### I. BASIC INFORMATION

#### A. Basic Project Data

<table>
<thead>
<tr>
<th>Country:</th>
<th>Nepal</th>
<th>Project ID:</th>
<th>P156797</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parent Project ID (if any):</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Project Name:</td>
<td>Nepal Livestock Sector Innovation Project (P156797)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Region:</td>
<td>SOUTH ASIA</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Estimated Appraisal Date:</td>
<td>31-Oct-2016</td>
<td>Estimated Board Date:</td>
<td>15-Feb-2017</td>
</tr>
<tr>
<td>Practice Area (Lead):</td>
<td>Agriculture</td>
<td>Lending Instrument:</td>
<td>Investment Project Financing</td>
</tr>
<tr>
<td>Sector(s):</td>
<td>Animal production (40%), Agricultural extension and research (30%), General agriculture, fishing and forestry sector (20%), Agro-industry, marketing, and trade (10%)</td>
<td></td>
<td></td>
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<tr>
<td>Theme(s):</td>
<td>Climate change (30%), Rural markets (20%), Rural policies and institutions (20%), Gender (10%), Micro, Small and Medium Enterprise support (20%)</td>
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<tr>
<td>Borrower(s):</td>
<td>Government of Nepal</td>
<td></td>
<td></td>
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<tr>
<td>Implementing Agency:</td>
<td>Ministry of Livestock Development</td>
<td></td>
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#### Financing (in USD Million)

<table>
<thead>
<tr>
<th>Financing Source</th>
<th>Amount</th>
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<tbody>
<tr>
<td>BORROWER/RECIPIENT</td>
<td>10.00</td>
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<tr>
<td>International Development Association (IDA)</td>
<td>80.00</td>
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<tr>
<td>Financing Gap</td>
<td>0.00</td>
</tr>
<tr>
<td>Total Project Cost</td>
<td>90.00</td>
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</table>

#### Environmental Category:

| B - Partial Assessment                  |        |

#### Concept Review Decision:

| Track II - The review did authorize the preparation to continue |        |

#### Is this a Repeater project?

| No |        |
B. Introduction and Context

Country Context
Nepal has made exemplary progress in poverty reduction and human development. Despite a
decade-long insurgency that ended in 2006, Nepal halved extreme poverty in seven years from 53
percent in 2003/2004 to 25 percent in 2010/2011, and thus attained the first Millennium
Development Goal (MDG) ahead of time. Nevertheless, Nepal remains one of the poorest
countries in the world with per capita income of US$ 762 in 2015. Eighty percent of Nepal’s
population reside in rural areas, and 66 percent are engaged in agriculture. Most industrial activity
involves the processing of agricultural products, including dairy, meat, pulses, jute, sugarcane,
tobacco, and grain. Agricultural development is therefore critical to the long term economic
prospects of Nepal’s rural poor.

This reduction in poverty took place overwhelmingly within urban and peri-urban areas, clearly
suggesting that the gains have been biased against the rural poor. The 2010 Nepal Living
Standard Survey (NLSS III) found that 37 percent of people in the rural hill areas were below the
poverty line, compared to the national average of 25.16 percent.

On April 25, 2015 a 7.8 magnitude earthquake struck central Nepal, resulting in human and
economic costs. Rural areas were especially hard hit, with crop losses and loss of post-harvest
storage infrastructure. A Post Disaster Needs Assessment completed later in 2015 found that
livestock losses amounted to US$26 million, and $85 million in livestock-related infrastructure
losses. Combined with weakened agricultural performance earlier in the fiscal year, the
earthquake contributed to a slowdown in economic growth to 3.4 percent in FY 2015 – two
percentage points lower than the previous year. In FY16 growth is projected to slow further to
between 1 and 2.3 percent, revised downwards from an earlier projection of 3.7 percent, owing to
severe disruptions to external trade between September 2015 and February 2016 following
protests against the new Constitution promulgated on September 20, 2015.

