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SCALING UP CLIMATE AMBITION ON LAND USE AND AGRICULTURE THROUGH NDCS AND NAPS (SCALA)

Inception Report | CAMBODIA

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The UNDP-FAO Global Support Programme on Scaling up Climate Ambition on Land Use and Agriculture through NDCs and NAPs (SCALA) is a five-year programme funded by Germany's Federal Ministry for Environment, Nature Conservation and Nuclear Safety (BMUV) through the International Climate Initiative (IKI).

The inception report was drafted by Yim Soksophors (FAO), the national consultant under the SCALA programme in Cambodia. Special thanks are extended to Ann ChanSopheak (FAO), Srijita Dasgupta (FAO), Damen Beau (FAO), Krib Sitathani (UNDP), and Nhem Sovanna (UNDP) for their continuous guidance and support in undertaking the various activities during the inception phase. This report was written based on the key activities and findings from various inception phase exercises such as development of the Climate Action Review (CAR), the baseline survey, the Theory of Change (TOC), the workplan, together with key technical inputs and feedback received during the technical consultation and planning meetings with the government entities, and the inception workshop.

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ABBREVIATIONS AND ACRONYMS

ADB	Asian Development Bank
AFOLU	agriculture, forestry and other land use
BMUV	Germany's Federal Ministry for the Environment, Nature Conservation, Building and Nuclear Safety
CAR	Climate Action Review
CARD	Council for Agriculture and Rural Development
CBO	Community-Based Organization
CCAP	Cambodian Climate Change Action Plan
CCCA	Cambodia Climate Change Alliance
CCPAP	Climate Change Priorities Action Plan
CF	Community Forestry
CPA	Community Protected Area
EU	European Union
FAO	Food and Agriculture Organization of the United Nations
FOLU	forestry and other land use
GDA	General Directorate of Agriculture
GDP	gross domestic product
GDANCP	General Department of Administration for Nature Conservation and Protection
GHG	greenhouse Gas
GSP	Generalized System of Preference
HDI	Human Development Index
IKI	International Climate Initiative
MAFF	Ministry of Agriculture Forestry and Fisheries
MDG	Millennium Development Goal



MEF	Ministry of Economic and Finance
MOE	Ministry of Environment
NAP	National Adaptation Plans
NBP	National Bio-digester Programme
NCCC	National Climate Change Committee
NCSD	National Council for Sustainable Development
NDC	nationally determined contribution
NGO	Non-Governmental Organization
NSDP	National Strategic Development Plan
PAG	Project Advisory Group
PDE	Provincial Department of Environment
PMU	Project Management Unit
PSC	Project Steering Committee
SCALA	Scaling up Climate Ambition on Land use and Agriculture through NDCs and NAPs
SPCR	Strategic Programme for Climate Resilience
TOC	Theory of Change
UNDP	United Nations Development Programme
UNFCCC	United Nations Framework Convention on Climate Change
USD	United States dollar



1. INTRODUCTION

The Paris Agreement adopted in 2015 aims to limit global warming to well below 2, preferably to 1.5 degrees Celsius, compared to pre-industrial levels, and to significantly reduce the risks and impacts of climate change. Cambodia has a strong commitment to implement the climate actions indicated in its nationally determined contribution (Updated NDC, 2020) in order to realize a low carbon and resilient society. Cambodia is highly vulnerable to climate change and hence implementation of the priority climate actions that lead by example in line with the capacity and responsibilities under the United Nations Framework Convention on Climate Change (UNFCCC) is required. To achieve the updated NDC, Cambodia looks forward to working with all partners to address its needs in financing, capacity development, and technology transfer.

The Food and Agriculture Organization of the United Nations (FAO) and the United Nations Development Programme (UNDP) are jointly implementing the Support Programme on Scaling up Climate Ambition on Land Use and Agriculture through NDCs and NAPs (SCALA). Cambodia is one of twelve partner countries of the Programme, including Argentina, Cambodia, Colombia, Costa Rica, Côte d'Ivoire, Egypt, Ethiopia, Mongolia, Nepal, Senegal, Thailand, and Uganda. In Cambodia, FAO and UNDP closely cooperate with the Ministry of Agriculture, Forestry and Fisheries (MAFF) and the Ministry of Environment (MoE) to implement the SCALA Programme in line with Cambodia's updated NDC, Agriculture Development Policy 2030, Cambodia Climate Change Priority Action Plan (CCPAP) 2023-2030 and the Cambodia Climate Change Strategic Plan (CCCSP).

During the inception phase of the SCALA Programme, the Cambodia FAO and UNDP country teams with support from the global team have been working on a desk review of relevant documents, conducting a climate action review (CAR), preparation of the baseline report, development of the draft Theory of Change (ToC), and the organization of technical consultation meetings with the government partners and stakeholders to collect feedback and comments for improving and finalizing the documents mentioned above.

1.1 PURPOSE OF REPORT

The main purpose of this report is to provide information on the different activities that were carried out during the inception phase of the SCALA Programme in Cambodia. The report further provides details on the results of the Climate Action Review (CAR) matrix, the baseline survey, the Theory of Change (TOC), and presents the workplan that were produced through participatory stakeholder consultations. The findings in this report can be used as guidance for the preparation of the SCALA Programme implementation in Cambodia.

1.2 OVERVIEW OF THE GLOBAL PROGRAMME

The Support Programme on Scaling up Climate Ambition on Land Use and Agriculture through NDCs and NAPs (SCALA) is a multi-year initiative funded by Germany's Federal Ministry for the Environment, Nature Conservation, Nuclear and Consumer Protection (BMUV) through the International Climate Initiative (IKI). The SCALA Programme has been designed to support transformative climate action in the land use and agriculture sectors to reduce GHG emissions and/or enhance removals, as well as strengthen resilience and adaptive capacity to climate change in participant countries. Its specific objective is for **countries to have translated their NDC and/or NAPs into actionable and transformative climate solutions in land use and agriculture with multi-stakeholder engagement**. It emphasizes collaboration between the public and private sectors to drive implementation. This will be achieved through three outcomes:

Outcome 1: Information and assessments used by national stakeholders to identify and appraise transformative climate actions to advance NDC/NAP priorities in land use and agriculture.



Outcome 2: Climate risk-informed land use and agriculture sector priorities integrated into national and sectoral planning, budgeting and monitoring.

Outcome 3: Private sector engagement in climate action in land use and agriculture increased.

The SCALA Programme supports **12 countries in Africa, Asia and Latin America**. It works directly with key government stakeholders (such as, Ministries of Agriculture, Environment, Finance and Planning and Climate Change Coordination bodies) as well as representatives of civil society organizations, private sector, research and academia. To reach a wider selection of countries, it also promotes sharing knowledge and lessons learned through a technical facility set up under the Programme focused on private sector engagement and public-private collaboration.

Funded by the German Federal Ministry for Environment and Consumer Protection (BMUV) through the International Climate Initiative (IKI), the SCALA Programme is implemented jointly by the Food and Agriculture Organization and the United Nations Development Programme, building on lessons learned from the IKI-funded Integrating Agriculture in National Adaptation Plans (NAP-Ag) Programme. The Programme taps into the technical knowledge and experience of both agencies, working through the respective Regional Offices, Regional Centers of Expertise and Country Offices in support of country programming frameworks. Both agencies have substantial global, regional and national initiatives which is leveraged for knowledge exchange and complementary activities.

1.3 INCEPTION PHASE

During the inception phase of the programme templates and guidance documents to conduct a baseline survey, theory of transformative systems change, and climate action review matrix were developed and shared by the UNDP and FAO global team to facilitate the assessment and prioritization climate actions based on NDC/NAP priorities.

Preparation during the inception phase entailed several consultations and reviews including the following:

1. **The introductory meeting of the SCALA Programme with the National Climate Change Technical Specialist** was organized on 28 May 2021 to introduce the SCALA Programme. The specific purposes of the meeting were to 1) exchange updates on country and global progress and 2) provide guidance to develop inception phase materials. Through this meeting, the national consultant was provided with a context of the project as relevant to Cambodia as well as a discussion of the objectives and expected outcomes. The national consultant benefitted from learning about the climate action review tool as explained by the global team that was later used for the review of the priority climate actions related to agriculture and land use indicated in the Cambodia's updated NDC and NAP (Annex 1: Meeting agenda).
2. **The meeting with the Ministry of Agriculture Forestry and Fisheries (MAFF):** On 11 June 2021, a formal introductory meeting was organized by FAO with the focal point(s) of the Ministry of Agriculture, Forestry and Fisheries (MAFF). The purpose of the meeting was to 1) introduce the focal point of the SCALA Team and 2) present the Programme and the inception phase processes to the FP and the other participants from MAFF. In total, there were 11 participants, including 3 participants from MAFF, 6 from FAO, and 2 from UNDP. Mr. Prum Somany is the MAFF focal point who participated in the meeting together with other 2 colleagues, Ms. Sar Sophyrak and Ms. On Neangpisy. They all will be involved in supporting the SCALA Programme from MAFF side. During the meeting, Mr. Beau Damen (FAO) presented an overview of the SCALA Programme including the objectives, participating countries, indicative budget, rationale, and approaches. This was followed by a presentation by Ms. Ann Chansopheak (FAO) on the structure of the coordination, outcome, output, and target. Lastly, Mr. Yim Soksophors (FAO) presented an overview of the different activities planned during the inception phase, including the development of the workplan, the Climate Action Review (CAR), the baseline survey and the Theory of Change (TOC). It was agreed that the identification of the Programme intervention will be based on the Climate Action Review Matrix. The MAFF focal point further suggested that the SCALA Programme should



broaden its focus beyond forestry and also include livestock sub-sector as it is aligned with mandate of MAFF. In addition, the meeting also discussed potential roles of the national project coordinator and the Project Management Unit (PMU). (Annex 2: Inception meeting with MAFF).

3. **Desk review of relevant documents and climate action review:** Primarily, the NDC and NAP were used as the reference documents for the climate action review. It was noted that both documents highlighted several climate actions related to agriculture and land use which are aligned with the priority areas of the SCALA Programme. In addition to the updated NDC and NAP, other relevant documents were also collected and used as complementary documents. These include the Cambodia Climate Change Strategic Plan 2014-2023, National REDD+ Strategy 2017-2026, and the Agriculture Strategic Development Plan 2019-2023. The CAR matrix was used to score and rank the climate actions related to agriculture and land use. 28 relevant climate actions were identified and reviewed. Details of the review are provided in the section 3 of this report.
4. **Technical Consultation Meetings:** With support from the FAO and UNDP country offices and the global team, 2 technical consultation meetings were organized separately. The first meeting was organized with MAFF on 7 September 2021. The meeting was chaired by **H.E. Chan Phalloeun**, Secretary of State and also the chairperson of the climate change technical working group (CCTWG) of MAFF. The majority of participants were from CCTWG and composed of representatives from different technical departments under MAFF. The participants suggested that the SCALA Programme should cover various sub-sector such as forestry, fisheries, livestock and crop production. H.E. Chan Phalloeun provided clarifications that the Programme has resources available for the priority climate actions, meaning that it would not be able to cover all of the sub-sectors, and hence the focus should be on priority climate actions that will contribute to the accomplishment of Cambodia's updated NDC. The suggestion from MAFF was that livestock and animal waste management to convert animal manure into biogas shows potential for transformative climate action and it will be a priority focus under SCALA. On **19 October 2021**, a second technical consultation meeting was organized with the Ministry of Environment (MOE). The meeting was chaired by **H.E. Chea Sam Ang**, Secretary of State with a total of 20 participants, comprising of representatives from different departments under MOE. In general, MOE is interested in the mitigation aspect of agriculture and land use as it is aligned with the priorities of the ministry. They suggested that the SCALA Programme should cover the mitigation efforts in relation to REDD+ in the forest areas (Annexes 3&4: Technical Consultation meetings with MAFF&MOE).
5. **Inception Workshop:** The inception workshop was organized virtually on March 25, 2022. In total there were 35 participants (7 women, 28 men) comprising of representatives from government partners, UN agencies, research and training institutions and the private sector. The main purpose of the workshop was to validate the results of the Climate Action Review (CAR), baseline survey, Theory of Change (TOC) and activity work plan of the SCALA Programme in Cambodia. The participants provided key comments and suggestions on the work plan and baseline survey. Some key suggestions included the need for gender transformative analysis as part of the work plan, as well as revisiting the baseline survey to see how many ministries have adopted sectoral plans and/or budget submissions that include NAP land use and agriculture priorities. After the organization of the inception workshop, the national consultant with support from the country and global teams finalized the different inception phase materials (for example, climate action review, baseline survey, Theory of Change, work plan) and prepared the inception workshop report.



2. CONTEXT

2.1 COUNTRY PROFILE

The Kingdom of Cambodia is situated in mainland Southeast Asia with a population of over 14 million people, and with approximately 80 percent of this population living in rural areas. In Cambodia – which is ranked the 12th most vulnerable country in the world to climate change by the Global Climate Risk Index 2020 – increases in the frequency of floods, droughts, and windstorms in recent years cost 10 percent of the country's Gross Domestic Product (GDP) in 2015 through disaster-related loss and damages. The agriculture sector employs 57 percent of the country's labor force. Approximately 80 percent of the country's population lives along the Mekong River and Tonle Sap Lake, where flooding occurs due to increased water levels between early July and early October. Disruptions to logistical corridors caused by floods have a profound impact on agricultural supply chains, both domestically and for international trade. At the same time, 39 percent of the country's total GHG emissions come from the agriculture and land use sectors.

Cambodia has made significant progress in economic growth and poverty reduction. The economic growth over the past two decades (1994-2015) averaged 7.6 percent per annum, ranking sixth in the world (FAO, 2022). The poverty headcount has fallen from 47.8 percent in 2007 to 13.5 percent in 2014, and is now expected to be below 10 percent. Strong growth of the agricultural sector from 2004 to 2012 (above 5 percent per annum) significantly contributed to alleviate poverty. It was estimated that more than 60 percent of the poverty reduction between 2007 and 2011 was attributed to the agriculture sector (Eliste and Zorya, 2015). In 2020, the UNDP predicted that Covid-19 would raise the poverty headcount rate to 17.6 percent, 1.34 million people would fall back into poverty, and the unemployment rate would increase to 4.8 percent. With falling incomes have come rising levels of debt. According to the National Institute of Statistics' *Cambodia Socio-Economic Survey*, conducted between July 2019 and June 2020, an estimated 1.25 million households, just under 35 percent of all households in Cambodia, were indebted at that time (Covid in Cambodia: Vulnerable Households and Debt, 2021).

In spite of the significant reduction in poverty headcounts, the vulnerability or the risk of sliding back into poverty remains high in Cambodia. While Cambodia has achieved the Millennium Development Goal (MDG) target of halving poverty in 2009, the vast majority of families who escaped poverty were only able to do so by a small margin. The multidimensional poverty headcount (2014) stands at 34.9 percent of the population (UNDP, 2018). Cambodia's Human Development Index (HDI) value for 2017 is 0.582— which puts the country in the medium human development category—positioning it at 146 out of 189 countries and territories, the lowest in Southeast Asia after Myanmar (UNDP, 2019). Cambodia is expected to graduate from LDC status by 2024. This is expected to imply the phasing out of preferential treatment by development partners, financial institutions, and partner countries, and the loss of preferential trade treatment. In addition, the safeguard measures on rice from Cambodia imposed by the European Union in early 2019, the possible suspension of Cambodia's preferential access to the European Union market under the Everything But Arms (EBA) scheme, the possible loss of the US Generalized System of Preference (GSP) pose serious threats for the Cambodia's competitiveness and economic performance.

Cambodia's development focus is on poverty reduction and stable economic growth, to support the country's efforts to become an upper middle-income nation by 2030. To meet this aim, the National Strategic Development Plan (NSDP) prioritizes: (1) investment in rural areas; (2) decentralization of national governance; and (3) further integration into the ASEAN region and the wider international community (MOE, 2020).

