CAMBODIA

MINISTRY OF AGRICULTURE, FORESTRY AND FISHERY



CAMBODIA INCLUSIVE LIVESTOCK VALUE CHAINS AND ONE HEALTH PROJECT

(P180535)

SOCIAL ASSESSMENT REPORT

September 2023

Table of Content

Table of Contentii
Abbreviations iv
1. Introduction
1.1. Background1
1.2. Rational and objective of the social assessment1
1.4. Project components2
1.5. Institutional and implementation arrangements3
2. Social Assessment Methodology
2.1. Social assessment approach3
2.2. Social assessment methods4
2.2.1. Preliminary activities and meetings4
2.2.2. Desk review of reports and documents4
2.2.3. Key informant interview (KII)5
2.2.3. Focus Group Discussions (FGDs)5
2.2.4. Stakeholder consultations5
3. Legal, Policy and Institutional Frameworks5
3.1. National Laws, Policies, Legislation, and Commitments6
The Constitution of the Kingdom of Cambodia6
The Law on Environmental Protection and Natural Resource Management (NS/RKM/1296/36)6
Law on Nature Reserves6
Protected Area Law No. NS/RKM/0208/0076
Law on the Protection of Cultural Heritage7
Law on Land Acquisition7
The 2001 Land Law7
Indigenous Community and Land Use8
Resettlement Implementation9
The Constitution of the Kingdom of Cambodia on women9
National Action Plan to Prevent Violence Among Women (2014-18)
Royal Kram NS/RKM/0709/010 on the Protection and Promotion of the Rights of Persons with Disabilities
Labor Law (1997)10
Law on Social Security Schemes10
Occupational Health and Safety (OHS)11

	Law	on Road Traffic, PREAH REACH KRAM NS/RKAM/0115/001, 2015	11
	Law	on the Commune/Sangkat Administrative Management	11
	Oth	er Sub-Decrees on Livestock and Value Chain Development	11
	3.2. A	pplicable World Bank Environmental and Social Standard (ESS)	12
	ESS	1 Assessment and Management of Environmental and Social Risks and Impacts	12
	ESS	2 Labor and Working Conditions	13
	ESS	3 Resource Efficiency and Pollution Prevention and Management	13
	ESS	4 Community Health and Safety	13
	ESS	6 Biodiversity Conservation and Sustainable Management of Living Natural Resources	13
	ESS Cor	7 Indigenous Peoples/Sub-Saharan African Historically Underserved Traditional nmunities	
	ESS	8 Cultural Heritage	14
	ESS	10 Stakeholder Engagement and Information Disclosure	14
4.	Bas	eline data analysis	14
	4.1.	Socioeconomics	14
	4.2.	Livestock production	14
	4.3.	Village Animal Health Workers	15
	4.4.	Slaughterhouse	15
	4.5.	Number of AC/Producer Group	15
5.	Soc	ial Risks and Assessment Results	16
	5.1. Cl	hallenge in the unstable price of livestock	16
	5.2. C	hallenge in production costs	17
	5.3. D	iseases in chicken, pig, and cow production	17
	5.4. La	ack of access to proper veterinary service	17
	5.5. Cl	hallenges in health and safety	18
	5.6. C	hallenges in waste management and community, health and safety	18
	5.7. C	hallenges in logistics and transportation of animals	19
	5.8. C	hallenges in information, education, and communication (IEC) materials	19
		leeting and training and communication channels	
	5.10.	ndigenous people (IP)	19
	5.11.	nclusion of poor, disabled, and women's household heads in livestock production	19
	5.12.	nstitutional barrier and exclusion	20
	5.13. I	Exiting GRMs	20
	5.14. /	Associated social challenges	21

a. Gender-related issues				
b.	Children abuse	.21		
c.	Potential external impacts which could be a project risk	.21		
Кеу	mitigation measures and recommendations	.21		
Acti	ons for the Environmental and Social Commitment Plan	. 26		
Appendix27				
. Preliminary activities and meetings27				
. Fieldwork in Battambang28				
3. Fieldwork in Kampong Spue29				
Fi	eldwork in Tbong Khmum	. 30		
Fi	eld Mission Concept Note	.31		
	b. C. Key Actio App Pi Fi Fi	 b. Children abuse		

Figure 1: project target provinces	1
Figure 2: Social Assessment Design	
Figure 3: Participant list in the preliminary meeting	27
Figure 4:Preliminary activities and meetings	28

Table 1: Reference Framework	5
Table 2: Socioeconomic characteristics in the targeted provinces	15
Table 3: Mitigation measures and recommendations	22
Table 4: Action for the ESCP	

Abbreviations

AC	Agriculture Cooperatives
CDC	Center for Disease Control
CILVCOHP	Cambodia Inclusive Livestock Value Chains and One Health Project
CNCW	Cambodian National Council for Women
DOE	Department of Environment
EA	Executive Agency
EIDS	Emerging Infectious Diseases
ESCP	Environmental and Social Commitment Plan
ESF	Environmental and Social Framework
ESME	Environmental and Social Management Framework
ESF	Environmental and Social Framework
ESMF	Environmental and Social Management Framework
ESS	Environmental and Social Standard
FA	Forest Administration

FGD	Focus Group Discussions
GAFSP	Global Agriculture and Food Security Program
GBV	Gender-Based Violence
GDAHP	General Directorate of Animal Health and Production
GHGs	Greenhouse Gases
GIIP	Good International Industry Practices
GRM	Grievance Redress Mechanisms
IAs	Implementation Agencies
ICT	Information and Communications Technology
IEC	Information, Education, and Communication
IFC	International Finance Corporation
ILO	International Labor Organization
IP	Indigenous People
KII	Key informant interview
MAFF	Ministry of Agriculture, Forestry and Fisheries
MLMUPC	Ministry of Land Management, Urban Planning and Construction
MoE	Ministry of Environment
MoEF	Ministers, Ministry of Economy and Finance
MOH	Ministry of Health
Mol	Ministry of Interior
MoLVT	Ministry of Labor and Vocational Training
MoRD	Ministry of Rural Development
MOWA	Ministry of Women's Affairs
NCDDS	Sub-National Democratic Development Secretariat
NGO	Non-governmental organization
NIS	National Institute of Statistics
ОН	One Health
PAH	Project Affected Households
POAHPs	Provincial Office of Animal Health and Productions
RGC	Royal Government of Cambodia
SA	Social Assessment
SEA	Sexual Exploitation and Abuse
SEP	Stakeholder Engagement Plan
USD	United States Dollar
VAC	Violence Against Children
VAHWs	Village Animal Health Workers
VGs	Vulnerable Groups

1. Introduction

1.1. Background

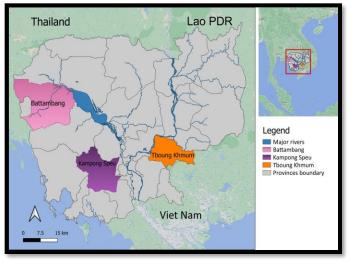
The World Bank is a long-standing development partner of the Royal Government of Cambodia (RGC). With a grant of \$20 million from the Global Agriculture and Food Security Program (GAFSP), the World Bank is supporting the Ministry of Agriculture, Forestry and Fisheries (MAFF), the Ministry of Environment (MoE), and the Ministry of Health (MOH) to prepare a new project, the Cambodia Inclusive Livestock Value Chains and One Health Project (CILVCOHP).

The CILVCOHP aims to (i) promote productivity enhancement measures and market-driven commercialization approaches in selected livestock value chains and (ii) strengthen the animal health system and promote One Health (OH) approaches to reduce the risks from transboundary animal diseases and zoonoses.

The project covers three provinces in Cambodia: Battambang, Tbong Khmum, and Kampong Speu. These provinces are located along the country's borders with Thailand and Vietnam, providing early warning

signs to the rest of the country against significant disease outbreaks. Kampong Speu has a large livestock population and major animal trade activities, making it a high-risk area for diseases. Besides, these provinces are home to indigenous people (IP), such as the Kuy, Pnong, Charai, Tampun, and Suoy.

At the same time, the CILVCOHP would empower disadvantaged and rural poor communities, including indigenous peoples and women. Poverty and vulnerability will be considered as eligibility criteria for selecting project beneficiaries. The project is expected to benefit about 432,000 households, with 52% being female and 48% male.



Source: author's preparation

1.2. Rational and objective of the social assessment

Despite the anticipated positive impacts of the CILVCOHP on livestock value chains, some smallholder farmers, especially vulnerable and disadvantaged groups, may not be able to access the project benefits due to factors such as lack of confidence, distance, literacy, health conditions, limited social capital, and lack of available data to identify their locations. As smallholder farmers produce approximately 90% of all livestock in Cambodia¹, a detailed Social Assessment (SA) is therefore required during project preparation to understand the needs and priorities of these farmers and to put in place measures (as part of the project design) to address barriers to accessing project benefits for smallholder farmers, especially for those who are Vulnerable Groups (VGs), such as elderly people, ethnic minorities (IP group), womenheaded households, disabled people, and the poor, who may have limited availability to attend to project services.

¹ Miranda, P., Savage, D., Stür, W., & Mom, S. (2013).

The specific objectives of the SA were:

- 1) To assess the project's likely social risks and impacts on livestock farmers, especially VGs in the three provinces.
- 2) To identify and prepare a comprehensive plan for the project that can better avoid, reduce, and mitigate risks and impacts on farmers and ensure that the project benefits reach VGs equitably.

The results from this SAR provided essential assessment information in order to inform the development of the project documents such as (i) Stakeholder Engagement Plan (SEP), (ii) Environmental and Social Commitment Plan (ESCP), and (iii) Environmental and Social Management Framework (ESMF). These plans will be designed to manage the potential environmental and social impacts associated with project activities and enable meaningful and inclusive multi-stakeholder consultations and engagement throughout the project's life cycle.

