



The World Bank

Cambodia Inclusive Livestock Value Chains Project (P180535)

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Project Information Document (PID)

Appraisal Stage | Date Prepared/Updated: 17-Dec-2024 | Report No: PIDA0124



BASIC INFORMATION

A. Basic Project Data

Project Beneficiary(ies)	Region	Operation ID	Operation Name
Cambodia	EAST ASIA AND PACIFIC	P180535	Cambodia Inclusive Livestock Value Chains Project
Financing Instrument Investment Project Financing (IPF)	Estimated Appraisal Date 20-Dec-2024	Estimated Approval Date 28-Feb-2025	Practice Area (Lead) Agriculture and Food
Borrower(s) KINGDOM OF CAMBODIA	Implementing Agency Ministry of Agriculture, Forestry and Fisheries (MAFF)		

Proposed Development Objective(s)

4. The Project Development Objective is to sustainably improve livestock-based livelihoods and strengthen animal health services in target project locations.

Components

- Component 1. Promote Inclusive and Sustainable Livestock Value Chains
- Component 2. Enhance Animal Production and Health Services
- Component 3. Project Management, Monitoring, Evaluation, and Learning

PROJECT FINANCING DATA (US\$, Millions)

Maximizing Finance for Development

Is this an MFD-Enabling Project (MFD-EP)? No

Is this project Private Capital Enabling (PCE)?

SUMMARY

Total Operation Cost	20.00
Total Financing	20.00
Financing Gap	0.00

**DETAILS****Non-World Bank Group Financing**

Trust Funds	20.00
Global Agriculture and Food Security Program	20.00

Environmental And Social Risk Classification

Substantial

Decision

The review did not authorize the team to appraise and negotiate

Other Decision (as needed)

B. Introduction and Context

Country Context

1. **Over the past two decades, sustained economic growth has driven Cambodia to lower middle-income status and significantly reduced poverty.** The economy grew at an average annual rate of 8.2 percent between 2000 and 2019, and over this period it was the fifth fastest-growing economy in the world. This growth was driven largely by tourism, manufacturing exports, real estate, and construction. However, the agricultural sector continues to play an important role in Cambodia's economic and social development (contributing approximately 22 percent to the country's GDP) and providing a major source of employment and income, particularly for the rural poor. The country reached lower middle-income status in 2015. By 2019, the poverty rate had almost halved, from 33.8 percent in 2009 to 17.8 percent. Despite this progress, some 2.4 million people (15 percent of the population) are considered near-poor¹ and vulnerable to falling back into poverty when exposed to economic and other external shocks.

2. **The COVID-19 pandemic and associated global economic disruptions pushed Cambodia into its first recession in 25 years, with GDP contracting by 3.6 percent in 2020.** COVID-19 had a pronounced impact on Cambodia's economy as the three sectors that were most heavily affected—tourism, manufacturing (garment) exports, and construction—were the major drivers of Cambodia's growth immediately prior to the pandemic. The economic downturn from COVID-19 led to at least an additional 500,000 people being classified as poor in 2020, and price surges in 2022 further pressured household budgets, potentially raising poverty by another 4 percentage points from 2019/20 levels, excluding the pandemic's effects. Climate risks, such as floods and extreme heat, also threaten poverty reduction efforts, with the poorest communities being the most at risk. If unaddressed, climate change could increase poverty rate by up to six

¹ Near-poor is defined as those whose daily per capita consumption lies between the poverty line and 1.25 times poverty line (Cambodia Socio-Economic Survey (2019/20), National Institute of Statistics, Ministry of Planning, Royal Government of Cambodia).



percentage points by 2040, with women and disadvantaged groups being particularly exposed. The pandemic also increased malnutrition, especially among marginalized groups. While the economy has gradually recovered, accelerating to 5.0 percent GDP growth in 2023, economic recovery is unlikely to return to the pre-pandemic growth levels of 8 percent. While farm employment steadily declined, accounting for 35.7 percent of total employment (2021), owing to Cambodia's structural transformation, rural livelihoods, where about 76 percent of people rely directly on agriculture and fishing, were particularly affected.

