



TOWARDS SUSTAINABLE FOOD SYSTEMS IN MONGOLIA



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Mongolia, along with other UN Member States, adopted the SDGs Agenda 2030 in 2015, announcing its commitment to sustainable development. The deadline for achieving the goals is less than 10 years away and many of these goals—especially on sustainable food systems—are not yet within easy reach. The Mongolian Government is therefore stepping up its efforts to achieve food security, improve nutrition and promote sustainable food production.

The task of ensuring that all people have access to enough, safe and nutritious food is closely linked to efforts in a range of other areas including private sector development, job creation, livelihoods, natural resource management, climate change, biodiversity, gender equality, governance, health, education and nutrition. The Government of Mongolia will therefore take an integrated systems approach to the development of food and agriculture sector. Within this decade, the government will intensify efforts to increase sustainable food production, improve nutrition, enhance job and value creation, and promote capacity building and good governance. Special attention will be paid towards small-scale farmers, herders, small and medium enterprises and engagement of Mongolian youth in shaping this agenda. These efforts will build on what the government is already doing including strengthening cooperation with partners and stakeholders. A number of key Ministries, international development partners, civil society, farmer organizations, youth organizations, and the private sector are expected to play a role.

This year, the UN Secretary-General is convening a Food Systems Summit as part of the Decade of Action to achieve the Sustainable Development Goals (SDGs) by 2030. This Summit is expected to serve as a turning point in the world's journey to achieve all the SDGs. Rebuilding the food systems of the world will also enable us to answer the UN Secretary-General's call to "build back better" from COVID-19.

Office of the Prime Minister of Mongolia convened a series of sub-national and national dialogues to bring together diverse stakeholders around the issue of food systems transformation and to identify concrete action pathways for Mongolia to follow in this Decade of Action. The main goal of these national dialogues was to explore what actions should be taken in Mongolia to be able to access sustainably produced food in ways that contribute to equitable, resilient livelihoods and provide healthy, nutritious diets for the whole population while adapting to and mitigating climate change. The dialogues were organized around three thematic areas

1. Ensure access to safe and nutritious food
2. Markets and value addition
3. Boost nature-positive production and resilient food systems

This paper presents a brief situation analysis around these three thematic areas and presents key recommendations that emerged from various consultations. The paper is organized as follows. Section 1 presents a brief situation analysis as background to the key recommendations.



Section 2 presents the key development priorities and action points as they emerged from multiple dialogues and analyses. Finally, Section 3 offers few thoughts on implementation and governance mechanisms for these recommendations.

1. The Setting

1.1 Food insecurity, nutrition and dietary diversity

As per the most recent statistics, 28.4 percent of Mongolian population continues to live below the poverty line and approximately 22 percent do not have access to sufficient dietary energy on a regular basis to lead a normal, active and healthy life. Worse still, there has been no progress on this front since 2015. Based on the Food Insecurity Experience Scale, nearly one in four Mongolians experience moderate or severe food insecurity¹. Further, food insecurity is higher in urban areas when compared to the countryside, which indicates a changing face of hunger and malnutrition in Mongolia as people migrate to capital city in search of better economic opportunities but instead get caught into the web of seasonal informal employment, higher reliance on markets for meeting food needs and vulnerability to market shocks. Considering high reliance of Mongolia on imports for meeting food needs, Mongolia is particularly vulnerable to external shocks. During the COVID-19 pandemic, for example, food CPI increased by more than 15 percent between December 2019 and March 2020². This led to deterioration of the food security situation particularly for the poor. A rapid survey carried out by FAO estimated that many households compromised on food (72 %), were worried about not having enough food (47 %) or had to reduced food intake (34 %). The major reasons for disruption in food consumption seem to originate from a lack of economic and to a lesser extent from physical and social access to food .

