



Program Information Document (PID)

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BASIC INFORMATION

A. Basic Program Data

Country Mongolia	Project ID P165945	Parent Project ID (if any)	Program Name National Livestock and Agriculture Commercialization Program Support
Region EAST ASIA AND PACIFIC	Estimated Appraisal Date 06-May-2019	Estimated Board Date 09-Oct-2019	Does this operation have an IPF component? No
Financing Instrument Program-for-Results Financing	Borrower(s) Government of Mongolia	Implementing Agency Ministry of Food Agriculture and Light Industry, Government of Mongolia	Practice Area (Lead) Agriculture

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Proposed Program Development Objective(s)

To improve efficiency and effectiveness of selected Government programs for enhancing livestock and crop productivity and commercialization

COST & FINANCING

SUMMARY (USD Millions)

Government program Cost	225.00
Total Operation Cost	50.00
Total Program Cost	50.00
Total Financing	50.00
Financing Gap	0.00

FINANCING (USD Millions)

Total World Bank Group Financing	50.00
World Bank Lending	50.00



B. Introduction and Context

Country Context

- 1. Mongolia is a landlocked country with population of three million people and half of its population living in the capital, Ulaanbaatar.** Mongolia is also favored with world-class mineral deposits (coking coal, copper, gold, etc.), large base of livestock assets, pasture land and pristine nature, relatively younger population and near full literacy. The domestic private sector has vastly expanded in all key sectors (banking, property, telecom, food and beverage, etc.) and foreign direct investment has shown clear, albeit sporadic, potential.
- 2. Mongolia has shown impressive economic growth and development, recording highest GDP growth in the world in 2011 at over 17 percent.** Mining and agriculture sectors are two key economic sectors for Mongolia. Mining sector contributes to nearly 20 percent of Gross Domestic Product (GDP). While contribution of agriculture declined from 35 percent in 1990s to just 12.7 percent in 2016, it absorbs 30.7 percent of the total employment in the country in comparison to just 5 percent by mining sector. The sustained economic growth since transformation to a market-oriented economy since 1990s has led to impressive results in poverty reduction and human capital development in general. During this period of high growth, the poverty head count ratio declined from 38.8 percent in 2010 to just 21.6 percent in 2014.
- 3. The country has been able to increase the productivity of its economy but this positive outcome has been partly offset by macroeconomic instability.** The sudden deceleration of economic growth between 2014 and 2016 led to a subsequent fall in employment growth and real wages. Macroeconomic instability manifests itself in dual fiscal and trade deficits and can be tracked to (i) lack of economic diversification resulting from over reliance on mining sector, and (ii) lack of prudent fiscal policy, that originates from a policy “implementation gap” that prevents the country from putting into action its modern regulatory framework.
- 4. Previously fast reduction in extreme poverty has reversed and growth in human development has decelerated.** Over the last two and a half decades, the country has experienced three recessions. Between 2014 and 2016, poverty rate in Mongolia again climbed back to 29.6 percent with only 35.3 percent of households were found to be food secure and 50.2 percent experiencing moderate or severe food insecurity. The percentage of children 6-23 months who had minimum dietary diversity and minimum meal frequency during the previous day was 43.8 percent. Paradoxically, 44 percent of men, 54 percent women and 11 percent of the children under five in the country were overweight and obese. The pastoral and nomadic background in Mongolia is associated with unique food consumption patterns, with high intake of proteins and carbohydrates from meat and milk products, but little dietary diversity leaving the population increasingly susceptible to nutrient deficiencies and excess weight gain.
- 5. Animal and human health risks, growing environmental stress and climate change issues can hinder economic growth and potentially put population wellbeing at risk.** Large herder population increases the risk of zoonotic diseases. In recent years zoonotic diseases have expanded and outbreaks of transboundary disease have emerged in animals and humans. Despite progress achieved, brucellosis, anthrax, tick borne disease and rabies still constitute a threat to human health and welfare. Climate change and human action have brought about higher disaster risks and environmental degradation. Over the last six decades, growing frequency and severity of natural disasters (dzud, drought, and flood) has been observed as well as a clear upward trend in Mongolian average temperatures. If not addressed, these trends could likely hinder economic growth and rural population wellbeing in the long term.

