

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

Sector Road Map

1. Sector Performance, Problems, and Opportunities¹

1. Agriculture sector is the backbone of the Mongolian economy and considered a key for diversifying the economy, which relies too heavily on the mining sector. In 2013, Mongolian agricultural primary products accounted for 20.1% and processed products for about 11.1% of Mongolia's gross domestic product. They are also the second largest export products after mineral products, accounting for 8.2% of total exports by value in 2013. However, the agriculture sector is mostly concentrated on primary production and forgoing significant value addition in agriculture because of limited processing capacity. The bottleneck is lack of long-term financing, which has significantly hindered Mongolian agro-enterprises from making long-term investments to improve their productivity. As a result, Mongolia exports a significant portion of its agricultural products (e.g., wool, cashmere, and animal skins) after primary processing while it imports a substantial volume of processed or final products (e.g., dairy products). It is crucial for Mongolia to capitalize on the rich yet untapped resources of the agriculture sector, which employed 30% of the labor force in 2013. Development of the agro-processing industry will have a substantial impact on employment, in itself and through its backward linkages, in rural areas, where the poor comprised 33.3% of the population in 2012, and consequently contribute to sustainable and equitable development of the nation. This sector assessment focuses on seven targeted project subsectors and businesses: wool and cashmere processing, leather processing, apparel manufacturing, meat processing, dairy production, sea buckthorn production and processing, and bee farming as the agriculture, natural resources, and rural development sector is a substantially board sector.

2. **Wool and cashmere processing.** In 2013, Mongolia produced a total of 28,912.8 tons (t) of wool,² which is derived mostly from sheep, and yak and camel in limited amounts.³ Until recently, a large quantity of coarse wool was discarded because of high transportation costs and limited demand. Recent increases in demand as insulation material have encouraged processors to adopt new technologies from Germany, Japan, and the Republic of Korea to meet the market requirement. Yak down is quickly establishing a place in the international market, particularly in France and Germany, for unique knitted goods that are perceived as luxurious, novel, and durable. Products from camel hair remain a favorite among Mongolian consumers, especially for winter clothing. Although market opportunities exist for the cashmere and wool subsector, it is constrained by (i) limited financial capacity to invest in value chain development, (ii) inadequate technical know-how and technologies for improving operational efficiency and product quality, and (iii) lack of competitiveness in the international market.

3. Mongolia's raw cashmere output increased from 4,000 t in 2006 to a peak of 6,400 t in 2009 to 5,600 t in 2013. The changes in supply were attributable to a rapid increase in the goat population up to 2009 and 2010, and a decline in 2011 because of a winter disaster when 20% of the herd population was lost, resulting in a decline in available raw cashmere. Stability in the herd

¹ Unless otherwise referenced, data was obtained from the National Statistical Office of Mongolia. 2014. *Mongolian Statistical Yearbook 2013*. Ulaanbaatar.

² Mongolian wool is classified into three types of fibers by coarseness: (i) coarse fibers, suitable only for carpets, blankets, felt footwear, and insulating materials (95%); (ii) semi-coarse fibers (3%); and (iii) fine or semi-fine fibers, suitable for garment production (2%).

³ National Statistical Office. 2014. *Agricultural Sector. 2013*. Ulaanbaatar.

population and hence supply of raw materials is essential for the processing sector if it is to capitalize on the high demand for cashmere garments in the luxury segments of European, United States, and Japanese markets. As the second-largest producer of raw cashmere globally, in 2013 Mongolia's raw cashmere production accounted for slightly more than 25% of world production, compared with the People's Republic of China (PRC) with 60%. Of the total raw cashmere output, 64% was exported while the rest was for the domestic market. Enterprises operating in the sector include 25 joint ventures, 15 integrated processors, 23 primary processors, 52 producers of knitted garments, and a large number of households in knitting businesses.⁴