3. Cambodia is increasingly vulnerable to climate hazards and environmental pressures. Over the last three decades, Cambodia has faced 20 floods, 5 droughts, 6 tropical storms, and 1 famine, with at least US\$1.5 billion of estimated damage.² The 2011 flood alone caused over US\$200 million in agricultural losses. By the 2040s, a quarter of the population could be exposed to extreme flooding, and severe climate events could reduce GDP by 9.8 percent in the 2050s.³ Between 2011 and 2021, forest loss jumped to 1.76 percent annually, up from 1 percent in 2001–2010, driven by pasture and cropland expansion and commercial logging. The country's GHG emissions have been rising, with the agriculture forest and other land use (AFOLU) sector accounting for roughly three-quarters of national GHG emissions.

4. The Royal Government of Cambodia (RGC) aims to sustain pro-poor growth and foster greater competitiveness, resilience, and sustainable development. For competitiveness, the government aims to improve the efficiency of producers and incentivize productivity in firms while addressing infrastructure gaps to support rural and urban connectivity in Cambodia. The RGC also aims to enhance the quality of human capital to meet the country's development needs and create a workforce that drives productivity growth. The RGC has also created several climate-smart development policies to address the country's significant climate risks.

Sectoral and Institutional Context

5. Agriculture in Cambodia is undergoing structural change in terms of GDP contribution, and employment. Agriculture's GDP contribution dropped from 36 percent in 2000 to 21 percent by 2019, and agricultural employment fell from 73 percent to 35 percent in the same period.⁴ While Cambodia still has a higher share of agricultural jobs compared to regional peers, rural workers are increasingly moving to higher-productivity urban jobs in manufacturing and services. Smallholder farming households⁵ have expanded livestock production, which now accounts for 11.7 percent of agricultural GDP, down from 26.5 percent in 2000. Livestock production has grown at 5.5 percent annually, driven by poultry and pigs, especially in Kampong Speu. Table 1 below shows the increasing livestock numbers in Cambodia.

Table 1: Evolution of livestock numbers between 2016 and 2023

	2016	2017	2018	2019	2020	2021	2022	2023	% change per annum 2016-2023 (CAGR))
Cattle	2,920,314	2,971,722	2,928,534	2,779,762	3,272,401	3,399,957	3,474,451	3,486,413	2.2%
Pigs	2,970,624	3,074,283	2,747,855	2,185,924	2,516,679	3,018,797	3,431,062	3,584,003	2.4%
Poultry	35,733,761	36,244,939	38,166,751	40,395,453	48,062,169	53,422,704	58,154,987	59,351,383	6.5%

Source: GDAHP Annual Report, 2023 and author's calculation

6. A growing population, increasing urbanization, and related rising incomes are driving changing dietary patterns, creating opportunities for smallholder livestock farmers to earn higher incomes. Cambodia produces enough meat to meet 82 percent of the local, annual market demand, with the rest being covered by imports.⁶ In 2022, Cambodia imported

² Emergency-Events Database [EM-DAT], 2021.

³ Cambodia CCDR, 2023.

⁴ National Council for Sustainable Development (NCSD), 2019.

⁵ Smallholder farming households commonly raise 2-9 heads of cattle, and 3-30 heads of small livestock.

⁶ General Directorate of Animal Health and Production (GDAHP) Annual Report, 2022.



about 17,000 pigs and 5 million live chickens. The country could replace meat imports with local production and possibly export to neighboring countries, depending on improvements in efficiency and competitiveness in the livestock industry. Raising livestock offers higher returns and lower variable costs, making it a better income source. Growing domestic demand for livestock products presents an opportunity to enhance smallholder farmers' livelihoods.

7. Livestock production is still characterized by low productivity, mainly due to inadequate use of advanced technologies and practices. Livestock in Cambodia are raised in subsistence systems, with few commercial farms. Farmers rely on traditional means due to limited access to advanced knowledge, technologies, and good practices. High production costs, low access to quality breeding stock and feed, and low adoption of good animal husbandry practices (GAHPs) severely constrain productivity. Farmers also lack institutional support and advisory services that are crucial for adopting improved practices. The lack of a strong public agricultural extension service means that extension information and training insufficiently reach smallholder farmers.

