preah. The household survey was conducted in all villages of the two communes based on a 25 percent random sample.

Major Findings

Declines in Natural Resources

As Dak Dam and Srae Preah villagers attempted to rebuild their lives in the aftermath of the Khmer Rouge regime, and amid changes brought on by the market economy, they experienced the rapid exploitation of their natural environment resulting from illegal and legal logging, unregulated hunting, and destructive fishing. In Dak Dam commune illegal logging was conducted on a large scale. Villagers remembered that truck convoys passed through the commune taking logs

across the border into Vietnam. The illegal loggers were armed and at times accompanied by border police and soldiers. In December 1999 a crackdown on illegal logging in Monduliri brought attention to a practice that had been endemic to the province for several years. But it did not curtail it. Indeed, the reinstatement of government officials involved in the crackdown emboldened others to pursue illegal logging activities.¹

In Srae Preah large-scale logging was carried out by members of the Royal Cambodian Armed Forces (RCAF) from about 1993 to 1996. In 1997 and 1998 the Samling company, whose concession covered most - if not all - of Srae Preah, accelerated the pace of logging in the commune, cutting down large resin trees as part of their operations. By the time Samling ceased its operations in early 1999, the loss of resin trees in Srae Preah commune had severely affected the incomes of most local inhabitants. Resin collection was the highest income earner of most commune households. Estimates of average resin tree losses in the six Srae Preah villages were around 50 percent.²

In Dak Dam soldiers and police stationed in the provincial town of Sen Monorum had guns and hunted to increase their food supplies and to supplement their incomes. Illegal loggers also hunted wildlife. In Srae Preah the intense logging period between 1993 and 1998 was a particularly destructive one for wildlife. RCAF and Samling loggers had guns and hunted wildlife for food. Soldiers and police also entered the commune in hunting parties to kill large game. In Dak Dam and Srae Preah supplies of fish were also threatened by soldiers and police coming into the communes to engage in electrofishing.

Livelihood Strategies

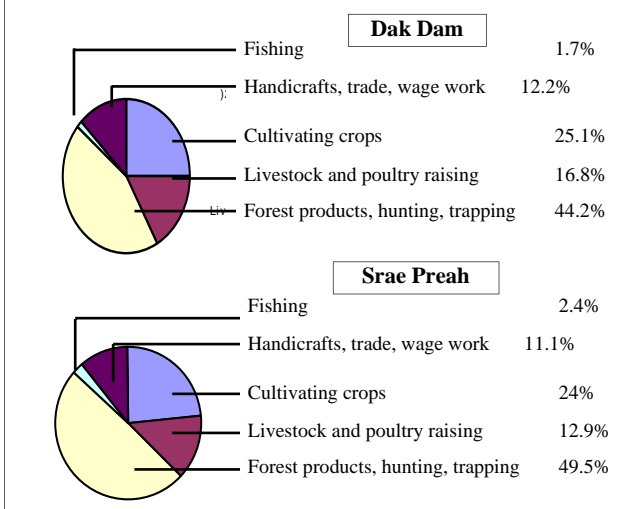
Household livelihoods in each commune were supported by a multiplicity of productive activities. Almost all sample households in Dak Dam and a large number of sample households in Srae Preah were involved in *chamcar* (growing crops other than rice) or slash and burn agriculture. While few households cultivated wetland or paddy rice in the uplands of Dak Dam, more than half of the households in the lower areas of Srae Preah did so. Raising pigs and chickens was prominent in both communes. Of note, gathering food and other products from the forest, and hunting and trapping were practised by a large majority of households in both communes. This underscored the importance of forest resources in the lives of the local people. Fishing was likewise prevalent in the two communes. By comparison, neither the making and selling of goods nor the buying and selling of goods were pursued by large numbers of residents in either area. Wage work was somewhat more common in Dak Dam than in Srae Preah but was not among the leading livelihood strategies in either commune (Table 1).

In the study average cash values of household income in the past year were also computed (Table 2). This provides some indication of the relative importance of various strategies in sustaining household livelihoods.

Comparing household income shares by source in the two communes reveals noticeable differences and similarities in the household income structures. The Dak Dam sample households received the largest shares of their income from hunting and trapping, and from *chamcar* cultivation. By contrast, the Srae Preah sample households received the largest shares of their income

* The complete study entitled *Indigenous Adaptation to a Decline in Natural Resources: The Experience of Two Phnong Communes in Northeast Cambodia* is available in English and Khmer from CIDSE Cambodia.

Figure 1. Household Income Shared by Sources
November 2002–January 2003



from forest gathering (particularly resin tapping), and from wetland rice cultivation. Despite these differences, the importance of forest and land resources in the lives of the people from both communes was clear (see Figure 1).

Notably, the incidence of poverty in both communes was high. In a report published by the Royal Government of Cambodia (RGC) and the World Food Programme (WFP) in March 2003, the poverty line for rural areas in Cambodia was set at 1,036 riels per capita per day, which amounts to 378,140 riels per capita per year.³ In Dak Dam 35 of the 65 sample households, or 54 percent, fell below this poverty line. In Srae Preah 47 of the 74 sample households, or 63 per cent, likewise fell below this mark. These incidences of poverty were considerably higher than the 40.1 per cent of rural households in Cambodia considered to be below the poverty line by the RGC Ministry of Planning in 1999.⁴

Implications

Enhancing Livelihood Strategies

Despite the destruction of forest resources through legal and illegal logging and unregulated hunting in Dak Dam and Srae Preah communes, the indigenous Phnong inhabitants of these areas remained largely dependent on forest resources for their subsistence. The adaptation to the decline in natural resource had essentially been to

Table 1. Livelihood Strategies in Past Year by Household
November 2002–January 2003*

	Dak Dam	Srae Preah
Slash and burn cultivation	64	61
Wetland rice cultivation	3	43
Pig raising	59	54
Chicken raising	63	68
Duck raising	22	10
Gathering food from the forest	60	69
Gathering other products from the forest	57	71
Hunting or trapping	45	52
Fishing	60	69
Making and selling goods	28	23
Buying and selling goods	9	13
Wage work	36	31
	n = 65	n = 74

*Data were collected during this period.

subsist on less and to exploit the further limits of their diminished resource base. This led to intensive hunting in Dak Dam and the tapping of young resin trees in Srae Preah. Losses of income from forest resources forced a greater reliance on the cultivation of crops and the raising of livestock and poultry. However, decreases in soil fertility and irregular rainfall linked to deforestation limited the potential of crop production. Market demand for cash crops such as cashew nuts had also been less than expected. Meanwhile increased market activity had not transformed the local residents into entrepreneurs or traders nor had it provided them with remunerative and sustained opportunities in wage work.