The blockade of borders by discontent political parties resulted in serious shortage of essential
goods including fuel which has affected transportation of goods and services. With suboptimal
monsoon rain and winter drought, the government estimates that agriculture share of GDP will
contract below 2015 level (3.4 percentage growth rate in 2015) with disruptions in the supply of
agriculture inputs (fertilizer, fuel for irrigation, animal feed and vaccinations). While the vagaries
of nature have had an impact on agriculture performance, the new Periodic Plan sustainable
development goal aims to improve the welfare of the rural population through sustainable
livelihood interventions, livestock income being one channel to deliver the new planned outcome.

Sectoral and Institutional Context
Agriculture makes up 34.3 percent of the GDP and livestock accounts for 26.9 percent of
agricultural GDP (DLS 2011). Nearly 70 percent of the population engaged in agriculture keeps
livestock. The Agriculture Development Strategy of 2015, which will guide Nepal’s agriculture
program for the next 20 years, assigns livestock a key role, both as an engine of agricultural and
economic growth and as a source for reducing poverty and improving food and nutrition security.
The ADS aims at achieving “self-reliant, sustainable, competitive and inclusive agriculture sector
that drives economic growth, and contributes to improved livelihoods and food and nutrition
security”. In order to achieve the vision, the ADS will accelerate agriculture sector growth through good governance, productivity, profitable commercialization and competitiveness. The ADS recognizes that the productivity and competitiveness of the agricultural sector in the long run will depend on the access and adoption to improved technology, smart advisory services, and engagement of private sector and institutional capacity building to achieve total factor productivity increase.

Demand for livestock and livestock products, and particularly milk, has outstripped supply in Nepal, causing increasing reliance on imports. This mounting dependence on imports diverts scarce foreign exchange. At the national level, urban demand for milk and meat are met by average annual imports of nearly 10,500 metric tons of dairy products ($14 million value), 476,000 live goats and 150,000 buffalo annually (DoLS, 2010); representing NR6 billion a year on meat imports and NR8.61 billion a year on milk imports (Central Bureau of Statistics, 2010). Demand for high value cashmere, for which Nepal has already established the market and brand name, is also largely unmet.

Limited institutional capacity, extension and outreach services which are limited in their capacity to reach smallholder producers, and underdeveloped value chains have undermined the livestock sector in its potential to capitalize on local demand and to both substitute livestock-based imports and generate export revenue.

The 2015 Agriculture Development Strategy of the Government of Nepal has identified institutional capacity building as the main instrument to lead livestock development. The newly established Ministry of Livestock Development announced by the government on 24 December 2015 will be responsible for delivering an evidence-based sector strategy, policies, and acts. Fulfilling this mandate will require significant capacity on the part of the Ministry, as well as the development of an appropriate legal and regulatory framework such as the food quality and safer commerce and trade, and public enterprise reform. The Nepalese products have been facing non-tariff barriers in the form of sanitary and phyto-sanitary and technical standards in the export market such as Yak cheese, meat and poultry products into the bordering town in India and China.

Weak extension and outreach services are a serious impediment to livestock sector growth in Nepal. Extension services tend to end at the District or village Development Committee level, leaving a huge gap between farmers and extension centers. The Livestock Service Centers have remained largely ineffective due to the lack of basic diagnostic facilities, budget, and trained human resources. While the use of ITs have been gaining momentum in the region, Nepal has yet to capitalize on it despite a very well established mobile phone service network and internet facilities in the country. Modernized services and competitive production systems have been seen as key to vitalize the livestock sector by the ADS (2015).

Livestock remains a predominantly smallholder enterprise in Nepal, with most production geared for subsistence or sub-commercial purposes targeting local markets. The ongoing analytical work (AAA) has identified meat and dairy production as the main drivers of economic growth in Nepal. There are some private companies operating in dairy sector the lack of road access to urban areas have discouraged private sector investment in areas where the bulk of milk and meat is produced, and prevented most producers from linking to value chains. Lack of access to affordable financing, credit, and information services has made it difficult for the private sector to establish and operate milching centers, processing plants, and other commercial operations. The lack of
live livestock market/auction sites and hygienic slaughter houses are other impediments to livestock and livestock product development. Transforming dairy and meat production into an economically viable sector will require a value chain approach that aggregates and mainstreams smallholder producers in the supply chain.

