Industrial Development Policy 2014-2024

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1. Introduction: Key Thrusts and Rational

Cambodia Vision 2030 and Rectangular Strategy Phase III have set directions for Cambodia's transformation toward a middle-income economy that emphasizes the role of industry as a key driver of future growth. Therefore, the Royal Government of Cambodia (RGC) aims to introduce this industrial development policy (IDP) to provide overall guidance and systemic solutions to developing a competitive industrial sector in Cambodia and to achieve its full integration into regional and global value chain.

In this context, IDP will become a new growth strategy that promotes development to reach higher level of equilibrium through key structural reforms – that results in higher income and fully realized national potentials especially the demographic dividend of young population. Efforts to upgrade industrial sector would be a new paradigm to sustain the high level of economic growth by harnessing potentials arising from Cambodia's young and knowledgeable labor force, substantial and accumulated investments in transport and energy infrastructure, positive effects of urbanization and population growth, increased size of middle class and agriculture modernization as well as the advantages of backwardness especially in term of technological absorption. Based on these potentials, Cambodia could first target to expand and strengthen its existing domestic industry, while looking for opportunities to leapfrog in some industries and eventually modernize the whole sector through specialization by exploiting its evolving comparative advantages.

Harnessing external opportunities is very crucial especially in planning industrial development to capture regional trends and changes in regional architecture (AEC, RCEP/PTT, China+1 and Thailand+1). This momentum has created an economy of scale and brought connectivity to a new level that eases transportation and opens up new markets. Moreover, the combined effect of increasing wage levels in China, Thailand and Vietnam and investors' hedging efforts against possible risks have motivated relocation of factories and industries to Cambodia, especially with the new trend of Japanese or other FDI industrial fragmentation (the so-called "China+1 and Thailand+1"). Moreover, Cambodia, being geographically located in between two big industrial centers — Bangkok and Ho Chi Minh, could benefit from the economies of agglomeration to develop industrial corridors and establish manufacturing clusters through defused production and agglomerated production. Last but not the least, the increased level of income in those countries have created a new demand for manufacturing products; and as countries are moving up their industry to higher value chains, Cambodia could access to new production chains which are more sophisticated and offer higher wages such as in machinery and electrical assembly industries.

Industrial development could be a game-changer – a "mega train" pulling growth in other sectors such as service and agriculture. Industry will absorb excess labor from a low productivity agriculture sector while putting pressure on other sectors to improve their productivity. The process of industrialization will create demand for supporting services such as financial and real

estate services as well as logistics and training. As for agriculture, there will be opportunities for food industry and agro-processing as well as linkages with industries in supplying inputs/raw materials for production. The interaction would create a virtuous cycle that promotes economic diversification that will be sustained and motivated by strong growth in industrial sector.

In transiting to a middle-income country status, IDP could be a long-term strategy for Cambodia to overcome the "middle-income trap" – a potential bottleneck preventing countries to reach the developed country status. Building an efficient, competitive and innovative industry is key to break this barrier. Attention should be given to human resource development, technological advancement/or promotion of technology application, and investment in relevant infrastructure while ensuring and maintaining a productive investment climate.

The key thrust of IDP is to provide a vision, policy framework and implementation arrangements to develop a competitive industry in Cambodia – contributing to sustained robust growth, full employment and high income. Its specific agenda is to address structural challenges in industrial development and facilitate investment in key industrial infrastructures. Its approach is to focus on diversification and competitiveness – attracting new industries, retaining more value added, and exploiting new potentials. This policy sets out corresponding and interlocking measures at different levels including specific interventions. It has a ten years timeframe and is updated in every five years.

2. Key Contexts of Cambodian Economy and Industry

2.1. New Growth Strategy

Industrial sector will become a priority focus of the new growth strategy to realize Cambodia Vision 2030 in reaching a middle-income country status through diversification, structural changes and competitiveness. The RGC envisioned a rapidly changing and diversified economic structure with growing share of manufacturing sector and steady growth of modern agriculture and high value-added service sector including improvement in financial services, logistics and technology. This trend will help promote sustainable and resilient economic growth, especially through increased investment in manufacturing, strengthened functions of financial intermediation, logistical and technological systems to support industrial activities, and enhanced state capacity to lead, initiate, coordinate and implement industrial policy interventions.

So far the sector has already played an important role in Cambodian economy as its share to GDP has increased from 12.6% in 1993 and reached the peak at 26.2% in 2006. Since then, it has declined and maintained 22% due to changes in international trade regime and later global economic crisis. In 2013, its share to GDP started to rise again to an estimated level of 24%. In term of growth, during the last 15 years (1998-2013) the industrial sector grew at average 12.4% per annum compared to 4.7% for agriculture and 8.5% for service sector, thus making it the fastest growing sector.

The industrial sector plays a key role in job creation. In 1993, there were around 72% of people employed in agriculture compared to only 5% in industry. According to 2008 National Census,

the number of jobs created in the sector has increased to almost 600,000 positions equivalent to 8.6% of total employment, while in 2012, it has increased to 1.4 million positions or 18.6% of total employment.

Investment does not have much role in driving the current growth. In term of GDP and based on expenditure figures, it is revealed that more than 70% of GDP comes from private spending, 21% from investment, 12% from Government and NGOs' spending and the rests are from net export. Moreover, export grows as fast as import does. Such a growth model, which largely depends on consumption, is fragile and vulnerable to unexpected shocks. According to a developing country standard, investment ratio should be at lest between 30%-40% levels in order to promote economic growth into a higher level. Currently, Cambodia's economic pillars are primarily based on garment, tourism, construction, and rice sector – indicating that more investments are needed to create new growth drivers.

With the current growth model, all economic pillars are much influenced by external factors since economic policies closely adhere to the market principles. Activities to attract FDI have not focused on any specific objective; investments in infrastructure have been limited to physical infrastructure while those in human capital have not met the new demand of development. A key pillar of trade, for example garment sector, is growing in respond to the preferential and quota systems offered by the United States and European Union; milled rice export is also growing due to the European Union's Everything But Arms Program; and tourism sector is flourishing due to the country's richness in cultural heritages. Finally, the prospect of improved investment climate and trade facilitation have not been impressive due to delays in key reform areas.

