



# Combined Project Information Documents / Integrated Safeguards Datasheet (PID/ISDS)

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Appraisal Stage | Date Prepared/Updated: 20-Feb-2018 | Report No: PIDISDSA22849



**BASIC INFORMATION**

**A. Basic Project Data**

Country Bangladesh	Project ID P161246	Project Name Livestock Development-based Dairy Revolution and Meat Production Project	Parent Project ID (if any)
Region SOUTH ASIA	Estimated Appraisal Date 01-Apr-2018	Estimated Board Date 12-Jul-2018	Practice Area (Lead) Agriculture
Financing Instrument Investment Project Financing	Borrower(s) People's Republic of Bangladesh	Implementing Agency Department of Livestock Services	

Proposed Development Objective(s)

The project development objective is to improve productivity, market access, and resilience of small-holder farmers and agro-entrepreneurs operating in selected livestock systems and value chains in target areas.

Components

- Productivity Improvement
- Market Linkages and Value Chain Development
- Improving Risk Management and Resilience of Livestock Production Systems
- Project Management

**Financing (in USD Million)**

Financing Source	Amount
International Development Association (IDA)	500.00
<b>Total Project Cost</b>	<b>500.00</b>

Environmental Assessment Category

B - Partial Assessment

Have the Safeguards oversight and clearance functions been transferred to the Practice Manager? (Will not be disclosed)

Yes

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Decision

The review did authorize the preparation to continue

Other Decision (as needed)

**B. Introduction and Context**

**1. Despite being one of the world’s most densely populated countries and highly vulnerable to climate induced natural disasters, Bangladesh has achieved robust economic growth over the past decade,<sup>1</sup> with significant progress towards poverty reduction.** The country has achieved the Millennium Development Goal of halving the incidence of extreme poverty from 44.2% in 1991 to 18.5% in 2010, and to 12.9% in 2016. Poverty reduction has been driven by increases in agricultural productivity, wages, female labor force participation and remittance transfers. Agriculture provided employment for 43% of the population in 2016 and accounted for 90 % of poverty reduction over the period 2005 to 2010.

**2. Looking ahead, Bangladesh will need to sustain growth to meet its target of reaching middle-income status by 2021 and eliminating poverty by 2030.** About 22 million people remain below the international extreme poverty line (\$1.90 2011 Purchasing Power Parity), and in rural areas their share exceeds a quarter of the population. Malnutrition continues to be widespread in Bangladesh, even amongst food producing households and where agriculture is the main source of income. Nationwide, about 41% of children under 5 years of age are chronically malnourished, and 22% are born with low birth weights. Bangladesh ranks 90<sup>th</sup> out of 118 countries in the Global Hunger Index and 142<sup>nd</sup> out of 186 countries in the Human Development Index. Despite a significant expansion of the power generation capacity in recent years, an estimated 31% of the rural population still lacks access to electricity. About 17% of the rural population do not have access to potable water.<sup>2</sup> The challenges faced by Bangladesh extend well beyond poverty and malnutrition, to several facets of social and economic life.

**3. The Government of Bangladesh (GoB) emphasizes agriculture (crops, livestock, forestry, and fisheries) as a key driver for Bangladesh’s development.** Agriculture features prominently in the GoB’s 7<sup>th</sup> Five-Year Plan (7<sup>th</sup> FYP), and is expected to contribute significantly to the governments’ short and medium-term goals. The 7<sup>th</sup> FYP foresees an accelerated process of transformation from predominantly semi-subsistence farming towards increasingly commercialized agriculture. This will require achieving productivity gains, diversification, value addition and agro-processing, commensurate with national environmental protection, risk mitigation, and climate change (CC) adaptation strategies. Both the World Bank’s 2016 Dynamics of Rural Growth study in Bangladesh (DRG) and the Bangladesh Development Update (BDU) point to the livestock and fisheries sub-sectors as key, but underexploited drivers for agricultural growth.<sup>3</sup>

**4. The development of the agriculture sector is also a high priority for driving growth and jobs.** While agricultural productivity growth has improved moderately over the past decade, it is not converging with the manufacturing and services sectors, and remains at just one-fourth the level of the overall economy. Raising productivity in agriculture matters for jobs in several ways. First, given the links between agriculture and the

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<sup>1</sup> The GDP grew well above the average for developing countries in recent years, averaging 6.5 percent since 2010, with an officially reported growth of 7.24 percent in FY17, driven by manufacturing and services.

<sup>2</sup> World Development Indicators, Bangladesh. Available at: <http://data.worldbank.org>.

<sup>3</sup> Growth in agriculture is estimated to have been a decent 2.6 percent in FY16, driven by growth in non-crop agriculture. Rice production has stagnated, but minor food crops, livestock products and fish production have grown remarkably.



non-agricultural rural economy<sup>4</sup>, weaker productivity growth may slow the growth of the non-agricultural rural economy. This can, in turn, slow job creation in rural areas, and weaken the counterweight to the forces that are pushing toward massive migration toward the Dhaka megacity, with negative externalities in terms of environmental, social, and congestion costs. Second, with slowing growth in demand for labor from the industrial sector, there is a risk that the transformation process may push agricultural workers into low quality services jobs.