Given the inward direction of household subsistence strategies and the lack of viable short-term alternatives, access and control over natural resources remained critical. A resumption of logging activities in either commune would be devastating for local communities but especially for the resin-tapping households in Srae Preah. With almost all resin trees currently tapped in Srae Preah commune, households would not be able to offset future losses from logging by expanding into new areas. Already diminished levels of income and food security would be reduced even further. This noted, it would be imperative for the RGC with support from the citizenry to enforce the law against the cutting of resin trees. The value of enabling the resin trade to continue must be defended. Prime Minister Hun Sen in a lecture presented in May 2003 proclaimed unequivocally, "We must give first priority to the people.... I made a clear recommendation that the forests where people tap resin should not be allowed for logging."⁵

Beyond upholding the law prohibiting the cutting of resin trees, it is necessary to rethink the viability of concession forestry itself.⁶ The Samling logging concession in southern Monduliri has been inactive since 1999. Nonetheless, Samling has submitted a strategic management plan to the RGC and if the plan is approved the company could once again commence logging operations. Some conservationists have acknowledged the potential threat of Samling while suggesting that well-managed sustainable concession logging might be a better alternative to the illegal logging which could replace it.⁷ The salient question here is whether Samling would have the corporate commitment or financial incentive to manage their concession on a sustainable basis. Given the company's history this seems highly unlikely. Indeed, one could argue that if resin trees were excluded from the company's operation, Samling could not harvest timber on a profitable basis. The RGC should not approve Samling's strategic management plan, for the resumption of logging operations in Srae Preah and other communes of southern Monduliri would only exacerbate the vulnerability and poverty of the local communities living within the concession area.

The cancellation of forest concession agreements and a total crackdown on illegal logging are clearly steps consistent with the RGC's National Poverty Reduction Strategy 2003–2005. Recognising poverty to be economically wasteful, morally unacceptable, and socially divisive, the RGC has made alleviating poverty its overriding development objective. Importantly, poverty reduction entails both increasing productivity and reducing vulnerability. High incidences of poverty exist in both Dak Dam and Srae Preah communes. If

RGC policy is to support the alleviation of poverty in the study communes then it must prevent, and not promote or permit, concessionaires and illegal loggers from exploiting forest resources to the detriment of local residents. Reducing the vulnerability of households in Dak Dam and Srae Preah with respect to access and control over forest resources is a necessary first step in the struggle to eradicate poverty. Increasing productivity in agriculture through improved techniques and augmenting earnings from trade and wage work will complement this.

Strengthening Participation in Natural Resources Management

In the last decade the indigenous Phnong people of Dak Dam and Srae Preah communes suffered a severe decline in their natural resources. The forces behind legal and illegal logging, and unregulated hunting were just too powerful and too relentless for the voices of these indigenous people living on the periphery of society to be heard and taken seriously. Into the 21st century the situation could worsen. The planned resumption of concession logging activities threatens further deterioration of forest resources in Srae Preah. The recent completion of the new road into the provincial capital of Sen Monorum opens up opportunities for land speculation and the violation of indigenous land rights. And yet while the potential for further disenfranchisement is real, so too is the promise of indigenous empowerment.

One alternative that involves local people in natural resources management is community forestry: essentially an effort to support and empower communities to pursue their traditional uses of forest resources whilst encouraging sustainable practices. Community forestry is also designed to promote local knowledge and skills in forest management and to ensure that communities have a stronger voice in decisions affecting the forestry sector. Community forestry normally involves activities in land-use mapping, planning, and developing forest management agreements on resource use, which are mutually recognised by villagers and provincial and local

government officials. A CDRI study has identified 237 community forest projects in Cambodia including 7 in Mondulhiri.⁸ Another promising alternative to corporate and private exploitation of property is communal ownership of land resources. Recently, the Ministry of Land Management announced plans to issue communal land titles to indigenous people in pilot projects under the 2001 Land Law including one village in Mondulhiri.⁹

In Mondulhiri alternatives are beginning to emerge as indigenous communities empower themselves and advocate for their own rights. In recent years indigenous people have built their awareness and understanding of forestry regulations and land laws, and have participated in public events and community action on issues that affect their lives. Decentralisation reforms have also enabled Commune Councils to speak out more forcefully on issues that concern their constituents. Conservation, development, and human rights NGOs have worked together to support the empowerment process. Clearly, much needs to be done to reverse the exploitative trends of the 1990s. But a concerted effort to strengthen indigenous participation in natural resources management has decidedly begun.

Endnotes

1. Global Witness, *Chainsaws Speak Louder Than Words*, May 2000, 19; Global Witness, *The Credibility Gap – and the Need to Bridge It: Increasing the Pace of Forestry Reform*, May 2001, 21-22.
2. These estimates were higher than those of a recent study conducted by the Wildlife Conservation Society which recorded a 20 per cent resin tree loss in one Srae Preah village and a 26 per cent resin tree loss in another. See Tom D. Evans, Hout Piseth, Phet Phaktra, and Hang Mary, *A Study of Resin-Tapping and Livelihoods in Southern Mondulhiri, Cambodia, with Implications for Conservation and Forest Management*, (Phnom Penh: Wildlife Conservation Society, 2003), 40-41.
3. Ministry of Planning, Royal Government of Cambodia and the United Nations World Food Programme, *Poverty and Vulnerability Analysis Mapping in Cambodia: Mapping Poverty, Malnutrition, Educational Need, and Vulnerability to Natural Disasters in Cambodia*, March 2003.
4. Royal Government of Cambodia, National Poverty Reduction Strategy 2003-2005, 24.
5. Samdech Hun Sen, Prime Minister of the Royal Government of Cambodia, "Keynote Lecture: The Economic Government and Strategies to Enhance Rural Livelihoods," Presented at the Development Seminar for Provincial and Municipal Leaders, organised by the Cambodia Development Resource Institute in cooperation with the Ministry of Interior, Phnom Penh, 12 May 2003, 15.
6. See Bruce McKenney, "Questioning Sustainable Concession Forestry in

Table 2. Average Cash Values of Household Income in Past Year November 2002-January 2003* (in riels)**

	Dak Dam	Srae Preah
Chamcar rice	193,292 10.3%	87,986 4.2%
Chamcar crops (other than rice)	271,585 14.5%	160,816 7.6%
Wetland (paddy) rice	4,615 0.2%	259,297 12.3%
Pigs raised	242,308 12.9%	211,149 10.0%
Chickens raised	65,077 3.5%	58,784 2.8%
Ducks raised	7,692 0.4%	2,567 0.1%
Food gathered from the forest	46,769 2.5%	42,239 2.0%
Other products gathered from the forest	252,376 13.5% (34,415 liquid resin)	870,799 41.2% (600,845 liquid resin)
Animals hunted or trapped	527,405 28.2%	133,755 6.3%
Fish caught	32,412 1.7%	51,342 2.4%
Goods made and sold	40,708 2.2%	35,270 1.7%
Goods bought and sold	26,069 1.4%	67,635 3.2%
Wage work	161,323 8.6%	132,486 6.3%
Total	1,871,631 99.9%	2,114,125 100.1%
	n = 65	n = 74

*Data were collected during this period. **4,000 riels equals one US dollar.
Note: Percentages do not add up to 100% due to rounding.

