Insights for Action

Cambodia Country Competitiveness
Driving Economic Growth and Poverty Reduction

Discussion Paper No. 7
2009
Background:

UNDP's Insights for Action (IFA) initiative was developed and launched following a 2004 meeting between H.E. Prime Minister Hun Sen and UN Assistant Secretary General and UNDP Asia Pacific Regional Bureau Director Dr. Hafiz Pasha. H.E. Prime Minister Hun Sen delivered a challenge to UNDP, asking them to help identify innovative policy responses to key development challenges.

The IFA initiative was created to undertake critical and timely policy research and to facilitate policy dialogue among the Cambodian Government, Cambodian society and Cambodia's development partners.

Purpose:

The IFA initiative is aimed at generating innovative ideas and practical knowledge for the effective implementation of the Government’s Rectangular Strategy. Special focus is given to those aspects of the Rectangular Strategy with greatest scope for rapidly advancing progress towards Cambodia's Millennium Development Goals (CMDGs).

The project has three main components: Knowledge Generation, Knowledge Sharing, and Knowledge into Action.

1. Knowledge Generation:

   IFA generates valuable new knowledge and insights in several critical areas through well-targeted research in collaboration with various Government Ministries and the Supreme National Economic Council (SNEC), a cross-ministerial advisory committee that reports directly to the Prime Minister.

2. Knowledge Sharing:

   IFA has also developed a range of knowledge sharing activities and modalities, including the annual Cambodia Economic Forum (CEF), media conferences, website development, and a series of Insights for Action publications.

3. Knowledge into Action:

   In addition to the two main components, IFA also contributes to the further development of national capacity, especially among researchers and policy makers, so that they will gain from both “learning by doing” during the applied research process, as well as benefitting from a transfer of valuable information and knowledge generated by this initiative.

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ACRONYMS

ACC  Authority of Communications of Cambodia
ASEAN  Association of Southeast Asian Nations
CMT  Cut-make-trim
EDB  Economic Development Board (Singapore)
FDI  Foreign Direct Investment
FOB  Free on board
GDP  Gross Domestic Product
GIFTEL  Ghana Investment Fund for Telecommunication
GMAC  Garment Manufacturers’ Association in Cambodia
ICT  Information and communications technology
IFC  International Finance Corporation
IPR  Intellectual property rights
ISP  Internet service provider
ITU  International Telecommunication Union
LDCs  Least developed countries
MAFF  Ministry of Agriculture, Forestry and Fisheries
MDGs  Millennium Development Goals
MEF  Ministry of Economy and Finance
MoC  Ministry of Commerce
MoWRAM  Ministry of Water Resources and Meteorology
MPT  Ministry of Posts and Telecommunications
NGO  Non-governmental organisation
ODI  Overseas Development Institute
R&D  Research and development
REE  Rural electricity enterprise
RGC  Royal Government of Cambodia
SEZ  Special Economic Zone
SME  Small and medium size enterprise
SNEC  Supreme National Economic Council
T&C  Textiles and clothing industry
TC  Telecom Cambodia
UNDP  United Nations Development Programme
WEF  World Economic Forum
FOREWORD

In the midst of the still unfolding global economic crisis, countries worldwide, including Cambodia, are facing unprecedented pressures. Cambodia remains particularly vulnerable given both its level of development and its high reliance on external financial flows (such as exports, foreign aid and foreign direct investment (FDI). Turbulent times may lie ahead for Cambodia and other countries with similar characteristics in terms of economic growth, social stability, and the livelihoods of their citizens.

Notably, the Royal Government of Cambodia (RGC) has begun to formulate a comprehensive response to the crisis in order to sustain its achievements. Urgent and comprehensive policy responses are needed if the country is to emerge from the crisis stronger and more resilient.

At the request of the RGC, the United Nations Development Programme (UNDP) commissioned the Overseas Development Institute (ODI) to conduct an independent study with the objective of further strengthening Cambodia’s competitiveness for economic growth and poverty reduction. While the initial focus of the study was to provide policy options to refine Cambodia’s national and sectoral competitiveness in the medium- to long-term, the analysis and the policy discussion have become increasingly relevant in the current environment.

At the national level, the study reviews human resource development, investment and industrial policy and other relevant issues. The sectoral competitiveness assessment highlights trends, challenges and opportunities for Cambodia’s principal sectors: agriculture, garments/light manufacturing and tourism. The analysis also covers information and communications technology (ICT) and construction, both of which support the competitiveness of the economy as a whole.

The practical policy options discussed in this report are based on extensive consultations with the RGC, development partners and the private sector. It is hoped that through further discussion with relevant stakeholders, and with the adoption of some of these proposals, economic growth can be sustained and Cambodia’s notable achievements in poverty reduction can continue.

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ACKNOWLEDGEMENTS

In 2008, the RGC and the Supreme National Economic Council (SNEC) requested that a study on Cambodia’s competitiveness be undertaken. In response, UNDP commissioned ODI to conduct the research and prepare a report.

The ODI team was led by Dirk Willem te Velde and included Jodie Keane, Karen Ellis, Alberto Lemma, Jonathan Mitchell, Massimiliano Cali, Stephanie Levy, Steve Wiggins, and Frederic Thomas. The research team was also supported by national researchers Socheth Hem, Khe-mara Phat and Ou Sochivy.

Senior officials from SNEC and the members of their research team, led by Sopheap Chan and Phiyorin Tep with support from Kong Ratha, Sisowath Chanto and Luyna Ung, provided invaluable guidance. Input was also provided by senior officials from the Ministry of Economy and Finance, Ministry of Commerce, Council for the Development of Cambodia, Ministry of Industry, Mines and Energy, Ministry of Public Works and Transport, Ministry of Tourism, Ministry of Posts and Telecommunications, Ministry of Education, Youth and Sport, Ministry of Agriculture, Forestry and Fisheries, Ministry of Labour and Vocational Training, Ministry of Planning, and the National Institute of Statistics.

A number of development partners, as well as embassies and chambers of commerce, also provided useful comments. Additionally, consultations with more than 50 national and international companies added much value to the study, particularly at the sector level.

The process of preparing and finalising the report was carried out under the overall direction of Ms. Dinravy Khorn, Senior National Project Manager, UNDP Insights for Action Initiative. Useful guidance and comments were provided by Robert Glofcheski, UNDP Chief Economist for the Sub-region, and the UNDP Poverty Cluster. Additional support was provided by the Insights for Action team, including Brooks Evans, Farah Abdessamad, Margaret Lamb, Rosaleen Martin, Raksa Pen, Sovannara Lim, and Pidor Chhay.
1. INTRODUCTION

This report summarises the findings of a study on Cambodia's competitiveness and policies to improve it. Cambodia moved up the World Economic Forum (WEF) competitiveness ranking and increased its rank by one place to 109 in 2008-09 (out of 134 countries). While it was close to the bottom in 2005-06 (112 of 117 countries included in the rankings), this is no longer the case. Cambodia also moved up 15 places last year in the World Bank’s Doing Business Report to 135. However, the challenges are great. Cambodia is still near the bottom of many indices such as health and primary education with scores lower than most Association of Southeast Asian Nations (ASEAN) countries for which data are available. Governance constraints appear to be inhibiting competitiveness and more rapid economic growth.

Nonetheless, Cambodia has achieved remarkable recent progress as it continues to recover from civil conflict. It has achieved the highest economic growth rates in ASEAN in recent years and significantly reduced poverty. However, the current economic and financial crises are having a direct impact and will require rapid policy responses to avoid regression on these achievements. Cambodia has doubled incomes and productivity in a decade. However, the global economic crisis will cut growth from more than 10 percent each year from 2004-2007 to a possible contraction in 2009, making promoting competitiveness urgent.

The sectoral challenges to improving competitiveness are formidable. Now is the time for Cambodia to move up the value added ladder, to sustain growth, to further increase productivity and to diversify into other activities. How much longer can Cambodia compete on low wages in garments, especially now that external conditions and policies are affecting competitiveness in the sector? Rice is a major part of Cambodia’s economy, but agricultural productivity is still low. Tourism has boomed, but there are questions regarding its sustainability, and international tourist arrivals have declined in 2008. Cambodia is being affected by the global financial crisis with external capital drying up, banks exposed to real estate loans, declining tourist arrivals, garment exports declining and rubber prices dropping.

"Cambodia has doubled incomes and productivity in a decade. However, the global economic crisis will cut growth...making promoting competitiveness urgent."
This study has two components: national-level and sector-level analyses. The study finds that Cambodia has gone a long way in terms of growth and introducing new regulations in the past decade. But it still has a low per capita income and is unable to finance key economic fundamentals, such as infrastructure and skills. Investments are needed to move up the value added ladder, to diversify and improve productivity, growth and development. Cambodia is also weak in implementing rules and regulations, which otherwise seem liberal.

The extensive consultations that the study team had with government ministries, the private sector and development partners suggest that there is a consensus on long-term policy challenges: improve skills, build infrastructure, stimulate technological development and reduce corruption. But there is a further message: Cambodia now needs to consolidate its progress, nurture its potential and sustain its growth. This requires some institutional change and a reconsideration of industrial policy on the basis of a selected group of sectors. This report covers agriculture, garments and tourism as key drivers of economic growth and key exports, in addition to information and communications technology (ICT) and construction, which make important contributions to the rest of the economy by acting as a horizontal source of growth (or an ‘enabler’). Cambodia needs to continue supporting these industries in different ways, including through the working groups with private and public sector members. Promoting a flexible economy based on effective state-business relations is a must in the current economic climate.

We suggest that Cambodia adopt policies similar to some other ASEAN countries, which have used active, market-friendly industrial policies to move the economy onto a higher value added growth path. Much of the substance of this report aims to provide a well-informed basis for such active policies. It is hoped that the competitiveness analysis and consultations provide an adequate picture of what is needed.

This report summarises some of the key issues in maintaining and increasing competitiveness and productivity growth. Following an overview of national competitiveness, agriculture, garments, tourism, ICT and the construction sectors are addressed. Finally, policy issues are discussed.
2. WHAT IS COMPETITIVENESS AND HOW CAN IT BE MEASURED?

The country-level competitiveness analysis examines composite indicators of competitiveness and benchmarks Cambodia’s competitiveness in relation to various ASEAN countries for which data are available. There are various definitions of competitiveness (see Box 1). Competitiveness is always a relative and comparative concept. It can refer to structural characteristics (productivity, innovation, skills) and/or dynamic aspects (prices, macro-economy and exchange rates) at the firm, sector or country level. In some composite competitiveness indicators, it can refer to both structural and dynamic aspects.

Box 1: Definitions of competitiveness

<table>
<thead>
<tr>
<th>Source</th>
<th>Definition</th>
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<tbody>
<tr>
<td>WEF (2006)</td>
<td>“National competitiveness is the set of factors, policies, and institutions which determine the level of productivity of a country.”</td>
</tr>
<tr>
<td>Lall (1999)</td>
<td>“National competitiveness does not mean just being a low cost producer, but being competitive in activities that are conducive to income growth … competitiveness in industrial activities means developing relative efficiency along with sustainable growth.”</td>
</tr>
<tr>
<td>Porter (2006)</td>
<td>“Productivity ultimately depends on the microeconomic capability of the economy, rooted in the sophistication of companies (both local and subsidiaries of multinationals), the quality of the national business environment, and the externalities arising from the presence of clusters of related and supporting industries. Unless microeconomic capabilities improve, sustainable improvements in prosperity will not occur.”</td>
</tr>
</tbody>
</table>

Porter defines the competitive advantage of a nation as its capacity to promote business (both local and foreign) to use the country as a platform for economic activity. His ‘diamond of national competitiveness’ includes four ‘facets’ that determine the competitive strengths and weaknesses of countries and their major sectors. These include:

- **Factor conditions**: The efficiency, quality and specialisation of inputs available to firms (e.g. natural, human and capital resources and research and development, or R&D, infrastructure)
- **Related and supporting industries** (e.g. access to reliable suppliers)
- **Demand conditions** (e.g. size and sophistication)
- **Context for firm strategy and rivalry** (e.g. local context and rules, competition)

The national-level study examines Cambodia’s competitiveness on the basis of its performance relative to other ASEAN countries, mainly on the basis of annual indices produced by the WEF, World Bank and other organisations. The measurable indices of competitiveness that make up the WEF Global Competitiveness Index (GCI) include 12 components:

I. **Factor driven - Porter’s first stage of development**

1. **Institutions**: The legal framework and efficiency of government operations and private sector transparency (standards and accounting practices);
2. **Infrastructure**: Costs, modes and scope;
3. **Macro-economy**: Inflation, interest rates, debts, exchange rate; and
4. **Health and primary education**: Investment, quality and quantity.
II. Efficiency driven - Porter’s second stage of development

5. Higher education and training: Secondary and tertiary enrolment rates, training;
6. Goods market efficiency: Distortionary taxes (taxes that are not in the form of a lump-sum), restrictive and discriminatory rules on foreign ownership or Foreign Direct Investment (FDI);
7. Labour market efficiency: Flexibility, incentives and gender equity;
8. Financial market sophistication: Risk capital and loans, capital availability, regulation of security exchanges, venture capital;
9. Technological readiness: ICT access and usage, penetration rates and regulation, whether technology used was invented within the country in question, level of technology readily available; and
10. Market size: Trade is considered a substitute for domestic demand in determining the size of the market for the country’s firms, foreign and domestic markets included.

III. Innovation driven - Porter’s third stage of development

11. Business sophistication: State of cluster development, nature of competitive advantage, value chain breadth;

Figure 2: Porter’s ‘Diamond’

These 12 sub-indices are divided into three stages of development, drawing on the work of Porter (1990):

- The first four pillars of competitiveness correspond to Porter’s first stage of development. In the first stage, the economy is factor driven and countries compete based on their factor endowments, primarily unskilled labour and natural resources.
- Pillars 5-10 correspond to Porter’s second stage of development. The efficiency stage is when countries’ wages rise and they begin to develop more efficient production processes and increase product quality (this is also referred to as the investment-driven stage).
- The final group, pillars 11 and 12, corresponds to Porter’s final stage of development, the innovation phase, where countries are able to sustain higher wages and associated stan-
dards of living only if their businesses are able to compete with new and unique products.

There are pros and cons to using composite indicators as a tool to track relative competitiveness as discussed in this report. Although composite indicators of competitiveness can provide a benchmark relative to other countries, further analysis is required to determine the relative importance of indicators within a country. Policy makers should also reflect on how indicators of competitiveness reflect social and economic development objectives. The report, therefore, provides a more comprehensive analysis of competitiveness by using a combination of quantitative and qualitative tools, including the WEF competitiveness ranking and other composite indices, and country case studies, in addition to numerous consultations with Government, private sector representatives and development partners in Cambodia and the region. It includes a discussion of policy options with the potential to improve economic growth and competitiveness.
3. COMPETITIVENESS, ECONOMIC GROWTH AND HUMAN DEVELOPMENT: THE STRATEGIC ROLE OF GOVERNMENT

Improved competitiveness promotes economic growth, which in turn enhances the capacity to promote human development. Economic growth is essential for human development, poverty reduction and improved standards of living. No country has achieved sustained poverty reduction in the absence of growth. Hence, competitiveness matters not only as a critical force behind economic growth, but is also essential for the achievement of the Millennium Development Goals (MDGs). In the current global economic environment, competitiveness and growth are essential for social stability and job creation.

One of the broad effects of economic growth is to empower the poor by creating jobs and increasing incomes, by stimulating demand for goods and services produced by the poor, and by generating revenue for public services. Growth is also essential to allow for sustained progress in other areas. For example, economies with faster growth can afford to provide better education and health services and to invest in green technologies. Some countries, such as China and India, have enjoyed significant growth and poverty reduction in recent years, but others have struggled. Poverty reduction and hunger eradication goals will be particularly hard to achieve for countries that cannot maintain sustained growth.

Analysts suggest that economic growth alone has lifted more than 500 million people out of poverty over the past 25 years, accounting for over 80 percent of poverty reduction globally. Cambodia has achieved formidable growth and has significantly reduced poverty, although its rate of poverty reduction might have been better if the quality and inclusiveness of growth had been higher and more pro-poor.

Figure 3: Competitiveness and incomes

Competitiveness is at the core of economic growth. A quick observation reveals that countries with a higher competitiveness score are associated with higher Gross Domestic Product (GDP) per capita. Research suggests that poverty reduction cannot be achieved without significant growth in national incomes. Improved competitiveness promotes economic growth, which enhances the capacity to contribute to sustainable livelihoods and foster more rapid and inclusive growth.

Economic growth, furthermore, has spill-over effects beyond poverty reduction. Sustainable economic growth enhances human development by creating better job opportunities and an enabling environment in which businesses can grow, supporting greater accountability at all levels of decision making, and improving workers’ knowledge and skills. Similarly, greater human capital, an improved business environment and an equitable society generate more growth. This is a virtuous circle. Countries with the highest global competitiveness scores also have the highest scores on the human development index (see Figure 3). More research is indeed needed in this area to highlight the positive returns of investments in human development on competitiveness and growth, and the impact of competitiveness on human development achievements through increased revenues.

