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ENGLISH ONLY
28 November 2013

ECONOMIC AND SOCIAL COMMISSION FOR ASIA AND THE PACIFIC
UNITED NATIONS DEPARTMENT OF ECONOMIC AND SOCIAL AFFAIRS
THE ROYAL GOVERNMENT OF CAMBODIA

Asia-Pacific Regional Workshop on Graduation Strategies from the Least Developed Country Category as part of the Implementation of the Istanbul Programme of Action for the LDCs
4 – 6 December 2013
Siem Reap, Cambodia

LDC Graduation – A Case of Cambodia

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The views and opinions expressed in this paper are those of the author and do not necessary reflect the views of UNESCAP.

This draft paper has been issued without formal editing.

Contents

1. Introduction

Istanbul Programme of Action, or Programme of Action for the Least Developed Countries for the Decade 2011-2020, specifically aims to overcome the structural challenges of LDCs in order to eradicate poverty, achieve internationally agreed development goals and enable half of the LDCs to graduate from the least developed country category. At the 69th session of the ESCAP commission, several LDCs in the region including Cambodia confirmed or expressed their intension to graduate from LDC status by 2020.

Criteria for identification of LDCs has been refined over time, with components of index revised or elaborated. It is currently based on the following three criteria, namely: (i) per capita gross national income (GNI), (ii) human assets and (iii) economic vulnerability to external shocks.

- Low-income criterion: based on a three-year average estimate of GNI per capita, based on the World Bank Atlas method (under $992 for inclusion, above $ 1,190 for graduation as applied in the 2012 triennial review).
- Human Assets Index (HAI): (a) nutrition: per centage of population undernourished; (b) health: mortality rate for children aged five years or under; (c) education: the gross secondary school enrolment ratio; and (d) adult literacy rate.
- Economic Vulnerability Index (EVI): (a) population size; (b) remoteness; (c) merchandise export concentration; (d) share of agriculture, forestry and fisheries in gross domestic product; (e) share of population living in low elevated coastal zones; (f) instability of exports of goods and services; (g) victims of natural disasters; and (h) instability of agricultural production.

Eligibility: For an LDC to become eligible for graduation, it must

- Reach at least 2 out of 3 graduation criteria, or
- Exceed GNI per capita at least 2 times higher than graduation threshold

Graduation: To be recommended for graduation, a country must

- Meet the eligible criteria 2 times (i.e., at two successive triennial reviews).

2. Objective and scope of work

This study presents an overview of the current state of the economy of Cambodia and the the "Gap" between the graduation "threshold" and the actual level of "achievement" under each of the 3 LDC graduation criteria. Based on that assessment, specific policy instruments for closing that gap will be suggested and recommendations will be made. The study is not a forecasting exercise which tries to forecast when each country is likely to graduate given its current growth and development trends.

This country report covers five sections. Section 1 reviews the recent macroeconomic/sectoral

performance including social development indicators. Section 2 discusses where the country stand vis-a-vis graduation, using the 3 criteria as established by Committee for Development Policies, conducting "Gap Analysis" in each of the 3 criteria which will "estimate" the gap between the current status of the criteria and the associated threshold. Section 3 identifies and analyzes policy instruments/interventions needed to close each of the "gaps". Section 4 discusses phasing out/transition strategies in areas such as concessional ODA and DFQF market access. Section 5 deals with conclusion and recommendations.

3. Review of Recent Development Trends

3.1 Human Development Index (HDI)

The core measure of human poverty is HDI that incorporates GNI per capita, a measure for health (i.e., average life expectancy at birth) and education (i.e., expected years of schooling and mean years of schooling). Cambodia's HDI value for 2012 is 0.543—in the medium human development category—positioning the country at 138 out of 187 countries and territories. The rank is shared with Lao People's Democratic Republic. Cambodia is among the more than 40 countries in the South that had greater gains in HDI between 1990 and 2012 highlighted in a UNDP's Human Development Report 2013.

Table 1 explains how Cambodia's HDI is associated with other socio-economic indicators. Thanks to reforms and multiple actions taken by the government in late 1990s, Cambodia's HDI value remarkably increased from 0.441 to 0.543 over 1995-2012. Cambodia's life expectancy at birth, mean years of schooling and expected years of schooling increased by 7.4 years, 4 years and 0.3 year, respectively, over the same period. Cambodia's Gross National Income (GNI) per capita increased by about 162 per cent, from $797 to $2,095 (2005 PPP$).

Table1: Life Expectancy, Years of Schooling, GNI per capita and HDI

Year	Life expectancy at birth	Expected years of schooling	Mean years of schooling	GNI per capita (2005 PPP$)	HDI value
1990	55.6	6.5	5.3	509	0.393
1995	56.2	6.5	5.5	797	0.411
2000	57.6	7.5	5.7	1,002	0.444
2005	60.1	10.1	5.7	1,440	0.501
2009	62.1	10.5	5.8	1,786	0.529
2010	62.7	10.5	5.8	1,868	0.532
2011	63.1	10.5	5.8	1,988	0.538
2012	63.6	10.5	5.8	2,095	0.543

Sources: Human Development Report 2013 and Author's estimate

3.2. Education Achievement

Effort to reform education sector also yields a positive result. Progress has been made in equitable access. Both gross and net enrolment ratios improved from 1997 to 2008 (Table 2). The net enrolment rate at the primary level appears impressive at over 90%, it having progressively improved through the last 5 years. Nonetheless, the primary school completion rate is lower; in 2012-2013, it was in the range 87-88% for both boys and girls, implying that children up to 13 percentage points either dropped out or repeated in that year. The dropout rate was 5.3% while repetition rate was 3.7%, adding up to 9%. The gap has stayed invariant in all the 5 years for which data are presented.

Table 2: School Enrolment and Completion Rates

	2008	2009	2010	2011	2012
Net enroment rate in primary education					
Total	94.4	94.6	95.2	96.4	97
Boys	94.8	95	95.8	96.7	97
Girls	94	94.6	94.6	96.1	97
Gross enroment rate in lower secondary education (Grade 9)					
Total	61.6	58.1	58.5	55	53.6
Boys	64	59	59	55	53.9
Girls	59.2	57.1	57.8	55	54.2
Completion rate at Grade 6					
Total	85.6	83.2	85.3	89.7	87.4
Boys	85.4	82.8	85.6	89.6	86.9
Girls	85.7	83.6	85	89.9	87.8
Completion rate at Grade 9					
Total	49.1	48.7	46.8	42.1	40.6
Boys	52.1	50	49.2	42.6	42.2
Girls	45.9	47.3	44.3	41.6	40.4

Source: Ministry of Education Youth and Sport 2013

The major problem begins with lower-secondary education and by this token at higher levels as well. There is a huge drop in enrolment at the lower secondary school level: in 2012-2013, 87.4% children passed out from primary level but only 53.6% joined the lower-secondary schooling stream; thus, children to the extent of almost 34 percentage points discontinued education. Another disturbing fact is