- Cambodia," *Cambodia Development Review*, January – March 2002, 6,1.
7. J. Walston, P. Davidson, and Men Soriyun, *A Wildlife Survey in Southern Mondulokiri Province, Cambodia*, (Phnom Penh: Wildlife Conservation Society, 2001) cited in Evans et al, *A Study of Resin-Tapping and Livelihoods in Southern Mondulokiri*, 19.
8. Bruce McKenney and Prom Tola, *Natural Resources and Rural Livelihoods in Cambodia: A Baseline Assessment*, Working Paper 23 (Phnom Penh: Cambodia Development Resource Institute, 2002), 86-89.

9. Michael Coren, "Landgrabs Loom for Mondulokiri Minorities," *Phnom Penh Post*, Aug 15-28, 2003, 7.

Continued from page 8:

Prahoc and Food Security...

and officials/authorities to impose a range of licensing, permit, and fee requirements (see CDRI Working Papers 27 and 28 on fish exports and resin trade). Such requirements for *prahoc* trade, no matter whether the trade is informal or commercial, should not be established or allowed. To ensure food security in Cambodia, it is critical that *prahoc* prices remain low. This will require the maintenance of low marketing and distribution costs.

- **Investigate opportunities to combat iodine deficiency problems through use of iodised salt in *prahoc*.** *Prahoc* is the single most important source of salt for Cambodians throughout the year. Findings from this study indicate that farmers (and their family members) consume about 10-15 kg of *prahoc* each year. Salt represents about 3.0-4.5 kg of this consumption, or about 8-12 g per day on average. Since a standard of 10 g per day is often assumed for salt consumption in other developing countries, and it is well known that little salt is used in rural Cambodian cooking beyond what is in *prahoc*, it is fair to say that a great proportion of salt intake in rural areas is from *prahoc*. Therefore, the use of iodised salt in *prahoc* will be essential if iodine deficiency problems are to be reduced in Cambodia. At the *dai*, the decision about which salt to use (and consume the rest of the year) is made by thousands of farmers during one week in January. *Prahoc* making at the *dai* offers a significant opportunity for encouraging the use of iodised salt and raising awareness about its health benefits. While much important effort is focused on ensuring that iodisation occurs in the production of salt, Cambodia may be unique in that influencing the use of iodised salt in a single popular food product (*prahoc*) could have widespread positive health impacts.

- ¹ A *dai* is a bagnet or stationary trawl with an anchoring position in the river used for capturing fish migrating downstream.
- ² Iodine is added to salt in Kampot under what is reportedly monopoly control. This control is viewed as necessary to ensure that iodised salt is consumed in Cambodia. Iodisation of salt can be an effective way to combat problems caused by iodine deficiency. Problems include goitre, lack of concentration and coordination, and lower IQ levels.
- ³ Aware of increasing exports of fish species used in *prahoc*, the Department of Fisheries called on *dai* owners in 2003 to only sell fish caught at night to exporters. This appears to be a practical first step. Previously, most *dai* owners did not operate at night and fish simply migrated past the *dai*. The *dai* closed at night because night sales, such as for animal feed, did not cover labour costs and the fish could not be stored for sales the following day. Exporters are willing to pay a higher price for this night catch, so more *dai* operated at night in 2002-03. Because of fish migration downstream, it is not clear whether the night catch affects the day catch.

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Endnotes

ECONOMY WATCH – EXTERNAL ENVIRONMENT

Expectation of diminishing geopolitical risks, in the third quarter of 2003, is likely to have led to more business and consumer spending, stimulating growth in key economies, e.g. that of the US. The end of the SARS epidemic was also a positive factor, especially for the East Asia region.

World Economic Growth

US economic growth accelerated in the third quarter of 2003 to hit a 7-quarter record annual rate of 3.3 percent. Consumers enriched by President George W. Bush's 350 billion dollar tax cut and super-low interest rates, splashed out in the third quarter and drove economic growth to its fastest rate in recent months, Channel News Asia reported. Real personal consumption expenditures increased by 6.9 percent in the third quarter, compared with an increase of 3.3 percent in the second, while real residential fixed investment jumped by 21.9 percent, compared with an increase of 4.5 percent in the second quarter, according to the Bureau of Economic Analysis. Also, the US improved its international trade position, contributing to faster growth. Real exports of goods and services rose, by 9.9 percent in the third quarter, in contrast to a decrease of 1.1 percent in the second. At the same time, the rate of growth of real imports of goods and services declined sharply, from 9.1 percent to 0.8 percent.

Economic performance of the Euro area remained weak. In the third quarter 2003, output grew by 0.3 percent over the same quarter of 2002, just one percentage point more than the growth in the preceding quarter. This was largely due to a fall in economic activity in Germany and France, which together constitutes the largest component of the Euro area economy. In September 2003, German industrial production fell by 3.6 percent, year-on-year. At the same time, the volume of retail sales declined by 3.1 percent. According to *The Economist*, recent business surveys suggest stronger growth in the fourth quarter 2003, although much will depend on the strength of the Euro.

Japan's economy grew by 1.8 percent in the third quarter 2003, slower than the 3 percent growth rate achieved in the preceding quarter. Machinery orders weakened, while private consumption and public investment dropped off, especially between the second and third quarter 2003. In September 2003, the volume of retail sales in Japan fell by 1.8 percent year-on-year. The fact that Japan's economy grew by 1.8 percent in the third quarter 2003 over the same quarter of 2002, is explained by an improvement in industrial production (4.1 percent increase in September 2003), a jump in fixed capital investment (by 14.2 percent), and an increasing trade surplus (US\$ 97.7 billion in September 2003).

In the third quarter of 2003, GDP growth in China climbed to an annual rate of 9.1 percent, after a slowdown in the second quarter when it experienced 6.7 percent growth. The main reason for the recovery lies in the expansion in the service sector with an increase of 7.6

percent in the third quarter. According to China Bureau of National Statistics, farm incomes also recovered in the third quarter, rising by 6.5 percent despite a decrease of 3.3 percent in the second quarter. This was due to a large increase in the number of farmers going to work in urban areas.

Economic output in South Korea rose by 2.3 percent in the third quarter of 2003, compared to the third quarter 2002. The faster growth was boosted largely by stronger exports. According to the Central Bank of South Korea, exports of goods and services surged by 10.8 percent in the third quarter, driven by a recovering global economy, while private consumption began to pick up as well, growing at 1.2 percent.

Thailand's economy grew somewhat faster in the third quarter 2003 at 6.5 percent, up from 5.8 percent in the second quarter. According to *The National Economic and Social Development Board (NESDB)*, private investment and private consumption were the main drivers. Increasing private consumption was fuelled by low interest rates, improving consumer confidence and expanding in farm incomes. Growth in investment (of 10.8 percent) was derived predominantly from higher capacity utilization both in export and domestic industrial sectors.

World Inflation and Exchange Rates

In the third quarter 2003, consumer prices in the US rose at an annual rate of 2.2 percent, slightly above the 2.1 percent recorded in the second quarter, despite the strengthening US economy. This was mainly due to a rise in energy prices, a 3.0 percent increase between August and September 2003, according to the US Department of Labor. While the inflation rate in the Euro Area continued to remain close to the target of 2 percent, deflationary pressures in Japan remained persistent, due to sluggish consumer demand. Consumer prices fell by 0.2 percent in the third quarter of 2003, after a similar decline in the second quarter.