Box 2: What is human development?

“Human development combines the capabilities and basic needs approaches with a greater emphasis on the ability of human beings to lead the lives that they aspire to and the enhancement of the substantive choices that they have. The human development framework is anchored in the idea that while economic prosperity may help people lead freer and more fulfilling lives, education and health, among other factors, influence the quality of people’s freedoms. Human development helps people to lead more healthy, lengthy and knowledgeable lives.”


Economic growth is underpinned by increases in productivity, innovation and structural change, as well as by making markets work better for capital accumulation and increased labour force participation. Economic growth in Cambodia has been fuelled by these factors, largely in equal amounts, unlike Viet Nam where faster capital accumulation has been the largest contributing factor to its growth.
Approximately 80 percent of the Cambodian population resides in rural areas, and so it is important to improve rural employment opportunities for workers. Working towards enhanced competitiveness can accelerate inclusive national economic growth, which can also reach out to the rural areas and increase stability. However, growth is a complex and dynamic process that involves addressing the binding constraints to growth and to support a competitive economy. Increased globalisation has further intensified the need for countries to consider their competitive niche within the wider economy. Countries will only be able to capture market share if they are competitive and if they have a sufficient level of productivity. This can be even more challenging for developing and least developed countries (LDCs).

Much is known about what is generally good for growth (e.g. macroeconomic stability, property rights, a favourable investment climate, well-functioning factor markets — labour, capital, land, etc. — and good infrastructure and education). This often involves long lists of helpful government actions. However, appropriate policy prescriptions should be context specific, and should outline a prioritisation of economic policies backed up by empirical research on growth and an analysis of policies that have been successful elsewhere. The recently launched Growth Report: Strategies for Sustained Growth and Development by the Commission on Growth and Development argues that:

“It is relatively easy to identify the shared characteristics of the high-growth cases and easy to appreciate their collective importance. But it is hard to know how to replicate these characteristics … Policy makers learned by example; case studies had a pronounced influence; demonstration effects were surprisingly important. It is said that Deng Xiao Ping was strongly influenced by his first encounters with Singapore and New York City, on a visit to the United Nations.”

The report highlights the importance of leadership and sustained focus in driving this process of formulating growth and competitiveness strategies. Singapore followed an effective growth strategy and updated it as its economy evolved (see Box 3).

There is no universal set of rules for effective strategies that will promote pro-poor growth, competitiveness and human development within a particular country.

While economic growth and poverty reduction are indeed based on a vibrant private sector, there is an even greater need to set the right conditions under which this occurs. This may include solving market and coordination failures. The state, therefore, plays a crucial role in promoting growth and private sector development, and in building a competitive economy (such as removing market and coordination failures in areas like skills and technology). Building a competitive economy requires robust relations between state and non-state actors, particularly between national and international businesses.

Governments can stifle investment, competition, and private sector development, retaining cumbersome rules and regulations that often result in lower economic growth. Effective government planning, on the other hand, can make a huge difference in mapping out a path for future growth and human development, resulting in increased employment, government revenue, and the ability to better compete in the globalized economy.
Box 3: Singapore, building competitiveness and human development

Competitiveness promotes human development and, *vice versa*, enhancing human development is a key component of building a competitive economy. Singapore illustrates this very clearly.

Singapore was a less developed country in the 1960s, similar to Cambodia now. Since then, incomes in Singapore have risen remarkably, enabling much higher living standards and human development levels. Singapore has outpaced many economies that were developing equally in the 1960s (some of which are still developing) with some of the world's fastest growth rates. Technological progress, education and training and a targeted investment policy have been key elements of successful competitiveness strategies implemented by countries such as Singapore (Lall'). Building private sector capacity to understand and implement technical change is a slow process. There are market and coordination failures in learning, education and training and Singapore has successfully adapted its education system to improve its competitiveness and enhance learning processes over time. It used policy tools such as the Skills Development Fund to enhance the technical skills of the workforce.

Singapore's Economic Development Board (EDB), well-resourced and in tune with the private sector, tried to coordinate the demand of investors with education provision and target new investors according to the level of development over time. The EDB has been proactive in planning infrastructure or relevant support institutions in order to attract FDI. The investment incentive framework in Singapore has developed gradually. There was a deliberate attempt to gear the investment incentives package towards the level of economic development. It has done this successfully from the late 1960s. In the 1960s and early 1970s, employment was a major focus; in the 1980s it was capital-intensive projects and in the 1990s knowledge-intensive sectors were targeted. Singapore now has among the highest GDP per capita and competitiveness scores in Asia, and this shows the critical importance of heavy investment in human capital (education and health responsive to private sector) to achieve economic growth and poverty reduction.
4. NATIONAL COMPETITIVENESS ANALYSIS: CAMBODIA AND OTHER ASEAN COUNTRIES

I. Trends

- The IMF predicts that Cambodia’s Gross Domestic Product (GDP) is predicted to contract by 0.5 percent in 2009
- Cambodia has enjoyed high economic growth in recent years
- FDI has increased quickly and Cambodia has a relatively high stock as a ratio of GDP

II. Competitiveness analysis

- Cambodia has improved its WEF ranking as well as its World Bank Doing Business rank by 15 places between 2007-2008 and 2008-2009
- While the country is starting at a low base due to the civil conflict, Cambodia’s WEF competitiveness rankings remain near the bottom among ASEAN countries on criteria such as institutions, infrastructure, health and primary education, higher education and training, financial and business market sophistication, and innovation (see Annex 1 for details)
- Foreign investors and chambers of commerce suggested that some investment plans are abandoned and a large amount of FDI is potentially lost as a result of uncertainty of the implementation of laws and regulations. Cambodia performs poorly on the World Bank’s Control of Corruption Index (CCI) with an 8.2 percentile ranking (91.8 percent of countries scored higher). Poor linkages with domestic human resources and intermediate products were also frequently cited
- Country wide labour productivity is lower in Cambodia than in neighbouring countries (except Lao PDR)
- Cambodia has a low tax base at 8 percent of GDP versus 16 percent of GDP in Thailand
- Electricity prices are comparatively high and place a large burden on firms, and so the sector would benefit from increased competitiveness

III. Policy discussion

- Cambodia requires a more pro-active human resource policy, which is more coordinated with the private sector
- Cambodia should move away from negative investment incentives, such as tax breaks, to those with strategies encouraging foreign firms through the provision of good quality and appropriate skills and infrastructure
- Cambodia needs to re-evaluate Special Economic Zone (SEZ) policy
- The country needs to develop a targeted infrastructure policy
- Cambodia requires a regulatory framework that includes more efficient application of laws and consistent enforcement
I. Trends

This section looks at GDP per capita in selected ASEAN countries and at Cambodia’s position in terms of ASEAN competitiveness indicators. It then examines Cambodia’s national competitiveness in terms of (A) education, (B) labour productivity, (C) ease of doing business, (D) government capacity, (E) Foreign Direct Investment (FDI), and (F) electricity prices. It concludes with a discussion on policy options.

Since 1993, economic growth in Cambodia has been steady and relatively strong. It has accelerated over the past five years, reaching an impressive 13.3 percent in 2005 and 10.2 percent in 2007. GDP per capita has grown at a constant rate, averaging 8 percent a year between 1993 and 2007 (see Figure 5), comparable with the performance of Viet Nam and Indonesia. As a result, the level of output per capita is now on average close to that of Viet Nam.

Figure 5: Gross national income per capita (purchasing power parity) in selected ASEAN countries, 1980-2007 (current international $)

Despite recent growth, Cambodia’s policy challenges are numerous. The research findings suggest that Cambodia needs to promote new thinking to combat negative effects from the global economic downturn, which is directly affecting Cambodia. Cambodia needs to enhance competitiveness and productivity growth using a new set of policies.

II. Competitiveness analysis

The country level analysis and consultations suggest that although Cambodia’s rankings for competitiveness moved up – increasing by one place to 109 in 2008-2009, and 15 places in the World Bank’s Doing Business Report to 135 – there is still work to be done. Cambodia performs very poorly on the World Bank’s Control of Corruption Index (CCI) with an 8.2 percentile rank (91.8 percent of countries scored higher). Consultations with various embassies representing the world’s largest industrialised countries suggested that many of their countries’ companies did not invest in Cambodia due to corruption or perceived corruption because their own national laws prevent engaging in corrupt practices. This suggests that both large FDI and skills...
transfers are not attracted. Poor linkages with domestic human resources and intermediate products were also frequently cited.

Table 1 provides a comparison of rankings on the main WEF competitiveness indicators (more details on the 12 sub-components of WEF competitiveness can be found in Annex 1). Although the table shows that Cambodia is at the bottom of most ASEAN rankings and among countries for which data are available, this is not so for all sub-indicators.

Table 1: WEF competitiveness indicators, country rankings in ASEAN

<table>
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<tr>
<th></th>
<th>Brunei</th>
<th>Cambodia</th>
<th>Indonesia</th>
<th>Malaysia</th>
<th>Philippines</th>
<th>Singapore</th>
<th>Thailand</th>
<th>Viet Nam</th>
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<td>GCI 2008-2009</td>
<td>39</td>
<td>109</td>
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<td>Institutions</td>
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<td>Health and primary education</td>
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<td>Market size</td>
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<td>Business sophistication</td>
<td>89</td>
<td>110</td>
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<td>14</td>
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<tr>
<td>Innovation</td>
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<td>22</td>
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<td>11</td>
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</table>

Source: WEF Global Competitiveness Report 2008-2009
Note: Data for Lao PDR and Myanmar are not available. A total of 134 countries have been included.

Figure 6 illustrates the underlying competitiveness scores (on a scale of increased competitiveness from 0 to 7). Cambodia's score is below the average ASEAN score. Cambodia has particularly large gaps in the areas of education, financial market sophistication, technological readiness and infrastructure.

Figure 6: WEF competitiveness scores, ASEAN average and Cambodia

Note: 0 is least competitive and 7 is most competitive. ASEAN is simple average. Data for Lao PDR and Myanmar are not available.
A detailed discussion of Cambodia’s scores in comparison with other ASEAN countries suggests that:

- Cambodia and the Philippines are weakest on institutions, especially issues such as intellectual property protection and property rights.
- Cambodia is weak in terms of road quality and quantity of infrastructure.
- Cambodia has done relatively well on macroeconomic stability.
- Cambodia received high scores for labour and goods market efficiency.
- Cambodia scores lowest on health and primary education, and is especially weak on higher education and technological readiness, business sophistication and innovation.

Table 2: Pillar 1 (institutions)

<table>
<thead>
<tr>
<th>Institutions</th>
<th>Brunei</th>
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<td>A. Public institutions</td>
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<td>38</td>
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<td>Intellectual property protection</td>
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<td>20</td>
<td>123</td>
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<td>Judicial independence</td>
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<td>Strength of auditing and reporting standards</td>
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<td>Efficacy of corporate boards</td>
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<td>Protection of minority shareholders’ interests</td>
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### Table 3: Pillar 4 (health and primary education)

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<td>Tuberculosis incidence</td>
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<td>Business impact of HIV/AIDS</td>
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<td>Infant mortality</td>
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<td>B. Primary education</td>
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<td>Quality of primary education</td>
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<td>Primary enrolment</td>
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<td>20</td>
<td>113</td>
<td>110</td>
<td>46</td>
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</tr>
</tbody>
</table>

### Education

A specific example where Cambodia is still falling far below other ASEAN countries is in education, receiving the lowest rank compared with other ASEAN countries (for which data are available) included in the WEF Global Competitiveness Index for almost all indicators included within ‘higher education’ (see Figure 7).

![GCI, higher education and training, 2008-2009](source: WEF Global Competitiveness Report 2008-2009)
Labour productivity

Increasing slowly in recent years, country wide labour productivity is lower in Cambodia than in neighbouring countries (except Lao PDR). It is, for example, three times lower than labour productivity in Thailand, and while it was comparable to that of Viet Nam in 1993, the gap between the two countries widened initially.

Figure 8: Labour productivity in selected Asian countries, 1993 and 2005 (annual output per worker in constant US$ 2000)

Source: Author’s calculation from United Nations Statistics (UN 2008)

Ease of doing business

There are a number of promising observations. Cambodia improved its World Bank Doing Business rank by 15 places in one year, between the 2007-2008 and 2008-2009 rankings, mainly as a result of credit reforms. In the 2008-2009 Doing Business rankings, Cambodia outperforms the Philippines and Lao PDR (see Figure 9).

Figure 9: Ease of doing business ranks 2008-2009 (high score equals less ease)

Capacity of government

The institutional and resource capacity of the Cambodian government to address well-known challenges remains limited. Cambodia performs poorly on sub-indices such as education, technology and infrastructure, yet these are key fundamentals for competitiveness. The tax base is still far too low to finance these public goods (see Figure 10), so development partners have had to step in. But will aid continue in the near future? And what can Cambodia do in the short-term, given the economic downturn?

Figure 10: Tax revenue as % of GDP

Source: World Development Indicators for 2006 or nearest year

Foreign Direct Investment

Cambodia has attracted an increasing amount of FDI into the country (see Figures 11 and 12), with a relatively high stock per Gross Domestic Product (GDP) ratio. It should be noted that approved FDI is higher than actual FDI. However, the total value is still low compared with many other ASEAN countries and the quality and local linkages often remain limited. FDI is expected to weaken further in 2009. In 2008, construction approvals, a leading indicator of FDI, were down 40 percent from 2007 according to the National Bank of Cambodia’s quarterly Balance of Payments. At the end of 2008, FDI stood at US$125 million.

It is not just the quantity of FDI that matters but also its quality. Good quality FDI has positive static and dynamic effects in areas such as employment and incomes, capital formation, market access, structure of markets, technology and skills, fiscal revenues, and political, cultural and social issues.

Electricity

Interviews suggest that poor service and the high cost of utilities create heavy burdens on businesses. Cambodia should consider attracting further electricity investment and increasing the competitiveness of this important horizontal enabler that remains one of the main binding constraints to competitiveness.
Figure 11: Inward FDI stock as % of GDP, 1980-2007


“...It is not just the quantity of FDI that matters but also its quality.”

Figure 12: FDI in Cambodia by sector: Approved by CDC (US$ m)

Source: Council for the Development of Cambodia

Figure 13: Comparative analysis of electricity prices

Source: ODI analysis of regional tariffs and Electricity Authority of Cambodia 2007
Cambodia established an electricity regulator and passed the Electricity Law in 2001. However, there is no national grid and most towns are supplied through isolated systems. A mere 10 percent of the population (mostly in Phnom Penh) consumes 90 percent of the electricity. Demand among existing grid customers is projected to grow by around 13 percent per year (2003-2008), but this figure does not take into account growing unmet demand. The problem is particularly acute in rural areas. Although the average tariff is around US$0.16 cents/kWh, the tariffs of rural electricity enterprises (REE) range from US$0.30-0.90/kWh. Only 6 percent of rural households have access to electricity, and half of those use individual power generating units. However, the RGC has announced plans to increase rural electricity coverage from around 10 percent at present to 70 percent by 2030. Measures put forward to achieve this ambitious target include:

- Importing cheaper electricity from Vietnam and Thailand through improved cross-border links and coordination with the development of the Greater Mekong sub-region grid;
- Increasing competition in fuel procurement and restructuring state-owned energy providers;
- Increasing REE access to finance, technical support and licences issued by the regulator; and
- Supporting the development of lower cost generation sources including renewables.

### III. Policy discussion

Having examined trends in (A) education, (B) labour productivity, (C) ease of doing business, (D) government capacity, (E) FDI and (F) electricity, this section focuses the policy discussion around the need to increase quality FDI as well as providing improved public goods. It highlights the importance of investment policy, in particular special economic zones (SEZs), human resource policy and high quality skills, infrastructure policy and suggestions for an improved regulatory framework.

**A more pro-active human resource policy, which is more coordinated with the private sector**

A new push is required to make secondary and higher education responsive to a changing economy. The university sector needs to be rationalised.

**Rethinking industrial policy using a more targeted approach in investment policy**

Cambodia has around 19 SEZs, some more active and successful than others. It is not guaranteed that all SEZs will work, however, as has been seen in other Asian countries, they may help. With a clearer SEZ strategy Cambodia might be more effective in attracting the type of investment it wants.

The RGC needs to think about investment policy strategically. The country need to move away from investment incentives without strategies towards encouraging foreign firms through the provision of good quality and appropriate skills (e.g. training centres) and infrastructure. At the same time, Cambodia needs to move away from single ministries working individually towards joint responsibilities for investment policy; and away from screening and using discretionary hurdles towards encouraging and enabling investors. The management of a revised industrial policy in Cambodia is not straightforward, and this could benefit from further government attention (see Box 4 for an example of an investment policy in Singapore). However, some measures could include:
• **Rationalising the number and scope of special economic zones (SEZs)**
  New thinking needs to determine the economic rationale for the location of SEZs and their specialisation in terms of activities. It makes sense for lightweight products such as electronic manufacturing to be near the airport (Phnom Penh SEZs) due to the high value to weight ratio; factories that assemble goods that need shipping should be close to the Sihanoukville SEZ; and firms that need cheap electricity should be located near the border.