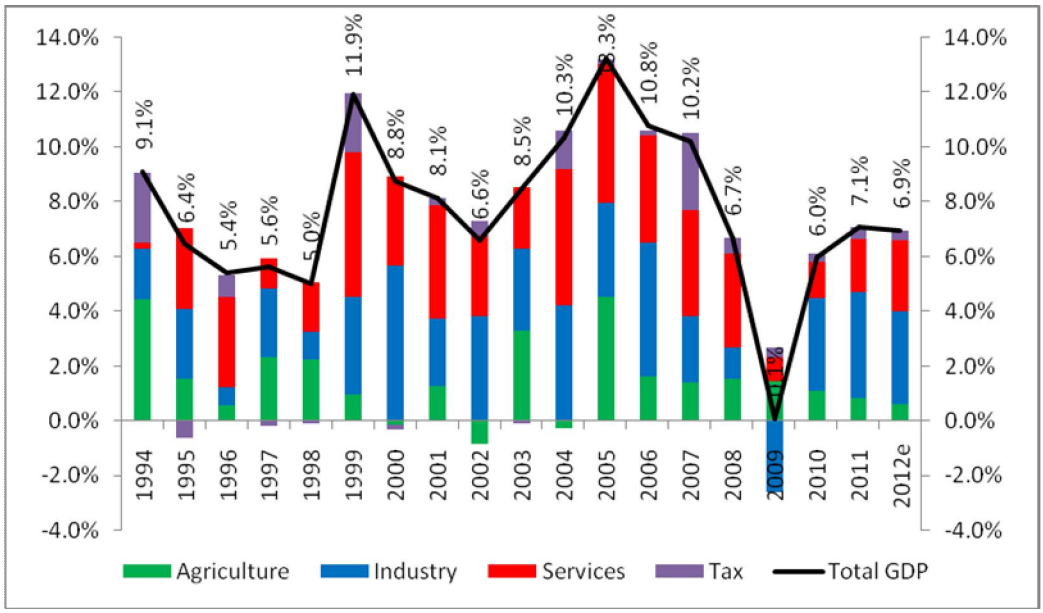
that fewer proportions of children have been joining the lower-secondary education stream in successive years, in this 5-year time-series. School completion rate at the lower-secondary (Grade 9) level has been less than enrolment by 10-14 percentage points in different years. Seen in terms of Cambodian Millennium Development Goal targets, the dropout rates are yet some distance away from the defined target.

3.3 GDP Growth

Cambodia's GDP has tripled, increasing from $295 per capita in 1997 to $909 per capita in 2011. Figure 1 shows that GDP growth rose sharply in 1999 reaching double digit for the first time and continued to strong until the 2009 Global Financial Crisis (GFC). From 1997 to 2011, Cambodia experienced an average growth rate of 7.9 per cent. The robust economic growth during this period mainly reflected a rise in industry, particularly manufacturing, which is dominated by garments thanks to Most Favoured Nation (MFN) and Generalized System of Preferences (GSP) status granted by the US and EU, and a surge in services mostly due to a recovery in tourism and real estate sub-sectors. While the industrial base is not yet deep, being largely restricted to garment manufacture which thrives on low wages, during the past decade to 2011, the garment industry alone accounted for 22 per cent of growth. Agriculture has grown at 4-5 per cent annually from 2002 to 2011 and still has high potential in rice, as well as other crops, if effective irrigation systems are improved and expanded. Both the industry and construction sectors experienced a dip due to the economic downturn in 2008-2009. The garment sector alone is estimated to have lost a total of 60,000 jobs, and 25,000 jobs are estimated to have been lost in the construction sector (Chun 2009 and Xinhua 2009 as cited in Phim 2011).

The GFC in 2009 is a break to test the structural weakness of the economy. After the crisis, it is widely accepted that, in order to sustain growth, the economy should no longer continue to rely only on its traditional sources of growth, namely, garment manufacture, tourism and construction sub-sectors. Excessive dependence on this limited growth base and a few market destinations limit economy's resilience against exogenous shocks. The sources of growth need to diversify and seize opportunities emerging from global and regional value chain, foreign direct investment and the markets. This approach implies emphasis on industrial sectors with good growth potential. It was recognized that industrial development can help transform the structure of the economy by generating more value added from a wider economic base to ensure sustained growth with equity.

Figure 1: GDP Growth and Sectoral Contribution: 1994-2012



Source: Author's calculation based on data from ADB Key Indicator for Asia Pacific 2012

3.4. Inflation

Figure 2 depicts inflation trends from 1996 to 2011. Year-on-year inflation was around 7 to 8 per cent in mid 1990s then rose to 15 per cent when political stability was disrupted in 1997–98. However, it was kept at bay until the economy was hit by the food price crisis in 2008. During the global financial crisis in 2009, inflation rate subsided to 0.7 per cent, due to lower international oil and food prices and weaker domestic demand. Inflation started to surge moderately again as the economy began to gain its growth momentum. The year-on-year overall inflation increased to 6.3 per cent in 2011, up from 4 per cent a year earlier. This was largely attributed to higher prices for food, beverages and transportation. Interestingly, overall living cost measured by CPI increased by half compared to 2000 or by almost two folds compared to 1996. This means that the purchasing power has been eroded dramatically overtime. Meantime, those who did not experience their wage increase by the same pace as CPI would be worse off.

3.5. Terms of Trade

The exports rose significantly since its accession to ASEAN and the WTO but the exogenous shocks which decelerated global demand reduced the country's export notably (Figure 3). The export base is very narrow with textiles and clothing accounting for more than 80 per cent of the total while the US has been the sole major market for Cambodia's exports. The global economic downturn tested the strength of the economy and called for diversification of both export products and destinations to mitigate risks associated with such external shocks. Trade liberalization also promotes Cambodia's

import along with exports (Figure 3). Main import goods include petroleum products, cigarettes, steel and cement. In the absence of domestic supply, the country imports raw materials, mostly from China and Hong Kong, to use as inputs in garment production. This import structure reflects the increasing scale and scope of trade with countries in the region. Nevertheless, as noted earlier, Cambodia's trade balance has persistently been negative, implying that the country increasingly requires external financing to deal with the deficit.

3.6. Fiscal Balance

The government has operated with a fiscal deficit since 1993. Despite remarkable improvement in domestic revenue collection since 1997, expenditure remained outpacing revenue collection. During the GFC, the fiscal deficit deteriorated further, largely driven by a decline in tax revenue combined with an increase in expenditure due to military build-up, larger spending on security and increased salaries for public servants. The share of total revenue and tax revenue in GDP significantly increased from 8 per cent and 6 per cent in 1998 to around 13 per cent and 11 per cent respectively in 2011(Figure 4). Nevertheless, according to statistics released by ADB's key indicator 2012, the ratio of revenue to GDP is among the lowest in ASEAN countries. This, however, is due to the generous tax policies adopted by the government to attract foreign direct investment. It is estimated that the ratio total revenue to GDP would increase significantly to around 18 per cent if those generous tax exemptions were included. The majority of the revenues of the National Budget have currently been raised domestically, coming from the Value Added Tax and other taxes, fees, and fines paid by consumers, and companies. On the other hand, the expenditure also increased significantly by 10 folds since early 1990s (Figure 5). The Budget Law split the budget into two parts with a recurrent budget financed by domestic resources and a capital side of the budget financed heavily by funds from development partners. The overall expansion in government expenditure has reflected an increase in both current and capital expenditure.