The US dollar remained unchanged at 0.88 Euro/US\$ in the third quarter of 2003, the same rate as in the second quarter. Meanwhile, the US dollar weakened against the Yen to 117.7 Yen/US\$, down from 119.1 in the second quarter of 2003. Compared to the same quarter of 2002, the US dollar depreciated significantly, by 13.7 percent against the Euro, and by 1.6 percent against the Yen.

Commodity Prices in World Markets

In the third quarter of 2003, crude oil prices rose by 8.2 percent to US\$ 26.5/barrel, up from US\$ 24.5/barrel in the second quarter. Compared to the third quarter 2002, the price of crude oil increased by 4.3 percent. The price of first quality rice in the Bangkok international market and of rubber in the Malaysian international market rose by 1 percent to US\$ 199.4/tonne and by 4 percent to US\$ 1,015.4/tonne, respectively, compared to the preceding quarter. Conversely, the price of soybeans in the US market declined by 9.5% to US\$ 214.9/tonne in the third quarter of 2003, down from US\$ 237.6/tonne in the second quarter.

By Dr. Kang Chandarot/Mr. Tong Kim Sun

ECONOMY WATCH—EXTERNAL ENVIRONMENT

Table 1. Real GDP Growth of Selected Trading Partners, 2000–2003 (percentage increase over the previous year)

	2000	2001	2002				2003			2002
			Q1	Q2	Q3	Q4	Q1	Q2	Q3	
Selected ASEAN countries										
Cambodia	7.3	6.7	-	-	-	-	-	-	-	4.2
Indonesia	4.4	3.8	2.5	3.5	3.9	3.8	3.4	3.8	3.9	3.8
Malaysia	8.7	0.5	1.1	3.8	5.6	5.4	4.0	4.4	3.5	5.6
Singapore	9.5	-2.3	-1.7	3.9	3.7	3.0	1.6	-4.2	1.7	2.6
Thailand	4.4	1.9	3.9	5.1	5.8	5.6	6.7	5.8	6.5	6.1
Vietnam		6.0	-	-	-	-	-	6.9	-	6.7
Selected other Asian countries										
China	8.0	7.5	7.6	8.0	8.1	8.1	9.9	6.7	9.1	8.1
Hong Kong	10.6	0.3	-0.9	0.5	3.3	5.0	4.5	-0.5	4.0	5.0
South Korea	9.1	3.0	5.7	6.3	5.8	6.8	3.7	1.9	2.3	6.1
Taiwan	6.0	-2.1	0.9	3.0	4.8	4.2	3.2	-0.4	4.2	4.2
Selected industrial countries										
Euro-11	3.5	1.4	0.1	0.7	0.8	1.3	0.8	0.2	0.3	0.7
Japan	1.6	-1.3	-1.6	-0.7	1.3	2.8	2.6	3.0	1.8	0.5
United States	5.0	1.2	1.5	2.1	3.2	2.9	2.1	2.5	3.5	2.4

Source: *The Economist and Country's National Statistics offices and Central Banks*

Table 2. Inflation Rate of Selected Trading Partners, 2000–2003 (percentage increase over the previous year – period average)

	2000	2001	2002				2003			2002
			Q1	Q2	Q3	Q4	Q1	Q2	Q3	
Selected ASEAN countries										
Cambodia	-0.3	-0.4	3.4	3.3	3.5	3.0	1.8	1.6	0.2	3.3
Indonesia	3.7	11.3	14.5	12.6	10.2	10.3	7.7	6.5	5.6	11.9
Malaysia	1.5	1.4	1.5	1.9	2.1	1.9	1.3	0.9	1.0	1.9
Singapore	1.4	1.0	-0.9	-0.4	-0.4	0.1	0.7	0.1	3.2	-0.4
Thailand	1.6	1.8	0.6	0.2	0.3	1.4	2.0	1.7	1.8	0.6
Vietnam	-1.7	0.0	2.3	2.7	2.9	3.7	2.2	2.3	3.5	2.8
Selected other Asian countries										
China	0.3	1.0	-0.5	-0.7	-0.8	-0.6	0.5	0.6		-0.7
Hong Kong	-3.7	-1.5	-2.7	-3.1	-3.5	-2.9	-2.0	-2.5	-3.7	-3.1
South Korea	2.3	4.3	2.5	2.7	2.5	3.2	4.1	3.3	3.1	2.7
Taiwan	1.4	0.5	-0.1	-0.1	-0.3	-0.5	0.3	-0.1	-	-0.3
Selected industrial countries										
Euro-11	2.3	2.6	2.5	2.0	2.0	2.3	2.4	2.0	2.0	2.2
Japan	-0.6	-0.5	-1.4	-0.9	-0.8	-0.5	-0.3	-0.2	-0.3	-0.9
United States	3.4	2.9	1.2	1.3	1.6	2.2	2.9	2.1	2.2	1.6

Source: *The International Monetary Fund and the Economist*

Table 3. Exchange Rates of Selected Trading Partners Against the US Dollar, 2000–2003 (period averages)

	2000	2001	2002				2003			2002
			Q1	Q2	Q3	Q4	Q1	Q2	Q3	
Selected ASEAN countries										
Cambodia (riel)	3,871	3,935	3,910	3,916	3,935	3,948	3,948	4,008	4,015	3,927
Indonesia (rupiah)	8,421	10,236	10,078	9,077	8,940	9,027	8,884	8,428	8,482	9,280
Malaysia (ringgit)	3.80	3.80	3.80	3.80	3.8	3.8	3.8	3.8	3.8	3.80
Singapore (S\$)	1.72	1.79	1.83	1.81	1.76	1.77	1.74	1.75	1.75	1.79
Thailand (baht)	40.1	44.4	43.77	42.78	42.09	43.4	42.7	42.2	41.5	43.0
Vietnam (dong)	14,083	14,827	15,142	15,231	15,314	15,297	15,427	15,470	15,693	15,246
Selected other Asian countries										
China (yuan)	8.28	8.28	8.28	8.28	8.28	8.28	8.27	8.28	8.28	8.28
Hong Kong (HK\$)	7.80	7.80	7.80	7.80	7.80	7.80	7.80	7.80	7.79	7.80
South Korea (won)	1,131	1,291	1,319	1,273	1,197	1,214	1,199	1,206	1,184	1,251
Taiwan (NT\$)	31.8	34.1	35.1	33.8	33.8	34.8	34.7	35.0	34.2	34.4
Selected industrial countries										
Euro-11 (euro)	1.08	1.12	1.15	1.09	1.02	1.00	0.93	0.88	0.88	1.07
Japan (yen)	108	122	133.3	127.6	119.6	123.0	118	119.1	117.7	126

Source: *The International Monetary Fund and The Economist and National Bank of Cambodia*

Table 4. Selected Commodity Prices on the World Market, 2000–2003 (period averages)