• **Rethinking the way that SEZ firms link with service providers**
  The major point about Porter’s work is that firms in clusters are more competitive because they can build on more reliable and competitive support services, such as cleaning and security services and education and technology services. If Cambodia does not exploit the clustering of firms and actively plan clusters (in a private sector friendly way), opportunities for productivity and growth spill-overs will be missed.

• **Moving towards offering positive incentives**
  The RGC should offer public goods, which contribute to development, rather than negative incentives (tax incentives account for a few percentage points in GDP).

**A targeted infrastructure policy**

Infrastructure policy needs to plug key gaps such as electricity supply, road quality and water and sewage systems.

**An appropriate regulatory framework**

A regulatory framework with adequate and non-discretionary implementation of rules and regulations, which offers more efficient laws, clearer *Prakas* and much clearer, yet market-friendly, implementation rules is needed. A new push for non-discretionary implementation is required. More emphasis should be placed on Aid for Trade (an initiative which emerged at the World Trade Organisation (WTO) to help developing countries implement and benefit from WTO rules) to help finance improvements in the regulatory framework.

Cambodia now needs to continue to move the economy forward, as the current economic crisis requires decisive action.

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**Box 4: Investment policy in Singapore**

Industrial policy in Singapore involved the use of effective incentives, interventions in skills development, infrastructure planning and regulatory reform. Investment incentives can influence the operations and types of multinationals that host countries attract when FDI policies and other policies move in tandem with the economic realities in the country and when they are effective and linked to performance.

Singapore’s Pioneer Industries Ordinance of 1959, one of many tax incentives, reduced corporation tax for a fixed period of time provided that firms, both foreign and domestic, developed ‘new’ products. This policy appears to have been successful, since the share of manufacturing output by firms with pioneer status increased from 7 percent in 1961 to 51.1 percent in 1971 and 69 percent in 1996. The Ordinance was part of an industrial strategy, which focused on attracting employment-generating multinationals in the 1960s and early 1970s. After wages rose and labour was upgraded, the focus shifted to targeting capital-intensive projects in the 1980s and knowledge-intensive sectors in the 1990s. To tackle the skill shortages, the Skills Development Fund was set up to encourage investors to upgrade the labour force.
Firms were further encouraged to recruit foreign workers and the regulatory framework was changed to attract foreign universities and business schools. The EDB’s regionalisation programme incited firms to set up skills-intensive regional headquarters in Singapore, with labour- and land-intensive production processes transferred abroad. It also engaged in promoting clusters of firms around key sectors and value chains on the basis of infrastructure development and access to investment funds.

Box 5: Crisis as opportunity: Rethinking investment strategies

In the early 1990s it was recognized that Costa Rica was losing competitiveness in unskilled-labour intensive industries. As a result, it decided to focus its FDI attraction efforts on fewer sectors; this included sectors that were a better match for its factor endowments – at that time, higher skilled labour – such as electronic and telecommunications industries. This was subsequent to a considerable increase in education expenditure. The decade of the 1980s was worse than a ‘lost decade’ in terms of education for Costa Rica, enrolment rates fell dramatically only to recover to 1980 levels by the end of the 1990s.

In order to ‘catch-up’, policy measures included the installation of computer labs in schools, a program that was later recognised around the world for two revolutionary characteristics: it concentrated on elementary schools, so that it could make a deep impact on students; it did not focus on teaching computer skills, but used the computer as a tool to aid in the general learning process. The provision of assistance in training – one of a raft of support provisions – is said to have influenced a major inward investment decision by the electronics company Intel.

Other policy measures included the development of clusters in certain skilled-intensive sectors, complemented by more general policies such as: improved telecommunications (particularly for the Internet and data transmission); improved infrastructure through private sector participation; improved Intellectual Property Rights protection; in addition to a tri-partite arrangement between the government, donors and non-profit organisations to promote skills and formulate an investment strategy based upon this.

FDI policy included a package of incentives that had clearly defined procedures and conditions and were not subject to arbitrary negotiation - efforts to attract investors were channelled through a foreign investment promotion agency. Such a strategy was more ‘proactive’ as opposed to ‘reactive’. Costa Rica marketed itself on the premise that ‘small is beautiful’. Its size meant that support was mobilised within the political and business communities within very short periods of time which was amenable to investors. The strategy soon paid off.

Source: ILO (1999); Rodriguez-Clare (1999); and the Foreign Investment Advisory Service (1998)
5. AGRICULTURE

I. Trends

- Agriculture generates 32 percent of Cambodia’s GDP and employs 4.75 million workers of the 8 million labour force.
- Agriculture has grown quickly since the early 1990s compared with other countries, at just under 4 percent a year; ahead of population growth, but behind other sectors.
- Most farming is for subsistence and formal agricultural exports are limited.
- Paddy remains the primary crop with 6.8 million tonnes produced in 2008.
- Production of cassava has risen dramatically from just 0.2 million tonnes in 2002 to 3.4 million tonnes in 2006.
- The price of rubber has dropped almost 50 percent between 2008 and 2009. Currently there are around 70,000 hectares of rubber and this could rise to 300,000 hectares within a decade.

II. Competitiveness analysis

Strengths

- Cambodia has reasonably good arable land and low cost labour.
- Cambodia can produce crops at low unit costs, but only due to very low wage labour and spending little on inputs from off the farm, such as manufactured fertiliser, crop protection chemicals, high-quality seed and machinery.
- Cambodia has two rapidly growing neighbours and is close to China, potentially the world’s largest market for agricultural surpluses.

Challenges

- The main disadvantages include the low education and health of the rural workforce, limited roads and irrigation structures, low access to finance, and the inability of institutions to coordinate the supply chains and to ensure both the quality and the level of technology used.
- Most of the growth in farm output can be attributed to increased use of labour and small additions to the arable area, with rather less growth due to improved productivity.
- Productivity per day worked is quite high, often US$10 a day or more, but since the land generates relatively few days of work a year, the overall output per person is low.
- The proportion of land irrigated is among the lowest in region, which means that most areas produce only one crop a year, which is one of the main constraints to higher output.
- Crop production per hectare is low due to the limited use of off-farm inputs.
- Market access is limited by the quality of transport infrastructure.
- Capacity for milling in Cambodia is limited, and there are only a handful of large-scale mills that process rice to a high quality and are able to export.

III. Policy discussion

- Effective sequencing for improvements is required since the needs are many, and the capacity to work on all of them at the same time is limited.
- Given the generally low yields, where yields can be increased at low cost. This makes sense, especially given the volatility of international commodity markets.
- Rural credit could be expanded by increasing land titling so that banks can use land as collateral; more credit could then increase investment and productivity.
- The highest returns on investment will accrue to investment in rural access roads.
- Working supply chains linking farmers to markets need to be bolstered.
- Increasing production of oil palm and vegetables could bring high economic benefits.
- Government investment in the uplands would be beneficial, while taking land rights into account.
I. Trends

Agriculture is very important for Cambodia, yet its productivity is comparatively low. A large majority of Cambodians live in rural areas, and most of the population depends to some degree on agriculture for their livelihoods. With up to 90 percent of the poor located in rural areas, poverty is concentrated in the countryside where average incomes are less than half the national average.

Agriculture generates 32 percent of GDP and employs 4.75 million workers out of a labour force of eight million. The sector has grown quickly since the early 1990s in comparison with other countries, at just under 4 percent a year, ahead of population growth, but behind that of other sectors. Most of the growth in farm output can be attributed to increased use of labour and small additions to the arable area, with rather less to improved productivity.

Most farming is primarily for the subsistence of the farm household with only a small fraction marketed. The country imports significant amounts of fruit and vegetables and agricultural exports are limited – although this may understate the volume of informal exports of paddy rice, livestock and fish across the borders to neighbouring Thailand and Viet Nam.

II. Competitiveness analysis

Most Cambodian agriculture uses few inputs from off the farm (manufactured fertiliser, crop protection chemicals, high-quality seed and machinery, etc.) resulting in low value of crop production per hectare (Figure 14). On the other hand, productivity per day worked is quite high – often US$10 a day or more – but since the land generates relatively few days of work a year, and much of that concentrated in the wet season, the overall output per person employed in farming is low. Much of this is due to the low proportion of land that is irrigated, among the lowest in region, which means that most areas produce only one crop a year.

Figure 14: Value of crop production per hectare, Cambodia and other Asian countries

Source: FAOSTAT data
Cambodia can produce crops at low unit costs (see Figure 15), but only thanks to very low cost labour and spending little on inputs from off the farm. The supply chains that link farmers to inputs such as fertiliser and markets are weakly developed. Many rice mills, for example, work to a fraction of capacity due to a lack of working capital. Transport costs can also be high.

**Figure 15: Costs of rice production, Cambodia and other Asian countries**

A significant part of the paddy collected is shipped not to Cambodian mills, but exported directly to Thailand and Viet Nam. There is demand in these neighbouring countries and, as has already been seen, Cambodian rice appears to be cheaper to produce than rice in these countries.

Capacity for milling in Cambodia is limited. However, much of the capacity constraint is not physical. On the contrary, many operate at well under their physical capacity, raising their costs of operation. The problem is more frequently one of working capital. The commercial mills pay spot prices for rice, but consign their milled output to trusted traders with payment made when the rice has been sold by the trader. With little or no access to bank credit, commercial mills simply run out of working capital to buy enough rice to keep the mill operating at capacity.

**Exporting milled rice**

There are, in addition, a handful of large-scale mills that process rice to a high level of quality and are able to export it. One of these is the renowned case of Angkor Kasekam Roongroeung (AKR) that contracts with farmers to produce premium rice (see Box 6). Another is operated by a family business conglomerate. In both cases, the mills sell their rice to markets in Europe, Hong Kong and Taiwan at premium prices. Apparently demand is not a limitation, nor is ship-
ping the rice out through the port of Sihanoukville, finding buyers in distant European markets, or meeting demands for branding and quality in those markets.

Indeed, when interviewed, the owners of these two mills both reported plans to expand their operations – although in both cases the sums likely to be needed, in the region of US$20 million – were beyond the ability of the enterprise or conglomerate to fund, and either partners or bank loans would be needed. Their plans were based on buoyant demand from overseas buyers. In one case, a recent potential buyer from West Africa was interested in purchasing as much as 200 kilotonnes.

**Margins in the rice chain**

Margins in the rice supply chain are modest. Only two actors in the chain seem to gain returns above the opportunity costs of capital: the miller and the farmer. In the case of the millers, their returns may not be as handsome as the 27 percent margin indicates, since they rarely operate at capacity and thus have high fixed costs. Some farmers, on the other hand, appear to get good margins, which helps explain why the implicit return on labour in rice farming in Cambodia is relatively high.

Unofficial fees in marketing have been reduced a great deal according to ACI/CC (2006), but they have been replaced by official charges for weighing and parking trucks. In one case, a 20-tonne truck running from Kampong Cham to the Thai border spent US$172.50 on operating costs, but another US$127.50 on fees and bribes. Crossing borders adds another layer of charges to moving rice.

**Cassava**

Cassava production has risen dramatically from just 200,000 tonnes in 2002 to 2.2 metric tonnes in 2006, largely in response to a booming international market.

The cassava supply chain, in broad terms, consists of two flows. Most cassava comes from small farms in Kampong Cham and Battambang provinces where it is grown with few inputs other than land and labour. Cassava’s advantage is that it is not very demanding in land quality or cultivation, or the timing of the harvest. It thus fits in well with smallholder farming systems. Similar to surplus paddy rice, 70-80 percent of the cassava marketed is exported to neighbouring countries that have large factories set up to meet domestic and international demand.

A key issue in the value chains is getting a reliable supply of cassava to keep the processing plants working at capacity. This is particularly true for the nine main domestic factories, four of which were set up in 2008 or expected to come on line in 2009.

**Rubber and other tree crops**

Rubber has considerable potential in the degraded forest lands of Cambodia (these soils and climate are suitable for rubber) where it offers good returns on land and labour. It is also well-adapted to provide tree cover, yielding environmental benefits. Currently around 70,000 hectares of rubber can be found, but with new plantings taking place in small, medium and large farms, it is expected that this could rise to 300,000 hectares within a decade.

The demand for rubber comes mainly from China, where almost all of Cambodia’s rubber is sold. This rubber is, however, sold at discounts of 10 percent or more from international prices due to a lack of knowledge about, and certification of, Cambodian rubber.
Box 6: Angkor Kasekam Roongroeung, exporter of premium rice

AKR is the family business of an entrepreneur who gained experience with the fragrant Neang Malis (NM) variety of rice while in Thailand. In 2001 he returned to Cambodia and set up a large-scale rice mill — now with a capacity of 30 tonnes per hour — in areas close to sandy soil suitable for the variety found in Kampong Speu, Kampot and Takeo provinces.

Under their business model, AKR advances the farmers’ NM seeds and promises to buy up the output at a guaranteed price with a subsequent bonus depending on market conditions at the time of milling. Farmers are enrolled in groups. The company offers technical assistance on growing NM and insists that manufactured fertiliser not be used because this spoils the taste of the variety. More than 100 field staff also offer lessons on other farm enterprises such as fish and cow production as well as natural fertilisation.

Building up the base of contracted farmers has taken time and has proceeded by trial and error. The growers are small-scale, with an average holding of 1.7 hectares. Direct contact with them did not work well, and after some experimentation the current system was adopted. This system operates through established commune-level farm associations, the operation being overseen and sanctioned by local leaders at association, village and commune levels.

Figure 16: Production-export chains of rice in Cambodia

The number of contracted farmers has expanded from 2,000 in the first year to approximately 45,000 at present.

In recent years AKR has exported 50-75 kilotonnes, mainly to eight European countries, as well as Hong Kong. Demand is not a limitation. There are plans to expand the mill and to recruit more growers. No problems were reported in exporting through Sihanoukville.

Given the conditions under which the rice is grown, the rice could be certified as organic. But AKR has not done so, largely due to the cost of certification. In any case, they have a premium product that sells at a good price internationally. The key to the business is maintaining the quality of the rice.

Sources: Cai et al 2008, ACI/CC 2006, interviews
Rubber farms are in transition from the majority of the rubber groves being government run, following the nationalisation of former commercial plantations, to a more mixed structure of privatised estates, new plantations on economic concessions, and medium and small private rubber lots. The potential for small-scale growers linked to estates and processing units that would share benefits may not happen as new land for rubber is monopolised by large-scale operators with economic concessions.

Cashew and oil palm

Cashew nuts are already grown, but in small areas and the nuts are mainly exported unprocessed to Viet Nam. A familiar range of problems affects the crop: low technology and productivity in production, high transport costs, lack of credit, and insignificant development of local processing capacity.

Surprisingly little oil palm is grown in Cambodia considering the natural conditions and the booming markets for palm oil that have been seen in recent years. In 2005 the best-known and probably largest plantation was reported to still be making losses due to high production costs (ACI 2005). It is not clear that it has yet begun to make money.

Yet oil palm has much to commend itself to Cambodia. The crop should grow well on previously forested land, although given Cambodia's level of deforestation, existing forests should be preserved as an asset. It can be grown on almost any scale, with a range of production intensities reflecting access to capital and inputs. While small-scale processing tends to get lower oil extraction rates, it is feasible, requires little capital and can create many jobs. Above all, demand for vegetable oil is high on world markets and tending to rise as the national diets in countries such as China increasingly include oils. Palm oil has industrial uses and makes a prime feedstock for biodiesel. For all these reasons, there is every expectation that demand in the medium term will be high, initially as an export crop, with China the prime destination, and then with the potential to increasingly serve the domestic market.

Vegetables

With the majority of vegetables consumed in the cities coming from Viet Nam, there is considerable scope for producing more vegetables. Given the often very high labour demands of vegetable production, growing these is ideally suited to small farms that have the labour to do so. Returns can be very high per unit of land. Vegetables are valuable enough to justify irrigation in the dry season and their production at this time can create jobs in rural areas when they are most needed.

But although around 230,000 households grow them, the potential is underdeveloped, limited by lack of expertise and capital in production, weakly developed marketing chains exacerbated by high transport costs, too little produced to a quality standard, and gross insufficiency of marketing facilities. Hence not only does production fail to satisfy the national market, but also some potential exports to the more affluent parts of ASEAN and China are not being realised.

Overall

The sector has the advantages of some reasonably good arable land and low cost labour, but in almost every other dimension – education and health of the rural workforce, roads and irrigation structures, access to finance, institutions to coordinate the supply chains and ensure quality and the level of technology used – Cambodia is at a disadvantage.
III. Policy discussion

A major challenge in Cambodia is finding an effective sequence for improvements. Since the needs are many, the capacity to work on all of them at the same time is limited.

For the immediate future, it may be wise to build on Cambodia’s current competitive advantage in agriculture (the existence of underused land and low cost labour), while complying with the Land Law and land rights of all citizens. Cambodia has two rapidly growing neighbours and is close to China, potentially the world’s largest market for agricultural surpluses.