Therefore, industrial sector will become a primary focus of the new growth strategy encompassing three main functions/objectives: (1) Industry continues to be a driver of growth over the medium to long-term periods; (2) It has the potential to create new jobs especially for the youth; and (3) It is a growth sector that could absorb new investments and push development frontiers to the next levels. The pursuit of IDP would provide a policy space and tools to coordinate development in other related areas such as education, infrastructure, ITC, knowledge economy and institutional reform that could take full benefit from the country's openness and globalization trends in terms of skilled labor movement and spillover effect of technology.

2.2. Current Industrial Structure in Cambodia

Cambodian industry is weak as reflected in its narrow base and low level of sophistication that is concentrated in few sectors such as garment, footwear and food processing. Most industries are family-based with lack of entrepreneurship and limited use of technology. Thus they could not compete in international markets. Their key characteristics could be summarized as follows: the share of manufacturing in industry remains small; the pace of modernization is slow; it is an export-oriented sector; it is mostly foreign direct investments in special economic zones; FDI leads industrialization process in the country, and a dual industrial structure exists between local industries and export industries during its early stage of development.

A. Narrow-based Industry

According to GDP, there are three main activities in the industrial sector namely, garment, construction, and food/beverage processing. Other sectors have not been progressing well while the economic role of wood and paper processing and publishing has been on slide. Garment plays an important role in industrial sector which climbed from 8.2% in 1993 to 51.8% in 2004, the highest year ever. Since then, it has slightly declined to 43.2% in 2012. Construction sector which contributed around 30% in industrial sector in 1993 has declined to its lowest level of 20.2% in 1998 but it increased again to 28.3% in 2012. On the other hand, manufacturing of foods and beverages has declined from around 32.7% in 1993 to around 10% during the last 5 years.

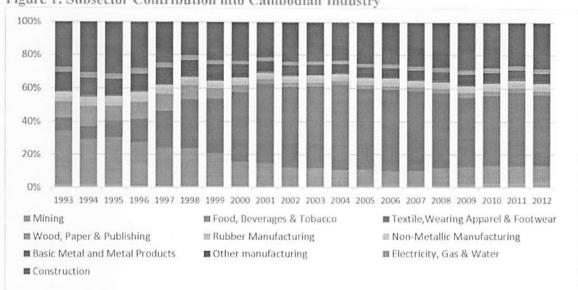


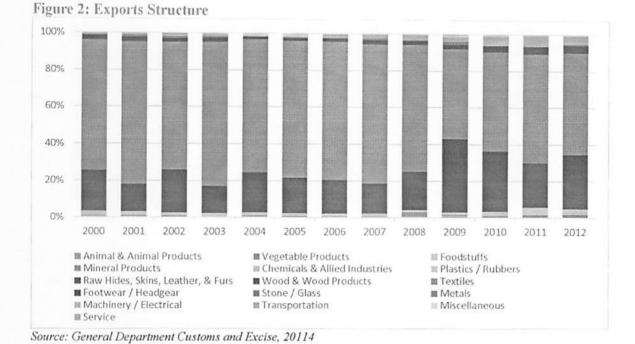
Figure 1: Subsector Contribution into Cambodian Industry

Source: NIS, 2013

In general, most of Cambodia's enterprises are retails and restaurants. Among 510,000 enterprises, only 70,000 or 14% are manufacturing type. The sector dominated by food processing and textiles, which are accounted for 45% and 35% respectively. Among large enterprises in the manufacturing sector, around 80% reside in textile, wearing apparel and footwear (TWF). This manufacturing structure is still under development because foods and textile productions are still low value added and less complex. The production of construction materials, electronics, machineries, engines, and chemical products are still small and import substitution products such as motorcycles, vehicles, plastics, construction materials, and many other products are still at early set up stage.

Export structure 2000-2008 shows that 75.6% are textiles and footwear and 22% are woods/wooden products out of total export. However, between 2009-2013 exports of woods and wooden products have increased tremendously by around 30% per annum, while textile and footwear declined to around 58%. Three major products including agriculture products, rubber and transportation vehicles have also largely contributed to export. For instance, exports of

agricultural products, particularly rice, cassava have increase to 2% of export in 2012. Additionally, there is progress in exporting light manufactured items including bicycle, wire, electronic motor, circuit, television, toys, furniture, screw gear and many more.



Overall, the manufacturing sector remains concentrated and lack of diversification, as perceived by the percentage of the number of firms, value-added to GDP and exports. Cambodian manufacturing is mainly dominated by the textile, clothing and footwear and drinks/food production sector. While, the construction sector which has seen a notable growth, has strong reliance on the imports of construction material. Therefore, for the medium term growth, it is highly necessary to focus on expanding production base as well as diversifying export products.

B. Missing Middle and Informal Industrial Structure

In industrial sector, the share of micro enterprises is 97.3%, small and medium enterprises is 2.2% and large enterprises is 0.6%. Amid those, the amount of enterprises in manufacturing sector is up to 91.7%. In labor context, large enterprises absorb around 63.3% of the labor force, 29.3% for micro enterprises and 7.4% for small and medium enterprises. However, in term of production, the share of large enterprises production is up to 76%, while it is 12% for micro and small and medium enterprises respectively. There is fragileness in this form of structure due to significant reliance on large enterprises. Therefore, the employment condition and economic growth would be negatively affected and it would be challenging for the economy to recover if there is a shutdown of one or two of those large enterprises. This type of structure can also easily lose its competitiveness in the case of the loss of favorable trade condition or a change in input cost structure, as there is no support from small and medium enterprises.

Table 1: Enterprises in Cambodia by Size

	Micro (1 – 20 staffs)	Small (11 – 50 staffs)	Medium (51 – 100 staffs)	Large (more than 100 staffs)
Total amount of enterprises	69,851	5,861	530	609
-Total Share	97.3%	1.9%	0.2%	0.6%
Total labor force	162,335	28,706	11,949	350,260
-Total share	29.3%	5.2%	2.2%	63.3%
Total production (millions dollars)	396	300	94.4	2,500
-Total share	12.0%	9.1%	2.9%	76.0%

Source: Enterprises Census (2010)

Among all the micro enterprises, 98.64% have not been officially registered. The rate of unregistered enterprises is reducing with an increase in enterprise size. For small enterprises, 62.83% have not been registered, 28.57% for the medium enterprises and 7.04% for the large enterprises. Besides, only a few number of firms actually use account-book, such as only 0.02% of micro enterprises, 3.89% of small enterprises, 24.11% of medium enterprises and 66.19% of large enterprises. Absence of proper account-book can be a major constrain to the firms as it restrains them from borrowing funds to expand their activities or acquire new technology. Furthermore, the government would able to provide support to those enterprises only if they have been officially registered and use proper account-book as it is a base for policy evaluation.