Sectoral (or multi-sectoral) and Institutional Context of the Program

- 6. Agriculture sector is of high importance to the economy, employment, export earnings, and GDP.** The size of



Agricultural GDP (AgGDP) measured in nominal prices is about US\$ 1.7 billion and grew by 12.3 percent CAGR over the period from 2007 to 2016. The share of livestock in agriculture output is 84.2 percent providing employment to one third of country's economically active population. Meat and milk are the primary products of the livestock sector, contributing to 61 percent of livestock output and 7 percent of GDP. Mongolia produced 400.0 thousand tonnes of meat, 483.5 thousand tonnes of grain, 163.5 thousand tonnes of potatoes and 94.4 thousand tonnes of vegetables in 2016. The preliminary estimates of livestock census 2017 reveal that, number of livestock heads reached 66.2 million and about 169,700 herding households in the same year.

7. **The disruptions in institutional mechanisms and service delivery systems caused long-lasting changes to the livestock and agricultural production systems in the country.** The herder population and livestock numbers increase, accompanied by policy neglect of agricultural infrastructure; input supply and services; decline in veterinary services and phytosanitary surveillance and degradation of pasture lands adversely impacted the quality and composition of livestock keeping vast-majority of herding households at or near the subsistence level. In 2016, only 21 percent of herders had 500 heads or more livestock, the size at which herders begin to invest in productivity improvements. On the other hand, 56 percent of herders with 200 heads or fewer are trapped in low-input, low-output and low productivity extensive production are poor and highly vulnerable to production, income and food shocks. Fodder availability of more than 40 Fodder Units (FU)/head in 1989 stood at just 11.3 FU/head in 2016. Nearly 65 percent of rangelands were degraded relative to the ecological potential (reference condition) and nearly 7 percent of the long-term monitoring sites have reported desertification. Inadequate nutritional reserves reduce resilience to environmental shocks and increase the severity of winter disasters. Animal disease coupled with poor food hygiene and sanitation have emerged as binding constraint for enhancing market access by herders.

8. **Mongolia is self-sufficient in meat, wheat and potatoes, but the gains are limited by declining livestock and crop productivity.** Per capita availability of meat (132.1 kilograms), cereals (157.1 kilograms) and potato (54.2 kilograms) have significantly increased to fully meet the domestic demand. But the offtake and yields for beef and sheep and goat perform poorly against global comparators. For example, while annual offtake for beef is 30 percent in Canada, it is only 18 percent in Mongolia. World Bank Livestock Sector Study (2009) indicated that Mongolian beef carcasses range from 120-130 kg compared to international yields of 250 to 300 kg and Mongolian sheep carcasses range from 15-18 kg compared to international yields of 18-30 kg. This is partially explained by overstocking of animals beyond carrying capacity of pasture which led to serious malnutrition and made them vulnerable to diseases, natural risks and climate hazards. Decrease in live weight of cattle by nearly 30 kilograms was observed between 2004 and 2014, decrease in carcass weight by 13.9 percent between 1990 and 2016 and decrease in average milk yield of cow by 19 percent between 2010 and 2015. The cereal production declined from 839,000 metric tonnes in 1989 to just 114,800 metric tonnes in 2007. The wheat and potato producers have increased productivity, although the average yields remain good deal lower than those achieved by more advanced commercial producers or producers in other countries. The peak yield of 16.8 centners (quintals) per hectare for wheat crop in 2014 is much lower to the average dry land yields for wheat at 27 centners per hectare in western Canada. The gains in crop productivity were achieved through use of new technologies (minimum tillage) and equipment, improved access to herbicides and improved seed varieties. These yields can again dip in the absence of supplementary fertilization, crop rotations or management of crop residues for soil enhancement. For instance, potato yields increased from 9.9 metric tonnes per hectare in 2007 to 14.6 metric tonnes in 2012 before declining to 11.0 metric tonnes in 2016. The vegetables production peaked to 104,800 tonnes in 2014 and so did the potatoes to 245,900 metric tonnes in 2012. Improving soil fertility, combating soil erosion, efficient water use (including conjunctive use of ground water), investments in seed technologies, farm mechanization coupled with better managerial are key ingredients for long term productivity improvements in crop sector.