4. **Leather processing.** Mongolia produced 10.9 million hides and skins in 2013,⁵ of which more than 80% were exported to Italy, the PRC, the Republic of Korea, Spain, and Turkey as semi processed wet-blue hides. Mongolian hides and skins are not price competitive as they are about half the price of those produced in the PRC.⁶ The PRC traders have an extensive rural network in Mongolia for direct bulk purchase of skins and hides from Mongolian herders or intermediary traders. These hides are then processed locally into wet-blue hides and exported to the PRC. As of 2013, according to the Ministry of Industry and Agriculture, there were 340 small and medium-sized processors in Mongolia, comprising 35 tanneries, 5 fur and sheep skin processors, and nearly 300 leather goods producers. Operational problems as a result of outdated equipment, technology, and shortage of skilled labor are the common constraints faced. As a result, Mongolia still relies on imported materials for manufacturing leather goods, despite its abundance of raw materials.

5. **Apparel manufacturing.** The Mongolian apparel subsector thrived during 2000–2004 as a result of the import quota granted by the United States that saw textiles and readymade garments grow to be the second major export item after mineral products. Over 100 joint venture and 20 local readymade garment manufacturing companies were established and employed more than 30,000 workers. After the lift of the import quota, foreign investors shifted to competing countries such as Viet Nam, Cambodia, and the PRC. The sector currently comprises small and medium-sized enterprises, employing more than 2,500 workers, and is constrained by outdated equipment, severe competition in the domestic market, and lack of business experience with foreign buyers. The government reform program during 2009–2015 and the sector reform program assigned the apparel sector to produce school uniforms to be made from Mongolian cashmere and wool textiles instead of using imported uniforms. With contracts awarded to 119 enterprises creating 1,500 jobs, 80% of the school uniform demand was met.⁷ The program faced challenges with delayed financing, lack of consistency in quality and sizing because of poor skills of operators and cutters, and outdated standards. Financial and technical assistance of the project will help the subsector capitalize on the opportunity.

6. **Meat processing.** In 2013, Mongolia produced 249,700 t of meat, of which only 9.2% was slaughtered and processed at adequately equipped facilities and only 1.5% was exported (footnote 4). About 80% of meat exports are shipped to the Russian Federation, Central Europe, the Middle East, the East Asia, and the European Union. The Mongolian meat processing subsector comprises 40 large livestock slaughterhouses; 130 small and medium-sized meat

⁴ Government strategy on wool and cashmere, presentation made by Ts. Bayarmaa, director general of the Light Industrial Policy Coordination Department, Ministry of Industry and Agriculture, May 2014.

⁵ This is broken down as follows: (i) cattle hides 0.47 million, (ii) horse hides 0.24 million, (iii) sheep skins 5.17 million, (iv) goat skins 4.64 million, and (v) camel hides 0.37 million.

⁶ The price difference is attributed partly to the smaller size of animals in Mongolia, their lighter skins, and inferior quality resulting from blemishes caused by ectoparasites.

⁷ Monitoring report on Ministry of Industry and Agriculture. 2014. *Apparel sector reform program 2009–2015*. Ulaanbaatar.

processing plants for ham, sausages, and canned meat products; and 21 small meat cut shops.⁸ With increasing meat prices due to growing demand especially in urban areas, the government continues to take measures to stabilize meat prices at affordable levels. Major bottlenecks of the meat subsector are (i) highly seasonal operations of slaughterhouses (mainly October–December) resulting in seasonality of meat supply, and (ii) inadequate hygiene conditions of slaughterhouses.⁹ Increasing consumer awareness and concerns regarding meat quality and safety have pushed the government to establish hygiene standards for meat products, introduce traceability mechanisms to monitor diseases and place of origin, and trade agreements on sanitary control and hygiene for export meat products.

7. **Dairy production.** Despite the high domestic capacity of raw milk production, Mongolia imports a considerable volume of milk powder and packed milk to meet the domestic demand. With implementation of the Dairy Sector Development Program, 2010–2013, the number of dairy farms increased from 649 to 912 producing about 575,200 liters of raw milk from more than 1 million cows annually. Of this, 11.1% is industrially processed while the rest is consumed as unprocessed and is sold locally without proper hygiene conditions (footnote 3). The milk industry faces two major bottlenecks: (i) seasonal raw milk supply, with abundant supply during the warm season and limited supply during the cold season; and (ii) the high logistical cost of collection, refrigeration, and transportation because of the fragmented nature of the industry, with numerous small dairy farms and herder households.