**5. Bangladesh is highly vulnerable to climate change and impacts on the agriculture sector are expected to be severe.** Changes include sea level rise and saltwater intrusion, mean temperature increases (up to 1.7°C by 2050), increased rainfall variability, and a growing frequency and intensity of extreme weather events. These trends will significantly impact the agriculture sector (crops, livestock, fisheries, and forestry<sup>5</sup>) and can already be felt today. For example, cyclones in 2007 and 2009 led to losses of an estimated two million metric tons of rice and 400,000 cattle – and are indicative of future developments.<sup>6</sup> Accordingly, Bangladesh’s 2009 Climate Change Strategy and Action Plan prioritizes agricultural adaptation and resilience, and the 7th FYP recognizes climate change as an added, critical challenge to reducing poverty and environmental degradation. Given the country’s high population density and continued loss of arable land caused by urbanization<sup>7</sup> and other factors<sup>8</sup> increasing agricultural productivity will be critical to achieving food security in the face of CC. These trends underscore the urgency to find solutions to sustainably diversify agriculture (within crops but importantly across crops, livestock and fish production) to make household income more resilient and to continue supporting economic growth and poverty reduction efforts.

#### Sectoral and Institutional Context

**6. Livestock plays an important role for poverty reduction and shared prosperity.** It contributes to poverty reduction in a number of ways: job creation, incomes for small holders, and provision of accessible nutritious and healthy food to the poor. Livestock accounts for 1.7% of the economy’s Gross Domestic Product (GDP) but employs 14% of total labor force and accounts one-third of total agricultural employment. The livestock and poultry population of Bangladesh is very high and are mainly reared by smallholders. Over 70% of rural households are engaged in livestock production which contributes a large share of the smallholder and landless farmers’ livelihoods. Most poor rural households raise livestock which provide power for cropping, transport, threshing and oilseed crushing; manure as source of fertilizer and fuel; a ready source of cash; and milk, meat and eggs for human consumption. This shows the importance of livestock to the poor segment of the rural population.

**7. Livestock has high potential to create rural jobs and livelihood opportunities for the women, youth,<sup>9</sup> and vulnerable in rural areas.** While women account for 88% of employment in the sub-sector, 70% of them are employed as unpaid family workers. In addition, a growing share of rural households without cultivable agricultural land are engaged in livestock.<sup>10</sup> Therefore, growth in the livestock sub-sector combined with

<sup>4</sup> Shilpi, Forhad J.; Emran, Shahe. 2016. Agricultural productivity and non-farm employment: evidence from Bangladesh. Policy Research working paper; no. WPS 7685.

<sup>5</sup> World Bank. 2014. River Salinity and Climate Change: Evidence from Coastal Bangladesh.

<sup>6</sup> Bishwajit et al. 2014. Reviewing The Status Of Agricultural Production In Bangladesh From A Food Security Perspective Russian Journal of Agricultural and Socio-Economic Sciences, 1(25). M.Z. Hossain, M.T. Islam, T. Sakai and M. Ishida “Impact of Tropical Cyclones on Rural.

Infrastructures in Bangladesh”. Agricultural Engineering International: the CIGR Ejournal. Invited Overview No. 2, Vol. X. April, 2008.

<sup>7</sup> The urban population is currently estimated to represent 26% of the total population, and this figure is expected to double within the next 2 decades.

<sup>8</sup> It is estimated that about 0.56% of agricultural land is converted into non-agricultural use annually. (Source: Md Abul Quasem (2011). ‘Conversion of Agricultural Land to Non-Agricultural Use in Bangladesh: Extent and Determinants”, Bangladesh Development Studies, Vol. XXXIV, March 2011, No. 1).

<sup>9</sup> Youth are those with age less than 25.

<sup>10</sup> The Household Income and Expenditure Surveys of Bangladesh Bureau of Statistics show that the share of rural agricultural landless households involved in livestock subsector increased to 66% in 2010 from 37% in 2000.



targeted support has potential to create more, better, and inclusive jobs for women, youth, and the landless.<sup>11</sup> The sub-sector is also an engine of shared growth and prosperity, providing business opportunities for Producer Organizations (POs), Micro, Small and Mid-Sized Enterprises (MSMEs), and service providers.

**8. As incomes rise and diets shift to animal protein, demand is growing rapidly.** Cattle and buffalo milk, ruminant meat, and poultry meat and eggs are the main animal source food consumed. Production is lagging consumption growth, resulting in rising deficits: the 7<sup>th</sup> FYP anticipates annual deficits of 1.5 billion eggs, 0.5 million tons of meat, and more than 5.90 million tons of milk by 2021. In 2015-2016, imports of dairy reached US\$248.8 million and an estimated 300,000 cattle/buffalo annually cross the border from India (down from previous estimates of 2 million heads per year). Production growth in the sub-sector has also led to an increasing dependence on feed imports (mainly corn and soybean), satisfying about 50% of feed demand.

