



## Cambodia Outlook Brief\*

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## Managing through the Crisis—Strengthening Key Sectors for Cambodia's Future Growth, Development and Poverty Reduction: Infrastructure and Energy to Support Cambodia's Manufacturing Base<sup>1</sup>

"Industrialisation is key to the economic transformation of Cambodia."

Stephen Higgins, CEO, ANZ Royal Bank

"There are four important goals to be achieved to provide energy to support Cambodia's manufacturing base: adequacy of supply, access to the supply, reliability and quality of supply and a reasonable tariff for the supply."

Dr Ty Norin, chair, Electricity Authority of Cambodia, presentation to the 2009 Cambodia Outlook Conference

## The Crisis and Cambodia's Manufacturing Sector: Impact and Gaps

Industry has been the fastest growing sector in Cambodia over the past decade. Its GDP contribution nearly doubled, from 17 percent in 1998 to 30 percent in 2007. This growth was mainly driven by manufacturing and construction.

The backbone of manufacturing is the garment sector. Garments represent about half of current industrial output, and labour productivity in the sector has now matched Vietnam's, signalling that Cambodia can indeed enhance its competitiveness in this area. The garment industry employs only around 13 percent

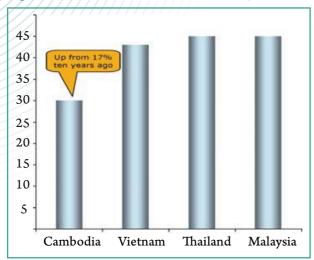
Industrialisation is key to the economic transformation of Cambodia, as it has been to the move of countries such as Thailand to a higher development. Thailand's modernisation started in the late 1950s, and per capita income has grown from USD100 then to about USD3000 in recent years. Manufacturing played a major role in this process, its share of GDP increasing threefold. It started with the labour-intensive textile industry, eventually promoting and attracting light manufacturing. Increased income growth and consumer demand quickened this transformation. Cambodia can perhaps pick up some useful lessons from this experience. While its industry's contribution to output has rapidly expanded over the years, it still lags behind those of its neighbours, Thailand and Vietnam (Figure 1).

of the workforce, compared with 59 percent for agriculture, which makes a lower GDP contribution. Food manufacturing represents less than 10 percent of industrial production.

This is a summary of the presentations and discussion in session 3B (i) of the 2009 Cambodia Outlook Conference.

Presenters for this Session were H.E. Dr Ty Norin, chairperson, Electricity Authority of Cambodia, and Mr Stephen Higgins, CEO, ANZ Royal Bank.

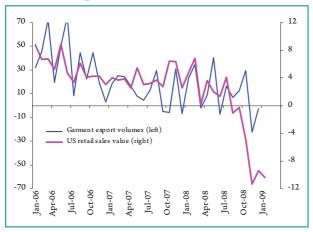
**Figure 1: GDP Contribution from Industry (%)** 



Source: World Bank and Breisinger and Diao, as presented to the 2009 Cambodia Outlook Conference

Garments are the country's leading export, having provided 70–80 percent of total exports before the crisis. The heavy dependence of this sector on one market, the US, has made it very vulnerable to the global economic shock. The sharp drop in US retail sales directly affected exports to the economic giant (Figure 2). At the end of 2008, garment exports were USD2.9 billion or 65 percent of total exports, with the year-on-year-growth of export volumes narrowing sharply by the final quarter of said year. Average export values also fell alarmingly, to USD102 million in February 2009 from a monthly average of about USD200 million in 2008. This slowdown meant job losses and increased underemployment as some factories closed down or reduced their operating costs.

Figure 2: Cambodia Garment Exports and US Retail Sales (Y/Y, in percent)



Source: IMF, as presented to the 2009 Cambodia Outlook Conference

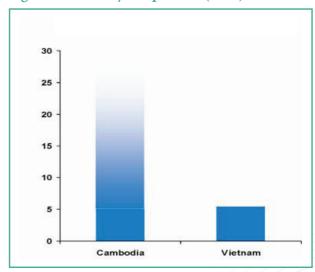
On closer analysis, the lack of diversification in manufacturing industry made it very vulnerable to the crisis. It prevents the expansion and further growth of the sector. Another problem is that most manufacturing activities are concentrated at the lower end of the value chain. Garments, for instance, are yet to progress beyond cut-make-trim to more complex products with more value added.

Problems related to infrastructure also prevent greater growth. Two—electricity and transport—pose the biggest challenges to the country's industrialisation.

Electricity supply faces problems of adequacy, accessibility, reliability, cost and financing:

- Inadequacy of supply. The present generation capacity is not enough to meet demand, which is estimated to have grown 20–26 percent during the last few years. Generation depends on imported fuels, leading to uncertainty of supply and higher cost. Cambodia has hydropower potential, but this may not be reliable due to uncertain rains and low water availability during the dry season. There is a lack of other energy sources like coal and gas.
- Inaccessibility and unreliability of supply.
   A huge amount of investment is needed for the development of transmission, sub-transmission and distribution facilities to make electricity reach the point of consumption reliably.