8. **Sea buckthorn production and processing.** Mongolia sea buckthorn is a berry that is grown locally and processed into juice, jam, tea, as well as essential oil from seeds and berry pulp (the most valuable products) as a medicinal product. The government has supported a sea buckthorn program which in 2013 had an area of 4,220 hectares cultivated with sea buckthorn in the northern and western regions of the country.¹⁰ Currently, two major sea buckthorn juice and oil processors produce over 2,000 t of juice and berries and other sea buckthorn products, and there are 36 smaller-scale processing plants. Sea buckthorn products can be exported on global markets under the Mongolian sea buckthorn brand name. It is already recognized by many countries for its ecologically sound production, quality, and as an ecologically pure product.

9. **Bee farming.** Bee farming in Mongolia developed only recently even though Mongolians have been familiar with bee products for a long time. Bee farming occurs mostly in the mountainous regions and involves family businesses. Bee products are increasing through the years. In 2013, 50.0 t of honey, 7.4 t of propolis, and 2.7 t of bees wax were produced; in 2014, 118.2 t of honey, 1.2 t of propolis, and 0.6 t of bees wax were produced (footnote 11). The increase is a result of donor-supported projects providing training and capacity development and support to export of bee products. As a new industry, there are still many constraints to be overcome, including (i) lack of knowledge and skills about beekeeping among new startups, (ii) shortage of fertile female worker bees, (iii) limited product range, and (iv) shortage of proper bee farming supplies and robust studies on bee farming in Mongolia.

2. Government's Sector Strategy

10. The Millennium Development Goals-based Comprehensive National Development Strategy for Mongolia emphasizes development of export-oriented manufacturing and services

⁸ http://www.mofa.gov.mn/new/index.php?option=com_content&view=article&id=124&Itemid=196

⁹ A large amount of meat, accounting for 60%–70% of domestic meat consumption, is produced by slaughterhouses with unhygienic outdoor facilities.

¹⁰ The information was collected from a sector specialist of the Ministry of Food and Agriculture.

led by the private sector as one of its six priorities. In line with this priority, the government is exerting effort to enhance the competitiveness of the agriculture sector by strengthening links between producers and agro-processors, and promoting export of value-added products.¹¹ One example is assistance to the wool and cashmere subsector through a loan and subsidy program during 2011–2016 for wool and cashmere processors and herders who supply raw materials to those processors. As the assistance was provided in a piecemeal manner to each type of value chain player separately, even though its scale was sizable its impact remained limited. As value chain development is complicated, it requires a holistic approach, tackling different layers of value chain players in a coordinated manner. Creating an enabling environment for value chain players is another area where the government can assist. For instance, institutional capacity for quality testing and standardization is crucial if Mongolia is to benefit from agro-processing sector development. Export facilitation is another area where the government can contribute to development of the sector.

3. ADB Sector Experience and Assistance Program

11. The Asian Development Bank (ADB) has been assisting the Mongolian agriculture sector since 1992. It has provided a number of technical assistance projects, including the Agriculture Sector Strategy Study,¹² which became the foundation of the Agricultural Development Strategy of Mongolia, 2006–2015, which has shaped the government strategy for agricultural development. ADB has also provided grants and loans for the sector, including the Agriculture Sector Development Program,¹³ which promoted regional development and poverty reduction by addressing major constraints in the agriculture sector.

12. The Agriculture and Rural Development Project is the first to focus on agro-processing and value chain development by taking a holistic approach covering different layers of the value chain, e.g., raw material production, processing, and marketing. The current project enabled 12 agro-enterprises to develop their value chains, and this needs to be scaled up to ensure sector-wide impact can be achieved. Other development agencies have also pursued value chain development but in a segmented manner or on a much smaller scale.¹⁴ ADB's interim country partnership strategy, 2014–2016 for Mongolia identifies poverty reduction as a thrust for assistance to Mongolia, given the widening inequality between urban and rural populations, and supports investments that benefit the labor force, including those people in agriculture- and livestock-related businesses.¹⁵ The project will assist with the additional financing of about 70 additional agro-processing enterprises with their value chain development and it will continue to help the existing 12 enterprises improve their value chains. ADB is also preparing a loan project, Regional Upgrades of Sanitary and Phytosanitary Measures for Trade Facilitation. The project aims to promote agriculture and food trade through improvement of sanitary and phytosanitary control, testing, and inspection.