1.4. Project components

Component 1: Inclusive Livestock Value Chains

The priority value chains to be supported under this component include poultry, piggery, and beef, but activities would focus on up to two value chains per province. Sub-component 1.1 would focus on improving livestock productivity through enhanced extension services on animal-raising and support the production of high-quality fodder and other animal feeds. With the introduction of simple, cost-effective biogas technologies, animal wastes would be more sustainably managed. The sub-component would also provide in-kind support for implementing a breeding program to improve the quality of the animal stock. Sub-component 1.2, which focuses on promoting smallholder involvement in modernizing livestock value chains, would support implementing three activities. First, the institutional strengthening of existing producer groups or agriculture cooperatives (ACs) or the support for the establishment of new ones (Producer Group). Second, the development of inclusive value chains, including through the promotion of contract farming arrangements and productive partnerships between ACs and Small and medium-sized enterprises (SMEs). Third, piloting a modernization process for selected value chains through upgrading key infrastructure such as slaughterhouses and market facilities.

The inclusive livestock value chain activities will also include practical skills training with a demo for GAHP and livestock ID for the ACs.

Component 2: Strengthening Animal Health Services

This component aims to improve the quality of and access to strengthened national veterinary services in line with international standards. Sub-component 2.1 focuses on capacity building of veterinary services, strengthening risk assessment, and communication. Key activities under this sub-component involve strengthening the institutional capabilities of the General Directorate of Animal Health and Production (GDAHP) and the Provincial Office of Animal Health and Productions (POAHPs). This includes capacity-building programs for veterinary personnel, paraprofessionals, other technical staff such as scientists and laboratory technicians, and the large cadre of Village Animal Health Workers (VAHWs) from the private sector. This is expected to enable the GDAHP to improve its ability to detect emerging issues nationally, such as pathogen spillovers, control animal diseases (major transboundary and endemic animal diseases), and improve public veterinary services. This sub-component would also support risk assessment of diseases, using improved surveillance data and risk mapping. The GDAHP will take the lead in monitoring emerging threats nationally and in the region. At community levels, the VAHWs will lead the identification of risks and how best to mitigate them. Sub-component 2.2 will support implementing surveillance and control programs for transboundary animal diseases and zoonoses. The capacities of veterinary

laboratories will be strengthened by establishing one new laboratory in the Battambang province. "High health and safe" production compartments, in line with the World Organization for Animal Health (WOAH) guidelines, will be piloted in the project provinces to identify best practices for mitigating disease risks.

Component 3: Building One Health (OH) system

An OH Situation Analysis was conducted in 2020 in Cambodia and found that many zoonotic diseases were prevalent in the country, and the impacts on human health were significant. The main issues included limited interagency cooperation and inadequate core funding. Thus, the National Medium-Term Priority Plan for Animal Health identified the need to "implement collaborative OH approaches to protect human health, animal health, and the environment." The involvement of interministerial One Health Committee (MAFF, MoH and MoE) will be included in this OH related activities. The project will support the "Zoonotic Technical Working Group (Z-TWG)," co-chaired by MAFF and MoH, by implementing consultations/workshops and studies to develop cross-sectoral plans against zoonoses. Joint training will be provided to increase staff capabilities in formulating relevant policies. In addition, close collaboration will be held between the GDAHP and the wildlife authorities for a pilot mapping of the risks posed by direct exposure to wildlife or the wildlife trade. This exercise will inform the implementation of a program of awareness raising and enforcement of the ban on illicit wildlife hunting and trade.

Component 4: Project Management, Monitoring, Evaluation, and Learning Project Benefits

The expected project benefits would be accrued from (a) enhanced livestock productivity, (b) increased value addition along the livestock value chains, (c) losses to be avoided from the reduction of disease incidence in the project areas, and (e) global benefits, such as reduced Greenhouse Gases (GHGs) emission including through mitigation of pastureland degradation. Other indirect benefits outside the project's target areas would be generated by replicating the production technologies introduced and policies implemented.

1.5. Institutional and implementation arrangements

The institutional arrangements for project implementation will follow the government's institutional setup. The GDAHP of MAFF, in close cooperation with the Forest Administration (FA), will be the Executive Agency (EA) responsible for managing and coordinating the implementation of the project. The implementation agencies (IAs) will be composed of the Center for Disease Control (CDC) under MoH and the Department of Environment (DoE) under MoE. They will be involved in the implementation of OH-related activities.

2. Social Assessment Methodology

2.1. Social assessment approach

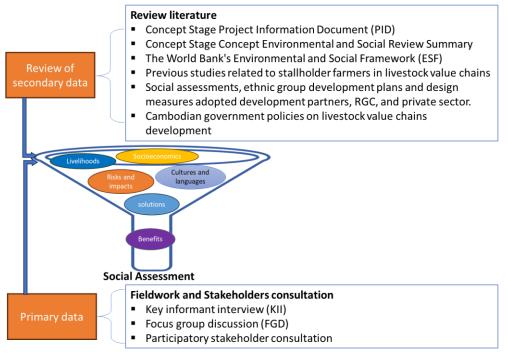
In this SA, the poultry, piggery, and beef value chains were narrowed down to chicken, pig, and cow. This research scope allowed us to dive deeper into the current state of livestock production and its challenges to farmers and VGs.

The assessment included comprehensive desk studies, direct discussions, and interviews with various stakeholders, such as officials responsible for livestock value chain development and development partners at the national and sub-national levels and AC members and livestock farmers at the community level.

The assessment was undertaken through the following approaches:

- 1. A preliminary consultation meeting with key project staff from GDAHP and FA was conducted to understand the assignment and planning for data collection. The outcome of the meeting was a field trip concept note and plan.
- 2. A detailed review and synthesis of existing data sources concerning the key social and institutional issues affecting livestock farmers, poor, vulnerable, and underserved individuals, households, and populations in the targeted provinces were conducted prior to and after the fieldwork. The findings from the desk studies provided a comprehensive Legal, Policy, and Institutional Framework and socioeconomic data in the target provinces.
- 3. The primary data collection throughout the meeting and interview was conducted according to the field trip plan facilitated by the GDAHP and POAHP teams. The objectives and consent for discussion and interview were informed to participants before conducting each meeting.
- 4. Finally, a stakeholder consultation was conducted at the national level to collect feedback and address the comments and concerns of key stakeholders in the project.

Figure 2: Social Assessment Design



Source: author's preparation

2.2. Social assessment methods

2.2.1. Preliminary activities and meetings

The preparation and planning meeting took place on July 31, 2023, and included preliminary consultations of key project staff from GDAHP and the FA to understand the assignment and planning for data collection. Sixteen participants attended the meeting (Appendix 1).

2.2.2. Desk review of reports and documents

Project documents at the conceptual stage and the World Bank Environmental and Social Framework (ESF) were reviewed to frame the assessment. Cambodian laws and policies that support livestock value chain development were then systematically reviewed to frame the legal, policy, and institutional framework.

Existing studies on smallholder farmer VGs were also used to discuss and guide the study. Livestock production and socioeconomic data from the GDAHP, the National Committee for Sub-National Democratic Development Secretariat (NCDDS), and the National Institute of Statistics (NIS) were used to analyze the socioeconomic characteristics of the livestock value chain in the target provinces.

2.2.3. Key informant interview (KII)

KIIs were conducted at both the national and community levels. To better understand the current livestock production and challenges in chicken, pig, and cow, the SA conducted in-depth interviews with GDAHPs, POAHPs, AC leaders, input supplier/depo store owners, traders, village chiefs, IP leaders, and farmers. These interviews helped identify the project's likely risks and impacts on farmer VGs and propose mitigation measures. KIIs were conducted using semi-structured questionnaires to guide the discussion meetings.

2.2.3. Focus Group Discussions (FGDs)

To understand the current state of livestock production in the community, focus group discussions (FGDs) were conducted with representatives from groups of chicken, pig, and cow farmers, as well as members of the AC livestock production team. At the beginning of each FGD, an appropriate introduction about the objectives of the study and the need for participant consent was given. This helped to build trust between the community and the study team, dispel any unrealistic expectations from the participants, and ensure that the team was engaging with the right participants.

2.2.4. Stakeholder consultations

The stakeholder consultation at the national level was conducted to consult with key stakeholders and validate the key issues and mitigation measures in project design. In recognition of VGs, the consultation obtained informed participation and feedback. Information was provided to and widely distributed among all stakeholders appropriately. Opportunities were provided for communicating stakeholder feedback and analyzing and addressing comments and concerns. Information was provided to and widely distributed among all stakeholders appropriately.

3. Legal, Policy and Institutional Frameworks

The CILVCOHP has to respect and comply with related national legislations and international standards, frameworks, and guidelines in order to maximize benefit to the targeted beneficiaries while mitigating potential negative social and environmental impacts. The applicable "Reference Framework" comprises most of the relevant standards, frameworks, and guidelines applicable to the project.

Reference	Relevance
National laws, policies, legislations, and commitments	All relevant national policies, legislation, and commitments need to be respected. This includes national laws, ratified international treaties, development plans, and commitments.
World Bank Environmental and Social Framework (ESF)	The World Bank ESF will be applied and considered throughout the project implementation cycle.

Table 1: Reference Framework

Source: author's preparation

3.1. National Laws, Policies, Legislation, and Commitments

The Constitution of the Kingdom of Cambodia

The Constitution of the Kingdom of Cambodia, which was confirmed in 1993, requires the state to consider environmental issues during project development and implementation. Article 59 of the Constitution specifically states that the state shall protect the environment and balance the abundant natural resources. It shall also establish a precise plan for the management of land, water, air, wind, geology, ecological systems, mines, energy, petroleum and gas, rock and sand, gems, forests and forestry products, wildlife, fish, and aquatic resources.

The Law on Environmental Protection and Natural Resource Management (NS/RKM/1296/36)

The law was issued in 1996 to govern environmental management in Cambodia. The law requires the RGC to prepare national and regional environmental plans, which are expected to cover various issues, including environmental assessment, pollution prevention and control, public participation, and project disclosure. As the Law on Environmental Protection and Natural Resource Management required, a National Environment Strategy and Action Plan (NESAP) was developed². The NESAP identifies priority policy tools and financing options for sustainable natural resource management and environmental protection. It guides government ministries, private sectors, civil society, and development organizations to mainstream environmental considerations in policies, plans, and investments.

Following the issuance of the Law on Environmental Protection and Natural Resource Management, MoE passed regulations (also referred to as sub-decrees) to provide further protection for the environment, including:

- Sub-decree No.27 on water pollution control, issued on April 06, 1999;
- Sub-decree No.36 solid waste management, issued on April 27, 1999;
- Sub-decree No.42 on air pollution and noise disturbance, issued on July 10, 2000;
- Sub-decree No.72 on the environmental impact assessment process, issued on August 11, 1999
- Law on the management and exploitation of mines resources, adopted on July 13, 2001.