8. The agriculture and livestock sector in Cambodia is highly vulnerable to climate hazards but also contributes to greenhouse gas (GHG) emissions. Climate change-related damage and losses in agriculture over the 2006–2019 period are estimated at US\$1.18 billion, of which floods and droughts accounted for 64 percent and 35 percent, respectively.⁷ The 2011 floods caused significant livestock losses, with two-thirds of households that owned livestock losing animals. Since the 1970s, agriculture's contribution to climate change has also been increasing. The main drivers of agricultural GHG emissions are rice cultivation (65 percent), followed by livestock emissions (24 percent). The expansion of agricultural land areas, including by overgrazing, has also significantly contributed to forest and biodiversity loss. Due to its low productivity, Cambodian livestock production is emission-intensive: 1 kilogram of beef emits 89 kilograms of carbon dioxide equivalent (kg CO₂e), compared to 69 kg CO₂e in Thailand and 51 kg CO₂e in Vietnam. Increasing livestock numbers may significantly contribute to emissions.

9. Since the 1990s, Cambodia has made strides in organizing farmers into producer groups (PGs)⁸ to enhance cooperation. PGs have been essential for strengthening collaboration between smallholder farmers and generating value for farmers through aggregation, enhanced processing, trade, bargaining power, and social capital. However, few Cambodian PGs are successfully active in agricultural trade and processing, despite the demonstrated benefit of well-functioning PGs.⁹ In many cases, PGs are in debt, have gone bankrupt, and have lost members. Lack of working capital, poor management and leadership, limited business acumen, and the marginalization of women significantly hinder PGs' performance.

10. Smallholder farmers struggle to gain market access and competitive prices for their produce. Only about 10 percent of the country's agricultural production is processed, a relatively constant figure since the late 1990s,¹⁰ due to low investment in agro-processing, resulting in poor post-production infrastructure. Most pigs and cattle are slaughtered traditionally at simple facilities with low capacities and poor sanitary standards due to a lack of more modern slaughterhouses. The growing private sector offers opportunities for public-private partnerships to improve smallholder access to infrastructure, markets, and competitive prices. However, partnership models like contract farming, which involve only 16 percent of PGs, remain limited in scope and face challenges. Strengthening PGs' capacity and their

⁷ Agriculture deep-dive note for the Cambodia CCDR.

⁸ Producer groups refer to producer organizations, including agriculture cooperatives and less formal organizations, which are considered equivalent in this project context.

⁹ Assessment of the Agricultural Cooperatives for Developing Policy on Public, Private and Producer Partnership (PPPP) in Cambodia, Centre for Policy Studies, 2023.

¹⁰ Agriculture deep-dive note for the Cambodia CCDR.



relationships is crucial to aligning needs, improving produce quality, and fostering mutual benefit.^{11,12}

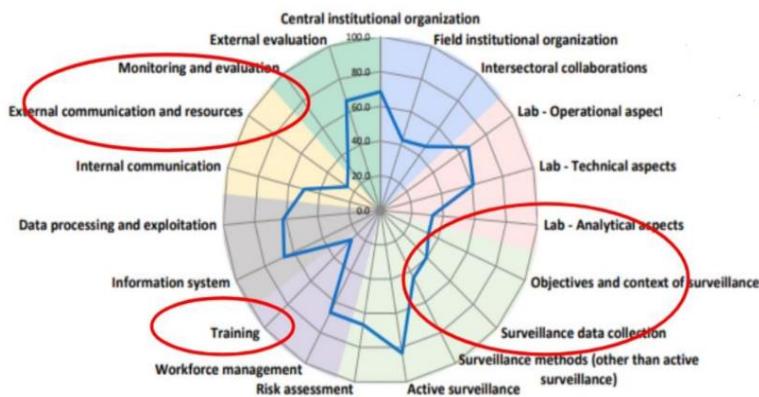


Figure 1. SWOT Analysis of Animal Disease Surveillance and Management System in Cambodia

who deliver most field veterinary services, operate voluntarily, with limited incentives, leading to high turnover and inconsistent services.

C. Proposed Development Objective

Project Development Objective

12. The Project Development Objective is to sustainably improve livestock-based livelihoods and strengthen animal health services in target project locations.

Key Results

13. The achievement of the PDO will be measured through the following indicators: (i) percentage increase in volume of gross sales of livestock and livestock products; (ii) number of farmers adopting climate-smart or sustainable livestock technologies or practices; and (iii) percentage of farmers satisfied with animal health services provided in the project target areas.

D. Project Description

14. **The project comprises the following three main components:** (i) Promote Inclusive and Sustainable Livestock Value Chains; (ii) Enhance Animal Production and Health Services; and (iii) Project Management, Monitoring, Evaluation, and Learning.

Component 1: Promote Inclusive and Sustainable Livestock Value Chains.