3.7. Foreign Direct Investment

FDI has started flowing into Cambodia's economy since the country embarked free-market reform in early 1990s, surged dramatically after accession to WTO. Between 1993 and 2011, FDI share of GDP increased from 2 per cent of GDP in 1993 to 12.9 per cent of GDP in 2011 thanks to its sustained levels of economic growth and macro-economic stability. FDI rose until 2008, and then fell sharply in 2009 due to the international economic downturn and rose again from 2010, demonstrating investor confidence in the Cambodian economy (Figure 6). Most FDI was approved in industry and services and came from Republic of Korea, China and Russia Federation. New fixed asset investment approvals which consists of both domestic investment and FDI and which hit a record in 2008, interrupted in 2009 (Phim 2011, page 8). While domestic investment decreased slightly in 2009, FDI slumped by 72 per cent implying that the formers are more resistant to external shocks compared to the later. China remained the top foreign investor, followed by Singapore, Russia Federation, Thailand and Republic of Korea. Investments were registered mainly for tourism, energy, agro-industry and telecommunications.

However, not all approved investments are implemented.

Agriculture attracted the smallest investment among the three sectors. Agriculture remains largely underdeveloped, reflecting very low private and public investment in the past decade. Despite its decreasing share of GDP, agriculture still employs the majority of Cambodians, especially the poor. Growing investment approvals in recent years should increase productivity, which would impact on food security and poverty. Industry received the second largest investments while tourism received the largest amount of proposed investment, followed by telecommunications and hotels. FDI inflows to Cambodia have demonstrated a bias towards the garment and tourism industries and can be categorised as export oriented and efficiency seeking. The competitive advantage of the garment sector, based in particular on its preferential access and labour cost advantage, has served as a significant pull factor. In the case of the tourism industry, this competitive advantage rests on its natural asset, Angkor Wat. The proximity of the country to major input sources and regional production networks has likewise significantly influenced FDI entry.

3.8. Poverty Reduction

Poverty rates were calculated for earlier and later years as well as per the new poverty line based on CSES 2009. Comparable data are available for the years 2007, 2008, 2010 and 2011. Reducing poverty has been amongst the most cherished goals of the RGC. The plan aims to reduce poverty at least to an extent that the country achieves MDG1 by 2015. According to the CSES conducted in 2007, the proportion of persons below the poverty line was 47.8 per cent (Figure 7). The proportions of persons below the poverty line are estimated to drop to 19.8 per cent in 2011. There are alternative measures of poverty available, which link the standards of living to asset-ownership and social consumption. The Commune Councils generate data on village assets and social consumption, among other indicators. These data are known as the Commune Database (CDB). The Ministry of Planning has (unofficially) generated annual estimates of poverty using these (Figure 7). It is interesting to note that the estimates obtained from CSES and CDB are quite similar except for 2007. In general poverty has been reduced from year to year.

Fig 2: Inflation, 1996–2011

Fig 3: Trade Balance (USD Mn)

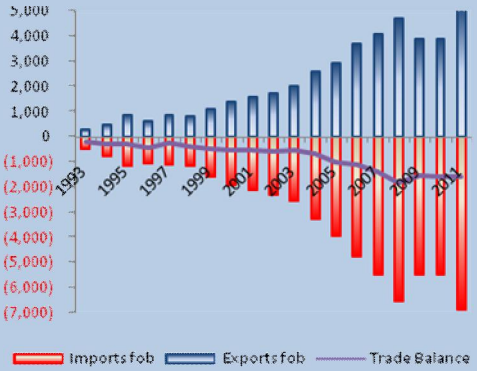


Fig 4: Government Revenue

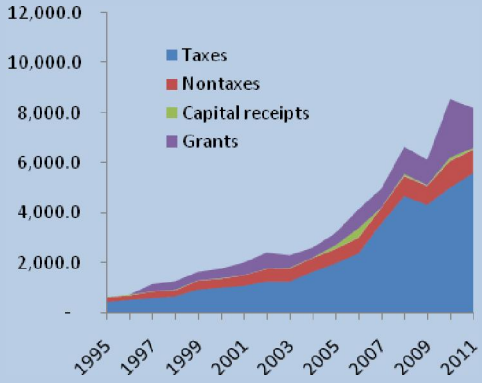


Fig 5: Government Expenditure

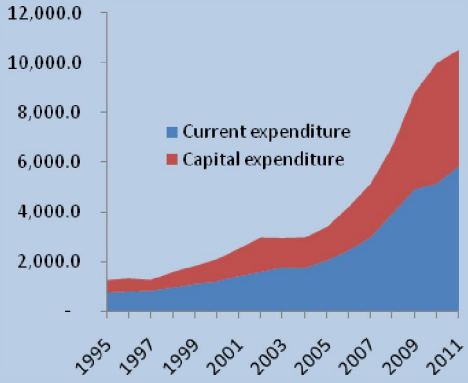
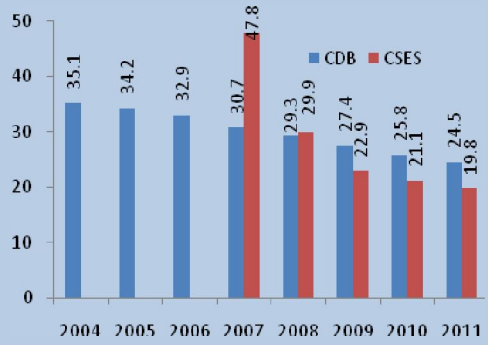


Fig 6: Foreign Direct Investment*

Fig 7: Poverty Reduction 2004-2011**



Source: Author's calculations based on data from ADB Key Indicators for Asia and Pacific 2012

* Adapted from HE Hang Chuon Naron Presentation on Sustainable and Inclusive Growth 27 March 2012

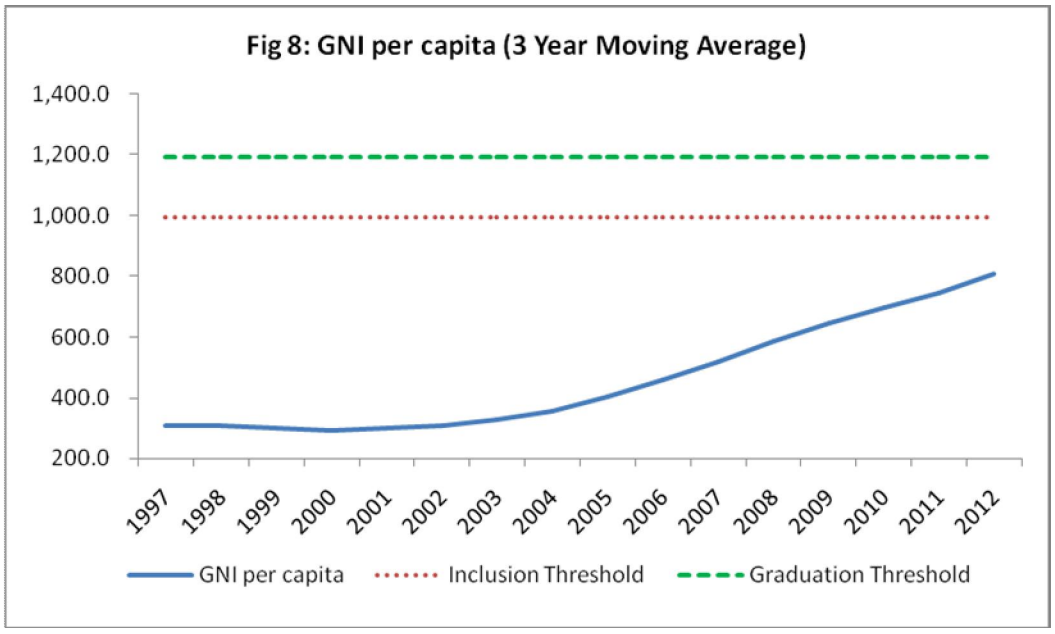
** Commune Data Base Poverty Score Card 2012 and Poverty Line in Cambodia-A New Approach 2012

4. Cambodia's Position Versus LDC Graduation Criteria

Three criteria serve to measure progress for LDC graduation. These include GNI per capita, Human Asset Index and Economic Vulnerability index. As of 2012, despite notable progress in many fronts, Cambodia has not yet met any of the thresholds associated with the three criteria: it stood at 59 per cent of the per capita income threshold; 50.5 per cent of the human assets threshold and 57.9 per cent of the economic vulnerability threshold.