Nepal is one of the most climate related risk-prone countries in Asia. The impact of climate change in Nepal is becoming clearly visible in the form of frequent and unpredictable drought and rains, shifting corridor, species change with impacts on declining fodder production, degradation of pasture, surge in animal diseases, and decline in crop production. Thus, there is a huge challenge to cope with climate change induced hazard and extreme events. Efforts to increase climate-resilience of rural communities and agricultural sectors must now be scaled up, along with boosting the operationalization of climate adaptation strategies at local level. The livelihood of more than 80% of local people of hilly regions in particular are heavily dependent on climate sensitive areas such as agriculture and livestock. Lack of access to insurance, climatic information and agricultural techniques have denied the farmers to use climate smart innovations in addition to putting them at a greater risk.

Notwithstanding the challenges described above, livestock sector offers opportunities for meeting the twin goals. With 66 percent of country’s rural population engaged in agriculture, the opportunity to mitigate poverty and shared prosperity through livestock sector cannot be over emphasized. FAO (2005) estimates that nearly 70 percent of the population engaged in agriculture keep livestock and more than 70 percent of the labor is provided by women (Chandra and Thapa, 2007). The rapidly growing market for meat, dairy and dairy products livestock sector provides significant scope and opportunity to engage/retain the youth. Furthermore, malnutrition rate in Nepal is alarmingly high with stunting of children under five at 37.4%, underweight at 30.1% and wasting at 11.3% (UNICEF, 2014). Consumption of animal source food during the first 1000 days of a child’s life is critical physical and mental wellbeing of the child. Thus, the investment in livestock sector will not only help in increased income, youth employment and import substitution, it will also help in addressing nutrition deficiency.

Relationship to CAS/CPS/CPF
The objective of the 2014-2018 Nepal Country Partnership Strategy is to help reduce extreme poverty and promote shared prosperity by: i) increasing economic growth and competitiveness (pillar 1) and ii) increasing inclusive growth and opportunities for shared prosperity (pillar 2). The Strategy identifies the need to shift from low-value food crops such as cereals which still dominate 80 percent of the cultivated land toward higher-value agricultural innovations which have higher potential to raise farmer incomes with a particular focus on integrating smallholders in value chain for non-traditional higher value commodities (outcome 2.1, para 56). The proposed project therefore directly contributes to achieving the overall objective of the CPS. With the agriculture sector accounting for 34.1 percent of the GDP in 2013-2014 and nearly 66 percent of the labor force and 5 of the 34 programs (core and flagship) the proposed project directly addresses 14 of them belonging to the four pillars thus aligns well with and supports the priorities of the Government of Nepal and Nepal CPS

C. Proposed Development Objective(s)

Proposed Development Objective(s) (From PCN)
13. To increase productivity and improve climate resilience of smallholder farms and agro-enterprises in selected livestock value chains in Nepal.
14. The primary project beneficiaries will be smallholder dairy and goat farmers with a potential for market-oriented production and growth, in districts selected according to criteria that will be developed during project preparation. Given their important role in animal husbandry, it is expected that women will be well represented among primary beneficiaries. Other direct beneficiaries of the project include private sector, in particular the small and medium agro-entrepreneurs, who will benefit from stronger backward and forward linkages in the selected value chains. Finally, staff from the newly established Ministry of Livestock Development, including at the decentralized levels, will benefit from the comprehensive capacity and skills development program implemented by the project.

**Key Results (From PCN)**

KPI #1 – Farm productivity. Increase in the yield of selected livestock commodities. This KPI will inform about select sub sector performance by monitoring the annual average milk production per cow or buffalo, the trend in average live weight of goat sold, and the trend in overall production of Chyangra cashmere fiber.