¹¹ The government has implemented programs and adopted laws to (i) increase sector productivity, (ii) secure a consistent supply of quality raw materials for the manufacturing sector to facilitate export market competitiveness, (iii) achieve food security and safety, (iv) improve the regulatory environment and governance, and (v) improve livestock health and breeds.

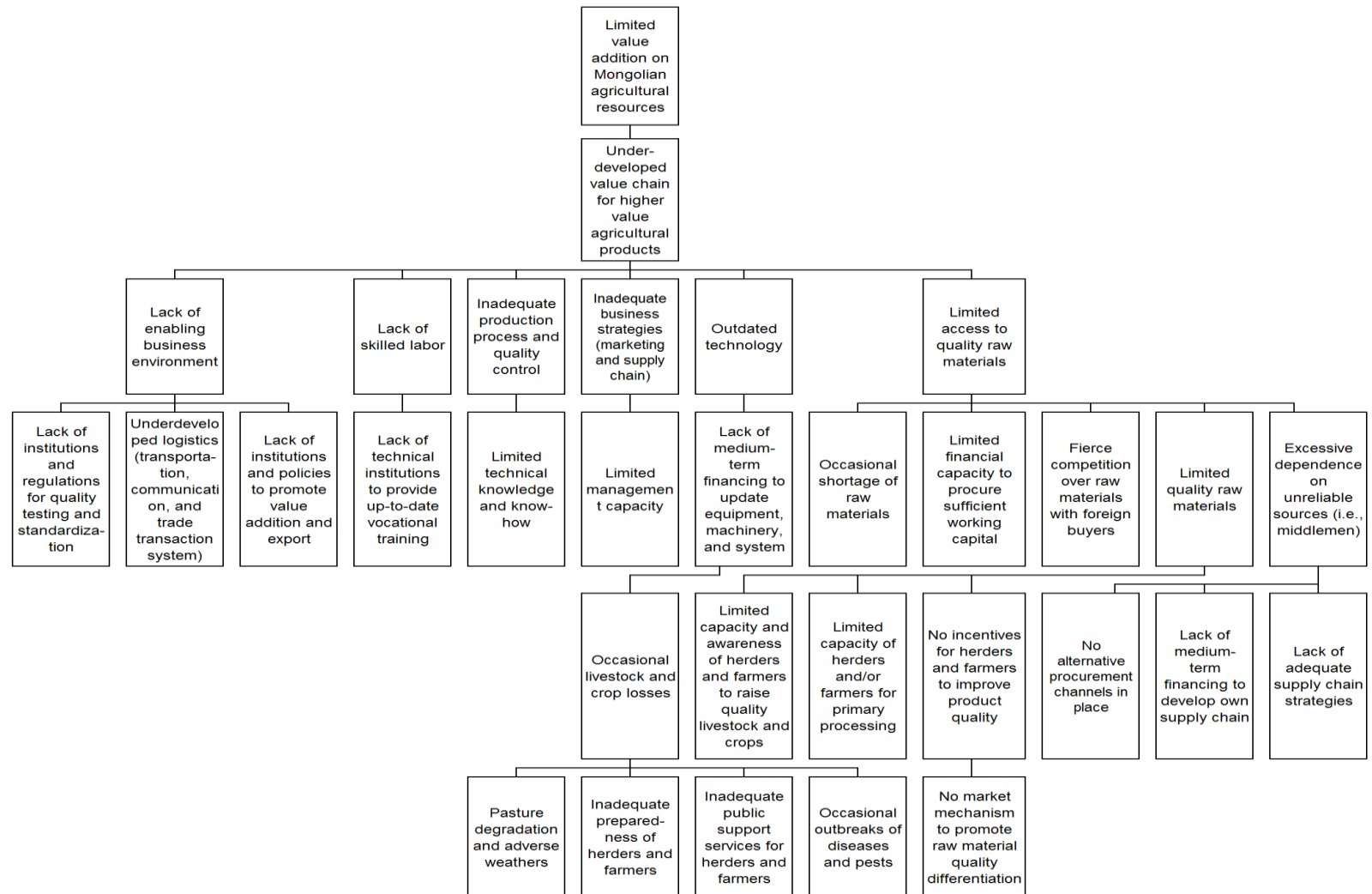
¹² ADB. 2004. *Technical Assistance to Mongolia for the Agriculture Sector Strategy Study*. Manila.