Figure 3: Electricity cost per kWh (cents)

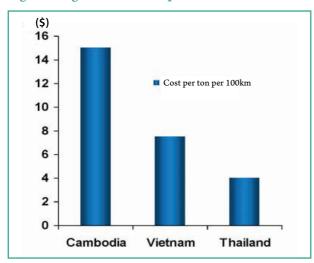


Source: World Bank as presented during the 2009 Cambodia Outlook Conference

High cost. The high cost of electricity has been identified as a major constraint to growth (Figure 3). According to the World Bank, the cost of electricity in the country ranges from around USD0.18 in urban areas to USD0.30–0.90 in rural areas. This is

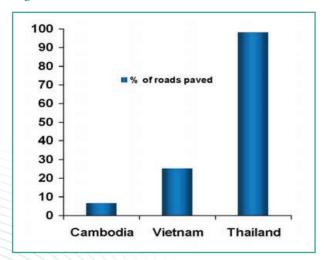
much higher than costs in neighbouring countries, which are all below USD0.10. This high cost is illustrated by the fact that so many firms largely use generators for power. It is estimated that firms in Cambodia produce about 36 percent of their electricity from generators. It is also estimated that diesel fuel accounts for more than 20 percent of the operating costs of some hotels. Apart from the high cost of the inputs and fragmented nature of generation, one reason for the high electricity charge is the lack of efficiency in operations, leading to large losses in transmission and distribution. From 1998 to 2008, an estimated 10.7 percent of electricity was lost, while the figure prior to that period was 28–30 percent.

**Figure 4: Agricultural Transport Costs** 



Source: World Bank as presented during the 2009 Cambodia Outlook Conference

**Figure 5: Paved Roads** 



Source: World Bank as presented during the 2009 Cambodia Outlook Conference

 Unavailability of Financing. Large projects need a lot of funds, which are hard to come by. Greater donor support is being requested to address this problem.

The cost of transporting agricultural products is high, especially compared to the costs in Thailand and Vietnam (USD15 per ton per 100 km for Cambodia as against USD7.50 for Vietnam and only USD4 for Thailand according to the World Bank) (Figure 4). There are a number of reasons for this, one of which is the country's poor road network. Again, Cambodia's road conditions are worse than Thailand's and Vietnam's. According to the World Bank, the percent of paved roads in Cambodia is only 6.3 percent while it is 25 percent in Vietnam and 98 percent in Thailand (Figure 5).

Over the medium term, there is cause to be optimistic. Large-scale plans by the government are already being implemented to address these problems.

The national highway system is almost complete, and secondary roads are being paved. Three hydropower projects are under construction, interconnections with Vietnam and Thailand are being increased, and the electricity grid is being upgraded as described below.

The government is currently upgrading the electricity grid under the plan, "Cambodia Power Development System 2013–2018". Under this plan, a national high-voltage grid will be developed and linked to Phnom Penh with the aim of combining all markets. The grid will also be connected to all existing and future hydropower dams. The next stage will centre on the import of electricity from Vietnam and Thailand.

## The Crisis and the Way Forward: Outlook and Future Policy Directions

Cambodia's manufacturing industry has a lot of potential. Many opportunities exist for it, one being its geographical position. Once railway links to Vietnam and Thailand are in place or restored or the Singapore-Kunming Trans-Asian Railway comes to fruition, Cambodia's position at the geographic heart of the most dynamic economic region on the planet will present enormous opportunities, particularly for manufacturing.

The potential of manufacturing can also be assessed in relation to agriculture, where Cambodia's workforce is presently concentrated. While agriculture is likely to be a key driver of Cambodia's economic growth in coming years, this will come from improved farming methods and increased mechanisation. This will result in a smaller proportion of the population being engaged directly in

agriculture and a shift to manufacturing industries. This puts pressure on the development of manufacturing.

The crisis showed the danger in being overly dependent on one industrial sector. Thus industrial policy must direct attention to diversifying beyond garments. Food manufacturing presents just one excellent opportunity because most raw agricultural products produced locally are now exported for processing. The processed goods are then imported by Cambodia.

The issues affecting electricity and transport are serious obstacles, and strategies to address them must be implemented without delay. Efforts to attract public-private partnerships in transport or energy-related projects must be doubled. The government must also continue inviting donor support for Electricité du Cambodge.

The Cambodia Power Development System is a remarkable plan to increase the supply of electricity and improve accessibility and reliability while helping bring down cost. It is expected that in the next few years, the national grid will be connected to all developed hydropower stations. It is also expected that available capacity will increase substantially in the areas supplied by grid substations. Major industries and special economic zones within 10 kilometres of substations may also get supply through direct feeder at lower cost. Industries with their own diesel generation may likewise tap the grid supply at cheaper rates.

Other measures can be undertaken to reduce the cost, including developing cheaper energy sources and enhancing efficiency. The latter will require improving sector governance, market liberalisation and competition, independent regulation and market-based pricing.

There are other serious challenges that inhibit manufacturing growth and therefore need to be addressed as well. They include:

- **Contract enforcement.** The importance of this should not be underestimated. It is particularly important for foreign investors and banks. The creation of a commercial court with high quality judges is also of high importance.
- More investment in vocational training. More and better trained industrial workers will facilitate the expansion of industry.
- Avoiding use of tax incentives. Reputable longterm investors will place a premium on quality infrastructure over tax incentives. Use of tax incentives must be minimised, as the foregone revenue would be better spent on infrastructure. Furthermore, where companies are attracted mainly by tax incentives, there is a high risk that they will leave as soon as another country offers a better tax concession..
- Reduction of informal costs of investment. A recent survey found that 52 percent of firms identified corruption as a major constraint on investment. Regardless of the reality of the situation, this creates a negative perception of Cambodia that impacts FDI and must be addressed.

Economic restructuring to allot a greater role to manufacturing can well usher the country into a higher level of development. To say that diversification and infrastructure and energy development are necessary conditions to this transformation is nothing new. As the tasks are imposing and require a large amount of financing, what is needed is concerted action among the government and development partners, especially at this time of crisis when the resources of the state are already stretched.