KPI #2 – Market access and value chain linkages. Volume and quality of selected livestock commodities sold annually by project beneficiaries. This KPI will inform about improved participation of smallholder farmers in selected livestock product value chains. It will measure the production output marketed in the dairy, goat meat and Chyangra cashmere value chains.

KPI #3 – Climate resilience. Adoption of climate-smart livestock production and processing technologies.

KPI #4 – Project beneficiaries. This KPI will measure the cumulative number of farmers, including the share of women, and small and medium entrepreneurs, who benefit from one or more project activities.

**D. Concept Description**

The project design focuses principally on the performance, competitiveness, and modernization of selected livestock value-chains in Nepal through support to the livestock institutions, to smallholders and private sector. In addition project activities will contribute to cross-cutting issues that support Nepal’s sustainable development agenda, in particular Climate smart agriculture, Women empowerment, Employment and Nutrition. The project design entails partnerships with institutions at both local and central levels of government, farmer groups and cooperatives, and private sector counterparts. The project design prioritizes clusters of districts in agro-ecological zones with potential for sustainable growth in select livestock subsectors. These are, for import substitution of milk and meat, dairy focusing primarily on the Terai plains, and goat meat primarily in the hilly regions, as well as, for export promotion of high-end products, Chyangra cashmere in a number of mountain region districts. These value chains could later be expanded to include other subsectors with a proven potential to contribute to the PDO.

The following components will enable the project in achieving it's objective:

Component A – Strengthening Critical Regulatory and Institutional Capacity: this component focuses on the ability of the new Ministry of Livestock Development (MoLD) and its agencies at the regional, district and village levels, to establish and enforce a policy and regulatory
framework that strengthens the livestock sector. It will contribute to the PDO by helping establish an enabling environment that improves the delivery of demand-driven services to livestock producers and provides adequate incentives for private sector investments in livestock. An Institutional Capacity Enhancement Needs Assessment (CENA) of MoLD and its key agencies will be carried out in the first year of project implementation. The CENA outcomes will be subject to a prioritization process to select further activities for Component 1, while other outputs should be funded through government sources or other donors. A lead international livestock agency should be recruited (e.g. ILRI, OIE, FAO) to support MOLD with the implementation of this component.

Component B – Promoting Sector Innovation and Modernizing Services Delivery: this component aims to improve the quality and increase the impact of livestock services delivered to smallholder farmers. This will directly contribute to the PDO by enhancing animal productivity and helping farmers generate a marketable surplus. Most activities under this component will be implemented at farm level and will involve government agencies whose capacity is being strengthened under Component 1. In line with principles already applied in the crop sector, this component will promote a decentralized approach to demand-driven livestock services whose delivery relies on multiple stakeholders (government agencies, academia, private actors – and farmers themselves). It will also specifically contribute to GHG emission reduction through promoting activities geared towards improved herd management and animal nutrition.

The participation of local level stakeholders (e.g., producer groups, communities, community-based Animal Health Workers (AHW), junior technicians and technician assistants (JT/JTA) at the sub district level (Livestock Service Centers) in the activities of this component will be subject to receiving training on nutrition sensitive livestock farming and animal protein-rich household level nutrition, designed and delivered to the various cohorts by an NGO competitively recruited under this component.

Component C – Promoting Smallholder-inclusive Value Chains for Selected Livestock Commodities: this component seeks to develop a more commercial-oriented approach for selected livestock sub sectors and to contribute to import substitution (for dairy products and goat meat) and export promotion (for Chyangra cashmere) by improving the performance and competitiveness of select value chains. The component will directly contribute to the PDO by supporting the integration of smallholder livestock farmers in those value chains. The component will focus on improving smallholders’ access to markets and on strengthening the backward and forward linkages among value chain actors. Activities will target the actors involved in production, logistics, processing or marketing in the value chains selected (i.e. producer groups, cooperatives, local service providers, traders, and other private sector). It is envisaged that experiences of Productive Alliances generated in Bank-supported programs in Latin-America might be brought to bear in detailing design and operational arrangements of this component.