Furthermore, various national environmental policy documents exist within Cambodia, such as the National Environmental Action Plan (1998-2002) and the National Biodiversity Strategy and Action Plan of 2002.

Law on Nature Reserves

The Royal Decree on Protected Natural Areas (RDPNA) was issued in November 1993. The regulation protects the environment, land, forests, wetlands, and coastal zones. The regulation covers 23 natural protected areas in Cambodia, representing 18% of the country's total land area or 2.2 million hectares³. The MoE is responsible for implementing the RDPNA.

Protected Area Law No. NS/RKM/0208/007

In 2008, Cambodia introduced the Protected Area Law No. NS/RKM/0208/007, which defines the National Parks (IUCN Category II), Wildlife Sanctuaries (IUCN Category IV), Protected Landscapes (IUCN Category IV)

² Cambodia's National Environment Strategy and Action Plan, 2016–2023 (NESAP)

³ <u>data.opendevelopmentcambodia.net</u>

V), Multiple-Use Areas (IUCN Category VIII), and Ramsar sites which includes two sites in IUCN Categories IV and VIII. The 2008 Protected Areas Law defines the framework of management, conservation, and development of protected areas and aims to ensure the management, conservation of biodiversity, and sustainable use of natural resources in protected areas. The Law reinforces the MoE's responsibility to administer and manage protected areas.

Under this Law, Chapter VI, Articles 21 and 22, also stated the involvement and access rights of communities and indigenous peoples in relation to participate fully in the provision of and access to information relevant to the protected area management, conservation and development and the state recognizes and secures access to traditional uses, local customs, beliefs, and religions of the local communities, and indigenous ethnic minority groups residing within and adjacent to the protected.

Law on the Protection of Cultural Heritage

All national monuments in Cambodia are protected by the Law on the Protection of Cultural and National Heritage, which was promulgated in 1996. This is supplemented by the "decision on the Definition of 3 Zones to Protect Temple Surrounding areas in all Provinces and Municipalities Except Angkor Wat" (1996). The Law protects a range of cultural heritage sites, including small temples and ancient structures in Cambodia.

Law on Land Acquisition

The 1993 Constitution of Cambodia has established two governing principles about land acquisition. Article 44 states that all persons, individually or collectively, shall have the right to ownership. Only Khmer legal entities and citizens of Khmer nationality shall have the right to own land. The law shall protect legal private ownership. The right to confiscate properties from any persons shall be exercised only in the public interest as provided under the law and shall require fair and just compensation in advance.

The 2001 Land Law

The rights to land and property in Cambodia are governed by the 2001 Land Law, which is primarily based on the provisions of the 1993 Constitution. It defines the scope of ownership of immovable properties, such as land, trees, and fixed structures. Article 5 states, "No person may be deprived of his ownership unless it is in the public interest. Any ownership deprivation shall be carried out following the governing procedures provided by law and regulations and after paying fair and just compensation in advance."

The land law grants collective land ownership rights to indigenous communities. Article 26 states that the state grants ownership of immovable properties to indigenous peoples as collective ownership. This collective ownership includes all the rights and protections enjoyed by private owners. The exercise of collective ownership rights is subject to the responsibility of traditional authorities and decision-making mechanisms of the indigenous community, according to their customs, and subject to the laws of general enforcement related to immovable property, such as the Law on Environmental Protection (Article 26).

The Ministry of Land Management, Urban Planning and Construction (MLMUPC) is responsible for receiving the land registration application. Mechanisms for dealing with land conflict issues are discussed at an inter-ministerial level, and issues related to land application and conflict are submitted to an inter-ministerial working group comprised of the Ministry of Interior (MoI), Councils of Ministers, Ministry of Economy and Finance (MoEF), MoE, MAFF, Ministry of Rural Development (MoRD), and other relevant ministries.

Indigenous Community and Land Use

In Article 23 of the land law, an indigenous community is defined as "a group of people that resides in Cambodia whose members have manifested ethnic, social, cultural and economic unity and who practice a traditional lifestyle, and who cultivate the lands in their possession according to the customary rules of collective use." The IP policy was formalized by the MoRD in 2009. The policy clearly states that all relevant ministries shall recognize that IPs have their own culture and traditions and have full rights and privileges related to their culture and traditions. The culture and tradition consist of the community's land occupation, actual land that they currently use, land for their funeral purposes, land for agriculture and farming, land for their belief systems, and land for their benefit. Therefore, IPs have full rights and privileges to protect their collective and privately and community-held lands. Any project involving involuntary resettlement impacts among IPs will need to collect detailed information on their land use, economic activities, and social organizations so that a culturally appropriate is formulated with full and meaningful consultation of affected indigenous peoples. All development projects must refer to this Law.

Article 265 states that where an infringement is committed against indigenous communities' land rights by an authority responsible for the management of the zone in which the immovable property is located, [the authority] shall be fined.

The Forestry Law (2002), Article 11 states that MAFF shall classify, register, and set boundaries for all forests within the permanent forest state by carrying out coordination with concerned local communities, concerned authorities, and MLUPC to assist in the registration of land property of the indigenous community and preparation of the national land used map.

Policy on registration and rights of use of the land of indigenous communities on April 24, 2009, and Subdegree on registration and rights of use of land of indigenous communities on June 09, 2009, provide the indigenous communities with legal rights over land tenure to ensure collective land tenure security and to protect collective ownership by preserving the identity, culture, good custom, livelihood and traditions of each indigenous communities.

National Policy on the Indigenous People Development on April 24, 2009, stated that IPs practice different cultures, traditions, customs, beliefs, and languages according to their particular group. The main occupations to make their living are shifting cultivation based on their tradition by slashing and burning forests for rotation farming, collecting forest products, hunting, fishing, and livestock...etc. Their livelihoods depend entirely on the natural environment. They face hardship and shortages of roads and means of transportation. In terms of the health sector, the indigenous peoples are vulnerable people. While talking about the education sector, their educational level is very limited. Therefore, their living standards are also low. In regards to the Royal Government's long-standing vision "to realize Cambodia with social solidarity, advanced education, and vibrant culture, without poverty, illiteracy and poor health" and based on the Cambodian millennium development goals, particularly the first goal "to reduce extreme poverty and starvation" and the second goal "to realize overall fundamental education," this "National Policy on the Development of Indigenous Peoples" has the following goals to achieve:

- Indigenous peoples shall have a living standard beyond starvation and extreme poverty.
- Indigenous peoples shall be provided with at least nine years of fundamental education and shall be provided with appropriate vocational skill training courses according to their needs and based on the geographical areas in which they live.

- Indigenous peoples have been provided with good healthcare services.
- The cultures of indigenous peoples have been carefully protected and safeguarded.

In order to achieve the goals mentioned above and ensure good development management, the Royal Government has general and sectoral policies for indigenous peoples, whereby the main sectors include culture, environment, land, agriculture/livestock, water resources, infrastructure, justice, tourism,...etc.

Resettlement Implementation

Sub-Decree No. 19 on Social Land Concession (March 2003) discusses the law about a social land concession. This sub-decree has eight provisions and 33 articles. This sub-decree defines the criteria, procedures, and mechanisms for granting social land concessions for residential use and family farming. In this sub-decree, it is clearly defined that a social land concession is a legal mechanism to transfer private state land for social purposes to the poor who lack land for residential and or family framing purposes.

Circular Number 02, which addresses illegal encroachment of state lands, was issued on February 26, 2007. This circular identifies the procedure for confiscating and removing all kinds of forest lands following order Number 01 dated May 10, 2006, on preventing all types of forest land clearance for properties.

MoEF Circular Number 006 (April 02, 2014) addresses the Resettlement Implementation Procedure for development projects. This circular provides clear instructions for the administrative management, roles, and responsibilities of all relevant implementing agencies and provinces when implementing resettlement for development projects.

The Law on Expropriation (2010) provides principles, mechanisms, and procedures of expropriation and defines fair and just compensation for construction, rehabilitation, and physical infrastructure expansion projects to be implemented in Cambodia's public and national interest and development. The Expropriation Law is largely consistent with the main principles of the World Bank's Involuntary Resettlement Policy (OP/BP 4.12). The RGC General Department of Resettlement (secretariat of the Inter-Ministerial Resettlement Committee [IRC]) is charged with determining entitlements, valuation of affected assets, and fixing compensation rates.

Expropriation Law defines fair and just compensation for any construction, rehabilitation, and expansion of physical infrastructure projects in the public or national interest and development. Expropriation Law does not detail the process and procedures of resettlement induced by physical infrastructure projects, land acquisition, voluntary land and asset donation, and post-relocation support. Even though the Expropriation Law outlines a complaint and dispute resolution mechanism for project-affected households (PAH) in articles under Chapter 3: Expropriation Mechanism and Chapter 4: Expropriation Procedures, there are no specific measures or actions articulated to support vulnerable groups of PAHs.

The Constitution of the Kingdom of Cambodia on women⁴

Article 34 of the Constitution states that "all citizens are equal before the law and are entitled to equal protection of the law." This means that women have the same rights and responsibilities as men, including the right to vote, to hold public office, and to own property. Article 46 states that the state and society shall provide opportunities to women, especially those living in rural areas without adequate social

⁴ Office of the Council of Ministers: https://pressocm.gov.kh/en/archives/9539

support so that they can get employment and medical care, send their children to school, and have decent living conditions.

National Action Plan to Prevent Violence Among Women (2014-18)

The Ministry of Women's Affairs (MOWA) is the leading agency responsible for promoting gender equality and preventing violence against women⁵, but other departments may also play a role, such as the Cambodian National Council for Women (CNCW). The Ministry of Labor and Vocational Training (MoLVT) is the leading ministry in charge of labour and workforce-related matters, including the minimum age of workers, wages, and rights of labourers.

Royal Kram NS/RKM/0709/010 on the Protection and Promotion of the Rights of Persons with Disabilities

This law helps to protect and promote the rights of persons with disabilities in the country and prevent, reduce, and eliminate discrimination against persons with disabilities. The law also seeks to ensure that persons with disabilities can participate fully and equally in activities within society and provide equal employment opportunities. The law also prohibits discrimination against persons with disabilities in all areas of life, including education, employment, housing, healthcare, and transportation.

