between 1994 and 1997, the Royal Government of Cambodia granted more than 30 commercial forest concessions encompassing an area of about 6.5 million hectares – equal to more than one-third of the country and more than half of Cambodia’s forests. By introducing a forest concession system, the government sought to delegate responsibility for forest management to private sector companies and raise much needed revenue for national development. Although government cancellations of concessions have since reduced the number of concessions to 20 (covering an area of 4.2 million hectares), the concession system remains the dominant means for managing forests in Cambodia (Chan et al 2001).

As problems of unsustainable harvesting and illegal logging have emerged in forest concession areas, the main policy response of government and donors has been to call for sustainable forest concession management. While definitions abound, sustainable forest management (hereafter referred to as SFM) generally entails ensuring that forest resources provide a sustained timber yield into perpetuity while maintaining natural forest quality, conserving biodiversity, ecosystem functions, and other forest services such as soil and watershed values, maintaining rights of forest access and use for local communities, and preserving cultural values.

With the aim of achieving SFM in the concession system, government and donors have invested a great deal of resources over the past several years. Major projects have included the World Bank-funded Forest Policy Reform Project (1997-1998), the Asian Development Bank-funded Sustainable Forest Management Project (1999-2000), and the ongoing World Bank-funded Forest Concession Management and Control Pilot Project (2001-2003). Implicit in these efforts to reform the forest concession system have been two assumptions:

1. SFM is an economically viable management regime for concessionaires to adopt and implement in Cambodia.
2. The concession system is the most effective management tool for optimising development benefits from Cambodia’s forest resources.

To evaluate these assumptions, this paper examines donor support for sustainable forest concession management, analyses key economic and financial disincentives for concessionaires to adopt SFM, and assesses the efficacy of Cambodia’s forest concession system as a means for achieving development goals.*

* Bruce McKenney is Manager of Natural Resources and Environment Programme at CDRI. Initiated in October 2001, the Programme’s research seeks to improve understanding of issues affecting natural resources and rural livelihoods.
cacy of the forest concession system as a tool for meeting development objectives. It is hoped that the issues raised here can support realistic discussions about the potential for concessionaires to adopt SFM and, given those expectations and the historical record of the forest concession system, whether changes in forest management strategies are warranted.

Donor Support for SFM in Concessions
A model for how Cambodia’s forest resources might contribute to wider development objectives was first put forth in 1996 by a joint mission of the World Bank, United Nations Development Programme (UNDP), and Food and Agriculture Organisation (FAO). The mission endorsed the use of a forest concession system as the appropriate tool for development of Cambodia’s forest resources, noting that “many forest-rich countries use concession systems and they can make important contributions toward various sectoral development objectives putting concessions among the most useful instruments of forest policy” (World Bank et al 1996). This endorsement of the concession system also included calls for reform aimed at ensuring a sustained yield of timber from concessions and increasing government forest revenue. The mission suggested that “the market-oriented policy reforms advocated in [the mission’s] report together with improved control of forest areas could increase government forest revenue in the order of over $100 million per year, while better sustaining these resources and their vital environmental and social functions.”

To support these reforms, the World Bank funded a range of technical assistance studies on the forestry sector in 1997-98 under the Forest Policy Reform Project. Findings from the project suggested enormous problems with uncontrolled and illegal logging in and around concessions and minimal revenue collection by the government. For instance, roughly 94 percent of timber production was found to be illegal in 1997, and government revenue from forest concessions only amounted to $6 million in 1997 and $10 million in 1998 (DAI 1998). Despite these problems, the project concluded that “the Forest Concession system is the most appropriate for commercial development of forest resources in Cambodia but needs refinement to suit Cambodian conditions” (Associates for Rural Development 1998). The findings were later synthesised by the World Bank into a strategic vision for the forestry sector that reaffirmed support for sustainable forest concession management in Cambodia, but revised estimates of potential government forest revenue from over $100 million to about $40-$80 million (World Bank 1999).

From 1999 to 2000, the ADB-funded Sustainable Forest Management Project (SFMP) conducted a review of the forest concession system and concluded that the extremely poor performance of concessions indicated “a total system failure.” The review found that no forest concession had been managed sustainably, with harvesting far outpacing the rates expected under a 25-year timber license. Of the concessions for which the SFMP was able to obtain sufficient information, 40 percent had fewer than five years of harvests remaining, 50 percent had 5-10 years of harvests remaining, and 10 percent had 10-15 years of harvests remaining (Fraser Thomas 2000). This finding was in line with conclusions from the Forest Policy Reform Project, which warned that Cambodia’s forest resources could be economically depleted within five years if 1997 logging rates continued (DAI 1998).

Despite the SFMP’s grim findings, it recommended continued support for a forest concession system in Cambodia, albeit a restructured and reformed one. Among other recommendations, the SFMP called on concessionaires to prepare sustainable management plans by November 2001 – the beginning of the 2001 logging season. Concessionaires, the Department of Forestry and Wildlife (DFW), and concerned donors agreed with this recommendation in May 2000, setting September 2001 as the deadline for concessionaires to submit management plans and November 2001 as the deadline for government approval decisions.

To support this process, the DFID-funded Joint Working Group on Forest Concession Management was established between the Cambodia Timber Industry Association (CTIA) and DFW. The Joint Working Group confirmed the September 2001 deadline for submission of concession management plans at meetings in October 2000, and May 2001, but the deadline recently passed without any concessionaires submitting management plans. CTIA suggests that most concessionaires’ management plans are at least several months from completion and some concessionaires have not yet begun developing their plans.

Most recently, the World Bank continued its support to the forest concession system with the launch of the three-year Forest Concession Management and Control Pilot Project (2001-2003). The objective of this project is to improve the effectiveness of forest management, operational guidelines, and control procedures in forest concession areas, and to establish effective forest crime monitoring, enforcement, and prevention capabilities (World Bank 2000).

The Economics of SFM in Concessions
Although the reluctance of concessionaires to adopt SFM reforms is often attributed to a lack of knowledge about SFM practices and a need for government and concessionaire capacity building, reluctance toward reform.
more likely reflects the incompatibility between SFM and concession profitability. Implementation of SFM will impose a variety of costs on concessionaires related to sustainable harvesting and environmental and social requirements. The most significant cost is likely to be associated with shifting from intensive logging to a sustained yield regime. The threat of sustained yield management to concession profitability was recognised as far back as 1996:

To prevent overcutting, ... Government should require that logging intensity be restricted to the established Cambodian standard. This implies harvests close to 10 m³/hectare as opposed to the 50 m³/hectare or more that has been proposed by some concessionaires. If limited to sustainable harvest levels, even with subsidised royalties, the current concessions are unlikely to be able to operate profitably as planned because of low conversion rates, poor marketing strategies and high capital costs (World Bank et al 1996).

Regarding the shift from intensive logging to a sustained yield, the DFW’s Forest Concession Management Planning Manual (2000) requires: (1) designation of 25 or 30 coupes¹ as part of an overall management plan for a 25-year or 30-year rotation, and (2) selective cutting of one coupe per year, with these harvests limited to no more than 30 percent of the marketable volume of the forest stand (i.e., commercial species above the specified minimum cutting diameter)². Such selective cutting is intended to allow the remaining stand to support forest regeneration.

As of 1997, only 6 percent (625,177 hectares) of Cambodia’s forests were in the commercially attractive category of dense evergreen, while 30 percent of the forest (3,183,395 hectares) was identified as disturbed evergreen, which indicates logging ranging from light to severe. Cambodia’s remaining forest is primarily deciduous and not considered viable for commercial timber production.

Based on available information on forest growth rates and commercially viable forest stands, implementing SFM in Cambodia would require reducing harvest volumes to about 10 m³/hectare, or the equivalent of about 1-3 trees per hectare. From a concessionaire’s perspective, the benefits of changing from high-intensity harvesting to a sustained yield are that the unharvested commercial evergreen forest is allowed to grow in volume and value over time, allowing for a second harvest in 25-30 years. To evaluate the annual returns associated with changing to a sustained yield regime, consider a simplified scenario in which a concessionaire has two options: (a) harvest a tree today; or (b) harvest the same tree in 30 years. Under “Option A”, profits from the immediately harvested tree can be invested elsewhere to earn an annual return. In comparison, the annual rate of return on waiting to cut under “Option B” is equal to the tree’s annual wood volume growth plus any real (inflation adjusted) wood market price increase.

Looking first at “Option B”, forest growth in Cambodia has been estimated to be about 0.33 m³/hectare/year, substantially lower than common growth rates in Indonesia (1.0 m³/hectare/year) and Malaysia (1.0-1.5 m³/hectare/year) (Koum 1992; World Bank et al 1996). Based on this growth rate and an estimated average marketable timber volume of roughly 33 m³/hectare², it follows that wood volume increases at an average rate of around one percent/hectare/year. However, this estimate

1. Rapid and intensive harvesting reduces concessionaires’ risk exposure.
Harvesting timber from a concession over 25-30 years under a sustained yield regime, instead of harvesting in say 5 to 10 years under current practices, greatly increases a concessionaire’s risk exposure. In Cambodia these risks include illegal logging by other entities, more restrictive forestry laws and regulations, contract termination, political uncertainty, natural disasters such as tree disease, fires, and floods, and so on. Due to these risks, concessionaires have strong incentives to harvest at intensities of 40-50 m³/hectare rather than harvest 10 m³/hectare in the hope that they will be able to conduct a second harvest of 10 m³/hectare 25-30 years later.

2. A far higher annual rate of return can be earned by harvesting intensively and investing profits elsewhere than by harvesting sustainably.
should be viewed as a rough approximation because forest growth rates vary under different management regimes and actual commercial timber volumes are not known because concessionaires have not yet developed new management plans.

Data on real price increases of tropical timber also do not suggest significant value gains from adopting a sustained yield regime. From 1995 to 2000, real annual price growth for tropical timber was between 0.2 and 2.7 percent. Over the past four decades, real price growth for tropical timber has averaged only 1.2 percent (Rice et al 2001). Thus, the combination of slow wood volume growth and low real price appreciation suggests an annual rate of return under “Option B” of perhaps 2-3 percent. Given the high risks of operating a forest concession in Cambodia, harvesting in accordance with sustained yields for the promise of a 2-3 percent annual return will not be viewed by concessionaires as a wise decision.

“Option A” is financially much more attractive than “Option B” because profits from an immediately harvested tree can be invested for superior returns. For example, investments in Cambodia are expected to earn annual returns of at least 15-20 percent (as indicated by Cambodia’s lending rate). Rather than adopt a sustained yield regime for the promise of low annual returns at high risk, concessionaires have strong financial incentives to continue to harvest as much as possible, as rapidly as possible.

3. Concessionaires’ existing investments in log processing capacity may be underutilised if SFM reduces logging harvests.

The Cambodian Forest Concession Review (2000) estimated existing log processing capacity in Cambodia at roughly 1.2 to 2.0 million m³ per year. This processing capacity is well above the estimated sustainable timber harvest of 0.5 to 1.0 million m³ per year. Returns on fixed investments in log processing capacity increase with higher capacity utilisation (i.e., increased throughput of log volume). Where the implementation of SFM reduces log harvests and results in lower utilisation of concessionaires’ processing capacity, earnings on their fixed investments will be reduced.