Component D – Project Management and Knowledge Generation: This component will host a Project Management Team (PMT) mapped to the MoLD Secretary’s office and responsible with ensuring that project activities are implemented in line with the provisions in the official project documents. The PMT will also be in charge of financial management and project procurement, as well as of ensuring safeguards compliance for all project activities implemented. The component will also support all activities related to project communication, public awareness and outreach, including the development of a comprehensive project web site that would also provide a
platform to capture stakeholders complaints (as part of a project grievance redress mechanism). The component will also finance the services of specialized consultant firms to develop and implement a comprehensive project impact evaluation, as well as the project’s Monitoring, Evaluation and Reporting system.

II. SAFEGUARDS

A. Project location and salient physical characteristics relevant to the safeguard analysis (if known)

The project location and boundaries are yet to be established. However, it is expected that the project will cover prioritized clusters of districts in agro-ecological zones with potential for sustainable growth in select livestock subsectors. These are for import substitution of milk and meat, dairy focusing on the Terai plains, goat meat in the hilly regions, and Chyangra cashmere in a number of mountain districts, as well as, for export promotion of high-end products. As regard to physical characteristics of project-specific areas relevant to safeguard analysis, a clear understanding would only emerge once areas of project intervention are identified across the different districts.

B. Borrower’s Institutional Capacity for Safeguard Policies

The newly established Ministry of Livestock Department (MOLD) will be the nodal institution responsible for implementing the project in collaboration with its line department. The new Ministry inherits with it the Department of Livestock Services which has prior experience working with Bank financed projects and Bank’s safeguard requirements. The new Ministry has a Biodiversity, Climate Change and Environmental Section under the Division of Livestock production and a Gender and Social Inclusion Section under the Planning, Monitoring, and Evaluation Division, both of which are located at the centre. These divisions with limited human resource needs to make arrangements for preparing safeguard documents and later for implementing the safeguards plan.

At the district levels, the scenario is different with a dedicated District Livestock Office (DLO) in place with acceptable arrangement and capacity for monitoring/supervision of the project activities. The DLOs have some knowledge and experience with safeguard requirements of the Bank through other Bank funded projects like PACT and AFSP which are currently under implementation. Capacity building activities and adequate trainings (focusing on livestock) needs to be tailored for strengthening the existing capacity for project implementation.

The institutional capacity of the MOLD will be further assessed and gaps on institutional capacity will be identified during the course of project preparation.

C. Environmental and Social Safeguards Specialists on the Team

Bandita Sijapati (GSURR)

D. POLICIES THAT MIGHT APPLY

<table>
<thead>
<tr>
<th>Safeguard Policies</th>
<th>Triggered?</th>
<th>Explanation (Optional)</th>
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</thead>
<tbody>
<tr>
<td>Environmental Assessment OP/BP 4.01</td>
<td>Yes</td>
<td>As the location of the project and type of sub project activities are to be identified at the appraisal stage, the safeguard team anticipates that an ESMF will be the safeguard tool used for identifying the impacts and preparing mitigation measures.</td>
</tr>
<tr>
<td>Natural Habitats OP/BP 4.04</td>
<td>Yes</td>
<td>The project interventions will take place in the Terai,</td>
</tr>
</tbody>
</table>

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mid hills and high mountains which are rich in biodiversity and other natural resources. These may be impacted during the construction of small scale infrastructure (chilling centers, meat processing unit, dairy, processing units for sheep wool etc). Furthermore, livestock owners are sometimes in conflict with protected areas because of restricted access to these natural resources (fodder, water etc.).