What then needs to be done to link Cambodian agricultural supply advantages to neighbouring and regional demands for food and raw materials? The need for improved transport is clear. Given that the cost of moving goods rises geometrically in the sequence from surfaced to gravelled to dirt and impassable roads, it is likely that the highest returns will accrue to investments in rural access roads.

Working supply chains linking farmers to markets need to be created. Vertically integrated chains where dominant actors arrange for critical institutional functions to be carried out have been successful in aromatic rice and tobacco. Such vertical supply chains should be closely monitored by the private sector to avoid anti-competitive behaviour.

While there may not seem to be much of a role for the RGC in promoting such chains, it may wish to be more proactive, especially in the uplands. Relatively large-scale investments in tree crops in the uplands may lead to the establishment of processing plants served by large-scale plantations, thereby reducing transaction costs. Consideration of large-scale plantations should take the Land Law into account. But given the abundance of labour, small-scale production of tree (and other) crops may be less costly and more flexible and create more jobs. There is thus a case for government to ensure that small farmers have access to land in the uplands, and to encourage processors to source supplies from small farms. Brazil has used tax incentives to get bio-diesel plants to obtain feedstock from small farmers, with some success though government incentive schemes should account for the cost of deforestation, versus benefits of considerations such as new possible carbon funding for LDCs.

In the central lowlands, dry season land and labour are underused factors of production that could be put to use by irrigation. Asian experiences over the past 30 years suggest that irrigation works best when it uses either groundwater through tubewells, or surface irrigation on a scale small enough to allow the farmers to participate effectively in the management and operation of schemes.

Given the low yields seen in much of Cambodian agriculture, it may appear that raising them is a priority. Rural credit could be extended by rapidly increasing land titling since banks use land as collateral. Where yields can be increased at a low cost (as applies sometimes with improved varieties of plants) this makes sense, but some care needs to be exercised when yields can be raised only by substantially increasing costs. Many of the world’s most successful agricultural export economies (e.g. wheat from the US, rice from Thailand and dairy products from New Zealand) operate with relatively low yields per hectare or animal. They compete not by getting the highest yields, but by keeping costs low.
### Table 3: Strengths, weaknesses, opportunities and threats in agriculture

#### Strengths

1. Land resources are available
2. Water resources are available
3. Abundant manpower is available in rural areas at low labour cost
4. Ministry of Agriculture, Forestry and Fisheries (MAFF) and Ministry of Water Resources and Meteorology (MoWRAM) have good human resources potential
5. Policy and/or strategic frameworks are developing for MAFF and MOWRAM
6. Stakeholders are committed to and recognise the importance of the sector (Government, external development partners (EDPs), non-governmental organisations (NGOs) and farmers)
7. Diverse agro-ecosystems are available, with many types of land and cultivars
8. Developing focus on community empowerment and engagement, through inter alia community councils, farmer water user community and farmers’ organisations
9. Agri-business is developing

#### Weaknesses

1. Institutional capacity, management and project implementation by MAFF and MOWRAM are weak
2. Water resources are highly variable by season and location, and agricultural water management technology is poorly developed
3. There is limited investment capacity or interest in investing in agriculture
4. Technology transfer is weak and farmers and extension workers have a low level of knowledge, access to technology, and skills
5. Soil fertility is low in many areas
6. Socio-cultural weaknesses include low community solidarity, vulnerability of farmers to landlessness, a cultural focus on subsistence agriculture: “Rice first, fish second”
7. Information asymmetry (inconsistency) among stakeholders
8. The productivity of agricultural labour, land and water is low (resources are used inefficiently)
9. There is weak access to markets
10. Legal instruments for agriculture and water (A&W) management are inadequate

#### Opportunities

1. Improvement of governance, including RGC commitment (the Governance Action Plan), policy definition and political stability
2. Market development and integration with the regional and global economy
3. Strong support from external development partners for investment in A&W
4. Science and new technologies
5. More fully exploit natural resources (water and land) that presently are under- or un-utilised
6. Availability of investment funds, including incentives, private funds, and rural credit services
7. Decentralization and de-concentration policy

#### Threats

1. Market changes, including highly competitive international markets
2. High cost of oil and gas
3. Political circumstances, including competing demands for RGC funds from other sectors
4. Legal circumstances, including continued failure to enforce laws on land, water, forests, etc.
5. Natural disasters
6. Degradation of the environment
7. Failure to implement governance, judicial and other reforms
8. Social and political changes, e.g. social conflict over access to water and land, labour migration
9. Decreasing EDP support for A&W

6. GARMENTS/LIGHT MANUFACTURING

I. Trends

- There were 51,000 job losses between September 2008 and March 2009 with the workforce currently standing at 301,000, and 70 factories have closed since August 2008, with few new ones opening.
- The textiles and clothing industry (T&C) contributed around 12 percent of GDP in Cambodia in 2007 with 4 percent of the Cambodian labour force employed in the industry.
- The garment industry is predominantly foreign owned, as is also the case for other types of light manufacturing for export.
- Cambodia is highly dependent on clothing exports, similar to a number of other LDCs, but it is by far the highest among all ASEAN countries.
- There is a very high dependence on a limited number of product lines with the top five product exports accounting for 65 percent of total garment exports in 2005.
- Since 2005 the country has lost relative market share to other exporters of textiles and clothing because the sector is less productive compared with its neighbours.

II. Competitiveness analysis

Strengths

- Cambodia is located within a world manufacturing hub.
- Skills were not considered to be a major constraint to the assembly businesses that were consulted, but higher wage management positions are largely held by foreigners.
- Lead times are low in Cambodia given the short shipping distances from other ASEAN partners.
- Good access to policy makers through the private sector working groups was ranked highly by the garment manufacturers surveyed, as was the favourable investment climate.

Challenges

- Between 2001 and 2005, Cambodia experienced the slowest increase in labour productivity in manufacturing industries compared to all other ASEAN countries for which data are available.
- Preferential trade access and low labour costs are considered to be the main motivations for garment manufacturers to locate in Cambodia, but these have both been eroded.
- While investment laws in Cambodia are very liberal, these policies will likely need to be re-examined.
- Cambodia appears to be competing in some products by undercutting rivals in terms of increasing the quantity supplied at lower prices, versus supplying greater quantities at stable or increasing prices, increasing value added, or moving to a more stable supplier position.
- The challenge for Cambodian producers is whether they can continue to be cost competitive against China after the removal of safeguards, while maintaining labour standards and increasing productivity and value added.

III. Policy discussion

Short-term priorities

- Increase productivity by promoting skills/training. There will be a need to further promote skills to increase the sophistication of product exports and to upgrade products.
- Improve industrial relations. Industrial relations are a major concern for garment manufacturers in ensuring Cambodia’s competitiveness and reputation.
- Streamline customs procedures. While the investment climate is generous and attractive to assembly types of operations, customs procedures could be significantly improved.
Long-term priorities

- Attract more garment value chain functions. Cambodia should seek to increase the value-added contribution of the sector, such as by acquiring more functions within the value chain.
- Build on the experience of the garment sector to attract and promote other types of light manufacturing. Produce products that are ‘close’ to their current production structure. This suggests a more targeted approach to attracting and selecting investment.

I. Trends

The emergence of the garments sector in Cambodia has been impressive, but today the industry faces considerable challenges. Strategies to improve the competitiveness of the industry are now more important than ever. Some of the challenges include: the removal of safeguards from Chinese textile and clothing exports as a part of the World Trade Organization (WTO) accession agreements; the recent accession of Viet Nam to the WTO; and the effects of the global financial crisis. This last factor is likely to dominate the near future, with factories around the world closing. It is no longer sufficient for Cambodia to rely on its reputation for compliance with labour standards for the continued growth of the industry, especially since other countries in the region are beginning to implement similar measures.

According to Nelmes (2009), Cambodia’s garment exports depend on US retail sales and these have recently dropped sharply. The value of garment exports fell in 2008, albeit only slightly (2 percent), but further falls are expected and 2009 is likely to be a pivotal year for the industry. Seventy garment factories have closed since August 2008, although a few have also opened. Recent factory closures are estimated to have resulted in job losses of 51,000 since September 2008 and further losses are expected in 2009. By some estimates, the industry could shed up to 15 percent of its workforce. This is likely to have severe socio-economic ramifications if workers are unable to find employment elsewhere.

T&C contributed around 12 percent of GDP in Cambodia in 2007, while the total contribution of manufacturing industries was 17 percent. Garment exports accounted for 72 percent of total merchandise exports in 2007. Textiles and clothing are the dominant source of exports and foreign exchange in several LDCs, some of which are in direct competition with Cambodia.

Around 4 percent of the Cambodian labour force is employed in the garment industry, the majority of those employed in manufacturing. Although total employment in the industry is low, indirect employment effects of the industry are substantial. As of September 2008, there were 310 garment factories in operation, with around 352,433 workers employed, of whom 322,000 are women (91 percent of the workforce). As noted above, figures released in March 2009 by the Ministry of Commerce (MoC) state that 51,000 jobs have been lost since September 2008. Garment sector employment now stands at 301,000 workers.

Although other manufacturing sectors have been growing, garments remain the dominant manufacturing industry for export. The total number of local office staff and workers employed in other types of manufacturing amounts to almost 10 percent of the workforce employed in textiles and clothing production. Garment workers (skilled and unskilled) tend to be paid more on average than other workers (skilled and unskilled) in non-textile/garment manufacturing industries.
Box 7: Garments and women

Many young women have found new employment opportunities in Cambodia's garment factories. While they benefit from paid employment, the changes that have resulted in both their rural home towns and in urban destinations, such as Phnom Penh, related to working conditions, labour standards and union issues have prompted broader discussions about employment, development and trade. Garment workers actually represent a small percentage of the labour force. Yet garment workers face high expectations for regular remittances to rural areas with a substantial contribution to rural livelihoods. The security of these jobs also depends on international agreements and global markets.

Source: ILO (2006)

Figure 17: Garment factories and employment

Workers within both the textile and non-textile/garment manufacturing industries located inside SEZs are generally paid less than those currently working in garment manufacturing firms located outside of SEZs. Although the total number of non-textile factories located in SEZs remained steady between 2007 and 2008, the total employment created by them almost doubled between September 2007 and September 2008. If the garment industry is allowed to falter, new jobs need to be found for redundant labour. It is worth bearing in mind that Cambodia needs to provide jobs to almost 250,000 new entrants to the labour market each year. This is roughly equal to the entire garment work force and highlights the issue of job creation for the economy.

Table 4: Shipping time to the US

<table>
<thead>
<tr>
<th>Country</th>
<th>Number of days</th>
</tr>
</thead>
<tbody>
<tr>
<td>Taiwan</td>
<td>14.3</td>
</tr>
<tr>
<td>Hong Kong</td>
<td>14.9</td>
</tr>
<tr>
<td>China</td>
<td>15</td>
</tr>
<tr>
<td>Indonesia</td>
<td>22.5</td>
</tr>
<tr>
<td>Cambodia</td>
<td>22.6</td>
</tr>
<tr>
<td>India</td>
<td>25</td>
</tr>
<tr>
<td>Pakistan</td>
<td>26</td>
</tr>
<tr>
<td>Bangladesh</td>
<td>27.1</td>
</tr>
<tr>
<td>Macau</td>
<td>27.2</td>
</tr>
</tbody>
</table>

Source: Bargawi (2005)
The garment industry is predominantly foreign owned. This is also the case for other types of light manufacturing for export (around 10 percent of manufacturing industries are owned by Cambodians).

Table 5: Garment firms by source of ownership and employment in Cambodia (2007)

<table>
<thead>
<tr>
<th>Country of Ownership</th>
<th>% of firms</th>
<th>Number of operators</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Firms</td>
<td>Employment</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Average</td>
</tr>
<tr>
<td>Hong Kong</td>
<td>20.7</td>
<td>24.4</td>
</tr>
<tr>
<td>Taiwan</td>
<td>24.5</td>
<td>30.6</td>
</tr>
<tr>
<td>China</td>
<td>13.1</td>
<td>7.3</td>
</tr>
<tr>
<td>Other</td>
<td>12.8</td>
<td>14.1</td>
</tr>
<tr>
<td>Korea</td>
<td>11.0</td>
<td>6.6</td>
</tr>
<tr>
<td>Cambodia</td>
<td>8.6</td>
<td>3.4</td>
</tr>
<tr>
<td>Malaysia</td>
<td>5.9</td>
<td>9.2</td>
</tr>
<tr>
<td>Singapore</td>
<td>3.4</td>
<td>4.3</td>
</tr>
</tbody>
</table>

Source: USAID (2007); GMAC database

As a proportion of total investment approvals, the garment industry’s relative importance has declined as new investments, particularly in services and tourism, have substantially increased (see Figure 18). While investment laws in Cambodia are very liberal, these policies will likely need to be re-examined to balance FDI attraction while maximising national socio-economic development opportunities and the manufacturing sectors’ indirect effects.

Figure 18: Total investment approvals across sectors (logarithmic scale)

Source: Cambodian Investment Board. Data for 2008 is for the first six months of the year only

Table 6: Markets for Cambodian garments

<table>
<thead>
<tr>
<th>Market</th>
<th>Value in 2007 (US$’000)</th>
<th>Share of total in 2007 (%)</th>
<th>Value in 2008 (US$’000)</th>
<th>Share of total in 2008 (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>1,899</td>
<td>100</td>
<td>2,001</td>
<td>100</td>
</tr>
<tr>
<td>USA</td>
<td>1,359</td>
<td>72</td>
<td>1,405</td>
<td>70</td>
</tr>
<tr>
<td>EU</td>
<td>391</td>
<td>21</td>
<td>404.5</td>
<td>20</td>
</tr>
<tr>
<td>Canada</td>
<td>100.5</td>
<td>5</td>
<td>130.6</td>
<td>6.5</td>
</tr>
<tr>
<td>Japan</td>
<td>7</td>
<td>0.4</td>
<td>7.9</td>
<td>0.4</td>
</tr>
<tr>
<td>Rest of world</td>
<td>42.6</td>
<td>2</td>
<td>53.09</td>
<td>2.7</td>
</tr>
</tbody>
</table>

Source: MoC
However, shipping and lead times from Cambodia were considered by some manufacturers as very favourable. Products shipped from Cambodia reach the US quicker than most other low cost producers such as Bangladesh. Cambodia may be more competitive in terms of lead times depending on the end-market and the source of inputs used in garment manufacturing. Nevertheless, it is worth bearing in mind that competitors such as Bangladesh have developed backward linkages with textile producers in their own countries, which reduces the time required for intermediate goods to reach factories and, therefore, total turn-around time.

II. Competitiveness analysis

Cambodia is located within a world manufacturing hub. As other countries move up the value chain, they will increasingly outsource or subcontract components of the value chain to more price-competitive countries such as Cambodia. But, in the medium- to long-term, improving Cambodia’s human capital will determine competitiveness in global, regional and domestic markets.

Cambodia is highly dependent on clothing exports, similar to a number of other LDCs, the highest by far among all other ASEAN countries. Cambodia faces direct competition from other ASEAN countries but also receives the majority of imports from its neighbours and regional partners, such as Thailand, Viet Nam, China, Hong Kong and Singapore. Since the end of the Multi-Fibre Agreement (MFA) in 2005, the Cambodian garment industry has had to rely on its competitiveness. Although the sector has experienced some productivity increases over time, since 2005 the country has lost relative market share to other exporters of textiles and clothing because the sector is less productive compared with its neighbours, including China and Viet Nam.

Although Cambodia’s dependence on the garment sector for total exports decreased between 2005 and 2007, there is a very high dependence within the sector on a limited number of product lines. The top five product exports from the garment industry accounted for 65 percent of total garment exports in 2005. In most cases, those products that have lost market share have equally lost export value. This raises two questions:

1. Who is Cambodia competing against, and to which countries has Cambodia gained or lost market share?
2. How is Cambodia competing?

Competitiveness analysis of exports suggests that:

• Some of Cambodia’s top performing garment exports increased market share and value between 2005 and 2007. However, some other products are ‘competitively challenged’.
• Out of Cambodia’s top five garment exports to the US, four are associated with a decline in unit values, despite increasing their market share. Only one product increased its market share and unit value between 2005 and 2007.
• All but one of Cambodia’s top five garment exports to the EU has experienced a decline in unit value, despite increasing their market share.

Market share and unit value analyses suggest that Cambodia is competing in some products by undercutting rivals in terms of increasing the quantity supplied at lower prices (unit values), as opposed to supplying greater quantities at stable or increasing prices, increasing value added, or moving to a more stable supplier position. Competing by increasing market share with the value received for the product contributes to sustaining longer-term productive and competitive gains.

“...improving Cambodia’s human capital will determine competitiveness in global, regional and domestic markets.”
Between 2001 and 2005, Cambodia experienced the slowest rate of increase in labour productivity in manufacturing industries compared to all other ASEAN countries for which data are available. This finding suggests that value-added per worker in the garment industry in Cambodia is likely to be lower compared to other ASEAN countries and competitor countries.