C. Weak Entrepreneurship and Urban Centered

This is reflected by the limited ownership and the fact that those enterprises are still in early stage. Almost half of all enterprises (42%) that are currently operating in Cambodia have only been established in 2008, 68.39% if include those established in 2003. Moreover, the same condition is also applied to the subsectors of the industry.

Amongst those firms from the census, foreign ownership constitutes approximately 63% of large-size enterprises and 37.15% for the medium-size enterprises. However, Cambodian ownership of micro and small enterprises are up to 99% and 94% respectively. For instance, garment industry has developed for nearly 20 years in Cambodia, but national entrepreneurship remains limited in this sector. The garment sector is considered as a highly competitive sector with relatively simple value chain and simple production process and is a crucial sector to learn about the global production network. Cambodian entrepreneurs should learn from the sector in order to have the ability to compete in the region.

Cambodian entrepreneurs require good organization to seize economic opportunities arising from new characteristics of economic development and political condition of the region and the world. Furthermore, Cambodian entrepreneurs should collaborate with foreign investors to fully harness our domestic potential and increase our competitiveness through mobilizing investment, exchange of international experiences, and modern technology transfer.

D. Low Value-added and Lack of Technology

Industries in Cambodia are labor-based with simple features that only focuses on particular production chain that is labor intensive, low value and straightforward. For example, in textile and clothing industry, about 60% of all firms are operating in Cut, Make & Trim (CMT) production chain. Only one-fourth of the companies in this industry furthers their production chain to embroidery, wash, and packaging and eventually exports it as final product. Cambodia is still unable to make fiber or yarn yet as this type of production chain requires sufficient and reliable supply of electricity at a cheaper price, consequently needing to import these inputs from other Asian countries. However, it does not include the packaging sector that has just started to attract gradual investment. For other sectors, the production chains are very similar to this there exists only leather-cutting, making, labeling and assembling. And for the assembly factory there exists only low-skilled and low-valued added jobs such as ready-part assembling and screwing. These works are not complicated and less value added.

As for local enterprises, production mostly focuses on food processing and nearly finished products, and is generally at low technicality. For example, in rice processing, before the launch of Rice Policy in 2010, Cambodia had very few international standard rice milling factories. At the same time, technology of other textile sectors was old with low productivity, limiting the competitiveness. For example, the production of soil-made pod by using traditional technology is not so rich in items/variety and is not in progress due to low productivity, while the production of traditional tiles is also in similar situation, which makes the manufacturing mostly serves the local consumption with low value added.

2.3. Scope and Priority Sectors

A. Scope of the IDP

Given the aforementioned potentials, opportunities and industrial position and structure, the scope of this IDP could be defined based on the following benchmarks:

- 1. Focus on promoting manufacturing and agro-processing, through attracting foreign direct investment and enhancing capacity of small and medium enterprises, aiming to promote both export orientation and import substitution industries.
- 2. Harness opportunities to integrate Cambodia's manufacturing into regional and global production network to benefit from the economy of scale and industrial fragmentation by attracting potential foreign investors through participation in ASEAN Economic Community and GMS Economic Corridors and development of physical and logistical linkages between key national economic centers/areas/poles (including Phnom Penh, Sihanoukville and key border areas) and beyond with industrial parks in Bangkok and Ho Chi Minh City.
- Reorient industries into specific industrial parks/zones to ensure high level of
 concentration that generate a critical mass to benefit from coordination, connectivity and
 efficiency of transport, logistics, electricity and utility services as well as other supporting

infrastructures. The RGC would assign the border areas with Thailand and Viet Nam as potential for manufacturing and an industrial linkage with regional networks, the Sihanoukville-Phnom Penh industrial corridor as export=oriented manufacturing, and the corridor from Kampong Cham to the northwest area of the country as an agro-processing industrial region while Siem Reap dedicated as craftsmanship and arts industrial center supporting tourism.

4. Contribute to the development of special economic zones, economic corridors, and industrial parks as well as industrial clusters especially through participation in the regional network of production fragmentation.

B. Priority Sectors

The IDP focuses on the following three groups of priorities: First, it focuses on attracting new industries by encouraging FDIs in such areas as machinery assembly and assembly of electrical appliances and transportation equipment, and through promotion of SMEs, in such areas as medicine, craftsmanship, construction materials, packaging materials, furniture and other consumable products and natural resources processing. Second, it gives priority to agroprocessing industry through modernization of processing techniques and technology, packaging and strengthening its value chains. Third, it considers the development of industries, which are strategic for national interest and trigger for future industries such as in energy and heavy industries, water supplies and green-based technology.

3. Key Challenges of Industrial Development in Cambodia

3.1. Weak Institutional Coordination

The development of industry requires strong coordination in policies, institutional regulation, infrastructure, finance and technology as well as private sector participation. Regulatory framework has not well responded to policy choices while infrastructure, finance and technology have not been adequately coordinated to support the evolving industrial needs. Therefore, a good coordination framework is required among all stakeholders or players in the industry in order to ensure a predictable and conducive investment climate and help business people to plan their activities.

Explicit strategies and/or policy guidance for industrial development have not been existed yet. Development has been generally focusing on all aspects of the economy – across different sectors and geographic locations throughout the country – that seems to respond to people's aspiration and to be motivated by the private sector. It has been very sporadic development while also heavily concentrated in some locations. Areas where investors consider as potential, it turned out to be lacking of sufficient infrastructure and public services necessary to support the operations of industry and livelihood of workers. As for places where exist sufficient public services, they are not conducive for manufacturing but have plenty of infrastructure in place. Moreover, places that the RGC gives priority, there is lack of interest by the private sector. Therefore, sufficient coordination and facilitation are needed to put together all the enabling elements to nurture the birth and growth of industry in Cambodia.