Mongolia has done well on child under-nutrition. Child stunting rates declined rapidly from 30 percent in 2000 to 7.3 percent in 2016—highest rate of decline during this period anywhere in the world³ and child wasting declined from over 7 percent in 2000 to less than 1 percent in 2018⁴. Beyond these two indicators however, health and nutrition statistics for both children and adults continue to paint a somewhat a grim picture. The prevalence of overweight children under 5 years of age has hovered around 10% in the last 8 to 10 years. The country has shown no progress towards achieving the target for obesity, with an estimated 23.2% and 17.5% of adult women and men, respectively, living with obesity—almost three times the average for Asia Pacific region. There has been limited progress towards achieving the diet-related non-communicable disease (NCD) targets. In 2016, it was estimated that globally Mongolia incurred the second highest

¹ FAO, IFAD, UNICEF, WFP and WHO. 2020. The State of Food Security and Nutrition in the World 2020. Transforming food systems for affordable healthy diets. Rome, FAO. <https://doi.org/10.4060/ca9692en>

² A quick analysis of food CPI trends in other Asia-Pacific countries showed that Mongolia stood out for having the largest increase in real food prices since the beginning of the pandemic back in early 2020.

³ The stunting rate increased from 7.3 percent in 2016 to 9.4 percent in 2018 whereas most other Asian countries saw a continued decline in this rate.

⁴ Child wasting rates in Mongolia are lower than the average for the Asia region (9.1%) and among the lowest in the world



national fraction of age-standardized cardiovascular mortality attributable to dietary risk factors. Diabetes is estimated to affect 11.2% of adult women and 12.2% of adult men. Part of this is at least due to the country's historic dependence on animal source foods and increasing rates of urban sedentary life.

Knowledge of healthy diets and feeding practices is poor in Mongolia and improving the knowledge of Mongolian people on the benefits of consuming a more diverse diet is extremely important for preventing health risks. Overall, transitioning to sustainable food systems will require technological innovation, strategic use of economic incentives, cohesive and participatory governance, and behavioural changes.

1.2 Markets and value addition

Mongolia has the human and natural resource base to produce sufficient 'green' livestock products and selected vegetables for import substitution on the domestic market; and a comparative advantage for producing 'green' livestock products for export. However, a number of factors limit competitiveness including complex eco-unfriendly supply/value chains, high processing costs and high cost of capital, low product quality, limited branding and poor employment practices. Concerted efforts are also needed to improve the business environment including accelerating progress in agro-industries and agribusiness development to promote value addition and competitiveness of local agricultural products in trade at the local, regional, and international level.

The livestock sub-sector accounts for almost 10 percent of export earnings and about 80 percent of total agricultural production. Agriculture employs 35 percent of the total labour force. With 25 percent of the overall population living below the poverty line, and one third of youth unemployed, the creation of inclusive employment and improvement of livelihoods are top national priorities. The agriculture and food sectors offer the best opportunity to grow inclusive employment.

Overall, the productivity in food and agriculture sector remains low due to underdeveloped animal health and breeding systems, high incidence of production and trade limiting animal diseases, lack of proper management of pastureland, insufficient fodder and water supply and poor adoption of modern production practices. Pastures make up almost 95 percent of agricultural land; of which about 70 percent have degraded to some extent. All these factors have substantially increased risk to herders' households, the quality of Mongolian livestock, and the health of the livestock industry.

Herders in the countryside continue to struggle to survive as their traditional livelihood dissolves and there are few job opportunities for young generations. Urbanization is high with many people leaving the countryside and moving to Ulaanbaatar in the hopes of better economic opportunities. Given the lack of qualified skills training, these new residents are faced with fewer opportunities in the formal job sector and often find themselves unemployed or forced to work



in informal jobs where wages are low. On the other hand, some of the government policies – such as cash transfers and subsidies are actually being counterproductive as it may distort incentives to seek productive employment and acquire necessary skills.

Domestic markets offer limited scope of scaling up and hence it is essential to have active coordinated support and leadership from the government in exploring new markets and facilitating entry of Mongolian firms into those potential export markets. This also requires tackling barriers in access to commercial finance, reducing the cost of capital overall (especially for small and medium enterprises), facilitating access to newer technologies and practices, putting in place credible certification and traceability mechanisms and harmonising food safety and quality standards for mitigating cross-border risks.