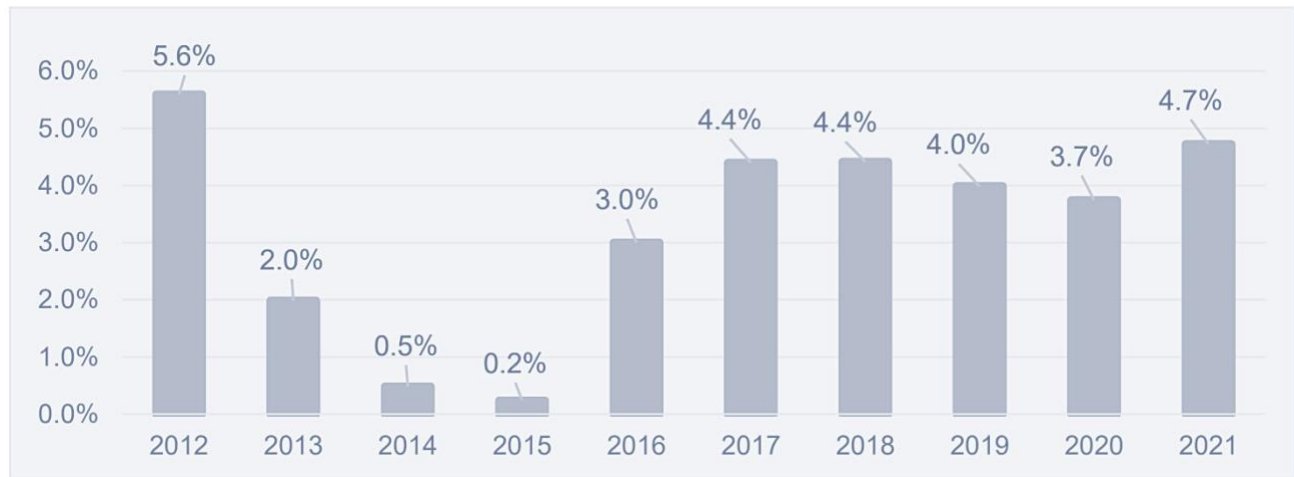
2.1.1 Agriculture and Land Use Sector

Cambodia's agriculture sector is already being seriously impacted, and is further threatened, by climate change (CC). Rural economies and the livelihoods of poor, agriculture-dependent rural households are most at risk. Vulnerability of agriculture-dependent populations is also linked to the degradation of ecosystems that limits their capacity to support communities' economic, social and environmental needs (Teresa *et al.*, 2018), which in turn increases their sensitivity to climate impacts. Rainfed agriculture



contributes significantly to Cambodia's national economy, and more so for the majority of the rural population. In total, agriculture contributes approximately 24.4 percent to national GDP (MAFF, 2022). As illustrated in figure 1, gross agricultural product has constantly increased over the past decade.

Figure 1 – Annual growth of Gross Agricultural product, 2012 - 2021



Source: MAFF, 2022. Annual Report 2021-2022. Available [here](#).

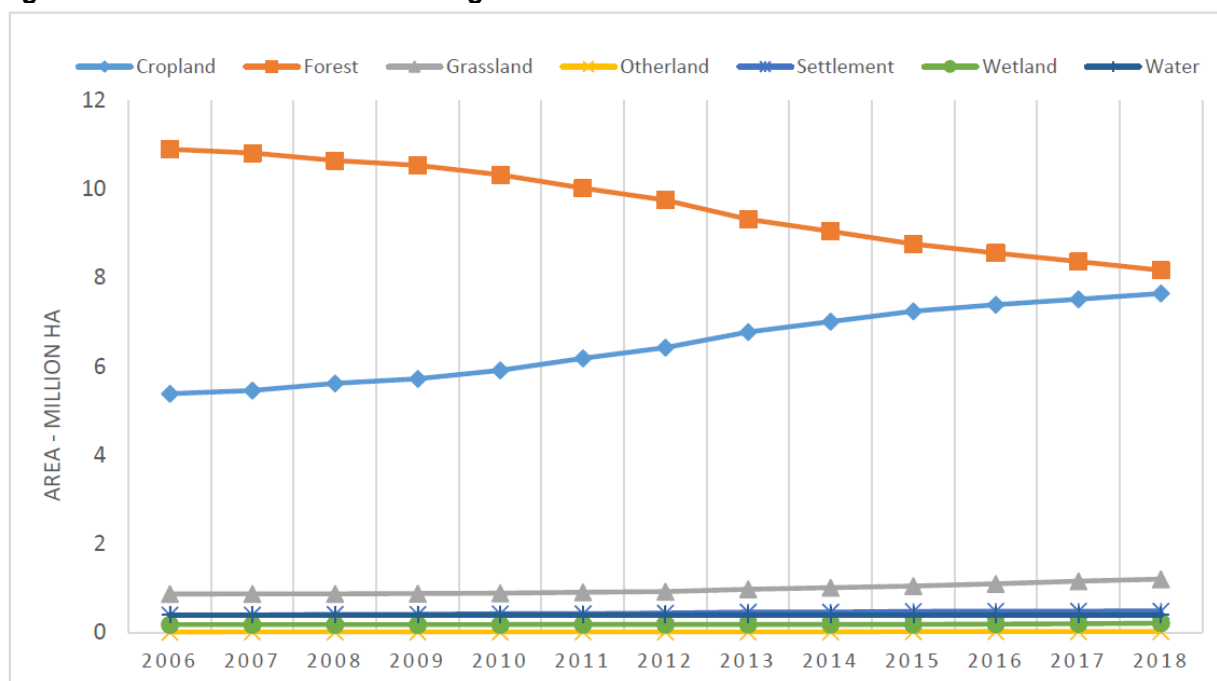
Forests and their ecosystems provide essential services and benefits to Cambodia's population and economy, as well as to local food security and income generation. Cambodia's forests are categorized into three ecological zones: 'dry forest' (60 percent), 'wet forest' (20 percent) and 'moist forest' (20 percent) (Watt *et al.*, 2012). Rising temperatures and changes to precipitation regimes have the potential to negatively impact wet forest while promoting moist forest; the extent of dry forest will likely remain the same. Projections up to 2050 indicate that 80 percent of broadleaf deciduous and evergreen (<500 m above the sea level) will be exposed to longer, drier conditions as water deficit periods extend by two months, to six to eight months (NDC, 2015). These changes will likely result in reduced forest productivity, increased fire risk, weaker ground water recharge and higher rates of soil erosion. Furthermore, CC-driven disruption to rural local livelihoods and food security will likely increase pressure on existing forest resources and accelerate expansion of agriculture lands into remaining forest areas, with associated impacts on biodiversity and species numbers (Cruz *et al.*, 2007:471 cited in CDRI, 2012).

The key drivers for the land conversion and forest degradation involved in various aspects of economic development, demand for food and fuel wood consumption as result of the population growth. Projections indicate that the population of Cambodia will significantly increase to 19 million by 2030 (World Bank, 2022; accessed 05 June 2022). Historically population growth has led to large scale deforestation for expanding the agriculture land use and urban development. Large scale forest encroachment for agro-industrial crops is associated with significant forest loss. Uncertainty of the land tenures, land speculation, certification and state land registration contributed to illegal land expansion into the protected areas and other wildlife reserves. Historically, Cambodia lost 2.7 million ha of forest area between 2006 and 2018, approximately 25 percent of the forest areas. During the same period, the total area of crop lands has increased from 5.4 million ha in 2006 to 7.6 million ha in 2018, corresponding to an increase of 41 percent and the recent increases in agricultural lands area have been mostly at the expense of forest cover (NRS, 2020).

Cambodia has made sizeable improvement in terms of food security and nutrition (FSN). Progress has been made on all fronts in implementing the priority actions for the National Strategy for Food Security and Nutrition (2014–2018) (CARD, 2017). Despite the impressive progress on FSN, a number of issues remain. The improvements in nutrition have lagged behind on a number of economic and human development indicators. The progress across the country, demographic and socioeconomic groups remains uneven. Moreover, sustainability of progress could be challenged by economic and disaster shocks, and therefore increasing emphasis will need to be placed on risk reduction and resilience building (CARD, 2017).



Figure 2 – Land use/Land cover changes between 2006 – 2018



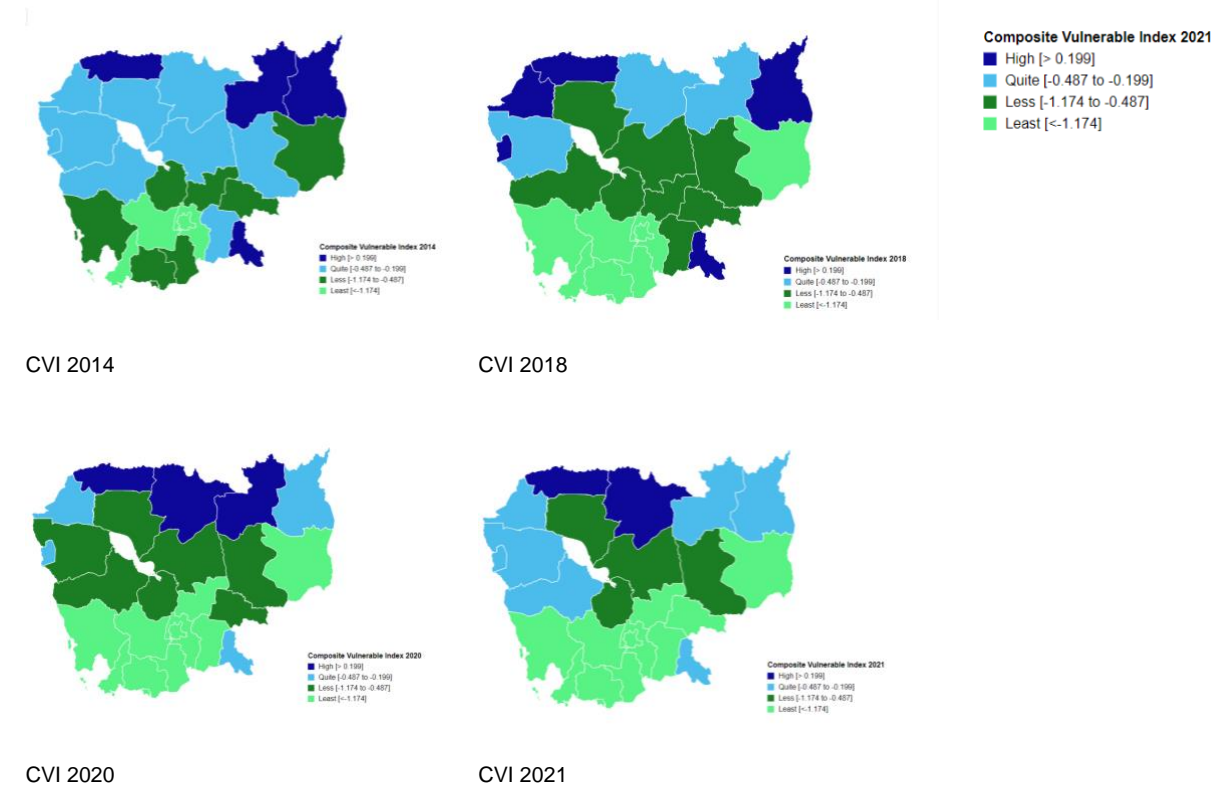
Source: National Redd+ Taskforce Secretariat, 2020. Action & Investment Plan for the implementation of the National REDD+ Strategy of Cambodia. Available [here](#).

2.2 CLIMATE CHANGE IMPACTS, RISKS AND VULNERABILITIES

Cambodia is highly vulnerable to the effects of climate change. The sectors most affected are agriculture, infrastructure, forestry, human health, and coastal zone areas which are particularly vulnerable to sea level rises and intrusion. Beyond extreme weather events, climate change also results in slow-onset events that can have significant negative implications for Cambodia and its citizens, particularly the most vulnerable people. Climate change acts as a threat multiplier and its impacts are particularly damaging given the limited adaptive capacity of Cambodia’s population due to socioeconomic conditions such as poverty, malnutrition, agricultural dependence, settlements in flood-prone areas, and public health (MOE, 2020).



Figure 3 – Composite Vulnerability to climate change by province



Source: National Council for Sustainable Development. 2023. Vulnerability index. Available [here](#).

Notes:

1. The vulnerability index were produced following the National M&E framework for climate change: Tracking Adaptation and Measuring Development ([TAMD](#)) in Cambodia.
2. The boundaries and names shown, and the designations used on this map do not imply the expression of any opinion whatsoever on the part of FAO concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers and boundaries.

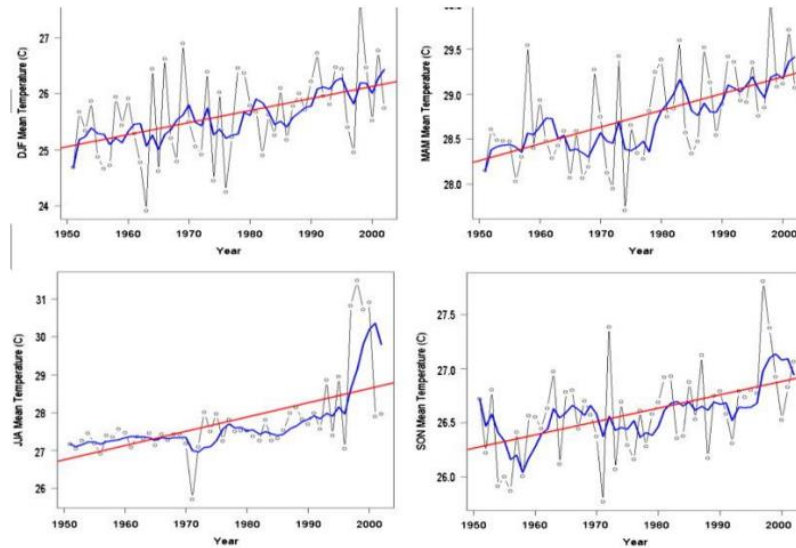
Historical observations show climatic changes both in terms of temperature and precipitation. Figure 4a illustrates a pronounced upward trend in terms of seasonal mean temperatures over the period 1950-2010. Over the same period area-averaged mean precipitation decreased substantially, with changes being most pronounced in the SON (autumn) season.

In terms of future projections, Cambodia’s temperature projections see a year-on-year increase of between 0.013 °C and 0.036 °C, resulting in an up to 3 °C increase above today’s average by the end of the century. While total rainfall trends are less obvious, average increases are predicted in the northwest while decreases are predicted in the northeast (MOE, Cambodia Climate Change Strategic Plan 2014-2023, 2013). In terms of these gradual changes in average temperature and rainfall over time, Cambodia is likely to be most strongly impacted by hotter daytime and nighttime temperatures affecting ecosystems and species’ productivity and range (both natural and agricultural species). On top of the slow-onset, long-term climate changes, Cambodia is also experiencing increased climate variability (significant differences in year-to-year climate conditions). Manifesting as increased frequency and severity of floods, droughts and



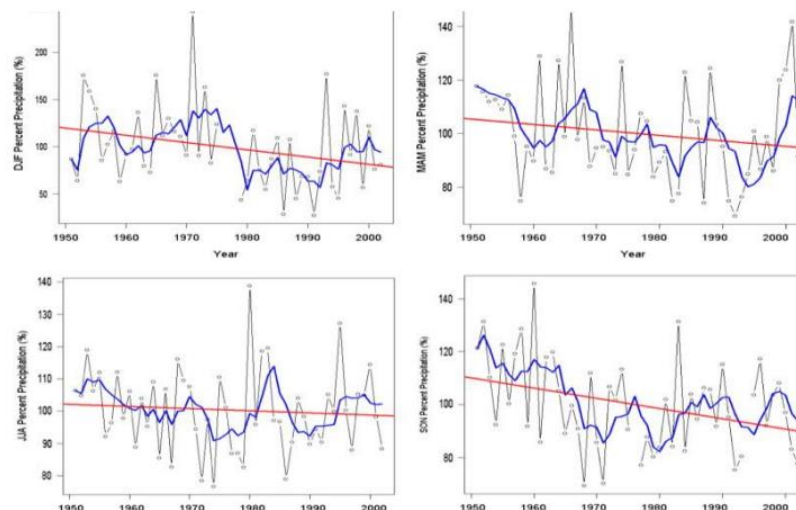
damaging storms, climate variability has resulted in increasingly higher physical and economic impacts, especially in rural areas.

Figure 4a - Historical mean temperature change over the period 1960-2000 by season December-February (top left), March-May (top left), July through August (bottom left) and September-November (bottom right)



Source: Thoeun, H. C. (2015) 'Observed and projected changes in temperature and rainfall in Cambodia', Weather and Climate Extremes. Elsevier, 7, pp. 61–71. doi: 10.1016/j.wace.2015.02.001.