Figure 19: Labour productivity in manufacturing industries (index 2000 = 1.0)

Cambodia has lost market share in some of its most valuable garment exports to China, which has increased market share despite safeguard measures being in place. The challenge for Cambodian producers is whether they can continue to be cost competitive against China after the removal of safeguards, while maintaining labour standards and increasing productivity and value added. Adherence to labour standards is, arguably, no longer the preserve of ‘niche’ products but is becoming increasingly de facto mandatory to access high-value, mature markets (although Cambodia has a first-mover advantage). The failure to regulate unions in Cambodia was a common complaint arising from firm-level discussions with garment manufacturers and with the Garment Manufacturers’ Association in Cambodia (GMAC).

Figure 20: Estimated value-added per garment worker (1999-2007)
Skills were not considered to be a major constraint to the assembly businesses that were consulted. But higher wage management positions are largely held by foreigners. Chapter VIII of the Laws and Regulations of Investment states that investors have an obligation to provide adequate and consistent training to Cambodian staff. The analysis presented in the report suggests that other types of light manufacturing tend to be more capital intensive and have a higher skill bias. If Cambodia wants to tap into other types of production networks within the region, it needs to have an adequately skilled workforce to attract them.

"If Cambodia wants to tap into other types of production networks within the region, it needs to have an adequately skilled workforce to attract them."

Figure 21: Number of strikes and reconciliations

![Graph showing number of strikes and reconciliations over years]

Source: GMAC (data for 2008 are until September only)

Preferential trade access and low labour costs are considered the main motivations for garment manufacturers to locate in Cambodia. These have both eroded over time. Additional pressures on employers in the garment industry include food and fuel price increases. Annual inflation in 2007 and 2008 was at historically high levels, but is now declining. However, inflationary pressures are common to other ASEAN countries, including Viet Nam.

Lead times are low in Cambodia, given the short shipping distances from other ASEAN countries (from which most of the raw material for clothing comes). Good access to policy makers in Cambodia through the private sector working groups was ranked highly by the garment manufacturers surveyed, as was the favourable investment climate. However, although only a small number of in-depth interviews were undertaken with garment manufacturers, a common theme was the view that the government needed to do more, beyond employment provision, to develop linkages with the industry and with the domestic economy.

III. Policy discussion

There are three main ways in which Cambodia can seek to increase the competitiveness of the garment and light manufacturing industry and its contribution to national productivity gains in the medium- to long-term. These include increasing:
The top-performing garment exports are supplying more, but at lower prices.

Cambodia Country Competitiveness

1. Productivity of workers and sector
2. The number of functions of the value chain that are undertaken in Cambodia
3. Cambodia’s ability to use garment manufacturing as the basis from which to move into other types of light manufacturing

There are both short-term and long-term implications for policy.

**The short-term priorities include:**

**Increase productivity by promoting skills/training**

The top-performing garment exports are supplying more, but at lower prices. This type of competition is not conducive to the sustenance of longer-term productive gains. There will be a need to further promote skills to increase the sophistication of product exports and to upgrade products.

**Improve industrial relations**

Industrial relations are a major concern for garment manufacturers in ensuring Cambodia’s competitiveness and reputation. Analysis of the productivity of labour in the garment industry suggests that productivity growth has been erratic (as opposed to linear) as reflected both in labour value-added and unit labour costs. This may reflect strikes, which have reduced output.

**Streamline customs procedures**

While Cambodia’s investment climate is generous and attractive to assembly types of operations, the trading conditions (customs procedure) could be significantly improved.

**The long-run priorities and strategies to meet them could include:**

**Attracting more functions of the garment value chain to Cambodia**

The level of value-added, and hence management requirements, typically increase from subcontractor to cut-make-trim (CMT) and full-package or FOB producer. Most Cambodian-owned factories are subcontractors. Most garment factories within Cambodia are concentrated in the CMT part of the value chain. Cambodia should seek to increase the value-added contribution of the sector, and acquiring more functions within the value chain is one way of doing this. FOB production means producers purchase the necessary input materials instead of having them supplied by buyers. They are then paid for the whole garment export. But buyers need to be assured that producers will deliver on time and to the required specifications.

Although the climate in which low income countries can drive development from a manufacturing base created by the T&C sector is now framed by the presence of extremely large supplying countries in the global market, such as China (Brenton and Hoppe, 2007), this may also mean that buyers choose to be less footloose with their preferred suppliers. As the start-up costs of the industry are comparatively small, this favours production in locations where labour costs are low. As trade in products becomes increasingly fragmented and trade in tasks more important, this presents opportunities for producers who are able to tap into niche markets and respond quickly to buyers’ demands.
Building on the experience of garment exporters and the emergence of the garment sectors to attract and promote other types of light manufacturing

Recent literature suggests that countries that seek to diversify their export base are more likely to produce products that are ‘close’ to their current products. This suggests a more targeted approach to attracting and selecting investment. Specific steps could include:

- Rationalising the number and focus of SEZs and modelling SEZs on Porter’s cluster strategies
- Promoting the notion of specialised SEZs or clusters, using targeted investment policies and human resource and technology policy to attract new, higher value-added activities

Successful examples of SEZs (e.g. Singapore, Malaysia, Dubai, and Ireland) suggest that it is important to have fenced off areas with zone specific rules and regulations (e.g. help with customs clearance), purpose-built infrastructure and appropriate institutions (i.e. skills development agencies). Countries that do not have appropriate complementary factors in place will usually struggle to make incentives effective as a basis for attracting quality investment and, as a result, development, in the long run. But even if they do, there is little guarantee that without incentives, garment manufacturers (and other types of multinational firms) would operate. The key is that such incentives alone are unlikely to move the country onto a higher development path and other policies are required. Trade preferences that might have attracted industry in the past are typically eroded over time, and governments need to recognise and prepare for this.

Box 8: Upgrading in the textile and clothing global value chain

The textile and clothing value chain in several Asian countries provides a classic example of how upgrading helped to raise the human capabilities of suppliers (Gereffi 1999). East Asian countries (e.g. Hong Kong, Malaysia and Singapore) upgraded production processes and functions (from simple assembly to marketing and design) in the context of triangle manufacturing, whereby developed country buyers place orders with East Asian countries, who in turn became successful entrepreneurs and outsourced parts of the production to low-wage countries, such as China and Indonesia, but more recently Viet Nam and Cambodia. For countries to become OEM (original equipment manufacturing) producers and/or OBM (original brand manufacturing) producers requires a skilled workforce with appropriate design and marketing skills as well as the deliberate attraction of activities and functions along the value chain.

The global financial crisis will challenge Cambodia’s current development path. But it also provides an opportunity to review and reconsider existing policy instruments:

- How can Cambodia maximise the domestic value-added in the garment industry?
- What other markets offer strong demand opportunities?

Taking advantage of this opportunity could enable Cambodia to better position itself for the upturn, both within the region and globally.
Box 9: Diversifying into other light manufacturing: Can this be done?

Evidence suggests that countries with adequate public policies and private sector engagement have used SEZs and the opportunities provided by external trade preferences for garments to move up the manufacturing value-added ladder over time (e.g. Asian Tigers, Mauritius, Costa Rica). Other countries have used trade preferences to attract garments as an important part of their manufacturing base (e.g. Lesotho, Malawi), but may still have to make full use of the opportunities offered to develop dynamically and diversify into other activities at a time when they are faced with increased competition from other countries (e.g. China).

Developing countries that have used textiles and clothing to develop and subsequently attract high-quality investment and upgrade human resources have been able to do so as long as appropriate policies and institutions are in place. Singapore’s Pioneer Industries Ordinance of 1959 encouraged firms to develop ‘new’ products. The share of manufacturing output by firms with pioneer status increased from 7 percent in 1961 to 51.1 percent in 1971 and 69 percent in 1996. Malaysia offered manufacturers tax rebates if they provided training to their workers by designated institutes. Originally established in the late 1980s it was subsequently re-launched as the Human Resource Development Fund in the 1990s. The objective was to tackle underinvestment in training.

Costa Rica used consistent skills development policies that attracted not just garment assembly investors but also electronic investors, who, in turn and in coordination with local governments and institutes, attempted to further develop skills. As opposed to reducing investment in human resources at a time of crisis, the government instead took the opportunity to revisit its human resource development strategy and better tailor it to the needs of the private sector.

Mauritius, a relatively small country, but one well endowed with human resources, developed since the 1980s on the basis of foreign and local investments in garments and textiles in its SEZ programme (UNCTAD 1999; Subramanian and Roy 2003). Skills, and secondary enrolment rates in particular, developed further as a result, and Mauritius has since moved into highly skilled activities such as financial services. Mauritius engaged positively with globalisation, which coincided with successful human resource development.
7. TOURISM

I. Trends
- Tourist spending, using a strict definition, accounts for just under 10 percent of the economy, however, its contribution may be close to 20 percent when related activities are taken into account.
- There has been a rapid increase in arrivals, from a very low number in the mid-1990s to over two million in 2008.
- By the end of the first quarter of 2009, preliminary figures were suggesting a 30 percent decrease in international tourist arrivals from 2008, and arrivals are likely to be further impacted downward by the financial crisis.
- One-third of FDI since the mid-1990s has been in the tourism sector.

II. Competitiveness analysis

Strengths
- Rich cultural assets, such as Angkor Wat, give Cambodia a comparative advantage.
- Cambodia has both improved its source market diversification, which should lower vulnerability, as well as enhanced its image as a safe travel destination.

Competitiveness is low by global standards
- Cambodian tourism competitiveness is ranked by the WEF at 112/130; due in part to high energy and flight costs, as well as limited ICT and infrastructure.
- Cambodia is cost competitive globally, however, it is surrounded by neighbours that perform better on this criterion.

Sustainable growth needs to be improved, especially for the poor
- Cambodia is a ‘new’ destination, and there is a tendency for the initial rapid growth in arrivals to become difficult to sustain over the longer term.
- The average length of stay is only 6.5 days, compared with 8.6 days in Thailand.
- The pro-poor benefit in Siem Reap is very low, at an estimated 7 percent versus over 25 percent in Lao PDR (Luang Prabang) and in the central region of Viet Nam.

Regulatory uncertainty and human resource quality
- There is uneven application of policies and rules.
- Corruption increases business costs, competitiveness and growth potential.
- The quality of human resources in the sector is low.

III. Policy discussion
- Reliance on Angkor Wat as the primary tourist attraction cannot be sustained and action is needed to diversify the tourism sector.
  - An ongoing destination marketing initiative is needed, especially via the Internet.
  - Tourism destinations need to be diversified – including Phnom Penh, coastal areas, and eco-tourism – while adhering to land and environmental laws.
- Action needs to be taken to increase arrivals and lower costs such as:
  - Expanding the open skies policy would lower costs and increase the number of tourists, particularly for the Siem Reap to Bangkok route.
  - Relax tourist visa restrictions.
  - Objectively implement the agreed hotel classification system without delay.
  - Ensure that lower electricity prices are passed on to consumers.
- Initiate a major drive to enhance basic human resource development.
- Implement the recently approved Tourism Law and decrease uncertainty regarding the application of rules and regulations.
- Increase pro-poor benefit though much greater involvement of the poor in the supply chain.
I. Trends

The tourism sector has been an important and very dynamic engine of growth and generator of foreign exchange revenues since the cessation of conflict in Cambodia. Many developing countries will look at the pace of tourism development in Cambodia with envy. International arrivals have increased from a very low number in the mid-1990s to about 2.1 million arrivals in 2008 (see Figure 22). By the end of the first quarter of 2009, preliminary figures suggested a 30 percent decrease in international tourist arrivals from 2008, and the still unfolding global crisis could lead to an even more significant drop in 2009. There is, therefore, considerable urgency for tourism sector reforms that will sustain growth and increase competitiveness.

As the domestic economy rapidly develops, there has also been an increase in domestic tourism. As a result of both domestic and international tourism, tourism receipts are making a significant contribution to the national economy. Tourist spending on hotels, restaurants and transport accounts for just under one-tenth of the Cambodian economy. Taking into account the impact of tourist spending beyond the tightly defined ‘tourism’ sector – for instance in the retail and construction sectors – some suggest that tourism constitutes about one-fifth of the country’s economy. The role of tourism as a pioneer sector, better able than other sectors to cope with the challenges posed by economies in transition, has been demonstrated in Cambodia. Investment in tourism has accounted for nearly a third of the FDI flows to Cambodia since the mid-1990s.

Figure 22: International tourist arrivals in Cambodia (1990-2008)

In addition to this picture of rapid growth, there are other very positive trends in the Cambodian tourism sector. The country has moved quickly from dependency on distant US and European source markets to a much more balanced spread of markets, with well over half of the international market coming from ASEAN member states. Particularly significant has been the recent growth of the tourism trade with Cambodia’s neighbours in Viet Nam, Thailand and Malaysia. This diversity of source markets is important because it reduces the vulnerability of the tourism sector to external shocks emanating from any one country, including likely future pressures to tax long-haul tourism to reflect the environmental damage caused.

There are also indications that the international market is recognising Cambodia's positive transformation. External perceptions of Cambodia as a dangerous place are being replaced
by a more realistic assessment of the country as a welcoming and safe destination for travel and tourism investment. As a result, the nature of Cambodia’s visitors is changing, with more women and children visiting the country. International assessments also recognise the government’s considerable efforts to prioritise the tourism sector in Cambodia.

Recent empirical evidence suggests that some of the apparently negative attributes of the tourism sector, such as the ‘leakage’ of the benefits of the tourist trade due to excessive imports, have been exaggerated. On average, US$0.63 of every tourist dollar spent in Cambodia remains in the country. Although corruption is widespread at the public-private interface in Cambodia, it is not necessarily ubiquitous. For instance, our analysis of the entrance fees collected at the Angkor Wat temples suggests that the amount received by the APSARA authority (US$17.1 million in 2007), plus the 20 percent of gross revenues accruing to the private sector organisation that manages revenue collection (Sokimex received US$3 million in 2007), corresponds closely to the revenue we would expect from a million visitors each spending US$20 to view the temples. This does not imply that there is no corruption involved with the management of Angkor Wat, but rather that our team found insufficient evidence to support this assertion.

While tourist arrivals of 2 million international visitors are not insignificant, they only represent about 3 percent of the total volume of international tourist flows in ASEAN countries. Notwithstanding this positive assessment, the analysis gives no grounds for complacency. There are serious constraints to the future growth and development of the tourism sector.

Cambodia is a ‘new’ destination, and there is a tendency for the initial rapid growth in arrivals to be difficult to sustain over the longer term.

**Figure 23: The life cycle of a tourist destination**

There are only a few indications that Cambodia is diversifying its tourism product beyond the key attraction of Angkor Wat in Siem Reap and business tourism in Phnom Penh. As a result, the average length of stay of visitors to Cambodia is short (the average is 6.5 days, compared with 8.6 days in Thailand), the number of repeat visitors is low and seasonal tourism demand is high.
There are other worrying signs for the future of Cambodian tourism. The rate of FDI in tourism began to drop significantly in 2004 and there is now strong evidence that Cambodia has been losing market share in many of its key source markets in Asia, Europe and America for some time.

At least as important as the question of whether Cambodia can maintain its spectacular growth in international arrival numbers and tourism receipts is the issue of the impact of tourism on disadvantaged communities.

Recent detailed empirical work suggests that few of the benefits of tourism growth are being captured by the poor in Cambodia, perhaps as little as 7 percent of tourist spending. This suggests that linkages between tourism and local communities are not only weak, but are also much weaker than have been observed across a wide range of other low-income countries in Southeast Asia and sub-Saharan Africa. Ongoing eco-tourism and community-based tourism projects have been developed by GTZ, UNDP, International Finance Corporation (IFC) and the Netherlands Development Organisation in the northeastern provinces, the Greater Mekong sub-region and Kratie. Smaller NGOs have developed small pro-poor projects in the Cardamom Mountains region and elsewhere.

The strongly pro-poor benefits seen in Tanzania, Lao PDR and Viet Nam (see Figure 23) reflect different factors. In Lao PDR, sales of crafts and local agricultural supplies are the major pro-poor supply chains to the tourist sector. In Kilimanjaro, the most important pro-poor flows are the direct and dynamic linkages from the hiking staff who accompany climbers and the social responsibility programmes of the park authorities – financed from park fees paid by tourists. Indirect linkages from tourist spending to the non-tourist economy through local food and craft purchases are much less significant factors. In Viet Nam, the rapidly tightening labour market has caused hotel wages to rise, which benefits the poor. Tourism in developing countries can have strong links to poor communities (see Figure 24), but as the example of Angkor Wat in Cambodia and gorilla tourism in Central Africa show, this is not inevitable. It also illustrates that pro-poor effects are not related to a particular type of tourism. Weak linkages are not inevitable for destinations that are package-dominated and eco-tourism is not inherently pro-poor.

Figure 24: Percent of in-country tourist spending benefiting the poor

0 5% 10% 15% 20% 25% 30%

Source: Various ODI studies
Gender differences persist in the tourism sector (see Table 7). By reinforcing existing gender equity legislation, salaries could be better adjusted for similar positions, significantly increasing the pro-poor impact of tourism in Cambodia.