	2000	2001	2002				2003			2002
			Q1	Q2	Q3	Q4	Q1	Q2	Q3	
Hardwood (logs) - Malaysia (\$/m3)	190.1	160.1	137.6	153.0	178.7	181.2	186.3	182.1	183.0	162.5
Hardwood (sawn) - Malaysia (\$/m3)	599.2	488.3	479.7	493.0	536	565.4	550.4	552.4	552.0	518.5
Rubber - Malaysia (\$/ton)	720.8	602.0	622.3	754.0	863	834.1	945.5	975.8	1017.4	768.4
Rice - Bangkok (\$/ton)	203.7	172.6	193.7	196.6	192.6	189.6	198.3	197.5	199.6z	193.1
Soybeans - USA (\$/ton)	211.3	195.6	179.9	189.8	219.3	239.0	243.3	245.7	244.3	202.3
Crude oil - Dubai (\$/barrel)	26.1	22.8	19.9	24.3	25.4	26.2	29.3	24.5	26.5	24.0
Gold - London (\$/fine ounce)	279.0	279.0	281.0	280.9	313.7	317.8	352.1	346.7	363.3	298.3

Source: *The International Monetary Fund and The Economist*

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Economic Activities

Cambodia's trade balance registered a surplus of US\$ 56 million in the third quarter 2003, the first time since the first quarter of 2000. Exports grew by 20.5 percent compared to the second quarter 2003, and by 8.9 percent compared to the third quarter 2002, mainly boosted by an increase in garment exports. Garment exports to the US grew moderately by 2.7 percent, exports to the rest of the world jumped by a massive 26 percent.

According to seasonal and historical trends, Cambodia's garment export can be expected to shrink in the last quarter of 2003. And as garments represent the largest share of Cambodia's exports, total exports can be expected to decline as well.

In the third quarter 2003, the value of total imports fell to US\$ 436.2 million (a drop of 10 percent) compared to the same quarter 2002. This reflects reduced imports of major items like diesel (from US\$ 31.3 million to US\$ 25.1 million) and construction materials (from US\$ 3.7 million to US\$ 2.4 million). During January-September 2003, gasoline imports were worth US\$ 24 million, diesel imports totalled US\$ 83.5 million, and construction material imports were US\$ 8.6 million. Compared to the same period 2002, gasoline imports decreased by 5.1 percent, diesel imports by 19.8 percent, and construction material imports by 35.1 percent.

In the third quarter 2003, the tourism sector showed some signs of recovery, after the slow down experienced in the first half of 2003. The total number of international arrivals by air, land and boat rose from 103,000 persons in the second quarter 2003 to 158,200 persons in the third quarter. The number of passengers by air increased from 59,600 persons to 97,600 persons, and visitors by land and boat rose from 43,500 persons to 60,600 persons. Most passengers from abroad were tourists (with tourist visas). Despite some recovery, total number of passengers in the third quarter 2003, fell by 8.9 percent compared to the same quarter 2002. In particular, the number of air passengers dropped sharply by 14.7 percent to 97,600. The number of passengers with "official visas" declined dramatically to 5,100 persons from 52,000, while the number of tourist and business passengers increased from 46,000 persons to 76,200 and from 15,600 persons to 16,300, respectively.

The construction sector continued to grow in the third quarter 2003. Project approvals for construction in Phnom Penh were 190 projects: 25 projects for mansion construction, 148 projects for apartment construction, and the remaining 17 projects for other construction activities. The total value of construction projects rose to US\$ 68.2 million in the third quarter, up from US\$ 59.6 million in the second quarter. Investment in apartment construction rose to US\$ 48.8 million, from US\$ 34.3 million in the second quarter 2003. However, mansion construction and other construction activities fell from US\$ 7.9 million to US\$ 5 million, and from US\$ 17.4 million to US\$ 12.85 million, respectively. Despite

some recovery, the number of construction projects in Phnom Penh in the third quarter 2003 was still 10.4 percent lower than in the same period 2002.

Inflation and Foreign Exchange Rates

The inflation rate in Phnom Penh declined to 0.8 percent in the third quarter 2003, the lowest rate in over a year. The major reason for this decline was a slower increase in food prices, by 1.5 percent in the third quarter 2003, down from 2.3 percent in the second quarter. The price of gasoline in Phnom Penh fell by 0.7 percent to 2,367 riels/litre, while the diesel price held steady at 1,683 riels/litre. Compared to the third quarter 2002, both diesel and gasoline prices rose by 8.6 percent and 7.6 percent, respectively. The gold price hit an 18-quarter high at 41.5 US\$/chi in the third quarter of 2003, mirroring international price movements.

The value of the riel against the US dollar remained almost steady, trading at 4,015 riel/US dollar in the third quarter 2003, compared with 4,008 riel/US dollar in the second quarter. This is likely to be associated with the tight monetary policy of the National Bank of Cambodia. Riel balances rose by 1.7 percent between the second and third quarter 2003, compared to a 5 percent expansion between the first and second quarter 2003. However, compared to one year ago, the riel depreciated by 2 percent in the third quarter 2003. The generally weaker riel is likely to be related to the continuing political uncertainty as a result of the failure to form a new government in Cambodia. In the third quarter 2003, for example, the exchange rate with the baht was 96.9 riel/baht, a 2.1 percent depreciation compared to the second quarter.

Monetary Development

Total liquidity (M2) rose to 3,007 billion riels in the third quarter 2003, a 9.3 percent increase compared to the same quarter 2002. Of the total liquidity, 886 billion riels were in riel and the remaining 2,120 billion riels were in US dollars. Outstanding credit provided to private banks reached 1,287 billion riels by the end of the third quarter 2003. Banks are generally reluctant to make long-term loans to the private sector. According to the Mekong Private Sector Development Facility, 70 percent of loans for small and medium enterprise are for periods of less than one year, and 29 percent is for 1-2 years.

Public Finance

In the third quarter 2003, Cambodia's national budget operations showed a smaller deficit at 263 billion riels, compared to a deficit of 281 billion riels in the second quarter. The main reason for this was a 5.7 percent increase in total revenues, mainly current revenues. Compared to a year ago, however, the overall deficit in the third quarter 2003 was 6 percent higher. This mirrors a decrease in total revenue (12.4 percent), largely related

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to a decline in current revenues (by 12.4 percent). Tax revenue, the largest share in current revenue, dropped by 15.4 percent to 273.1 billion riels in the third quarter 2003. Especially, "customs duties", which represents the main component in the tax revenue, fell by 21 percent to 91.6 billion riels in the third quarter, 2003.

Private Investment and Employment

In the third quarter 2003, fixed assets approved by the Council for the Development of Cambodia (CDC) amounted to US\$ 95.1 million, i.e. an increase of 97 percent compared to the second quarter. Of this, the agriculture sector accounted for US\$ 1.2 million (1 project), the industrial sector for US\$ 89 million (15 projects), and the tourism sector (1 project) for US\$ 4.8 million. However, the value of private investment in the third quarter 2003 declined sharply by 25.5 percent, compared to the same period 2002, despite adding 6 more projects.

