

SECTOR ASSESSMENT (SUMMARY): AGRICULTURE, NATURAL RESOURCES AND RURAL DEVELOPMENT

A. Sector Performance, Challenges, and Opportunities

1. Myanmar is one of the largest countries in Southeast Asia in both land area and population. The country is divided into five major topographic and climatic zones: (i) the Mountainous region; (ii) the Shan Plateau; (iii) the Central Dry Zone (CDZ); (iv) the Delta region; and (v) the Coastal region. Agriculture accounts for 28% of the country's gross domestic product. Annual sector growth reached 12.1% in 2005 but slowed to below 5% after 2010 and was 3.3% in 2014. Agriculture accounts for 50% of employment and 20% of exports.¹

2. About 30% of Myanmar's rural population is landless. The landless have few sources of income other than through their work as laborers and their small businesses. The holdings of about 37% of the rural households that do have land are smaller than 2.0 hectares (ha).² Despite some poverty reduction between 2005 and 2010, Myanmar remains one of the poorest countries in Southeast Asia.³ At least one in four citizens lives below the national poverty line. The World Bank estimated Myanmar's per capita income at \$1,270 in 2015⁴. Income inequality is growing and the gap is becoming particularly wide between the residents of the major urban centers of Yangon and Mandalay and the 70% of the population living in rural areas.⁵

3. The agricultural and rural development sector must be assessed within the context of overall change in the country's society and economy. Almost 20% of the population moved out of agriculture between 1990 and 2013, reducing its share of total employment from 65% to 50% (footnote 3). A 2016 study suggests that the reasons for this decline include diversification of rural households incomes due to increased non-farm employment opportunities, shortages of and higher costs for agricultural labor due to migration to urban centers, and a declining rural population.⁶ The returns from agricultural labor are now uncompetitive and will remain so as long as farming is based on labor-intensive farming practices, production is not diversified, no shift occurs from raw agricultural to value-added production, financial products suited to agriculture are not available, and the business enabling environment continues to be inadequate.

4. The potential for agricultural development in Myanmar is considerable, and the sector also offers the country's most significant opportunity for achieving inclusive economic growth (footnote 3). Myanmar has 18.2 million ha of arable land, of which only 13.3 million ha (73%) was cultivated in 2014,⁷ of which 2.1 million ha was irrigated in the main monsoon season. Cultivation on the remaining 11.2 million ha was rainfed. Rice is the main crop. Others include pulses, oilseeds, maize, cotton, rubber, sugarcane, tropical fruits, and vegetables.⁸ The potential for further developing the value chain for these crops is significant.

¹ ADB. 2015. *Key Indicators*. Manila.

² The rural landless and marginal farmers (with cultivation rights to less than 2 acres of land) constitute two-fifths of Myanmar's population, but make up over half the poor. World Bank. 2014. *Myanmar: Ending poverty and boosting shared prosperity in a time of transition*. Washington

³ ADB. 2014. *Myanmar: Unlocking the Potential—Country Diagnostic Study*. Manila.

⁴ <http://data.worldbank.org/country/myanmar>

⁵ Ministry of National Planning and Economic Development, Swedish International Development Cooperation Agency, United Nations Children's Fund, United Nations Development Programme. 2011. *Integrated Household Living Conditions Survey in Myanmar (2009-2010)*; and ADB. 2012. *Asian Development Outlook 2001: Update*. Manila.

⁶ National Economic and Social Advisory Council. 2016. *From Rice Bowl to Food Basket: A New Vision of Myanmar's Agricultural Development*. Yangon.

⁷ World Bank. 2015. *Myanmar - Agricultural Development Support Project*. Washington.

⁸ Myanmar is the world's second-largest producer of pulses and beans. It is the third largest producer of sesame after People's Republic of China and India.

5. Myanmar's five major rivers basins provide it with abundant water resources. Its annual per capita water endowment of 24,000 cubic meters is more than 10 times those of the People's Republic of China and India and offers considerable opportunities for expanding irrigation and hydropower systems. Only about 10% of the available water resources is now being used, 90% of which goes to irrigation. Irrigation is currently conducted by pumped systems on the main incised rivers or by run-of-the-river systems on their smaller tributaries. Annual rainfall varies considerably between regions from highs of 4,000–6,000 millimeters in coastal reaches and the mountains of Rakhine and Tanintharyi to lows of 500–1,000 millimeters in the CDZ. This is not enough to produce a rice crop, so rice cultivation in the relatively heavily populated CDZ depends on irrigation even during the monsoon season. Excessive rainfall in other regions, notably the delta region, often results in flooding, loss of standing crops, and the displacement of people.