Table 7: Tourism and gender in Cambodia

<table>
<thead>
<tr>
<th>Sex</th>
<th>Sending remittances</th>
<th>Frequency</th>
<th>%</th>
<th>Level of salary</th>
<th>Amount of remittances</th>
<th>% income (salaries)</th>
<th>Number of staff in Cambodia</th>
<th>Total amount of remittances</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>Yes</td>
<td>283</td>
<td>79%</td>
<td>US$77</td>
<td>US$40</td>
<td>52%</td>
<td>25,108</td>
<td>US$793,413</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>75</td>
<td>21%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>358</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>Yes</td>
<td>341</td>
<td>80%</td>
<td>US$53</td>
<td>US$33</td>
<td>61%</td>
<td>16,336</td>
<td>US$431,270</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>101</td>
<td>20%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>442</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: IFC/MPDF (2007)

Tourism’s potential role as a mechanism to transfer resources from largely affluent international tourists to local communities is not being realised in Cambodia. This is particularly significant because it is precisely the poor who are bearing many of the costs of rapid tourism development, for instance from land evictions, without sharing significantly in the benefits. There are also robust empirical grounds for serious concern about the future growth and development of Cambodian tourism.

II. Competitiveness analysis

The main focus of our analysis was an attempt to understand this apparent paradox: why is tourism in Cambodia not an unmitigated success? In spite of the past decade’s significant achievements, why are there ominous indications that tourism may grow more slowly in the future, and that, whatever the rate of growth, the tourism sector will exacerbate rather than reduce inequality in Cambodia? Many of the answers to this paradox, and some possible solutions, were revealed through an analysis of the comparative and competitive advantages of Cambodian tourism.

There is strong evidence that Cambodian tourism has developed primarily on the basis of the comparative advantage of the Angkor Wat temples and the cost competitiveness of Cambodia in the traditional source markets in Europe and the US. However, over-reliance on the temples and price competitiveness, without quickly developing the competitive advantages of Cambodian tourism, lies at the heart of the problem presently facing the tourism sector. The real danger is complacency.

Many policy makers in Cambodia believe that eco-tourism provides the best route to diversify tourism in the Kingdom. Our analysis suggests that eco-tourism has some potential in Cambodia, particularly in terms of extending tourist flows into the northeast of the country and developing a less exploitative form of tourism where the Land Law and the rights of inhabitants are taken into account. However, eco-tourism is likely to remain a small niche within Cambodia and the development of coastal tourism represents an opportunity to diversify tourism on a larger scale.
A range of competitiveness analyses highlights a common set of constraints to the competitiveness of Cambodian tourism. These constraints are serious and have the combined effect of making Cambodia one of the least competitive countries for which surveys are conducted. Even more concerning are the indications that, while different indicators are moving in different directions over time, the aggregate trend for Cambodian tourism’s competitiveness is getting worse.

In an international context, the business environment for tourism enterprises in Cambodia is poor (see Figure 25). Particularly problematic is the condition of tourism infrastructure, as well as ICT infrastructure. This is compounded by weak performance in terms of ground and air infrastructure.

Cambodia remains highly cost-competitive globally, but is surrounded by competitors that perform even better under this criterion. One negative effect of the mainly positive trend to attract more tourists from Asia is that Cambodia is eroding its principal competitive advantage – cost. There are also clear indications that the cost competitiveness of Cambodia is being undermined by relatively high energy, fuel and flight costs. Table 8 provides an example of how public policy, in this instance the airport tax, is eroding the inherent cost competitiveness of Cambodian tourism.

Table 8: Airport tax levels

<table>
<thead>
<tr>
<th>Country</th>
<th>International passengers</th>
<th>National passengers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cambodia</td>
<td>25</td>
<td>6.00</td>
</tr>
<tr>
<td>Thailand</td>
<td>21</td>
<td>3.00</td>
</tr>
<tr>
<td>Viet Nam</td>
<td>19</td>
<td>2.50</td>
</tr>
<tr>
<td>Lao PDR</td>
<td>10</td>
<td>1.20</td>
</tr>
<tr>
<td>Malaysia</td>
<td>16</td>
<td>2.00</td>
</tr>
</tbody>
</table>

Source: Various ODI tourism studies

**Figure 25: 2008 Travel and Tourism Competitiveness Index (ASEAN countries): Business environment**

Note: The tourism overall competitiveness index scores range from Chad (score of 2.48 and ranking 130) to Switzerland (score of 5.63 and ranked 1). Cambodia ranked 112 with a score of 3.32.
Cambodia’s regulatory framework is favourable in terms of safety, and the government places a great deal of importance on the tourism sector. However, these positive factors are outweighed by uncertainty regarding the application of rules and regulations and the existence of widespread corruption. Some policy initiatives, such as hotel grading, are good in principle, but ineffective because they are not implemented fully. Anti-competitiveness in a number of important cost components for tourist enterprises appears to be the cause of the high prices that are undermining Cambodia’s cost competitiveness as a destination. Specifically, exclusivity arrangements for key air routes and the distribution of fuel and electricity impose costs on the tourism sector which, among others, are considerably higher than elsewhere in the region.

The quality of human resources in the sector is low, with only small-scale initiatives by hoteliers and NGOs to equip hospitality staff with the skills to deliver world class services. This also prevents disadvantaged individuals from being able to access anything other than the most menial jobs in the sector. Cambodia has poor tourism infrastructure. Ground, air, ICT and other tourism infrastructure are ranked 99, 100, 123 and 125, respectively, in the world (out of 130 countries surveyed).

III. Policy discussion

Four strategic issues facing tourism in Cambodia were identified. These, and a series of practical and realistic activities to address them, are summarised below.

1. As a result of the global financial crisis, as well as the border hostility with Thailand, the tourism sector in Cambodia will face very difficult conditions in the immediate future. By the end of first quarter of 2009, preliminary figures suggested a 30 percent decrease in international tourist arrivals since 2008. The RGC should consider the following actions:
   - Relax tourist visa restrictions
   - Strengthen support for the ongoing destination marketing initiative
   - Reach a peaceful and lasting cessation of border hostilities
   - Implement the recently approved Tourism Law
   - Drop restrictions on the use of ICT by tourism enterprises in Cambodia

2. Cambodia is becoming less competitive in price terms. Actions should be taken to reduce costs and increase the quality of the tourism product. Government should:
   - Ensure that the lower costs of electricity generated in Thailand and Viet Nam are passed on to consumers
   - Initiate a cost-benefit exercise examining the cost to the Cambodian economy of maintaining the current exclusivity agreement with Bangkok Airways on the route from Bangkok to Siem Reap and act on its recommendations
   - Objectively implement the agreed hotel classification system without delay
   - Initiate, through the Tourism Forum, a major drive to enhance basic human resource development for hotel staff
   - Review the fuel distribution system with a view to reducing the premium price paid by Cambodian consumers

3. Reliance on Angkor Wat as the primary tourist attraction cannot be sustained and action is needed to diversify the tourism sector. Government should:
   - Focus on developing a coastal destination initiative that can be served from Sihanoukville airport, while adhering to land and other laws

“Cambodia is becoming less competitive in price terms. Actions should be taken to reduce costs and increase the quality of the tourism product.”
- Encourage the construction of the planned business convention centre in Phnom Penh and market the capital as a Meetings, Incentives, Conventions and Exhibitions (MICE) destination
- Investigate and address the threat posed to Angkor Wat by falling groundwater levels
- Continue to support the eco-tourism sector, but this should not be regarded as the central element of Cambodia’s tourism strategy and should take into account local communities

4. Only a small proportion of tourist spending reaches the poorer sections of the population. Government should:
   - Strengthen hospitality training for the labour force in Siem Reap, Phnom Penh and on the coast
   - Encourage the development of tourism in new coastal destinations while protecting the land rights of the poor
   - Enhance the availability of local cultural goods and services through targeted support to the supply chain
   - Improve water supply and sanitation infrastructure in tourist destinations

Box 10: How public policy can influence tourism development

Da Nang in central Viet Nam had a languishing tourist sector. Although visitor numbers increased each year, the city was losing high spending international tourists. In 2007 a tourism value chain exercise identified the development of coastal tourism as the key strategy to capture high spending tourists. The main constraint on this strategy was the failure of the government to enforce the time-limited provisions on permits for coastal development, with the result that coastal sites were held by land speculators with no intention of implementing development projects. In mid-2007, the government indicated that it would start to enforce the restrictions on development permits. By mid-2008, the construction of 3,500 four-six star hotel rooms were underway in 11 coastal development projects (Hyatt, Crown Plaza, Raffles, etc.) amounting to US$1.6 billion. These developments will create 7,000 jobs in the next three years.

Source: Mitchell and Le Chi Phuc (2007)
8. INFORMATION AND COMMUNICATIONS TECHNOLOGY

I. Trends

- Cambodia was the first country worldwide where the number of mobile phone users surpassed fixed landline users
- The ICT sector has been growing rapidly at a rate of 32 percent per annum over the last five years
- There are now 3.7 million mobile users in the country, representing 26 percent of the population
- There are only 17,000 Internet subscribers, the second lowest in ASEAN

II. Competitiveness analysis

Legal and regulatory issues

- The ICT sector shows a high degree of openness, as the Ministry of Posts and Telecommunications (MPT) encourages the entry of mobile and internet service providers (ISPs)
- Cambodia has the second highest cost of Internet amongst ASEAN countries
- There is currently no clear, legal framework overseeing the ICT sector, and more specifically the telecommunications market in Cambodia. Two ministries are capable of issuing licenses on the same frequency, and this has allegedly led to licenses for the same frequency being issued to more than one operator, resulting in interference and a poor quality signal
- The duopoly on fixed landlines hinders both fixed line and internet competition. Internet access is lowered since broadband largely relies on fixed telephone lines
- International broadband connections are controlled by Telecom Cambodia (TC), and all ISPs must operate through these connections in order to provide broadband access. ISPs state that the high price of Internet connectivity stems in large part from the high prices that TC charges to connect

Infrastructure and human resource constraints

- Companies which are heavily reliant on ICT for their business operations face high operating costs in Cambodia, discouraging both the use of ICT in local companies as well as discouraging ICT reliant foreign companies from investing
- As individual telecommunications operators rely on their own infrastructure, interconnectivity is limited and leads to congestion in communications, especially among mobile telephones
- The lack of both an international and a domestic Internet exchange point means that all internal data must be routed out of the country and then back in, leading to an unnecessary usage of international bandwidth
- The low number of qualified ICT workers hinders competitiveness and increases turnover rates

III. Policy discussion

- The Telecommunications law as well as the Authority of Communications of Cambodia (ACC) should be implemented, as this would give more order, transparency and certainty to the telecommunications market, as well as improving efficiency
- Cambodia would benefit and could provide leased broadband access to landlocked countries such as Lao PDR and become less dependent on broadband leased from other countries
- Independently managed Internet exchanges, possibly run by a consortium of ICT firms, would provide fair access to the exchange points
- The government could consider creating and implementing a standardised accreditation scheme for ICT education and training, including a national ICT curriculum and increasing the availability of computers in schools
I. Trends

The ICT Sector in Cambodia has been growing at a rate of 32 percent per annum over the last five years and is now estimated to generate over US$429 million per annum. The sector is now, however, facing large challenges, not least the high price of Internet and the small pool of qualified ICT workers in Cambodia, which prevent it from competing internationally with countries such as India, where ICT service exports have been a major contributor to growth.

Access to ICT is important for private sector development. It improves the efficiency and competitiveness of firms, by reducing transaction costs, and facilitating quicker and easier access to market information such as prices and changes in demand. It can also greatly improve operational speeds and efficiency levels within government departments. It can link firms directly to new and foreign consumers. For example, hotels and tour companies can advertise and facilitate online reservations through the Internet, accessing many more potential customers than would otherwise be possible. Citadel, an ironmongery firm based in Phnom Penh, which specialises in reproductions of antique swords, sells its products internationally through a catalogue on its website. Farm-Link, an agro-business company based in Cambodia, also allows clients to order goods online, such as Kampot pepper. Such companies would not be able to reach an international market if they were not able to access the Internet or use ICT.

It also creates many new jobs and entrepreneurial opportunities, in the formal ICT sector itself (e.g. engineers, handset distributors), in related industries (e.g. security personnel, construction of masts, etc.), and in entrepreneurial activities in the formal and informal sectors (e.g. airtime and recharge card sellers on street corners).

Box 11: ICT and human development

The main benefit of ICT for human development does not only lie in its ability to employ large segments of the population (although an emergent ITC industry can create employment) but the ability to enhance productivity across all sectors, leading in turn to greater overall employment and reduction in poverty levels.

The nationwide roll-out of ICT access allows areas previously cut off from information flows to become both generators and receivers of information. This in turn allows businesses to expand in areas in which they were previously not operating and also gives existing businesses access to information. For example, farmers could look up current produce prices as well as allow small and medium sized enterprises (SMEs) to access financial services through mobile operators. Outsourcing call centres (a possibility with a young population and the emergence of spoken English in Cambodia) can also create jobs far away from the markets they serve, much like call centres in India serving the British market.

Although it is a niche market in Cambodia, ICT can still be a form of employment for the underprivileged. Digital Data Divide, Yejj and the Centre for Information Systems Training (CIST) provide ICT training and education for young adults and teenagers from very poor backgrounds allowing them to pursue a successful ICT career.

The Cambodian ICT sector is still recovering from the civil war of the 1970s which severely disrupted ICT infrastructure within the country. Cambodia has only 43,000 fixed landlines nationwide, close to 0.28 landlines per 100 inhabitants, the lowest rate amongst ASEAN countries.

Cambodia was the first country worldwide where the number of mobile phone users surpassed fixed landline users. There are now 3.7 million mobile users in the country, representing 26 per-
cent of the population, and about 27 mobile phones per 100 inhabitants (as the tele-density chart above shows).

**Figure 26: ICT Tele-density**\(^{24}\) in Cambodia and across ASEAN countries

![ICT Tele-density chart](image)

*Source: International Telecommunication Unit (ITU), 2008*

**II. Competitiveness analysis**

The ICT sector shows a high degree of openness, as MPT encourages the entry of mobile and Internet providers (though there is a duopoly on fixed landlines, with the market dominated by TC). There are eight major mobile phone providers, all of which are foreign owned. Millicom International (operator of the Cellcard brand) is the largest. In terms of Internet provision there are 11 major ISPs and a number of smaller ISPs.

Internet provision is hindered by the lack of fixed telephone lines which, in turn, means increased investment costs for Cambodian ISPs, costs which are then passed on to consumers. This has limited the number of Internet subscribers within the country (only 17,000 subscribers, the second lowest of the ASEAN countries after Lao PDR). Cambodia has the second highest Internet cost among ASEAN countries, with prices up to US$400 per MB of bandwidth per month.

The price basket (adjusted for purchasing power parity) of monthly ICT costs across a number of ASEAN countries for which data was available, shows that Cambodia has some of the highest ICT costs per month, based on typical usage for small- and medium-sized enterprises. Companies that are heavily reliant on ICT for their business operations will face high operating costs in Cambodia, discouraging the use of ICT in local companies as well as discouraging ICT-reliant foreign companies from investing in the country.

"Cambodia has the second highest Internet cost among ASEAN countries..."
Competitiveness is also hindered by the low number of qualified ICT workers in Cambodia. The small pool of labour stops local firms from rapidly expanding and also leads to high turnover rates within companies. Workers with just two or three years experience command wages of up to US$600 per month, much higher than wages for equivalently skilled and experienced workers in both Viet Nam and Thailand.

There is currently no clear, legal framework overseeing the ICT sectors and, more specifically, the telecommunications market in Cambodia. As individual telecommunications operators are reliant solely on their own infrastructure, interconnectivity is limited, which leads to congestion in communications, especially amongst mobile telephones using different providers. The situation is also aggravated by mobile providers blocking incoming calls from other providers in order to discourage competition.
Summary of main ICT constraints

Lack of a clear legal and regulatory framework for the ICT sector

A good regulatory framework is an important prerequisite for a well functioning telephony market, given the information asymmetries and network externalities inherent in the market. The lack of a clear legal and regulatory framework in Cambodia, as well as the lack of an effective competition law could result in a range of problems. For example, the Government Private Sector Forum argues that some mobile phone operators are not facilitating connections between different networks. This kind of practice is sometimes adopted by larger mobile phone networks in a bid to dominate the market and prevent the expansion of smaller new entrants, by preventing calls from these smaller networks from reaching their own customers, or by charging a very high price for them to do so. The regulatory framework for telecommunications in most countries is designed to regulate behaviour in this regard, but there appears to be no control over this in Cambodia. In addition, the draft competition sub-decree would potentially address such behaviour if it is deemed anti-competitive; however as the sub-decree has not yet been implemented this practice could potentially persist unabated.

Another problem that has been identified is that both the MPT and the Ministry of Interior (MoI) are capable of issuing licenses on the same frequency, and this has allegedly led to licenses for the same frequency being issued to more than one operator, resulting in interference and a poor quality signal.