Facing Concession System Realities

In light of the enormous financial disincentives to SFM, concessionaires’ failure to produce sustainable management plans and reform their practices should not be a surprise. Future forest management in Cambodia may include SFM or the current concession system, but the long sought-after combination of the two is unlikely to ever be achieved as they appear fundamentally incompatible. It is important, therefore, to take a closer look at how effective the current (unsustainable) concession system has been in meeting development objectives to determine whether the system’s performance merits its retention in the future.

<table>
<thead>
<tr>
<th>Year</th>
<th>Government Forest Revenue (million US$)</th>
<th>Average Net Revenue of Concessionaires before Payment of Royalties and Export Taxes (US$ per m³ of log volume)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1996</td>
<td>10</td>
<td>Not Available</td>
</tr>
<tr>
<td>1997</td>
<td>12</td>
<td>-17.34</td>
</tr>
<tr>
<td>1998</td>
<td>6</td>
<td>-49.53</td>
</tr>
<tr>
<td>1999</td>
<td>10</td>
<td>7.73</td>
</tr>
<tr>
<td>2000</td>
<td>11</td>
<td>Not Available</td>
</tr>
<tr>
<td>2001</td>
<td>7*</td>
<td>Not Available</td>
</tr>
</tbody>
</table>


One of the main goals of establishing a concession system in Cambodia was to generate government revenue that could then be used for wider development purposes. As noted above, in 1996 the World Bank, UNDP, and FAO estimated that government forest revenue could eclipse $100 million annually. The World Bank later adjusted this estimate to $40-$80 million annually. Since the initial revenue projection in 1996, annual government forest revenue has ranged between $6-$12 million (Table 1). Privately, several donors now concede that the forestry sector is unlikely to ever generate significant government revenue. In addition, it is worth noting that if a SFM regime were implemented, harvests would be lower than in past years, suggesting even less royalty and export tax revenue for the government.

According to a draft study prepared by KPMG in 2001, the concession system has also not proven profitable for concessionaires (Table 1). With CTIA support, KPMG collected primary data from five representative concessionaires to evaluate their average profitability and corresponding ability to pay royalties and export taxes. These concessions accounted for about 40 percent of the total area under forest concessions in Cambodia. KPMG concluded that “over the past three years [1997-1999], the average Cambodian producer has not generated significant positive net revenues and has never met reasonable profit expectations.” KPMG also suggested that the “extremely poor” performance of concessionaires has left little if any revenue for paying royalties and export taxes to the government: “Only in 1999 did the average company generate a small positive net revenue, but only when government taxes (royalties and export tax) are excluded…. This means that there was no residual value or rent available for payment of royalties or taxes in any year covered by the study.”

In addition to apparent revenue generation and profitability failures, other serious problems associated with
the concession system have received significant attention though they will not be discussed in detail here. These include:

- Impacts to rural livelihoods due to reduced access and use of forest resources;
- Conflicts between concessionaires and local communities;
- Severe deforestation and degradation of forest areas resulting in biodiversity loss, increased flooding, soil erosion, and higher levels of sedimentation that threaten the health of fisheries.

Exploring Forest Management Alternatives

Cambodia is not the first country to struggle with the implementation of sustainable forest concession management. Around the world, countries with timber industries and regulatory systems more mature and robust than Cambodia have failed to introduce SFM despite more than 20 years of effort and hundreds of millions of dollars of investment and development assistance. Only 1.1 million hectares of natural tropical forests are managed under a SFM regime out of an estimated 1.7 billion hectares worldwide (Rice et al. 2001).

The financial disincentives for concessionaires to embrace SFM suggest that reform efforts are unlikely to achieve the forest management, revenue generation, and sectoral development goals envisioned for the forestry sector in Cambodia. There is a strong need to explore forest management alternatives to the concession system if future generations are to enjoy the benefits of Cambodia’s forest resources. Although a detailed assessment of forest management alternatives is beyond the scope of this paper, some suggestions on how forestry sector reform efforts might begin to be refo- 

1. Recognise that the forest concession development model, whereby forest revenue flows to the national government and then back out to rural areas for development purposes, has failed.

Government forest revenue generated from concession forestry is very limited, and the concession system has negatively affected rural livelihoods by reducing access and use of forest resources. Given that improving rural livelihoods is one of the government’s main development objectives, forest management approaches should be explored that might directly enhance the benefits of forest resources for rural people. For example, where rural livelihoods depend on resin collection and trade, the government might support local forest management structures for protecting resin trees and surrounding forest areas, remove encumbrances to trade such as transport permits, and help to identify potential export markets.

2. Terminate concessions without a viable base of commercial timber or where concessionaires are known to have repeatedly violated the terms of their Forest Concession Agreement or the Sub-Decree on Forest Concession Management.

Terminations might begin with eight concessions identified by the Cambodian Forest Concession Review (2000) as unlikely to ever have viable management plans due to “the severely depleted state of forest reserves in their concessions.” While much concern has been voiced about the potential legal repercussions of unilaterally terminating concession contracts, these concerns appear overstated. First, the government’s cancellation of 12 concessions and unilateral increase in royalty rates from $14 to $54/m³ in 1999 did not result in legal action from concessionaires. Second, the government appears to have a strong legal basis for terminating contracts. As noted in the Cambodian Forest Concession Review (2000):

No concessions are in compliance in terms of: their ability to demonstrate that they are meeting their investment commitments; payment of royalties; and reporting of annual accounts. The appalling quality of the current management plans, the severe lack of technical capacity of many concessionaires, a complete lack of resource assessment, monitoring and planning of silvicultural operations, extremely poor infrastructure in most of the concessions, indifference to communities and their development all constitute clear evidence that concessionaires have not complied with their contractual agreements. Moreover, there are very few records that the concessionaires have reported incidents of illegal logging to the authorities.

Finally, the government has overriding responsibility for management of the nation’s forests. Although concessionaires have been entrusted by the government as partners in forest management, where concessionaires have managed forests irresponsibly, this partnership should be reconsidered. As recommended by the Cambodian Forest Concession Review (2000), “no inadequacy in the agreements or proven violations should prevent the Government from taking measures to protect the nation’s resources. The forest estate remains a vital resource and the Government retains the responsibility to bring about its effective management.”

3. Designate forest areas for outright protection where biodiversity, watershed, conservation, and/or potential eco-tourism values are deemed important.

The government has already taken important steps toward establishing a “protected forest” in the central Cardamom Mountains, despite much of the area be-
ing under three different concessions. This government action implicitly acknowledges that concessionaires are incapable of implementing SFM to protect environmental values. Where environmental values in other concession areas are considered of critical value, similar steps should be taken to establish protected forest. Such protection measures are likely to be more effective than entrusting concessionaires with responsibility for protection under proposed SFM reforms.

4. Increase resources available for developing and pilot testing “community forest” management models.

With the bulk of resources focused on developing and reforming the forest concession system, community forestry has often been marginalised in Cambodia. For example, the influential World Bank report Cambodia: A Vision for Forestry Sector Development (1999) called for a forestry sector where “reasonably well stocked” forests are available for commercial production and “small forest areas and scattered trees” are managed by local communities. “Community forestry needs to be recognised as a means for achieving sustainable management for the large bulk of forest resources that are not suited to commercial production and which will be beyond the direct management capacity of Government.” The vision did not comment on whether communities residing within or adjacent to commercially valuable forests should have priority rights to benefit from those resources, or what the motivation would be for communities to manage low value, degraded forests. Moreover, none of the report’s “action priorities” suggested making the development of community forest management a priority for donor support.

More recently, community forestry has received considerable attention as a potential alternative (or complement) to forest concession management. Signs of increasing support include the holding of a National Community Forestry Workshop in 2001, greater support for community forestry projects, and ongoing drafting of a Community Forestry Sub-Decree. Since community forestry remains largely untested as a formalised forest management tool in Cambodia, much still needs to be learned about how community forestry might play a larger role in forest management and this will require increased support, development, and experimentation.

Conclusion

Forestry sector reforms in Cambodia have focused on establishing sustainable forest concession management since 1996. These efforts have largely failed and will continue to do so because concessionaires have strong financial incentives to avoid adoption of a SFM regime. Even if the government’s capacity to strictly monitor and enforce SFM could be developed rapidly, SFM would ironically bring an end to forest concessions due to its negative impacts on concession profitability.

Justifications for retaining the current forest concession system appear limited. Significant problems with government revenue generation, concession profitability, forest loss and degradation, and social and environmental impacts attest to a concession system that has fallen well short of envisioned forest management and development goals. Rather than continuing to direct scarce forest management funds and capacity toward the establishment of SFM in concessions, government and donor resources would be better spent on exploring and developing forest management alternatives to concessions.

Endnotes

1 A coupe is a geographically recognisable area of production forest forming the basis of each annual operation area as defined in a forest concession management plan and annual operation plan.

2 DFW notes more than 70 commercial tree species, but only 4-5 of these tree species are considered commercial and harvested by concessionaires. Commercial trees greater than 60 cm in diameter are the main source of marketable timber in Cambodia; minimum cutting diameters vary by species.

3 More useful growth estimates for analysing forest management in Cambodia would assess growth rates under different selective logging regimes. At present, no such studies have been conducted in Cambodia.

4 Field inventories conducted in the 1960s and 1970s suggested an average volume of marketable timber in evergreen forests of 80 m³/hectare (FAO 1962 and Legris and Blanco 1972 cited in World Bank et al 1996). More recent findings indicate significantly less available marketable timber – 32.9 m³/hectare with wide variation of 10.8 to 63.9 m³/hectare (Fraser Thomas 2000 cited in DFW 2000).

5 Alternatively, profits under “Option A” could be invested for returns in line with those promised under “Option B”, but at far less risk (e.g., investments in nearly risk-free U.S. Treasury bonds provide a 3-5 percent return).

6 “Community forest” is “an area of State forest subject to an agreement to manage and utilise the forest in a sustainable manner between the cantonment chief of the Forest Administration and a local community or organised group of people living within or near the forest area [who] depend upon it for subsistence and customary use” (Draft Forestry Law, 20 July 2001).
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Higher Education Development

The Government is undertaking major initiatives to promote the quality and efficiency of higher education in Cambodia. Dr. Luise Ahrens and Dr. Frances Kemmerer summarise the background, status, and current strategies for subsector development.*

Background
Cambodia occupies a special status even among post-conflict nations. The extraordinary turmoil of the second half of the 20th century seriously undermined the socioeconomic fabric and institutional framework of the nation, and no sector was more affected than education. The Khmer Rouge regime between 1975 and 1979 engendered tragic loss in every sector of Cambodian society. An estimated one-to-two million men, women and children died, including untold numbers of teachers and other professionally trained individuals. School buildings and other physical infrastructure not actually destroyed were abandoned and neglected during the period. Thus even after the Khmer Rouge were overthrown in 1979 it was very difficult to renew the process of nation building. Within the education system, only a handful of qualified higher education faculty people survived and the damage done to higher education continues to be played out in the formation of new teachers and the flow of ideas upon which the entire system depends. Moreover, Cambodia’s gradual transition to a market economy since 1989 has placed important new demands on higher education institutions.