4.1 Gross National Income (GNI) per Capita

In spite of significant growth performance in the past decade Cambodia's GNI remains far below the 2012 thresholds for inclusion and graduation. According World Bank, Cambodia's GNI per capita increased from roughly 300 USD to around 800 USD over 1997-2012. If the current high growth rate continues, Cambodia is expected to meet GNI per capita threshold by 2020. The issue is that after a long period of high growth, Cambodian economy is still driven by few sectors such as crops, garment, construction and tourism, which creates a small industrial base for structural transformation. Given its small open economy, it is vulnerable to external shocks as reflected by the recent global financial crisis. The vulnerability of the Cambodian economy to external shock was evident during the 2009 global financial crisis, and has posed a threat for the country to further industrialize and successfully move up into the middle income status. Though the country recovered rapidly from such shock, the experience has reminded policy makers to reconsider the current growth engines and the needs to diversify the structure of economy so as to sustain the catch-up process and long term growth.

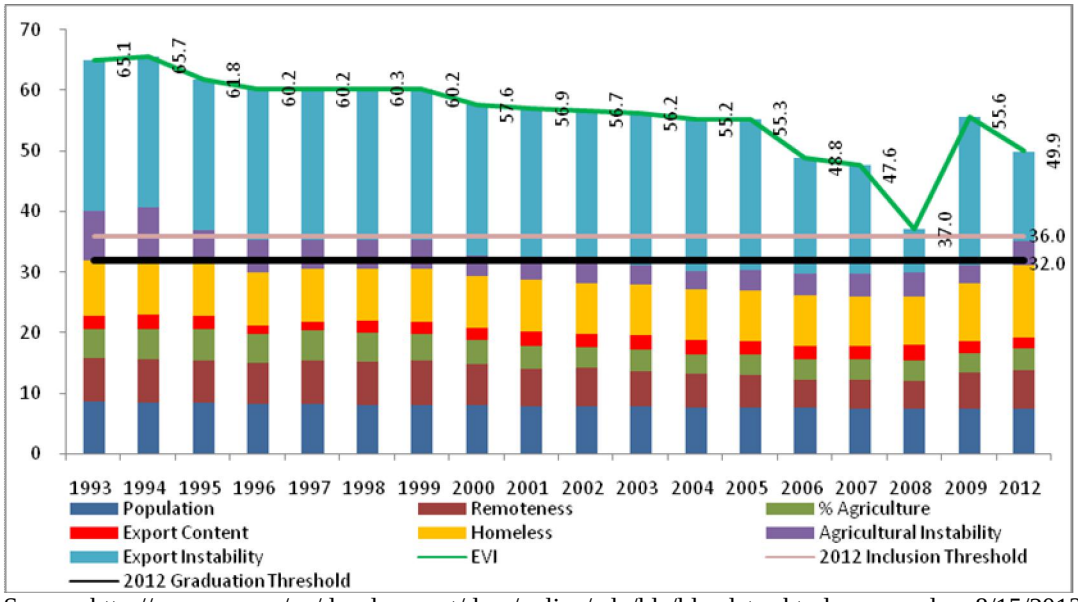


Source: http://data.worldbank.org/indicator/NY.GNP.PCAP.CD/countries/KH-4E-XM?display=graph

4.2 Economic Vulnerability Index (EVI)

According to Fig 9, Economic Vulnerability Index does not reach inclusion or graduation threshold either. In 2012 the EVI score stood at 49.9 against the inclusion threshold of 36 and graduation threshold of 32. It is observable that two factors influence EVI trend. These factors are exposure index which includes population size, remoteness, and economic structure and merchandise environment and shock index which includes trade shocks and natural shocks (homelessness and other consequences of natural disasters and instability of agricultural production). It appears that change of shock index contributes more significantly to variation of EVI. For instance, in 2008 when export instability shrank, the overall EVI score dropped to almost meet inclusion threshold. Since the export bases are narrow, EVI can be further improved through industrial diversification. At present, the economy remains an agrarian economy but it is structurally shifting rapidly towards the manufacturing sector. The agricultural sector is a dominant sector in the economy but has fallen over the years. In contrast, manufacturing has grown rapidly in recent years, by about 15% per annum, but it is dominated to some extent by just one industry, the garments and clothing industry that accounts for over half of manufacturing output and most of the Cambodian export. As compared to the neighbouring country of Thailand, the large agricultural processing and home goods manufacturing that is typically observed in low-income economies are largely absent due to the proximity to large industrialized neighbours which can do these more efficiently.

Fig 9: Cambodia's Economic Vulnerability Index 1993-2012



Source: http://www.un.org/en/development/desa/policy/cdp/ldc/ldc_data.shtml, accessed on 8/15/2013

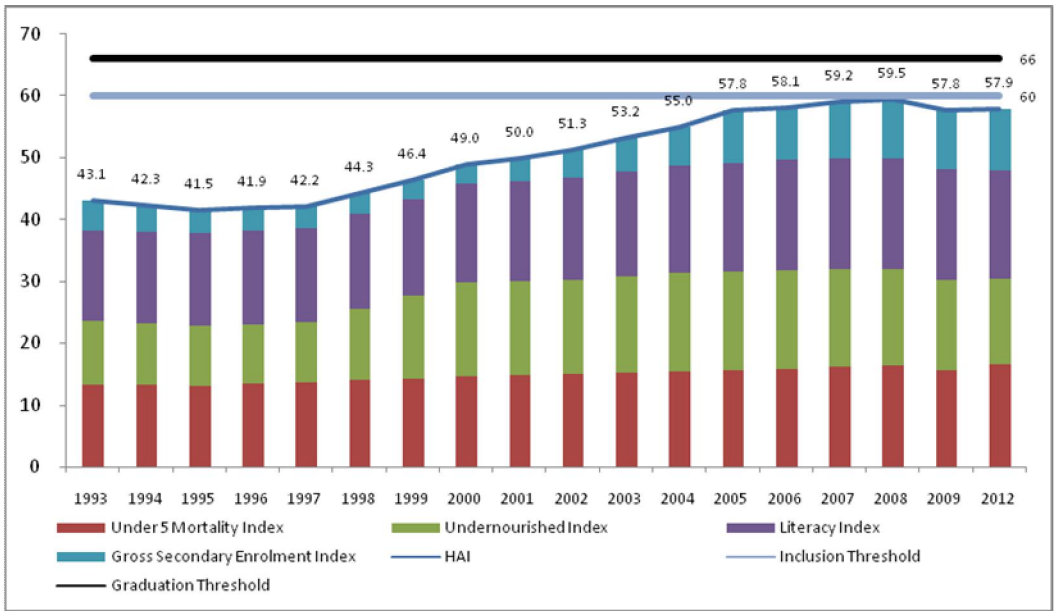
4.3 Cambodia's Human Asset Index

Human Asset Index (HAI) is calculated based on under-five mortality index, undernourished index, literacy index and gross secondary enrolment index. Fig 10 below shows that HAI made significant progress rising from 43.1 in 1993 to 57.9 in 2012. Such advancement was largely due to an improved undernourished index and an increased enrolment index. HAI almost met inclusion threshold of 60 in 2008 but was deteriorated the following years as a consequence of GFC which negatively affects undernourished index significantly. As of 2012 HAI is still far from graduation threshold of 66.