**9. Animal source food (ASF) can play a critical role in improving nutritional status.** Analysis from national surveys points to the low quality and diversity of diets of children above two years. Young children and pregnant and lactating women are particularly vulnerable to nutritional deficits and micronutrient deficiencies. ASF are source of six critical nutrients (vitamin A, vitamin B12, riboflavin, calcium, iron and zinc) and essential amino acids. Consumption of relatively small amounts of ASF can thus substantially contribute to dietary adequacy and alleviation of micronutrient deficiency.

**10. The livestock sector benefits from favorable conditions for growth.** Growing demand for ASF, a high density of cattle population (145 large ruminants/km<sup>2</sup> in 2010 with production clusters), very high potential for productivity improvement, agro-ecological conditions favorable to feed production, availability of crop residues, and a culture of mixed crop-livestock farming represent assets the sector can build on.

### Main Characteristics of Livestock Production Systems

**11. The livestock value-chains in Bangladesh are largely informal.** Mixed livestock production systems are predominant. There are considerable numbers of cattle and buffaloes and most farmers keep small animals (sheep and goats) and poultry. The livestock supply chains in Bangladesh largely depends on the smallholders, who are mostly practicing subsistence farming and do not have capacity to supply quality and quantity to meet the demand for the livestock industry. The red meat value chain is the least developed, with only two formal meat processing enterprises operating in the country, whereas the poultry chain is the most commercially developed. The milk supply chain provides a mixed picture, as milk not consumed by the farm households is supplied to informal traditional markets (>80%), while the rest enters a much smaller, but growing<sup>12</sup> formal commercial processing and distribution circuit (5%). The overall formal milk market comprises 1.35 million tons (or US\$ 775 million, mostly in the form of powder for industrial use, pasteurized milk followed by UHT milk), of which a third is sourced locally. The few commercially developed value chains of red meat, poultry, egg, and milk are centered around the big cities (Dhaka and Chittagong).

**12. Despite informality, small-holder producers are engaged in commerce and contribute into private sector led value chains.** Many small holder producers in the livestock value chains depend on surplus production being sold to neighbors, markets or off-takers for improved livelihoods and income. Whether formally registered as a business or not, the small holders are de facto private sector actors. They engage in sales of surplus product and thus connect to a large and complex supply chain that include: feed

<sup>11</sup> The female unemployment rate in the rural areas increased from 4.9% in 2010 to 6.5% in 2015-16; while the unemployment rate among the rural youths increased to 8.6% in 2015-16 from 6.7% in 2010.

<sup>12</sup> Feedback from the major processing companies indicates that demand is still expanding but the farmgate price being paid for milk is above the cost of using imported whole milk powder to make recombined milk for packaging. Thus, several processors with the ability to change the balance of fresh and recombined milk may be using more imported milk powder.



manufacturers, health service providers, artificial insemination providers, logistics and transport providers, processors, retail and wholesale sales agents and exporters. By design, this project will support commercialized small holders to increase production levels, increase access to markets and improve quality – all of which will reinforce commercialization and improve integration into private sector led value chains.

**13. Dairy production is dominated by small scale mixed crop-livestock units, typically with very low productivity levels.** These dairy production units commonly comprise 1-3 local/nondescript milking cows producing less than 480 liters per cow per annum. There are an estimated 25 million heads of cattle (dairy and beef, 95%) and buffalo (5%) in Bangladesh, with over 75% of cows on less than 1 ha land, which, if not efficiently managed, puts undue strain on an already scarce natural resources base. Total milk production is approximately 7.27 million tons per the Department of Livestock Services (DLS) (2016).

**14. Beef accounts for about 65% of total meat produced (including goat and poultry).** Animals are generally stall-fed or graze around the homestead, in small family-based production units. Goat meat, also mostly based on small family-based production units, contributes about 5% to national meat output but the goat population has been growing rapidly (nearly 30 % over the last 10 years). A unique challenge for the meat sub-sector is that nearly 30% of all stock is slaughtered during a three-day period over Eid, with over 350,000 cattle/buffalo slaughtered in Dhaka alone.

**15. Poultry production continues to thrive.** The poultry industry is moving towards self-sufficiency in meeting local demand for meat and eggs. A significant part of the broiler market (~ 40 %) is dominated by a more resilient locally bred Sonali chicken, which sells for a much higher price (>40 % more) and is suited to backyard / semi-intensive production. The broiler industry now depends on imported maize and protein grains for formulating high performance feeds.

**16. Women are heavily involved in the livestock sector.** Women comprise 68 % of agricultural labor force. They tend to be involved in home-based activities such as feeding and milking of cows as well as raising small ruminants and backyard poultry. Women’s involvement in marketing is limited due to traditional norms that restrict their mobility outside the homestead. Women face constraints in terms of economic opportunities, voice and agency, mobility and access to inputs, services and technology, and are relatively more vulnerable to climatic disasters. In addition, heavy workloads, and lack of decision making power are obstacles and challenges to women’s involvement in economic activities. Despite improvements in gender equality especially in education, gender discrimination is widely recognized as a primary underlying cause of undernutrition in Bangladesh. In the Global Gender Gap Index, Bangladesh ranked 72 out of 144 countries with good progress in education and health, but weaker in economic opportunities and political empowerment.

