

SECTOR ASSESSMENT: AGRICULTURE, NATURAL RESOURCES, AND RURAL DEVELOPMENT

Sector Road Map

1. Sector Performance, Problems, and Opportunities

1. **Sector performance.** Agriculture remains a crucial sector in the Cambodian economy. Four million people have been lifted out of poverty between 2004 and 2015, and 60% of the poverty reduction in the country is the result of positive developments in the agriculture sector. However, the number of vulnerable people has increased. Most people who escaped poverty did it by a small margin. The loss of only KR1,200 per day (\$0.30) would cause a doubling of Cambodia's poverty rate back to 40%¹. Value for the agriculture sector grew at an average rate of 4.5% per annum during 2008–2013, but slowed to 0.3% in 2014 and 0.2% in 2015, and was estimated at 1.4% in 2016.² Agriculture's share in gross domestic product decreased from 46.0% in the 1990s to 26.6% in 2015. While agricultural growth has slowed down, it is essential to keep the agricultural growth rate at 5% per annum between 2015 and 2030 to keep real farm incomes growing. With 5% growth, farm wages are projected to triple from \$1,200 currently to \$3,760 in 2030, while agriculture growth of 3% would increase incomes only to \$2,500 by 2030.

2. In 2016, Cambodia's rural population was 12 million or 79% of the total population.³ The agricultural labor force accounted for 48.7% of the total labor force in 2013, a decline from 57.6% in 2009.⁴ This trend is projected to continue with the agriculture sector accounting for 31% of the total labor force in 2030. Seasonal work (e.g., construction workers moving from rural to urban areas during the dry season), permanent work (e.g., women moving to garment factories) and migration work (e.g., in Thailand) interact to create labor scarcity in agriculture. Scarcity of labor in agriculture has a number of consequences: (i) reduced production and resource use efficiency, (ii) higher agricultural and rural wages, and (iii) agricultural mechanization. These factors need to be taken into consideration in future Asian Development Bank (ADB) support to Cambodia.

3. **Key sector problems.** Three major problems exist in the agriculture sector: (i) low agricultural productivity whereby productivity enhancement has not been a high priority and products are low quality; (ii) underdeveloped agricultural value chains, with most commodities exported in raw form and production is chiefly producer pushed rather than demand driven; and (iii) deteriorating natural capital stock and high vulnerability to climate threats.

4. **Other development partners' investment.** Apart from ADB, major development partners in the agriculture sector in Cambodia include Agence Française de Développement, Australian Aid, Japan International Cooperation Agency, European Union, Food and Agriculture Organization of the United Nations, International Fund for Agricultural Development, and United States Agency for International Development. Their support has been mainly in the production side, especially in the rice industry (with the exception of the European Union which focuses on livestock and fisheries but will be limited to only fisheries from 2018). Support to strengthen the agricultural value chains has been more limited and more recent, especially with regards to private sector engagement.

¹ World Bank. 2015. *Cambodian Agriculture in Transition: Opportunities and Risks*. Washington, DC.

² ADB. 2017. *Cambodia Country Economic Indicators*. Phnom Penh.

³ World Bank. <http://data.worldbank.org/indicator/SP.RUR.TOTL.ZS?locations=KH> accessed on 4 April 2017; ADB. 2017. *Cambodia Country Economic Indicators*. Phnom Penh.

⁴ Government of Cambodia, Ministry of Agriculture, Forestry, and Fisheries. 2015. *Annual Agricultural Report*. Phnom Penh.

2. Government's Sector Strategy

5. The Rectangular Strategy for Growth, Employment, Equity, and Efficiency Phase III (2014–2018) continues to focus on critical development issues in four priority areas, or rectangles, one of which emphasizes agriculture's continued important role in Cambodia's economic growth, ensuring equity and food security, and promoting development of the rural economy. The four sides of this rectangle are (i) improved productivity, diversification and commercialization with a target of agricultural growth of 5% per annum, (ii) promotion of livestock farming and aquaculture, (iii) land reforms, and (iv) forestry reforms.