Figure 4b: Historical mean precipitation change over the period 1960-2000 by season December-February (top left), March-May (top left) July through August (bottom left) and September-November (bottom right)



Source: Thoeun, H. C. (2015) 'Observed and projected changes in temperature and rainfall in Cambodia', Weather and Climate Extremes. Elsevier, 7, pp. 61–71. doi: 10.1016/j.wace.2015.02.001.



Higher elevation areas, such as in northern, eastern and northwestern areas (Mondulkiri, Rattanakiri, Kratie, and Stung Treng, and Battambang and Pursat plateau areas) will likely experience an increased intensity and possibly higher frequency of flooding events. These trends are likely to have negative impacts on agriculture and other related infrastructure which already cost between USD 100-170 million each year due to lack of adaptation capacity (RGC 2010 cited in UNDRR 2019). Drought also seriously affects Cambodia's agriculture production, food security and income generation, and is a strong driver of rural poverty. Drought not only contributes to decreases in rice production but also to depletions in fish stock and livestock, local livelihoods, wellbeing and the national economy. Although farmers are used to coping with either too much or too little water, the projected increases in the intensity and frequency of extreme events are likely to further threaten national food security, rural livelihoods and wellbeing. Drought-driven water shortages as a result of the 2015 El Nino affected approximately 260.000 rural people and resulted in the requirement of widespread water deliveries (Caritas, 2016). In terms of future impacts, according to the National Climate Change Committee (2013) rice productivity will decrease by 10 percent for every 1 °C increase in temperature. Based on these projections, without appropriate adaptation by 2100 rice yields are likely to decrease by between 20 percent and 45 percent under the RCP 4.5 and RCP 8.5 scenarios respectively. Agriculture is projected to incur 17 percent of all climate-related losses and damages (from loss of income, declining labour productivity, and extreme events) by 2050 in an RCP 4.5 scenario (MoE & MEF, 2019).

In terms of future emission levels, overall GHG emissions in 2030 without the FOLU are expected to rise to by up to 79 million tCO₂e/year, while overall GHG emissions with the FOLU are expected to increase to 155 million tCO₂e/year (BAU scenario). The FOLU sector would contribute the highest overall BAU emissions in 2030, contributing up to 49.2 percent of the BAU emissions. This would be followed by the energy sector with 22.2 percent, the agricultural sector with 17.5 percent, and industry (IPPU) with 9.0 percent. The FOLU, energy, agriculture, and industry (IPPU) sectors would be responsible for more than 95 percent of the estimated BAU emissions in 2030. As opposed to the BAU scenario, the FOLU NDC Scenario aims to reduce 50 percent of historical emissions (baseline year: 2016) in the FOLU sector by 2030 (via the REDD+ programme). This target is based on the REDD+ national strategy which was included due to recommendations from the REDD+ Technical Secretariat (RTS) and the Department of Climate Change. The main assumption of the calculation was to reduce the 50 percent historical emission from the forest sector (76.3 million tCO₂e) by 2030 (to 38.1 million tCO₂e) (MOE, 2020).

2.3 CLIMATE CHANGE PLANNING AND IMPLEMENTATION

2.3.1 Institutional arrangements

At the national level, National Climate Change Committee (NCCC) was established in May 2017, mandated to prepare, coordinate, and monitor the implementation of relevant policies, strategies, legal instruments, plans and programs including the Cambodia climate change strategic program and Cambodia Climate Change Action Plan (CCAP). NCCC is chaired by the Prime Minister with 36 ministries/ agencies, all provincial governors and the municipality, and a secretary general.

The Ministry of Environment (MOE) is the focal ministry mandated with climate change adaptation and mitigation, planning and implementation. However, when looking at agriculture and land use, the Ministry of Agriculture Forestry and Fisheries (MAFF) is the key government ministry to be engaged with Forestry, Agriculture and Land Uses. The planning and implementation of the climate actions related to agriculture and land uses arranged from national to sub-national, and local level, involves coordination among the vertical and horizontal line departments at all levels. Under the vertical organizational management structure of MOE and MAFF, and specifically Department of Climate Change of the National Council for Sustainable Development (NCS), General Department of Administration for Nature Conservation and Protection (GDANCP), General Department of Local Community under MOE are more relevant to climate change adaptation and mitigation, agriculture and land use. The Royal Government of Cambodia considers REDD+ an effective global initiative that will contribute to mitigating impacts of climate change in agriculture, forestry and related sectors. The Royal Government of Cambodia has a clear vision that REDD+ is the national mechanism that provides an opportunity to support the Ministry of Agriculture, Forestry and Fisheries, the Ministry of Environment, and relevant stakeholders, including local communities and



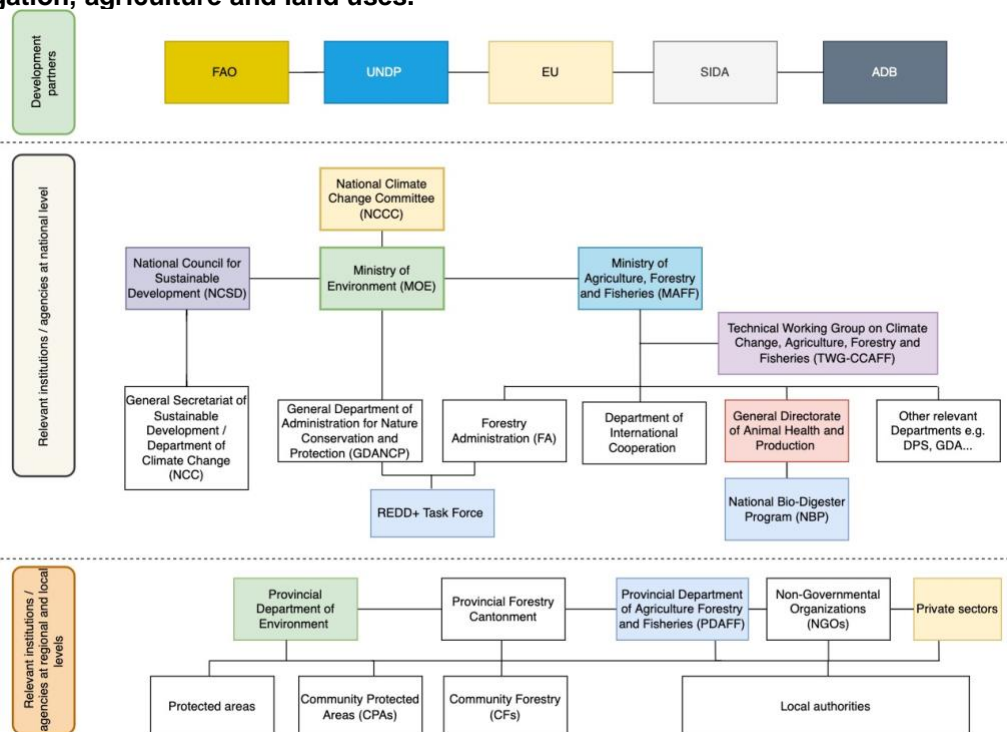
indigenous peoples in their efforts to sustainably manage forest resources in the country (National REDD+ Strategy 2017-2026, 2017).

From the MAFF side, the Department of International Cooperation is leading the coordination with development partners in planning and implementation of climate change adaptation and mitigation, which include some technical institutions under MAFF such as the General Directorate of Animal Health and Production, General Directorate of Agriculture, and so on. The National Biodigester Program (c) is under the management of MAFF's General Directorate of Animal Health and Production. NBP is also engaged with private sectors and other non-Governmental organizations and local authorities at the grassroots level working on the promotion of bio-digester plants for renewable energy and mitigation of Greenhouse Gas (GHG) emission by converting animal manure into bio-gas.

There are a number of development partners that have supported climate change adaptation and mitigation, agriculture, and land use, such as UNDP, EU, SIDA through the Cambodia Climate Change Alliance (CCCA). The Asian Development Bank (ADB), in particular, supports the Strategic Program for Climate Resilience (SPCR) to mainstream climate resilience into national and sub-national development policies, plans and projects supported by scaled up financing of adaptation activities in the key development sectors.

At the sub-national level, there are specialized provincial government departments, including Provincial Department of Agriculture Forestry and Fisheries (PDAFF), Provincial Department of Environment (PDE), private sectors/financial service providers, Non-Governmental Organizations (NGOs), Community-Based Organizations (CBOs) (such as in relation to Community Protected Areas (CPAs) and Community Forestry (CFs)) working on agriculture and land use.

Figure 5 – Diagram of relevant institutions and agencies working on climate change adaptation and mitigation, agriculture and land uses.



Source: Author's own elaboration.



2.3.2 Key policies and frameworks

There are a number of key planning documents and policies relevant to climate change adaptation and mitigation in the land use and agricultural sector aiming at mainstreaming and integrating the climate change related actions into local planning and implementation. The section below provides an overview of the key planning documents and policies relevant to climate change adaptation and mitigation in the land use and agriculture sector.

Table 1 Key policies, plans and frameworks on climate change, agriculture and land use

No.	Titles	Description: Relevance to climate action on land use and agriculture
1	Cambodian Sustainable Development Goals (CSDGs) Framework 2016-2030 ¹	<p>Cambodia’s SDG framework provides the overall direction for the achievement of the 17 global goals, and a breakdown into country-specific targets.</p> <p>Among further linkages to SDGs such as SDG2 (Zero Hunger) and SDG 15 (Life on Land), in particular “Cambodia sustainable development goal 13” Climate Action is relevant to SCALA.</p>
2	Rectangular strategy IV ²	<p>The rectangular strategy for growth, employment, equity and efficiency sets out an overall vision for the development of the country focused around four core elements. The plan is currently in its fourth phase.</p> <p>The priority area of the Rectangular Strategy IV is Inclusive and Sustainable Development, include 1) promotion of agriculture and rural development, 2) strengthening sustainable management of natural and cultural resources, 3) strengthening management of urbanization and 4) ensuring environment sustainability and readiness for climate change.</p>
3	National Strategic Development Plan 2019-2023	The NSDP outlines the roles of the Ministry of Environment (MOE) and National Council for Sustainable Development (NCSD) to respond climate change, for instance promoting climate resilience and facilitate progress of building a society that release low carbon, develop and implement the National Determined Contributions (NDC) for the implementation of UNFCCC.
4	Cambodia’s Updated nationally determined contributions	The NDC has 17 prioritized adaptation actions under agriculture, focusing on agribusiness, the development of rice and other cash crops, horticulture, livestock aquaculture production.
5	REDD+ national strategy	The mission of the REDD+ Strategy is to strengthen the capacity of national and sub national institutions for effective implementation of policies, laws and regulations that will contribute to improved management of natural resources, forest lands, and biodiversity conservation. The goal of the strategy is to reduce deforestation and

¹ [CSDG Framework 2016-2030 English LAST FINAL.pdf \(mosvy.gov.kh\)](#)

² [Rectangular Strategies - Ministry of Foreign Affairs and International Cooperation \(mfaic.gov.kh\)](#) / [Microsoft Office 2000 \(iric.gov.kh\)](#)



		forest degradation, promote sustainable management and conservation, and contribute to poverty alleviation of local communities.
6	National forest programme	The overall National Forest Program Objective is “The forest resources provide optimum contribution to equitable macro-economic growth and poverty alleviation particularly in rural areas through conservation and sustainable forest management, with active participation of all stakeholders.” Specifically, the Objective 2: Adapt to climate change and mitigate its effects on forest-based livelihood and the Objective 3: Macro land use planning that allows for holistic planning across sectors, jurisdictions and local government borders. The Objective 7: Ensure environmental protection and conservation of forest resources.
7	National Strategic Plan on Green Growth 2013-2030	Promote national economy with growth stability, reduction and prevention of environmental pollution, safe ecosystem, poverty reduction and promotion of public health service, educational quality, natural resources management and sustainable land use and water resources management to increase energy efficiency, ensuring food safety and glorify the national culture.
8	Cambodia Climate Change Strategic Plan 2014 –2023	The vision is Cambodia towards a green, low carbon, climate resilient, equitable, sustainable and knowledge-based society. The mission is creating a national framework for engaging the public, the private sector, civil society organizations and development partners in a participatory process for responding to climate change to support sustainable development.
9	Land policy “White Paper, 2015”	The objective is to provide direction on land use and sustainable use of the natural resources for economic development, prevention and response to climate change impact and natural disasters.
10	National Environment Strategy and Action Plan 2016-2023	Objective 1.3: To strengthen and scale up the land use spatial planning and land use classification for promoting land productivity and sustainability and reduced poverty in Cambodia.
11	Climate Change Priorities Action Plans (CCPAPs)	15 ministries have prepared action plans aligned with CCCSP 2014-2023. Specifically, the MAFF climate change priorities action plan proposed priorities actions “promoting resilience in animal production and adaptation to climate change” and “Enhancing animal waste management and emission mitigation”. At the same time, promoting reforestation and afforestation to increase carbon stock in the forestry sub sector. MAFF is updating its plan to design a Climate Change Priority Action Plan (CCPAP) 2022-2030 with the support of SCALA (see section 4.3).
12	Gender and Climate Change Action Plan 2014-2018	The plan is developed by the Ministry of Women’s Affairs following the Cambodia Climate Change Strategic Plan (CCCSP). The Ministry of Women’s Affairs (MoWA) will actively address the following priority areas: 1. strengthening institutional capacity and cross-sectoral coordination with a focus on women's role in climate change adaptation and mitigation. 2. improving capacity, knowledge and awareness on women's role in climate change adaptation and mitigation. 3. reducing vulnerabilities to climate change impacts of



		disadvantaged women and other groups. 4. reducing GHG emissions by introducing climate friendly, low carbon economic activities for women.
13	Sub-National Action Plans	Integrating of the climate change adaptation and Mitigation at the sub national government.
14	National Protected Area Strategic Management Plan 2017-2031	The National Protected Area Strategic Management Plan (NPASMP) is developed to guide the future planning and management of individual protected areas. Its mission is to achieve the most effective, efficient and equitable management of the national protected area system in the Royal Kingdom of Cambodia. <i>One of the five goals is to strengthen protected area management effectiveness and working partnerships with government agencies, local authorities, conservation NGOs, and development partners.</i>
15	Agricultural Strategic Development Plan 2019-2023	The vision for agriculture development is climate resilience. Cambodian agriculture has to deal with natural disasters possible, with two main measures, 1) adaptation or resilience to climate change focusing on the production of seeds and crops which are adapted to the drought and flood, 2) mitigation of climate change impacts by enhancing activities related to the establishment of the planting system; climate tolerant livestock (modern farm system, water saving, heat and rain management). Cambodian agriculture will need to be developed in accordance with the principle of "green development", reducing environmental and socio-economic impacts, and maintaining a balance between "conservation" and "development".
16	National adaptation plan Financing framework and implementation plan (2017)	The main purpose of the National Adaptation Plan (NAP) Financing Framework and Implementation Plan is to bring the National Adaptation Plan process in Cambodia closer to its execution and with a specific aim to increase the possibilities for Cambodia to access additional adaptation finance.

Source: Author's own elaboration.

2.3.3 Capacity needs for climate action in land use and agriculture

Capacity needs for climate action in land use and agriculture vary from national to sub-national levels. At the national level, there is limited capacity of the national institutions responsible for climate change, agriculture and land use and limited participation of stakeholders (MOE, Cambodia Climate Change Strategic Plan 2014-2023, 2013, see also footnote 3 below for further sources). In addition, the capacity to mobilize financial resources is limited. Specifically, capacity is limited in engaging with the private sectors to implement agriculture and land use related climate actions. These kinds of capacity needs are more relevant to the ministries at the national level such as MOE, MAFF, and so on. Particularly, capacity and skills development in monitoring, reporting and evaluating is needed, especially for MAFF to collect data and analysis of climate mitigation in agriculture and land use. M&E and MRV capacity needs are suitable for all levels from national to sub national or community level. Apart from that is the capacity to conduct research and specifically impact assessments that generate evidence for upscaling and replication at a larger scale, which are also lacking.

At the sub national level, technical staff from relevant provincial departments such as the Provincial Department of Environment (PDoE), the Provincial Department of Agriculture Forestry and Fisheries



(PDAFF), the Provincial Cantonment of Forestry need capacity building on the concept and practices of climate change adaptation and mitigation in forestry, agriculture and land use. Training on the integration of climate change related actions into development plans is also needed together with the support on the effective implementation on the ground. At the community level, local people, including committee members of existing Community-Based Organizations (CBOs) are still not well understanding these issues due to their technical complexity (MOE, A Second study on understanding public perception of climate change in Cambodia, 2016). Capacity in the integration and implementation of climate actions related to agriculture and land use, coordination and engagement with multi-stakeholders, including private sector, civil society, non-governmental organizations and other stakeholders is also important to improve the impact of climate change interventions.