<table>
<thead>
<tr>
<th>Policy</th>
<th>Triggered</th>
<th>Description</th>
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<tbody>
<tr>
<td>Forests OP/BP 4.36</td>
<td>Yes</td>
<td>This policy is triggered as the project activities may include investments to develop grazing landscape, reforestation and agro-forestry. There are also possibilities of degradation, risk of over grazing, and encroachment of forest especially in community forest and in higher mountains for forage and fodder. The applicability of this policy will be closely reviewed at the time of appraisal.</td>
</tr>
<tr>
<td>Pest Management OP 4.09</td>
<td>Yes</td>
<td>This policy is triggered because of the possibility of an increase in the use of animal drugs and veterinary medicines. In addition, the project activities will likely increase the use of private practices and services including chemical pesticides which could have negative impact on the environment and health. To address these concerns, an Integrated Pest Management Plan will be prepared as part of the ESMF for proper handling/screening of pesticides.</td>
</tr>
<tr>
<td>Physical Cultural Resources OP/BP 4.11</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Indigenous Peoples OP/BP 4.10</td>
<td>Yes</td>
<td>Indigenous people are spread across the country and hence, it is likely that there would be significant presence of indigenous and other vulnerable groups in the project areas. The ESMF will include a framework for vulnerable community development planning (VCDF) to ensure that project benefits are maximized while any form of negative impacts are minimized and/or mitigated.</td>
</tr>
<tr>
<td>Involuntary Resettlement OP/ BP 4.12</td>
<td>Yes</td>
<td>Large-scale land acquisition or resettlement is not envisaged under the project. However, construction of small infrastructure (e.g. chilling centers, meat processing unit, dairies, wool processing units) would require additional land. A Resettlement Policy Framework will be prepared to be adopted in case there are any requirements for land taking.</td>
</tr>
<tr>
<td>Safety of Dams OP/BP 4.37</td>
<td>No</td>
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<tr>
<td>Projects on International Waterways OP/BP 7.50</td>
<td>No</td>
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</tbody>
</table>
E. Safeguard Preparation Plan

1. Tentative target date for preparing the PAD Stage ISDS
15-Jun-2016

2. Time frame for launching and completing the safeguard-related studies that may be needed. The specific studies and their timing should be specified in the PAD-stage ISDS.
ESMF will be completed by May 31, 2016. In order to for the project not to entail significant environmental and social impacts for activities financed under the project a screening procedure will be included in the ESMF.
VCDF will be completed by May 31, 2016
RPF will completed by May 31, 2016

III. Contact point

World Bank
Contact: Purna Bahadur Chhetri
Title: Sr Agricultural Spec.

Borrower/Client/Recipient
Name: Government of Nepal
Contact: Baikuntha Aryal
Title: Joint Secretary
Email: chiefacd@mof.gov.np

Implementing Agencies
Name: Ministry of Livestock Development
Contact: Shyam Paudel
Title: Joint Secretary
Email: shyampdl1961@gmail.com.

IV. For more information contact:
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Washington, D.C. 20433
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Fax: (202) 522-1500
Web: http://www.worldbank.org/infoshop

V. Approval

<table>
<thead>
<tr>
<th>Task Team Leader(s):</th>
<th>Name: Purna Bahadur Chhetri</th>
</tr>
</thead>
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<tr>
<th>Approved By</th>
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</thead>
<tbody>
<tr>
<td>Safeguards Advisor: Name: Maged Mahmoud Hamed (SA) Date: 18-Apr-2016</td>
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Table:

<table>
<thead>
<tr>
<th>Practice Manager/Manager:</th>
<th>Name: Martien Van Nieuwkoop (PMGR)</th>
<th>Date: 08-May-2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>Country Director:</td>
<td>Name: Bigyan B. Pradhan (CD)</td>
<td>Date: 27-May-2016</td>
</tr>
</tbody>
</table>

1 Reminder: The Bank's Disclosure Policy requires that safeguard-related documents be disclosed before appraisal (i) at the InfoShop and (ii) in country, at publicly accessible locations and in a form and language that are accessible to potentially affected persons.