6. Furthermore, the need for better water resources and irrigation system management is well reflected in the rectangular strategy. A number of critical challenges were recorded, such as (i) expansion of irrigation capacity needed to increase the number of crops per year; (ii) strengthening of irrigation infrastructure repair and maintenance mechanisms; (iii) enhancement of the standards and quality of irrigation construction; (iv) effective and sustainable water resource utilization; (v) management of and protection against floods, (vi) development of the legal framework; (vii) institutional capacity and human resources in the water sector; (viii) and strengthened coordination between the uses of water in agriculture, energy, and transportation. To address these challenges, the following priorities have been set by the government: (i) increase the irrigation area by 30,000 hectares per year from 2014 to 2018,⁵ enhancing standards and quality of irrigation infrastructure, enhancing effectiveness of investment and construction of water storage reservoirs, and developing a fully extended climate-resilient irrigation system; and (ii) improving the effectiveness of irrigation system management; improving maintenance and financing; and strengthening the maintenance, repair, and rehabilitation of irrigation systems. In line with the Rectangular Strategy Phase III, the Agricultural Sector Strategic Development Plan 2014–2018⁶ recognized that although much attention has been paid to investments in rural infrastructure, insufficient investment in irrigation remains a challenge to enhancing agriculture productivity.

3. ADB Sector Experience and Assistance Program

7. ADB support to agriculture has been both multilayered and multifaceted. It has engaged with policy and institutional reform processes as well as with individual investment projects on the ground. It has worked on various rural livelihood dimensions (including rural infrastructure provision) and through several ministries within individual projects in often innovative (if sometimes complex) structures. The major lessons learned for program and project design include the following:

- (i) Institutional issues have affected both the adoption of new sector practices (e.g., operation and maintenance on irrigation schemes) and project implementation (i.e., through procurement, consultant recruitment, covenant compliance delays, etc.).
- (ii) Sector policy and management reform has been a necessary but (so far) insufficient step to promote growth and diversification, and further substantial downstream activities need to continue to provide technical training for farmers and government staff so as to build social capital and promote value chain formation.

⁵ Ministry of Water Resources and Meteorology. 2014. *National Water Status Report*. Phnom Penh.

⁶ Ministry of Agriculture, Forestry and Fisheries. 2014. *Agricultural Sector Strategic Development Plan 2014–2018*. Phnom Penh.

- (iii) A programmatic approach should be adopted with a long-term sector investment plan (10 years) for the country, financing multiple projects for two main streams of the sector, i.e., (i) productivity enhancement and (ii) value addition improvement, complementing each other and capitalizing on the policy reforms that have been or are being developed under completed and ongoing programs.
- (iv) There is a need for better coordination between agencies to deliver support services in agriculture production such as irrigation and extension.

8. **Opportunities and the desired shift.** Agriculture is likely to continue to play a key role in Cambodia's economic growth and job creation. Yet, future transformation may take different pathways depending on which policy decisions are made now. Lessons from the neighboring country, Thailand, which in the 1980s experienced similar challenges, pointed to investments in productive infrastructure and a system of food quality standards, and more open agricultural trade policy. These policies made an important contribution to the shift towards mechanized farming and higher-value food processing and exports⁷. Cambodia can seize the opportunity from agricultural growth for income generation and poverty reduction for many years if it strengthens its investments in productivity to improve competitiveness, and commences putting in place an enabling environment for agro-enterprises to develop, so as to transform the current sector *status quo* of being supply-driven to a commercially oriented, diversified, and demand-driven system. This shift will need to incorporate the following characteristics: (i) be consumer oriented; (ii) address land and water productivity enhancement in a changing climate; (iii) conserve underlying agro-ecosystems along the product value chains; (iv) focus on processes, grading, and labeling; and (v) promote product differentiation, predominance of retailers, global outsourcing, and value creation. This development orientation will help broaden the base of the sector contribution to the national economy and result in more benefits trickling down to more smallholder farmers and ensure poverty reduction. Stronger engagement of the private sector throughout the agricultural value chains is also expected to produce a shift in Cambodia's agriculture sector.