Labor Law (1997)

The Labor law is the overarching legal instrument that regulates and protects workers in Cambodia. The Law governs relations between employers and workers. The law considers that the rules, obligations, and rights are the same for casual or permanent workers. The law prohibits discrimination by sex, religion, social origin, or ethnicity (Article 12). Employers are required to make available a copy of the law to workers at all business locations/ operations (Article 15), and forced compulsory or the hiring of workers to pay off debts is prohibited (Article 16). Article 106 reaffirms equal conditions and wages for all work regardless of origin, age, and sex for the same types of work. The law establishes the limit for working hours to 8 hours per day and 48 hours per week and rates for working overtime and on public holidays.

The allowable minimum age for wage employment is set at 15 years (Article 177). Children from 12-15 years of age can be hired to do light work (see Section 2.24) provided that (a) the work is not hazardous to their health or mental and physical development, and (b) the work will not affect their regular school attendance, their participation in guidance programmes or vocational training approved by a competent authority. The Law recognizes statutory maternity leave on half wages (Article 183) and for the performance of light duties for a further two months. Employers are prohibited from laying off women during maternity leave (Article 182).

Finally, Prakas on the Prohibition of Hazardous Child Labour (MoSALVY No.106, April 28, 2004) prohibits the employment of anyone under 18 in any of the 38 scheduled hazardous works/ activities listed in the Prakas.

Law on Social Security Schemes

The law on social security schemes was issued in 2002. This law seeks to set up a social security scheme. It includes references to i) a pension scheme, which provides old-age benefits, invalidity benefits, and survivors benefits, and ii) an occupational risk scheme, which is in charge of providing employment injury and occupational disease benefits.

⁵ See National Action Plan to Prevent Violence Among Women (2014-18).

Occupational Health and Safety (OHS)

MoLVT developed the first OHS Master Plan (2009-2013) with technical support from the International Labor Organization (ILO). It contains the following priority areas: strengthening national OHS systems, improving safety and health inspections and compliance, promoting OHS activities by employers and workers organizations, implementing special programs for hazardous occupations, extending OHS protection to small enterprises and informal and rural workplaces, and promoting collaborative actions with hazardous, child labour, and human immunodeficiency virus infection and acquired immune deficiency syndrome (HIV/AIDS) projects and activities.

Law on Road Traffic, PREAH REACH KRAM NS/RKAM/0115/001, 2015

The Law on Road Traffic (2015) is intended to ensure road traffic safety and order and protection of human and animal health and lives, properties, and environment. Its establishment is a requirement for all motor vehicles, trailers, and semi-trailers moving on the road to obtain a technical inspection certificate. It also outlines road safety requirements.

Law on the Commune/Sangkat Administrative Management

Article 9 (second paragraph) of the Law on the Commune/Sangkat Administrative Management states that "the Commune/Sangkat (C/S) is a body representing citizens in its Commune/Sangkat and has missions to serve the general interests of its Commune/Sangkat." The Inter-Ministerial Prakas Number 2423 BRK, dated July 03, 2007, on C/S Development Plan, Article 9 states:

- "Civil society organizations may participate in the Development Plan and shall be responsible for representing the interests of local communities and specific stakeholder groups like women, youth, the poor, ethnic minorities.
- C/S Council (local people) must ensure that IPs or representatives of them can take part in the decision-making process on the projects that affect them".

Multisectoral Action Plan on Antimicrobial Resistance in Cambodia 2019–2023

This plan envisions a country with a healthy population and strong governance systems without the threat of antimicrobial resistance (AMR) that will impede economic growth and cause unnecessary risks to health, security, and social protection⁶.

Other Sub-Decrees on Livestock and Value Chain Development

Sub-decree 16 ANKr.BK: Sanitary inspection of animals and animal products: It aims to prevent the spread of animal diseases and protect animal health and public health by regulating the sanitary inspection of animals and animal products in Cambodia.

Sub-degree26 ANKr.BK: Village Animal Health Workers establishment and management: It aims to establish and manage Village Animal Health Workers in Cambodia.

Sub-decree 36 ANKr.BK: Contract farming: It aims to promote contract farming in Cambodia by providing a legal framework for establishing and implementing contract farming agreements.

⁶ <u>rr-asia.woah.org</u>

Sub-decree 108 ANKr.BK: Management of slaughterhouses and inspection of animals and animal products: It aims to regulate the management of slaughterhouses and the inspection of animals and animal products in Cambodia.

Prokas 343 Pr. K/MAFF: Protocol for inspection of animals and animal products in the country: It sets out the protocol for inspecting animals and animal products in Cambodia.

Prokas 225 Pr. K/MAFF: Location and technical norms for construction of slaughterhouses: It sets out the location and technical norms for constructing slaughterhouses in Cambodia.

Prokas 549 Pr. K/MAFF: Categorization of technical norms and procedures for issuing permits for animal husbandry and breeding: It sets out the categorization, technical norms, and procedures for issuing permits for animal husbandry and breeding in Cambodia.

Prokas 116 Pr. K/MAFF: Guideline and procedure for establishing and registering Agriculture Cooperative (AC): It sets out the guidelines and procedure for establishing and registering AC in Cambodia.

Prokas 414 Pr.K/MAFF: Procedure for issuing permit and technical norms for import export transit production mixture and repackaging storage distribution and supplies wholesale-retail and transportation of veterinary drugs, 02 Oct 2020

3.2. Applicable World Bank Environmental and Social Standard (ESS)

At the stage of project preparation, without site-specific as yet selected, the key Environmental and Social Standards (ESS) that are deemed relevant to the CILVCOHP are:

- ESS1: Assessment and Management of Environmental and Social Risks and Impacts;
- ESS2: Labor and Working Conditions;
- ESS3: Resource Efficiency and Pollution Prevention and Management;
- ESS4: Community Health and Safety;
- ESS6: Biodiversity Conservation and Sustainable Management of Living Natural Resources;
- ESS7: Indigenous Peoples/Sub-Saharan African Historically Underserved Traditional Local Communities
- ESS8: Cultural Heritage
- ESS10: Stakeholder Engagement and Information Disclosure.

ESS9 (Financial Intermediaries) and ESS5 (Land Acquisition, Restrictions on Land Use and Involuntary Resettlement) are not relevant to the CILVCOHP, as there will be no financial intermediaries involved in the project and the land where construction/infrastructure will take place is owned by the MAFF and pertinent ministries and agencies.

ESS1 Assessment and Management of Environmental and Social Risks and Impacts

Project environmental risks and impacts

Potential environmental risks and impacts caused by the CILVCOHP include (i) risks and impacts of spreading zoonotic diseases and infections to people from inappropriate waste disposal and management and worker and waste picker injuries from sharps (syringes, needles, blades etc.) disposed of by animal vaccination programs; (ii) Occupational safety and health (OHS) issues related to testing and operation works; (iii) waste, noise, dust, vibration, OHS for workers, community health and safety associated with civil works; (iv) resource efficiency, waste management, use and handling of chemicals in laboratory facilities, (v) resource efficiency and pollution (wastewater discharge, solid waste) in slaughterhouses and

markets during construction/rehabilitation of infrastructure and their operation; and (vi) community health and safety issues related to the handling, transportation, and disposal of carcass and other biological materials, and in markets.

Project social risks and impacts

The social risks and impacts anticipated for this project are (i) risks of excluding vulnerable groups from project benefits; (ii) low risk of use of child labor as part of construction and the project's engagement in the livestock sector, and risk related to OHS of workers and their working conditions during construction and operation; (iii) risks related to temporary and minor community safety as caused by interaction between workers and communities, including Sexual Exploitation and Abuse/Sexual Harassment (SEA/SH) risks from workers and their proximity to vulnerable groups, as well as other risks associated with community safety as a result of project construction and operations; (iv) risks associated with engaging with indigenous communities (by construction workers/project technical service providers) present in project areas, in a culturally appropriate manner; and (v) community safety/health risks associated with impacts caused by waste/smells from labs/ livestock infrastructure and facilities. There is no risk related to land taking, as construction works, including value chain facilities, will take place on public land owned by MAFF without resorting to any resettlement impacts.

ESS2 Labor and Working Conditions

The project is expected to engage consultants/technical experts as direct workers to support the project operations. The project will engage paraprofessionals and VAHWs, who might be deemed community workers, to support the delivery of veterinary services to its targeted beneficiaries. Civil servants who support the project implementation will also need to travel to targeted provinces to support project implementations.

ESS3 Resource Efficiency and Pollution Prevention and Management

Animal waste can be better and sustainably managed with the introduction of simple, cost-effective biogas technology, and septic tank. But if it is not well managed, the runoff from animal waste can flow into water bodies, causing severe ecological harm, and decomposing waste can cause harm to the environment and threaten human health.

ESS4 Community Health and Safety

There will be concerns and potential risks due to the modernization of value chain infrastructure and wet market facilities. Public health risks are associated with zoonoses, Emerging Infectious Diseases (EIDs) and AMR that originate in slaughterhouses, distribution and logistics and wet markets, and water pollution due to poor sanitation utilities in slaughterhouses.

ESS6 Biodiversity Conservation and Sustainable Management of Living Natural Resources

The project activities are associated with sustainable livestock management, including animal husbandry, transport, and slaughter. It will support technical assistance activities that promote productivity enhancement measures and techniques for animal nutrition. The project interventions will be consistent with Good International Industry Practices (GIIP) and Good Manufacture Practices (GMP) for animal welfare, including International Finance Corporation (IFC) Good Practice Note: Improving Animal Welfare in Livestock Operations, and GIIP in animal husbandry techniques with due consideration for religious and cultural principles.

ESS7 Indigenous Peoples/Sub-Saharan African Historically Underserved Traditional Local Communities

The project will be implemented in three provinces, two of which (i.e., Battambang and Kampong Speu) are geographically considered as having the presence of IPs. IP communities in the project areas are also project beneficiaries. The project needs to ensure that indigenous peoples are consulted in a culturally appropriate manner, including using the languages appropriate to them.

ESS8 Cultural Heritage

ESS8 on cultural heritage is relevant as the project will involve civil works. There is the potential to discover unknown cultural heritage during excavation activities for civil works. A guidance for chance finds procedure will be developed as a part of ESMF.