For these reasons there has been an intense focus on the higher education subsector since 1990. Subsector studies have all documented both the need for a viable strategy for reform and concurred on a surprising number of specific recommendations. The recommendations of the major studies are summarised below. These include a UNESCO-supported Ministry of Education Youth and Sports (MoEYS) study (RGC and UNESCO 1994); an Asian Development Bank supported study (RGC and ADB 1994); the donor supported National Action Plan (NAP) (NHETF 1997); and a World Bank funded study (Zhang 1997).

Academic Programme Quality and Relevance
1. Improve the quality of the teaching faculty through provision of opportunities for advanced degrees
2. Revise programmes to respond more efficiently to national economic and social needs

Resources
1. Increase the resources to public institutions through a cost sharing system consisting of government subsidies, student fees, and government loans/scholarships for students
2. Establish a financial management system in institutions that is characterised by transparency and accountability
3. Revise student financial aid policies to improve access and equity for women and disadvantaged but able students

Organisation and Structure
1. Create a legal framework for higher education
2. Develop a national plan for education
3. Redefine the roles and responsibilities of government and institutions with greater autonomy for the institutions
4. Reform admissions and examination systems
5. Rationalise faculty numbers and assignments
6. Expand access through encouraging private institutions, part-time programmes, distance education, or public campuses outside Phnom Penh

The National Action Plan, built on a host of highly focussed studies of the issues identified in the 1994 sector studies, was submitted to Government in April of 1997. Before the Council of Ministers could endorse the Plan and send it to the National Assembly for formal consideration, the NAP process was overtaken by the events of July 1997. Peaceful elections in July 1998 signalled the possibility of renewed formal progress in higher education. In March 1999, MoEYS convened a workshop on higher education, attended by representatives of all higher education institutions (HEIs) and other Cambodian stakeholders. The workshop endorsed many of the NAP recommendations but implementation of its recommendations was delayed by ongoing debate over management and finance issues.

Even as the debate continued, the World Bank in 1999, at the Government’s request, made available technical assistance to lay the groundwork for the much needed quality assurance and institutional financial management systems. The success of this work led, in turn, to a Government request for financial support to assist in the creation of a legal/regulatory framework for higher education, the development of a system of accreditation and quality assurance, and the strengthening of financial management systems in higher education.

At the same time, the MoEYS in the Education Strategic Plan 2001-5 and the Education Sector Support Programme 2001-5 articulated the Government’s commitment to the NAP recommendations. Objectives for the next five years therefore include: a new legislative framework, a more efficient and transparent admission

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system, increased capacity of the teaching faculty, enhanced programme relevance, a new quality assurance and accreditation scheme, and improved institutional governance through the addition of boards with broad-based representation. Implementation of the objectives will be financed through categorical government grants and through partnerships among government, parents and students, and donor grants and loans. The MoEYS also expects 100% expansion of the sector by 2005, with the private sector capturing 85% of the growth.

Status of the Subsector

In academic year 2000-2001, the higher education system comprised five public universities, three semi-independent specialised institutes or faculties, and six recognised private higher education institutions. These institutions served approximately 25,000 students.

The summary statistics shown in the table, however, do not capture the fluidity of the system. First, new institutions of varying levels of quality are opening each month and secondly, recognised institutions are expanding the numbers of programmes offered. In the absence of an accreditation system, "recognition" remains as much a political as a technical process.

Many public institutions remain dramatically under-financed as government subsidies are negligible and, rather than charging fees of all higher education students, sharp divisions between fee-paying students and the unfunded-scholarship students are maintained. This fragmentation within institutions results in enormous financial and managerial inefficiencies as budgets remain decentralised to the faculty level and teacher time and other resources are not maximised. It also negatively impacts teacher incentives as teachers in fee-paying programmes receive salary supplements, while teachers in scholarship programmes receive only their civil service salaries.

Both the number of new higher education institutions and the expansion of public fee-paying programmes indicate a strong social demand for higher education. With the number of students exiting senior secondary school expected to quadruple over the next 10 years, the number of places in higher education will need to expand four-fold to 100,000 simply to maintain the current high school/higher education transition rate.

It can be argued that even if the four-fold increase is achieved the higher education system is too small to meet the development needs of the country. The gross enrolment rate in tertiary education is 1.2%, compared to an average of 20.7% in ASEAN countries and 5.1% in low income countries worldwide (see Table 2). The lack of highly skilled people is a severe constraint on development in the public and private sectors, and results in a heavy dependence on expensive foreign technical assistance. For example, within the education sector fewer than 5% of teachers have a university degree. There are only 58 physicians and 136 nurses per 100,000 people; yet the University of Health Sciences plans to graduate only 192 health workers in 2001; this in a country with some of the worst health indicators in the region. The Royal University of Agriculture will graduate only 78 technicians.

### Table 1. Higher Education Enrolments 2000-2001

<table>
<thead>
<tr>
<th>Public</th>
<th>Total</th>
<th>Percentage of Women</th>
<th>Percentage of Scholarship</th>
<th>Percentage of Scholarship for Women</th>
</tr>
</thead>
<tbody>
<tr>
<td>Royal University of Agriculture</td>
<td>815</td>
<td>12%</td>
<td>91%</td>
<td>12%</td>
</tr>
<tr>
<td>Royal University of Fine Arts</td>
<td>519</td>
<td>23%</td>
<td>100%</td>
<td>23%</td>
</tr>
<tr>
<td>Royal University of Phnom Penh</td>
<td>4705</td>
<td>26%</td>
<td>53%</td>
<td>32%</td>
</tr>
<tr>
<td>Maharishi Vedic University</td>
<td>423</td>
<td>6%</td>
<td>86%</td>
<td>4%</td>
</tr>
<tr>
<td>National Institute of Management</td>
<td>8526</td>
<td>36%</td>
<td>8%</td>
<td>30%</td>
</tr>
<tr>
<td>Institute of Technology of Cambodia</td>
<td>268</td>
<td>6%</td>
<td>77%</td>
<td>7%</td>
</tr>
<tr>
<td>Faculty of Law &amp; Economic Science</td>
<td>3196</td>
<td>23%</td>
<td>25%</td>
<td>26%</td>
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<td>University of Health Sciences</td>
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<td>26%</td>
<td>100%</td>
<td>26%</td>
</tr>
<tr>
<td>Private</td>
<td></td>
<td></td>
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<td>Institute of Management and Economics</td>
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<tr>
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<td>329</td>
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</tbody>
</table>

Note: Preparatory course enrolments are not included

The imperative for growth and development of higher education is clear. Cambodia currently depends on a large contingent of expatriate technical advisors to fill middle and upper level management roles. It must begin to generate greater numbers of highly skilled people to assume leadership positions in Government and the private sector. Moreover, it must develop a cadre of people who will be able to deal creatively with issues associated to environmental management, poverty alleviation, provision of education and health care, growth and globalisation.

If Cambodia’s pattern of development is to follow that of its neighbours, this will imply a large expansion of the higher education system during the coming decades. The enrolment rate in higher education in Vietnam, Thailand and Malaysia grew rapidly (Figure 1) as each country approached its economic “take off” point (Figure 2). By 1997 the gross enrolment rate was 22% in Thailand, 12% in Malaysia, and 7% in Vietnam. Rising incomes and growing labour market opportunities fuelled demand for higher education in those countries. A steady supply of skilled graduates, in turn, helped to ensure that the economies continued to grow and develop. In Cambodia the combination of economic growth and the projected doubling of the number of 18-23 year olds in the next 25 years would lead to demand for tens of thousands of new university places if enrolments expand from just 1% to 5% of the university age population. The role of the private sector in the provision of education will likely grow. And Cambodian universities should gradually enter “the world academic system,” with a common set of definitions, academic and management structures, and a freer flow of students and staff across borders.3

Strategies for Expansion and Development of the Tertiary Education System

If the rationale for higher education investment and development are obvious, viable strategies for change, in the past, have proved elusive. The Royal Government of Cambodia now, however, has determined that a legislative framework is the foundational step that needs to be taken in order to implement the various directions for development that have been advocated over the years (RGC 2001a; RGC 2001b). Financial resources required for higher education improvement and reform are significant and without legal support, both donors and government would find it hard to make the investments needed in the sector. Government has indicated that priorities for the education budget are for basic education and non-formal education, although present budget support for tertiary civil service salaries and Priority Action Plan tertiary spending will remain at the same levels; this is an even greater incentive for the regulation and rationalisation of tertiary spending.

The Royal Government of Cambodia asked the World Bank for assistance in the design of a legal framework and areas to be addressed are as follows:

1. Higher education needs to be situated within the legal framework of Cambodia and within the education
sector. It belabours the point to say that without a quality tertiary education system, rationalised to meet both developmental and societal needs of Cambodia, there cannot be improvement in any of the other educational sectors. In the long term, an overall “education law” is to be developed: higher education is the first step in the legal process.

2. An accreditation committee is required that will assist the various higher education institutions (HEIs) to begin quality assurance processes both within the institutions and among the various HEIs, both public and private, that comprise the tertiary system in Cambodia. Minimum standards need to be established so that current institutions as well as groups/persons desiring to establish institutions have some guidelines within which to operate. There is no doubt that the system must and will expand to meet increasing needs; how it expands in terms of quality and systemic convergence are the issues that need to be addressed. Future students need to know what they are getting when they enter the system, and public information about quality issues is key to their capacity to choose the institutions they want to enter.

3. Systemic regulation is needed in order that transfer among institutions is possible. Transfer assumes basic coherence in credit systems, assessment policies, admissions standards, length of school year, etc. It also presumes that HEIs, that are called “universities”, are indeed what they are called. Lack of clarity in this matter of definition creates problems in the regulatory systems required for a system of higher education. For example, there must be no confusion between a technical-vocational institution that provides skill training and an Institute of Technology that provides a Bachelor of Science in engineering. In addition, there is a need to relate the programmes offered in HEIs to the market and to the needs of Cambodia. These sometimes-conflicting demands have to be debated in the public forum and the institutions need to be responsive to the expressed needs of market and country.

4. Management and finance within the HEIs in Cambodia are significant support systems that need to be addressed. Governing Boards, transparency of financial transactions, fee-scales, clear job descriptions and related appointment of personnel—all have been raised as issues needing clarity and direction in the law. The beneficiaries of such clarity are the students and the institutions themselves. The HEIs are seeking greater autonomy; good management of personnel and finance, acknowledged through public reporting and sharing of information, are key to this process.

5. As seen earlier in this article, the legacy of the past decades in Cambodia is the reality of a tertiary teaching service that is, for the most part, lacking the degrees and competence to lecture at the level required. Limited access to professional resources, such as books, periodicals, and INTERNET, minimal retraining courses, out-dated degrees and teaching methodologies, low salary scale and poor incorporation of the few well-trained staff have all combined to limit the development of even the best of the teachers in the system. It is not a lack of goodwill that holds people back, it is a lack of salary and clear criteria for and rewards for performance, a lack of academic planning linked to additional training, and a lack of opportunities for rigorous study in this country, and the small number of opportunities to study at foreign universities.