¹¹ Assessment of the Agricultural Cooperatives for Developing Policy on Public, Private and Producer Partnership (PPPP) in Cambodia. Centre for Policy Studies, 2023.

¹² Ibid.

¹³ WB Report: Crossborder and Regional Collaboration to reduce one health risks in Cambodia and Laos.

11. **Inadequate control of animal diseases, zoonoses, and transboundary animal diseases (TADs) threatens livestock productivity and commercialization in Cambodia.** Recent outbreaks of foot and mouth disease, African swine fever, highly pathogenic avian influenza, and lumpy skin disease have caused major economic losses.¹³ The country also faces food safety issues, antimicrobial resistance (AMR), and neglected zoonotic diseases, with climate change expected to increase risks. National and subnational veterinary services struggle with limited resources, insufficient training, and poor surveillance (Figure 1). At the same time, the over 9,000 village animal health workers (VAHWs),



15. **This component aims to sustainably improve the productivity of livestock production and orient farmers toward more commercialization.** Such improvement will be done by promoting productivity-enhancing technology and practices, which also build resilience and reduce GHG emissions, and by fostering market-driven commercialization approaches in selected livestock value chains. The activities under this component will contribute to increased returns to producers while enhancing resilience to climate shocks and reducing the GHG emission intensity of livestock production. The component will finance; (i) access to climate-smart technologies and practices, (ii) technical assistance (TA) to improve the organization of farmers and strengthen the operation of producer groups, (iii) the rehabilitation and upgrade of value chain infrastructures to meet higher safety and quality standards, and (iv) facilitation of the linkage between PGs and agribusinesses.

Sub-component 1.1: Enhancement of Livestock Productivity.

16. **Activities under this subcomponent will focus on improving livestock productivity and output volume while enhancing climate resilience and reducing the emission intensity of livestock production.** The project will finance (i) Climate-smart technology and practice packages (PaTecs), which include improved breed, feed, and fodder production, rangeland management, GAHPs, manure management, and crop-livestock integration to increase productivity, build resilience of livestock, and reduce livestock GHG emissions intensity; and (ii) Strengthening PGs. The project will support the capacity building of producer organizations for climate-smart production and commercialization. The project will support improved farmer access to four groups of PaTecs (i) Breeding; (ii) High-quality feed and fodder and improved pasture management; (iii) Good animal husbandry practices (GAHPs); and (iv) Animal waste management.

Sub-component 1.2: Promoting Smallholder Market Access.

17. **Activities under this subcomponent will focus on improving the commercialization of smallholder farmers through enhanced access to markets, aiming to increase livestock product sales and farmer incomes.** The project will finance (i) the establishment/strengthening of business partnerships between smallholder farmers and agribusiness to unleash market opportunities for smallholder livestock producers and (ii) the improvement of common post-harvest infrastructure such as slaughterhouses and market facilities to increase quality, aggregation, processing, and trade of livestock and livestock products of farmers and agribusinesses. The project will provide TA to smallholder farmers to foster improved participation in value chains through establishing and strengthening/expanding available business partnerships between smallholders, traders, and small, medium, and large agribusinesses. The project will fund upgrades to important value chain infrastructure, such as slaughterhouses and marketplaces, to boost access for smallholder farmers and enhance product quality. The project will fund the upgrading of value chain infrastructure,¹⁴ which is largely publicly owned but privately operated. Infrastructure upgrades will be based on simplified LBPIs or MOUs co-developed by PGs, traders, and private sector operators. Detailed information on eligible criteria, selection process, fund flow and evaluation criteria for slaughterhouse is outlined in the PIM.

Component 2: Enhance Animal Production and Health Services

18. **This component seeks to strengthen national and subnational extension and animal health services.** Strengthening the core capacities of national and subnational institutions will allow them to deliver effective and consistent extension and animal health services, and to manage animal diseases and zoonoses. By doing so, the activity will increase or preserve livestock herd productivity and farmer incomes by limiting losses from the growing burden of

¹⁴ Slaughterhouses are operated by private sector players through a long-term lease agreement (up to 20 years) with the government, based on a bidding process. Leases are renewable.



animal diseases and climate hazards thanks to improved climate-smart information and animal health. Ultimately, the activities will enhance the resilience of livestock-based livelihoods. The project will finance; (i) demonstration farms to showcase climate smart technologies and practices, (ii) TA for the development and dissemination of extension information through an information, education, and communication (IEC) approach, (iii) a capacity-building program for national, provincial, and grassroots-level animal health service providers (GDAHP, Provincial Offices of Animal Health and Production (POAHPs), VAHWs, etc.), and (iv) establishment of an enhanced local disease surveillance system.