Control of Internet connectivity by Telecom Cambodia

ICT firms cited the high price of Internet in Cambodia as a major constraint to the development of the ICT sector, as well the competitiveness of Cambodian enterprises more generally. Internet prices in Cambodia are significantly higher than in all other ASEAN countries.
except Lao PDR. TC holds complete control over the use of the international broadband connections (one to Thailand and two to Viet Nam as well as a separate satellite link) and all ISPs must operate through these connections in order to provide broadband access. ISPs state that the high price of Internet connectivity stems in large part from the high prices that TC charges to connect (around US$40-50 a month). This represents a potentially significant source of revenue for the government, so the political economy of reform may be challenging.

**Lack of ICT infrastructure**

The high cost of Internet connections may also result from the lack of ICT infrastructure, although this in itself may be due to TC’s monopoly over the infrastructure. Greater private sector involvement in telecommunications infrastructure development could potentially have eased these constraints.

ICT firms also cite the lack of cable infrastructure as a problem. They have to invest in this themselves, which is costly, and must be recouped through higher charges to the customer. In addition, economies of scale may be lost due to limited sharing of infrastructure.

The lack of both an International and a Domestic Internet Exchange Point means that all internal data must be routed out of the country and then back in, leading to an unnecessary usage of international bandwidth. TC is investing in the creation of an International Internet Exchange as well as a Domestic Internet Exchange. However this has led to fears from ICT companies that it would further help TC maintain its monopoly over the Internet backbone in Cambodia. The ICT firms would rather see independently managed exchanges, possibly run by a consortium of ICT firms, which would provide fair access to the exchange points.

**Lack of ICT skills and training**

Interest in ICT is currently booming for Cambodian students, with both universities and schools providing training courses. However, there may have been too much of a focus on the quantity of training provided, rather than the quality. According to interviewed ICT firms, training is often undertaken without the actual use of computers, resulting in ICT classes being explained on blackboards and therefore providing no hands on experience for students.

Interviewed Cambodian software firms complain that there are very few well qualified programmers and system administrators coming out of the education system, most of which still require training in the workplace even after they have graduated. Graduates with two or three years experience are in high demand and command wages of over US$600 per month, higher than in Viet Nam where a large number of software outsourcing firms are based. This means that Cambodian wages are uncompetitive and it leads to low employee retention for skilled software programmers who constantly change jobs as soon as better wages are offered. This in turn leads to reluctance by software companies to invest time and money in training for new employees, as they could potentially take their skills elsewhere soon after completing the training. According to a 2008 study by BDLINK Cambodia for the YEP-Project study, for ICT firms, the biggest skills gap was in finding well qualified IT managers with good business support IT skills.

The lack of familiarity with ICT technology by managers in large firms as well as SMEs is also identified as a constraint for the further growth of software companies. Most managers are either unfamiliar with the productivity gains which could be achieved through the use of
ICT systems, or belong to an older generation which generally lacks an understanding of ICT business management tools altogether.

**Lack of intellectual property rights**

The lack of enforcement of intellectual property rights (IPR) laws means that pirated software is easily available to the general market in Cambodia, for US$1-5, compared with normal retail prices which start at about US$50 per product. IPR laws are not yet legally implemented in Cambodia, even though the Ministry of Economy and Finance (MEF) state that they are currently working to address this issue.

Software companies identify the lack of enforcement of these laws as a major constraint to creativity and the production of local software, in turn limiting the attractiveness of the software production industry for local investors. On the other hand, a strict enforcement of IPR laws, together with the removal of infringing products from the market, would block access to a large number of productivity enhancing applications for a large number of users who would not be able to afford to pay the US$50 or more for officially licensed products. The provision of licensed software (for commercial applications) at a reduced price (such as US$10-20), in Khmer language and with full local support, may be more affordable and provide more benefits for local businesses instead of unlicensed and unsupported English language pirated software. This could potentially be negotiated with software producing companies in exchange for more stringent IPR law enforcement for software.

**III. Policy discussion**

The Cambodian ICT sector faces a number of challenges, some of which could be addressed quickly, with others likely taking longer to address, in order to improve the competitiveness of the sector.

In the short-term it is important that the draft telecommunications law as well as the ACC be implemented, as this would give more order, transparency and certainty to the Cambodian telecommunications market, as well as improving the efficiency of the market.

For the medium-term, the Government could consider creating and implementing a standardised accreditation scheme for ICT education and training, including a national ICT curriculum for primary and secondary schools, and increasing the availability of computers at school.

**Box 12: Internet at school**

The governments of Lesotho, Namibia and Senegal have all negotiated with local Internet providers to give discounted Internet access rates to schools. This has allowed greater numbers of schools in these countries to access the Internet at affordable prices. The initiative could be repeated for Cambodian schools with the help of the MPT and the Ministry of Education, Youth and Sport. A second policy example to limit prices can be found in Pakistan, where the government has set price caps for broadband connections (ITU, 2008).

The example of the state funded GIFTEL (Ghana Investment Fund for Telecommunication) project in Ghana is one particular method through which the process can be jump started. GIFTEL provided schools with PCs and Internet connectivity as well as creating wide area net-
works (WANs) and Community Information Centres in areas where Internet connectivity was previously not possible. This allowed Internet access to people living in underserved areas, as well as providing valuable ICT skills to schoolchildren. The RGC could undertake a similar project through the provision of PCs to schools in rural and impoverished areas, as well as providing free or cheap Internet connectivity for these schools.

Box 13: Promoting Internet exchanges

Thailand, Viet Nam, Singapore, the Philippines, Indonesia and Malaysia all have Internet Exchanges, which have helped lower Internet prices in these countries since local traffic passes through the exchange rather than through international connections (ITU, 2008).

Cambodia would benefit and could provide leased broadband access to landlocked countries such as Lao PDR and become less dependent on broadband leased from Thailand and Viet Nam through an undersea cable connection to Malaysia. Bangladesh and Mauritius were previously not connected to an undersea fibre-optic cable since the connection cost was deemed too high, however, due to high local demand both countries opted to build undersea connections. The connections provided both lower broadband prices and later increased competition within the country. As prices decreased, demand increased and both countries have now either built or are building a second undersea connection (ITU, 2008).

For the longer term, investment in infrastructure to facilitate widespread adoption and access to ICT is fundamental. The RGC, together with TC and MPT could look at connecting the fibre-optic backbone of Cambodia to major international fibre-optic cables, such as through a submarine cable to Malaysia, in order to increase Cambodia’s international bandwidth.

These priorities would help underpin the development of a sustainable and competitive ICT infrastructure and workforce in Cambodia, which should, in turn, help to stimulate private sector development, improve overall economic competitiveness, attract foreign investment, and perhaps open up opportunities for ICT service exports from Cambodia in the longer term.

The MPT could also encourage telecommunication companies to invest in shared infrastructure and also to share existing infrastructure, in order to increase economies of scale and reduce provision costs. Domestic and International Internet Exchanges could also be set up in order to reduce and make Internet traffic more efficient.
9. CONSTRUCTION

I. Trends

- Over 30 percent of construction projects may have been placed on hold due to the global downturn
- As a proportion of GDP in current prices, construction rose from 12.3 percent in 2003 to 22.4 percent in 2006, falling to 17.2 percent in 2007, close to US$600 million
- Construction projects increased in value from US$500 million in 2003, to over US$3.2 billion in 2007

II. Competitiveness analysis

Human resources
- Cambodian construction workers have the lowest wages across ASEAN countries, at US$4.50 a day per worker as opposed to US$7 in Thailand
- More highly skilled construction roles – such as architects, engineers, electricians, welders, and carpenters – are filled by foreign workers

Regulatory framework
- It takes approximately 710 days to get all the construction permits required to complete a project in Cambodia, as opposed to 200 days in Viet Nam and about 150 in Thailand
- It takes 31 days to clear each procedure in Cambodia, while in Viet Nam and Thailand it is about 15 days, and 7 in Lao PDR
- Foreign construction firms claim they often employ construction standards from their own country, and projects are not perceived by some to be monitored effectively by regulatory authorities
- Construction companies in Cambodia claim they often need to resort to paying unofficial fees in order to shorten timescales for regulatory approval
- The highly bureaucratic regulation of licensing in the construction sector may reduce its competitiveness

III. Policy discussion

- Stricter rules and regulations could be applied and enforced in the construction sector through the establishment of an efficient, but comprehensive construction code
- Construction permit approvals could be made more transparent with a standard framework applied to all projects
- Vocational training courses could be provided by educational facilities to train skilled workers. Apprenticeship and internships schemes could also be fostered
- Cambodia’s resources could be fully explored to gauge the potential for the domestic production of construction materials
I. Trends

The construction sector in Cambodia has boomed over the last few years, although the economic crisis has put a number of construction projects on hold. Projects have increased in value from a total of US$500 million in 2003, to over US$3.2 billion in 2007. The average project cost over the same time period increased from US$157,000 to US$1.65 million. Construction projects have increased both in scale and in value with a large number of high-rise apartments and office buildings currently being built.

As a proportion of GDP, however, the picture is more varied. In 2003, the sector accounted for 11.1 percent of Cambodian GDP and rose to 20 percent by 2006 (in constant 2000 prices) before sharply falling to 6.7 percent in 2007. In current prices, however the fall has not been so sharp, rising from 12.3 percent in 2003 to 22.4 percent in 2006 and falling to 17.2 percent in 2007, close to US$600 million.

Figure 30: Construction sector total project costs 2003-2007

Source: MLMUPC (2008)

Much of the literature on the role of the construction sector in development focuses on an idea espoused by Bon that there is an inverted, u-shaped relationship between construction and development.

According to Tan, “In low income countries, construction output is low. As industrialisation proceeds, factories, offices, infrastructure and houses are required, and construction as a percentage of gross domestic product reaches a peak in middle income countries. It then tapers off as the infrastructure becomes more developed and housing shortages are less severe or are eliminated.” If this theory is applied to Cambodia, it seems likely that construction is still approaching its peak as a percentage of GDP, but data over a longer time period would be required to prove this trend.

Short-term fluctuations in construction sector activity are also considerable, and governments sometimes use the construction sector as a tool to help stabilise the economy. Indeed, the construction sector is strongly linked to the macro-economy. Construction booms are often closely linked to changes in the overall growth rate of the economy and managing the housing market is often a key policy lever used by government to achieve economic stability. Governments may initiate large infrastructure projects to stimulate output or to create jobs during economic downturns, and may reduce publicly funded construction work and introduce other policies designed to dampen demand to prevent overheating in the economy during boom
times. Thus the construction sector raises issues of both short- and long-term economic management.

**Box 14: Construction and human development**

The construction sector can benefit the population of a country like Cambodia by providing both employment and infrastructure. A large number of unskilled workers can be employed on construction sites as manual labour as an alternative (and in addition) to agricultural employment.

Infrastructure construction benefits the country as a whole as new roads, bridges, power plants and other types of infrastructure allow increased integration of regions and give more options for investment. A good level of infrastructure benefits both existing producers (which can access more markets) and encourages both local and foreign investment, as well as benefiting citizens with cheaper and more reliable access to electricity and efficient public transport, which allows labour to efficiently move towards employment.

The main drawbacks to the construction sector, however, are that the sector follows the cyclical nature of the economy, hence in periods of slower growth (or in periods of recession) construction activity tends to slow or even come to a halt, as is the case in a number of foreign funded projects in Cambodia, leaving many people unemployed. The construction industry, if not well regulated, may also be risky for workers if strict health and safety regulations are not fully implemented, and for citizens should a badly built project cause fatalities. Land access and management also need to be strictly regulated in order not to allow people to be dispossessed from land on which they live. The environmental impact of construction projects also needs to be well assessed in order to reduce negative environmental effects.

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**II. Competitiveness Analysis**

The importance of the construction sector in relation to international competitiveness depends more on its capacity as an enabler than as an industry in itself. It plays a fundamental role in the economy by providing the necessary public infrastructure and private physical structures for the government, business and domestic spheres of life. The construction sector produces all of the facilities needed for the production of goods and services.

Cheaper and more efficient construction projects lead to larger amounts of FDI, where foreign companies see it as profitable to invest or relocate production facilities in a country if set up costs are lower, while local firms will be more competitive in terms of overhead costs if the construction of an office or manufacturing plant is cheaper than in competing countries.

Cambodia currently has the lowest wages for construction workers across ASEAN countries, with US$4.5 a day per construction worker as opposed to US$4.7 in Viet Nam and US$7 in Thailand. On the other hand, labour productivity is relatively low, and there is a shortage of construction labour to meet the high demand, as well as a very low skill base for Cambodian construction workers. Engineers and architects are overwhelmingly foreign (generally from Korea, Thailand or Viet Nam) while there is also a shortage of skilled labour, such as electricians, welders, carpenters, etc.

The wages of skilled and unskilled construction sector labour have however benefited from the construction boom. Wages for unskilled construction workers (the most vulnerable group) have increased from US$3.8 a day in 2005 to US$4.6 a day in 2008, for urban labour (see figure...
Recent data suggest that construction costs in Cambodia have risen considerably in recent years. The cost of building a house has risen from around US$170 per square metre in 2000 to about US$200 per square metre in 2008, of which around 80 percent was raw materials and around 20 percent was labour costs.

**Figure 31: Urban unskilled labour wages, 2000-2008**

![Graph showing urban unskilled labour wages, 2000-2008](source)

Source: Primary data compiled by ODI in country (2008)

Recent data suggest that construction costs in Cambodia have risen considerably in recent years. The cost of building a house has risen from around US$170 per square metre in 2000 to about US$200 per square metre in 2008, of which around 80 percent was raw materials and around 20 percent was labour costs.

**Box 15: Construction and imports**

In order for construction prices to fall and become more competitive in Cambodia (as well as making the industry more profitable) construction materials, such as cement, should be made locally rather than imported. The IFC, for example, has promoted local investment in the creation of local sustainable cement plants in countries where this has not happened before (for example in Yemen). With a lack of local funding, Cambodia could turn to international investors to promote local production of construction materials.

The prices of construction materials in Cambodia, which have also rapidly risen since 2003, add to total construction costs in Cambodia. As the majority of products are imported, Cambodian construction companies depend to a large degree on regional and world prices for materials. Imports of construction materials have rapidly risen hand in hand with the construction boom. Cambodia imported US$60 million worth of construction materials in 2002, a figure which rapidly rose to over US$120 million by 2007. A significant proportion of this total is imports of cement and steel. World prices for construction materials have generally risen rapidly in recent years, as is most evident in steel prices rising from US$400 a ton in 2003 to US$975 in 2008. Import duties, and high freight costs, which may be exacerbated by alleged anti-competitive practices in the Cambodian freight sector, also push up construction costs.

The recently opened, Thai-owned cement factory in Kampot Province will only be able to meet around half of Cambodia’s estimated domestic demand, so the country will continue to rely on imported cement.
Unfortunately no data is available comparing construction material prices across ASEAN countries.

The highly bureaucratic regulation of licensing in the construction sector may also reduce the competitiveness of the sector. It is estimated that it takes approximately 710 days to get all the construction permits required to complete a project, as opposed to 200 days in Viet Nam and about 150 in Thailand. It takes 31 days to clear each procedure in Cambodia, while in Viet Nam and Thailand it is about 15 days, and 7 in Lao PDR. Construction companies in Cambodia claim they often need to resort to paying unofficial charges in order to shorten timescales for regulatory approval.

Building standards seem to be relatively lax in Cambodia. Foreign construction firms claim they often employ construction standards from their own countries, and projects are not per-
ceived by some to be effectively monitored by regulatory authorities. This lack of regulation could potentially lead to poor quality and dangerous construction.

III. Policy Discussion

The Cambodian construction sector faces a number of challenges both in the short- and long-term, which could be addressed to ensure maximum efficiency and safety, and to make the sector an enabler for other productive sectors of the Cambodian economy.

In the short-term:

Stricter rules and regulations could be applied and enforced in the construction sector, through an efficient but comprehensive construction code tailored to the Cambodian environment. This would ensure the safety of small- and large-scale construction projects, as well as providing a signal to foreign and local investors that construction projects in Cambodia are well regulated and comply with international safety standards.

Construction permit approvals could be made more transparent with a standard framework applied to all projects. Informal fees could be removed from the process in order to facilitate smoother and quicker permit approvals, and increase transparency.

In the medium-term:

The lack of skilled Cambodian construction workers such as welders, electricians and carpenters and Cambodian professionals, such as architects and engineers, could be addressed. Vocational training courses could be provided by educational facilities in order to train skilled workers, while accreditation schemes could be set up at the tertiary level in order to standardise engineering and architectural courses within universities. Incentives for students to study disciplines such as engineering and architecture could also be provided (such as the provision of living grants and university fee waivers or payments) for low-income students wishing to undertake these courses. Apprenticeship and internship schemes could also be set up for more highly skilled workers and architecture and engineering students to fully prepare them for the work environment as well as to give them hands on skills which are in high demand in the industry.