A summary of technical and institutional capacity need for planning and implementation in agriculture and land use³ is listed below:

Technical capacity:

- Limited research capacity for related sectoral impacts of climate change and limited resources for running the impact assessment.
- Limited connection between research results, policy formulation, and propose actions – National adaptation plan process in Cambodia
- Limited skills and documenting and producing the best practices or evidence-based for mobilizing resources to replicate and upscale the best practices.
- How to mobilize financial resources from development partners/donors, and the private sector for implementing climate actions.
- Limited knowledge and technical capacity in climate change aspects among staff that may be constraint in effective implementation of the climate actions.
- Lack of capacity for climate change data management in agriculture and land use and also skills in data analysis and reporting.
- Lack of technology transfer and awareness
- Capacity in developing and operating a sustainable inventory system related to GHG emission
- Capacity in monitoring, reporting and evaluating the implementation of the climate actions, especially the evaluation of the GHG mitigation from agriculture.
- Lack of registry system for GHG mitigation and capacity to conduct analysis.
- Limited capacity at national and provincial levels to integrate gender concern into climate change adaptation initiatives.

Institutional capacity:

- Limited capacity in institutional coordination across sectors with other line departments/ ministries involved in the planning and implementation of the climate change actions related to agriculture and land use. The ministry of environment is the focal ministry that coordinates other departments/ministries, and this should include the involvement of civil society, NGOs, farmers group/community-based organizations.

³ [Cambodia First NDC \(Updated submission\) | UNFCCC](#) ; [Cambodia Climate Change Strategic Plan 2014-2023 \(CCCSP 2014-2023\) EN | The National Council for Sustainable Development \(moe.gov.kh\)](#)



- Capacity to engage the private sector in implementing climate actions related to agriculture and land use. Capacity to increase investment from public private sector partnership.
- Lack of capacity at the sub national level, lack of provision of effective support from national to sub national and community level.
- Mainstreaming climate change into the budgeting and planning process of line ministries.
- Limited capacity to mainstream M&E for climate change, agriculture and land use to sub-national planning and local planning.

2.4 RELEVANT PROJECTS AND PROGRAMMES

At the time of this inception report, there are a number of ongoing projects that are relevant to climate change adaptation and mitigation planning and/or implementation in the land use and agricultural sector that can complement the SCALA Programme. MAFF is currently implementing the National Bio Digester Program (NBP) that can complement with the SCALA Programme on the livestock system (Livestock waste management to reduce GHG emission). At the same time, UNDP in cooperation with MOE implemented the REDD+ Programme that complements the SCALA Programme to implement the Forestry system (Sustainable Forest Management). In the meantime, FAO Cambodia is also implementing a project named “Strengthening capacity in the agriculture and land use sectors for enhanced transparency in implementation and monitoring of Cambodia’s nationally determined contributions (NDC)”.

Table 2 List of ongoing projects that can be complemented with the SCALA Programme

No.	Titles	Status (on-going/planned)	Description
1	National Bio-Digester Programme (NBP)	On-going	NBP is a government owned program initiated by the Ministry of Agriculture Forestry and Fisheries (MAFF) and Netherland Development Organisation (SNV) can be complemented with the SCALA Programme working on the selected Livestock system (livestock waste management to reduce GHG emission)
2	Strengthening capacity in the agriculture and land use sectors for enhanced transparency in implementation and monitoring of Cambodia’s nationally determined contributions (NDC)	On-going	Funded by GEF and being implemented by FAOKH. The project duration is 36 months, start from 30 May 2018
3	Building Adaptive Capacity through the Scaling-Up of Renewable Energy Technologies in Rural Cambodia (S-RET) Project	On-going	S-RET is a project of the Royal Government of Cambodia (RGC) and is implemented by the Ministry of Agriculture, Forestry and Fisheries (MAFF). The project is financed by a grant from IFAD. In turn, IFAD has received financing from Global Environment Fund (GEF). Project Timeframe: 5 years from 2016 to



Scaling up climate ambition on land use and agriculture through NDC and NAPs (SCALA)

			2021 (including 1 year with No Cost Extension)
4	REDD+ Programme	On-going	Potential cooperation to mitigate climate change and reduce emissions from deforestation and Forest degradation through the sustainable forest management.
5	Cambodia Climate Change Alliance (CCCA Phase III)	On-going	Complement to strengthen national systems and capacities to support coordination and implementation of Cambodia's climate change responses.
6	Strengthening capacity in the agricultural and land use sectors for enhanced transparency in implementation and monitoring of Cambodia's nationally determined contribution (NDC) (Capacity-building initiative for Transparency, CBIT)	Ending in Q2/2023	Complement on the capacity building support on MRV and development of the M&E framework for tracking the implementation of the NDC actions.
7	UN-REDD - Sustainable Forest Trade in the Lower Mekong Region	On-going	Complement on the action of of sustainable forest management through promoting the sustainable and legal timber trade and forest monitoring system.
8	Forest Restoration for Resilience and Recovery (3R)	Operationalized in 2023	Complement on the restoration plan and monitoring as part of the sustainable forest management plan action.
9	Establishing an Evidence-Based National Adaptation Plan (NAP) process at National and Subnational Scales in Cambodia Phase 1 (GCF Readiness)	Ongoing	GCF Readiness support to adaptation planning and implementation in Cambodia, implemented by the Department of Climate Change of the General Secretariat of the National Council for Sustainable Development (GSSD). The three outcomes match the SCALA outcomes closely.
10	Climate Finance Network	Ongoing	UNDP's Climate Finance Network is a knowledge management and technical support facility to identify and support climate finance innovations in order to facilitate, accelerate and scale up these innovations in eighteen countries



			in Asia and the Pacific. In Cambodia, the work will focus on thematic issuance in climate financing.
11	NDC Partnership support (Cambodia country page)	Ongoing	NDC-P coordinates support to the implementation of Cambodia's NDC targets by various partners. The partnership plan prioritizes several actions related to SCALA priority systems (SFM and livestock).
12	Adaptation Pipeline Accelerator initiative	Ongoing	UN Secretary-General's Adaptation Pipeline Accelerator initiative supported by UNDP, the NDC Partnership, the Green Climate Fund to accelerate adaptation investment. In Cambodia, UNDP Cambodia is conducting cost benefit analysis, SDG Investor Map focusing on climate adaptation, and an assessment as part of LCDF project development.

Source: Author's own elaboration.



3. CLIMATE ACTION REVIEW

3.1 METHODOLOGY

The Climate Action Review Matrix was developed under Activity 1.2.1 by the UNDP and FAO global team as a screening tool to assess climate actions in land use and agriculture for their transformative change potential within the context of NDC and/or NAP implementation. The matrix allows for a comparative analysis of climate actions across seven dimensions of transformation to inform the prioritization of a transformative climate action to take forward under SCALA. A 'transformative climate action' in SCALA is one that is climate-informed, applies systems-thinking, promotes gender equality and social inclusion, contributes to sustainable development, fosters a whole-of-government approach, incentivizes private sector engagement and applies innovative technologies and financing instruments in order to achieve national climate change adaptation and/or mitigation goals in land use and agriculture.

The review process for transformative potential of the different NDC and NAP priorities in the agriculture and land use sectors was conducted following a systems approach.

The CAR matrix was filled in by the national consultant with technical support from the country and global team. Review of existing climate actions were conducted based on the seven criteria, which included: *Climate Rationale, System Thinking, Private Sector Engagement, Gender and Social Inclusion, Sustainable Development, Whole of Government, and Innovation*. Scores were given to each climate action so that at the end, the potential climate actions could be ranked and prioritized. Two separate technical consultation meetings were organized with the Technical Working Group on Climate Change, Agriculture Forestry and Fisheries (TWG-CCAFF) of the Ministry of agriculture forestry and Fisheries (MAFF) and the Ministry of Environment (MOE).

Results of the scoring and ranking of the climate actions related to agriculture and land use sector can be found in the Annex 6.

3.2. ANALYSIS OF CLIMATE ACTION WITH TRANSFORMATIVE POTENTIAL

Overview of the NDC and/or NAP priorities in the land use and agriculture sectors: Updated NDC and NAP financing were the main reference documents used to “source” for review the climate actions related to agriculture and land use. However, other relevant documents including the Agriculture Strategic Development Plan (ASDP), Agriculture Development Policy (ADP), Agriculture Master Plan 2030 from the government were also collected and reviewed. It was noticed that the majority of the climate actions were identified from Cambodia's Updated NDC.

Results of the analysis: Through an intensive review of the NDC and the NAP, 28 actions were identified as relevant for the agriculture and land use sectors and covering four key sub sectors and two cross cutting themes on support needs. The subsectors include agriculture, forestry, livestock and, fisheries and aquaculture. The two cross cutting themes include capacity development, and research and development. Next, using the seven criteria under the climate action review matrix as a screening tool, the transformative potential of each action was assessed within the context of NDC and NAP priorities. “Transformation scores” in table 3 were given based on the CAR assessment tool methodology (see Annex 6 for detailed results and spider diagrams).



Table 3 NDC and/or NAP priorities in the land use and agriculture sectors

No.	Climate Actions	Categories	AVG. SCORE
1	Promoting sustainable forest management	Mitigation	9.8
2	Promoting reforestation and afforestation to increase carbon stock	Mitigation	9.1
3	Promoting resilience in animal production and adaptation to climate change (technical package)	Adaptation	9
4	FOLU: Reduce 50% of historical emission by 2030	Mitigation	8.8
5	Enhancing animal waste management and climate change emission mitigation	Mitigation	8.5
6	Organic input agriculture and bio-slurry; and deep placement fertilizer technology	Mitigation	8
7	Building climate change resilience on cassava production and processing	Adaptation	7.7
8	Towards an Agroecological transition in the uplands of Battambang	Adaptation	7.7
9	Integrate climate change respond measure to commune land use planning	Adaptation	7.6
10	Improvement of support services and capacity building to crop production resilient to climate change by promoting research, trials and up-scaling climate-smart farming systems that increase resilience to CC and extreme weather events	Adaptation	7.5
11	Promote fodder production to improve high nutrient rich and high-quality forage feed value agriculture by-products technology to support cattle production	Adaptation	7.4
12	Seedlings distribute to public and local community	Adaptation	7.3
13	Promote manure Management through compost making process to reduce carbon emission	Mitigation	7.3
14	Research for the development and enhancement of agricultural productivity, quality, and transfer through strengthening of crop variety conservation and new crop variety release responding to the impacts of climate change	Adaptation	7.2
15	Scaled up climate-resilient agricultural production through increased access to solar irrigation systems and other climate-resilient practices	Adaptation	7.2



16	Development of Rice crops for increase production, improved quality-safety; harvesting and post harvesting technique and agro-business enhancement	Adaptation	7
17	Development of Horticulture and other food crops for increase production, improved quality-safety; harvesting and post harvesting technique and agro-business enhancement	Adaptation	7
18	Development of Industry crops for increase in production, improved quality-safety; harvesting and post harvesting technique and agro-business enhancement	Adaptation	7
19	Strengthening capacities for risk prevention and reduction, effective emergency preparedness and response at all levels; enhancing livestock and disease-related early warning system, and integrating disaster risk reduction and climate change adaptation measures into recovery and rehabilitation initiatives in the livestock sector	Adaptation	6.9
20	Development of rubber clone varieties suitable for AEZ and resilient to climate change	Adaptation	6.9
21	Promoting aquaculture production systems and practices that are more adaptive to climate change	Adaptation	6.9
22	Promoting climate resilience in the fisheries sector	Adaptation	6.8
23	Promotion of research capacities on animal genetic, animal breeding, and animal feed is strengthened to adapt to climate change	Adaptation	6.8
24	Development of new technologies and increased yields by using new crop varieties which adapt to climate change	Adaptation	6.7
25	Increasing the effectiveness and sustainability of agricultural land management techniques (Conservation Agriculture)	Adaptation	6.7
26	Enhancing institutional and capacity development on climate change impact, vulnerability assessment, adaption measures and mitigation related to rubber sector	Adaptation	6.4
27	Improvement of animal breeding technology in Cambodia through Artificial Intelligence (AI) which can adapt to climate change	Adaptation	6.4
28	Developing a training manual and providing training on approaches for development of climate-smart and sustainable livelihood to rural poor people	Adaptation	5.6

Source: Author's own elaboration.

As an additional screening tool to support the findings of the CAR, each action was then categorized according to its sector focus or support need type using the NDC-AFOLU framework (Crumpler *et al.*, 2020) which characterizes the NDCs across five main pillars and sub-components specific to the agriculture and



land use sectors. To narrow down priorities for the SCALA work plan, the country teams with support from the global team organized consultation meetings with MAFF and MOE to discuss the prioritization of the climate actions related to agriculture and land use to be covered under the SCALA Programme.

The review entailed the following steps:

- The actions listed in the CAR were firstly reviewed based on the Cambodia Updated NDC (for example those actions that weren't originally 'sourced' from the NDC but from the NAP were checked for their relevance to the NDC targets) and the feedback from MAFF focal point(s).
- Using the NDC-AFOLU framework, the actions were then categorized based on and under the most relevant pillars of the framework which in this case were **Mitigation, Adaptation and Support Needs**.
- Several actions were highlighted that require support needs in terms of capacity building activities, research and developments.
- Using a sub-sectoral approach (under the adaptation component of the framework), the actions were then divided into the most relevant sub sectors namely agriculture, forestry, livestock, fisheries and aquaculture, and then support needs.

Description of the transformative climate actions selected to be the focus area under SCALA in the country: As described above, Cambodia's Updated NDC was used as a basis to assess the transformative climate actions and identify priorities for the SCALA Programme. The highest scores were given to **promoting sustainable forest management, promoting reforestation and afforestation to increase carbon stock** as well as the climate actions that **enhance animal waste management and climate change emission mitigation**. These findings also align well with the suggestions and comments from MOE to focus on the mitigation effort and also in compliance with the comment from MAFF regarding the selection of priority climate actions to not only focus on the forestry but also the other sub-sectors especially livestock and particularly on enhanced animal waste management to reduce GHG emission by converting animal manure into biogas.

Based on these analyses, two systems were selected to be covered under the SCALA Programme: **1) Forestry (sustainable forestry management) and 2) Livestock (animal waste management to reduce GHG emission by converting animal manure to biogas).**



4. IMPLEMENTATION OF TRANSFORMATIVE CLIMATE ACTION IN LAND USE AND AGRICULTURE

4.1 INCEPTION WORKSHOP

The inception workshop was organized on March 25, 2022, in cooperation between FAO and UNDP country offices and support from the global team. The 25 participants included the government counterparts and related departments of relevance to the project, such as the MAFF Focal Point, the International Cooperation Department, Climate Change Technical Working Group of MAFF, REDD+ task force, Climate Change Department, and MOE representatives. Details of the agenda and participants can be found in Annex 5. The inception workshop was participatory in nature. The main purpose of the workshop was to introduce the SCALA program in Cambodia and to further discuss the workplan with the different with the stakeholders involved in the development and review of the different inception phase materials. More specifically, results of the baseline survey, climate action review matrix, Theory of Change (see 4.2) and the workplan (see 4.3) were presented to the audience, and a discussion on the overall approach and workplan were held. Some of the key comments and suggestions from the participants included:

Table 4 Key comment, suggestion and clarification in the inception workshop

Key comments /suggestions	Clarification
<ul style="list-style-type: none"> The inclusion of gender transformative analysis as part of the activities work plan 	Gender inclusion is one of the cross-cutting issues and strongly embedded in the program. The programme team has conducted climate action review with the consideration of the gender relevant action plans and will ensure the gender analysis is integrated in all the project results.
<ul style="list-style-type: none"> Revisiting the baseline survey to see how many ministries have adopted sectoral plans and/or budget submissions that include NAP land use and agriculture priorities. 	The programme team took note and will revisit this suggestion.
<ul style="list-style-type: none"> It should be stated clearly whether the sustainable forest management program targets inland forests or mangrove forests, for example. 	The analysis is based on the NDC priorities actions and the sustainable forest management which is in broad terms. The determination of different type of forest land cannot be made at this stage.
<ul style="list-style-type: none"> Incorporate the cost benefit analysis into the project work plan in order to collect evidence for replication and scaling up. 	The programme will look further into this suggestion and see if it feasible.
<ul style="list-style-type: none"> In order to achieve greater results, it is necessary to intensify collaboration with existing projects/programs. MAFF officials expressed interest and support in the SCALA Programme's selection of the livestock system, which can be 	The interventions were designed with in support livestock management to reduce greenhouse gas emission such as biodigester program, animal waste management, and so on.