¹³ ADB. 2000. *Report and Recommendation of the President to the Board of Directors: Proposed Loans and Technical Assistance Grant to Mongolia for the Agriculture Sector Development Program*. Manila.

¹⁴ Assistance provided by development partners to Mongolia's agriculture sector has been aimed at private sector development, particularly in value chain development, and overall development of the agriculture sector, with focus on economic empowerment of the rural subsector.

¹⁵ ADB. 2014. *Interim Country Partnership Strategy: Mongolia, 2014–2016*. Manila.

Problem Tree for Agro-Processing



Sector Results Framework (Agriculture and Natural Resources, 2014–2016)

Country Sector Outcome		Country Sector Outputs		ADB Sector Operations	
Outcomes with ADB Contribution	Indicators with Targets and Baselines	Outputs with ADB Contribution	Indicators with Incremental Targets	Planned and Ongoing ADB Interventions	Main Outputs Expected from ADB Interventions
Increased productivity in agriculture sector in line with the national green development policy	By 2016: value added of agro-processing increased by at least 30% (2012 baseline: MNT460 billion)	Agriculture value chain and natural resource management improved	<p>By 2016: management strengthened in three ecosystems, e.g., forest reserves, grasslands, and wetlands (2013 baseline: 0)</p> <p>29 river basin authorities established and strengthened by 2015 (2014 baseline: 1)</p> <p>At least 400,000 ha forest area and 200,000 ha grassland under improved natural resource management by 2016 (2009 baseline: 0)</p> <p>Volume of domestically processed wool increased from 90% in 2014 to 100% in 2016</p>	<p>Planned key activity areas Water security (40% of funds) Agriculture and agro-processing (40% of funds) Climate resilience (20% of funds)</p> <p>Pipeline projects (i) Agriculture and Rural Development Project (additional financing) (ADF: \$15 million and OCR: \$35 million) (ii) Agri-business Development (OCR: \$50 million) (iii) Tuul River Improvement Project (ADF: \$20 million) (iv) Khuvsgul Lake Protection (JFPR grant: \$2.5 million) (v) Country water security assessment (CDTA: \$0.5 million) (vi) Strategic Planning for Peatlands in Mongolia (TBD, \$0.25 million) (vii) Sustainable Forest Management to Reduce GHG Emissions and Improve Livelihood of Local Communities (JFPR grant: \$2 million)</p> <p>Ongoing projects with approved amounts (i) Agriculture and Rural Development Project (ADF: \$14.7 million) (ii) Establishment of Climate-Resilient Rural Livelihoods (JFPR grant: \$2.5 million) (iii) Preparing the Tuul River Improvement Project (JFPR PPTA: \$1 million)</p>	<p>Planned key activity and pipeline projects One river basin authority strengthened</p> <p>Improved value chains for about 40 agro-processing companies</p> <p>Grassland and forest management improved in one <i>aimag</i> (province)</p> <p>Ongoing projects Improved value chains for 10 agro-processing companies</p> <p>Grassland and forest management improved in one <i>aimag</i></p>

ADB = Asian Development Bank, ADF = Asian Development Fund, CDTA = capacity development technical assistance, GHG = greenhouse gas, ha = hectare, JFPR = Japan Fund for Poverty Reduction, MNT = Mongolian togrog, OCR = ordinary capital resources, PPTA = project preparatory technical assistance, TBD = to be determined.

Sources: Asian Development Bank; and ADB. 2012. *Interim Country Partnership Strategy: Mongolia, 2014–2016*. Manila.