9. **Increasing urbanization and rising incomes of the population demands modern and comprehensive agro-food**



policy to ensure well-being of its people. The young and growing population of Mongolia is projected to reach 4.3 million by 2050 from the level of 3.1 million in 2016. The GDP per capita doubled from US\$ 1,717 in 2009 to US\$ 3,686 in 2016. About 68.3 percent of the country's population living in urban centers, the emerging middle class with exposure to international foods and a growing awareness of the link between diet and health, is promoting diversity in their food purchasing habits. Fruits and vegetables which play important role in this transition, are largely imported with domestic production meeting only in addition to the strategic need for promoting diet diversity by them available all year round. Only 2 percent of net sown area is used for vegetable production. In 2017, nearly 50 percent of vegetable and 98 percent of fruits and berry supply were provided through import. Further, less than 10 per cent of meat and dairy is processed by slaughtering houses and dairy factories. These processors hardly utilize their installed capacities up to 50 percent. Out of total 49 meat processing businesses in Mongolia only 29 could receive export permissions after meeting food safety and health standards. The fragmented food processing sector demands paradigm policy shifts in terms of (i) encouraging sustainable production models of semi-intensive/intensive production based on market demand; (ii) introduction of advanced technologies for local value addition and processing; (iii) value chain development and efficient storage and distribution systems for catering to domestic food markets (and export segments); and (iv) well-functioning market based regulatory mechanism for food safety and food quality assurance.

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Relationship to CAS/CPF

10. **The proposed PforR supports the World Bank's twin goals of ending extreme poverty and promoting shared prosperity and is closely aligned with the World Bank Country Partnership Strategy (CPS) for Mongolia for the period FY2013–2017.** It is in line with Pillar 2: Build a Sustained and Diversified Basis for Economic Growth and Employment in Urban and Rural Areas, the proposed PforR would support Outcome 2.1: Enhancing the investment climate and financial intermediation by working with Small and Medium Enterprises Development Fund, and Outcome 2.2 – Create more opportunities in the rural economy for enhanced livelihoods through productive, healthier and sustainable livestock sector and promoting higher quality and higher value agribusinesses. It also contributes Pillar 3: Address Vulnerability through Improved Access to Services and Better Service Delivery, Safety Net Provision and Improved Disaster Risk Management by targeting poor and vulnerable households; increasing incomes through employment creation and agriculture productivity improvements; enhancing nutrition outcomes through improved diet diversity; and mitigating pandemic and climate risks in rural areas. It is also consistent with the observations in Performance and Learning Review (PLR) of the CPS concluded in FY16 that analytical work by WBG focused on improving agriculture productivity, and hence incomes, through studies on agriculture productivity and marketing, improving public expenditure in agriculture, assessing agriculture risk, reviewing agricultural subsidies, and agriculture research and extension and committed to support to the 2015 national state policy on food and agriculture.

Rationale for Bank Engagement and Choice of Financing Instrument

11. World Bank has long history of providing investment and analytical support to agriculture sector in Mongolia. Livestock and Agriculture Marketing Project (LAMP) supported by the Bank piloted several innovative ways to deliver services to herders, women farmers and their cooperatives (hay production, genetic improvement, linkage to markets and agro-processing) with satisfactory outcomes. The Government of Mongolia (GoM) has requested for a follow-on operation with a view to scaling up interventions piloted under the LAMP, such as enhancing livestock productivity, improved market access and diversification in livestock based production systems. In this context, instruments such as Investment Project Financing (IPF), Development Policy Operation (DPO), Program for Results (PforR) or standalone Technical Assistance & Advisory Services could be considered. Out of these PforR seemed to closely fit with the GoM's reform objectives and emphasis upon improvements in efficiency and effectiveness of selected Government programs by leveraging the budgetary mechanisms for enhancing the outcomes of its livestock and agriculture programs.

12. GoM is committed to enhance the programmatic outcomes of its livestock and agriculture programs and achieve



export competitiveness. But combination of factors such as (a) inefficient service delivery systems; (b) frequent outbreak of transboundary animal diseases (TAD); (c) lack of market oriented livestock and agriculture production systems, warrants coordinated action on public, private and civil society sectors on multiple fronts. MOFALI would need to strengthen its fiduciary and governance mechanisms besides significantly improving institutional capacity to manage underlying complexities of this ambitious program. Focused technical assistance along with institutional strengthening program can help mitigate some of the institutional risks arising out of political instability resulting in frequent turnover of strategic leadership with every change at the Government level. In this case, it is considered that the proposed PforR could be supported by a parallel program of technical assistance to be funded, either out of IDA credit or through a donor funded Trust Fund.