Poverty Situation - Earnings of Vulnerable Workers

CDRI survey of vulnerable workers in the period 3-21 November 2003 shows that average nominal daily earnings of six groups (Cyclo drivers, Porters, Waitresses, Rice-field workers, Unskilled workers, and Skilled construction workers) increased and of three groups (Small vegetable sellers, Scavengers, and Motor-taxi drivers) fell compared to November last year. The garment workers' average nominal daily earnings, however, remained unchanged. In general, average nominal daily earnings of all groups was around 7,890 riels.

Although average nominal daily earnings of Cyclo drivers rose by 10.6 percent to 9,817 riel in November 2003 compared to a year ago, eighty-seven percent in the sample felt that their nominal earnings had declined. The survey also revealed that sixty-three percent of cyclo drivers graduated from primary school, while five percent graduated from secondary school. In addition, fifty-eight percent reported owning less than a hectare of land. Twenty-two percent and twenty-four percent of cyclo drivers were permanent residents of Prey Veng and Takeo province, respectively. On average, cyclo drivers reported working for 6 months in a year.

Average nominal daily earnings of porters increased by 3 percent to 6,500 riels in November 2003 compared to 6,312 riels in November last year, although eighty three percent of porters reported that their daily nominal earnings declined. Their earnings in 2003 were 2 percent higher than that of a year ago.

Average nominal daily earnings of waitresses and rice field workers rose by 10.8 percent and 5.5 percent in November 2003, compared to the same month last year. Nonetheless, eighty percent of waitresses felt that their average nominal daily earnings remained unchanged. It is worth noting that waitresses spend the least (928 riels per day) among the 10 groups of vulnerable workers in the sample, as meals and accommodation are provided by the shop owners.

Average nominal daily earnings of garment workers remained unchanged at 10,000 riels in November 2003, the same amount as in November last year. However, their nominal earnings fell by 3 percent compared to the previous survey (August 2003). The average working hours per week was 62 hours. The survey also indicated that garment workers could save about 114,531 riels (28.6US\$) per month, and eighty one percent of them sent their savings home to support their families.

Average nominal daily earnings of small vegetable traders and scavengers fell by 6.4 percent and 2.8 percent respectively in November 2003, compared to the same period last year. The decline in nominal daily earnings of small vegetable traders reflects a drop in vegetable cultivation due to bad weather, and an increasing number of traders. The survey also reveals that recycled rubbish is cheaper than was the case 3 months ago leading to a fall in nominal daily earnings of scavengers. In addition, ninety five percent of scavengers claimed that their numbers have increased. They have mainly come from Prey Veng (34 percent) and Svay Rieng (20 percent). Moto-taxi drivers experienced a 17 percent decline in average nominal daily earnings compared to November 2002 and a 8 percent decrease compared to August 2003. None of the motor-taxi drivers thought that their earnings were enough to fully support their families.

Nominal daily earnings of skilled construction workers increased by 26.6 percent in November 2003 compared to the same period in 2002, largely due to an increase of construction activities. However, only twenty two percent of skilled construction workers claimed that their daily income was able to support their families. Skilled construction workers normally work for 8 months a year. Average nominal daily earnings of unskilled workers rose by 6 percent to 6,200 riels in November 2003, up from 5,850 riels in the same period 2002. However, their earnings fell by 18 percent compared to August 2003 because of increased competition, according to respondents.

By Dr. Kang Chandarot,
Mr. Tong Kimsun and Ms. Pon Dorina

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Table 1. Private Investment Projects Approved, 1996–2003

	1996	1997	1998	1999	2000	2001	2002			2003		
							Q2	Q3	Q4	Q1	Q2	Q3
	Number of investment projects											
Total	300	136	140	96	96	188	9	11	8	20	14	17
Garment	144	48	84	44	52	76	4	5	2	6	7	12
	Registered capital (millions of dollars)											
Total	391.2	278	416.4	246.8	102.4	129.2	4.5	12.1	20.3	41.6	10.4	4.0
Garment	156.8	34.4	91.6	55.6	25.6	60	1.0	5	1	5	4.1	1.0
	Fixed assets (millions of dollars)											
Total	746.8	761.6	849.2	474	266.4	217.2	23.3	127.6	60.9	108.5	48.3	95.1
Garment	158.4	38.8	120.8	79.6	76.8	100	2.4	5.5	1.7	6.5	10.5	43.3

Source: Cambodian Investment Board (1995-2003) * Including existing investment expansion projects

Table 2. Projects Approved of Construction in Phnom Penh (1996-2003)

	1996	1997	1998	1999	2000	2001	2002			2003		
							Q2	Q3	Q4	Q1	Q2	Q3
Mansion	205	179	143	136	111	108	38	36	40	29	39	25
Apartment	537	528	678	864	520	499	126	154	123	125	104	148
Other	116	117	132	74	64	57	20	22	14	21	23	17
Total	858	824	953	1074	695	664	184	212	177	175	166	190

Source: Department of Cadastre and Geography of the Municipality of Phnom Penh

Table 3. Exports and Imports, 1996-2003

	1996	1997	1998	1999	2000	2001	2002			2003		
							Q2	Q3	Q4	Q1	Q2	Q3
	Millions of dollars											
Total exports	387.1	493.4	784.4	941.1	1055.5	1267.0	314.1	451.7	412.9	331.5	408.5	492.3
Of which: - Garment	78.8	227.2	378	554	962.1	1201.0	289.5	431.7	385.4	314.7	389.9	475.2
. To U S	0.4	107.2	74.1	486	714.1	840.9	203.5	295.2	269.2	230.6	267.8	303.2
. To Rest of the world	78.4	120	82	68	248.0	360.1	86.0	136.5	116.2	84.1	122.1	172.0
- Agriculture	-	-	-	-	90.5	66.0	24.7	20.1	27.4	16.8	18.7	17.0
. Rubber	-	-	-	-	29.6	25.9	5.5	9.2	9.1	6.3	6.7	10.0
. Wood	-	-	-	-	32.5	22.3	5.3	4.1	3.3	2.8	2.8	2.1
. Fisheries	-	-	-	-	5.4	6.0	1.6	1.0	0.5	0.8	0.7	0.6
. Other	-	-	-	-	26.0	11.8	12.3	5.8	14.5	6.9	8.5	4.3
Total Imports	1114.4	1094.5	1112.2	1237.4	1417.7	1501.4	470.4	484.4	438.7	393.8	507.3	436.2
Of which: - Gasoline	-	-	-	-	-	-	7.5	5.9	7.6	10.4	8.0	5.6
- Diesel	-	-	-	-	-	-	28.3	31.3	23.3	25.0	33.4	25.1
- Construction material	-	-	-	-	-	-	3.2	3.7	2.9	2.8	3.4	2.4
- Others	-	-	-	-	-	-	431.4	443.5	404.9	355.6	462.5	403.1
Trade Balance	-727.3	-601.2	-327.8	-296.3	-362.2	-234.0	-156.3	-32.7	-25.8	-62.3	-98.8	56.1
	Percentage change over previous year											
Total Exports Garment	198	188	66	47	74	24.8	2.8	27.5	33.2	26.3	34.7	10.1
Total Exports	2.1	27.5	58.9	12.4	19.7	20	5.5	28.0	35.3	20.7	30.0	9.0
Total Imports	1.2	-1.8	1.6	11.3	14.5	5.9	29	59	27	22	7.8	-10.0