The current export basket of agriculture products is highly narrow. Majority of exported livestock goods have low value-addition, hence being sold in lower prices at world markets. Absence of quality based pricing system is leaving no incentive for high-quality products. Thus, for livestock productivity and livestock product exports to increase, investments should be directed towards improving quality of livestock products, digitalization of quality assurance systems, integration of domestic supply chains as well as branding and certification of nature-positive products.

The potential of the agricultural private sector (corporations, small- and medium- sized enterprises, women self-help groups etc.) also needs to be better leveraged to improve equitable access to livelihoods. The private sector holds the potential to generate much-needed investment in agriculture and food systems and ensure responsible and supply chains that can benefit small producers, workers and consumers. Barriers that hamper access to financing and technology for the private sector need to be addressed. Increasing investment and access to finance is critical to achieve rural transformation, especially for small producers, herders and rural micro, small and medium agri-food enterprises.

1.3 Nature-positive production and resilient food systems

Mongolia hosts one of the world's most extensive and biodiversity-rich grassland ecosystems. This ecosystem is however degrading rapidly and that biodiversity is being lost due to the degradation of grasslands, attributed primarily to overgrazing. Mongolia does not have any mechanism for proper economic valuation of natural capital and accounting the social costs into policies and regulations. As a result, a range of natural resources are de-facto open access resources resulting into the classic tragedy of the commons. This is severely influencing livelihoods, limiting availability of vital functioning ecosystem services and driving local poverty, migration and user conflict. Poor herders with less than 200 animals often lose their control of winter and spring camps. Around one third have no winter and spring camps. Larger herders have multiple camps and their control of pastoral resources have been growing at the expense of smaller herders. Overall, the herd size has increased from around 25 million in 1990 to over 70 million in 2019 with severe consequences for health of natural resources and agriculture productivity.



Mongolia is also experiencing some of the highest rates of climate change in the world. The effects of climate change are complex and difficult to predict. Early warning systems in Mongolia are nascent, and while the development of drought and dzud conditions is monitored regularly, response activities continue to rely mainly on rapid assessments for identifying needs and assessing disaster impact. Existing laws and policies and international commitments provide a strong enabling framework for biodiversity conservation, and reversal/avoidance of degradation of country's precious natural resources. However, there is a need to improve institutional capacities and incentives to exercise their mandate in sustainable natural resource management.

Some consequences of poor natural resource management

- Soil humus content declined by 15-44 percent. Almost 70 percent of cropland soil has less than 2.5 percent humus content
 - Sheep live weight decreased by 1-2 kg between 2004-2014
 - Cattle live weight decreased by 1-2 kg between 2004-2014
 - Carcass weight of small animals decreased by 14 percent during 1990-2016
 - Cow milk yield decreased by 19 percent during 2010 and 2015
 - Average yield of several crops decreased
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Given the dominance of livestock within agriculture, Mongolia also needs to invest in approaches that can help better tackle future threats emanating from the interface between health of humans, animals, plants and their shared environment. By addressing these solutions, Mongolia can ensure that climatic and economic disruptions that follow with stresses and shocks like food shortage, food losses and price volatility can be overcome.

Women play a huge role in building resilient food systems. Studies have also shown that Mongolian women pastoralists demonstrate leadership qualities equal to, if not better than, that of their male counterparts. They also display superior abilities in building trust among group members. However, they remain disadvantaged because of multiple societal expectations, limited assets and restricted access to information and knowledge.

2. Key development priorities and action points

Mongolia adopted the Vision 2050 in early 2020 as the key mechanism to nurture and achieve Mongolian aspiration to become one of the leading Asian countries in terms of social development, economic growth and quality of life. It sets a clear framework and targets for key sectors, including agriculture and the environment. It prioritizes sustainable crop and livestock production, grassland management, protection of biodiversity, and reversal of land degradation and sustainable management as well as building national capacity and mechanisms for adaptation to Climate change. The Vision 2050 principles for sectoral development include (i) adoption of advanced technologies with high productivity in including encouragement of new products, production and service innovations; (ii) encouragement of production methods that