<p>complemented with the National Biodigester Program (NBP) that is currently being implemented by the government. There was also a comment about the connection between the SCALA Programme and the Green Climate Fund.</p>	<p>This work will be implemented in collaboration with the New Zealand Agricultural Greenhouse Gas Research Centre (NZAGRC).</p>
<ul style="list-style-type: none"> Capacity building on MRV and M&E was discussed. What level of capacity building will be provided by the programme? 	<p>Capacity development is included in outcome 2 of the programme. More details capacity building activities developed based on the training need assessment. This will be discussed further to identify the areas of training needs based on the available resources.</p>
<ul style="list-style-type: none"> A question arises about the implementation of NDC, and whether the SCALA Programme will choose to implement NDC or facilitate an enabling environment with existing efforts. 	<p>The SCALA Programme team has explained this point. The programme will build on the existing effort, provide more evidence for concept note or proposal development that leads to implementing the selected NDC priorities in the future.</p>

Source: Author's own elaboration

4.2 THEORY OF TRANSFORMATIVE CHANGE

As introduced above (see section 3.2), the SCALA Programme is focusing on the two selected systems: **1) Forestry** (Advanced sustainable forest management in building community resilience and deforestation-free agricultural product), and **2) Livestock** (Enhanced resilience of production systems, and improved animal waste management to reduce GHG emission by converting animal manures into bio-gas).

The **key issue in the forestry sector** consists in excessive deforestation and forest degradation rates driven by various factors including agricultural conversion, which is exacerbated by climate change vulnerabilities of ecosystems and communities. In the livestock sector, inefficient manure management represents a significant source of greenhouse gas emissions, and presents a missed opportunity to improve resource efficiency and environmental outcomes. The **livestock sector** is among the main sources of GHG emission. Based on the 2020 Biennial Update Report (BUR), agriculture contributes around 11.2 percent of the total emission and the livestock sub-sector highly contributed to this.

In terms of the **climate risk context**, as pointed out in section 2.1.1, anticipated temperature increases and changes to precipitation regimes are forecast to negatively impact wet forest while promoting moist forest. Water deficits will likely result in reduced forest productivity, increased fire risk, weaker ground water recharge and higher rates of soil erosion. Climate-related disruption to rural local livelihoods and food security will likely increase pressure on existing forest resources and accelerate expansion of agriculture lands into remaining forest areas, with associated impacts on biodiversity and species numbers (Cruz *et al.*, 2007:471 cited in CDRI, 2012).

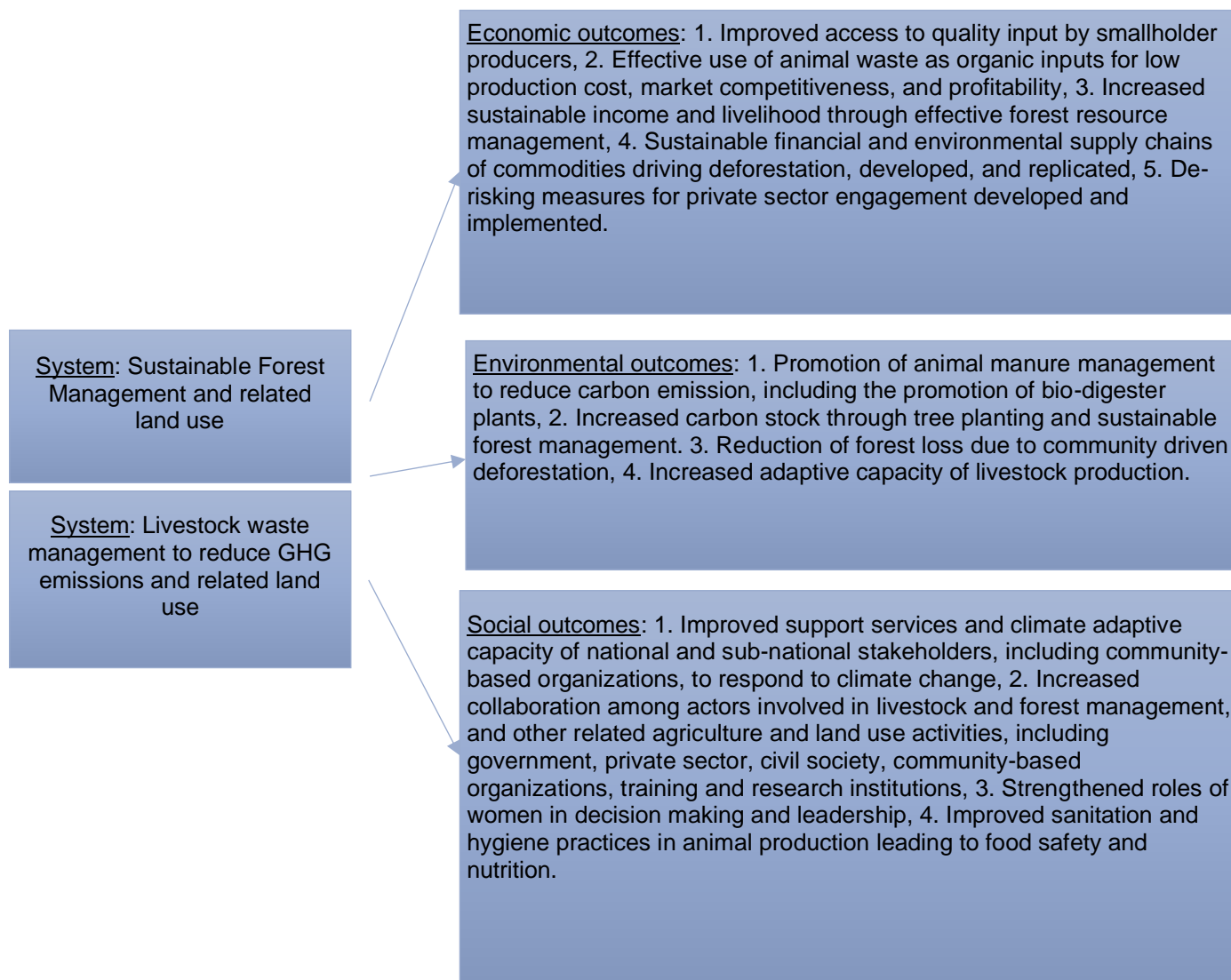
Production of meat, milk and eggs has grown rapidly in the last decade in response to increased demand for livestock products. Beyond increased emissions resulting from livestock, climate change also poses risks to the functioning of livestock production systems themselves: increased heat stress and reduced water availability for instance are projected to negatively affect livestock productivity in Cambodia. In addition, changes in precipitation and temperature negatively impact production ecosystems and pasturelands including the availability and quality of feed and fodder crops. Increases in animal diseases,



energy cost and general competition for resources are further expected to drive up production costs and disrupt livestock production systems (FAO, 2021).

To counterbalance some of these trends and mitigate additional risks posed by climate change, in terms of the desired **systems outcome** SCALA envisages forestry and livestock systems to provide balanced economic, environmental and social benefits to forest- and livestock-dependent communities in a sustainable manner, as well as “global good” climate mitigation benefits. Figure 6 illustrates envisaged systems-level outcomes.

Figure 6 – Systems outcomes in forestry and livestock systems envisaged by SCALA







Source: Author's own elaboration



Driver Analysis

Various drivers (leverage points) and barriers benefit or prevent the realization of the envisaged system outcomes. Below are some *potential drivers* for the implementation of climate actions in the selected systems “Forestry and Livestock” under the SCALA Programme in Cambodia.

 <p>Economic</p>	<p>Smallholder and commercial animal productions in Cambodia have noticeably improved in recent years. Productivity gains are partially due to improved use of inputs and farming techniques, and positive experiences with technology adoption and innovation might be beneficial to related approaches under SCALA</p> <p>Promoting animal production and increasing animal productivity are priority targets for animal commercialization. These include the promotion of resilient fodder management, reducing conventional slash, and burn practices by turning rice straw into high protein fodder via straw silage technologies. These priorities might increase interest and attention paid to SCALA work on livestock systems.</p> <p>Commercial animal production has increased significantly, from 6,335,200 in 2014 to 10,035,585 in 2018. The growth rate of commercial production was approximately 58 percent from 2014 to 2018, while only 8.6 percent for that of smallholder production (Agriculture Sector Strategic Development Plan 2019-2023).</p> <p>The national biodigester program aims for the establishment of a self-sustaining, market driven, national domestic biodigester sector in.</p>
 <p>Environmental</p>	<p>Ambition to reduce GHG emission by setting up bio-digesters that produce bio-slurry, and manure processing to ensure a high quality of organic fertilizer for the horticulture production or other commodities. Therefore, promotion of biodigester has potential for reducing GHG gas emissions.</p> <p>Forest is priceless in maintaining the balance of the natural environment.</p>
 <p>Social and Cultural</p>	<p>Forest is socially valuable. Millions of peoples depend on the timber and non-timber forest products for their food and income (Agriculture Sector Strategic Development Plan 2019-2023).</p>
 <p>Political</p>	<p>The Royal Government of Cambodia (RGC) has put into effect the National Forest Program on 18th October 2010. The government has vowed to continue the forestry reform to strengthen sustainable environmental management, focusing on three main objectives:</p>



1. To sustainably manage forest resources by taking meticulous control on the forest commercial activities and forest management to ensure that there are enough reserved forests for local uses, thereby preventing droughts and floods and maintaining wet lands and fish habitats.
2. To protect natural resources, biodiversity and endangered species.
3. To encourage and develop forest communities which are transparent and governed by local people.

These objectives are in line with the sustainability outcomes of the aspired forest system transformation envisaged by SCALA, which may in turn contribute to the success of this Program.

Institutional capacity building is a priority for the Agriculture Strategic Development Plan (ASDP) reform and implementation.

Barrier Analysis

The key barriers impeding transformations in the agriculture and land use sectors in relation to the selected systems include:

- 1) Understanding of and trust in biodigester technology is not yet well developed amongst smallholders despite strong government interest and support in promotion of the technology.
- 2) Research on agricultural technology and practices.
- 3) Human resources: Capacity and knowledge transfer.
- 4) Illegal forest invasion and clearance.
- 5) Access to credit/financing.
- 6) Access to technical support services.

Actions to achieve transformative change in the selected systems

In light of the envisaged system outcomes and identified drivers and barriers, the SCALA approach aims at the long-term transformation leading to sustainable forest and livestock management by **building capacities of different stakeholders (Outcome 2)**, including the provision of capacity building in M&E and MRV for both adaptation and mitigation for MAFF and MOE. SCALA seeks to induce sector-wide transformational change that builds resilience of rural livelihoods while reducing of GHG emissions. In livestock systems, this will be achieved through promotion of fodder crop management, improved animal waste management, further strengthening the promotion of biodigester plants with **private sector engagement** for a self-sustained market (**Outcome 3**), promotion of low carbon practices. At the same time, SCALA will strengthen sustainable forest management by building capacity of local people to promote carbon sequestration, and developing business models of sustainable supply chain of commodities driving deforestation. The SCALA Programme will leverage and build stronger collaboration between the government and the private sector, in line with the recent push for Public-Private Partnerships by the Royal Government of Cambodia. Particularly the Programme will contribute towards developing the De-Risking strategy for the promotion of private sector engagement in implementing the climate actions related to agriculture and land use, which equally share benefits for a long-term resilient livelihood and living standard of the local people. Innovative practices and introduced climate solutions will be based on a rigorous, systems-level perspective-informed assessment of the selected systems (**Outcome 1**).



In each of the selected systems, the specific actions to achieve transformative change include:

- 1) Forestry (Sustainable Forest Management):** Through the implementation of climate action related to sustainable forest management, SCALA will strengthen the effort of the government regarding the existing REDD+ Programme, with the aim of a reduction of Greenhouse gas emissions. At the same time, it will build the local adaptive capacity for development of sustainable forestry, and contribute to improve livelihoods of local communities. This will be based on findings from the cost benefit analysis of the REDD+ Programme in terms of natural resources as well as livelihood of the local people. The SCALA Programme will support the development of a sustainable supply chain of deforestation-free agricultural products. Findings / Results from the support of the SCALA Programme are expected to serve as a model that can be used for upscaling and replication of the best practice in other areas.
- 2) Livestock (Enhanced animal waste management to reduce GHG emission by converting animal manures into bio-gas):** The SCALA Programme will contribute to strengthen the reduction of greenhouse gas emission in the agriculture sector through improved animal waste management converting animal manures into bio-gas, as well as by promoting fodder cropping system and climate smart animal production. By improving livestock farmers incomes and animal feed suppl, for example, during drought conditions, this intervention will also strengthen community resilience to the impacts of climate change. This will complement the existing effort of the Government of Cambodia's Ministry of Agriculture, Forestry and Fisheries (MAFF). The SCALA Programme will support in conducting the system-level analysis of the bio-digester program, fodder crops and quality inputs, including the cost benefit analysis in order to develop evidence for further upscaling and replication of good practices on a larger scale.

4.3 WORKPLAN

The project workplan has been developed in a consultative process that included all relevant stakeholders. Following internal meetings with the Cambodia SCALA team (see Annex 1 for detail), separate technical consultations were held with MAFF (Annex 2 and 3) and MoE (Annex 4). The inception workshop (see section 4.1, Annex 5) was conducted on 25 March 2022 and included joint consideration of the workplan. In addition to the below summary of the workplan, Annex 6. contains the full programme results framework and baseline information.

4.3.1 Outcome 1

Information and assessments used by national stakeholders to identify and appraise transformative climate actions to advance NDC/ NAP priorities in land use and agriculture.

The basis of work to strengthen the evidence base for implementation of transformative climate action in land use or agriculture has mostly been undertaken during the inception phase through the intensive reviews of the priority actions for the agriculture and land use sectors in the NDCs and NAPs.

Under this outcome, the expected deliverables are listed below:

- An Inception Report, TOC, CAR, and work plan (all described in this report).
- A report on mapping of the value chain of the key forest-risk commodities.
- A feasibility study for a carbon standard for communities.

As key activities under the Outcome 1 and output 1.1. mentioned above, the SCALA Programme will carry out the following major activities and sub activities as follows:



Activity 1.1.1: Conduct participatory technical reviews of NDCs and/or NAPs to identify priority land use and agriculture actions with transformative and systems-change potential.

- Sub-activity 1.1.1.1: Technical Review of the main climate change strategies namely NDC (2030), CCCSP (2023), REDD+ AIP (2026) focusing on the action plans related to AFOLU sector through a step-by-step review process, spanning seven key areas.
- Sub-activity 1.1.1.2: Conduct participatory systems-level assessments to define evidence-based transformative and inclusive implementation options (value chain-Agriculture-CSA, landscape, agro-ecosystem) including a baseline assessment.
- Sub-activity 1.1.1.3: Consultations with key stakeholders to identify and prioritize the potential transformative implementation action/options.

Activity 1.1.2 Participatory mapping of the value chain of the key forest-risk commodities.

- Sub-activity 1.1.2.1: Participatory mapping of the value chain of the key forest-risk commodities including the producers, intermediaries and buyers.

Activity 1.1.3 Conduct a feasibility study to implement a Plan Vivo offset project.

- Sub-activity 1.1.3.1: Conduct a feasibility study to implement a Plan Vivo offset project (or similar carbon standard for communities) in a REDD+ pilot project by FCPF.

4.3.2 Outcome 2

Climate risk-informed land use and agriculture sector priorities integrated into national and sectoral planning, budgeting and monitoring are expected to achieve the Output 2.1. NDC and NAP priorities for land use and agriculture are enhanced and integrated into sectoral planning and budgeting.

The Outcome 2 is expected to produce the following deliverables:

CCPAP updated and endorsed.

M&E/MRV guidelines/ roadmap/action Developed.

Capacity building activities delivered.

Capacity needs assessment and capacity building plan developed.

Capacity building activities delivered .