Source: Ministry of Commerce, Department of Trade Preferences Systems and Customs and Excise Department including tax exemption

Table 4. Passenger Arrivals in Cambodia, 1996-2003

	1996	1997	1998	1999	2000	2001	2002			2003		
							Q2	Q3	Q4	Q1	Q2	Q3
	Thousands of passengers											
Tourist visas	194.4	163.0	141.9	199.6	209.6	335.4	24.9	46.9	58.7	183.7	83.8	132.0
by Air	194.4	163.0	141.9	199.6	209.6	335.4	24.9	46.9	58.7	124.6	44.4	76.2
land and boat	-	-	-	-	-	-	-	-	-	59.1	39.4	55.8
Business visas	58.4	48.6	37.6	55.4	46.9	62.4	19.5	15.6	16.1	20.4	14.7	20.3
by Air	58.4	48.6	37.6	55.4	46.9	62.4	19.5	15.6	16.1	17.2	11.2	16.3
land and boat	-	-	-	-	-	-	-	-	-	3.2	3.5	4.0
Official visas	7.6	7.2	6.8	7.9	95.2	10.6	57.4	52.0	92.9	4.7	4.6	5.9
by Air	7.6	7.2	6.8	7.9	95.2	10.6	57.4	52.0	92.9	4.0	4.0	5.1
land and boat	-	-	-	-	-	-	-	-	-	0.7	0.6	0.8
Total by Air	-	-	186.3	262.9	351.7	408.4	101.8	114.5	167.7	145.8	59.6	97.6
Total Land and boat	-	-	100.2	104.8	114.7	196.5	62.8	59.3	69.6	63	43.5	60.6
Total of passenger	260.4	218.8	286.5	367.7	466.4	604.9	164.6	173.8	237.3	208.8	103.1	158.2
	Percentage change over previous year											
Total of passenger	18.5	-15.9	30.9	28.3	26.8	29.7	26.9	24.7	41.3	-0.9	-37.4	-8.9

Sources: Ministry of Tourism

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Table 5. Consumer Price Index (CPI), Exchange Rates and Gold Prices, 1996-2003 (period averages)

	1996	1997	1998	1999	2000	2001	2002			2003		
							Q2	Q3	Q4	Q1	Q2	Q3
	Consumer price index (percentage change over previous year)											
Provinces	-	6.1	16.3	6.2	5.4	0.9	0.0	2.0	-0.3	7.4	5.9	-1.9
Phnom Penh - All Items	7.1	8.0	14.8	4.0	-0.8	-0.6	3.3	3.5	3.04	1.8	1.6	0.8
- Foods	7.6	6.7	14.1	7.6	-3.3	-2.8	1.02	2.0	2.00	3.20	2.3	1.5
- Energy	20.7	20.0	15.1	3.5	6.6	-1.1	-0.02	0.9	2.25	4.75	5.2	5.1
	Exchange rates, Gold and Oil prices (Phnom Penh market rates)											
Riel per US dollar	2,666	3,029	3824	3832	3,879	3,935	3,913	3,935	3,948	3948	4008	4015
Riel per Thai baht	105	98	88	101	96.3	88	91.4	93.5	90.9	92.4	94.9	96.9
Riel per 100 Vietnamese dong	24.0	25.6	28.6	27.8	27.4	26.6	25.7	25.7	25.8	25.6	25.9	24.9
Gold prices (US dollar per chi)	46.3	40.4	36.0	34.0	33.3	32.7	36.2	38.0	38.5	39.8	40.0	41.5
Price of Diesel (Riels/litre)	779	883	1,065	1,105	1,329	1,521	1,450	1,550	1550	1697	1683	1683
Price of Gasoline (Riels/litre)	1,118	1,378	1,613	1,760	2,113	2,084	2,167	2,200	2200	2433	2383	2367

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

Table 6. Monetary Survey, 1996-2003 (end of period)

	1996	1997	1998	1999	2000	2001	2002			2003		
							Q2	Q3	Q4	Q1	Q2	Q3
	Billions of riels											
Net foreign assets	881	1,177	1,726	2,019	2,589	3,080	3,614	3,693	3,737	3,741	3,594	3627
Net domestic assets	31	-114	-496	-576	-759	-876	-965	-943	-849	-737	-641	-621
Net claims on government	128	54	178	103	3	-75	-165	-106	-119	-72	-19	18
Credit to private sector	435	637	655	763	898	936	928	971	1,059	1,125	1,224	1287
Total liquidity	912	1,063	1,230	1,443	1,831	2,204	2,648	2,751	2,888	3,004	2,953	3007
Money	329	385	543	531	540	609	748	771	813	829	871	886
Quasi-money	583	678	687	911	1,291	1,594	1,901	1,979	2,075	2,175	2,082	2120
	Percentage change from previous year											
Total liquidity	40.3	16.6	15.7	17.3	26.9	20.4	33.4	29.5	24.1	24.6	11.5	9.3
Money	18.3	17	41	-2.2	1.7	12.8	37.5	35.5	33.4	22.6	16.4	14.9
Quasi-money	57.1	16.3	1.3	32.6	41.7	23.5	32.0	27.3	30.2	25.7	9.5	7.1

Source: National Bank of Cambodia.

Table 7. National Budget Operations on Cash Basis, 1996-2003 (billion riels)

	1996	1997	1998	1999	2000	2001	2002			2003		
							Q2	Q3	Q4	Q1	Q2	Q3
Total revenue	748	880	920	1326	1528	1529	369	457	481	400	379	400.5
Current revenue	-	-	-	-	-	1521	369	456	481	400	377	399.2
Tax revenue	536	596	676	956	1096	1096	302	323	339	273	287	273.1
Customs duties	344	348	376	432	376	376	104	116	122	92	94	91.6
Non-tax revenue	176	272	204	348	424	424	66	133	142	127	90	126.2
Forest exploitation	28	36	20	36	28	29	1	9	5	1	1	4.5
Post & Telecommunications	64	84	88	108	124	122	13	30.7	44	19	18	33.5
Capital revenue	40	12	36	12	8	9	0	1	0	0	2	1.3
Total expenditure	1440	1260	1296	1792	2332	2332	714	704	668	660	660	663.5
Capital expenditure	628	452	368	624	976	977	272	303	343	276	271	251.8
Current expenditure	812	808	980	1164	1356	1355	442	401	325	384	388	411.8
Education and Health	124	128	132	280	344	343	108	85	96	36	88	122.4
Defense and Security	408	420	448	464	404	405	117	105	110	70	119	75.4
Other Ministries	284	260	332	412	636	637	217	212	120	279	182	213.9
Overall deficit	-692	-380	-380	-476	-804	-803	-346	-248	-187	-260	-281	-263
Foreign financing	680	444	268	416	768	766	237	273	287	176	201	201
Domestic financing	12	-64	112	60	36	37	110	-25	-100	84	80	62

Source: Ministry of Economy and Finance.