4. ADB's Future Strategy and Assistance Program

9. ADB's sector strategy supports two main streams of operation: (i) enhancing agricultural productivity through strengthening irrigation and water resources management, and (ii) improving value addition in value chains of agricultural commodities.

a. Enhancing Agricultural Productivity

10. Enhancing agriculture sector productivity involves addressing the crucial gaps in agriculture production by: (i) bringing more area under irrigation; (ii) improving water efficiency and productivity through upgrading, rehabilitating and climate proofing irrigation systems; (iii) modernizing operational management of irrigation systems; (iv) strengthening water governance; (v) improving operation and management via farmer water user communities; and (vi) adopting best practices for on-farm water use efficiency. These investments will incorporate climate resilience and disaster risk reduction measures in the design of irrigation schemes as well as in providing training for the government and for communities at risk. ADB's approach is two-pronged. First, at the national level, building on the Water Resources Management Sector Development Program⁸ and the Uplands Irrigation and Water Resources Management Sector

⁷ World Bank. 2015. *Cambodian Agriculture in Transition: Opportunities and Risks*. Washington, DC.

⁸ ADB. 2010. *Report and Recommendation of the President to the Board of Directors: Proposed Loans, Grant, Technical Assistance Grant, and Administration of Loan and Technical Assistance Grants Kingdom of Cambodia: Water Resources Management Sector Development Program*. Manila.

Project,⁹ an irrigated agriculture improvement project and technical assistance to develop a 10-year investment plan aligned with the long-term strategic development goals of the sector are planned in 2019. Subsequently, a 10-year multitranche financing facility for an investment program to improve irrigated agriculture is planned in 2020. These investments will ensure support to achieve long-term and sustainable goals for enhancing agricultural productivity and the rural economy. The proposed project and program will focus on medium- to large-scale irrigation structures, supporting the government's policy for agriculture commercialization and rice export.

11. Second, at the local level, to ensure inclusive growth in the agriculture sector through poverty reduction and food security, ADB will upscale and replicate some of the successful productivity-oriented components of the Tonle Sap Poverty Reduction and Smallholder Development Project (e.g., improved agriculture productive infrastructure such as irrigation and rural roads, improved access to good quality and climate-resilient rice seeds, and access to agriculture markets and agriculture extension through innovative rural information and communication technology) in the Tonle Sap Basin through the additional financing for the project. As smallholders are vulnerable of sliding back into poverty, continuation of growth to enhance their resilience to economic and environmental shocks is needed to reduce that vulnerability in the future.