Despite this progress, many critical issues persist within education and health system which can slowdown the speed of HAI improvement to meet the graduation threshold. On education, a number of critical issues in need of urgent action, including: teaching staff shortages and understaffed schools in remote areas; grade promotion regulation and ensuring the implementation of regulations in development partners' education programs; ensuring equal access to education services; reducing parental cost barriers and informal school fees; retaining students and reducing drop out; improving the quality and efficiency of education services; and finally strengthening institutional development and capacity building for decentralization.

Similarly though improvements have been many in health sector, a number of challenges should be brought to the attention of policymakers and health partners. Currently, high-impact interventions to improve maternal, newborn and child health services are insufficient, including (1) emergency obstetric and newborn care, (2) safe abortion and family planning, and (3) neonatal care and nutrition.

Fig 10: Cambodia's Human Asset Index: 1993-2012



Source: http://www.un.org/en/development/desa/policy/cdp/ldc/ldc_data.shtml, accessed on 8/15/2013

5. Policy Gap Analysis and Intervention

This section reviews key policy and intervention gaps which can influence the change in GNI, EVI and HAI and hence affect the graduation. It then attempts to suggest some options to fill those gaps. Policies to be reviewed include rice policy, industrial policy, human development policy etc.

5.1. Agricultural Policy

The Rice Policy Paper of RGC sets the year 2015 as a target year for producing a surplus of more than 4 million tons of paddy rice while achieving at least 1 million tons in milled rice export and making Cambodian rice an internationally recognized brand. Two main strategies are developed. First, in the short run, the RGC promotes paddy rice production to meet market demands and encourages export of milled rice by encouraging the shift from the informal export of paddy rice to the formal export of milled rice. Several concrete measures include:

- Expanding irrigation facilities, promoting the use of water, seeds, fertilizers and appropriate technologies, as well as providing micro credit for rice production;
- Encouraging the private sector to invest in paddy processing and exporting milled rice by resorting to resolving the issues of credit shortages; and
- Facilitating and fast-tracking rice export through improvements in export procedures, logistics support and more especially eliminating informal fees.

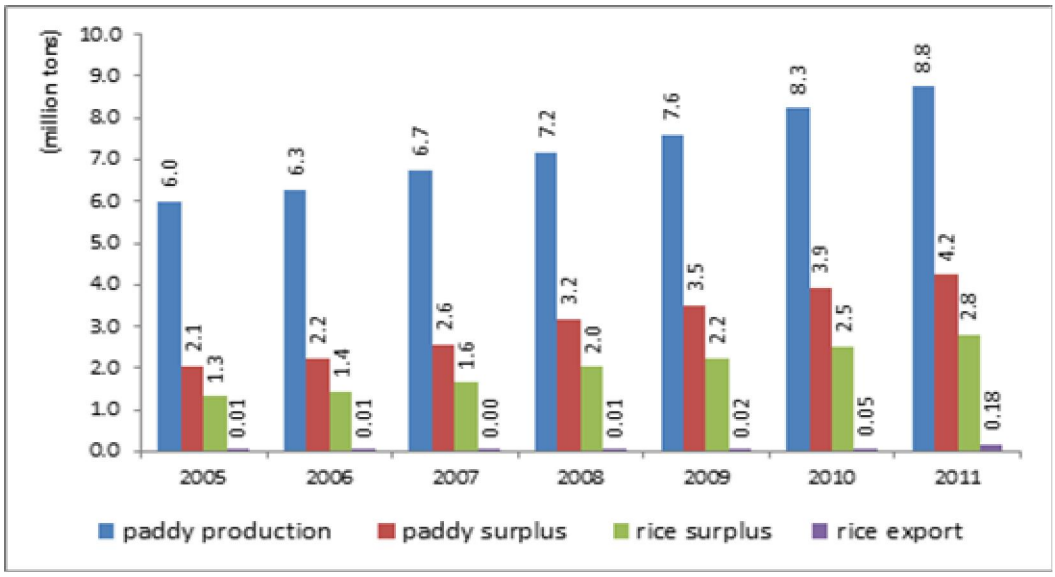
Second, in the medium and long term run, the RGC focuses its efforts on enhancing rice export competitiveness through the promotion of: production technology, management of soil fertility, management of water usage, better application of seeds and fertilizers, organization of farmers associations, improving the rice processing quality, enhancing transport infrastructure, including roads and ports, reducing energy cost, better land use and management, short and long term credit facilities, trade facilitation and exploring new market opportunities.

Rice is Cambodia main agriculture product, which accounts about 40 per cent of the total agriculture output. In terms of the rice crop, only 13% of the cultivated area is irrigated, the rest is rainfed (MoE, 2010). Rice productivity is highly dependent on weather conditions. For instance, the severe Mekong and flash floods in 2011 affected 423,449 hectares of rice field with 265,804 hectares reported as damaged, which represented 10.7 per cent of total crops destroyed. Some 43% of communes are considered vulnerable to extreme climate events (drought and floods). SNC report of MoE suggested that Cambodia's climate is changing in the last 50 years. Mean monthly temperatures are predicted to increase from between 0.013oC to 0.036oC per year until 2099. It estimated that wet seasonal rice yield decrease from between 40%-60% until 2080. Adaptive capacity to climate change is important to address long term agricultural product and ensure food security.

Despite the challenges, a significant surplus it is estimated in the country even if not coupled by equal rice export, (see Figure 11 below). However, despite the paddy surplus, Cambodia continued to face

food insecurity and high poverty rates, especially in rural areas (CDRI 2010). The growth of paddy production is associated with significant expansion of the cultivated area and increased crop yield. Nevertheless, expansion of rice cultivation area was largely achieved by clearing forest (slash and burn farming in upland areas) which may be one of major causes of concern for deforestation.

Fig11: Rice Production, Paddy and Rice Surplus and Rice Export (Million tons)



Sources:1) MAFF for paddy production, paddy surplus and rice surplus, 2) GDCE of MEF for rice export, 3) Authors' estimates for rice surplus 2005 and 2006

Challenges

RGC rice policy and especially MEF response to it is sound in its substance but does not take into due account climate change, does not focus on storage infrastructure and is too confident in the global rising of aggregate demand.