Coherence and consistency among different regulations, involving tax system, trade regime, competition, transport sector and other areas, have remained a big challenge. In Cambodia, the coordination among regulators is problematic and, sometime, it does not exist for some reasons. Example, tax authorities focuses too much on revenue collection while those in charge of trade care about opening up of the economy and access to market. It is not clear about competition framework while transport policy is not also comprehensive. The lack of coordination among regulators will be a bottleneck toward achieving IDP objectives, particularly in mobilizing adequate resources and implementing the policy.

Access to information and transparency has been also a constraint for industrial development that prevents investors from making the right decisions. The provision of unclear information makes investments extravagant or very costly, and it presents a loss of opportunities. To address this issue, clear mechanisms should be established to facilitate access to information that could reduce the cost of obtaining information and encourage broader participation in supporting the development of a sustainable and competitive industrial sector. Wider dissemination of development information could help promote innovation and creativity particularly in the areas of institutional setting, policies and strategies and regulatory framework.

3.2. Low Technological Knowledge

The creation of a critical mass or adequate pool of technical expertise is becoming an important challenge for Cambodia's growing manufacturing. The current attempts, with unclear leadership, coordination and limited resource, to train technicians and engineers will not make headway toward technological upgrading and advancement. It requires a big push and coordinated efforts to pursue this objective that requires sufficient voice and political weight.

Skill training has not met the demand by manufacturing, thus making productivity very low. Since majority of Cambodian labor force remain in agriculture and service sector, it requires a big change in mindset, discipline and expectation of workers as they move to work in industries and become more productive. It requires more time and efforts to train workers, as their general education background is low. Therefore, official mechanisms to recruit and train workers should be strengthened in order to avoid the abuse of workers' rights through informal recruitment process as workers have been held hostage by syndicate unions to pay for their gratitude or debts.

High dropout rate among students has trapped Cambodia in the low productivity and labor-intensive industries. In term of technical capacity, students should complete at least 9 grades in order to acquire technical skills and knowledge that promotes technological absorption and advancement. In term of productivity, low education is a sacrifice of productivity in the long term, and workers do not have ability to learn new skills and are forced to accept low paid jobs. Thus, the policy should give a second chance for workers so that they can learn and aquire new skills.

Society has not valued technological knowledge and science developments – a lack of inspiration and motivation among the youth to study science and technology. Career orientation that gives

young people with opportunities to expose to or interact with technology and sciences would help raise awareness and attract their attention to consider pursuing engineering and science careers.

3.3. Insufficient Infrastructure and Lack of Coordination

Although much effort has been put in building infrastructure over the past 20 years, it is still not sufficient to meet the new demands of development. The promotion of one million tons rice export target clearly indicates the need for additional infrastructure to ensure an efficient and timely shipment. Key export routes are now suffering from congestion that may lead to delays in transportation and put more pressure on the current capacity of road networks. Thus the promotion of industrialization and exports will generate more demand for infrastructure especially in targeted industrial areas and export gates – that prompts the development of a highly effective logistic system.

Another major challenge for industrialization is a stable supply of cheaper electricity. The RGC has tried hard to invest in electricity, but the supply still falls short of meeting the current demands. Projected demand for electricity is expected to increase by 142-192 megawatt on average per annum until 2024. In 2012, Cambodia has the capacity to supply 568 megawatt, and if the ongoing projects will completed as planned, it will have the capacity to supply 1,643 megawatt and 2,800 megawatt in 2015 and 2020 respectively. Further investments in electricity supply will be necessary to ensure stable supplies. On top of stable supply of electricity to promote manufacturing, cheaper electricity prices are even more important for a competitive manufacturing as the prices remain very high.

Development of key infrastructures such as clean water and sewage system must be well coordinated to support industrial development. It is estimated that the volume of water needed may increase by 10,000 to 14,000 cubic meters per day every year; and by 2020 its total demand is expected to increase to 140,000 cubic meters per day. At the same time, the drainage system should have the capacity to handle sewage of about 120,000 cubic meters per day. Currently, there is a shortage of clean water and drainage system in some special economic zones. Thus, building proper clean water and drainage infrastructures in industrial areas is needed that requires rigorous planning and preparation.

Industrial zoning and spatial planning are instrumental to foster growth of manufacturing. Estimated need of additional land for factory location is expected to increase by about 240 to 250 hectares every year. By 2020, the total additional land needed would increase to 3,400 to 4,500 hectares per year. As for now, there are 22 special economic zones covering around 9,000 hectares of land, but only 280 hectares being occupied by operating factories. Land use policy particularly that of SEZs along with connectivity in terms of transport, electricity, clean water and other basic infrastructures would be a challenge to be addressed.

There is also a need to promote development of standard and measurement that are playing important role in supporting production process. It would help improving efficiency, confidence and value—added. It also lead to improve in price, quantity, quality and safely of the production. Such improvement would lead to export and attract more investment.

Building of social infrastructure would be complement to the above physical infrastructure needed by manufacturing particularly in securing stable supply of labor. Social infrastructure would include provisions of housing, schooling, hospitals and public transport. So far they have not been seriously considered in the factory locations. Workers use high cost and low quality private facilities that have exposed them to many risks such as health related hazards and traffic accidences that will impact productivity over the long run. Thus it is necessary to put basic social infrastructure for workers that help reduce their living costs and improve the quality of their lives especially in maintaining a steady increase of their real wage.

3.4. Limited Financial Access (Financing)

Banking sector including microfinance services has been strongly growing over the past decade, but access to long-term loans remains a challenge to promote development. The level of capital accumulation is still low by regional standards. Interest rate remains high and lending requirements are very stringent that does not favor the development of domestic industries. Loans from banking sector are short to medium-term in nature, and they are not suitable for long-term investment projects since they would require full collateralization.

There are not much financing options for big investment projects. A lack of flexible financing mechanisms would make investment projects hard to succeed. Experience in implementing the rice policy indicated that Agriculture Development Fund has played key role in improving the situation in the rice sector. Rice millers were hard to get loan, but now they can get a reasonable amount of loan with more proper requirements. Thus it is necessary to establish mechanism to provide long-term financing that would promote industrial activities. This work should be carried out in tandem with the overall action plans of the financial sector blueprint especially the development of money markets that are strongly backed up by strengthened domestic saving systems such as insurance and pension systems. Therefore, private savings should be integrated into a single system that will make them available for industry financing.