### C. Proposed Development Objective(s)

**17.** The project development objective is to improve productivity, market access, and resilience of small-holder farmers and agro-entrepreneurs operating in selected livestock systems and value chains in target areas.

#### 18. Key Results

- Farmers adopting improved agricultural technologies (following CSA principles) [core indicator] (# of female).
- Increased productivity of targeted species by direct beneficiaries (aggregated over cattle, buffalo, goat, sheep and poultry).
- Increase in market access reflected in increased sales (milk and/or processed milk products, live animals and meat, and egg) among the livestock producers and value chain actors in project areas (% for female).



- Farmers, value chain actors have adopted either food safety standards and/or traceability system, and/or livestock insurance (including climate induced risks) (% of female benefit).

#### D. Project Description

**19. The project seeks to promote climate resilient productivity<sup>13</sup> growth, enhance market access, and improve risk management among smallholder farmers and Agro-entrepreneurs, by providing support for climate smart production systems, farmer empowerment and commercialization.** A schematic depiction of the project's results chain is provided in Figure 1. The project will foster a market-led transformation of livestock production, while ensuring that the supply response to growing demand is sustainable, inclusive, safe, and environmentally conscious. To this end, the project will improve the ecosystem for value chain development by financing key infrastructures including markets, and access to market, insurance and financial products and services, capacity building and knowledge. The project will establish partnership with public FIs (Krishi Bank and Rajshahi Krishi Unnayan Bank) and other scheduled banks to promote co-financing credit for farmers and agro-entrepreneurs. Climate resilient livestock production systems will be developed through the promotion of appropriate CSA practices addressing feeding strategies, animal health and welfare, animal husbandry and breeding, as well as manure and waste management (including production of energy), improved storage and processing. The project will build on existing experience to foster the generation of renewable energy from solar and livestock manure sources.<sup>14</sup> Project activities on animal health food safety and AMR will embrace the One Health principles since it will address public health at the human animal interface.

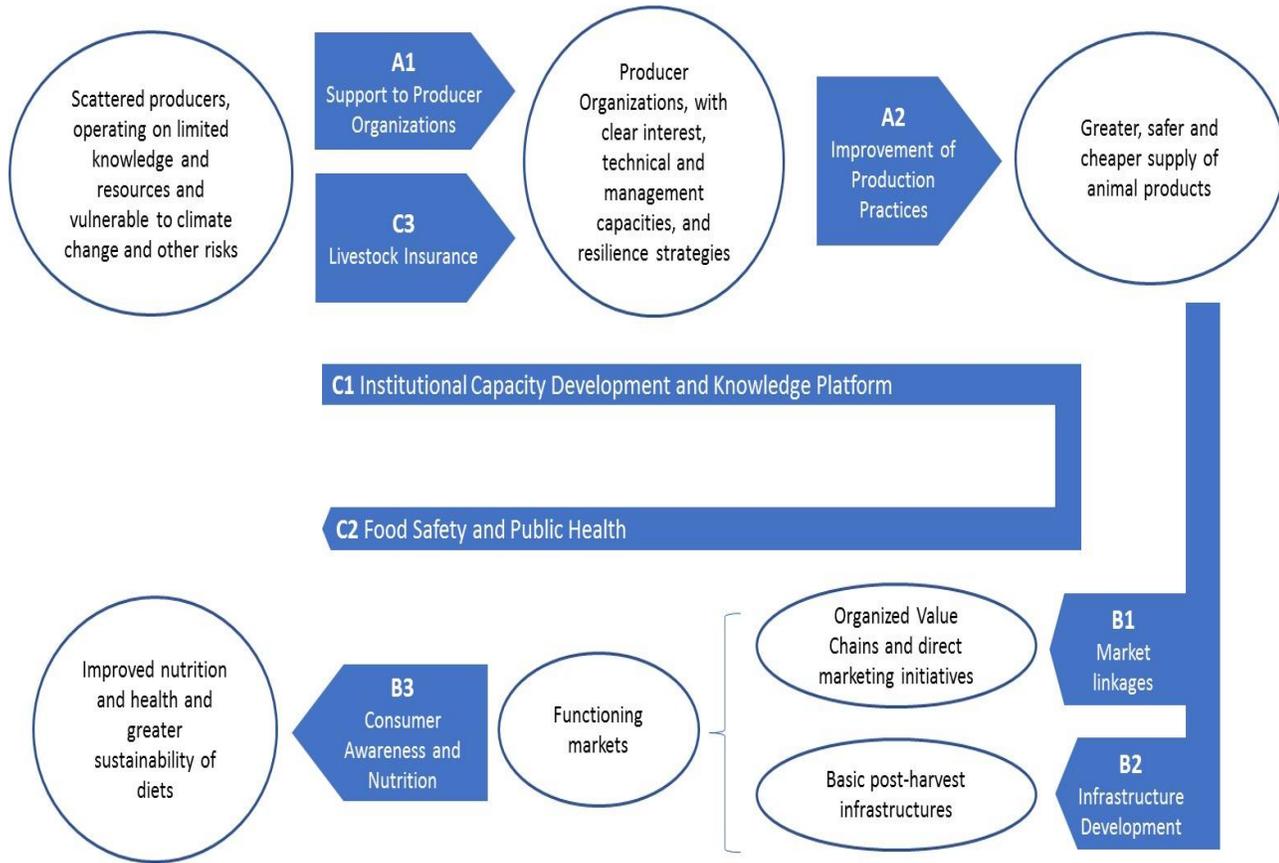
**20. The project is designed and will be implemented taking into consideration the different gender roles.** The three key approaches CSA, farmer-demand driven support services, and market access offer clear opportunities to mainstream gender. For example, the 7<sup>th</sup> FYP notes that the promotion of renewable energies that help avoid greenhouse gas emissions could provide an approach for promoting economic participation of women. Women use to get exposed to GHG, while they conventionally manage manure and to black carbon, while they prepare family food using cooking manure and biomass. Improved manure management may save their household keeping time by 4.5 hours daily, allow sharing of at least 1.0 hour more time for their children, prepare hygienic food for their family, and keep them free of mental tension for fire wood. Women could be employed in the upkeep and maintenance of solar and other energy equipment which, through off-the-grid lighting and energy generation, can also extend the productive time available for them to work. The project will actively pursue the participation of women across all project components.