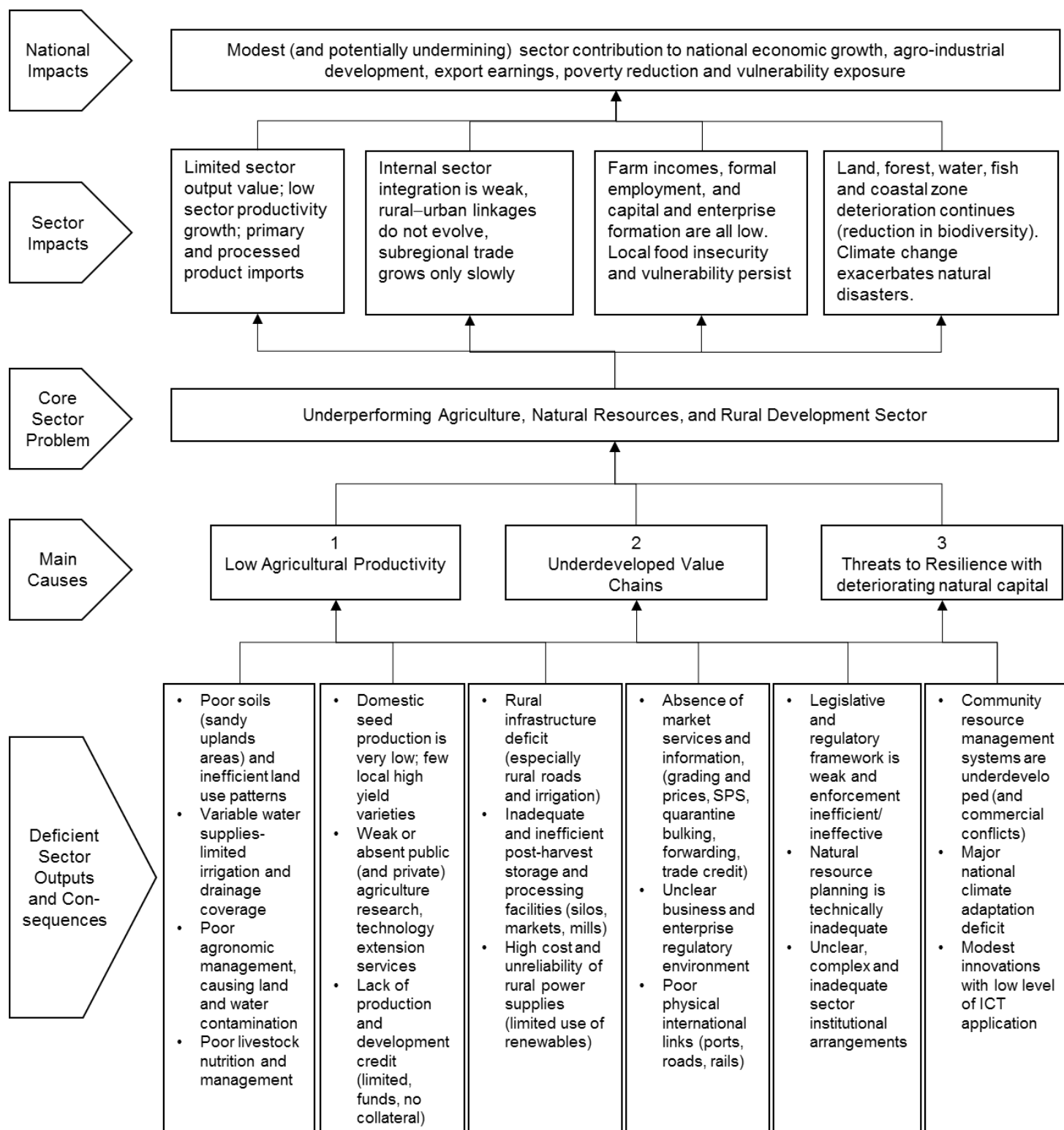
b. Adding Value to Agricultural Products through Value Chain Development

12. A value-addition strategy is critical to the long-term survival and competitiveness of agriculture and rural job creation in Cambodia. The essential premise for adopting a consumer-driven value chain approach is that higher financial returns can be realized through value-enhancing inputs to augment those obtained from simple supply chains. ADB will support the value-addition approach through several of its pipeline projects, including the Climate Friendly Agribusiness Value Chains Sector Project to be approved in 2018, the Agriculture Value Chain Infrastructure Investment Project to be approved in 2019, and the Greater Mekong Subregion Second Agriculture Value Chain Infrastructure Investment Project for approval in 2021.

13. Overall support will continue to be provided to strengthen institutional and technical capacity to formulate climate-smart agribusiness policies; support contract farming and farm mechanization; enhance access to rural credit, market information, technologies, and other farm business services; and improve food quality and safety. More specifically, ADB will improve critical production and post-harvest infrastructure facilities under the Climate Friendly Agribusiness Value Chains Sector Project and the Agriculture Value Chain Infrastructure Investment Project, as well as processing and marketing facilities under the first and second Agriculture Value Chain Infrastructure Investment Projects. As well as improvements in rice marketing, support will be selectively focused on nonrice crops that have realistic market potential. In addition to investment in public sector infrastructure, ADB will explore innovative ways of working with the private sector through capacity building and value chain financing in all post-production activities concerned with collection, grading, processing, packaging, and marketing of agricultural products under the Agriculture Value Chain Infrastructure Investment Project. The Second Agriculture Value Chain Infrastructure Investment Project will take a step further to develop public-private partnerships for agriculture value chains. Similar to the first stream of operation on enhancing agriculture productivity, investment in climate resilience will underpin all these projects under the value chain development strategy.

⁹ ADB. 2015. *Report and Recommendation of the President to the Board of Directors: Proposed Loan Kingdom of Cambodia: Uplands Irrigation and Water Resources Management Sector Project*. Manila.

Problem Tree for Agriculture, Natural Resources, and Rural Development Sector



ICT = information and communication technology, SPS = sanitary and phytosanitary

Source: Asian Development Bank.