C. Program Development Objective(s) (PDO) and PDO Level Results Indicators

Program Development Objective(s)

13. To improve efficiency and effectiveness of selected Government programs for enhancing livestock and crop productivity and commercialization

PDO Level Results Indicators

14. Preliminary results that reflect and measure success in achieving the PDO are:
- i. Animal disease free territories/zones established
 - ii. Improved productivity of livestock
 - iii. Increased value addition in agriculture and livestock sectors
 - iv. Increased availability of locally grown diversified fruits and vegetables

D. Program Description

PforR Program Boundary

15. **Expenditure boundaries:** The Program Expenditure Boundary is anticipated to encompass a set of existing sub-sector/thematic focused programs under MOFALI and allocations for cross-cutting institutional reforms. Various thematic departments and agencies of MOFALI lead various programs and statutory funds for advancing policy actions. Programs are approved by Parliament/Cabinet. Given Mongolian budgeting practices, this definition of “programs” is more akin to activities or sub-programs, but linking to the counterparts overarching strategy.

16. The proposed PforR will be embedded in the ‘National Programs’ that come within the ambit of **Healthy Food-Healthy Mongolian** program with clearly defined geographical and sub-sectoral boundaries, as relevant for achieving the results relating to livestock and agricultural productivity and competitiveness. Given both the importance of SME Development Fund (SMEDF), and likely efficiency gains to be associated with systems improvement in terms of allocation, prioritization, and reporting mechanisms, the PforR anticipates including this fund in the Program Boundary, pending further institutional and fiduciary reviews.

17. MOFALI is in the process of developing medium term budget outlook for selected national programs. In its absence, budget allocations for 2018 have been used as baseline and the team took conservative view of flat budgets to arrive at GoM’s program size of about USD 225.00 million for next five years. This figure will be revised during the preparation as some of the selected programs, particularly the newly designed programs for fruits and berries, vegetables and SMEs, are still evolving.

18. **Timeline:** The timeline of the proposed PforR is 2019 – 2023 including the period for verifying results. The selected



programs support Mongolia's Sustainable Development Vision 2030 and therefore there is high GoM commitment to prioritize these programs in the next phase beyond 2022. The proposed PforR, is therefore, both timely and strategic to support Mongolia in closing the generational gap in agriculture.

19. **Geographic boundaries:** The proposed PforR will cover the entire country as policy actions and efforts for improving efficiency and effectiveness of program delivery institutions will have country wide implications. Specific geographical areas may be prioritized for fast tracking results depending upon the focus of selected program. For example, animal disease surveillance and preventive actions will be enhanced across the country but some investments related to controlling the outbreak and quarantine enforcements for TADs like Foot and Mouth Disease (FMD), *Peste des Petits Ruminants* (PPR), etc. will receive higher attention in Eastern Region which would have higher impact on the results. On a similar note, most of the results from the enterprise promotion support for agro-processing and SME clusters would come from key export locations. The criteria to carve out geographical boundaries of the PforR will be defined during the preparation, and could include: (i) comparative advantage of the zone on the specific value-chain (fruits, berries, vegetable, or livestock); (ii) level of preparedness of the aimag/soums (land use, infrastructure, local Government budget, prior initiatives that have built capacity, etc.), (iii) existing initiatives to be replicated, upscaled or built up on (from donor assisted projects or private sector), (iv) priority for the Government (for instance on livestock: inside the future Diseases Free Zone) and commitment from local Government (for instance: vegetables, fruits and berries in Selenge and Darkhan aimags).

20. **Result Areas:** To ensure sharper focus on achieving the targets of the selected national programs, the Result Areas (RAs) of the proposed PforR cover a key subset of the Government program activities, which are to the extent feasible, aligned with the government's own targets. The RAs were selected considering that they: (i) make a strong contribution to achieving the government's vision for **Healthy Food-Healthy Mongolian** program; (ii) must be linked to specific measurable results; (iii) provide "value added" in terms of interventions that are innovative, scalable or expand upon on-going and planned pilot initiatives; and (iv) incentivize behavioral changes.

21. **Results Area 1: Livestock and agriculture production and productivity:** The objective of this result area is to support policy reforms, strengthen program delivery systems and incentivize intermediate program outcomes to address constraints of low productivity and poor quality of livestock and agriculture products. This results area will comprise two blocks of results. One will focus upon livestock sub-sector and another on agriculture (primarily vegetables, fruits and berries crops) sub-sector.