Both in its long term and short term measures for increasing productivity, the policy focuses on important measures and technological improved techniques and seeds but does not take into consideration the usage of flood resistant, drought tolerant or salinity resistant rice varieties. Though the policy mentions irrigation as a strong driver to production increase, the accent is put on developing primary and secondary canals fueled by existing dams, rather than on the construction of alternative basins which could pump water from the flooded fields. The last kind of irrigation could, in fact, mitigate flood impact on the harvest, and containing more efficiently the huge quantity of rain-water falling during the rainy season.

Being confident in a never-ending increase in the aggregate demand for rice moreover might be a wrong outlook. If food diversification in Asia is slow and not widespread, then it is almost certain that this will be offset by rising per capita consumption in Africa and the rest of the world and the global population and total global consumption will continue to rise. However, if Asian countries follow a rapid diversification path, the opposite will be true and total global consumption may start declining.

Aggregate demand should also be considered as internal aggregate demand since Cambodian consumers cannot be forgotten in this debate. Both producer and consumer welfare will need to be addressed given acute market volatility as food expenditures are high in Cambodia (64%) and rice provides 75-80% of calories. Similarly, farm incomes are highly susceptible to price shocks, as abundantly made clear during 2007-08. Surpluses may be injected in the market to lower the market price of the staple and not only being traded abroad.

Last but not least given that the majority of paddy rice surplus and rice surplus is informally traded, more attention should be devoted to storage infrastructure to enhance formal trade. According to MEF statistics (Custom and finance office), just 6.4% of the surplus is officially traded while, due the lack of storage facilities, suggesting that 93.6% is informally traded to border countries. Informal trade per centage could be reduced if storage infrastructure was available.

Adding to storage infrastructure, issue of transportation (inland and waterway) should also be addressed. The creation of storage along Mekong river, etc.

Recommendations

Given the background, strengths and weaknesses of the policy, and in order to align the implementation efforts to the already good visioning exercise, weaknesses should be taken in consideration to implement the policy. Few recommendations, which address these weaknesses could be formulated both for in a short and long term perspective includes: increase institutional capacity to use climate information such as the use of climate forecast information in setting up better rice cropping; invest in rice varieties that could be resilient to droughts, floods and salinity; increase rice production through adaptive measures such as the water use efficient technologies; facilitate pre-harvest and post-harvest techniques and technology (e.g rice harvesting mechanization should be introduced) to ensure the good quality of paddy collected; establish a climate monitoring system which could give pace to weather indexed insurance products; make export incentives conditional to the building of storage facilities, or invest in storage facilities asking rents to farmers which could be proportional to their income; improve transportation infrastructure; and establish adaptive irrigation, through the construction of basins that collect rainfall water and pump water from the flooded fields.

5.2. Industrial Policy/ Export Diversification

In light of the future challenges, Cambodia will need renewed growth framework to maintain fast growth that was achieved in the past. For the past decade, Cambodia experienced structural change where resource allocation from agriculture to industry. According to SNEC's draft Industrial development policy is to facilitate structural transformation which entails key objectives as below.

- To strengthen industrial structure that is weak: Enterprise structure of Cambodia: 97.7% are micro-enterprises with 10 workers or less, generating 58.2% of total jobs;
- To diversify export products: There are only a few export products. Most of them are garment products and apparels. This creates high trade deficit due to importation of most consumer goods and that is needed to be addressed in the long-term;
- Import-substitution products are emerging but still in low value-added chains: motor-bicycles, soup powder, cars, construction materials, plastics, and other equipment;
- To avoid "lower middle-income trap";
- Current Approach: So far, Cambodia's Industrial Development based on market forces; the Royal Government only set priority sectors by providing tax incentives and maintaining favorable investment climate to promote those sectors
- New class of entrepreneurs: The rapid increase in real estate and land prices creating entrepreneurs with capital and knowledge for investing and creating investment groups
- Lessons from Rice Policy: Rice policy has proved real need for government's guidance and response to private sector demand through better dialogue. With rice policy, the government has improved inter-ministerial coordination, provided appropriate assistance in terms of infrastructure, financing and technology

Nevertheless, the industrial policy does not provide any scientific backup why a number of specific sectors should be diversified. The role of government in promoting industrial diversification is not very much highlighted in the industrial development policy. Private sector and market force are solely left to drive the economic growth and structural change. On top of that, the current industrial development policy seems to not take into account serious issues of low level of human capital and financial capital to promote specific industries.

Recommendations

Many interventions can be suggested to improve human capital and promote industrial diversification. First, the average educational attainment of the labour force is at primary and lower level of education implying the challenge to shift the average educational attainment in the economy towards secondary and higher level of education within the next decade if the industrial diversification is to be achieved.

Second, due to the household dynamics that reduce the incentive for investment in human capital at the young age, there is an urgent need for the government to address the trade-off between working and schooling of the young population. In this respect, TVET as well as on-the-job training are very crucial and critical to retain and sustain the human capital development in the economy. There is an urgent need to increase the skill-set of workers in later part of their life-cycle and TVET training is important to attain this balance over time.

Third, the role of the government is important to coordinate the training needs of the workers with the industry demand for skills. The government could emphasize the "Education for All" framework that allows every individual to acquire some skills from the formal education system. For example, the establishment of National Technical High Schools and Machinery Technical High Schools in Korea in 1960s to create technical skills at an early stage of education allowed Korea to move its human capital to skilled-based workforce, thus enabling it to meet the industrial manpower needs at the early stages of growth. There is also an urgent need to strengthen higher education in Cambodia. The government needs to increase the funding for overall education and in particular for the post-secondary and higher education (Universities, Polytechnics and Institute of Vocational and Technical Training). In particular, the government should also emphasize the importance of Science and Engineering Universities and University of Agriculture, which would aid in increasing the technology diffusion and productivity of the agriculture sector.

5.3. Human Development Policy

The Royal Government of Cambodia has made some significant progress in ensuring equal access to education services, improving quality and efficiency of the education services, and strengthening institutional development and capacity building for decentralization.

To ensure equal access to education services, the number of new schools has been added up every year. However, it is important to note that school construction alone is not a measure of success because not all schools operate on a full-time, daily basis and the current shortage of trained teachers continues to be a significant problem in Cambodia. Teacher shortage and demotivation of public school teachers due to low salary and limited management capacity of school directors are still big challenges for improved accessibility and quality education. The Government's intention and commitment toward the elimination of unofficial payments in schools is commendable; however, the practice is still prevalent and needs to be urgently addressed to ensure equitable access to education for all the children, especially the poor.

To improve quality and efficiency of the education services, MoEYS has endorsed the *Child Friendly School (*CFS) policy, its master plan and policies on education for children and children with disability. MoEYS renewed its school curriculum by issuing guidelines on the implementation of the new curriculum for basic education, including curriculum standards and action plans for guiding teachers on the new curriculum policy. Guidelines on preparing school subjects and guidelines for students to select elective subjects to study in upper secondary schools ere also introduced. The MoEYS is developing a

framework for supplying core textbooks for the new curriculum. Although significant progress has been made, the quality and effectiveness of the education service cannot be guaranteed if the textbooks and supplementary reading materials are not adequate and distributed to the students on time. Next, loss of teaching and learning time due to lack of classrooms and poor attendance of some teachers is not strengthened. Then, the lack of a professional career path for teachers is not solved. Later, improving standardized tests to assess student-learning outcomes is not employed.