6. These issues will not all be addressed at the same time and with the same intensity by the new legal framework. But it is the hope of the Royal Government of Cambodia that the new higher education law will provide the foundation on which a high quality, responsive system for tertiary education can be developed and sustained. With a good higher education system, the admirable human resource efforts of the Royal Government of Cambodia will be assisted and their efforts made fruitful.

Endnotes
1 Government now determines the number of scholarships it places at each public institution. However, government subsidies do not cover the true cost of providing instruction to these students.
2 The population of 18-23 year olds is projected to grow from 983,000 in 2000 to 1,805,000 in 2025. An increase in the gross enrolment rate to just 5% would therefore translate into the need for approximately 90,000 university places, up from approximately 10,000 today.
3 For a fuller discussion of trends and a detailed description of the development of higher education in several Asian countries, see Gerard and Mak 1997.

References
RGC (Royal Government of Cambodia) and Asian Development Bank (1994), Education Sector Review (Phnom Penh).
RGC and UNESCO (1994), Rebuilding Quality Education in Cambodia, (Phnom Penh).
RGC and the World Bank (2001)a, Background and Terms of Reference (for IDF), (Phnom Penh).
Labour Migration in the Transitional Economies of South-East Asia

Evidences on its impact on poverty from Cambodia, Laos and Vietnam*

This article aims to estimate the magnitude of migration by type of migration, and determine the extent to which migration helps in addressing the problem of poverty in the transitional economies of Southeast Asia. It mainly, though not exclusively, draws on data and studies conducted in the three countries, Cambodia, Laos and Vietnam, under a research network named Development Analysis Network (DAN), in 2000-1 (see DAN 2001).

Development Pattern in the Region

In all the transitional economies of the region and the other neighbouring countries, human migration has existed since the colonial and pre-colonial times. Migration has continued till today and has in fact intensified in one from or another. It serves to bridge the gap between demand and supply of labour in specific segments of the market, as well as reduces the resource/labour imbalance between different regions. In the process, migration becomes a survival strategy for large sections of the population. With rising demographic pressures, the imperative to move for livelihood is increasing. What makes the transitional economies special is also their history of long wars in the recent past, experimentation with socialism and then a transition to market economy. These factors created prolonged periods of instability, which in turn dampened investments, infrastructure and human development, and thereby adversely affected living standards.

Cambodia has recently emerged from war and civil strife lasting nearly three decades; as a result its civic, financial and governance institutions were severely eroded. They have however started to function again. Serious development efforts were initiated in 1993 and the economy achieved growth rates of 7-8 percent for four years thereafter. This was, however, punctuated again by the resurgence of fighting in 1997. Business as usual has begun only since 1998. In 1999, the proportion of people living below poverty line was estimated at about 36 percent. The large rural-urban gap, high demographic upsurge and a gross lack of physical and human capital, are the major problems which the country now faces. These problems also create conditions for ‘push’ migration.

In Laos and Vietnam, the war ended in the mid-1970s, but conditions for rapid growth began to emerge only in the late 1980s. Laos, for a good part of first three development decades, stayed out of the international division of labour in the dualism of agrarian and centrally planned forms of politics and economics. Though still sparsely populated, its physical and human resources are very underdeveloped. Its New Economic Mechanism, adopted in 1986, brought in some economic liberalisation and briefly led to economic growth of about 6 percent in the 1990s. Those living below the poverty line on the aggregate, though, were still at about 46 percent in the 1990s.

Vietnam has shown considerable economic dynamism in the recent years. Its social and civil institutions came out rather intact after the war, which is the reason for high literacy and education there. Vietnam adopted the policy of Doi Moi in the late 1980s, through which it initiated a number of market-oriented reforms and hoisted the growth rates to 7-8 percent annually in the early/mid-1990s. Poverty proportions on the aggregate fell from about 51 percent in 1993 to about 37 percent in 1998. However, even as late as 1998, the percentage of the labour force employed in subsistence agriculture was as high as 73. Again in the late 1990s, the country had to re-trench a large number of workers employed in state enterprises due to low efficiency and non-sustainability of these enterprises, which compounded the effect of demobilisation of the military to worsen an already difficult employment situation (Anh 2001).

Finally, each of these three countries was also affected by the financial crisis of 1997, mainly because of their dependence on other Asian countries for foreign investment.

Hence each of the countries has an increasing number of workers seeking greener pastures for survival or better survival.

Migratory Streams

Cambodia: Internal Migration

The Census of 1998 counted 881,400 out-migrants from rural areas within five years prior to the census (recent migrants). Of these, almost one-third had moved within the previous 12 months (very recent migrants). By comparison, the Demographic Survey of 1996 estimated that 634,700 persons had moved from rural areas within five years prior to the survey, of whom 27 percent had moved within the previous 12 months. These figures show a rapid increase in rural out-migration. The average distance travelled by migrants also increased between 1996 and 1998. The census further shows that about 57 per-

* This article has been prepared by Sarthi Acharya, Research Director of CDRI, on behalf of the Development Analysis Network (DAN).
Internal Migration in Vietnam

Internal migration in Vietnam has historically been characterised by two major flows: the southward flow - southern provinces of Vietnam are better endowed than those northern - and the rural to urban flow. Data confirm strong rural to urban flows of migrants (Ba et al. 2001). According to the Vietnam Living Standards Survey of 1998, about one half of urban residents were born in the countryside. The rate of migration from one region to another is also very different: e.g. the Central Highland was found to have the highest rate of immigrants, while migrants were mostly from the south-central coast region, this in turn confirms the uneven endowment distribution.

In contrast to Cambodian migrants, Vietnamese migrants, to a significant extent move with the intention to settle or stay for long periods in the new locations. This can be explained by the fact that they relocate from resource-poor regions to better-endowed ones, and at times invest or work in non-seasonal and skilled activities. The high population density in specific regions also contributes to this.

The migration flows though, have not been able to reduce the large dependence of the populace on subsistence agriculture.

International out-Migration from Vietnam

During the 1980s there was considerable out-migration of workers to the former Soviet Union and Eastern Euro-
pean Bloc countries (about 200,000). By the 1990s, most of them had returned to Vietnam. A new wave of migration to Japan, Korea, the Middle East and East Africa began in the 1990s, which numbered about 60-70 thousand. Yet another stream of migration since the early 1980s has been in the direction of Laos and then Cambodia. The main activities of Vietnamese migrants in Laos are in low skilled jobs. Estimates of Vietnamese workers and their work in Cambodia can best be obtained from small sample surveys conducted by CDRI, presented next (So 2001; Chan and So 1999).

During the 1980s, Vietnamese migrants gradually began to return after their repatriation in the 1970s. In the 1990s, more migrants were attracted by opportunities offered by a suddenly opened up market economy in Cambodia. Demographers calculate that in the late 1990s there were a little over one million immigrants in Cambodia, of whom a very large proportion was from Vietnam.

Many are involved in fishing in Cambodia. The Vietnamese have been found to be more dextrous than others are in fishing, and this is one reason why they have been more successful in retaining their hold on it in Cambodia. In Phnom Penh they work as construction workers, traders and skilled workers in machinery and electric repair workshops, wood processing enterprises, etc. About 80 percent of the small contractors and supervisors in construction industry are believed to be of Vietnamese origin. Field studies also show that employers prefer Vietnamese workers because they are better skilled, harder working and patient.

Vietnam presents the paradox of a country having relatively high skills, and yet a low capacity to fully utilise them.

### Reasons to Move, Earnings, Working Conditions and Poverty

According to the Census of 1998, internal migrants in Cambodia stated that their principal reason for moving was the need to search for employment (29 percent of the total), while the second reason given was the need to follow their families (25 percent). Family reasons in many cases are also related to employment, since spouses move with migrants in search of work. There were few differences in the reasons reported by male and female migrants.

The wage difference between agricultural work and unskilled work in Phnom Penh is significant: workers in paddy fields earn about 4,000 riels per day (about US$1), while the prevailing wage rate for unskilled/semi-skilled workers in the city can be 6,000-10,000 riels (Pon and Acharya 2001). Garment factory workers, most of whom are migrants, can net US$60-75 monthly (Sok et al 2001). Additionally, in rural areas work not is available for more than a few months, while in the city work availability has no apparent seasonality. Larger number of days of work translates into higher incomes. Even in rural to rural migration, people move from single-crop regions to double-crop ones, or to fish, log or work on construction sites.

For Cambodian workers in Thailand the differential wage rate is the main attraction: wages in Thailand can be 2-6 times higher for similar jobs (So 2001).

Life for Cambodian migrants in Thailand, though, is not easy. Since most are illegal migrants they face harassment, and pay high bribes and extortion money. Respondents in CDRI surveys further stated that migration could cause difficulties for those left behind; for example, older parents are left behind with no help. There could also be theft or land grabbing by others. Yet, workers choose to migrate and most actually manage to make money as well as acquire some skills/trade.

CDRI surveys as well as research done in Vietnam reveal that the overwhelming motives for movement of Vietnamese immigrants have been economic. In Cambodia, better opportunities to earn money were cited by almost all of them. The lack of skilled workers has provided opportunities for immigrant Vietnamese to work as construction foremen, wood processors, machine repairers, etc. Weak immigration controls and favours granted for unofficial fees in Cambodia also facilitate the in-flow of workers.

Small and medium Vietnamese fishermen earn on average around 10,000 riels per day; more than US$2, the World Bank's mild poverty line wages. Informants reported much higher earnings from medium and large-scale fishing dominated by Vietnamese migrants. Vietnamese fishing contractors compete for fishing concessions and often succeed in getting them because of their superior prowess in technology and business. On the downside however, unofficial checkpoints levying fees have proliferated. To meet these excessive demands, fishermen use harmful and illegal fishing methods, much to the detriment of the fish stock. Respondents reported that the catch in the survey areas fell by about 40 percent in the late 1990s compared to the 1980s.

To what extent have such movements affected poverty? Evidences suggest that in most cases there is a wage difference between the home location and the host location. In other cases jobs are available or available for longer periods, and in yet other cases there is a learning process, which in turn makes people more employable in higher paying jobs. More people are becoming mobile overtime, they are willing to travel longer distances and they are also willing to take more risks. To this extent migration is a useful tool to combat poverty.

In terms of indirect effects, data from varied sources show that in most cases, whether the move is within the country or out of it, people remit money. Remittances
help in stabilising household food security back home and help in some capital formation. In a few instances there is a path formed for future migrants to enter the job market outside. Next, expenditure of remittance monies help create local jobs for those poor who may not have succeeded to migrate. Indirect effects extend to also filling gaps in certain segments in host labour markets, which in turn improve the economy. Of course there are negative implications as well, but migrants, at least on their part, take the negative effects to be more than offset by the positive ones mentioned above.

The descriptions in this article further suggest that while all workers move with the same motive - of maximising their incomes and standards of living - there is heterogeneity in their composition, employment conditions and social security. Human capital, social networks and identification of niches in labour markets play a critical role in ensuring a better bargaining position for the migrants. Thus the impact of migration is not linear.