ESS10 Stakeholder Engagement and Information Disclosure

The project recognizes the need for effective and inclusive engagement with all the relevant stakeholders. It aims to involve a wide range of agencies (including the private sector SMEs) and government organizations working in animal health, veterinary services, livestock development, meat production processes, and livestock farmers).

Baseline data analysis

4.1. Socioeconomics

The target project areas of Battambang, Tbong Khmum, and Kampong Speu covered 3.2 million people, with 701,133 families. According to NCDDS 2022, 865,011 people in the target areas had farming as their primary occupation. Additionally, there were 435,044 VGs, including 98,578 women-headed households, 325,745 people older than 65 years old, 9,286 people with disabilities from nature, and 1,435 IPs, which is equal to 14% of the total population in the three provinces. Noticeably, indigenous Charai and Suoy were located more in Battambang and Kampong Speu provinces (see details in Table 2).

According to the ID Poor RGC 2023⁷, Battambang had the highest number of poor families among the three provinces, with 91,599 families holding ID Poor I and II, representing 31% of the total families. Thong Khmum province was next, with 40,580 poor families, including ID Poor I and II, equal to 21%. Finally, Kampong Speu had 24,584 families or 13%.

4.2. Livestock production

According to the NCCDS, in 2023, there were 165,447 families raising cows in Kampong Spue, Battambang, and Tbong Khmom provinces. Kampong Spue had the highest number of cow-raising families, followed by Battambang and Tbong Khmom. Only 17,322 families raised pigs in the target provinces, with a negligible difference in the number of pig-raising families across the provinces. Finally, there were 383,044 families raising chickens, with Battambang and Kampong Spue being the leading chicken-producing provinces.

Despite the high number of families raising these animals, there were only two pig breeding stations located in Battambang province. Additionally, only 89 certified vet drug and animal feed shops were present in the target provinces. These statistics indicate a high demand for pig breeding stations and vet drug and animal feed shops from livestock farmers, as the number of animals being raised is much higher than the number of available facilities.

⁷ https://app.idpoor.gov.kh/public-data-query#publichouseholddata

4.3. Village Animal Health Workers

There were 1,081 VAHWs providing veterinary services to cattle, pigs, and poultry in the target provinces of Battambang, Kampong Spue, and Tbong Khmum. Of these, 513 were from Battambang, 483 were from Kampong Spue, and only 85 were from Tbong Khmum. This represents a significant disparity in the distribution of VAHWs, especially considering that 138,360 families in Tbong Khmum are raising livestock.

The gender distribution of VAHWs is disproportionate, with only 4% being female. This shows that there are barriers to women accessing employment opportunities in the veterinary sector. These disparities raise questions about the availability of free and fair employment opportunities for women, as well as the incentives for women to pursue careers in veterinary care. From a service provision perspective, this may lead to a lack of understanding of the needs and priorities of women livestock farmers. It is important to address these issues to ensure that all women have the opportunity to participate in and benefit from the development of the livestock sector.

4.4. Slaughterhouse

There were 37 slaughterhouses in the target provinces of Battambang, Kampong Spue, and Tbong Khmom. Of these, 14 were located in Battambang, 15 in Kampong Spue, and 8 in Tbong Khmom. The slaughterhouses were mainly used for cows and pigs, and only 1 was specifically for chickens, located in Kampong Spue province. This is a concern, as 383,044 families were raising chickens in the three provinces. The limited number of slaughterhouses for chickens raises questions about the demand for slaughterhouse services, as well as the hygiene and safety of chicken consumption in the target provinces. Additionally, remote farmers face higher transportation costs to access these slaughterhouses, which may disincentivize people from buying livestock from them.

4.5. Number of AC/Producer Group

There are no agricultural cooperatives specifically for livestock production in the target provinces. However, AC members and producer groups can engage in agricultural production, including cultivation and livestock production within their entity. In the three provinces, there were only 45 AC/producer groups raising chickens. These groups have shared technical knowledge, sold veterinary drugs and animal feed, and collected chickens from their members. This has been shown to help build the capacity of the members, reduce input costs (by buying products in bulk), and sell chickens at a better price due to their stable supply (collect 200-300 chickens per day and sell). However, these practices have only been implemented in the chicken value chain, and the cow and pig value chains have not yet adopted them.

Characteristics	Battambang	Kampong Spue	Tbong Khmum	
Socioeconomics				
Total population	1,367,402.00	914,864.00	880,553.00	
Total families	294,294.00	206,556.00	196,174.00	
Women headed households	40,184.00	31,102.00	27,292.00	
Number of people older than 65 years old	137,046.00	85,527.00	103,172.00	
Number of disabled people (nature)	3,078.00	3,351.00	2,857.00	
Number of farmers (primary occupation)	342,145.00	253,992.00	268,874.00	
Indigenous people				

Table 2: Socioeconomic characteristics in the targeted provinces

Number of Indigenous Pnong	7.00	8.00	12.00	
Number of Indigenous Kuy	5.00	15.00	17.00	
Number of Indigenous Charai	306.00	201.00	103.00	
Number of Indigenous Tampun	14.00	10.00	26.00	
Number of Indigenous Suoy	13.00	697.00	1.00	
Liv	vestock			
Number of families raising cows	52,346.00	85,919.00	27,182.00	
Number of families raising pigs	5,975.00	7,067.00	4,280.00	
Number of families raising chickens	138,725.00	137,421.00	106,898.00	
Animal breeding stations	2.00	-	-	
Vet drug and animal feed shops	21.00	53.00	15.00	
Village Animal Health Workers				
Male	481.00	472.00	83.00	
Female	32.00	11.00	2.00	
Slaughterhouse				
Cow	7.00	-	1.00	
Pig	7.00	14.00	7.00	
Chicken	-	1.00	-	
Number of AC/Producer Group				
Cattle	-	-	-	
Pig	-	-	-	
Chicken	9.00	19.00	17.00	
Courses (NIC otheric consult 2010, NCDDC 2022, CI				

Source: (NIS ethnic census, 2019; NCDDS, 2022; GDAHP, 2023; ID Poor RGC, 2023)

Social Risks and Assessment Results

The data collected from fieldwork in Battambang, Tbong Khmum, and Kampong Speu and secondary data sources were analyzed and categorized according to the key themes identified during the development of interview questions. Key emerging themes from research participants were also incorporated. The section below provides the key themes that are central to the study.

5.1. Challenge in the unstable price of livestock

In the three provinces, chicken, pig, and cow livestock production farmers have experienced price drops⁸ in the last eight months (from January to August 2023).

Chicken farmers reported on 22 August 2023 that the price of local chickens dropped by around 3,000 riels, from 18,000-16,000 riels to 13,000 riels (1.2 kg). They attributed this to the high number of company-raised chickens (CP Cambodia) and imported chickens from Thailand in the market. Similarly, the price of chicken eggs also dropped, from 450 riels to only 400-380 riels. This represents a decrease of about 70 riels per egg.

Household pig farmers also faced pricing issues, with the price dropping by 4,200 riels, from 12,000 riels to only 7,800 riels (live pigs), reported on 28 August 2023. This price was lower than the price of company-

⁸ Noticed that these prices were reported in the farm gate price in this study.

raised pigs, which are sold for insurance * CP Cambodia pig: 2.2 USD/kg; * Betagro Cambodia pig: 1.95 USD/kg; * Green Feed pig: 2 USD/kg; * M's Pig ACMC: 1.95 USD/kg. Farmers attributed the price drop to the high number of company-raised pigs in the market.

Similarly, household cow farmers reported prices that were 5,000 riels lower, from 14,500 riels to only 9,500 riels. The price drop was due to several factors, including imported frozen beef, imported cows from Thailand, and lower local demand caused by economic uncertainty.

5.2. Challenge in production costs

Production costs varied significantly between household and commercial scales. For chicken, the average cost of raising a chicken over a period of 3.5 months was approximately 3.58 USD at the household level, compared to 3.40 USD on a commercial scale.

In terms of pig farming, the estimated cost for a 5-month feeding period was 250 USD for household-scale production and 230 USD for commercial-scale production.

Lastly, the cost of cattle farming was considerably higher, with an estimated expenditure of around 877 USD for the household scale and 787 USD for the commercial scale over an 18-month production period.

These were some of the concerns that arose from the variation in production costs between household and commercial scales.

- a) High production costs at the household level: This could make it difficult for small-scale farmers to make a profit, especially if prices are low.
- b) Inefficiency of household production: Household production is often less efficient than commercial production due to factors such as smaller scale, less specialization, and lower access to resources.
- c) Competition from commercial producers: Commercial producers have economies of scale and other advantages that give them a competitive edge over household producers.
- d) Limited access to markets: Small-scale farmers often have limited access to markets, which can make it difficult to sell their products at a fair price.

5.3. Diseases in chicken, pig, and cow production

Chicken farmers had reported several diseases affecting their poultry, including Avian Influenza (ជំងឺក្រុន ជ្អាសាយបក្ស៊ី), Newcastle Disease (ជំងឺញូវកាសមាន់), and Infectious Bronchitis (ជំងឺរលាកទងសួតបក្ស៊ី). These diseases were reported due to inadequate biosecurity measures and high livestock density, particularly in the Kampong Spue province.

Pig farming also faced challenges with diseases such as African Swine Fever (ជំងឺប៉េស្ត ជ្រូកអាហ្រ្រិក), Classical Swine Fever (ជំងឺប៉េស្តជ្រូក), and Porcine Reproductive and Respiratory Syndrome (ជំងឺក្រចៀក ខៀរ). These diseases were believed to be transmitted due to a lack of biosecurity measures.

Lastly, cattle farmers had informed diseases including Lumpy Skin Disease (ជំងឺដុំពកស្បែក), Foot-and-Mouth Disease (ជំងឺអុតក្តាម), and Bovine Tuberculosis (ជំងឺរបេងកោក្របី). These diseases were also transmitted due to a lack of biosecurity measures and high livestock density.

5.4. Lack of access to proper veterinary service

Despite the presence of Village Animal Health Workers in their communities, farmers often lack access to veterinary care. This is due to several reasons, including the low cost of letting a few chickens die, the high cost of vaccines and medicines relative to the price of a chicken, and the low profit for Animal Health

Workers to treat chickens compared to their transportation and opportunity costs. In term of vaccines, the farmers had reported using vaccines such as Fowl Cholera, Fowl Pox, ND, and Gumboro to protect their poultry.