Table 8. Average Daily Earnings of Vulnerable Workers, 1997-2003

	Daily earnings (riels)									Change from last year (%)		
	1997		2001		2002		2003			2003		
	Pre-Jul	Nov	May	Aug	Nov	Feb	May	Aug	Nov	May	Aug	Nov
Cyclo drivers	12,250	6,262	9,375	8,900	8,878	9,200	9,572	9,380	9,817	2.10	5.4	10.58
Porters	9,675	5,000	6,675	7,600	6,312	7,600	7,955	7,240	6,500	19.18	-4.7	2.98
Small vegetable sellers	7,050	5,096	6,712	6,862	7,158	7,250	6,674	6,860	6,700	-0.57	-0.3	-6.40
Scavengers	4,155	3,393	4,231	3,440	4,012	3,875	3,605	4,900	3,900	-14.80	42.7	-2.79
Waitresses*	-	2,358	3,652	4,225	4,000	4,600	4,341	4,520	4,435	18.87	7.0	10.88
Rice-field workers	-	3,618	5,167	3,833	4,219	4,180	3,712	4,600	4,450	-28.15	20.0	5.48
Garment workers	-	8,968	8,775	9,800	10,000	10,127	9,123	10,300	10,000	3.97	5.1	0.0
Motorcycle-taxi drivers	-	9,791	11,978	11,300	12,075	11,400	9372	10,900	10,000	3.26	16.7	-17.18
Unskilled construction workers	-	4,841	6,912	6,525	5,850	6,162	7100	7600	6200	-17.49	-3.5	5.98
Skilled construction workers	-	9,866	13,850	12,695	13,350	12,500	12,050	12,700	16,900	-3.72	0.0	26.59

Notes: The survey 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.

GLOSSARY – TERMS USED IN THIS ISSUE

Conflict Escalation

This term describes a situation in which an existing conflict becomes more serious, or more intense, often as a result of a failure to implement conflict management techniques or where distrust among the parties to the conflict inhibits constructive communication.

Conflict Management

A process of negotiation and problem-solving which serves to prevent the worsening of a conflict and aims to bring about a peaceful resolution satisfactory to both parties to the conflict.

Institutional Legitimacy

This term refers to the acceptability of the authority of an institution. Perceptions of bias, corruption or poor leadership has eroded the authority of many institutions in Cambodia, resulting in a lack of legitimacy.

Food Security

The situation in which people have sufficient food, or income to buy food, in order to maintain their livelihoods.

Dai Fisheries

A *dai* lot is an anchoring position in a river for a bagnet or stationary trawl that can be used to capture fish migrating downstream.

Concession forestry

A system whereby the government grants the right to harvest and sell forest products from a block of land, for a specified period of time and for a specified sum, to a concessionaire.

Electrofishing

A method of fishing whereby a field of electricity is passed through the water, causing a muscle response reaction from the fish forcing them towards the netman.

Inward Migration

The movement of people into a region, especially in order to find work or a place that will sustain their livelihoods.



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CDRI UPDATE

CDRI Management

In December 2003 CDRI said farewell to its founding Executive Director, Ms Eva Mysliwiec, and welcomed its new Executive Director, Mr Larry Strange, who has for the past 10 years been the Director of The Asia-Australia Institute in Sydney. On 16 December, Ms Mysliwiec was awarded the Royal Government of Cambodia's Medal of Sahametrei for her remarkable achievements in the reconstruction and development of Cambodia.

CDRI's Annual Board Meeting, held on 5-6 December, welcomed a new Board member, H.E. Dr Hang Chuon Naron, Ph.D, Secretary General of Cambodia's Supreme National Economic Council. The Board also paid tribute to Ms Eva Mysliwiec's achievement in building CDRI into the effective institution that it is today, and wished her well in her future work for Cambodia. The Board meeting also endorsed a new CDRI Research Framework for 2004-6 'Achieving Human Security and Poverty Reduction'. In mid-December CDRI held its annual consultation with partners, involving key government ministries and other local institutions and NGOs with whom it works closely, and representatives of the international donor community who resource CDRI programs. The consultation provided an opportunity to report on the major achievements of 2003 and plans for 2004, and to discuss how CDRI can work more effectively with its partners to achieve development outcomes for Cambodia.

Research

Apart from our regular publications (CAER, Flash Report and CDR/Economy Watch) a large number of studies were executed or remain at various stages of implementation, including two regional studies involving partner institutes in Thailand, Vietnam and Laos. In ad-

dition, our researchers participated actively in numerous seminars and conferences, including participation in regional and international workshops and conferences (e.g. in Hanoi, Bangkok and Ankara). Two regional workshops were hosted by CDRI (under DAN 4 and Agricultural Competitiveness Study) and a dissemination seminar was held for CAER in June. The Programme also provided substantial inputs to the Governors' Workshop held in May. Publications during this period include the CAER 2003, the quarterly CDR/Economy Watch and the monthly Flash Reports. A research report on Cambodia's competitiveness in garments was published jointly with IDE, Japan, in March.

Major research projects undertaken or initiated during this period include the Cross Border Economy under DAN 4, Small and Medium Enterprises initiated in October, a regional study on Agricultural Competitiveness, Community Based Poverty Monitoring in 3 Communes and the Land Titling Baseline study in November 2003.

Center for Peace and Development

In December CDRI bade farewell Mr Ok Serei Sopheak who has made a unique contribution to CDRI as Coordinator of its Centre for Peace and Development, and played a key role in CPD's peace-building training programs, the COPCEL (Prevention of Conflict in Cambodian Elections) process, and CDRI's annual Parliamentary Seminars and Governors Workshops. CDRI's Annual Board Meeting, held on 5-6 December, also endorsed a new Mission Statement and Strategic Objectives for the Centre for Peace and Development, which will aim to contribute to building a culture of peace and to enhance human security in Cambodia, through applied research, raising awareness and developing skills for conflict transformation, and by creating opportunities for constructive engagement and reconciliation.

ទស្សនាវដ្តីអភិវឌ្ឍន៍កម្ពុជា ក៏មានបោះពុម្ពផ្សាយជាភាសាខ្មែរផងដែរ
Cambodia Development Review is also available in Khmer



CAMBODIA
DEVELOPMENT REVIEW

A Publication of the
Cambodia Development Resource Institute

Volume 8, Issue 1 (January-March 2004)

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

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

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

CAMBODIA DEVELOPMENT RESOURCE INSTITUTE

PO Box 622, Phnom Penh, Cambodia

Tel: (+855-23) 881-701 / 881-916 / 883-603; Fax: (+855-23) 880-734

e-mail: cdri@camnet.com.kh / pubs@cdri.forum.org.kh

website: <http://www.cdri.org.kh>

Publisher: Cambodia Development Resource Institute

Acting Managing Editor: EM Sorany,

Editor and Photographer: Andrea Struik

Production Editor: OUM Chantha

Printing: Japan Printing House, Phnom Penh

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