are natural resource-efficient, and (iii) compliance with the principles of efficiency and effectiveness in all economic and social sectors. Within Food and Agriculture sector, the Vision places special emphasis on enhanced increase productivity in crop and animal agriculture; regulation of livestock numbers in line with grazing capacity; adoption of international standards in traceability and development of an internationally competitive livestock sector with particular emphasis on the export livestock and livestock products. In addition, the vision emphasizes provision of healthy and safe food products to the population, decent employment creation throughout the agriculture value chain, proper knowledge and skills to have a decent, etc. The vision also pays particular attention to establishing national capacity to cope with climate change, strengthening disaster risk management capacity, establishing early detection and early warning systems and educating citizens on coping with climate change through a framework of lifelong education.

Within the broad framework of Vision 2050, Mongolia will intensify its efforts in pursuit of better production, better nutrition, better environment and better life. The government will encourage a more integrated approach to increase nature positive and resilient production systems, improve food security and nutrition, enhance job and value creation, and promote capacity building and good governance. Following broad action points have been identified to achieve this overall objective. Modern smart digital information and communication technologies will play an increasingly important in achieving these objectives⁵.

2.1 Food security, malnutrition and dietary patterns

- Support national authorities in developing nutrition plans and to strengthen public education campaigns about dietary diversity, diet-related diseases, role of healthy diets and minimizing food waste.
- Strengthen food consumption, production, and food system statistics (including food loss and waste) to track progress, strengthen monitoring, support evidence based policy making, and to contribute to reduced food waste and improved utilisation of resources
- Accelerate the development and implementation of policies on food safety and promote comprehensive vocational training related to food systems
- Strengthen institutions and legislation of relevance to food safety, including legislation on pesticides and animal and plant health and increase knowledge about this legislation throughout the food value chain.
- Establish strong network of accredited food safety laboratories and invest in human resource development for building capacity to ensure the safety and quality of the food supply.

⁵ The Ministry of Food, Agriculture and Light Industry adopted an e-agriculture strategy for Mongolia in 2019. The development of the strategy was supported by FAO and ITU in partnership with CITA. The e-agriculture strategy will provide the broad framework for accelerating digital transformation of food and agriculture sector.



- Improve information and guidance on maternal and child health and implement measures to improve nutrition for schoolchildren, young people and adults. Efforts to improve nutrition will be more closely linked to food production, health and education including dissemination of information about maternal health and more diverse diets.
- Further strengthening of school feeding programmes with an aim to provide more budget and giving priority to diverse locally produced food and mainstreaming nutrition/healthy diets education in school curriculum.
- Discourage high consumption of sugar and salts through appropriate public education and regulatory measures including the prohibition of sale of candies and sugar sweetened beverages in and around educational institutions. Discourage procurement of candies in government offices and promotion of low sodium products. In partnership with private sector, develop recipes and guidelines for healthy convenience food and promote healthy food through convenience stores.
- Provide nutrition information through easy to understand labelling and launch a massive public education campaign on label reading while making food purchase choices
- Mainstream nutrition and environmental education at all levels in school curriculum

2.2 Value chains and markets

- Prioritize support for small and medium enterprises and entrepreneurs in the areas of business development, access to commercial finance and help to put in place risk-mitigation instruments for start-up businesses.
- Ensure that more women are able to engage in the full range of business activities along food value chains, by providing start-up support to women entrepreneurs, supporting the establishment of women's groups, and promoting women's access to loans and credit.
- Promote farmer/herder organizations to build capacities, generate scale and enhance their bargaining power so as to facilitate a fairer sharing of value across the market chain
- Build competence in the field of food processing, packaging and marketing by making available appropriate technology and financing
- Develop a long-term vision, strategy and action plan for agriculture exports and provide coordinated support and leadership in exploring new markets and facilitating entry of Mongolian firms into those potential markets. For this purpose, an independent, autonomous Export Promotion Board may be set-up. The Export Promotion Board would have the responsibility of harmonizing standards, negotiating and facilitating the implementation of trade agreements, branding Mongolian products in export markets and advising the government on key export policy and regulatory measures. The governance of the Board would be based on the best international practices of similar Boards around the



world. The Board should be accountable directly to the parliament. Establish a Ministry of Commerce to streamline commodity and trade standards. Collect, evaluate, and publish data pertaining to Commerce and Industry. Establish and enforce standards for business practices and promote sound development of trade.