Securities market is a good option to raise capitals and makes financial arrangement more sophisticated to promote the development of sustainable corporations. In the industry context, further development of a vibrant securities market would help speed up industrialization in Cambodia. For instance, if an industry or any special economic zone listed in the securities market, it could mobilize resources to expand its activities including needed infrastructures and, at the same time, its corporate governance and management are being strengthened to meet the regulatory requirements.

Moreover, the RGC should consider issuing government securities to mobilize domestic savings for industrial development. In this context, it could use public investment mechanism to trigger more inflow of private investments. The public private sector partnership (PPP) could be an option to engage both public and private sectors in developing specific industries.

3.5. Proactive Play Maker or Facilitator Is Needed

Securing a good investment climate is not enough. The RGC needs to be proactive in driving private sector participation to pursue industrialization in Cambodia. This IDP should be therefore coordinated and managed by a highly creative and motivated facilitator. Though there are clear functions and division of labor among concerned institutions, there needs an effective agency to lead the process and facilitate industrial growth as defined in this policy. Public and private institutions as well as communities should engage in close partnership, while working hard together and respecting each other respective duties with high accountability. Thus, it is important to develop a strong institutional coordination among government agencies, to organize manufacturers into an effective inter-professional organization for alliance, information sharing and advocacy, and to get communities involved and prepared to take benefit from industries.

In this context, it is necessary to establish a permanent body to coordinate with private sector and government agencies to provide technical support, address pertinent challenges facing industries and seek opportunities to engage in specific activities that promotes priority industries. This institution should have the mandate and capacity to plan and implement coherent and effective interventions that promotes industrial diversification and strengthens its competitiveness. This institution must be able to provide technical assistance and training, and manage investment projects in specific activities that support future industrial growth. Moreover, industrial community should be more organized to play an active role in pursuing industrial policy.

4. Industrial Development Policy (IDP)

Cambodia's vision to develop industrial sector is to enhance the living standard of Cambodian people and to achieve national prosperity through employment generation, improved productivity and nurtured innovation. Thus, the ultimate goal of IDP is to promote stronger and sustainable economic growth through industrialization. It encourages a rapid transformation of industrial structure in Cambodia that will create and generate more value added to the economy, while moving from a labor-intensive and low productivity industry to a more broad-based, high-tech and high-skilled industry including manufacturing, heavy industries such as in chemical and energy sectors and other pioneer industries.

To this vision, Cambodia's industrialization will encompass three stages of development: First, the initial stage involving the building of foundation for industrial takeoff such as through attracting investments and policy support from government institutions; Second, the stage involving further expansion of manufacturing bases and export market penetration through upgrading industries and improving their productivity, quality and safety, as well as standard and technical conformity; and Third, the full-fledge development of industries that focuses on specialization according to Cambodia's evolving comparative advantage through provisions of a predictable regulatory environment and targeted incentives.

4.1. IDP Strategic Objectives and Key Targets

The Royal Government of Cambodia sets forth three strategic objectives for the implementation of IDP that covers industrial transformation, expanded export products and strengthened corporate governance through registration and organization of industries so that they can access to support and incentives offered by IDP. They include the following targets:

Promoting industrial growth by increasing the share of industrial sector to GDP to 30% by 2024 (22,9% of GDP in 2012) with the share of manufacturing rising from 15% of GDP in 2012 to 20% in 2024.

Table 2: Share of GDP by Sector

Sectors	1962	1998	2008	2012	2015	2020	2024
Agriculture	49%	44.5%	32.8%	33.6%	31%	28%	25%
Industry	19%	16.7%	22.4%	22.9%	25%	28%	30%
- Manufacturing	-	12.7%	15.3%	15.1%	18%	19%	20%
Services	32%	34.8%	38.8%	37.8%	38%	40%	45%

2. Diversifying export products by increasing export of manufacturing products (other than garment export) to 15% of total export by 2024, and export of semi and final agroproducts to 10% of total export by 2024 while promoting export of other new products.

Table 3: Exports by Sector

Sectors	1998	2008	2012	2015	2020	2024
Agriculture Products	10%	10%	2%	3%	5%	10%
Manufacturing						
- Clothing and Footwear Industries	80%	70%	60%	58%	55%	50%
- Non-garment and footwear Industries	0.1%	0.5%	1%	5%	10%	15%

3. Promoting formalization of SMEs and big enterprises by strengthening their legal status through registration with relevant ministries and tax authorities, and holding proper accounting records as required by laws. By 2024, at least 80% of enterprises operating in Cambodia should be officially registered while at least 50% of micro enterprises should keep proper balance sheets. Though being simple, this objective is key to instituting a process that could monitor the health of the sector including their operational challenges, performance and technology acquisition by industries. Moreover, holding proper balance sheets would be the basis to assess the financial strength of enterprises that would help them better access to loans, capitals or financial assistance. They all are needed to justify government support and assistance under this policy.

Table 4: Ratio of Unregistered Enterprises and Enterprises Having Balance Sheets

Types of Enterprise	Unregistered			With Balance Sheets			
	2010	2020	2024	2010	2020	2024	
Small Enterprises	37%	70%	80%	4%	30%	50%	
Medium Enterprises	72%	80%	95%	24%	50%	70%	
Large Enterprises	93%	95%	99%	66%	80%	100%	

4.2. IDP Approach toward Industrial Development

In order to achieve the above-mentioned vision and strategic objectives, the RGC's approach is to focus on the following three interlocking pillars:

- (1) Promotion of FDI and domestic investment into manufacturing sector by securing good investment climate and provisions of needed infrastructure, market access and technology for targeted industries in designated industrial corridors, industrial parks and special economic zones (SEZs);
- (2) Development and upgrading of small and medium enterprises (SMEs) through technical support and capacity building as well as development of linkages with mainstream industries that promote their access to market, capital and technology transfer; and
- (3) Export promotion by strengthening Cambodian industry's competitiveness, provision of market information and trade facilitation.

