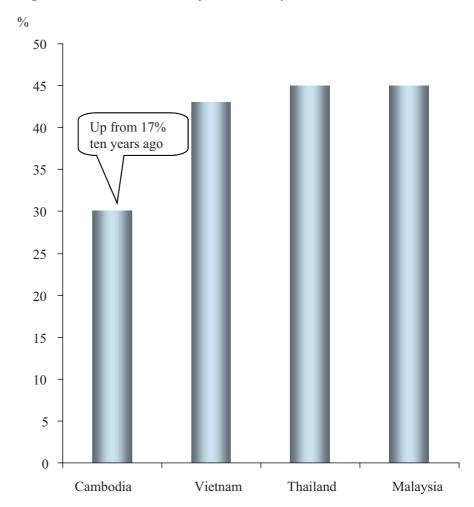
Managing Through the Crisis— Strengthening Key Sectors for Cambodia's Future Growth, Development and Poverty Reduction: Infrastructure and Energy to Support Cambodia's Manufacturing Base

This article summarises the presentations by H.E. Dr Ty Norin and Mr Stephen Higgins¹ during session 3B(i) of the 2009 Cambodia Outlook Conference.

Promoting industrialisation a tested strategy for facilitating national progress towards development. It is a well-worn path that nurtured many of today's flourishing economies. Thailand is one such economy that proves the success of the strategy. Its modernisation began in the late 1950s and supported the rise in its per capita income from USD100 then to about USD3000 at present. At the heart of the process was the expansion of manufacturing industry, this sector's contribution increasing threefold over time. As in other countries, manufacturing in Thailand began with labour-intensive industry and then outgrew this stage by promoting and attracting light manufacturing. Helping to speed metamorphosis increase in income and consumer demand.

Bearing in mind the experiences of other countries, industrialisation is the key to the economic transformation of Cambodia. Already,

Figure 1: GDP Contribution from Industry



Source: World Bank; Breisinger & Diao

the industrial sector has anchored the exceptional growth of Cambodia; its GDP contribution nearly doubled over the past decade. However, its share still lags behind that in Thailand and Vietnam.

Leading the expansion of the industrial sector in Cambodia have been manufacturing and construction. The growth of manufacturing has been based on the garment sector. Garments represent

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about half of the country's current industrial output and are the country's leading export. The industry's competitiveness has been honed by a surge in the productivity of its workers to a level now matching Vietnam's. The sector employs only around 13 percent of Cambodia's workforce, a modest figure compared to agriculture's share of about 59 percent (figures are for 2007). Compared to garments, other manufacturing activities in Cambodia are limited in scope. Food manufacturing, for instance, represents less than 10 percent of total industrial output.

A crucial hurdle in the further expansion of manufacturing is the underdevelopment of infrastructure. The conditions of transport networks and electricity supply are particularly problematic.

It is estimated that firms in Cambodia produce about 36 percent of their electricity from generators. Diesel is also estimated to account for more than 20 percent of the operating costs of some hotels. These figures illustrate the serious problems of electricity supply (Box 1).

Box: Electricity Supply in Cambodia—Key Problems

Problem 1: Inadequacy of Supply

A serious supply gap exists. Demand for electricity, which is estimated to have grown by 20 to 26 percent in the last few years, cannot be met by the present generation capacity. The heavy dependence on imported fuels for power generation also leads 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. The country lacks other energy sources such as coal and gas.

Problem 2: Inaccessibility and Unreliability of Supply

This problem is brought about by poor transmission, sub-transmission and distribution facilities. Upgrading and maintenance of these facilities are needed to ensure that the electricity reaches the point of consumption and the supply becomes stable. However, for this objective to be met, substantial financing is needed.

Problem 3: High Cost

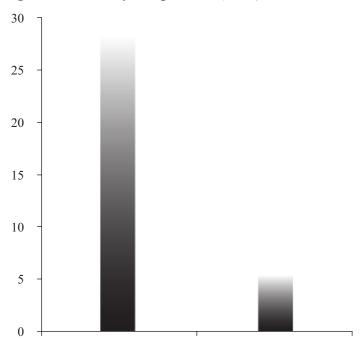
A major constraint on growth has been the high cost of electricity (Figure 2). According to the World Bank, the cost of electricity in Cambodia ranges from around USD0.18 in urban areas to USD0.30–0.90 in rural areas. This is much higher than in neighbouring countries, which are all below USD0.10. Aside from the effect of high input costs and the fragmented nature of power generation, one factor pushing up the cost of electricity is the lack of efficiency in operations, resulting in large losses in transmission and distribution. From 1998 to 2008, it is estimated that about 10.7 percent of electricity was lost, while the figure prior to that period was 28–30 percent.

Problem 4: Unavailability of Financing

A huge amount of investment is needed to finance the large-scale projects to address these challenges. The government currently does not have the fiscal capability to provide such investment; hence, greater cooperation with development partners is vital.