<sup>13</sup> Improvement of productivity accounts both the increase in number of ruminants per households and the number of livestock products per household.

<sup>14</sup> An estimated 31% of the rural population still lacks access to electricity, and about 17% do not have access to potable water.<sup>14</sup> However, renewable energy of solar and waste sources is one of the priorities of the government to alleviate fossil-fuel based energy consumption and climate pollutions, and over the last decade both solar energy and biogas production have been increasing cumulatively and attained at 195.2 MW and 72,104<sup>SREDA</sup> numbers having capacity of 6.0 m<sup>3</sup> to 2700 m<sup>3</sup> biogas.



Figure 1: Results chain



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### E. Implementation

#### Institutional and Implementation Arrangements

##### A. Institutional and Implementation Arrangements

**21. The main implementing agency will be DLS in MoFL.** The implementation mechanisms will be described in detail in the Project Implementation Manual (PIM). A Project Steering Committee (PSC) will be formed, chaired by the Secretary MoFL, to provide strategic oversight and guidance the project implementation. A Project Implementation Committee (PIC) will assist PSC on oversight of technical issue of implementation. DLS will establish a PMU and PIUs to ensure a day-to-day implementation and supervision of the project. The PMU will be headed by a strong team comprising an Executive Project Director (EPD), a Chief Technical Coordinator (CTC), and four Technical Coordinators (TCs) to be recruited on a competitive basis and market based salary, at the Joint Secretary level officials of the GoB for EPD, from DLS for the CTC and three of the TCs, and from the market for one TC with engineering academic and professional background. PMU and PIUs will be supported/empowered by design and supervision and capacity building firms. Importantly, the firms'



responsibilities will include significant hands-on training of the DLS, PMU and PIUs staff to ensure the necessary capacity during transition period. This will reduce significantly the risks of institutional capacity gaps during the initial years of implementation and reduce the total cost of consulting services.

**22. Design and Supervision Consultant firm (D&SC).** The PMU will be supported during the first 48 months by a Project Design and Management Consultant based on agreed Terms of Reference. The D&SC will be hired upon project effectiveness to help the PMU with the timely mobilization and uptake of the project. He will carry out feasibility studies related to the construction works, prepare procurement packages, and supervise the works in coordination with DLS and other relevant ministries/and other government.

**23. Capacity Building Service Providers (CBSPs).** CBSPs could be either private firm, or state-owned agency, or NGO and will be hired upon project effectiveness to help the PMU with the timely mobilization and uptake of the project direct support and training by doing. Components A, B and C will be implemented by DLS in partnerships with a CBSP in AB for component 1 and 2 and Sub-component C2 on food safety. Sub-component C1 will be implemented by DLS directly while PMU will implement component D. A separate Livestock Insurance Vertical Unit (LIVU) will be established in the PMU with dedicated personnel responsible for the overall implementation and management of the Livestock Insurance Pilot Program (LIPP). The LIVU will implement and monitor the LIPP through a partner agent model in collaboration with insurance companies, insurance regulator (IDRA) and delivery channels. There will be LIVU representatives in each PIUs responsible for project field activities where Livestock Insurance Pilot Program operates. The LIVU will work in compliance with insurance best practices and with ability to serve small farmers efficiently with risk mitigation products. The key functions of the LIVU would include: (i) implementation and refinement of the LIPP; (ii) coordination with insurance companies and delivery channels under the partner agent model; (iii) control of the financial aspects of LIPP; organization of the promotion and awareness activities to maximize rural stakeholder participation; and (iv) monitoring and evaluation.