In contrast, pig farmers generally had access to veterinary services through agricultural input suppliers or depo stores in their communities. Vaccines such as PRRS, FMD, CSF, and Pasteurellosis were available. However, farmers often rely on peer learning or information from YouTube/Facebook videos rather than official sources. In the case of new diseases, such as African Swine Fever, farmers were unable to find a cure for their pigs. Village Animal Health Workers do provide vaccinations for pigs, but coverage is low, and not all pigs in the community are vaccinated.

Similarly, cattle farmers also had access to veterinary services through agricultural input suppliers or depo stores in their communities. Farmers can purchase vaccines such as FMD, Pasteurellosis, Blackleg, and <u>LSD</u> and apply them to their cows. In some cases, input suppliers or depo stores also provide veterinary services such as surgical sterilization and vaccination.

Peer learning and self-learning from YouTube/Facebook videos were popular among farmers but can be unreliable as they are not verified by officials. This can lead to increased transmission and damage to farmers' livestock, especially in the absence of adequate biosafety and biosecurity measure practices.

5.5. Challenges in health and safety

Farmers reported concerns about the transmission of chicken diseases from animals to humans, as well as from humans to animals. They were aware of basic biosafety practices such as not eating sick chickens, washing their hands, changing clothes and boots, and wearing face masks. However, they believed that these methods were not enough to protect against disease transmission.

Similar concerns were raised by pig and cow farmers, who were worried about diseases that could be transmitted to their animals and their families. Most of them knew basic biosafety measures to protect their animals and themselves, but they still had concerns, especially in the case of new diseases such as African Swine Fever.

5.6. Challenges in waste management and community, health and safety

The smell of chicken waste was a concern for neighboring households due to the high density of living, especially in Kampong Spue and Battambang. Even though some farmers regularly collected and cleaned their chicken farms, the smell still disrupted the lives of other households nearby. Complaints about the smell were filed with village/commune chiefs. The solutions varied, from negotiation to moving the farm to another location.

Waste storage and biodigester technologies were used to collect pig waste. These methods helped farmers to reduce the smell in their neighboring households and generate fertilizer for their crops. However, the smell was still a problem due to the high density of living. Biodigester technologies were also reported to be expensive, and small-scale farmers rarely used them.

Similar to pig farmers, cow farmers used waste storage and biodigester technologies to collect and control cow waste. These methods were effective for farmers in rural areas (far from the village), but they still had problems in communities with a high density of people.

5.7. Challenges in logistics and transportation of animals

Chickens were transported to market by motorbike, using plastic cages. Pigs and cows were transported by hand tractors or trucks. These transportation methods raised concerns about biosafety, as they could potentially transmit diseases, especially through waste during transportation. Additionally, these transportation methods could also contribute to the spread of disease through the air.

5.8. Challenges in information, education, and communication (IEC) materials

Input supplier companies had produced Information, Education, and Communication (IEC) materials that were distributed at the community level by depo stores. These IEC materials included leaflets, feed bags, vaccine/medicine boxes, and billboards, all translated into the Khmer language and verified by GDAHP.

While most of these IEC materials were translated into Khmer, technical terms such as 'vitamin A', 'vitamin D', 'vitamin E', 'vitamin B12', 'PRRS', 'FMD', and 'CSF' could be challenging to understand. Furthermore, these materials were primarily suitable for literate individuals. Illiterate farmers often rely on depo stores, VAHWs, and their neighbors to explain the materials before using them. This reliance could pose a risk if they forget or misunderstand how to use the input products for their livestock.

5.9. Meeting and training and communication channels

Meetings and training were conducted in village public spaces such as pagodas, markets, village chief's houses, and commune halls. In some cases, input supplier companies also conducted meetings and training at community depo stores. Meetings and training were also supported by local authorities and Animal Health Workers. The most popular method of communication among farmers was phone calls, especially for meetings and training. Other channels of communication included Facebook/Messenger, Telegram, and face-to-face meetings.

However, it presented a concern of lack of follow-up and support after meetings and training. Even if farmers attended meetings and training, they could not put what they learned into practice without follow-up and support. This was a challenge for both existing organizations trying to improve livestock production and farmers themselves.

5.10. Indigenous people (IP)

Languages, land resources, culture, and communication were not significant challenges for Indigenous Peoples (IPs) to be involved in livestock production (according to Indigenous Suoy leader). However, motivation was found to be a critical problem. IP leader Souy informed that most IP members used to be involved in a few NGO projects, but they tended to drop their production after the NGOs moved out. Additionally, most IPs are interested in working in garment factories over livestock production, which takes more effort, time, and investment to get profits. IP leader Souy recommended working with middle or high-income households for the project's success and influencing low-income households to be interested in livestock production.

5.11. Inclusion of poor, disabled, and women's household heads in livestock production

Many smallholder farmers did not have suitable land size, making it difficult to invest in their livestock businesses and improve their productivity. Additionally, smallholder farmers were poor, limiting their ability to purchase inputs such as vet drugs and feeds, veterinary care, and transportation. This also made them more vulnerable to shocks such as droughts and floods, creating weather-borne diseases in their livestock.

The study also found that poor, disabled, and women household heads were more involved with household chicken production than pig and cow production. This was due to the following factors:

- Chicken production requires a small investment amount, especially for household production.
- Chicken production is short-term, only 3.5 months, compared to pigs for 5 months and cows for 18 months.
- Finally, the risks of production loss due to unstable prices and diseases are low compared to pigs and cows.

These factors made chicken production a more attractive option for smallholder farmers with limited resources and looking for a way to reduce their risks. However, introducing the household chicken production to smallholder farmers may also take into account the three key elements: ability, opportunity, and dignity.

Ability refers to whether the smallholder farmers have the capacity to participate in the project. This can be included through information dissemination and meetings, but it is important to note that many smallholder farmers may not be literate, especially in the remote districts.

Opportunity refers to whether all farmers, including smallholder farmers, have equal access to the project's benefits. This can be challenging in a context where women may have more household responsibilities, disabled farmers may have limited mobility, and elderly farmers may need to care for grandchildren. The project should consider how to make its services more accessible to all farmers.

Dignity refers to how farmers are treated when they participate in the project. Animal Helath Service providers should pay attention to the needs of VGs and avoid discrimination.

5.12. Institutional barrier and exclusion

Institutional barriers and exclusions prevent certain groups of livestock farmers, especially VGs, from accessing livestock production resources and opportunities. These barriers can be formal or informal, and they can be caused by a variety of factors, such as lack of access to proper veterinary services, lack of access to markets and high production costs, challenges in logistics and transportation of animals, and challenges in IECs, meeting and training.

These barriers can have a significant impact on the livelihoods of livestock farmers in the target provinces. They can make it difficult for livestock farmers to produce and sell their products at a competitive market price, which can slow down the achievement of the project's objectives.

5.13. Exiting GRMs

There were two types of existing grievance redress mechanisms (GRMs) for farmers. For concerns about diseases and technical veterinary services, farmers can contact VAHWs, depo stores, and input suppliers. They can raise their concerns and seek advice on their livestock production, such as disease prevention and treatment for chickens, pigs, and cattle, as well as animal production techniques, epidemiology, and disease surveillance through this mechanism.

For concerns and conflicts caused by livestock waste and production, farmers can log their complaints to village/commune chiefs for solutions. Issues related to their safety or health can be reported to the police or health professionals at the community health centers.

5.14. Associated social challenges

a. Gender-related issues

Women played a significant role in livestock production in the three provinces. However, they may have faced discrimination and had less access to resources such as credit, training, and veterinary care compared to men. Additionally, women may have been responsible for unpaid care work, which could have limited the time they had to devote to livestock production. This raised concerns about gender inequalities in livestock production. It was important to address these issues to ensure that women had equal opportunities and could fully participate in and benefit from livestock production.

Additionally, there were concerns about gender-based violence (GBV) and sexual exploitation and abuse (SEA) against women. A 2018 report by the Cambodian Center for Human Rights found that transgender women in public spaces experience high rates of abuse, with 43% of respondents reporting physical violence, 31% reporting sexual assault, and 25% reporting rape⁹.

b. Children abuse

Children may be used to feed and water animals, collect manure, and transport animals. They may also be exposed to hazardous substances and work long hours in dangerous conditions, especially in cow and pig production.

c. Potential external impacts which could be a project risk

The traditional ethnic groups (focal points) appointed to oversee the official administration and decisionmaking related to the social hierarchy of ethnic groups may lose their importance as the knowledge and cultural systems of self-determined ethnic groups decline. This can also disempower traditional leadership. This, in turn, can have serious social impacts in villages with fewer effective social controls and could lead to the breakdown of the traditional cultures of different ethnic groups.

Key mitigation measures and recommendations

The project is expected to promote productivity enhancement measures (animal breeding, genetics, and animal nutrition) and market-driven commercialization approaches in selected livestock value chains. It will also help strengthen the animal health system and promote the One Health approach to reduce the risks of transboundary animal diseases and zoonoses. These interventions are expected to have positive impacts on household income from livestock products, increase the share of marketed livestock products through business contracts and partnerships, and reduce the prevalence of priority animal diseases, which overcome the challenges of institutional barriers and exclusion of farmers in livestock production.

The assessment results suggest that issues with chicken, pig, and cow production, especially in the farmer VGs contexts and areas emphasized by the project, are complex and involve far more than livestock development and One Health-related issue. The issues do not solely depend on developing livestock value chains, market facilities, and infrastructure but also involve livelihood improvement, economic development, recognition of social and cultural challenges, allocation of resources, and equitable sharing of project benefits in the target provinces. It is also important to develop a multisectoral and holistic livestock development policy and undertake more research on the costs and benefits of livestock

⁹ <u>https://www.cchrcambodia.org/admin/media/factsheet/factsheet/english/CCHR%20Factsheet_Violence%20</u> <u>Against%20Women_ENG.pdf</u>

production and livelihood improvement while supporting the integration of smallholder farmers into value chain development. The table discusses recommendations for key social issues in the project.