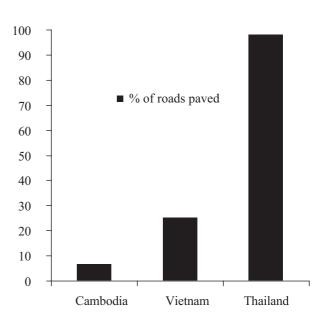
^{*} Source: World Bank, Sustaining Rapid Growth in a Challenging Environment (Cambodia Country Economic Memorandum), 2009.

Figure 2: Electricity cost per kWh (cents)



Vietnam

Figure 3: Paved Roads



The poor state of transport is manifested in the high cost of moving agricultural products. A recent World Bank report mentioned that the cost of transporting one ton of agricultural products 100 kilometres is about USD15 in Cambodia, much higher than in Vietnam (USD7.50) and Thailand (USD4). This is hardly surprising given that only 6.3 percent of roads in Cambodia are paved, while the figure is 25 percent in Vietnam and 98 percent in Thailand (Figure 3).

Cambodia

The government of aware the imperative of building infrastructure. Large-scale plans to improve both the electricity supply and the condition of transport networks are being implemented. One high-profile project is the "Cambodia Power Development System 2013-2018", which aims to upgrade the electricity grid.

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—Stephen Higgins

According to this plan, a national high-voltage grid will be developed from Phnom Penh with the aim of connecting all markets. The grid will also be connected to all existing and future hydropower dams. A subsequent phase of the project centres

on the importation of electricity from Vietnam and Thailand. As well, three new hydropower projects are under construction.

The national highway system is almost complete, and secondary roads are continuously being paved.

A lot remains to be done given the numerous tasks at hand. Increasing public-private partnerships in both number and in scope is necessary to make way for more burden sharing. Given resource

constraints, the government continue negotiating must for greater donor support for Electricité du Cambodge. Further, the Cambodia Power Development System is a remarkable plan that has to be realised in order to bolster and stabilise the electricity supply while aiming to push down its cost. In the next few years, it is expected that the national grid will be connected to all

developed hydropower stations. Available capacity is also foreseen to increase substantially in the areas supplied by grid substations. Major industries and special economic zones within 10 kilometres of substations may also get power through direct feed

at cheaper rates. Industries with their own diesel generation may likewise tap the grid at lower cost. Other measures to reduce the price of electricity include developing cheaper sources and increasing the efficiency of operations. Addressing efficiency will necessitate facing difficult questions about governance, market liberalisation, fair competition and independent regulation.

Infrastructure development builds up the country's capacity to exploit the potential of its manufacturing industry. A survey of present and future opportunities reveals that this sector holds much promise. One such opportunity pertains to Cambodia's strategic location. Completion of railway links within the region will widen the window for product, knowledge and skills exchange. Another opportunity is traced to changes in the labour market. It is predicted, for instance, that more and more workers from agriculture will want to shift to manufacturing industries as they learn the required skills. This intensifies the pressure for the expansion of manufacturing.

Poor infrastructure is not the only challenge confronting the manufacturing sector. The crisis has directed attention to a long-standing problem, namely the lack of diversification. The heavy reliance on garments prevented industry from spreading the risks and hence fending off some of the impact of the global economic meltdown. An industrial policy that learns from this crisis will make diversification a priority. As mentioned, food manufacturing accounts for only 10 percent of industrial production. There is room for improvement here, especially in view of the fact that many imported products are made from raw materials that originated in Cambodia.

One other impediment to the growth of manufacturing is the questionable state of legal governance. The importance of contract enforcement to investors and banks should not be underestimated. The establishment of an independent commercial court with qualified judges will be a welcome development.

The question whether a high degree of dollarisation continues to be in the interest of the country also cannot be avoided. The advantages and disadvantages of dollarisation will have to be revisited. One benefit is that foreign investors like transacting in dollars. A point against it is that it eliminates the possibility of using currency devaluation to boost competitiveness.

Other actions that can spur the development of manufacturing are increasing investment in vocational training, avoiding the use of tax incentives and reducing the informal costs of investment. A recent survey found that 52 percent of firms identify corruption as a major constraint on investment. This puts addressing corruption on the agenda.

Industrialisation has facilitated the development of many countries. This path is open for Cambodia to tread, but the journey will not be easy. To reach the end, concerted action by the government and its development partners is essential.

Did you know that

... Cambodia is in the process of building its own "Three Gorges Dam"?

The Kamchay dam, likened to China's Three Gorges Dam because of its massive size in the Cambodian context, is under construction in Kampot province. Driven mainly by Chinese investment, other hydropower projects in the country are currently under construction or in the pipeline. These include dams around the lush Cardamom Mountains. While the stated purposes for hydropower development have been commended, the perceived lack of transparency in negotiations and disregard for the environmental impact of the projects have been criticised. In 2008, a joint report by the NGOs International Rivers and the Rivers Coalition in Cambodia asserted: "Hydropower development in Cambodia has proceeded in the absence of meaningful public consultation and [with] an overall lack of transparency in the decision-making process". The National Assembly also passed a law that would oblige the government to cover any financial losses incurred by two Chinese hydropower projects in the event of political instability.

Sources: IR & RCC (2008), Phnom Penh Post (2009), IRIN (2009)