To strengthen institutional development and capacity building for decentralization, MoEYS is engaged in strengthening the monitoring system as well as restructuring working procedures, developing legislative instruments and training education officers at all levels on technical skills. MoEYS efforts were on the finalization of and implementation of the Education Law and BMCs. However, the above policy cannot be achieved if the capacity of school directors is not strengthened to implement decentralization, such as school-based management, classroom management, teaching and learning activities, student performance evaluation, and effective use of budget resources. In addition, the implementation of decentralization also strongly depends on engagement of the community and commune council. However, some communities and commune councils failed to integrate school development plans into theirs.

Recommendations

To enhance human capital requires actions in many areas. First, there is a need to accelerate school construction, especially incomplete ones to ensure enough classes for the students all over the country and to increase scholarship budget for poor children, and those who live in rural and remote areas. In addition, textbooks produced must be in good quality and quantity with timely distribution to the students and teachers. Second, capacity of school directors should be enhanced to improve school management. Third, there is a need to reallocate education staff funding to allow for fair salaries for teachers to help reduce informal school fees and encourage them to stay where they are sent. Moreover, salary of teachers shall be increased to a level where they can be motivated to concentrate on their teaching work. Fourth, community should be sensitized and made to participate in school affairs so as to value education and appreciate the work teachers do. In doing so, teachers' morale will be boosted and the quality of education improved.

5.4. Natural Resource and Environmental Policy

Policies supporting natural resource management, as well as those protecting rural development and the economy, are paramount to Cambodia's sustainable development process, as a significant majority of the population is dependent upon these natural resources and the rural economy. On fishery resources, recent years have proven difficult for Cambodia's fishing households, both poor and non-poor, as immense difficulties have arisen due to high food prices and continued declines due to the economic downturn. Fragmented activities between sub-national administrations, which may not be aware of decentralization processes, may jeopardize sustainable fisheries, especially regarding illegal fishing practices and unregulated and unregistered community fisheries.

On forestry resources the intention of the RGC is acknowledged particularly concerning efforts to reforest degraded land, demarcation of forest estates and protected areas, an increase in approved community forestry, and a more participatory process in developing the National REDD+ Roadmap, as agreed in the JMIs. However, some shortfalls exist and some recommendation could be made. First, RGC/FA should limit the definition of "forests" to "natural forest" and exclude plantations. On environmental protection, conservation and climate change are concerned the JMIs on forestry and the environment are primarily focused on the forestry sector, while not sufficiently addressing climate change issues. It is proposed that the RGC include a separate set of JMIs specifically focusing on climate change and disaster risk reduction, to facilitate accountability mechanisms and performance assessment on the work being done on these issues.

At the same time, the RGC's effort in minimizing the environmental and social impacts of the extractive industry (oil, gas and mining) deserves appreciation. However, a number of concerns were observed in the enforcement of existing mining law, relocation and compensation, access to detailed and timely information, lack of meaningful consultation on EIA reports, and limited institutional capacity. Therefore, the RGC with supports from Development Partners (DPs) should strengthen the existing legal framework; meaningfully engage the public in the drafting process of related laws and policies and EIA reports; review the Law on Mineral Resource Management and Exploitation, in close consultation with all impacted sectors of society, to ensure sufficient protection for people and the environment, in accordance with international standards in the mining industry; and make information readily available to the public through internet sources.

Concerns over the development of hydropower dams and the energy sector are consistent with those environmental protection and climate change. While the RGC has made strides in increasing the use of renewable power through rural electrification and the promotion of decentralized power generation, the development of large hydropower dams on major rivers, such as the Sesan, have the potential to cause serious environmental damage—negatively impacting water supply, fisheries resources, and natural land and maritime resources. NGOs are concerned that the construction of such large hydropower dams in South-western Cambodia could increase the salinization of underground water in coastal areas, affecting agriculture in the region.

6. Discussion of phasing out/transition strategies

6.1. ODA Disbursements

Cambodia is an aid-dependent nation. There is a concern that LDC graduation to a lower middle income country would reduce amount of ODA particularly grants flowing from developed countries to the country. Nevertheless, Cambodia already starts experiencing to receive fewer amounts of grants since 2011. Total aid, including disbursements to NGOs, amounted to around US$12.3 billion between 1992 and 2011. In 1992, aid disbursements amounted to only US$250.2 million, mainly in the form of natural disaster and civil war relief. By 2011, disbursements had grown to US$1.39 billion. While

disbursements of development cooperation grew at annual compound rate of 14% between 2004 and 2012, Fig 15 shows that the increase was largely funded by grants up to 2010 but since then the increases are largely attributed to the increase in loan financing. The overall trend of ODA/GDP ratio over the period of 2000-2012 has declined but risen again from 2010 (Fig 16), however, this is attributed to larger loan disbursement in this period.

Fig 12. ODA Disbursements (USD million)

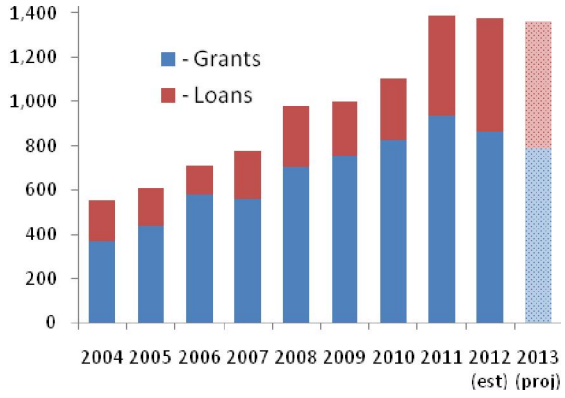
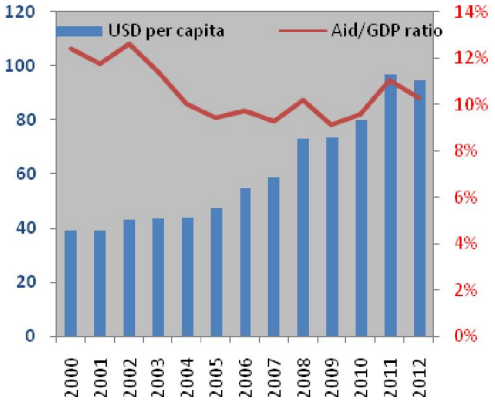


Fig 13. ODA per Capita and ODA/GDP Ratio



Source: CDC, January 2013

Cambodia has been depending on ODA from development partners to support the government's spending and to construct and rehabilitate economic and social infrastructure. Nevertheless, that will not continue in the long term for two reasons. First, Cambodia has already been enjoying ODA for years. Second development partners seem to have shifted their focus and support towards alleviating poverty in the more poverty-stricken African continent.

Over the medium term Cambodia's resource envelope is limited as only modest increases in public resources can be expected through growth in the tax base and efficiency improvements since domestic resource mobilization through domestic borrowing seems also not feasible. Tax revenue in Cambodia has steadily increased from around $100 million in 2003 to $600 million in 2011. The revenue reportedly reached $740 million in 2012. In recent years, Cambodia has strengthened its revenue collection effort via the broadening of tax base, introduction of new taxes such as the property tax and stronger enforcement. The ratio of domestic revenue to GDP is expected to reach 15.2 per cent in 2015. Cambodia should continue to strengthen the public financial management which is critical for improving public service delivery and effectiveness in budget spending.