22. The results sub-area 1(a) on livestock will aim at sustainably increasing the productivity, product quality and market competitiveness of livestock products to ultimately secure export markets by supporting strengthening *Animal Health Program (2018)* and *National Livestock Program (2017)* with emphasis on (i) reforming the regulatory framework of the veterinary sector using the new AH Law as the foundation; (ii) strengthening the early detection of the TADs and other infectious diseases, and better control of endemic diseases with links to country level 'one health' initiatives; (ii) preserving gene pool and resilience of pastoral livestock breeding adept to climate change; (ii) increased fodder production, pastureland development and improved storage for winter preparation.

23. The results sub-area 1(b) on agriculture will support *Vegetables National Program (2018)* and *Fruits and Berries National Program (2018)* with the focus on increased availability for locally produced diverse fruits and vegetables contributing to improving diet diversity and nutrition outcomes. The PforR will support (i) evidence based policy and guidelines for national program on vegetables, fruits and berries; (ii) increased allocations for strengthening technology, innovation and extension services and input supply; and (iii) financial incentives for families, cooperatives and SMEs for shifting to market oriented crop production, high value agriculture, water efficient technologies; for meeting domestic



market needs.

24. **Results Area 2: Value Chains and Commercialization:** The objective of this result area is to support policy and institutional reforms, and incentivizing value chain linkages between lead cooperatives and private firms for increasing market access to farmers and herders and improving export competitiveness. This result area will leverage private investments and commercial capital to support the GoM's program objectives. Market facing and professionally managed SMEDF implementing its lending programs in strategic partnership with large commercial banks, plays a key role in promotion and development of SMEs in the country. The PforR will support *SME Development Program (2018)* and the proposed *Industrialization 21-100 National Program* focusing on (i) system improvements in SMEDF for greater efficiency and effectiveness of fund management and its results; (ii) enabling productive partnerships between leveraging lead SMEs and herders/farmers; and (iii) increased compliance to food quality and food safety regulations. IFC's TA to private sector firms and General Agency for Specialized Inspection will be leveraged for this RA.

25. **Results Area 3: Institutional Support for PforR Implementation:** The proposed PforR is the first ever PforR operation in the country. Mongolia has advanced in the creation of regulatory frameworks addressing the key challenges in several sectors including food and agriculture, but policy 'implementation gap' and lack of systemic approach to the coordination, transparency, and enforcement of regulations deny full benefits of such reforms. From a more operational point of view, these governance issues translate into problems in terms of credibility of fiscal budget, quality of regulations and institutional capabilities of government programs. Again, there are limitations in terms analysis and impact assessment of regulations for evidence based policy making. The PforR will therefore strengthen the institutional capacity of MOFALI for (i) improved program management and governance; (ii) capacity building, knowledge and evidence based decision making, independent verification protocols; (iii) policy development and program improvements; (iv) enhancing role for aimag/soums; and (v) innovations in program delivery.

E. Initial Environmental and Social Screening

Environment and social risks identified during preliminary screening for the proposed PforR are moderate.

26. **Environmental:** The proposed PforR will support select activities under national programs on animal health, livestock, vegetable, fruits and berries, SME and industrialization. In terms of national livestock and animal health programs, a significant environmental benefit would be to alleviate overgrazing by reducing the number of livestock substantially. Preliminary screening of the program activities shows that potential environmental issues and risks include: (i) land degradation, soil erosion and increased water use associated with increased cultivation area; (ii) pesticide use associated with growing of vegetables, fruits and berries; (iii) solid waste management such as plastics use and disposal of greenhouses; (iv) construction of small-scale production facilities and productive infrastructure; and (v) wastewater and animal waste management, particularly associated with meat processing. Mongolian national law and regulations pertaining to environmental protection, natural resources (water resource primarily) was reviewed and environmental impact assessment guidelines are considered adequate to mitigate and control these risks.

27. **Social:** During preliminary screening some of the potential social issues identified include (i) livelihood impact of policies restricting livestock numbers to carrying capacity of pasturelands, particularly on small herders; (ii) land reallocation to meet the needs of livestock production, (iii) land acquisition for value chain development activities; and (iv) engagement of women, ethnic minority groups and other vulnerable groups for improving access to services and enhancing flow of program benefits. Potential impact on ethnic minority groups will be further assessed. Per PforR policy and directive, an environmental and social assessment (ESSA) report will be prepared by the Bank task team in close coordination with the client team. The ESSA will be launched after program concept review in July 2018. Meanwhile, an outline of the ESSA has been shared with the client to seek their initial feedback. A detailed environmental and social screening will be undertaken in the next stage of assessment for excluding activities (Category A) within programs that



could cause significant harm to the environment or which would have significant adverse social consequences.

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