4.3. IDP Framework and Measures

The IDP framework is organized as follows:

- (1) Strengthening coordination mechanism to promote investments in industrial sector by upgrading the capacity of institutions managing FDI and domestic investment and SME development;
- (2) Improving trade facilitation by simplifying export process and procedures, while supporting efforts to penetrate new markets and/or develop new products and rewarding the leading or innovative exporters through specific arrangements and strengthen national standard and compliance;
- (3) Establishing new financing arrangements to support industrialization including public and private sector partnership (PPP), industrial and SME development funds, government bonds to finance infrastructure projects, and credit guarantee mechanisms;
- (4) Promoting industrial skills and capacity by enhancing vocational training programs, promoting sciences and technology, and expanding the coverage of informal education accessible to all workers.
- (5) Investing in research and development (R&D) to promote new innovation in technologies, products, and business models, and regularly hosting science and technology exhibitions, and
- (6) Coordinating development of key supporting infrastructure such as through industrial zoning and spatial planning and infrastructure support to targeted industrial zones, including the provisions of stable and cheaper electricity supply, coordinated transport and logistic system, water utilities and other social infrastructure.
- (7) Strengthen international mechanism both inside and outside of country to mobilize potential resources through improving trade representatives and Cambodian Embassy abroad.
- (8) Study potential of national resources to attract heavy industry that based on primary resources or intermediate input for create more new industry.

Based on this framework, the RGC sets forth three groups of well-coordinated measures that aims to: (1) improve overall investment climate for industrial development; (2) address basic infrastructure needs and skills and finance challenges including R&D and technology; and (3) directly involve or invest in specific projects that promote priority industries.

A. Attracting Foreign Direct Investments (FDIs)

1. Overarching Investment Climate (short, medium to long terms)

- Maintaining financial and macroeconomic stability to ensure strong foundations for industrial development, especially by implementing flexible monetary policies to enhance the competitiveness of Cambodian products.
- Rationalizing the current economic rents aimed to revise the tax policies that will help build up fiscal space for investments in industrial sector.
- Reviewing and amending the Law on Investment and Law on Taxation to reflect the current situation and need of industries and promote local content.
- Reviewing existing investment projects and setting out favorable treatments or privileges to attract more qualified investment projects (QIPs) that will have spillover effects on industrial development.
- Further enhancing the legal and regulatory framework, including the review of incentives provided to investors and strengthened governance in concerned public institutions including that of the CDC's "One Stop Service" process.
- Reviewing and changing requirements for QIP approval as well as clearly defining conditions for revoking issued licenses.
- Strengthening and enhancing the capacity of government institutions overseeing the implementation of investment projects to proactively engage in aftercare services such as addressing investors' issues related to their projects.
- Attracting and orienting prospective investors to make their investment in potential industries with firm commitment and high professionalism to secure Cambodia's reputation as a desirable investment destination.
- Further strengthening the Government-Private Sector Forum (G-PSF) to help address challenges facing private sector that promotes the role of private sector in industrial development.
- Developing professional investment aftercare services to take good care of investors in Cambodia, particularly in facilitating the implementation of their investment projects and helping them complied with existing rules and regulations.

- Strengthening the enforcement of laws and regulations related to environment impact assessment (EIA) to ensure compliance with required environmental and technological standards especially to preserve the quality of water and surrounding environment.\
- Strengthen law and regulatory enforcements in WTO on trade technical barriers.

2. Skill Training and Labor Recruitment

Short-term measures:

- Further strengthening the general education system aimed at reducing the dropout rate at the secondary level to 3% by 2024 from 18% in 2012.
- Improving general education curricula to incorporate soft skills including social interaction and problem solving ability, arithmetic skill, disciplines at workplace, and other relevant skills needed by industries.
- Doubling efforts to promote vocational and technical training programs in areas such as electricity, electronics, mechanics, standard, measurement (verification, calibration testing and utilization of tools) and chemistry, as well as in the technical secondary education and higher education.
- Strengthening education quality at the primary and secondary levels by enhancing the basic knowledge of children and youths in mathematics, sciences, literature and technology.
- Establishing more technical secondary schools (in both formal and informal education systems) to provide skills and technical trainings and orient students toward vocational training schools. Those technical schools should focus on key areas such as electricity, electronics, information technology, computers, mechanics, auto and motorbike repairs and assembly, other skills related agro-processing and handicrafts.
- Expanding non-formal education targeting factory workers in order to equip them with basic knowledge and to boost aspiration to develop their skills and technical capacity.
- Creating a system of equivalent certificate that allows workers to go through competency testing and receive certificates in their respective levels of non-formal education.
- Strengthening the process of labor recruitment including the provisions of labor market information and education about their legal rights in accordance with the existing Labor Law aimed particularly to reduce the costs of getting a job.
- Initiating a study on industrial relations especially between employers and employees to identify best practices and solutions to the current labor conflicts that will help

enhances labor productivity in the long run, including the provision of professional training on conflict resolution according to the Labor Law and relevant regulations.

Medium to long-term measures:

- Promoting workers' welfare through promoted housing policy that enables them to own house, to live with family and prevent frequent relocation causing labor shortage.
- Strengthening tertiary education in areas related to agriculture, sciences and technology and engineering by equipping laboratory facility, leading to build education quality for research and development (R&D).

3. Infrastructure for Industrial Development

Short-term Measures:

- Further improving physical infrastructure, including road links and access to strategic industrial areas/estates, power and water supplies, and other supporting infrastructure and facilities such as housing, schooling and hospitals.
- Eliminating electricity shortage by 2018 and gradually boosting stable electricity supply with competitive prices by exploring various possible options including the early or timely completion of the construction of ongoing power plant projects.
- Improving the capacity and quality of transmitting lines to key industrial areas/estates such as through funding from development partners, and fully integrating those industrial areas/estates with the national power distribution system.
- Reviewing the country's long-term energy needs and its power development plan in light of new demands resulting from pursuing new economic and industrial development visions, while considering options to build high capacity power plants to supply electricity to strategic industrial regions.
- Expand water supplies in urban areas, industrial zone and SEZs through strengthening capacity of water supplies administration and private sector to comply with national standard on clean water.
- Review the potential of national resources to development heavy industry.