Capacity needs assessment and capacity building plan developed.

System level assessment and evidence-based collected regarding the greenhouse gas emissions reductions through improved livestock management.

Major activities and sub-activities to be implemented under the Outcome 2 are listed below:

Activity 2.1.1: Support MAFF and MOE to update CCPAP 2022-2030 through integration of the priority assessment, including gender analysis and COVID Recovery plan.

- **Sub-activity 2.1.1.1:** Updating the CCPAP including the identified action of the AFOLU sector with transformative and system-change potential based on the findings and recommendations of the Activity 1.1.1



- **Sub-activity 2.1.1.2:** Conduct participatory systems-level assessments to define evidence-based transformative and inclusive implementation options (value chain-Agriculture-CSA, landscape, agro-ecosystem) Including baseline assessment.

Activity 2.1.2: Support the improvement of the existing M&E/MRV systems reporting in regard to mitigation and/or adaptation in land use and agriculture, including collection of gender disaggregated data.

- **Sub-activity 2.1.2.1:** Based on the results of the technical and financial analysis made by CBIT on the M&E and MRV system in MAFF, develop the M&E/MRV Guidelines/roadmap/action for MAFF regarding to adaptation and mitigation actions for AFOLU sector.
- **Sub-activity 2.1.2.2:** Support MAFF and MOE to improve their MRV capacities for monitoring and reporting (this includes the review, identification of set of sector-specific adaptation/mitigation indicators).

Activity 2.1.3: Capacity building support for the integration of land use/agriculture into government policy, planning, budgeting.

- **Sub-activity 2.1.3.1:** Capacity needs assessment and capacity building plan of relevant/key stakeholders for integrating land use/agriculture into government policy, planning, budgeting and M&E/MRV.
- **Sub-activity 2.1.3.2:** Relevant capacity-building activities conducted for the relevant key stakeholders.

The SCALA Programme will also work with MAFF and MOE to improve M&E/MRV capacity for monitoring and reporting, this includes the review and identification of a set of sector specific adaptation and mitigation indicators for the AFOLU sector. Additionally, the SCALA Programme will support MAFF to develop a new climate change priority action plan 2022-2030. Apart from that, another government partner is the NBP program under MAFF through coordination and support from the Department of International Cooperation and the General Directorate of Animal Health and Production. Under the outcome 2, the SCALA Programme is planning to conduct various assessments including capacity assessments that engage with different stakeholders in the studies.

4.3.3 Outcome 3

Outcome 3: Private sector engagement in climate action in land use and agriculture is to be achieved inter alia via Output 3.1, an enabling environment and enhanced incentives for private sector engagement in NDCs and NAPs implementation.

The Outcome 3 is expected to produce the following deliverables:

Technical report of a sustainable intervention and potential PPP to develop in one province.

At least one project concept note, engaging civil society and private sector actors, is validated and registered under the Plan Vivo Standard (or a similar community-based standard).

Major activities and sub-activities to be implemented by the SCALA Programme under Outcome 3 are listed below:

Activity 3.1.1: Identify policy and financial de-risking measures and business opportunities.

- **Sub-activity 3.1.1.1:** Study the key commodities driving deforestation, including the social (livelihood, cultural), financial and environmental impact of supply chains of those commodities and



the opportunities to enhance the partnership for sustainable development, share knowledge technology and resources.

- **Sub-activity 3.1.1.2:** Propose sustainable interventions and potential effective public-private and civil society partnerships, addressing social and environmental risks in the supply chain, and supporting the government in meeting the NDC commitments.

Activity 3.1.2: Develop project concept notes to leverage investment for transformative and inclusive action in partnership with the private sector.

- **Sub-activity 3.1.2.1:** Support the development of a Project concept note of a sustainable land use solution (Agroforestry, reforestation, and so on) leveraging investment for transformative and inclusive action in partnership with the private sector.

The SCALA Programme will work with different stakeholders from national to sub-national levels, including private sector, government institutions and other relevant agencies, to identify policies and financial de-risking measures and business opportunities, propose sustainable interventions for effective private, public, and society partnership, and develop project concept notes to leverage investment for transformative and inclusive action in partnership with the private sector.

4.4 STAKEHOLDER MAPPING

The key government partners will be the Ministry of agriculture and forestry and fisheries (MAFF) and Ministry of environment (MOE). The SCALA Programme will also involve the technical departments and/or technical working groups under each relevant ministry, for example MAFF Department of International Cooperation, Department of Planning and Statistic (DPS), Forestry Administration, Technical working group on climate change, agriculture, forestry and fisheries (TWG-CCAFF), and also the NBP steering committee under MAFF. From the MOE side, the SCALA Programme may involve the Department of Climate Change, General Department of Administration for Nature Conservation and Protection (GDANCP), REDD+ Task Force. To some extent, the SCALA Programme may also involve the National Council for Sustainable Development (NCSD) and its secretariat/department of climate change. This is particularly true given the role the NCSD Secretariat play in executing the NAP Readiness project highlighted under 2.4., which is a key support programme to which complementarities will be sought. Other technical partners include national and support actors involved in the delivery of the NDC-P Partnership plan. At the sub-national level, PDAFF, PDoE, as well as private sector, NGOs, and local authorities will be involved with the program. At the community level, there will be involvement with the community-based organizations concerning the sustainable forest management / REDD+ Programme.



5. OPERATIONS

5.1 COUNTRY AND GLOBAL TEAM COORDINATION

The project will be technically supported by the members of the global, regional and national team members. The FAO country team will be composed of a SCALA Country coordinator, a national SCALA project coordinator, and members of the Climate Change and Forestry Programme of FAO with direct and regular support and supervision from the manager of the FAO Climate change/ Forestry unit. The UNDP country team will compose of a SCALA Country Focal Point, a national SCALA technical coordinator, and staff and project staff of UNDP and related projects and initiatives on climate change.

At the national level, the SCALA focal points will be from MAFF and MOE. Currently, the SCALA focal point from MAFF is H.E Prum Somany, Department of International Cooperation. It is expected that a focal person from MoE will be nominated soon. A strong coordination arrangement exists between the country, regional and global teams who frequently communicate via email to provide technical support.

The FAO and UNDP country teams are also in regular communications and monthly updates and meetings among the country teams are expected to be organized. During the meeting, a monthly work plan and monthly progress report, including challenges and support needed will be shared among the country teams for urgent need and support to move the SCALA implementation ahead with the activity plan. In addition, requests for meetings can be made for a specific task to be completed in case of urgency.

The country team and Global team regularly communicate by email and virtual meetings. Quarterly meetings will be organized regularly to update the progress and discuss solutions for moving forward with the program implementation in the country. Certain issues could be raised by the country team to ask for technical and methodological support from the global team in carrying out the specific assignments of the SCALA Programme, for example system level assessments, documentation of best practices, and so on.

5.2 PROJECT STEERING COMMITTEE OR ADVISORY GROUP

It is proposed that there will be two main groups to be involved in the coordination and steering of the program implementation. Major roles and functions of each group are highlighted below:

- The **Project Steering Committee (PSC)** is the overarching guiding body for the project. It will ideally include nominated focal points from a range of government agencies and other invited representatives. It would normally meet one to two times per year.
- **Project Advisory Group (PAG)** manages the day-to-day operation of the project. It will largely be the national consultant and the government focal point as well as the assigned FAO and UNDP staff. The PAG can meet on a quarterly basis.

5.3 MONITORING AND EVALUATIO AND REPORTING

Monitoring and evaluation and reporting will be conducted both at the level of the global SCALA programme (with country inputs and updates from Cambodia) and at the national level. Country-specific M&E activities that have been commenced and/or will be undertaken include the following:

- **A Baseline survey** was produced in the inception phase of the SCALA Programme through various participatory consultation meetings with government partners from MAFF and MOE and other key stakeholders. The baseline survey will be used as the reference for measuring the changes under the intervention of the SCALA Programme. Cambodia has contributed to the baseline survey.
- **An global endline survey and final evaluation** of the SCALA Programme will be conducted at the end of the global programme implementation to measure changes. Comparison between



endline and baseline data and information will be conducted to see the changes and additional qualitative information will also be collected to use as supporting evidence of the changes and impacts of the program. Cambodia representatives will be invited to respond to the survey and might be requested to respond to interviews and provide key documents, as appropriate.

- **Ongoing/periodic monitoring** will be conducted by the country team with participation from the government partners from MOE and MAFF with the purpose to understand and monitor the progress of the Programme. At the same time, these will provide an opportunity for them to provide technical inputs and direction support for improving the performance of the SCALA Programme implementation.

5.4 KNOWLEDGE MANAGEMENT AND COMMUNICATIONS

The project will work towards the creation of key technical outputs, including the following

- Capacity needs assessment and capacity building plan for relevant/key stakeholders for integrating land use/agriculture into government policy, planning, budgeting and M&E/MRV.
- MAFF Climate Change Priority Action Plan 2022-2030 (CCPAP 2021-2030).
- System level assessment reports related to the bio-digester program, sustainable forest management, and so on.
- M&E/MRV guidelines/roadmap/action for MAFF regarding the adaptation and mitigation actions for AFOLU sector.
- Study report on key commodities driving deforestation.
- De-risking strategy to promote private sector engagement in implementing climate actions related to agriculture and land use.
- Concept note for project proposal development “to leverage investment for transformative and inclusive action in partnership with the private sector”.

Lessons and learnings from these will be made available to a wider, non-technical audience via the production of knowledge products such as case studies and briefs.



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ANNEX 1: MEETING AGENDA WITH NATIONAL CLIMATE CHANGE TECHNICAL SPECIALIST

Event: SCALA Cambodia - Meeting with the global team on inception (via Zoom)

- *Date/time:* Friday 28 May 2021
- 13:30-15:00 Phnom Penh & Bangkok (GMT+7) / 8:30-10:00 Rome

Objectives:

- Exchange updates on country and global progress
- Explain how the inception materials could be applied in Cambodia

Agenda:

13:30-13:35	Welcome and agenda	Samuel Tumwesigye (UNDP) Beau Damen (FAO)
13:35-13:50	Updates	
	Update from the country team on inception phase to date	Carlos Riano (UNDP) Chansopheak Ann (FAO)
	Update from the global team on global implementation and inception work in other SCALA countries	Julie Teng (UNDP) Sibyl Nelson (FAO)
13:50-13:55	Overview of inception phase activities and milestones	Subhi Shama (UNDP)
13:55-14:25	Climate Action Review matrix and Theory of Change	
	Explanation and demonstration of the materials based on Cambodia work plan	Krystal Crumpler (FAO) Samuel Tumwesigye (UNDP) Subhi Shama (UNDP) Beau Damen (FAO)
	Inputs on Private Sector Engagement; Gender & Social Inclusion	Neha Rai (FAO), Shovon Kibria (UNDP), Sibyl Nelson (FAO)
14:25-14:45	Discussion	
14:45-14:55	Next steps	Samuel Tumwesigye (UNDP) Beau Damen (FAO)
14:55-15:00	Summary and closing	Julie Teng (UNDP) Sibyl Nelson (FAO)



ANNEX 2: INCEPTION MEETING WITH MAFF

Date: Friday 11 June 2021

Time: 16:00-17 :00 Phnom Penh & Bangkok (GMT+7)

Participants:

MAFF: Mr Prum Somany, Ms Sar Sophyrak, and Ms On Neangpisy

FAO: Mr. Beau Damen, Ms. Chansopheak Ann, Mr. Siveun Nhak, Ms. Sochanny Hak, Mr. Soksophors Yim, Mr. Than So

UNDP: Mr Carlos Riano, Mr Sovanna Nhem

Meeting objective and agenda

Ann Chansopheak (FAO): The objectives of the meeting were to:

- i. Introduce the focal points of the SCALA team.
- ii. Present the program, inception phase process, and approach to the focal point(s) of MAFF.

Introduction of the team:

- Mr. Prum Somany (MAFF) introduced himself as the focal point, and his two other colleagues namely Ms. Sar Sophyrak and Ms. On Neangpisy who will support the program from MAFF.
- Ann Chansopheak (FAO) introduces the SCALA Programme team including the focal points of FAO and UNDP and short-term consultants who support the introductory phase of the SCALA Programme.

Presentations:

The presentation is attached. The presentation covered the following points:

- Mr. Beau Damen presented the overview of the SCALA Programme including the objective, participating countries, indicative budget, rationale, and approaches.
- Ms. Ann Chansopheak presented the structure of the coordination, outcome, output, and target.
- Mr. Yim Soksophors presented the process of inception phase, work plan development including the climate action review and Theory of Change, timeline of the inception phase, and structure of the inception report.

Questions and discussions:

- i. What are the agencies involving in the program? Will the program's interventions focus only on Forestry? Is it possible that the interventions address the issues of other subsectors of agriculture, for example, livestock as this is the mandate of MAFF?
 - ⇒ The identification of the program intervention will be based on the Climate Action Review Matrix and the Theory of Change being conducted and will be consulted. With the limited resources, the SCALA Programme may support some development of the policies related to the AFOLU sector (the Agriculture, Forestry, and other land use) such as low emission strategy initiated by the National Council for Sustainable Development. Depending on the analysis, the intervention may be scoped down to any specific subsector.
- ii. What are the roles of the national project coordination? What is the NDC unit? Will there be a project management unit? What is the role of the focal point from the MAFF?
 - ⇒ It is understood that Mr. Prum Somany has been designated as the focal point for other FAO projects, so it is expected that his roles for SCALA are the same.
 - ⇒ The national project coordinator will be recruited on a full-time basis to lead the implementation of the project in the country. She/He will liaise with different stakeholders and work under the



Scaling up climate ambition on land use and agriculture
through NDC and NAPs (SCALA)

- guidance of the designated focal point of MAFF and MOE. On the other hand, depending on the arraignment of each country, the national project coordinator will liaise with the NDC unit as SCALA Programme aiming to support climate actions committed in NDC. Cambodia has been a member of the NDC Partnership who oversees and facilitates the implementation of the NDC. NDC Partnership in Cambodia is recruiting the NDC facilitator so the SCALA national project coordinator will also work closely with the facilitator.
- ⇒ Together with FAO's CBIT project team, the national project coordinator will work closely under the guidance of MAFF's team. Project Management Unit (PMU) manages the day-to-day operation of the project. It will largely be the national consultant and the government focal point as well as the assigned FAO and UNDP staff. The steering committee is the overarching guiding body for the project. It will ideally include nominated focal points from a range of government agencies and other invited representatives. It would normally meet one to two times per year.
 - iii. What is the project stage now? Whether or not the inception workshop will be organized? Within MAFF, there is a Technical Working Group on Climate Change, Agriculture, Forestry, and Fisheries (TWG-CCAFF) that might need to be engaged somehow to provide the technical guidance and coordinate with the different sectors.
 - ⇒ The project is now running through the inception phase, and the country-specific program is being developed to be consulted and share in the inception workshop tentatively organized by end of July. The TWG-CCAFF is one of the important platforms for consultations and technical guidance. Sophors will need to approach Mr. Prum Somany and the team on the consultation processes and some guidance for the coming weeks.
 - iv. This was the first meeting with MAFF. It was strongly suggested that there should be a face-to-face meeting to discuss more in-depth the program and work plan.

Action: Sophors will contact Sophyrak for the next meeting and it is hoped to be a face-to-face meeting.



ANNEX 3: TECHNICAL CONSULTATION MEETINGS WITH MAFF

Date: Tuesday, 07 September 2021

Time: 8:30-12:00 Phnom Penh & Bangkok (GMT+7)

Objectives of the meeting:

- Introduce the background information of the SCALA Programme
- Present the draft Climate Action Review and baseline survey and to gather comments and inputs for improving the documents.

Welcome and Opening Speech

The meeting started with the opening speech by **H.E Chan Phaloeun**, MAFF secretary of state and also the chairperson of the climate change technical working group. She welcomed the participants who spent valuable time for the meeting and encouraged the participants to actively participate in the discussion including provision of feedback and comment on the draft documents (climate action review, draft work plan, and required information for the baseline report).

Introduction to the Background Information of the SCALA Programme

First, **Ms. Ann Chansopheak** started with the brief of the agenda and objectives as well as the background of the SCALA Programme, followed by the presentation on the overall of the Programme by **Mr. Beau Damen**, and presentation on draft climate action review and baseline survey by **Mr. Yim Soksophors**, national consultant. Ms. Ann Chansopheak also emphasized that the selection of the climate priority actions was based on the review of NDC and NAP. Today's meeting is the chance to present the draft CAR and also collect feedback from the members of the climate change technical working group of MAFF.