Subcomponent 2.1: Strengthening Capacity in Animal Production Service Delivery.

19. **Activities under this subcomponent will focus on improving farmers' access to extension information and training by enhancing national capacities to deliver and coordinate extension services.** The project will finance two main extension approaches to achieve this: (i) field demonstrations and training to equip farmers with practical skills and encourage them to adopt PaTecs most suitable for them, and (ii) IEC, using various actors and media, including information and communication technologies (ICTs), to provide easy access to information and training materials for production and post-production. The project will finance the development and delivery of livestock extension services through demonstration farms, developing and delivering IEC materials and training to farmers via PGs, and other means of outreach. The project will strengthen the capacity of available public extension institutions – extension workers, MAFF, GDHAP, and POAHP officers, VAHWs, and the cadre of commune agriculture officers (CAOs) - which the government is recruiting to increase farmers' knowledge and skills in areas of animal production, animal health, PaTecs, and post-harvest management, processing, and marketing.

Sub-component 2.2: Strengthening Animal Health Service Delivery Capacity.

20. **Under this subcomponent, the project will focus on improving the capacities of national and subnational institutions to deliver animal health services and to perform disease surveillance and management in project locations.** The project would finance (i) strengthening capacities of national and local institutions like MAFF, GDAHP, POAHPs, CAOs, and VAHWs to deliver veterinary services through bolstering the workforce, skills, and incentives for last-mile service providers, and (ii) the strengthening of disease surveillance and response capacities for prevalent TADs and zoonoses in project locations, through an enhanced local surveillance system.

Component 3: Project Management, Monitoring, Evaluation, and Learning

21. **This component will finance operating costs, consultants, and training to carry out fiduciary, environmental, and social safeguards activities and report on the project's implementation progress and results.** The project will support developing and maintaining a management information system for results tracking and reporting. The project will establish a robust monitoring system to track project activities and measure impacts on productivity, value addition, and animal disease and zoonoses. The project will also integrate data collection to track the project's contribution to reducing GHG emission intensities of livestock as part of the monitoring system. The project will implement surveys to ensure systematic assessments of implementation experience and lessons learned. Qualitative assessments will also generate knowledge during implementation to make mid-course corrections. This component will also finance the mid-term review, final evaluation reports, and underlying analytical work.

22. **Project Beneficiaries.** The project will cover Battambang, Tbong Khmum, and Kampong Speu provinces, chosen for their high-risk status —Battambang and Tbong Khmum for their cross-border entry points where TADs first appeared, and Kampong Speu for its high livestock density and animal trade. Around 30,000 direct beneficiaries will include farmers, staff of GDAHP, POAHP, MoH, MoE, VAHWs, CAOs, traders, and agribusinesses, 40 percent being female. The project will



focus on high-potential smallholder farmers and work with existing PGs interested in expanding their livestock businesses, with support provided mainly through PGs. Approximately 20,000 farmers will benefit from training, grant co-financing for climate-smart technologies, and access to improved infrastructure, veterinary, and extension services. The remaining 10,000 beneficiaries will include farming households, agribusinesses, and traders. SMEs collaborating with farmers and PGs will also receive support. The project will use transparent, participatory processes for beneficiary selection. Women will be a key focus, with efforts to enhance their livestock production skills, access to technology, and involvement in producer organization management.

Legal Operational Policies	Triggered?
Projects on International Waterways OP 7.50	No
Projects in Disputed Area OP 7.60	No
Summary of Screening of Environmental and Social Risks and Impacts	

23. **The overall environmental and social risk rating is substantial.** The project activities are mainly TA and construction/renovation of value chain infrastructure. This includes grant co-financing to promote the uptake of PaTecs, and feed/fodder production. Eight ESSs are currently relevant to the project.