6.2. Preferential market seeking FDI would be dropped

Cambodia could see less preferential economic treatment by Europe in coming years, as it graduates as a more developed country. Cambodia currently enjoys tariff exemptions under a scheme called Anything But Arms, which seeks to promote trade with lesser developed countries. But Cambodia's status under that scheme could change soon with its growing economy. However, Cambodia's economy

is heavily reliant on garment exports to the EU, which accounted for more than $1.2 billion, or 25 per cent of its exports, in 2011. If the country lost its trade preferences, its products would be less competitive posing burdens on its single-export economy.

There is fear that Cambodia's exit to lower middle income country would disqualify the country to receive preferential status to export products to some major markets and hence would make the country less attractive to FDI which by far is regarded as the driving force of Cambodia's industrial transformation. FDI does not only provide the needed capitals for the manufacturing productions and employment opportunities, but also skills, managements, and know-how to boost the productivity of Cambodia's workforce. In addition, FDI provides greater market access through exports, improved standards and access to advanced technologies for domestic firms.

In this regard, Cambodia needs to focus on attracting more FDI from transnational corporations. Investment climate is critically important in attracting FDI and ensuring sustainable long-term industrial development. Cambodia needs to enhance it by maintaining macroeconomic stability, the rule of law, regulatory framework, and logistics and labour relations, particular focusing on both soft and hard infrastructures and trading facilitation. In the short- to medium-terms, instead of attempting to improve the investment climate nationwide, Cambodia should focus on enhancing the investment climate and performance of SEZs. Proactive and flexible policy supports should be considered in order to meet the government objectives and the FIEs' requests. Cambodia can learn from other country best practices. For instance, Botswana moved away from LDC status in 1994, but it did so with good institutions, laws and democratic reforms which are the main ingredients for success.

7. Concluding Remarks

Despite notable progress in many fronts, Cambodia has not yet met any of the thresholds associated with the three criteria: it stood at 59 per cent of the per capita income threshold; 50.5 per cent of the human assets threshold and 57.9 per cent of the economic vulnerability threshold. Given its small open economy, Cambodia is vulnerable to external shocks as reflected by the recent global financial crisis.

The vulnerability of the Cambodian economy to external shock was evident during the 2009 global financial crisis, and has posed a threat for the country to further industrialize and successfully move up into the middle income status. Cambodia is prone to export shock as well since the export bases are narrow. The economic vulnerability can be improved through industrial diversification.

The success of policies and strategies to push for graduation critically depends on the development of key human capital skills for the next stage of industrial development, economic growth and LDC graduation. There are several key challenges that exist in the economy which require important economic and institutional reforms to avoid a "low skill, low-wage development trap", a brain drain of qualified Cambodian workers to other ASEAN countries or that mainly foreign workers will take qualified jobs due to large skill gaps.

Currently, the average educational attainment of the labour force is at primary and lower level of education. This impedes structural changes of the domestic industrial structure to higher value-added activities, and thus the creation of better jobs and higher incomes. Hence, the challenge is to shift the average educational attainment in the economy towards secondary and higher level of education within the next decade. This needs determined action, not only reflected in increased public spending on education, but also a holistic human capital development approach, such as a human capital roadmap.

High drop-out rates at primary and secondary education level reflect the Cambodian household dynamics and the fact that the young population has greater incentive to work than to invest in education.

There is strong evidence that the opportunity cost of investing in education is very high for the young population, due to the insufficient number of middle-aged working population and the consequential need for the young to support their families. The government needs to address the trade-off between working and schooling of the young population. In this respect, TVET as well as on-the-job training are very crucial and critical to retain and sustain the human capital development in the economy. There is also to compensate this under-investment in HC of the young by increasing the skill-set of workers in later part of their life-cycle and TVET training is important to attain this balance over time. Progressive TVET could be emphasized as it would allow workers to acquire accumulative training throughout their working career.

Youths have also less incentive to complete their education due to the low return to education and training and the quality of jobs. There should be labour market reforms to increase the welfare of workers by protecting their interest and improving the quality of jobs. Standardization and better certification of training programmes can improve the return to education and thus, the incentive to invest more into it.

There is immediate need to diversify the industry structure and the exports market to create the links for global production value-chain. Given the structural changes in the economy, there are growing skills mismatches in the labour market. In particular, there is a growing demand for semi-skilled and skilled workers which are generally matched by foreign skilled workers from the region such as Singapore, Malaysia, Indonesia, Thailand, and Vietnam.

The role of the government is important to coordinate the education/TVET system with the industry demand for skills. There should be more emphasis on basic science and mathematical skills (STEM) at early stages of the education of the young. For example, the establishment of National Technical High Schools and Machinery Technical High Schools in Korea in 1960s to create technical skills at an early stage of education allowed Korea to move its human capital to skilled-based workforce, thus enabling it to meet the industrial manpower needs at the early stages of growth. The government could also consider setting up Regional Training Centers (RTCs) as in Korea, Malaysia and Singapore.

Over the medium term Cambodia's resource envelope is limited as only modest increases in public resources can be expected through growth in the tax base and efficiency improvements since domestic

resource mobilization through domestic borrowing seems also not feasible. Cambodia needs to focus on attracting more FDI from transnational corporations from different countries. This means Cambodia needs to enhance it by maintaining macroeconomic stability, the rule of law, regulatory framework, and logistics and labour relations, particular focusing on both soft and hard infrastructures and trading facilitation.

References:

Asian Development Bank (ADB), Key Indicators for Asia and the Pacific 2013, ADB: Manila, 2013.

Hahn, Chin Hee, Runsinarith Phim, and Chandarany Ouch, "Search for Development Path and Evaluation of Growth Potential of Cambodia", in KDI, ed., Policy Agenda for Cambodia in Growth, Finance, Industry and Energy, KDI: Seoul, 2011.

Handbook on the Least Developed Country Category: Inclusion, Graduation and Special Measures; CDP/UNDESA, November 2008.

Ministry of Planning (MoP): National Strategic Development Plan update 2009-2013, MoP: Phnom Penh, 2009.

Royal Government of Cambodia (RGC): Rectangular Strategy-Phase III, RGC: Phnom Penh, 2013

Supreme National Economic Council (SNEC), "The Promotion of Paddy Production and Rice Export", SNEC Policy Paper, SNEC: Phnom Penh, 2010.

Supreme National Economic Council (SNEC), "Diversifying the Cambodian Economy: The Role of Industrial Development", SNEC Working Paper, SNEC: Phnom Penh, 2011.

United Nations Development Programme (UNDP), Industry-Agriculture Linkages: Implications for Rice Policy, UNDP: Phnom Penh, 2013 (2013).

Thangavelu, Shandre M., "Higher Education and Skills Framework for Industrial Transition in Cambodia", power point presentation, Phnom Penh, 15 August 2013.

World Bank, statistical data set, http://databank.worldbank.org

World Economic Forum (WEF), "Global Competitiveness Report 2013-2014", WEF: Geneva, 2013.

World Trade Organization (WTO), World Trade Report 2013, WTO: Geneva, 2013.