**On Policy**

Both Cambodia and Laos have not taken steps that would pro-actively promote or control migration – in the same way as Thailand, Philippines or Bangladesh have – for either internal or international migration. The only visible policy in Cambodia appears to be of discouraging rural-urban migration and providing land to the landless in rural areas so that they can earn a living locally. Vietnam on the other hand has explicit policy only on international migration. As in 2000, both public and private sector companies were permitted to participate in exporting labour. No official stand on internal migration or cross-border migration, though is presently available.

Geographic mobility of labour helps to reduce poverty; this has been the world over. However, normatively migration requires being demand-led, in order to optimally deploy power to the larger interests of the society. To this extent there is need to promote a rational migration policy. At the same time, it is equally important to put in place policies that would advance regionally balanced development, encourage labour-intensive industries and activities, and help rapid human capital formation so as to provide opportunities for people locally as well.

**Geographic mobility of labour helps to reduce poverty. To this extent there is need to promote a rational migration policy. At the same time, it is equally important to put in place policies that would advance regionally balanced development, encourage labour-intensive industries and activities, and help rapid human capital formation so as to provide opportunities for people locally as well.**

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**References**


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**Newly Published !!!**

A number of new research working papers have been published since October 2001:

Working Paper 19: Land Tenure in Cambodia (English edition $10.00; Khmer forthcoming)

Working Paper 20: Social Assessment of Land in Cambodia (English $10.00; Khmer forthcoming)


A Report on An Investigation of Conflict Management in Cambodian Villages (English $10.00; Khmer forthcoming)

Khmer edition of the Cambodia’s Annual Economic Review-2001 is now also available at CDRI at 10,000 riels and 50% discount price available for students (upon presentation of a valid student ID card).

These papers and all CDRI publications are available for sale from CDRI, by direct mail order, and through Monument Books outlets, International Book Centre, City Books and other newsstands. Abstracts of all publications are available on CDRI’s website at [http://www.cdril.org.kh](http://www.cdril.org.kh). CDRI, 56 Street 315, Tuol Kork, PO Box 622 Phnom Penh Cambodia. Tel: (855-023) 880-734
Recent economic data show that the world economic situation, when compared with the second quarter of 2001, worsened in the third quarter. Unemployment and poverty have been increasing. To prop up their respective economies, the central banks in different countries have continued to boost domestic demand by easing their credit policies through cutting interest rates. Consequently, world inflation rate has reduced somewhat, though foreign exchange rates and commodity prices in the world markets have been volatile.

World Economic Growth
According to the most recent economic data, the events of September 11 in the US have worsened the current economic downswing in most parts of the world. The US industrial production growth, on an year over year basis, declined to -6.4 percent in October 2001, compared to -3.2 percent in July. In Japan, the decline of industrial output was more severe, to -11.9 percent in October from -8.5 percent in July, on an year over year basis. In Europe, though, the industrial production index remained unchanged during these periods. To control the economic downswing, America's Federal Reserve cut its short-term interest rates once again in early December, for the eleventh time during 2001. This monetary policy, however, will need time to achieve results.

Setting in of economic depression in the Western countries has led to economic recession in some Asian economies as well. In the third quarter of 2001, Singapore and Taiwan experienced a negative GDP growth for the second consecutive quarter. Hong Kong and Malaysia too have fallen into economic recession. Between the third quarter of 2000 and the third quarter of 2001, the real GDP dropped by 5.6 percent in Singapore, 4.2 percent in Taiwan, 1.3 percent in Malaysia and 0.3 percent in Hong Kong. However, economic growth in China remained strong (7 percent GDP growth in the third quarter) despite a drastic slowdown in exports. This dynamic has partly resulted from a continued inflow of foreign direct investment into China (about US $40 billion per year since 1994). With world-wide economic depression, external demand becomes scarce, and hence the main challenge for China now is to promote domestic demand to sustain its economic growth. To some extent, Chinese domestic demand already is growing. During the first seven months of the year, domestic retail sales were up by about 10 percent and real estate investment rose by 30 percent.

The social implications of the economic depression are becoming increasingly visible. In the US, the unemployment rate increased to 5.4 percent of the labour force in October 2001, from 4.5 percent in July and 3.9 percent a year ago. In Japan, the unemployment rate increased to 5.4 percent in October, from 5 percent in July and 4.7 percent a year ago. In the euro area, though, joblessness remained unchanged at 8.3 percent of the labour force during the third quarter, down from 8.8 percent a year ago. In some newly industrialised countries also, the social implications on the population are disturbing. According to the Far Eastern Economic Review, by the end of 2001, the Malaysian government expects more than 390,000 people to be out of work, and unemployment would stand at 3.9 percent compared to 3.1 percent in 2000. In Hong Kong, the unemployment rate increased to 5.3 percent in the third quarter, from 4.6 percent in the earlier quarter. In Thailand, poverty is worsening, with the number of poor rising to about 10 million in 2001 against 7 million in 1996, according to a recent release from the World Bank.

Cambodia is an atypical country in that, some opportunities have emerged as a result of the terrorist attacks in America. In the garment business, for example, some US and European clients have increased their garment procurements from Cambodia, and correspondingly reduced them from Islamic countries (e.g. from Pakistan, Bangladesh and Indonesia). This was clearly observed in October. The trend of job reduction in that sector appears to have stopped now. In fact, workers in garment factories have begun to work overtime. In the tourism sector too, the situation has stayed unaffected. People, mainly from Asian countries, who earlier expected to visit the US, have now turned to the non-Muslim Asian region, including Cambodia.

World Inflation and Exchange Rates in the International Markets
Continuation of worldwide depression in demand and reduction in interest rates has led to a decline in world inflation. In the US, the inflation rate declined to 2.1 percent in October 2001, from 2.7 percent in July and 3.4 percent a year earlier. In the euro area, the inflation rate declined to 2.4 percent in October, from 2.8 percent in July and 2.7 percent a year earlier. In Asia, most economies experienced a similar trend in inflation. In Japan, inflation remains negative.

Uncertainty about the economic future continues to cause exchange rate volatility in the international markets. Between September and mid-December 2001, the US dollar remained generally stable against the euro, though it fluctuated on a day to day basis (in the range of 1.09 to 1.13 euro per US$). During the same period, the US dollar significantly appreciated against the Japanese currency, trading at 127 yen in mid-December, up from 118 yen in early September. The US dollar also significantly appreciated against the Singaporean dollar, trading at about S$1.84 in mid-December, up from S$1.75 in early September. However, during the same period, the US dollar remained stable against the Thai baht, Malaysian ringgit and South Korean won.

Commodity Prices in the World Markets
Except for rice, commodity prices in the world markets declined during the third quarter of 2001. The price of first quality rice in Bangkok slightly recovered, trading at US$170 per tonne in the third quarter of 2001, up from US$165 per tonne in the previous quarter. It however remained lower than what it was in the same quarter of 2000 (US$185 per tonne). The prices of soybean,
Economy Watch—External Environment

Wood and rubber continued to exhibit declining trends. Moreover, it is noted that the world-wide economic slowdown has also had a significant downward impact on the price of crude oil. In the second quarter of 2001, crude oil in Dubai traded at US$25 per barrel, it then slightly reduced to US$24 per barrel in the third quarter, and finally fell to about US$17 per barrel in December.

Prepared by Sok Hach

Table 1. Real GDP Growth of Selected Trading Partners, 1999–2001 (percentage increase over the previous year)

<table>
<thead>
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<th>Year</th>
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<td>-1.1%</td>
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<td>-0.9%</td>
<td>1.4%</td>
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Source: the International Monetary Fund. The Economist. *CDIR Estimates based on the IMF, ADB and World Bank Projections

Table 2. Inflation Rate of Selected Trading Partners, 1999–2001 (percentage increase over the previous year)

<table>
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<th>Selected other Asian countries</th>
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<tbody>
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<td>3.4%</td>
<td>3.3%</td>
<td>3.5%</td>
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<tr>
<td>2001</td>
<td>2.3%</td>
<td>2.2%</td>
<td>2.4%</td>
</tr>
<tr>
<td>2000-2001</td>
<td>3.4%</td>
<td>3.3%</td>
<td>3.5%</td>
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</table>

Source: the International Monetary Fund. The Economist. *CDIR Estimates based on the IMF, ADB and World Bank Projections

Table 3. Exchange Rates of Selected Trading Partners Against the US Dollar, 1999–2001 (period averages)

<table>
<thead>
<tr>
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<td>2001</td>
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<td>2000-2001</td>
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<td>3.971</td>
<td>3.977</td>
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</table>

Source: the International Monetary Fund. The Economist. *CDIR Estimates based on the IMF, ADB and World Bank Projections

Table 4. Selected Commodity Prices on the World Market, 1999–2001 (period averages)

<table>
<thead>
<tr>
<th>Year</th>
<th>Hardwood (logs) - Malaysia ($/m3)</th>
<th>Rubber - Malaysia ($/ton)</th>
<th>Rice - Bangkok ($/ton)</th>
<th>Soybeans - USA ($/ton)</th>
<th>Crude oil - Dubai ($/barrel)</th>
<th>Gold - London ($/fine ounce)</th>
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<tr>
<td>2000</td>
<td>199</td>
<td>643</td>
<td>689</td>
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<td>-610</td>
<td>-729</td>
<td>-225</td>
<td>-23</td>
<td>-296</td>
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</table>

Source: the International Monetary Fund. The Economist. *CDIR Estimates based on the IMF, ADB and World Bank Projections
Economy Watch--Domestic Performance

The Cambodian economy has continued to experience a moderate growth in GDP, expected in the range 4-5% in 2001, despite concerns of contagious effects in the wake of the world economic slowdown, and the September 11 events in the US. Economic indicators for the third quarter of 2001 reveal that garment exports and tourism, the principal modern sectors of the economy, continued to thrive in spite of a global slowdown. Construction sector has been recovering as private investment has continued to grow for the fourth consecutive quarter ending in September 2001. Monetary performance during this period remained stable – inflation rate in Phnom Penh was low, falling to –0.4% in the year to the third quarter of 2001, and the Consumer Price Index (CPI) in provincial areas hit a record low of -1.1%. The value of Cambodian riel depreciated slightly against the US dollar and the Thai baht. One dollar traded for 3,952 riels and one baht for 88.2 riels, in the third quarter of 2001. The banking sector reform is ongoing, but the expected privatisation of the Foreign Trade Bank of Cambodia by the end of 2001, will probably not happen so early. Gross foreign reserves in Cambodia’s Central Bank, as revealed by the NBC, reached US$532.3 million by the end of September (equivalent to 3.5 months of imports of goods and services).

Economic Activity

Although economic slowdown and recession have officially been admitted in many countries, Cambodia managed to achieve moderate economic growth during the first 9 months of 2001. Cambodian economic growth has basically relied on sectors such as garment and footwear manufacture, tourism, rice and rubber exports. Fishing, forestry and other crops also contribute considerable added value to the economy. Activities of small and medium processing industries and exports of finished goods (other than apparel and footwear) however remain stunted.