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#### **F. Project location and Salient physical characteristics relevant to the safeguard analysis (if known)**

While the general area for project interventions cover the entire country, the exact locations for project interventions are not known at this stage. Therefore, an Environmental and Social Management Framework (ESMF) has been prepared based on environmental and social assessment (ESA) of the project including gender analysis. Since the detailed design of the project components necessary for conducting component-specific Environmental and Social Impact Assessments (ESIAs) is likely to be available only during project implementation, the system to support the process of environmental safeguards, social development and social safeguards review and clearance has been defined through the ESMF. It provides for each project component to be screened for potential environmental and social impacts and, where necessary, detailed, site-specific ESIAs and subsequent management plans to be prepared to identify and address the risks and potential impacts of the proposed project activities once specific site locations and beneficiaries are identified. Considering the potential use of chemicals in livestock and poultry farms, processing facilities and feed storage to manage pests and disease, the OP 4.09 has been triggered and a standalone Pest management Plan (PMP) has been prepared. Guidance for addressing gender promotions, preparing and implementing community consultations, communication plans, and gender action plans have been provided under the ESMF to complement the design of the main strategies under this project. Guidance has also been provided for grievance redress mechanism and institutional arrangements. Although the project does not foresee any large-scale land acquisition, some small and medium scale infrastructure provision is expected under Component B: Providing Access to Basic Infrastructure and Services. Hence, OP 4.12 has been triggered, and a Resettlement Policy Framework (RPF) is included in the ESMF to provide guidance for the preparation and implementation of site-specific Resettlement Action Plans (RAP) as and when



required. It can be expected that the project will touch upon indigenous communities' areas. A Small Ethnic Community Development Framework (SECDF) fully cognizant of local and cultural nuances has also been included in the ESMF to provide guidance for the preparation and implementation of site-specific Small Ethnic Community Development Plans (SECDP), where required. The ESMF prepared including a Gender Action Plan (GAP) has been disclosed locally at DLS and in Bank external website before appraisal.

**G. Environmental and Social Safeguards Specialists on the Team**

Md. Akhtaruzzaman, Social Safeguards Specialist (GSU06)  
Md Istiak Sobhan, Environmental Safeguards Specialist (GEN06)

**SAFEGUARD POLICIES THAT MIGHT APPLY**

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Safeguard Policies	Triggered?	Explanation (Optional)
Environmental Assessment OP/BP 4.01	Yes	<p>The project interventions are expected to cater better and more sustainable livestock management developing market linkages and value-chain, and improving risk management and resilience of the livestock production systems. In addition to the consumers, the project will benefit small and medium scale livestock producers, public and private enterprises and service providers in the selected value chains and project areas. The youth, livestock support service institutions, including public livestock research and extension services, and NGOs are likely to benefit from the project . The project will not invest in large scale infrastructures but support critical infrastructures in the value chain. Although denitrification is quick in a tropical country like Bangladesh, the sector will have to handle deposition of the large scale animal waste from increase of livestock and poultry bird numbers. The runoff from manure can flow into water bodies causing severe ecological harm, and decomposing waste can cause harm to the environment. Increase in livestock number and production also increases demand for feed crops thus requiring intensification of agricultural land use and resulting in a host of environmental costs. It is anticipated that some activities may trigger reversible environmental impact during the site clearance and infrastructure development. The project is not expected to be close to any environmentally sensitive areas. However, the project is likely to have limited potential social impacts specially associated with the small-scale infrastructures development and rehabilitation. The project is classified as category B in accordance with OP 4.01.</p> <p>Exact and detailed location and design information for conducting activity-specific ESIA for some of the project activities was not available at the preparation level and will only be available during project implementation. An Environmental and Social Management Framework (ESMF) has therefore, been prepared to provide guidance for</p>