Medium and long-term measures:

- Further developing and maintaining road transport especially the key national road links connected to ports and border exit points along the Southern Economic Corridor by upgrading them into four-lane roads to better connect with Thailand and Vietnam including those links along Phnom Penh-Siem Reap and Phnom Penh-Sihanoukville corridors. As part of a long-term plan, the RGC considers building new highways aimed at strengthening transport and logistic capacity to handle the increasing needs of transport linking with neighboring countries such as Thailand and Vietnam.
- Further developing railway links within Cambodia and with neighboring countries (Thailand and Vietnam), as an alternative and cheaper mean of transportation, by completing the ongoing projects linking Phnom Penh and Sihanoukville, Phnom Penh

- and Kampot, and Phnom Penh, Battambang and Poi Pet, and studying and building a railway link connected with Vietnam.
- Developing maritime transport along the river which have the potential to reduce logistic cost through building small ports that enable the ships to load and transfer goods along Mekong river in parallel with building the new port in Phnom Penh and Sihanoukville that will facilitate transport by ships in greater amount.
- Promoting air transport links with the region and the world with "open sky policy" and best practices aimed at reducing cost of shipments.
- Supporting infrastructure development including road access, drainage system, power and water utilities and essential transport services linked to SEZs and other industrial estates in designated areas such as Phnom Penh, Svay Rieng and Koh Kong provinces and International Seaport of Sihanoukville.
- Solving traffic jam at the outskirt of Phnom Penh that regularly increase logistic costs by building ring roads, feeder roads and/or relief roads to ensure smooth traffic movement along the Southern Economic Corridor.
- Establishing a coordinating mechanism to plan and develop a multimodal transportation and logistic system (road, railway, air and maritime transport and facilities) that will seamlessly links all targeted industrial estates and regions.

B. Industrial Zoning and SEZs Development

- Developing a master plan for industrial zoning and development aimed at promoting competitive SMEs and industries in designated provinces. The RGC will provide essential supports including regulatory and administrative facilitation, technical assistance for capacity building and business development, provision of market access and information, basic infrastructure such as electricity and water supplies, and support to foster better industrial relation and community building.
- Promoting spatial planning and urban development in designated industrial regions such as in Svay Rieng, Sihanoukville and Koh Kong provinces and Poipet Municipality to coordinate industrial activities aimed at enhancing land use planning, environmental management, residential development and infrastructure development including electricity, roads, ports, water supply, flood protection, waste and sewage system, as well as accessibility to public health and education facilities.
- Developing Phnom Penh capital into an industrial agglomeration through implementing a long-term urban development plan with clear designation of industrial, administrative and residential areas aimed at transforming Phnom Penh into a dynamic center of culture, knowledge and industry.
- Paying special attention to providing adequate and cheaper power supply to industries especially to those in the special economic zones.
- Strengthening administrative and institutional capacity to effectively manage SEZs operations aimed at reducing their costs of doing business.
- Developing guidelines on procedures and standard fees charged to investors for receiving public services in SEZs.

- Promoting specialized SEZs in targeted priority industries such as agro-processing and export (they should be developed according geographic locations, their nature of operations and available infrastructure and incentives).
- Strengthening the functions of Conflict Resolution Committee at SEZs to quickly respond or address issues.
- Studying the development of Preah Sihanouk province or the coastal areas of Kampot, Preah Sihanouk and Koh Kong provinces into an industrial corridor in addition to the already established SEZs.

C. SMEs Upgrading and Modernization

Short-term measures

- Reviewing framework and mechanism for SMEs development focusing on improving registration, management and monitoring processes that encourage industries/ enterprises in Cambodia to officially register their business with relevant authorities especially with real tax regime.
- Regularly informing prospective and registered SMEs/industries about available support, benefits and protection provided by the policy.
- Facilitating technology transfer through study tour and training to other countries or any other supports.
- Establishing R&D Fund managed by a highly professional and independent organization and with an innovative business model, whereas the RGC provides seeds funding and other partners provide additional contribution to support researches in new product development, starting with limited amount as the government budget could handle while increasing it gradually to meet the demand for R&D by industries.
- Strengthen capacity of standardization and conformity assessment
- Building capacity of SMEs aimed at promoting stronger and dynamic industries in Cambodia by providing special skill trainings to address skill shortage in priority sectors as well as providing more scholarships to students to study engineering and vocational trainings both in the country and abroad.
- Promoting the capacity of higher education institutions to support the development of adequate pool of engineers and technicians for SMEs and to promote technology absorption by SMEs.
- Developing events/activities that promote SMEs development including providing awards for technical skill contests.
- Encouraging inter-professional organizations including SMEs associations/ federations to share knowledge/information and to dialogue with the RGC in resolving their concerns and challenges.
- Enhancing SMEs corporate governance including adherence/compliance with existing rules and regulations as well as nurturing a culture of social responsibility.

Medium to long-term measures

- Promoting development of private research institutions specialized in SMEs issues
 while connecting them with vocational training centers to address SMEs challenges
 such as planning, marketing and technical skills, access to technologies and other
 issues related to productivity improvement.
- Providing other support to SMEs to facilitate their access to finance and new technologies.
- Brokering linkages between SMEs and multinational enterprises/industries helping them access to capital, technologies and markets.
- Establishing a government-run research institute, which fully devotes to science and technology development. It is expected to start from a few to several engineering fields directly related to SMEs priority sectors. The institute could recruit able scientists and engineers from abroad by providing attractive benefits. Moreover, the RGC should provide appropriate laboratory facilities. It may discuss this proposal with interested development partners.
- Support capacity development of standard and measurement to ensure consistent volume, quality, safety, environment and management.
- Improve the capacity of national productivity center to promote productivity and quality of SMEs.

D. Export Promotion and Trade Facilitation

Short-term measures:

- Encouraging export of new products by SMEs/Manufacturing industries by offering specific awards or incentives to outstanding domestic firms for their innovative business model, volume of export and new products that have significant impact on future industrial development in line with the IDP's objectives.
- Establishing export promotion agency that provides trading skills and information on foreign markets and assist exporters to participate in trade/industry fairs. At the same time, the RGC should consider establishing policy-financing institutions in charge of funding exporting industries in key priority sectors while making efforts to reduce uncertainty and export risks.
- Encouraging establishment of SMEs/Industry associations by sector to share knowledge and enhance communication with the RGC.
- Encourage the science and technology development by hire local and international scientist and engineer with support from government including the investment in equipment.
- Using existing Cambodia Productivity Center to provide services to SMEs.
- Strengthen capacity of Cambodia Institute of Standard to research and prepare national standard of service, production and production following the regional and international standard.
- Strengthen capacity of Cambodia Measurement Center to prepare procedure for inspection, verification, calibration, texting and adopted measurement tools that used in the industry.