The apparel industry - the country’s largest employer outside agriculture - continued to grow through the year, albeit slowly. During the first nine months of 2001, Cambodia’s total garment exports amounted to US$814 million, a 13% rise over the same period of 2000. Exports to the US markets accounted for US$580 million (rose 3% compared to the first nine months of 2000). Despite looming fears of declining orders, the volume of exports to the US did not diminish. The US market is an important destination for the Cambodian garment-export industry; in fact it ensures the sector’s sustainability, as in the recent years, it has absorbed about 75% of Cambodia’s total apparel exports. By December 31, 2001, a three-year Cambodia–US bilateral agreement on quota for 12 apparel categories, to which the US has limited Cambodia’s garment exports in its markets, will end. Negotiations for a new agreement on quotas are however underway.

Exports to EU markets - Cambodia’s second largest apparel destination - rose dramatically in the very recent past. In the first nine months of 2001, exports to the EU area accounted for US$221 million (rose 58% compared to the same period last year). Since April 1999, EU granted a three-year special preferential trading status to Cambodia, by which it could have access to EU markets without quotas and duties. However, only about 10% of Cambodian apparel exports have gone to EU markets under this preferential arrangement, and the other 90% have been subjected to MFN tariff rates at an average of 9%, according to the Ministry of Commerce. Some prime impediments that have hampered the preferential access are, poor quality standards, and inability to understand and apply the necessary rules prevalent in the importing countries.

According to the World Tourism Organisation (WTO), the world tourism industry is expected to contract 20% in 2001, resulting from the adverse effects of September 11 terrorist attacks in the United States. Despite the slowdown in the global tourism sector, Cambodia’s tourism industry (the country’s second largest foreign exchange earner) has not signalled a decline yet. During the first 9 months of 2001, a total of 344,500 foreign tourists arrived in Cambodia by air (higher by 22% compared to the same period of 2000), of which 28% entered Cambodia through direct international flights to Siem Reap. According to WTO, the Asia–Pacific Region will become a popular tourist destination in the future, and by 2020, China will overtake France and Spain to become the world’s most popular place for international tourists. The prospect of Cambodia’s tourism sector is promising owing to spill over effects that Cambodia could expect from rising tourism in the region.

Inflation and Foreign Exchange Rates

The inflation rate in Phnom Penh City was around zero percent in the third quarter of 2001. The Consumer Price Index of all goods fell to –0.4% in the year to the third quarter and the core CPI, principally consisting of food and energy prices, dropped to –2.4% and –3% respectively, as seen from data released by the National Institute of Statistics. According to CDRI’s quarterly surveys, inflation also declined markedly in Cambodia’s provincial areas. Inflation rate in the provinces fell to a record low of –1.1% in the year to the third quarter of 2001. The decline in fish prices is a prime factor in driving inflation down in the provincial areas.

The Cambodian riel continued to lose ground, albeit gradually, against the US dollar, trading at an average of 3,952 riels per dollar in the third quarter of 2001. One of the prime reasons for devaluation is an increase in the money supply (in riels) released into circulation, for meeting the expenses of the forthcoming commune election. Cambodia’s first ever commune election will be held in February 2002. The riel usually depreciates as elections approach, and then readjusts afterwards. The riel has however continued to gain against the Vietnamese dong, but has come under pressure against the Thai baht. A Thai baht traded for 88.2 riels, and 100 Vietnamese dong for 26.4 riels, in the third quarter of 2001.

Despite decline in crude oil prices in the world mar-
kets in the recent months, the gasoline price in Cambodia has remained high, at 2,100 riels (US$0.53) per litre and diesel sold for 1,550 riels per litre (Table 4). The high price of oil could have a negative impact on the growth of some sectors of the economy.

**Poverty Situation – Earnings of Workers**

The Asian Development Bank has stated that poverty in Asia dropped by almost half during the 30 years ending in 1997. The proportion of persons below the poverty line in this region however began to rise after the economic and financial crisis in 1997. The proportion of people below the poverty line in Cambodia, as calculated by its Ministry of Planning, showed a modest decline from 40% to 36% between 1994 and 1999. The poverty proportions in Cambodia appeared to have declined but the number of poor has continued to rise because the rate of economic growth has not been high enough to offset the impact of high population growth. About 1/2 million new poor have been added in Cambodia between 1994-1999. To assess different facets of poverty in Cambodia, CDRI conducts quarterly surveys on a spectrum of vulnerable worker groups, ranging from cyclo-drivers to skilled construction workers, in Phnom Penh City and select provinces (Table 5).

In the survey conducted in November 2001, it was found that 73% of all vulnerable workers experienced a decline in their daily earnings in comparison to the same period last year. The hardest hit were the cyclo-drivers, small vegetable sellers, porters, and skilled and unskilled construction workers (Table 5). This decline in earnings, it is believed, is due to a growing number of migrant workers in Phnom Penh: increasing labour supply has pushed earnings down. Many people have come into the city to escape the misery caused by natural disasters (floods, droughts) in rural areas. The other reasons for people's vulnerability could relate to their lack of physical or human endowments, the strained natural resources, and the rising population. Despite that there are no detailed studies conducted to assess the causes of poverty, or effects of in-migration, floods, etc. on the economy, indeed the declining (daily) earnings and rising rural to urban migration, are serious concerns. The daily earnings of porters have plummeted for the fourth quarter in a row, and it was found that they had no money to send to their families back in rural areas. On the other hand, though, daily earnings of garment workers rose by 21% over the same period last year. However, compared to August 2001 (when the previous survey was conducted), their earnings declined slightly (Table 5). Almost a third out of 120 garment workers in 10 factories surveyed, pointed out that for obtaining employment in a factory, male workers particularly, spent between US$50-100 in the form of bribes. For paying these monies, 74% workers reported that they took loans from relatives, while the other 26% used their own savings.

Interviews were also conducted with luxury goods sellers (of precious stones, watches, televisions and souvenirs, household item sellers (of mosquito nets, mattresses and dishes), clothing, food and other goods sellers and cosmetics, toys and stationery sellers, in the CDRI survey, to assess the market performance. One hundred and thirty one wholesalers and retailers in Phnom Penh pointed out that there are difficult times ahead. About 78% of them stated that sales had declined, and only 22% responded that sales remained as good as in the earlier year. About 88% of luxury goods sellers pointed out that business had declined by nearly 40% compared to the last quarter. About 74% of those who sell household items (clothing and consumption goods) stated that their business was bleaker this year compared to last year. About 56% of food sellers in the five main markets in Phnom Penh complained of a near 50% reduction in sales in the recent months. Meanwhile 75% of the wholesalers also expressed that their sales are not as good as in the previous year. The survey found that, in the provinces, natural disasters are the prime reasons for the business downturn. Most stated that clients from provinces have become more scarce due to erosion of purchasing power following to two consecutive years of flooding. It is more difficult to earn now than earlier, and hence people tend to spend less now. In the absence of large survey data, it is difficult to gauge what is the extent of reduction in consumer demand, but based on CDRI's small sample studies, it is inferred that the volume of consumer spending appears to have declined compared to what it was in 2000.

In conclusion, due to lack of current large-scale socio-economic survey data, it is difficult to identify the root cause of the falling earnings, but based on CDRI studies, it appears that demographic pressures, scarcer natural resources and lack of employment opportunities are taking their toll.

**Monetary Developments**

Monetary performance has remained under control despite growing money injection into the markets during the third quarter of 2001. According to the National Bank of Cambodia (NBC), the Cambodian currency in circulation reached 535 billion riels in the third quarter of 2001 (rose 5% over the previous quarter). Meanwhile, foreign currency deposits in Cambodia’s commercial banks have continued to increase, reaching 1,496 billion riels by the end of third quarter (up from 1,390 billion riels in the end of the second quarter). Government deposits in NBC remained high (73 billion riels) and credit provided to the private sector rose by nearly 5% (reaching 992 billion riels by the end of the third quarter of 2001). The government has also helped poor households to access micro credit. In order to support micro credit institutions, it has taken loans from the ADB and World Bank. By the year 2000, about 15% of total Cambodian households had access to micro credit. A sum of 114.4 billion riels has been lent to 370,651 poor people, according to reports received from the National Rural Development Bank.

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**Economy Watch—Domestic Performance**

*Institutions* is underway, and according to the NBC, by the end of November of 2001, 11 banks (each with US $13 million capital requirement) were re-licensed. Another 10 banks (including three specialised banks), that have not yet met the *New Law* conditions, are being permitted to operate under an executed agreement which expands the time period for meeting the new law requirement. The Foreign Trade Bank of Cambodia (FTB), which was to be separated from the NBC by the end of this year, will probably take longer to de-nationalise. Since FTB is still a state-owned bank, NBC has capitalised its capital requirements.

**Public Finance**

The major challenge before the government is to rapidly increase revenue collection and restrict expenditure, mainly in the defence-cum-security sector. During the first nine months of 2001, total domestic revenue receipts reached 1,126 billion riels (up 7.6% compared to the same period in 2000) but it was 7% below the planned target. According to the *Budget Law* of 2001, total domestic revenue was aimed at 1,651 billion riels (about 12% of GDP). This target appears to have been achievable due to the introduction of a number of revenue-boosting strategies, such as stamp duties on cigarettes, VAT on diesel sales and extra fees for visas, all levied since mid-2001. The government is moving towards less dependence on customs duties in compliance with ASEAN/AFTA policies and instead, concentrating more on VAT and excise taxes. The new *Budget Law* for 2002 has already been passed by the Council of Ministers and forwarded to the National Assembly for final approval. The *Budget Law* of 2002 aims to increase the total domestic revenues to 1,816 billion riels; this is equivalent to about 13% of the GDP compared to about 12% in 2001. To achieve this figure a number of policies have been planned for 2002. These include extending VAT to a number of industries (e.g. motorbike assembling and its spare parts), enforcing VAT in 10 provinces (presently it is five) and reducing tax exemptions on big companies, among others.

On the expenditure side, priority has been accorded to spending on four major sectors, namely, Education, Health, Agriculture and Rural Development. During the first nine months of 2001, the combined spending on Education and Health rose by 27%, while the combined spending on Agriculture and Rural Development increased by 68% compared to the same period in 2000. During this period, military spending dropped 12.6% compared to the same period of 2000. In absolute numbers the total expenditure during the first nine months of 2001 amounted to 1555 billion riels (including foreign financing), which represents an increase by 10.5% over the same period of 2000. The expenditure policy in the new *Budget Law* of 2002 again redirects monies towards priority sectors and reduces expenses on non-priority sectors. Military spending is expected to slide to 2.7% of GDP (down from about 3% of GDP in 2001) and outlays for the four priority sectors are expected to increase substantially over 2001. Expenditure on Education is planned to increase by 28%, Health by 21%, Agriculture by 13% and Rural Development by 46%.

**Private Investment and Employment**

Private investment appeared suffered a downturn in 2001. Foreign direct investments (FDI) continued to slump as per the records of the Council for Development of Cambodia (CDC). During the first nine months of 2001, 36 new investment and expansion projects were approved by the Council worth US$56.1 million in fixed assets. The volume of new fixed assets in 2001 was 73% lower compared to the same in 2000. Of the total investment approvals, 17 projects were for garment manufacture. This was a fall of nearly 60% in the first nine months of 2001, compared to the first nine months of 2000. The future of Cambodia’s apparel industry appears to be uncertain in the near future due to falling demand in its prime export markets, resulting from continued global recession.