24. **The environmental risk is rated substantial given the prevalent nature of many zoonotic diseases and potentially significant impacts on human health in Cambodia.** Direct environmental risks and potential impacts include (i) spreading zoonotic diseases/infections due to handling and inappropriate waste management of biological materials (from lab testing, slaughterhouses, markets); (ii) waste, noise, dust, vibration, occupational health and safety for workers, community health and safety associated with civil works; and (iii) resource efficiency and pollution in feed/fodder production and slaughterhouses and markets. Downstream impacts may arise from TA for increased livestock production, leading to higher feed crop demand, potential forest-to-agriculture conversion, and impacts on habitats and biodiversity.

25. **The social risk is rated moderate.** Impacts include (i) possible exclusion of vulnerable and disadvantaged groups due to improperly designed project service delivery; (ii) risks related to labor and working conditions; (iii) potential impacts on community safety/public health caused by upgrading/construction of value chain infrastructure and minor labor influxes; (iv) risk of increased sexual exploitation and abuse/sexual harassment of vulnerable groups; (v) risks related to adequate stakeholder engagement, including with Indigenous Peoples' communities.

26. **The project will apply standard practices and measures from the World Bank General Environmental Health and Safety Guidelines (EHSG) and Industry Sector Specific EHSGs for livestock and poultry production and processing.** The project has prepared an Environmental and Social Commitment Plan (ESCP), a Stakeholder Engagement Plan (SEP), and an Environmental and Social Management Framework (ESMF), which includes screening tools and procedures for site-specific instruments. The ESMF also includes waste management measures aligned with the Good International Industrial Practices (GIIP) and animal welfare measures from the IFC Good Practice Note on Improving Animal Welfare in Livestock Operations. ToRs for project activities will integrate ESF requirements, addressing potential environmental and social (E&S) risks, including those associated with ESS6. Social exclusion risks will be mitigated by reviewing the implementation of the beneficiary targeting strategy and through a robust GRM to ensure benefits reach vulnerable communities.



27. **Capacity for ESF implementation and monitoring.** Under MAFF, the PIT will include one environmental and one social focal staff/officer. GDAHP will utilize the expertise of MAFF and other relevant ministries to address zoonotic risks through the Z-TWG. Capacity building will be planned for E&S focal persons and other colleagues on ESF instruments.

E. Implementation

Institutional and Implementation Arrangements

28. **MAFF will lead project implementation as the implementing agency via the GDAHP and related technical departments at the national level, alongside the Provincial Department of Agriculture Forestry and Fisheries (PDAFF) and POAHP.** The implementing agency (IA) will have a project management team (PMT), led by a Project Director and including a deputy director, relevant technical experts, administration, procurement, finance, environmental and social standard (ESS), and M&E experts from relevant units of GDAHP and MAFF. The PMT will be responsible for the overall management of project implementation and external communication, including the agreed reporting to the World Bank. The PMT will be physically located in MAFF. The project implementation team (PIT) will be established to support the planning and execution of daily activities. During implementation, the IA, through the PIT, will draw on technical expertise and advice from broader MAFF departments and relevant ministries like the MoE and MoH to implement zoonotic-related activities. The PIT will be supported by relevant consultants and/or contract staff to bolster implementation capacity. Strategic direction and guidance for the management and operation of the project will be provided by a high-level Project Steering Committee (PSC) chaired by MAFF¹⁵ and which includes MEF. A provincial project coordinating office (PPCO) will lead implementation in each province, drawing technical expertise from PDAFF and POAHP. Last-mile services at the communal level will be provided to farmers largely through PGs through POAHP, CAOs, and VAHWs. Private sector players will be the primary providers of inputs, technologies, and supplies.

CONTACT POINT

World Bank

Mudita Chamroeun
Senior Rural Development Specialist

Nkulomo Zinyengere
Senior Climate Finance Specialist

Borrower/Client/Recipient

KINGDOM OF CAMBODIA
H.E. Seilava Ros
Secretary of State
seilava_ros@mef.gov.kh

Implementing Agencies

¹⁵ Minister or his/her delegate.

**Ministry of Agriculture, Forestry and Fisheries (MAFF)**

H.E. Pyseth Meas
Under Secretary of State
pysethmeas1@gmail.com

FOR MORE INFORMATION CONTACT

The World Bank
1818 H Street, NW
Washington, D.C. 20433
Telephone: (202) 473-1000
Web: <http://www.worldbank.org/projects>

APPROVAL

Task Team Leader(s):	Mudita Chamroeun, Nkulumo Zinyengere
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Approved By

Practice Manager/Manager:	Paavo Eliste	04-Jun-2024
Country Director:	Tania Meyer	17-Dec-2024