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		environmental and social assessment and management at the implementatoin level. It will also identify the requirements and responsibilities for preparing Environmental and Social Impact Assessment (ESIA) as a precondition for individual investments that are likely to have high environmental and social risks and impacts. The ESMF defines the detailed process for the corresponding consultations, reviews, and clearances for environmental and social management. The ESMF also provides a grievance redress mechanism (GRM) for responding to questions, receiving suggestions and addressing complaints related to the project’s safeguards issues and broader project implementation approach.
Natural Habitats OP/BP 4.04	No	The project will not support any activities that would trigger this policy, this will be ensured during the subprojects initial environmental screening. Its indirect impact would be reduction in number of animals and respectively reduction of the pressure on the pastures that would beneficial in terms on improving status of NHs.
Forests OP/BP 4.36	No	This OP/BP is not triggered at the Appraisal stage, as the impact of the proposed activities on vegetation/ forests (natural/ planted) is not definite, project will be located in non-forested area as defined by the policy, and likely to have no direct or indirect impact on forests.
Pest Management OP 4.09	Yes	The policy is triggered considering the potential use of chemicals in livestock and poultry firms to manage pests and disease. Specifically, processing facilities as well as feed storage areas may need to control pests as well utilizing pesticides or rodenticides.
Physical Cultural Resources OP/BP 4.11	No	Chance finds are unlikely in the project areas and the project activities are not expected to otherwise relate to physical and cultural resources.
Indigenous Peoples OP/BP 4.10	Yes	There is a likelihood that some of the project activities might touch upon areas inhabited by indigenous communities recognized as small ethnic communities. The ESMF therefore, included a Small Ethnic Community Development Framework (SECDF) to provide guidance for the preparation and implementation of site specific Small Ethnic Community Development Plans (SECDP) as and when required. The framework will be fully cognizant of local and cultural nuances associated with designing and proposing alternative livelihood measures, grievance redress processes and all other project interventions including free, prior and informed consultation process.
Involuntary Resettlement OP/BP 4.12	Yes	The project will invest in critical and climate resilient public Infrastructure under Component B including, inter alia: (i) improvement of slaughtering at local wet markets, selected pilot slaughterhouses at district level and in major cities, and mobile slaughter facilities to match slaughter capacities needed during major festivals; and (ii) renewable energy installations (solar panels, bio-digesters) at the livestock processing facilities and milk chilling and cooling facilities. All activities will be within existing available lands and acquisition of private land will be avoided to the extent feasible. Beneficiaries may also be approached



		for voluntary donation of land or direct purchase methods for infrastructures requiring land. However, involuntary displacement may not be completely avoided. Therefore OP 4.12 is triggered and a Resettlement Policy Framework (RPF) has been prepared with the ESMF to provide guidance for the preparation and implementation of site specific Resettlement Action Plans (RAP) as and when required.
Safety of Dams OP/BP 4.37	No	Not triggered, as the project has nothing to do with dams.
Projects on International Waterways OP/BP 7.50	No	Not triggered, as the project is not likely to impact any international waterway.
Projects in Disputed Areas OP/BP 7.60	No	The project will not support activities in disputed areas.

**KEY SAFEGUARD POLICY ISSUES AND THEIR MANAGEMENT**

**A. Summary of Key Safeguard Issues**

1. Describe any safeguard issues and impacts associated with the proposed project. Identify and describe any potential large scale, significant and/or irreversible impacts:

While the general area for project covers entire country except Chittagong Hill Tracts (CHT), the exact locations for project interventions are not known at this stage. The overall impact assessment of the DRMP reveals that most of the likely negative social and environmental impacts could be minimized or eliminated by adopting standard mitigation measures; there is also scope to enhance some of the beneficial impacts to be generated from the proposed project. ESMF identifies that most of the activities will not require further environment and social assessments. However, further assessments are recommended for the Sub component B2 ‘Critical Public Infrastructure for Livestock Infrastructure Development’, in which construction or rehabilitation of few Slaughterhouses are proposed. It is anticipated that some activities may trigger reversible and not so significant environmental impact during the site clearance and infrastructure development. The project is not expected to be close to any environmentally sensitive areas. Although the project does not foresee any large-scale land acquisition, however, some small-scale infrastructure provision is expected under Component B, which may create economic displacements. There is also a likelihood that the project will touch upon ethnic communities’ areas. No large scale, significant and irreversible impact is expected from this project.

2. Describe any potential indirect and/or long-term impacts due to anticipated future activities in the project area:

Although it is difficult to anticipate future implications or trends, however, it is expected that more and more people vis a vis land will come under livestock and poultry production. With the increase of livestock and poultry bird numbers large amount of additional animal waste is a consequence, though it is not expected to be a severe problem in a warm tropical country like Bangladesh, where denitrification is quick, but proper regulation for manure deposition is needed. The runoff from manure can flow into water bodies causing severe ecological harm, and decomposing waste can release dust particles, bacteria, endotoxins, and volatile organic compounds, as well as hydrogen sulfide, ammonia, and other odorous substances into the air. Increase in livestock number and production also increases demand for feed crops thus requiring intensification of agricultural land use and resulting in a host of environmental costs including increased erosion, lower soil fertility, reduced biodiversity, pollution of ground and surface water, and impacts on atmospheric constituents, and climate.

3. Describe any project alternatives (if relevant) considered to help avoid or minimize adverse impacts.

As appropriate, individual investment-specific alternatives will be considered during implementation in line with the

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project's ESMF.

4. Describe measures taken by the borrower to address safeguard policy issues. Provide an assessment of borrower capacity to plan and implement the measures described.