Thus, despite a revision in Cambodia’s *Investment Law* in early 2001 and improved political stability FDI has continued to be low. FDI plays an important role in providing jobs to the country’s rapidly growing labour force. According to a CDRI study, employment in FDI projects is nearly 8.5% of Cambodia’s total employment. Between 2004 and 2008, around 220,000–250,000 new job seekers will enter labour markets annually and, unless both FDI and local investments pick up unemployment will pose a grave problem.

**Foreign Aid and External Debt**

During the period of 1992–2000, Cambodia received approximately US$1.44 billion from multilateral donors. Of this, 315.2 million came from the European Union, 299 million from the Asian Development Bank, 287.2 million from the World Bank, 107.2 million from the International Monetary Fund, and the rest from specialised agencies of the United Nations. This assistance supported a broad range of programmes aimed at reducing poverty, improving living standards, providing financial support to priority programmes, infrastructure rehabilitation and structural reforms.
**Table 1. Cambodia: Main Macro-economic Indicators, 1993-2000**

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<tbody>
<tr>
<td>GDP at current prices (billions of riels)</td>
<td>6,080</td>
<td>6,220</td>
<td>7,200</td>
<td>8,330</td>
<td>9,130</td>
<td>10,600</td>
<td>11,640</td>
<td>11,993</td>
</tr>
<tr>
<td>GDP at current prices (millions of dollars)</td>
<td>2,160</td>
<td>2,420</td>
<td>2,925</td>
<td>3,155</td>
<td>3,050</td>
<td>2,790</td>
<td>3,050</td>
<td>3,108</td>
</tr>
<tr>
<td>GDP per capita (dollars)</td>
<td>225</td>
<td>245</td>
<td>284</td>
<td>295</td>
<td>276</td>
<td>244</td>
<td>259</td>
<td>257</td>
</tr>
<tr>
<td>Growth rate of real GDP (1993 prices)</td>
<td>7.1</td>
<td>4.0</td>
<td>6.7</td>
<td>8.0</td>
<td>0.6</td>
<td>1.7</td>
<td>6.6</td>
<td>5.0</td>
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<td>Agriculture</td>
<td>5.5</td>
<td>5.2</td>
<td>10.3</td>
<td>2.0</td>
<td>2.8</td>
<td>0.9</td>
<td>1.3</td>
<td>-2.2</td>
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<td>Industry</td>
<td>12.7</td>
<td>4.8</td>
<td>9.0</td>
<td>19.3</td>
<td>0.4</td>
<td>14.0</td>
<td>8.9</td>
<td>14.9</td>
</tr>
<tr>
<td>Service</td>
<td>6.9</td>
<td>2.6</td>
<td>2.4</td>
<td>10.5</td>
<td>-1.5</td>
<td>-2.1</td>
<td>11.0</td>
<td>7.8</td>
</tr>
<tr>
<td>Inflation (in riels, final quarter basis)</td>
<td>41.0</td>
<td>17.8</td>
<td>3.5</td>
<td>9.0</td>
<td>9.1</td>
<td>12.6</td>
<td>0.0</td>
<td>0.5</td>
</tr>
<tr>
<td>Riel/dollar parity (average annual)</td>
<td>2,814</td>
<td>2,569</td>
<td>2,462</td>
<td>2,641</td>
<td>3,000</td>
<td>3,800</td>
<td>3,820</td>
<td>3,859</td>
</tr>
<tr>
<td>Budget revenue (percentage of GDP)</td>
<td>4.8</td>
<td>9.5</td>
<td>8.9</td>
<td>9.0</td>
<td>9.6</td>
<td>8.9</td>
<td>11.3</td>
<td>11.9</td>
</tr>
<tr>
<td>Budget expenditure (percentage of GDP)</td>
<td>10.0</td>
<td>16.2</td>
<td>16.7</td>
<td>17.3</td>
<td>13.8</td>
<td>14.7</td>
<td>16.0</td>
<td>17.5</td>
</tr>
<tr>
<td>Current public deficit (percentage of GDP)</td>
<td>-1.4</td>
<td>-1.4</td>
<td>-0.8</td>
<td>-1.2</td>
<td>0.7</td>
<td>-0.2</td>
<td>1.6</td>
<td>1.6</td>
</tr>
<tr>
<td>Overall public deficit (percentage of GDP)</td>
<td>-5.2</td>
<td>-6.7</td>
<td>-7.7</td>
<td>-8.3</td>
<td>-4.1</td>
<td>-5.8</td>
<td>-5.3</td>
<td>-5.6</td>
</tr>
<tr>
<td>Exports of goods (percentage of GDP)</td>
<td>7.4</td>
<td>10.6</td>
<td>10.8</td>
<td>11.4</td>
<td>17.9</td>
<td>21.8</td>
<td>24.8</td>
<td>36.4</td>
</tr>
<tr>
<td>Imports of goods (percentage of GDP)</td>
<td>16.9</td>
<td>22.6</td>
<td>24.4</td>
<td>29.3</td>
<td>31.8</td>
<td>41.4</td>
<td>41.2</td>
<td>48.6</td>
</tr>
<tr>
<td>Trade balance (percentage of GDP)</td>
<td>-9.5</td>
<td>-11.9</td>
<td>-13.6</td>
<td>-17.8</td>
<td>-13.9</td>
<td>-19.6</td>
<td>-16.4</td>
<td>-12.2</td>
</tr>
<tr>
<td>Current account balance (percentage of GDP)</td>
<td>-5.2</td>
<td>-10.6</td>
<td>-14.0</td>
<td>-16.8</td>
<td>-12.1</td>
<td>-17.8</td>
<td>-13.6</td>
<td>-9.0</td>
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<tr>
<td>External contribution to the economy (percentage of GDP)</td>
<td>14.5</td>
<td>16.9</td>
<td>21.0</td>
<td>21.2</td>
<td>14.5</td>
<td>18.3</td>
<td>16.4</td>
<td>14.5</td>
</tr>
<tr>
<td>Total savings (percentage of GDP)</td>
<td>18.9</td>
<td>19.2</td>
<td>22.1</td>
<td>27.6</td>
<td>22.3</td>
<td>26.3</td>
<td>23.6</td>
<td>19.2</td>
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<tr>
<td>Gross foreign reserves (months of imports)</td>
<td>1.5</td>
<td>1.4</td>
<td>1.7</td>
<td>2.0</td>
<td>2.3</td>
<td>3.1</td>
<td>3.1</td>
<td>3.1</td>
</tr>
<tr>
<td>Population (million)</td>
<td>9.6</td>
<td>9.9</td>
<td>10.3</td>
<td>10.7</td>
<td>11.1</td>
<td>11.4</td>
<td>11.8</td>
<td>12.1</td>
</tr>
<tr>
<td>Labour force (percentage of population)</td>
<td>48.0</td>
<td>47.3</td>
<td>46.6</td>
<td>45.9</td>
<td>45.3</td>
<td>44.8</td>
<td>45.2</td>
<td>45.7</td>
</tr>
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</table>

Sources: Government data and CDRI.

**Table 2. Destination of Garment Exports, 1994-2001**

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<tbody>
<tr>
<td>United States</td>
<td>0.0</td>
<td>0.02</td>
<td>0.1</td>
<td>26.8</td>
<td>74.1</td>
<td>121.5</td>
<td>187.7</td>
<td>220.4</td>
</tr>
<tr>
<td>Rest of the world</td>
<td>1.0</td>
<td>6.6</td>
<td>19.6</td>
<td>30.0</td>
<td>20.3</td>
<td>17.0</td>
<td>37.6</td>
<td>78.8</td>
</tr>
<tr>
<td>Total</td>
<td>1.0</td>
<td>6.6</td>
<td>19.7</td>
<td>56.8</td>
<td>94.5</td>
<td>138.5</td>
<td>225.3</td>
<td>299.2</td>
</tr>
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</table>


**Table 3. Passenger Arrivals by International Flights at Pochentong and Siem Reap Airports, 1994-2001**

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<tbody>
<tr>
<td>Tourist visas</td>
<td>27.9</td>
<td>38.7</td>
<td>55.3</td>
<td>46.3</td>
<td>38.1</td>
<td>44.9</td>
<td>55.8</td>
<td>56.0</td>
</tr>
<tr>
<td>Business visas</td>
<td>7.1</td>
<td>10.6</td>
<td>15.8</td>
<td>13.9</td>
<td>10.7</td>
<td>16.0</td>
<td>13.0</td>
<td>12.7</td>
</tr>
<tr>
<td>Official visas</td>
<td>3.3</td>
<td>3.9</td>
<td>3.2</td>
<td>3.6</td>
<td>4.4</td>
<td>8.8</td>
<td>3.5</td>
<td>4.3</td>
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<tr>
<td>Total Pochentong</td>
<td>38.3</td>
<td>53.2</td>
<td>74.3</td>
<td>63.8</td>
<td>53.2</td>
<td>69.7</td>
<td>72.3</td>
<td>73.0</td>
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<tr>
<td>Total Siem Reap</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>2.6</td>
<td>7.15</td>
<td>14.8</td>
<td>20.1</td>
</tr>
<tr>
<td>Total</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>175.202</td>
<td>183.166</td>
<td>111.59</td>
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**Table 4. Consumer Price Index (CPI), Exchange Rates and Gold Prices, 1994-2001 (period averages)**

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<tbody>
<tr>
<td>Provinces</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>6.1</td>
<td>16.3</td>
<td>6.2</td>
<td>4.0</td>
<td>6.5</td>
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<tr>
<td>Phnom Penh - All Items</td>
<td>-0.5</td>
<td>7.8</td>
<td>7.1</td>
<td>8.1</td>
<td>14.2</td>
<td>4.2</td>
<td>-2.3</td>
<td>-1.4</td>
</tr>
<tr>
<td>- Foods</td>
<td>-13.4</td>
<td>4.9</td>
<td>7.6</td>
<td>6.7</td>
<td>15.6</td>
<td>8</td>
<td>-5.5</td>
<td>-5.1</td>
</tr>
<tr>
<td>- Energy</td>
<td>-1.2</td>
<td>19.4</td>
<td>20.7</td>
<td>21.0</td>
<td>10.7</td>
<td>5.5</td>
<td>3.6</td>
<td>8.8</td>
</tr>
<tr>
<td>Price of Riel/US dollar</td>
<td>2,582</td>
<td>2,479</td>
<td>2,666</td>
<td>3,029</td>
<td>3,824</td>
<td>3,832</td>
<td>3,874</td>
<td>3,912</td>
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<tr>
<td>Price of Thai baht</td>
<td>102</td>
<td>95</td>
<td>105</td>
<td>98</td>
<td>88</td>
<td>101</td>
<td>99</td>
<td>94</td>
</tr>
<tr>
<td>Price of 100 Vietnamese dong</td>
<td>23.5</td>
<td>22.3</td>
<td>24.0</td>
<td>25.6</td>
<td>28.6</td>
<td>27.8</td>
<td>27.3</td>
<td>27.3</td>
</tr>
<tr>
<td>Gold price (US dollars per ch.)</td>
<td>45.8</td>
<td>45.9</td>
<td>46.3</td>
<td>40.4</td>
<td>36.0</td>
<td>34.0</td>
<td>33.8</td>
<td>34.0</td>
</tr>
<tr>
<td>Price of Diesel (Riel/litre)</td>
<td>750</td>
<td>716</td>
<td>779</td>
<td>883</td>
<td>1,065</td>
<td>1,105</td>
<td>1,256</td>
<td>1,353</td>
</tr>
<tr>
<td>Price of Gasoline (Riel/litre)</td>
<td>698</td>
<td>847</td>
<td>1,118</td>
<td>1,378</td>
<td>1,613</td>
<td>1,760</td>
<td>2,043</td>
<td>2,200</td>
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</table>