In the long-term:

The mineral resources of Cambodia could be fully explored to gauge the potential for the domestic production of construction materials. Both environmental and social impacts of mineral extraction should be fully gauged in order to minimise negative impacts on the local populace. Investment in the provision of cheap and reliable electricity is already underway in Cambodia, which should alleviate electricity costs in the construction sector.
10. CONCLUSIONS AND POLICY IMPLICATIONS

Cambodia has come a long way in promoting growth and improving competitiveness over the past decade. However, the challenges are formidable: the global financial crisis is likely to more than halve economic growth between 2007 and 2009 with a potential contraction of the economy. Competitiveness indicators are still towards the bottom of many rankings. The extensive consultations that the study team had with Government Ministries, the private sector and development partners suggested that there is a consensus on long-run challenges for policy: improve skills, supply infrastructure, stimulate technological development and reduce corruption.

This report has a further message. Cambodia now needs to consolidate its progress, nurture its potential and sustain its growth, which will involve institutional change. The Government needs to rethink industrial policy on the basis of a selected number of components and sectors. This report covered agriculture, garments and tourism as key drivers of economic growth and key exports, as well as ICT and construction, which are important contributors to the rest of the economy. Cambodia needs to continue supporting these industries in different ways, including through the promotion of working groups with private and public sector members. Promoting a flexible economy based on effective state-business relations is a must in the current economic climate.

The policy challenges are numerous. This report suggests that Cambodia needs to promote new thinking to combat the negative effects of the global economic downturn, which is directly affecting Cambodia. Cambodia needs to enhance competitiveness and growth using a set of new policies.

Summary discussion of national level

A more pro-active human resource policy, which is more coordinated with the private sector

Secondary and higher education need to be made responsive to the economy’s changing needs. Rationalise the university sector. Involve the private sector in the planning and design of training courses. Examples include:

- Promote private sector participation in human resource planning through a National Vocational Training Council
- Promote the role of the private sector in the provision of training through tax incentives on training expenses in approved institutions
- Establish a Human Resource Development Fund such as in Malaysia
- Promote the sharing of public and private sector training resources, through the exchange of trainers or allowing the use of public training facilities

Rethink industrial policy using a more targeted approach in investment policy

The RGC should reconsider its industrial policy, which requires further government attention to:

- Rationalise the number and scope of SEZs
- Rethink how firms in SEZs link with service providers
- Move towards offering positive incentives and review existing tax policies, such as the tax dividend policy
A targeted infrastructure policy

Policy is required to plug the key infrastructure gaps such as electricity supply, quality roads and water and sewage systems. Governance constraints need to be removed and regulatory capacity improved.

An appropriate regulatory framework

Adequate and non-discretionary implementation of rules and regulations is essential. A regulatory framework that offers more efficient laws, clearer Prakas and much clearer, yet market-friendly, implementation rules will be required, as well as a new push for non-discretionary implementation. Aid for Trade could be sought to help finance improvements in the regulatory framework.

Cambodia should now continue to move the economy forward, as the current economic crisis requires decisive action.

Summary discussion of sectors

Agriculture
- Effective sequencing for improvements is required since the needs are many, and the capacity to work on all of them at the same time is limited
- Given the generally low yields, where yields can be increased at low cost this makes sense, especially given the volatility of international commodity markets
- Rural credit could be expanded by increasing land titling so that banks can use land as collateral; more credit could then increase investment and productivity
- The highest returns on investment will accrue to investment in rural access roads
- Working supply chains linking farmers to markets need to be bolstered
- Increasing production of oil palm and vegetables could bring high economic benefits
- Government investment in the uplands would be beneficial, while taking land rights into account

Garments/light manufacturing

Short-term priorities
- Increase productivity by promoting skills/training. There will be a need to further promote skills to increase the sophistication of product exports and to upgrade products
- Improve industrial relations. Industrial relations are a major concern for garment manufacturers in ensuring Cambodia’s competitiveness and reputation
- Streamline customs procedures. While the investment climate is generous and attractive to assembly types of operations, customs procedures could be significantly improved

Long-term priorities
- Attract more garment value chain functions. Cambodia should seek to increase the value-added contribution of the sector, such as by acquiring more functions within the value chain
- Build on the experience of the garment sector to attract and promote other types of light manufacturing. Produce products that are ‘close’ to their current production structure. This suggests a more targeted approach to attracting and selecting investment

Tourism
- Reliance on Angkor Wat as the primary tourist attraction cannot be sustained and action is needed to diversify the tourism sector
  - An ongoing destination marketing initiative is needed, especially via the Internet
Tourism destinations need to be diversified – including Phnom Penh, coastal areas, and eco-tourism – while adhering to land and environmental laws.

Action needs to be taken to increase arrivals and lower costs such as:
- Expanding the open skies policy, which would lower costs and increase the number of tourists, particularly for the Siem Reap to Bangkok route
- Relax tourist visa restrictions
- Objectively implement the agreed hotel classification system without delay
- Ensure that lower electricity prices are passed on to consumers
- Initiate a major drive to enhance basic human resource development
- Implement the recently approved Tourism Law and decrease uncertainty regarding the application of rules and regulations
- Increase pro-poor benefit though much greater involvement of the poor in the supply chain

ICT
- The Telecommunications law as well as the Authority of Communications of Cambodia (ACC) should be implemented, as this would give more order, transparency and certainty to the telecommunications market, as well as improving efficiency
- Cambodia would benefit and could provide leased broadband access to landlocked countries such as Lao PDR and become less dependent on broadband leased from other countries
- Independently managed Internet exchanges, possibly run by a consortium of ICT firms, would provide fair access to the exchange points
- The government could consider creating and implementing a standardised accreditation scheme for ICT education and training, including a national ICT curriculum and increasing the availability of computers in schools

Construction
- Stricter rules and regulations could be applied and enforced in the construction sector through the establishment of an efficient, but comprehensive construction code
- Construction permit approvals could be made more transparent with a standard framework applied to all projects
- Vocational training courses could be provided by educational facilities to train skilled workers. Apprenticeship and internship schemes could also be fostered
- Cambodia’s resources could be fully explored to gauge the potential for the domestic production of construction materials

Summary discussion of horizontal enablers

The report applies a consistent framework to five sectors, covering the socio-economic effects of the sector, a competitiveness analysis and a discussion of the policy options. The competitiveness analysis, based on the WEF competitiveness methodology, covered the major factors affecting competitiveness in all sectors (i.e. the horizontal enablers and disablers such as factors of production, technology and infrastructure, and the regulatory and institutional framework).

Factors of production

- Labour: For all sectors, the availability of quality and appropriate skills was a problem. This relates to hotel and garment factory managers and ICT programmers with English and relevant computing skills. There is an abundance of low quality skills. This suggests that it...
is important to rationalise the tertiary sector in light of these needs and promote targeted courses in coordination with the private sector.

- **Land:** Whether this was a constraint or not in Cambodia depended on the sector. This is not so much a problem in garments, but it is for agriculture.

- **Capital:** Some sectors do get access to foreign capital (e.g. garments, tourism, and construction during the boom). However, in other sectors, such as agriculture and ICT, there is insufficient capital or a lack of specific FDI.

### Technology and infrastructure

- **Science and technology:** This is a key constraint in improving productivity. Technology used in all sectors is old or underdeveloped, and there are hardly any incentives to upgrade technology. ICT technology is not widespread and Internet access is expensive. A countrywide, but targeted, ICT strategy is needed.

- **Infrastructure and transport:** The key infrastructure constraint in nearly all sectors is access to electricity, which pushes up the costs and reliability of production. There are also specific problems reported on the road infrastructure network. Road freight is costly and costs could be lowered by decreasing informal payments.

### Rules, regulations and institutions

- The enforcement of the regulatory framework is often weak and lacks transparency, and this has led to reported problems in sectors such as agriculture, construction and tourism. The garment sector reported fewer problems, as it has emerged rapidly on the basis of foreign private capital, although there are also some problems in obtaining licences to trade and operate.

- The regulatory framework is also underdeveloped in some areas. There is no competition law or anti-corruption law and a lack of regulation in the ICT and construction sectors. This requires further action.

The study provides tentative short-term and long-term priorities for policy and aims to kick-start a number of discussions on the following issues.

### Long-term policy options to improve competitiveness

#### Infrastructure and human resources

Public goods such as high quality and appropriate skills and infrastructure (electricity is the priority) should be promoted by building up a good tax base to finance this (in addition to using aid flows) and promoting partnerships with the private sector.

#### Laws and regulations

There is a need to improve and enforce existing laws and regulations as well as develop new laws such as a competition law, an anti-corruption law, a telecommunications law and a tourism law.

Strict rules and regulations could be applied and enforced in the construction sector, through an efficient but comprehensive construction code tailored to the Cambodian environment, ensuring the safety of construction projects. Construction permit approvals could be made more transparent, with a standard framework applied to all projects.
Growth strategies

Growth and competitiveness strategies should be formulated and encouraged by rethinking industrial policy, ensuring the prioritisation of investment and human resource development policy interventions (i.e. the rationalisation of SEZs) and making human resources development more responsive to private sector needs. The current global financial crisis requires a rethink of growth and industrial strategies.

Short- to medium-term policy options to improve competitiveness

Labour

Invest in both vocational training courses for the trades (welders, electricians, carpenters, etc.) and professional degree courses (architects, engineers and ICT specialists). Educational facilities could provide vocational training courses to train skilled workers; accreditation schemes could be set up at tertiary level to standardise courses within universities. Incentives to study courses such as engineering, architecture and ICT could be provided (e.g. living grants and university fee waivers or payments) for low-income students wishing to undertake these courses. Apprenticeship and internship schemes could also be set up for young workers and students in order to fully prepare them for the work environment as well as to give them hands-on skills that are in high demand. Specific training courses could be organised to upgrade the skills of workers in the garment and tourism sectors.

Land

The mineral resources of Cambodia could be fully explored to gauge the potential for domestic production of construction materials. Both environmental and social impacts could be fully assessed to minimise negative impacts on the local populace.

Rules and regulations

Bureaucratic procedures (e.g. customs and construction permits) should be streamlined, together with a reduction in informal fees through better rules and incentives for officials (e.g. wages for public officials matching equivalent private sector wages). There should be an improvement in governance to attract and manage concessions in infrastructure. There should be an examination of potential innovations in regulatory reform.

Infrastructure and transport

Investment in the provision of cheap and reliable electricity is already underway in Cambodia, which should alleviate electricity costs in the construction sector. However, further targeting of investment towards the supply of electricity would provide increased capacity for the medium-term as well as insuring stable and sufficient supplies of electricity in the long-term. Further investment in ICT and towards higher value added manufacturing would also benefit these industries, ensuring greater competitiveness and efficiency.

Telecommunication companies could also be encouraged to invest in shared infrastructure and to share current existing infrastructure, in order to increase economies of scale and reduce costs. Domestic and International Internet exchanges should be set up to make Internet traffic more efficient in-country as well as reducing connection costs for Internet traffic flowing in and out of Cambodia.
In tourism, the development of a coastal destination initiative served by Sihanoukville airport would further enhance the potential of Sihanoukville and bring in larger numbers of foreign and local tourists. In addition, there should be an investigation and solution to the threat posed to Angkor Wat by falling groundwater levels. A cost-benefit exercise examining the costs to the economy of maintaining the current exclusivity agreement with Bangkok Airways on the route from Bangkok to Siem Reap should also be initiated.

**Investment promotion and facilitation**

The implementation of the planned business convention centre in Phnom Penh and marketing the capital as a MICE destination should be encouraged to foster investment within the country. There should also be priority in the examination of potential innovations in regulatory reform. The tax dividend policy should nullify ‘tax holidays’.

The objective implementation of the agreed hotel classification system should be undertaken without delay, as this would provide valuable information to tourists coming into Cambodia and further reassure potential holidaymakers of the quality and value of the country’s hotels. Further support should be given to the ongoing destination marketing initiative for tourism. The government should facilitate better visa procedures, hotel classification and air access, ensure pro-poor impacts and study the sustainability of tourism. There could be targeted investment and export promotion support for value chains for processed rice and organisation of products by promoting ‘exporting skills’.

**Moving towards a more competitive economy**

Cambodia has advantages in certain areas including low wages, a well-established garment industry, and cultural assets such as Angkor Wat. This report provides policy discussion to build on these strengths and increase medium- to long-term competitiveness for growth and poverty reduction. The global economic crisis offers an opportunity to more quickly support its continued socio-economic development.
## ANNEX 1: WEF COMPETITIVENESS RANKINGS

### Table 1: World Economic Forum Global Competitiveness Index 2008-09

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Global Competitiveness Index (GCI) 12 Pillars:
*WEF ranking above is based on the 12 sub-components, which are detailed below*

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ANNEX 2: GLOSSARY

Accreditation schemes: system of providing recognition of qualifications to individuals or businesses.

Agro-industry: sector that deals with the production of agricultural goods.

Aid for Trade: the process of giving aid to developing countries with the aim of improving that countries’ capacity to trade in regional and global markets.

ASEAN: the Association of Southeast Asian Nations, established in 1967, is a regional organisation consisting of 10 countries: Indonesia, Malaysia, the Philippines, Singapore, Thailand, Brunei, Cambodia, Lao PDR, Myanmar and Viet Nam.

BDLink: a Cambodian consulting firm that provides business development consulting and market research services to clients in the private sector, not-for-profit sector and public sector.

Cluster development: refers to the concentration of factories in a small location in order to benefit from shared service providers and infrastructure (i.e. garment factories located close to dry ports).

Competitiveness: how cheaply and efficiently an economy can produce goods and services.

Composite indicators: refers to an indicator that includes more than one item (for example, the Human Development Index includes measures of education, health and gender equality).

Distortionary taxes: tax, a payment made to the government, makes goods more expensive. Taxes are distortionary when they change the behaviour of consumers. For example, I will buy a good if it is priced x, but if is priced x + tax, then I will not buy it. This shows a change in behaviour as a result of the tax.

DF&QF: duty free and quota free refers to open access to markets of developed countries for LDCs without trade barriers such as quotas (a limit on the amount of goods permitted into a country) or duties (a tax or charge on goods coming into a country).

Economies of scale: refers to the reduction in costs which comes about as a result of large scale production. For example producing garments requires building a factory, hiring staff, paying electricity. The more garments you make the cheaper each unit cost becomes.

Factors of production: include labour, land, capital and technology (i.e. the items used to produce goods and services within an economy).

Factor endowment: refers to the items or resources in a country that can be used for production (for example, minerals, workers, IT).

Horizontal enabler: refers to infrastructure (such as roads, education, electricity supplies), regulatory frameworks (such as the banking system) and institutional frameworks (such as the tax or justice system) which allows economic growth to develop.
**Light manufacturing:** refers to physically light goods such as garments, computers, and household items.

**Outsourcing:** the process of referring or subcontracting part of a job or project to an outside party, usually but not always, overseas.

**Prakas:** a Prakas, or proclamation, is a ministerial or inter-ministerial decision signed by the relevant Minister(s). A proclamation must conform to the Constitution and to the law or sub-decree to which it refers.

**Pro-poor tourism:** tourism that is sustainable and helps to alleviate poverty such as eco-tourism (for example, home-stays, eating in locally-owned restaurants, and not damaging environmental resources).

**Risk capital:** refers to capital invested in high-risk investments. For example, putting money into an oil exploration company without any guarantee of finding oil.

**Spill-over effects:** effects of an action that may not be foreseen at the planning stage. For example, it could be negative such as pollution or it could be positive, the improvement of roads as a result of the development of the garment industry or increased flights as a result of the expansion of the tourism industry.

**Tele-density:** refers to the number of telephones in a given area.

**TFP:** total factor productivity is the extra item that contributes to production (for example, the climate or other external factors).

**Value chain:** the increase in value or worth that is added at each stage of production, for example the cut-make-trim adds value to the raw material by transforming it into garments.

**Venture capital:** capital invested into new projects or enterprises, for example investing in a new technology company where little is known about the new technology, thus making it higher risk.

**Vocational training:** the teaching of vocational skills.
ANNEX 3: FOOTNOTES

10. Ibid.
11. Ibid.
12. A traditional variety, Neang Malis apparently has low response to fertiliser (Cai et al. 2008).
13. Of the 25,000 hectares privately held, roughly 20 percent of the area is in units of under 5 hectares, 40 percent in lots from 5 to 20 hectares, and 40 percent in larger-scale units. (Gergely 2007)
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18. Phnom Penh Post, “Garment orders plunge 40 percent”, 16 March 2009. Note that factories often close and re-open under a different name in order to take advantage of tax holidays, but the fact that the number of factories closing are more than those opening suggests that consolidation in the industry may be taking place.
20. Textile exports have been included with garments, since they make up just 0.8 percent of total garment and textile exports.
21. No data are available for Brunei, Myanmar or Lao PDR.
22. An abbreviation (for ‘free on board’) used in international trade statistics and sales contracts; a method of valuing traded goods that includes the cost of transportation to the port of embarkation and the cost of loading the goods on a vessel, but does not include further shipment or insurance costs. Export data are usually reported in f.o.b. terms.
24. Tele-density gives the higher value between fixed landlines per 100 inhabitants or mobile telephone subscriptions per 100 inhabitants
25. Based on ICT usage for five individuals within a firm
27. No data is available for Lao PDR or Myanmar