Table 3: Mitigation measures an	nd recommendations
---------------------------------	--------------------

Key social issues in livestock production	Recommendations
Unstable price of livestock and high input costs	The following project design and implementation measures can help overcome the challenges:
	Develop inclusive value chains by promoting contract farming arrangements and productive partnerships between agriculture cooperatives (ACs) and small and medium-sized enterprises (SMEs). This can be done in accordance with Sub-decree 36 ANKr.BK: Contract farming.
	Support institutional strengthening of existing producer groups or ACs, or the establishment of new ones. This can be done in accordance with Prokas 116 Pr. K/MAFF: Guideline and procedure for establishing and registering Agriculture Cooperative.
	Provide in-kind support for implementing a breeding program to improve the quality of the animal stock.
	Improve livestock productivity through enhanced extension services on animal-raising and support the production of high-quality fodder and other animal feeds.
	Upgrade key infrastructure such as slaughterhouses and market facilities for livestock farmers.
Animal diseases and lack of	To strengthen animal health services, the project should:
veterinary care and training	Provide capacity building for veterinary services, risk assessment, and communication for GDAPH and POAHPs. This can be done through training programs, workshops, and other capacity-building activities.
	Provide capacity building for veterinary personnel, paraprofessionals, other technical staff such as scientists and laboratory technicians, and VAHWs from the public and private sectors. This can be done through a variety of methods, such as on-the-job training, distance learning, and short courses.
	Recruit more VAHWs, especially female VAHWs, for Tbong Khmum province. This can be done by raising awareness of the VAHW program and its benefits, and by providing financial and other incentives to encourage people to become VAHWs.

	These measures will help to improve veterinary care and training at the community level, which will ultimately lead to better animal health and productivity.
Concerns about health and safety	The following measures should be taken to implement collaborative One Health approaches to protect human health, animal health, and the environment:
	Support risk assessment of diseases using improved surveillance data and risk mapping. This will help to identify the risks and how best to mitigate them.
	Establish a new laboratory in the Battambang province to improve the capacity for disease diagnosis and surveillance.
	Conduct consultations/workshops and studies to develop cross- sectoral plans against zoonoses. This will bring together experts from different disciplines to work together to prevent and control zoonoses.
	Provide training to increase staff capabilities in formulating relevant policies. This will help to ensure that policies are developed that are effective in protecting human health, animal health, and the environment.
	Collaborate between GDAHP and the wildlife authorities for a pilot mapping of the risks. This will help to identify the specific risks posed by wildlife to human health and animal health.
	Introduction of simple, cost-effective biogas technologies for animal wastes and capacity building for farmers on managing animal wastes and wastewater from animal production
	Animal waste is a major source of pollution, both water and air. It can also be a source of disease. Biogas is a renewable energy source that can be produced from animal waste. It is a clean and efficient way to dispose of animal waste, and it can also be used to generate electricity and heat.
	In addition to introducing biogas technologies, it is also important to provide capacity building for farmers in managing animal wastes and wastewater. This training should cover topics such as:
	 The different types of animal waste and their environmental impacts

	 How to properly store and manage animal waste How to use biogas technologies The benefits of using biogas Waste management policies should also be introduced to help regulate the disposal of animal waste. These policies should be based
	on Sub-decree No.27 on water pollution control, issued on April 06, 1999, and Sub-decree No.36 solid waste management, issued on April 27, 1999.
Information, education, and communication (IEC) materials	IEC materials should be translated into the Khmer language, including leaflets, feed bags, vaccine/medicine boxes, and billboards.
	The GDAHP technical team should verify all technical content and words used in the IEC materials to ensure that they are accurate and appropriate for the target audience.
	In addition to written IEC materials, other formats should be produced for illiterates, such as video, audiobooks, and pictures. These formats can be used to communicate important messages about animal health and production to people who cannot read.
disabled, and women's household	The project should ensure that all people, regardless of their social group, are included in the project's activities. This will be done by:
heads) in livestock production	Recruiting a social development specialist who will work throughout the life cycle of the project.
	Ensuring meaningful consultation and quality of engagement with vulnerable and marginalized groups at all levels during project preparation and other project activities.
	Improving physical barriers for VGs by designing market construction facilities and the laboratory with inclusive accessibility.
	Conducting proper and regular screening to refer VGs to project services based on the screening results. If they are VG farmers, the project should integrate them with the livestock value chain through criteria-based in-kind support.
	Providing information and training on animal production in a format that is accessible to farmers who cannot read or write. In addition, offering flexible scheduling and transportation options to accommodate the needs of women, disabled farmers, and elderly farmers.
	Working with community leaders to promote gender equality and inclusion in the project. Moreover, train the existing or new VAHWs on how to interact with farmers in a respectful and dignified manner.

The project can also collect data on the needs or feedbacks of vulnerable farmers to ensure that its services are meeting those needs. This data can be collected through surveys, focus groups, interviews, as well as the designated GRMs.
Raise awareness among VMs, farmers, VAHWs, village/commune chiefs, and communities about gender-based issues and child abuse.
Display the numbers of local authorities and police in accessible locations to report any gender issues and child abuse cases.
Ensure that Project work, staff, and benefitceries are trained and sign Codes of Conduct (CoCs) regarding Gender-Based Violence (GBV), Sexual Exploitation and Abuse (SEA), and Violence Against Children (VAC).
Enhance awareness of the GRM among project teams and beneficiaries, including VGs, farmers, VAHWs, and private sectors. This includes informing them about how to access the GRM and displaying the contact information and procedure of the GRM in accessible locations.
The project will provide adequate information to those who could be affected by project activities, such as the improvement of market facilities, slaughterhouses, and other related facilities, and the selection of community VGs, farmers, and ACs. The project may also seek their support and respond to any contributions made. This should include taking into consideration existing traditional knowledge offered by the different ethnic groups and villagers, and ensuring the active, free, flexible, effective, meaningful, and informed participation of individuals and groups in Project CILVCOHP.
Build the capacity of farmers and VAHWs on ICT technology, including online communication and learning. This includes providing them with training on how to use ICT tools and resources, such as smartphones and the internet.
Verified information, education, and communication (IEC) materials in written formats and video, audiobooks, and pictures should be made available to livestock farmers in both physical and online formats. This will ensure that farmers have access to the latest information on livestock production and health, regardless of their location or level of literacy.

Source: author's preparation

Actions for the Environmental and Social Commitment Plan

The table below discusses the action that should be taken in the Environmental and Social Commitment Plan (ESCP).

Table 4: Action for the ESCP

En	vironmental and Social Commitment Plan action items	Relevant ESS
1	Recruit a social development expert.	ESS1
2	Develop a project-level communication strategy that is sensitive to gender, culture, and ethnic group differences. The strategy should address strengthening relationships among project staff, VAHWs, farmers, the private sector, NGOs, and other development partners who are working on livestock development.	ESS1,7 & 10
3	Explore the potential and possibility of producing written IEC materials and other formats for illiterates, such as video, audiobooks, and pictures available online.	ESS1,7 & 10
4	Recruit more VAHWs, especially females.	ESS4
5	Establish and renovate market facilities, slaughterhouses, and the laboratory.	ESS1, 4,7 & 10
6	Develop and deliver training and CoC/codes of practice:	ESS1, 2, 4,7 & 10
	1. Codes of Conducts	
	Child protection	
	Health and safety	
	Environmental safety	
	GBV/SEA/ VAC	
	2. Training materials/manuals/tools	
	Child protection	
	GBV/SEA/ VAC	
	 Gender, culture, ethnic sensitivity 	
	• GRM	
	3. Record of beneficiaries (including number of participants and training provided)	
	 Project staff and stakeholders 	
	• VAHWs	
	Livestock farmers	
	AC members	
	Provinces/District	
	 Community/village/ Community Groups/ NGOs/ and other development partners who are working on livestock development. 	
7	Develop a project-level Grievance Redress Mechanism (GRM) with implementation, including training on how to use the GRM and reporting, to be done at the subproject level.	ESS10

Source: author's preparation

Appendix

1. Preliminary activities and meetings

Figure 3: Participant list in the preliminary meeting

mag	ចកសិកម្ម ត្រាប្រឆាញ់ រំ	ie ie i	មាន			
អង្គនះ	าแหล่วะห่อมายหมิ	តិច៨	លិតកម្មសត្វ			
			មញ្ជ័ន	ម្ពីមាន 		
ប្រជុំថ្ងៃ	ō		5.27	មោង <u>14</u>	1.00	
ក្រោមអ	ធើបតីភាព:ស្រុង	state	RESME	1	0	
ខ្លឹមសារ	រធិបតីភាពៈ	Do go	Study geoder	Zwort Plann	CAPSP-/WI	\$
R5.1	ເອງສູຂາຍ ລິດຂາຍ	ina	ຊອອາເລືອອຳຄະ	អត្ថភាព	មវត្ថាលេខា	លេខធូសេត្
	Soen, San	M	DGG	GDAHP	And	0/293962
	Ho Brenyeth	N	H)- phyrider	SOUTHP	X-z	01642988
	रेडल कार	v	Anger Salar	MN.X.N	abl	axe 90552
	malat	a	558/NX7	GRAHE	fas	0126161
	The also	V	consulpt.	WB	Petr	01281801
	man and	8	Consultant	World Bany	ASSIL	0574317
-	may F of Them	a	land.	AL AR XIA	So.	01/8549
	and the	U	12.03	N. 51 . 2. 81	-A	0126524
	NE NG	77	Mad	NANA	- 00-21	0693542
-	The works	U	61	507	Mos	017 9/31
	र्षेत्र सेंद्रेधला ह	R	1415 155.	сарнь	100	01788696
-	the wat	63	rip	COAHP	65.	0777 891000
-	Entra all	87	218	GOAHP	Caris-	0704587.
	Ing knownes	M	Consultant	Nord Bank	125	0984154
			MUTO SSC.	GDAAP	De C	08582655

Galaxy S21 Ultra 50

Figure 4:Preliminary activities and meetings



2. Fieldwork in Battambang



3. Fieldwork in Kampong Spue



4. Fieldwork in Tbong Khmum



5. Field Mission Concept Note

Field Data Collection on CILVCOHP Preparation Cambodia Inclusive Livestock Value Chains and One Health Project (P180535)

Location:Battambang, Kampong Speu, and Tbong KhmumDate:21-22 and 28-29 August 2023