- Establish credible certification and traceability mechanisms, harmonise food safety and quality standards for mitigating cross-border risks, and streamline internal processes to substantially reduce the time and costs for obtaining expert permits, licences and other necessary documents.
- Leverage/combine the power of youth and that of digital technologies to modernize food value chains, improve labor productivity in food and agriculture sector and enhance competitiveness.
- Develop and promote “Mongol brand” food products in the international and domestic markets. This would also include branding Mongolian food and agriculture products as natural, cruelty free (particularly for animal products), organic and more sustainable.
- Accelerate the process for obtaining FMD (Foot and Mouth Disease) free zone certification for Western Mongolia. Prioritize domestic firms and producers in public procurement for school lunch, hospital meals and other government purchases
- Comprehensively reassess the public expenditure and subsidies in food and agriculture and align the budgeting processes to SDGs
- Initiate comprehensive financial sector reforms aimed at reducing the overall cost of capital and preferential targeted access to capital by MSMEs

2.3 Nature positive and resilient production systems

- Develop and institutionalize a uniquely Mongolian measure/index that captures the value of Mongolian culture, psychological wellbeing of people, standard of living, good governance, health and nutrition, and ecological diversity and resilience⁶.
- Strengthen economic valuation of natural resources and to better institutionalize the user pays principle into policy making
- Strengthen the knowledge and skills needed for sustainable food production at local, national and global level. This will include improving extension services and vocational training in areas related to food systems, and strengthening knowledge in the fields of climate-resilient food production practices, increasing agricultural productivity in cooperation with herders, farmers and youth

⁶ For example, Bhutan measures Gross National Happiness (GNH). Can Mongolia develop something that is uniquely Mongolian and utilize that for defining some of the policies.



- Mount a massive program on vegetable production and marketing to contribute to dietary diversity and reduce dependence on imported vegetables. Provide support for farmer markets for sale of local vegetables and encourage consumers to buy local vegetables through public campaigns.
- Declare 'Dairy Production' as key priority sector and put in place appropriate institutional structure based on best global practices to foster long term development of dairy sector in a manner that contributes to nutrition, job creation (specially for women) and GHG mitigation.
- Institute quality standards along the dairy value chain, including strict regulation of antibiotics and drugs, and incentivize quality based pricing.
- Increase access to the necessary inputs for food production and to information about the correct use of inputs. The government will also promote integrated pest management as an alternatives to chemical pesticides.
- Institutionalize One Health approach and accelerate its implementation to protect human, animal and plant health and the fight against antimicrobial resistance.
- Strengthen the management of genetic diversity of crops and livestock at local, national and international level including investing in the knowledge of herders and farmers about plant varieties and animal breeds, and provide access to a greater variety of both.
- Promote use of conservation agriculture and climate smart livestock production practices to mitigate climate change and reduce releases of pollutants to air, soil and water
- Reduce and regulate the number of livestock by 5 percent per year as committed in Mongolia's NDCs and align incentives (including recently approved pasture use tax) in support of that objective
- Promote global good practices, policy measures and regulatory instruments to promote ecosystems conservation and regeneration and create legal environment for operationalizing payment for ecosystem services.
- Develop and implement a special program that encourages recycling of water from snow and rain into agriculture production.
- Support the development of shock responsive social protection systems, forecast-based financing for risk reduction measures and insurance schemes for vulnerable food producers and other vulnerable groups.
- Strengthen the development of weather and climate services for farmers and pastoralists to ensure increased access to, and use of, these services.



- Increase knowledge about climate change, natural disasters, and disaster risk reduction among food producers.
- Mainstream climate-resilient and sustainable food and agriculture interventions into 10-year-long Targeted Development Programs