6. Myanmar needs a comprehensive approach to and a national plan for water management, to include rainwater harvesting, surface irrigation, groundwater usage, water control, and rural electrification. The plan should consider engineering, economic, and user inputs along with demand projections and climate change impacts. Water user groups, along with other farmers' groups, should be reestablished to encourage participatory decision-making on water use. Existing water control infrastructure, including irrigation systems, need to make more efficient use of irrigation water and be demand-driven, rather than focusing on supply management.

7. Myanmar is positioned to access agricultural export markets, both through its geographic proximity to the People's Republic of China and India and its participation in such regional groupings as the Association of Southeast Asian Nations' Economic Community and the Greater Mekong Subregion economic cooperation program. It has the potential to achieve a comparative advantage over other Southeast Asian countries to export rice to regional markets,⁹ as well as beans, pulses, and oil seeds.

8. Key constraints to the agriculture sector in the CDZ include (i) weak land and water resource management; (ii) disjointed agricultural value chains, with poor access to support services, inputs, and credit, and inadequate post-harvest operations and marketing arrangements; (iii) poor quality of irrigation infrastructure and weak management (with limited participation by farmers), resulting in unreliable and inequitable access to water; (iv) insufficient operational flexibility to cope with the emerging impacts of climate change; and (v) insufficient public investment and private sector participation.

9. Policy reforms undertaken since 2011 have enhanced the potential for agriculture sector growth.¹⁰ These included (i) land law reforms; (ii) the abolition of production quotas and the freeing of farmers to make decisions on their choice of crops; (iii) the liberalization of domestic and international marketing of crops; (iv) the removal of export taxes; (v) allowing farmers to use crops as loan collateral; and (vi) new laws on quarantine, pesticides, and fertilizers. While such steps have spurred faster agricultural growth in neighboring countries in the past, they have not yet done the same in Myanmar. Sector growth fell from 12.1% in 2005 to 3.3% in 2014 (para. 1). This suggests that execution has been weak, including the implementation of reform to give farmers more say in agricultural decision making. The reform process is incomplete, which provides the government with many opportunities to move it forward.

B. Government's Sector Strategy

⁹ Food and Agriculture Organization of the United Nations (FAO). 2013. *Geographic Determinants of Rice Self-sufficiency in Southeast Asia*, ESA Working Paper No. 13-03. Rome.

¹⁰ ADB. 2015. *Myanmar's agriculture sector: unlocking the potential for inclusive Growth*. Manila

10. **Governance and institutional capacity.** In 2016, the former Ministry of Agriculture and Irrigation was merged with the Ministry of Livestock, Fisheries, and Rural Development to create the Ministry of Agriculture, Livestock, and Irrigation (MOALI). Institutional arrangements and plans are still being developed, but the merger of mandates for rural economic development under one ministry offers the prospect of a more coherent and comprehensive approach to development than was possible in the past. Overall effectiveness will continue to be constrained by inadequate budgets, lack of relevant technical expertise, and poor access to many rural areas. However, the single ministry will be better able to address whole farm development of crops, livestock and fisheries, improvement of on-farm and nonfarm livelihoods and promotion of value chains.

11. The government regards agricultural development as a driving economic force that can provide the foundation for the broad-based development and inclusive growth needed to improve the well-being of most of Myanmar's people. The new government's initial policy statements have indicated that it will address restrictions on agricultural freedoms, as well as the absence of land tenure security that greatly affects the country's farmers. Since 2011, government agricultural policies have aimed (i) to build a competitive agriculture sector comparable to those in more developed neighboring countries, (ii) to keep abreast of rural knowledge and technical know-how in neighboring developed countries; and (iii) to develop rural industrial productivity and social infrastructure to levels similar to those achieved by neighboring countries.

12. The government's second five-year plan for the crop sector¹¹ was developed based on the new global Sustainable Development Goals, Myanmar's rice sector development strategy,¹² and the agriculture sector development objectives of the MOALI. Agricultural policies under this medium-term plan aim to promote crop production to supply agriculture-based industries and to double farmer incomes. Specific objectives linked to these policies include (i) the strengthening of agricultural water management and flood protection, including renovation and rehabilitation of canal systems and better management of underground water resources; (ii) the development of crop production, including seed industry development and dissemination of good agricultural practices; and (iii) the development of agro-industries.

13. The cross-cutting development efforts by the MOALI are guided by two existing strategies. Ongoing development of the National Action Plan for Poverty Alleviation and Rural Development through Agriculture (NAPA)¹³ identifies eight priority areas for attention: (i) the agriculture production sector; (ii) the livestock and fisheries sector; (iii) rural productivity and cottage industries; (iv) micro savings and credit enterprises; (v) rural cooperatives; (vi) rural socioeconomic development; (vii) rural renewable energy; and (viii) environmental conservation. A rural development strategic framework adopted in March 2014¹⁴ proposes integrated rural development strategies for poverty reduction. The government's mission under this framework is to (i) address inclusive and sustainable rural development by employing a people-centered approach, (ii) strengthen community-based organizations, and (iii) mitigate natural and social disasters and create resilient communities.