After that, **Mr. Beau Damen, FAO regional**, briefly presented the overall SCALA Programme, including objectives, duration, budgets, expected outcomes and so on. He added that the Programme aimed to strengthen the adaptive capacity from climate change impact and the Programme is mainly relevant to the Agriculture and Land Use Sector, working with different entities working on climate change, and the Programme complements existing works at the country level.

Impression / comment from the participants:

Impression from **Mr. Mak Mony, Department of Planning, MAFF**: His impression is that the SCALA Programme will help to complement the NAP of the ministry, while the MAFF has a shortage of funds to implement the Programme. NAP was approved in march 2018. However, he referred to the **MAFF National Action Program to Combat Land Degradation (NAP)**.

Ms. Vong Sophanna, Forestry Administration mentioned that the outcome 3 is about the private sector engagement, but she suggested that the **Community Forestry (CFs)** should be integrated under the Outcome 3 as well (to align with the work plan of FA). This means that the Outcome 3 will engage both **Private sector and Community Forestry**.

Another participant raised about the use of words **“Agricultural cooperatives or Agricultural communities”** instead of CF as it also covers community forestry. He added that the Agricultural cooperatives should be used with highlights of specific communities in bracket (for example: community forestry, community fisheries, crop producer community, livestock producer groups, rubber associations, and so on).



Presentation on the draft Climate Action Review and Baseline Survey

Mr. Yim Soksophors, then presented the draft Climate Action Review (CAR), followed by the questions related to the baseline report to the participants at the end of his slides.

Below are some observations and questions from the participants after the presentation:

What are the priority criteria used for the spider graph analysis?

- **Answer:** Scoring on the spider graphs was based on the 7 criteria (in the climate action review tool), which include System thinking, climate rationale, gender and social inclusion, whole of government, sustainable development, private sector engagement, and innovation.

Why do we select the study in Stung Treang province?

- **Answer:** Ms. Ann Chansopheak helped to answer that work is relevant to UNDP, it is our suggestion which is relevant to the REDD+ Programme.

Impression from H.E Chan Phaloeun, according to the findings from CAR. H.E mentioned that there are 28 climate actions, mostly related to adaptation actions, only 1 climate action related to the mitigation. H.E added the limited budget from the government for carrying out the research related climate actions. She also added about the involvement of the private sector, mostly the government has limited budget to support the private sector and the private sector itself normally puts the profit as their first priority. She also raised about the involvement of companies and community forestry in tree planting. She noted that the CF normally does at a smaller scale if compared to companies.

Mr. Beau Damen clarified a few things. 1) he clarified that we referred to the NAP financing document, but it does not mean that we cannot link with the *National Action Plan to Combat Land Degradation* of MAFF. 2) he highlighted the relevance of the government priority to the SCALA Programme.

H.E. Prom Somany, MAFF Focal point: We have not yet prioritized the climate actions in the sub sector and CAR is also not the final version. So, TWG members can provide recommendations that departments can look at, what should be included to align with the priority and work plan of the departments. Once again, he added *about the addition of the Biodigester Program as it is much relevant to the mitigation action of greenhouse gas emission.*

- **Answer:** Livestock, bio digester, animal waste management are already among the 28 climate actions identified from NDC update.

Ms. Vong Sophanna, Forestry Administration raised about the Master Plan approved by MAFF and companies normally follow that master plan. Companies also conduct Environmental Impact Assessment (EIA). She added that ***it is not clear regarding the DeRisking strategies*** that the SCALA Programme referred to? FA, currently focus on the forest land encroachment by supporting the boundary demarcation and land registration. In addition, FA focuses on livelihood improvement. Why do farmers convert forest land to agricultural land? This is because of their *livelihood*. We want them to use existing land through the practices of agroforestry, ecotourism, and so on. Our barrier is budget. It is good if the SCALA Programme has funds to support CF, then we can significantly reduce/stop forest land encroachment, meaning that communities can improve their livelihood without putting pressure on the forest resources.

Mr. Kim Savoeun: Livestock is relevant to land use, for example fodder production. It is relevant to the SCALA Programme. We have a National biodigester program which is relevant to animal waste management, helping to reduce the greenhouse gas emission to address the climate change impact. In addition, we can use bio slurry for composting / soil improvement, while at the same time reduce the use of chemical fertilizer. So, please consider the integration of livestock sub-sector in the SCALA Programme. He also raised a question regarding the women participation, why women participation was scored less in the climate action review? He added that the women participation should be at least ⅓.



- **Answer:** Gender was reviewed for specific climate action, therefore the score for gender is different for different climate action.

Mr. Beau Damen: The SCALA Programme does not provide direct support to the companies. It is about how to set up partnerships with civil society, farmer groups, other stakeholders toward climate action and so on. He also explained that the SCALA Programme tried to capture different dimensions / holistic approaches and the private sector is one aspect of the dimensions. Beau explained with examples of the Programme in other countries like Thailand.

Comment from a participant: national forest program also *includes rubber* as a main program, the SCALA Programme should not only focus on the rubber clone varieties, but should also focus on the **extension services to farmers** as well as the promotion of agroforestry in rubber plantation.

H.E Chan Phaloeun explained the **SCALA Programme would not be able to cover all programs of MAFF**, so please consider key priorities to include in the Programme.

A participant raised that water and irrigation system should be included in the SCALA Programme

- **Answer:** The Programme is about agriculture and land use, so it includes water management practices in agriculture, but for big irrigation scale it should be under the authority of the Ministry of Water Resources and Meteorology (MOWRAM).

Ms. Ann Chansopheak our SCALA Programme **focuses at the national program, not at field level.**

H.E Prom Somany: Is there **budget available from the SCALA Programme to support institutional management, for example flights** to join the international conference COP26 in England

- **Answer:** Budget could be prepared when we have finalized the activity work plan. Due to the time constraint, we are not sure whether we could integrate the flight cost in the budget and get it approved prior to the COP26 meeting scheduled at the beginning of November 2021.

How does the **SCALA Programme support in carrying out activities under each climate action?**

- **Answer:** Ms. Ann Chansopheak, the Programme has only 600,000 USD for 5 years. Most climate actions are relevant to assessments, studies in more detail that can be supported by the SCALA Programme, then produce project proposals to mobilize resources for field implementation.
- **Answer:** Mr. Sovanny, UNDP provided an explanation of the linkage between **SCALA and REDD+ Programme.**

Ms. Vong Sophannha, Forestry Administration: Can we have a **pilot project for each selected climate action?**

Mr. Am Phirum, Deputy Director of the Land Department of the General Directorate of Agriculture (GDA) raised the development of the Land **Use Map**. Some data might be relevant to the Programme, and previously FAO Life and Nature project might want to support.

- **Answer:** Life and Nature project has its specific scope that is why land use map was not able to be included under the financial support of the project, but FAO management team is still looking for the resource mobilization to continue doing that work.

Mr. Sar Cheatra, raised that the **selection of the priority climate actions in the CAR should be aligned with NDC that MAFF needs to report or update to MOE.**

- **Answer:** Ms. Ann Chansopheak motioned that the SCALA Programme will match with CBIT help to build staff capacity in MAFF and MOE, including monitoring and reporting related to NDC, and commitment to the climate change actions.



Closing

Finally, **H.E Chan Phaloeun** provided a closing remark highlighting the active participation of the participants and inputs gathered from the meeting should be considered to improve the draft documents.

Agenda:

Time	Description	Person in charge
9:00 – 9:05	Introduction on the background and objective of the meeting	Ms. Chansopheak Ann, Operations Coordinator (Forestry Programme)
9:05 – 9:15	Welcome and opening remarks	H.E Chan Phaloeun Team Leader of TWG of Climate Change/MAFF
9:15 – 9:30	Introduction to the background information of the SCALA Programme	Mr Beau Damen Natural Resources Officer - Climate Change & Bioenergy, FAO RAP
9:30 – 10:15	Presentation on the draft Climate Action Review and baseline survey (Q&A) Confirm priority review Comments on the work plan Anything mission from the baseline	Mr. Yim Soksophors National consultant SCALA Programme
10:15 – 11:00	Plenary discussion	H.E Chan Phaloeun Team Leader of TWG of Climate Change/MAFF
11:00 – 11:30	Wrap-Up and closing	H.E Chan Phaloeun Team Leader of TWG of Climate Change/MAFF



ANNEX 4: TECHNICAL CONSULTATION MEETINGS WITH MOE

Date: Tuesday, 19 October 2021

Time: 14:00 – 17:00 Phnom Penh & Bangkok (GMT+7)

Objectives of the meeting:

- Introduce the background information of the SCALA Programme
- Present the draft Climate Action Review and baseline survey and to gather comments and inputs for improving the documents.

Welcome and Opening Speech

The meeting started with the opening speech by H.E Chea Sam Ang, Secretary of state of MoE. He firstly thanked all participants who spent valuable time to join this important meeting. He stressed that the climate change related programme needs participation from multistakeholder, this kind of program could not be achieved by individual effort that is why this participatory consultation meeting is organized. He encouraged the participants to capture key indicators of the SCALA Programme and actively participate in the meeting.

Introduction to the Background Information of the SCALA Program

First, Ms. Ann Chansopheak started with a brief introduction to the objectives and agenda of the meeting. She also provided a brief background of the SCALA Programme, including initial formation of the program in April 2020, donor, and nature of the Programme to be implemented in line with the NDC priority climate actions, which mainly focus on agriculture and land use.

Ms. Dasgupta, Srijita (FAOGB) provided the overall information of the SCALA Programme, including target countries from different regions of the world, overall goal of the program, key implementing partners, the Programme will build on NDC and NAP as the entry point to apply the system level thinking, to identify climate action with transformative potential, and other key criteria of the Programme and finally ended her presentation with the specific outcomes of the Programme. Her presentation provided an opportunity for participants to understand the overall SCALA Programme and she encouraged the participants to actively provide input after the presentation of climate action review, baseline survey, and draft work plan.

Presentation on the draft Climate Action Review and Baseline Survey

Mr. Yim Soksophors, then presented the draft Climate Action Review (CAR), baseline survey, draft activity work plan, followed by the guiding questions for plenary discussion at the end of his slides.

Below are some observations and comments from the participants after the presentation:

- 1) First of all, the participant also asked about the methodology of the climate action review, including clarification of the spider graph, and scoring. Clarification was provided by the national consultant related to the CAR tool and also provided elaboration on the meaning of scoring for each criterion of the identified climate actions.
- 2) It was observed that it seems that the SCALA Programme looks for both mitigation and adaptation. So, if the Programme looks at the mitigation, we should determine which sector has



maximum mitigation potential. If we look at the adaptation, we need to look at the sectors that are more vulnerable to the climate change impact.

- 3) The participants raised that the SCALA Programme should select priority climate actions relevant to the climate mitigation by supporting the management and conservation of the protected areas as it is aligned with the government's commitment.

Closing

Finally, H.E Chea Sam Ang, Secretary of state of MoE provided the closing remarks. The SCALA team will improve the existing draft documents based on the inputs from the participants, and the next step will be the organization of the inception workshop with multi-stakeholders. The relevant documents of this meeting will be shared to participants through the REDD+ Programme.

Agenda:

Time	Description	Speaker/Moderator
14:00 – 14:05	Introduction on the background and objective of the meeting	Ms. Chansopheak Ann, Operations Coordinator (Forestry Programme), FAO
14:05 – 14:15	Welcome and opening remarks	H.E Chea Sam Ang, Secretary of state of MoE
14:15 – 15:15	Introduction to the background information of the SCALA Programme Presentation on the draft Climate Action Review and baseline survey Discussion: Q&A Confirm priority review Comments on the work plan Anything missing from the baselines	Mr. Yim Soksophors, National consultant, SCALA Programme
15:15 – 16:00	Presentation on Supporting the NDC in the land use and forest sector through public and private sector engagement in REDD+ actions in Cambodia Discussion: Q&A Updates on the proposal and pending actions Co-financing	Dr. Jamil Mahmood, REDD+/MRV Technical Advisor, UNDP Cambodia
16:00 – 16:15	Wrap-Up and closing	H.E Chea Sam Ang, Secretary of state of MoE



ANNEX 5: THE INCEPTION WORKSHOP

Scaling up Climate Ambition on Land Use and Agriculture through

NDCs and NAPs (SCALA)

Inception Workshop

25 March 2022

Background

Achieving NDC and NAP-related goals in land use and agriculture requires nothing less than transformation of our food and agricultural systems (FAO, 2016). The IPCC defines transformative change as “system-wide change that requires more than technological change through consideration of social and economic factors that, with technology, can bring about rapid change at scale” (IPCC, 2018). Transformative change processes can include innovation, expansion, reorganisation and/or reorientation (Few *et al.*, 2017).

The SCALA programme is funded by the German Ministry of Environment, Nature Conservation and Nuclear Safety, through the International Climate Initiative (IKI). With a budget of €20 million, it is being implemented through a joint effort between FAO and UNDP, building on lessons learned from the IKI-funded “Integrating Agriculture in National Adaptation Plans Programme (NAP-Ag). The programme provides in-depth support to 12 countries in Africa, Asia and Latin America from 2020-2025: Argentina, Cambodia, Colombia, Costa Rica, Cote d’Ivoire, Egypt, Ethiopia, Mongolia, Nepal, Senegal, Thailand, and Uganda.

The **SCALA Programme** aspires to contribute to the medium- to long-term goal of supporting **transformative** climate actions in the land use and agriculture sectors that reduce GHG emissions and/or enhance removals, as well as strengthen climate risk reduction, resilience, and adaptive capacity in participant countries. In terms of the programme-specific objective, SCALA aims for countries to have translated their NDC and/or NAPs into actionable and transformative climate actions in land use and agriculture with multi-stakeholder engagement. In the context of SCALA, **transformative climate action** refers to an agricultural or land use activity (or portfolio of activities) that: i) is implemented in anticipation of climate change and its impacts (or opportunities) and/or to minimize its contribution to climate change in line with national climate change targets (such as NDCs, NAPs); ii) generates systems-wide change (such as in a landscape, value chain or integrated management system) and contributes to transformation across other system(s) (such as socio-political economy, investment landscape); iii) supports systems-wide change at local, national or regional level; iv) focuses on current and future change; v) tackles the underlying drivers of vulnerability to climate risk (such as social injustices and power imbalances); and vi) is economically, socially and environmentally sustainable in the long term (after implementation).



SCALA further emphasises greatly on collaboration between the public and private sectors to drive implementation and addresses several cross-cutting issues such as gender and social inclusion, private sector engagement, innovation, and sustainable development. The main outcomes of the programme are:

- Outcome 1: Information and assessments used by national stakeholders to identify and appraise transformative climate actions to advance NDC/NAP priorities.
- Outcome 2: Climate risk-informed land use and agriculture sector priorities integrated into national and sectoral planning, budgeting and monitoring.
- Outcome 3: Private sector engagement in climate action in land use and agriculture increased.

Objectives and outcomes:

The main purpose of the workshop is to introduce the SCALA program in Cambodia and to further discuss the workplan with the different with the stakeholders involved in the development and review of the different inception phase materials. More specifically, the workshop aims to:

- Introduce the SCALA programme objective, approach and expected outputs for Cambodia.
- Present the results of the baseline survey, climate Action review matrix, Theory of Change the workplan to all participants.
- Generate a discussion on the overall approach and workplan.

Following the workshop, it is expected that,

- Participants will gain a good understanding of the SCALA programme, and its activities and approach in Cambodia.
- The workplan and the Theory of Change will be validated and thereby, consolidated.

Participants

The main participants of the inception workshop will be the MAFF Focal Point, representatives of the International Cooperation Department, Climate Change Technical Working Group of MAFF, REDD+ task force, Climate Change Department, and representatives from relevant departments of the Ministry of Environment (MOE). In addition, FAO and UNDP technical staffs and resource persons will also attend the workshop.