Medium to long-term measures

- Enhancing trade facilitation by improving administrative and regulatory processes and procedures, upgrading cross-border transport and trade facilitation mechanisms, implementing measures to reduce costs of doing business across the board as well as strengthening institutional coordination.
- Increasing investment in hard and soft infrastructure to improve facilities and services supporting industrial operations.
- Accelerating the implementation of regional integration efforts such as the GMS Cross Border Transport Agreement (CBTA) and ASEAN Single Window (ASW) aimed at integrating Cambodia into an efficient and effective regional transport and logistic system. This will promote the development of intra-regional industrial linkage where Cambodia could benefit from being strategically located between two big industrial agglomeration centers Bangkok and Ho Chi Min City.
- Further strengthening institutional capacity to develop standards, metrology and quality certification system. On-going efforts to develop legal frameworks and international accreditation for national institutions should be accelerated, including strengthening an effective management of national laboratories.
- Further improving the Automated System for Customs Data (ASYCUDA) making it user-friendlier.
- Improving custom clearance procedures for the duty-free importation of goods under QIP projects, making them more effective with strengthened cooperation between CDC and GDCE while eliminating unnecessary costs related to documentation, trade facilitation and other informal fees.

E. Investment and Financing

Short Term Measures

- Establishing fund and later specialized bank for industries.
- Providing funds from the national budget to support the implementation of IDP activities.
- Developing mechanism to issue government bonds and securities to finance potential industrial projects.
- Developing other financial arrangements such as government investment guarantee, risk sharing and credit guarantee schemes to promote access to finance by industries.
- Developing legal and regulatory framework for government to participate in industrial development such as through public private sector partnership (PPP).

Medium to long-term measures

- Strengthening securities market to mobilize financial resources for industrial development including the issuance of treasury bills and/or government securities to finance key infrastructure projects to promote industrial activities.
- Strengthening national saving systems such as through development of money markets including interbank market, pension fund and insurance systems to channel national saving into the development of industries.

F. Technology Transfer, innovation and industrial patent

Short Term Measures

- Promote technology transfer to handicraft.
- Strengthen the management of innovation and creative center to promote invention and train industrial patent.
- Improve efficiency of industrial patent through cooperation and partnership country and facilitate in registering representative agency.

Medium to long-term measures

- Strengthen and build human resource capacity for research and development of industrial technology.
- Cooperate and promote research activities and encourage science, technology and innovation.
- Consider to establish science and technology park that link to industrial park and special economic zone to provide research and lab services.
- Automate patent registration system.

5. Institutional Arrangement and Implementation mechanism

5.1. Institutional Arrangement

A fundamental of industry policy is effective implementation coordination. The complex process and tasks of industrialization will necessary require strong political leadership at the top, to ensure integrity and responsibility of key policy decision. Moreover, it requires a competent and committed agents to implement projects and initiatives under the framework of the policy.

Institutional coordination is sufficient condition to ensure effective implementation of the policy. Currently, each ministry focus on their and isolated responsibilities, which it does not reflect a good interlock and interconnected working system. In general, MOC is responsible for trade facilitation and competition governing, MIH is responsible for factory, technology and standard regulation, MEF is responsible for financing, MOLVT is responsible for skill training and labor relation, MOEYS is responsible for produce human resources for industry, MOUPC is responsible for organizing industrial location, MOTPW is responsible for infrastructure and logistics and CDC plays key roles in attractive investment, windows services and incentives management.

To ensure effectiveness in implementing this policy, the government will arrangement an working mechanism.

5.2. Monitoring and problem solving

The review of progress and hearing of issues in implementing IDP should be put in the COM agenda every six months to seek guidance and solutions from the cabinet meeting. Monitoring will focus on the targets and indicators. Regular public-private sector consultations and partnership in certain areas should be held in order to monitor the progress and make appropriate adjustments to the policy.

5.3. Financing

A billion dollar investment is needed every year, it is estimated that USD350 million will be needed for infrastructure development and USD650 million in industrial investments per annum till 20201. The public investment would play an important role to attract private sector. The Royal Government aims to cover the infrastructure development and other sink costs that require public investment of about USD500 million per annum. The remaining costs will be shared among private investors.

5.4. Implementation Risks

The success of the industrial development policy relies on the global situation, since Cambodia is a small and open economy. While this policy aims to strengthen the competitiveness of the Cambodian economy, global demand and supply as well as technical progress might affect development processes. The risks include:

- 1. Priority sectors and implementation must take into account changes in regional context. For instance, reform in Myanmar could affect the competitiveness position of Cambodia.
- 2. Technological absorption failure due to either low domestic education level or rapid global technological advancement could hinder Cambodia's effort to increase domestic value added and elevate its industry to a higher level.
- 3. Inability to control inflation caused by spike in oil or food prices will result in increase in wages and unexpectedly rapid loss of Cambodia's competitiveness. Rapid loss of competitiveness does not allow enough time for economic diversification. As a result, Cambodia could be trapped in labor-intensive industries.
- 4. The private sector's participation failure will jeopardize the policy implementation since they are the leading actors in almost all industries.
- 5. Inability to prevent and eliminate corruption will result in ineffectiveness of policy implementation and failure to achieve set target since the implementation process provides room for corruption acts.
- 6. Implementation of coordinated and crosscutting activities are determinants of success. Unsolved problems in any area will hinder the whole policy implementation. For instance, if electricity price remain unaddressed, policy interventions in other areas will render ineffective. Therefore, any drawback will lead to the interruption of the policy implementation.

6. Conclusion

Although the Cambodian economy has recorded decent economic growth over the last decade, it is urgent for the government to take necessary policy measures to graduate to a middle income county and compete with regional countries in attracting FDI through infrastructure improvement, including affordable and reliable electricity supply, expansion of transport infrastructure, improvement to logistics system, upgrading of technologies, strengthening of

¹Primary estimate using ICOR.

coordination mechanism especially the upgrading of the capacity of the executing agencies together with the provision of appropriate incentives.

This industrial development policy aims to create a policy framework for promoting industrial development through economic diversification, export promotion and establishment of industrial management framework. The industrial development policy will lay out measures that cover various aspects to be implemented by concerned ministries/institutions.

[END]