I. BRIEF PROJECT BACKGROUND

- The Cambodia Inclusive Livestock Value Chains and One Health Project (CILVCOHP), is a \$20 1. million project funded by the Global Agriculture and Food Security Program (GAFSP) with the overall aims to address the medium to long-term COVID-19 response and recovery of the agriculture and food sectors in a changing climate, and supports the principle of 'building back better. The project design pays particular attention to the important issues of sustainability, inclusiveness, and resilience. The strong commitment of the Royal Government of Cambodia (RGC) to the sustainable development of the livestock sector provides an important stepping stone. The project includes a strong capacity-building component for the General Directorate of Animal Health and Production (GDAHP) and the newly established One Health Technical Working Group (OH-TWG) to provide guidance and strategic direction to support the sector. Capacity building is also a key part of the project's activities at the community level, to promote effective and efficient delivery of livestock support services. The project will contribute to the promotion of gender equality. Experience worldwide including in Cambodia highlights the benefits of building on the insights, knowledge, and initiative of all parts of the community in terms of consensus building on the identification and implementation of relevant activities. Rural women, especially those producing livestock, lack collateralizable assets and hence are less likely to obtain commercial loans to run their businesses.
- 2. The rationale for the project is two-fold: (1) short cycle livestock production such as chicken and pigs has traditionally been an important activity for the vulnerable poor and women-headed households in rural areas; and (2) possibilities for enhancing revenues from short-cycle livestock production are large, owing to large productivity gaps from current practices and potentials from improved and available technology and management practices. Thus, the project approach will be to address key binding constraints for the development of short-cycle livestock value chains by (i) promoting productivity enhancement (animal breeding, genetics and animal nutrition) measures and market driven commercialization approaches, involving close linkages with the private sector in specific livestock value chains, and (ii) strengthening the animal health system and adopting One Health (OH) approaches to reduce the risks from transboundary animal diseases, zoonoses including food borne infections, emerging pathogens and antimicrobial resistance.
- 3. The **CILVCOHP** will implement multi-sector approaches for reducing the risk from emerging pathogens (spillover from wildlife), zoonoses and food borne pathogens. It will promote resilience to disasters including the recovery from the COVID-19 pandemic, by investing in resilient livestock production and food systems and addressing risk transmission pathways to human health from animal health (domestic and wildlife) and environmental changes including from climate change. The planned activities will also support the empowerment of the disadvantaged and rural poor including ethnic minorities and women, with the view to improve their food security status. The proposed project will have four components.

4. The CILVCOHP aligned with the priorities in the World Bank's Cambodia Country Partnership Framework (CPF) FY19-23 (Report No. 136500-KH, 2019).

II. PROJECT DEVELOPMENT OBJECTIVE AND KEY RESULTS

- 5. The overall **project's goal** is to address the medium to long-term COVID-19 response and recovery of the agriculture and food sectors in a changing climate, and supports the principle of 'building back better.
- 6. The Project **Development Objective** is to improve livestock based livelihoods and food security of targeted communities and reduce priority animal disease risks and zoonoses in target project locations.
- 7. The **project's key results** would be:
 - (a) Increased production of livestock products
 - (b) Increased share of marketed livestock products through contracts and partnerships
 - (c) Reduced disease prevalence of priority animal diseases

III. KEY PROJECT COMPONENTS

8. The project will (i) promote productivity enhancement measures (animal breeding, genetics and animal nutrition), and market driven commercialization approaches in selected livestock value chains; and (ii) strengthen the animal health system and (iii) promote the One Health (OH) approach to reduce the risks from transboundary animal diseases, and zoonoses. **CILVCOHP** has three integrated components and the fourth component is on project management.

A. Component 1: Inclusive Livestock Value Chains

 Planned activities under this component would be implemented in the three provinces of Battambang, Tbong Khmum, and Kampong Speu. This component focuses on up to two value chains per province where smallholders, including female-headed livestock-raising households, have been traditionally active. Animal producers would be supported to develop their animal stocks as commercial farms. Priority value chains would include poultry, piggery, and beef, where improved quantity and quality of products are often directly associated with improved nutritional status of families.

B. Component 2: Strengthening Animal Health Services

• The proposed interventions under this component aim to improve the quality of, and access to, strengthened national veterinary services in line with international standards. High health animal production zones with minimal risk of transboundary animal diseases would be established in targeted areas, leading to improved quality and safety of animal products entering the value chain.

C. Component 3: Building One Health (OH) system

 The component will support the "Zoonotic Technical Working Group (Z-TWG)" through implementation of consultations/workshops, and studies to develop cross-sectoral plans against zoonoses such as rabies, anthrax, and brucellosis. Joint trainings will be provided to increase staff capabilities in the formulation of relevant policies. Activities under this component will include the provision of (a) technical assistance, consultancies, and studies; (b) coordination of the zoonotic technical working group (Z-TWG); (c) Inter-agency Data Sharing Arrangements; (d) mapping of zoonoses risk areas; and (e) training.

D. Component 4: Project Management, Monitoring, Evaluation, and Learning

 This component will finance operating costs, consultants, trainings to carry out fiduciary, and environmental and social safeguards activities, as well as reporting on project's implementation progress and results. Particular attention would be paid to Monitoring/Evaluation, and Learning; the project will support (a) the establishment of a management information system that enables timely tracking of, and reporting on results; and, (b) implementation of studies and surveys after-action reviews to ensure systematic reviews of lessons learned.

IV. Rationale and Objectives Field Mission

- 9. The rationale for this proposed field mission is two fold: (1) to engage with inclusive livestock value chain actors (private and public) to seeks their inputs, including the last mile and market actors, into the project preparation and PIM and (2) to assess social and environmental risks and impacts association with the CILVCOHP. It is anticipated that the field team will travel to three target provinces to meet with livestock stakeholders at provincial, district and commune levels.
- 10. The overall objectives and main activities of the field mission are:
 - To consult with and collect inputs from relevant livestock stakeholders/value chain actors from private and public sector, especially on cattle, poultry and swine/pigs in the provinces, district, and communes, to incorporate into the preparation of the CILVCOHP project;
 - Given the project's focus on promoting both the modernization of private sector-driven value chains, and the integration of organized smallholders through partnerships with private actors, the field mission will review extensively with relevant stakeholders (private sector and members of PO/ACs) issues and priorities for the inclusive development of value chains.
 - To identify and validate livestock challenges and economic/market potentials; and
 - To assess Social and Environmental risks and impacts associated with the said project, especially with livestock smallholder farmers, vulnerable groups, and indigenous peoples who are in livestock and value chain (cattle, pig and chicken).

V. Field Mission Schedule and Agenda

11. The draft field agenda is tabled below. These meeting arrangements are indicative only and subject to change based on actual availability of all parties.

Day1: August 21 2023			
	8:00 - 1:00	Travel from Phnom Penh to Battambang	Phnom Penh - Battambang
	2:30 - 4:00	Meeting officials responsible for livestock and value chain (cattle, swine/pig, and chicken), PDAFF	Battambang
	4:00 – 5:00	Meet with livestock market actors, input suppliers and traders/commercial producers	Battambang
Day2	Day2: 22 August 2023		

8:00 - 10:00	Meeting with livestock smallholder farmers, vulnerable groups, and indigenous peoples (6 farmers) who are in livestock and value chain (cattle, pig and chicken), in Banan district, Battambang	Battambang
10:00 - 12:00	Meeting with agricultural cooperative (AC) leaders and livestock producers	Battambang
1:30 – 6:00pm	Travel from Battambang to Phnom Penh	Battambang - Phnom Penh
Day3: August 28 2023		
7:00 – 9:00	Travel from Phnom Penh to Kampong Speu	Phnom Penh – Kampong Speu
9:00 – 10:00	Meeting officials responsible for livestock and value chain (cattle, swine/pig, and chicken), PDAFF	Kampong Speu
10:00 - 12:00	 Meeting with livestock smallholder farmers, vulnerable groups, and indigenous peoples (6 farmers) who are in livestock and value chain (cattle, pig and chicken), Oral district, Kampong Speu Meet with livestock market actors, input suppliers and traders/commercial producers 	Kampong Speu
1:00 - 3:00	Meeting with agricultural cooperative (AC) leaders and livestock producers	Kampong Speu
3:00 - 6:00	Travel from Kampong Speu to Phnom Penh	Kampong Speu - Phnom Penh
Day4: 29 August 2023		
6:30 - 9:30	Travel from Phnom Penh to Tbong Khmum	Phnom Penh - Tbong Khmum
9:30 - 10:30	Meeting officials responsible for livestock and value chain (cattle, swine/pig, and chicken), PDAFF	Tbong Khmum
10:30 - 12:00	 Meeting with livestock smallholder farmers, vulnerable groups, and indigenous peoples (6 farmers) who are in livestock and value chain (cattle, pig 	Tbong Khmum

		and chicken), Ponhea Kraek District, Tbong Khmum (proposed)	
		 Meet with livestock market actors, input suppliers and traders/commercial producers 	
1:	00 - 3:00	Meeting with agricultural cooperative (AC) leaders and livestock producers, Ponhea Kraek District, Tbong Khmum	Tbong Khmum
3:	00 – 6:00	Travel from Tbong Khmum – Phnom Penh	Tbong Khmum – Phnom Penh

VI. Field Mission Logistic Arrangements

12. The logistics for the all the field meetings and arrangements will be facilitated by GDAHP in coordination with the consultant team.

VII. Field Mission Participants

13. Participants for the field mission are:

No	Name	Position at GDAHP	Assigned task at CILVCOHP			
CILVCC	CILVCOHP Team					
1	Dr. Mam Somony	Deputy Director of Animal Production Department	Livestock production Officer (Component1)			
2	Mr. Sam May	Deputy Director of Technical Extension and Legislation	Social Risk Management Officer, GDAHP			
3	Mr. Klaing Sobunna	Chief of Wash management office of Animal Production Department	Environment Risk Management Officer, GDAHP			
4	Mr. Thol Virak	Vice Chief of Monitoring and Evaluation Office	Project Monitoring and Evaluation Officer			
World	Bank Team					
5	Mr. Ing Kvanthai	Social Consultant	STC/WB			
6	Mr. Penh Socheat	Environmental Consultant	STC/WB			
7	Mr. Sun Boreth	PIM Consultant	STC/WB			
8	Ms. Lyden Kong		STC/WB			
9	Ms. Mudita Chamroeun		WB			