C. ADB Sector Experience and Assistance Program

14. The Asian Development Bank (ADB) has been a key development partner in agriculture

¹¹ MOALI, 2016. *Second Five Year Plan (FY2017-FY2021)*, Nay Pyi Taw.

¹² MOALI. 2015. *Myanmar Rice Sector Development Strategy*. Nay Pyi Taw.

¹³ MOALI. 2016. *Formulation and Operationalization of National Action Plan for Poverty Alleviation and Rural Development through Agriculture (NAPA)*. Nay Pyi Taw. (Interim Report). <http://www.fao.org/documents/card/en/c/05b22849-cfb2-4348-93fd-0806bb76cae8/>

¹⁴ Government of Myanmar; Ministry of Livestock, Fisheries, and Rural Development. 2014. *Rural Development Strategic Framework*. Nay Pyi Taw.

and rural development in Myanmar. Since its operational reengagement in Myanmar in 2012, ADB has focused on supporting the development of the policy and institutional environment as part of sector reform. A series of diagnostic assessments have underpinned ADB's investment roadmap.¹⁵ In addition, specific subsector studies and knowledge work have focused on (i) identifying critical barriers to and constraints on developing the seed industry in Myanmar; (ii) assessing a seed value chain in the CDZ; (iii) water modeling in the Samon River Basin in the CDZ to support the development of integrated water resource management; and (iv) providing support for national water legislation. At the request of the government, ADB has also initiated an exercise with other development partners to develop a coherent systematic agriculture development strategy for the country that has been in the draft stage during 2016, along with associated investment plans to accelerate modernization in the agrifood sector.

15. The World Bank has been another prominent partner in the sector, providing a variety of projects and programs and supporting sector reform and policy review. Key initiatives have included an ongoing public expenditure review of agriculture sector programs, and projects on irrigation, water resource management, and community-driven development. The Livelihood and Food Security Trust Fund, which comprises 13 of the country's bilateral development partners,¹⁶ is supporting agricultural commercialization, climate-smart agriculture, and financial inclusion across the country. The United States Agency for International Development, the European Union, and other bilateral partners are supporting land reform.

16. Based on its upstream sector assessments, ADB's operational priorities during 2012–2016 dealt with (i) restoring and upgrading rural infrastructure, including those of small and medium-scale irrigation rural access systems; and (ii) restructuring and redirecting key agri-support institutions and investments to drive broad-based agricultural productivity growth.

17. The ADB's current portfolio includes three projects, two approved under grant funding by the Japan Fund for Poverty Reduction (JFPR) and the third under preparation. The two approved projects support (i) improvements in village-level infrastructure and rural livelihoods in the Ayeryarwady Delta, in Magway and Mandalay regions in the CDZ, in Tanintharyi Region, and Shan State,¹⁷ and (ii) restoration of village access, rebuilding community assets and enhancing disaster preparedness in Chin State following cyclone Komen in 2015.¹⁸ The Irrigated Agriculture Inclusive Development Project will support agricultural value chain development and irrigation rehabilitation and modernization in the CDZ, with a total funding of approximately \$135 million, comprising a \$75 million loan from ADB and cofinancing from the Agence Française de Développement, the Asian Investment Facility of the European Union, and a grant of \$4.8 million from the Global Environment Facility for the associated technical assistance.

18. ADB's country partnership strategy for Myanmar for 2017–2021, currently under preparation, aims to help the government achieve sustainable and inclusive economic growth and job creation for poverty reduction. Agriculture and rural development is one of the strategy's priority sectors. This reflected the sector's fundamental importance to developing an array of soft and hard skills needed to build a modern economy, transforming the rural sector, boosting productivity, creating jobs, and improving livelihoods. ADB's 2017–2021 operational program for agriculture and rural development includes two pipeline projects: (i) Climate-Friendly Agribusiness Development Project (2017), and (ii) Economic Corridor Agribusiness Development Project (2020).

¹⁵ See for example, <http://www.adb.org/documents/myanmar-agriculture-natural-resources-and-environment-initial-sector-assessment-strategy>; <http://www.adb.org/publications/myanmar-agriculture-sector-potential-inclusive-growth>

¹⁶ Livelihood and Food Security Trust Fund. www.lift-fund.org

¹⁷ ADB. 2013. *Myanmar: Enhancing Livelihoods and Rural Incomes Project*. Manila (JFPR grant, \$12 million).

¹⁸ ADB. 2016. *Myanmar: Emergency Support for Chin State Livelihood Restoration*. Manila (JFPR grant, \$10.0 million)

PROBLEM TREE FOR AGRICULTURE AND RURAL DEVELOPMENT