The Borrower has prepared an Environmental and Social Management Framework (ESMF) along with a Pest Management Plan (PMP), Resettlement Policy Framework (RPF) and a Small Ethnic Community Development Framework (SECDF) for guiding the implementation level assessments of environmental and social impacts and their mitigations. Since the detailed design of the project components necessary for conducting component-specific Environmental and Social Impact Assessments (ESIAs), which is likely to be available only during project implementation, the system to support the process of environmental and social review and clearance is defined through the ESMF. It provides provision for each project component to be screened for potential environmental and social impacts and, where necessary, detailed, site-specific ESIs and subsequent management plans will be prepared to identify and address the potential impacts of the proposed project activities once specific site locations are identified. Guidance for addressing gender impacts, preparing and implementing community consultations, communication plans, and gender action plans are also provided under the ESMF to complement the design of the main strategies under this project component. Guidance has also been provided for grievance redress systems and institutional arrangements. Borrower will hire social and environment staffs in the PMU to monitor and report safeguard issues.

5. Identify the key stakeholders and describe the mechanisms for consultation and disclosure on safeguard policies, with an emphasis on potentially affected people.

The primary key stakeholders are small scale producers, processors and service providers in the selected supply chains and project areas. Given their central role in production and household nutrition decisions, women will represent an important beneficiary group to be addressed with specific demand led activities to strengthen their empowerment and economic activities. The mechanisms for consultation will be through policy dialogue, consultations among different stakeholders engaged and interested in livestock production, feedback from project beneficiaries and stakeholders and also through awareness raising activities, targeted information campaigns and also by proactive outreach.

**B. Disclosure Requirements (N.B. The sections below appear only if corresponding safeguard policy is triggered)**

**Environmental Assessment/Audit/Management Plan/Other**

Date of receipt by the Bank	Date of submission for disclosure	For category A projects, date of distributing the Executive Summary of the EA to the Executive Directors
19-March-2018	25-March-2018	

**"In country" Disclosure** 25-March-2018

**Resettlement Action Plan/Framework/Policy Process**

Date of receipt by the Bank	Date of submission for disclosure
19-March-2018	25-March-2018

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**"In country" Disclosure**

Bangladesh

25-March-2018

Comments

In all the project locations.

**Indigenous Peoples Development Plan/Framework**

Date of receipt by the Bank

19-March-2018

Date of submission for disclosure

25-March-2018

**"In country" Disclosure**

**Pest Management Plan**

Was the document disclosed prior to appraisal?

Yes

Date of receipt by the Bank

19-March-2018

Date of submission for disclosure

25-March-2018

**"In country" Disclosure**

25-March-2018

**If the project triggers the Pest Management and/or Physical Cultural Resources policies, the respective issues are to be addressed and disclosed as part of the Environmental Assessment/Audit/or EMP.**

If in-country disclosure of any of the above documents is not expected, please explain why:

All pertinent safeguard documents will be disclosed in-country and a link will be provided to access them.

**C. Compliance Monitoring Indicators at the Corporate Level (to be filled in when the ISDS is finalized by the project decision meeting) (N.B. The sections below appear only if corresponding safeguard policy is triggered)**

**OP/BP/GP 4.01 - Environment Assessment**

Does the project require a stand-alone EA (including EMP) report?

Yes

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If yes, then did the Regional Environment Unit or Practice Manager (PM) review and approve the EA report?

Yes

Are the cost and the accountabilities for the EMP incorporated in the credit/loan?

Yes

**OP/BP 4.04 - Natural Habitats**

Would the project result in any significant conversion or degradation of critical natural habitats?

No

If the project would result in significant conversion or degradation of other (non-critical) natural habitats, does the project include mitigation measures acceptable to the Bank?

No

**OP 4.09 - Pest Management**

Does the EA adequately address the pest management issues?

Yes, a stand along Pest management Plan is prepared and disclosed.

Is a separate PMP required?

Yes

If yes, has the PMP been reviewed and approved by a safeguards specialist or PM? Are PMP requirements included in project design? If yes, does the project team include a Pest Management Specialist?

Yes

**OP/BP 4.10 - Indigenous Peoples**

Has a separate Indigenous Peoples Plan/Planning Framework (as appropriate) been prepared in consultation with affected Indigenous Peoples?

TBD

**OP/BP 4.12 - Involuntary Resettlement**

Has a resettlement plan/abbreviated plan/policy framework/process framework (as appropriate) been prepared?

Yes

If yes, then did the Regional unit responsible for safeguards or Practice Manager review the plan?

Yes

Is physical displacement/relocation expected?

No

Is economic displacement expected? (loss of assets or access to assets that leads to loss of income sources or other means of livelihoods)

No

**The World Bank Policy on Disclosure of Information**

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Have relevant safeguard policies documents been sent to the World Bank for disclosure?

Yes

Have relevant documents been disclosed in-country in a public place in a form and language that are understandable and accessible to project-affected groups and local NGOs?

Yes

### All Safeguard Policies

Have satisfactory calendar, budget and clear institutional responsibilities been prepared for the implementation of measures related to safeguard policies?

Yes

Have costs related to safeguard policy measures been included in the project cost?

Yes

Does the Monitoring and Evaluation system of the project include the monitoring of safeguard impacts and measures related to safeguard policies?

Yes

Have satisfactory implementation arrangements been agreed with the borrower and the same been adequately reflected in the project legal documents?

Yes

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## CONTACT POINT

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