Sources: CDRI, IMF, NIS, Ministry of Planning, Ministry of Economy and Finance.
Table 5. Average Daily Earnings of Workers, 1997–2001

<table>
<thead>
<tr>
<th>Daily earnings (riels)</th>
<th>Change from last year (%)</th>
</tr>
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<tbody>
<tr>
<td></td>
<td>Q1-Q4</td>
</tr>
<tr>
<td>Small vegetable sellers</td>
<td>7.050</td>
</tr>
<tr>
<td>Waitresses</td>
<td>-1.873</td>
</tr>
<tr>
<td>Motorcycle-taxi drivers</td>
<td>-9.200</td>
</tr>
</tbody>
</table>

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

Table 6. Monetary Survey, 1994–2001 (end of period)

<table>
<thead>
<tr>
<th></th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Q1-Q4</td>
<td>Q1-Q4</td>
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<td>Q1-Q4</td>
<td>Q1-Q4</td>
<td>Q1-Q4</td>
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<tr>
<td>Bills of riel</td>
<td>391</td>
<td>550</td>
<td>881</td>
<td>1,172</td>
<td>1,550</td>
<td>1,961</td>
<td>2,510</td>
<td>2,448</td>
</tr>
<tr>
<td>Net foreign assets</td>
<td>391</td>
<td>550</td>
<td>881</td>
<td>1,172</td>
<td>1,550</td>
<td>1,961</td>
<td>2,510</td>
<td>2,448</td>
</tr>
<tr>
<td>Net domestic assets</td>
<td>59</td>
<td>99</td>
<td>31</td>
<td>-109</td>
<td>-435</td>
<td>-591</td>
<td>-679</td>
<td>-656</td>
</tr>
<tr>
<td>Net claims on government</td>
<td>143</td>
<td>148</td>
<td>128</td>
<td>54</td>
<td>141</td>
<td>111</td>
<td>41</td>
<td>6</td>
</tr>
<tr>
<td>Credit to private sector</td>
<td>237</td>
<td>293</td>
<td>435</td>
<td>637</td>
<td>637</td>
<td>682</td>
<td>731</td>
<td>860</td>
</tr>
<tr>
<td>Total liquidity</td>
<td>450</td>
<td>650</td>
<td>912</td>
<td>1,063</td>
<td>1,316</td>
<td>1,370</td>
<td>1,831</td>
<td>1,792</td>
</tr>
<tr>
<td>Money</td>
<td>200</td>
<td>279</td>
<td>329</td>
<td>385</td>
<td>466</td>
<td>515</td>
<td>540</td>
<td>540</td>
</tr>
<tr>
<td>Quasi-money</td>
<td>250</td>
<td>371</td>
<td>583</td>
<td>678</td>
<td>855</td>
<td>1,286</td>
<td>1,252</td>
<td>1,291</td>
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</tbody>
</table>

Note: Source: National Bank of Cambodia.


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<tbody>
<tr>
<td></td>
<td>Q1-Q4</td>
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<td>Q1-Q4</td>
<td>Q1-Q4</td>
<td>Q1-Q4</td>
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<tr>
<td>Total revenue</td>
<td>148</td>
<td>161</td>
<td>187</td>
<td>220</td>
<td>230</td>
<td>239</td>
<td>329</td>
<td>378</td>
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<tr>
<td>Gross tax revenue</td>
<td>164</td>
<td>172</td>
<td>203</td>
<td>202</td>
<td>245</td>
<td>291</td>
<td>274</td>
<td>234</td>
</tr>
<tr>
<td>Capital revenue</td>
<td>0</td>
<td>2</td>
<td>10</td>
<td>3</td>
<td>9</td>
<td>3</td>
<td>0</td>
<td>6</td>
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<tr>
<td>Total expenditure</td>
<td>252</td>
<td>300</td>
<td>360</td>
<td>315</td>
<td>324</td>
<td>448</td>
<td>483</td>
<td>514</td>
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<tr>
<td>Capital expenditure</td>
<td>84</td>
<td>128</td>
<td>157</td>
<td>113</td>
<td>92</td>
<td>156</td>
<td>209</td>
<td>280</td>
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<tr>
<td>Current expenditure</td>
<td>168</td>
<td>172</td>
<td>203</td>
<td>202</td>
<td>245</td>
<td>291</td>
<td>274</td>
<td>234</td>
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<td>Education and Health</td>
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<td>32</td>
<td>33</td>
<td>33</td>
<td>70</td>
<td>35</td>
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<td>Defence and Security</td>
<td>98</td>
<td>106</td>
<td>102</td>
<td>105</td>
<td>110</td>
<td>116</td>
<td>118</td>
<td>74</td>
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<tr>
<td>Other Ministries</td>
<td>48</td>
<td>41</td>
<td>71</td>
<td>65</td>
<td>83</td>
<td>103</td>
<td>122</td>
<td>128</td>
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<tr>
<td>Overall deficit</td>
<td>-105</td>
<td>-139</td>
<td>-173</td>
<td>-95</td>
<td>-95</td>
<td>-119</td>
<td>-105</td>
<td>-178</td>
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<tr>
<td>Domestic financing</td>
<td>-3</td>
<td>-1</td>
<td>3</td>
<td>-16</td>
<td>28</td>
<td>15</td>
<td>-63</td>
<td>-34</td>
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Table 8. Investment Projects Approved, 1994–2001*

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<tbody>
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<td>Q1-Q4</td>
<td>Q1-Q4</td>
<td>Q1-Q4</td>
<td>Q1-Q4</td>
<td>Q1-Q4</td>
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<tr>
<td>Total</td>
<td>46</td>
<td>51</td>
<td>75</td>
<td>34</td>
<td>35</td>
<td>24</td>
<td>27</td>
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<tr>
<td>Garment</td>
<td>27</td>
<td>30</td>
<td>36</td>
<td>12</td>
<td>21</td>
<td>11</td>
<td>17</td>
<td>13</td>
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<tr>
<td>Total</td>
<td>116.0</td>
<td>89.0</td>
<td>97.8</td>
<td>69.5</td>
<td>104.1</td>
<td>61.7</td>
<td>19.7</td>
<td>42.7</td>
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<tr>
<td>Garment</td>
<td>26.8</td>
<td>28.0</td>
<td>39.2</td>
<td>8.6</td>
<td>22.9</td>
<td>13.9</td>
<td>7.0</td>
<td>8.2</td>
</tr>
<tr>
<td>Total</td>
<td>303.0</td>
<td>76.2</td>
<td>166.7</td>
<td>190.4</td>
<td>212.3</td>
<td>118.5</td>
<td>85.8</td>
<td>86.6</td>
</tr>
</tbody>
</table>

Glossary
Terms Used in This Issue

Forestry*
A system of activities pertaining to forests, forest areas, timber products, and NTFPs undertaken with an integrated management methodology involving policy, legislative, technical, scientific, and administrative aspects.

Concessionaire*
A national or foreign legal entity awarded user rights in a forest concession by an State through the authorised public bidding process.

Concession Agreement in Cambodia*
A contract between the State and a concessionaire for sustainable management and harvest of timber products and NTFPs from an authorised forest concession pursuant to the provisions of the Forestry Law and the Forest Concession Agreement.

Royalties*
Payments due to the State from an individual, legal entity or community for timber products and NTFPs harvested from the State’s forest reserve.

Non-Timber Forest Products (NTFPs)
Products other than timber that are extracted from the forest, including bamboo, rattan, resins, wild vegetation, wildlife products, and other goods.

Vulnerability
Exposure to harmful factors or attack because of weak physical or social conditions.

Growth rate
Percentage change in national income in the year compared to what it was in the past year.

Disincentive
Factors that discourage an action or effort

Accreditation
Establishment of academic standard and norms

Enrolment Rate
Proportion of standard in educational institution compared to maximum students permissible.

Retrench
Remove from active employment

* As defined in the Draft Forestry Law (20 July 2001).

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CDRI Update

CDRI
Local and International Board Directors met on December 6-7, 2001 for the Annual CDRI Board of Directors' Meeting. The Board reviewed the achievements and financial records of 2001, and approved the 2002 Operational Plan and Budget as well as a policy framework to guide the Human Resources Development Programme of the Institute. This policy framework was elaborated during the consultancy mission of Mr. Paul Matthews in November 2001. It draws on CDRI's past experience of HRD work, various planning documents of the Royal Government of Cambodia, as well as on the insights and recommendations of a broad range of CDRI stakeholders and partners. From December 6-8, 2001 CDRI conducted a seminar for distinguished members of the Senate and National Assembly on the Cambodian economy, the national budget and development. CDRI welcomed new staff members: Mr. Bruce McKenney, Mr. Prom Tola and Ms. Moudda Billmeier.

Research
The second phase of data collection of the Land and Food Security study was completed during September-November, 2001. At the same time all data pertaining to the Land Market Study were entered into a machine-readable form. The Cambodia Human Development Report for 2001 was completed and submitted to the UNDP/MoP. CDRI embarked on two new research programmes: Poverty Monitoring and Analysis, and Natural Resources and Environment Programme, in the last quarter of 2001. The third phase of the Development Analysis Network project on Occupational Diversification and Off-farm employment was initiated with a Methodology Seminar, held in December 2001.

Centre for Peace and Development
The monthly round-table COPCEL meetings for the prevention of conflict in commune elections continued to meet regularly. CPD conducted a conflict prevention workshop for the media in September and also facilitated a dialogue between the various parties in labour disputes. In October and December, the CPD training team conducted two additional courses on Managing Change, for local officials in the reconciliation zones of Anlong Veng and Tropaing Prasath. CPD also began a series of conflict management and peace-building workshops for women which will continue in January and March 2002. In November 2001, CPD led a mixed government-NGO study mission to South Africa to exchange and learn from experiences in rebuilding post-conflict societies. During the mission members discussed reforms and strategies which contribute to reconciliation and nation building. Finally, a four-volume illustrated version of Mindful Mediation, a Buddhist guide to conflict management and peace building, has been reprinted and will be disseminated in the new year.

Library
The CDRI library has moved to larger premises in order to accommodate growth and the increasing number of library users. Additional computer terminals have also been installed to facilitate searching the catalogue of library holdings.

Publications
In the last quarter of 2001, three new working papers (WP) were published in English. These are: WP19 - Land Tenure in Cambodia; WP20 - A Social Assessment of Land in Cambodia; and WP21 - Cambodia 1999-2000: Land, Labour, and Rural Livelihoods in Focus. The Khmer editions of Cambodia's Annual Economic Review—2001, Land Tenure in Cambodia (WP19) and the Illustrated Version of Mindful Mediation were also completed during this period.