01	H.E Chea Sam Ang	Secretary of State of the Ministry of Environment (MoE) and Deputy of National REDD+ Taskforce and the National Project Director of FCPF-II
02	H.E Chuop Paris	The Director General of the General Directorate of Environmental Knowledge and Information (GDEKI), MoE; the Chair of National REDD+ Taskforce and REDD+ Focal Point



03	H.E Kim Nong	The Director General of the General Directorate of Administration for Nature Protection and Conservation (GDANCP), MoE and member of National REDD+ Taskforce
04	Dr. Khorn Saret	Deputy Secretary General of the Ministry of Agriculture Forestry and Fishery, Deputy of National REDD+ Taskforce, and the Head of REDD+ Secretariat
05	Mr. Uy Kamal	Deputy Director General of the General Directorate of Environmental Knowledge and Information, MoE and a Deputy of REDD+ Secretariat
06	Mr. Chhun Delux	Deputy Director General of the Forestry Administration, MAFF and a REDD+ Technical Team.
07	Mr. Ouk Vibol	The Director of Fishery Conservation Department, the Fishery Administration, MAFF, and member of National REDD+ Taskforce
08	Dr. Hak Mao	Director of Department of the Climate Change, National Council for Sustainable Development, MoE
09	Mr. Leng Chivin	The Director of Department of Geospatial Information Service, GDEKI, MoE and the FCPF-II project manager
10	Ms. Klok Vichet Ratha	Deputy Director of the Climate Change Department, NCSD, MoE and a Deputy of REDD+ Secretariat
11	Ms. Ann Chansopheak	Operations Coordinator (Forestry Programme); FAO
12	Ms. Srijita Dasgupta	FAORAP
13	Damen, Beau	FAORAP
14	Mr. Yim Soksophors	National consultant, SCALA Program
15	Mr. Jamil Mahmood	REDD+ Technical Specialist, FCPF-UNDP
16	Mr. Nhem Sovanna	National Project Advisor, FCPF-UNDP
17	Mr. Lun Kimhy	REDD+ Coordinator, FCPF-UNDP
18	Mr. Krib Sitathani	UNDP



19	H.E Prom Somany	MAFF Focal point and director of international cooperation department
20	Ms. Sar Sophyrak	International Cooperation Department
21	H.E Chan Phaloeun	Chairperson of the Climate change technical working group of MAFF
22	H.E Sar Chetra	Deputy chairperson of the Climate change technical working group of MAFF
23	Ms. Vong Sophannha	Forestry Administration
24	Mr. Kim Savoeun	MAFF Technical working group on climate change
25	Mr. Am Phirum	Deputy Director of the Land Department of the General Directorate of Agriculture (GDA)

Workshop Agenda

Time	Description	Speaker/Moderator
Session 1: Introduction and background		
8:00-8:10	Introduction and objective of the workshop	Ms. Chansopheak Ann, Operations Coordinator (Forestry Programme), FAO
8:10-8:20	Welcome and opening remarks	Co-chaired by: H.E Chea Sam Ang, Secretary of state of MoE H.E. Chan Phaloeun, Secretary of State of MAFF
8:20 – 8:30	Introduction to SCALA program	Ms. Srijita Dasgupta (FAO)
8:30 – 8:35	Group Photo	All participants
Session 2: Overview of the SCALA Baseline survey, Theory of Change and Workplan		
8:20 – 9:20	Overview of SCALA Climate Action Review and Baseline survey	Mr. Yim Soksophors, National consultant, SCALA Program
9:20 – 10:00	Presenting the SCALA country-level Theory of Change	
10:00 – 10:40	Presenting the SCALA draft work plan	
10:40 – 10:50	Break	All participants
10:50 – 11:40	Group work and Plenary discussion Guiding questions: <i>Do you have feedback on the findings of the climate action review?</i>	Co-chaired by: H.E Chea Sam Ang, Secretary of state of MoE



	<i>What is your input or comment on the draft baseline? Do you recommend any adjustments or revisions to the work plan?</i>	H.E. Chan Phaloeun, Secretary of State of MAFF
11:40 – 12:00	Wrap-Up and closing	Co-chaired by: H.E Chea Sam Ang, Secretary of state of MoE H.E. Chan Phaloeun, Secretary of State of MAFF



ANNEX 6: RANKING OF CLIMATE ACTIONS RELATED TO AGRICULTURE AND LAND USE

N.	Action	Score							AVG. SCORE
		Climate rationale	Systems-approach	Private-sector engagement	Gender equality & Social inclusion	Sustainable development	Whole-of-government	Technological Innovation	
1	Promoting sustainable forest management	10.0	10.0	8.3	10.0	10.0	10.0	10.0	9.8
2	Promoting reforestation and afforestation to increase carbon stock	10.0	10.0	7.5	10.0	7.5	10.0	8.8	9.1
3	Promoting resilience in animal production and adaptation to climate change (technical package)	6.7	10.0	7.5	10.0	10.0	8.8	10.0	9.0
4	FOLU: Reduce 50% of historical emission by 2030	10.0	10.0	10.0	10.0	6.3	8.8	6.3	8.8
5	Enhancing animal waste management and climate change emission mitigation	8.3	10.0	9.2	8.0	7.5	7.5	8.8	8.5



6	Organic input agriculture and bio-slurry; and deep placement fertilizer technology	8.3	8.8	8.3	9.0	6.3	7.5	7.5	8.0
7	Building climate change resilience on cassava production and processing	8.3	10.0	10.0	9.0	6.3	3.8	6.3	7.7
8	Towards an Agroecological transition in the uplands of Battambang	6.7	10.0	9.2	9.0	6.3	6.3	6.3	7.7
9	Integrate climate change respond measure to commune land use planning	6.7	0.0	7.5	10.0	8.8	10.0	10.0	7.6
10	Improvement of support services and capacity building to crop production resilient to climate change by promoting research, trials and up-scaling climate-smart farming systems that increase resilience to CC and extreme weather events	8.3	10.0	7.5	9.0	6.3	5.0	6.3	7.5
11	Promote fodder production to improve high nutrient rich and high-quality forage feed value agriculture by-products technology to support cattle production	6.7	10.0	7.5	4.0	6.3	8.8	8.8	7.4



Scaling up climate ambition on land use and agriculture through NDC and NAPs (SCALA)

12	Seedlings distribute to public and local community	10.0	10.0	8.3	4.0	6.3	6.3	6.3	7.3
13	Promote manure Management through compost making process to reduce carbon emission	6.7	10.0	9.2	4.0	6.3	7.5	7.5	7.3
14	Research for the development and enhancement of agricultural productivity, quality, and transfer through strengthening of crop variety conservation and new crop variety release responding to the impacts of climate change	5.0	10.0	9.2	9.0	6.3	5.0	6.3	7.2
15	Scaled up climate-resilient agricultural production through increased access to solar irrigation systems and other climate-resilient practices	6.7	8.8	8.3	9.0	6.3	5.0	6.3	7.2
16	Development of Rice crops for increase production, improved quality-safety; harvesting and post harvesting technique and agro-business enhancement	6.7	6.7	9.2	9.0	6.3	5.0	6.3	7.0



17	Development of Horticulture and other food crops for increase production, improved quality-safety; harvesting and post harvesting technique and agro-business enhancement	6.7	6.7	9.2	9.0	6.3	5.0	6.3	7.0
18	Development of Industry crops for increase in production, improved quality-safety; harvesting and post harvesting technique and agro-business enhancement	6.7	6.7	9.2	9.0	6.3	5.0	6.3	7.0
19	Strengthening capacities for risk prevention and reduction, effective emergency preparedness and response at all levels; enhancing livestock and disease-related early warning system, and integrating disaster risk reduction and climate change adaptation measures into recovery and rehabilitation initiatives in the livestock sector	5.0	8.8	8.3	9.0	6.3	5.0	6.3	6.9
20	Development of rubber clone varieties suitable for AEZ and resilient to climate change	5.0	7.5	9.2	9.0	6.3	5.0	6.3	6.9



Scaling up climate ambition on land use and agriculture through NDC and NAPs (SCALA)

21	Promoting aquaculture production systems and practices that are more adaptive to climate change	3.3	10.0	8.3	9.0	6.3	5.0	6.3	6.9
22	Promoting climate resilience in the fisheries sector	5.0	8.8	8.3	8.0	6.3	5.0	6.3	6.8
23	Promotion of research capacities on animal genetic, animal breeding, and animal feed is strengthened to adapt to climate change	5.0	7.5	8.3	9.0	6.3	5.0	6.3	6.8
24	Development of new technologies and increased yields by using new crop varieties which adapt to climate change	5.0	7.5	9.2	8.0	6.3	5.0	6.3	6.7
25	Increasing the effectiveness and sustainability of agricultural land management techniques (Conservation Agriculture)	6.7	10.0	7.5	4.0	3.8	7.5	7.5	6.7
26	Enhancing institutional and capacity development on climate change impact, vulnerability assessment, adaption measures and mitigation related to rubber sector	5.0	5.0	8.3	9.0	6.3	5.0	6.3	6.4



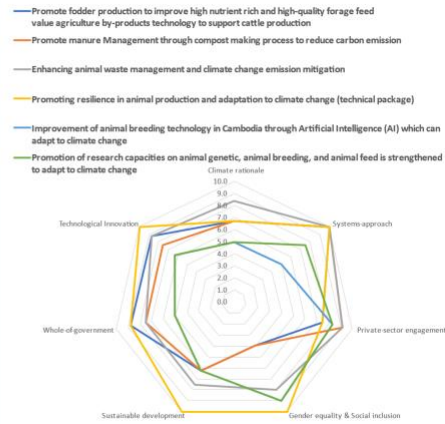
27	Improvement of animal breeding technology in Cambodia through Artificial Intelligence (AI) which can adapt to climate change	5.0	5.0	8.3	9.0	6.3	5.0	6.3	6.4
28	Developing a training manual and providing training on approaches for development of climate-smart and sustainable livelihood to rural poor people	3.3	10.0	6.7	2.0	6.3	5.0	6.3	5.6



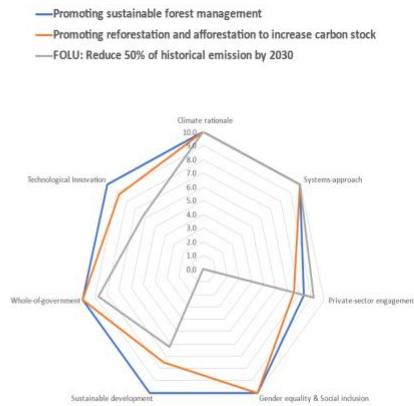
CAR ANALYSIS USING THE NDC-AFOLU FRAMEWORK

Sub-sectors:

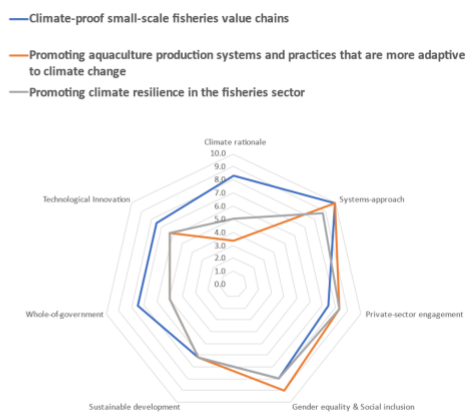
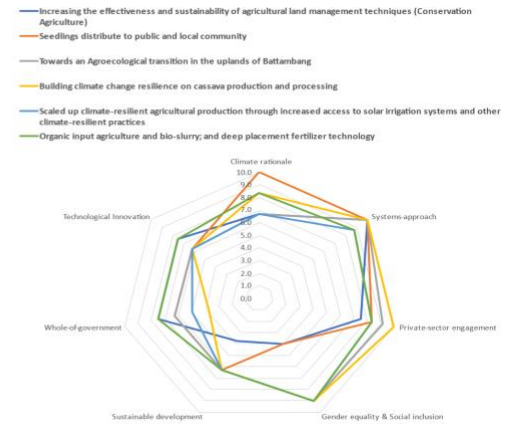
Livestock



Forestry



Agriculture

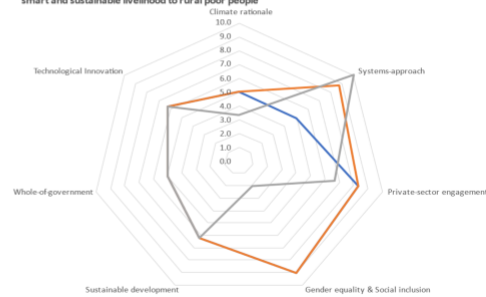




Cross cutting themes:

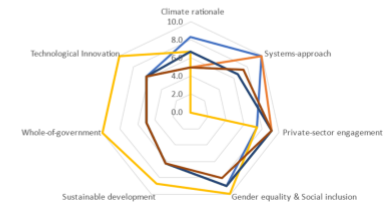
Support needs:
Capacity
Development

- Enhancing institutional and capacity development on climate change impact, vulnerability assessment, adaption measures and mitigation related to rubber sector
- Strengthening capacities for risk prevention and reduction, effective emergency preparedness and response at all levels; enhancing livestock and disease-related early warning system, and integrating disaster risk reduction and climate change adaptation me
- Developing a training manual and providing training on approaches for development of climate-smart and sustainable livelihood to rural poor people



Support needs:
Research and
Development

- Improvement of support services and capacity building to crop production resilient to climate change by promoting research, trials and up-scaling climate-smart farming systems that increase resilience to CC and extreme weather events
- Research for the development and enhancement of agricultural productivity, quality, and transfer through strengthening of crop variety conservation and new crop variety release responding to the impacts of climate change
- Development of rubber clone varieties suitable for AEZ and resilient to climate change
- Integrate climate change respond measure to commune land use planning
- Development of Rice crops for increase production, improved quality-safety; harvesting and post harvesting technique and agro-business enhancement
- Development of Horticulture and other food crops for increase production, improved quality-safety; harvesting and post harvesting technique and agro-business enhancement
- Development of Industry crops for increase in production, improved quality-safety; harvesting and post harvesting technique and agro-business enhancement
- Development of new technologies and increased yields by using new crop varieties which adapt to climate change



ANNEX 7: PROGRAMME RESULTS FRAMEWORK AND BASELINE INFORMATION

RESULTS CHAIN	ACTIVITY	LEAD AGENCY	INDICATOR	UNIT	BASELINE	TARGET
<p>Outcome 1: <i>Information and assessments used by national stakeholders to identify and appraise transformative climate actions to advance NDC/ NAP priorities in land use and agriculture</i></p>						
Output 1.1. ⁴ Evidence base for implementation of transformative climate action in land use or agriculture strengthened	Activity 1.1.1 Conduct participatory technical reviews of NDCs and/or NAPs to identify priority land use and agriculture actions with transformative and systems-change potential.	FAO	- 2 meetings in Phnom Penh - 1 Inception workshop - 1 Assessment report with Theory of Change (TOC)	Successful conducted technical review and report.	0	1 technical review report
	Sub-activity 1.1.1.1: Technical Review of the main climate change strategies namely NDC (2030), CCCSP (2023), REDD+ AIP (2026) focusing on the action plans related to AFOLU sector through a step-by-step review process, spanning seven key areas.	FAO				
	Sub-activity 1.1.1.2: Conduct participatory systems-level assessments to define evidence-based transformative and inclusive implementation options (value chain-Agriculture-CSA, landscape, agro-ecosystem) Including baseline assessment.	FAO				
	Sub-activity 1.1.1.3: Consultations with key stakeholders to identify and prioritize the potential transformative implementation action/options.	FAO				

⁴ Global programme indicator for Output 1.1: Number of a assessments (i) conducted on transformative, gender-responsive climate actions in a food, landscape or other related systems identified through NDC and/or NAPs reviews and (ii) assessed through inclusive multi-stakeholder consultations that address the needs and priorities of women and men



Scaling up climate ambition on land use and agriculture through NDC and NAPs (SCALA)

	Activity 1.1.2. Participatory mapping of the value chain of the key forest-risk commodities.	UND P	- Meeting reports and assistance-sheets	Meeting report, mission report, technical report	0	- 1 per meeting
	Sub-activity 1.1.2.1: Participatory mapping of the value chain of the key forest-risk commodities including the producers, intermediaries and buyers.	UND P	- 1 Report of missions, - Technical report			- 1 report of the mission - 1 technical report
Outcome 2: Climate risk-informed land use and agriculture sector priorities integrated into national and sectoral planning, budgeting and monitoring						
Output 2.1.⁵ NDC and NAP priorities for land use and agriculture enhanced and integrated into sectoral planning and budgeting	Activity 2.1.1. Support MAFF and MOE to update CCPAP 2021-2025 through integration of the priority assessment, including gender analysis and COVID Recovery plan.	FAO				
	Sub-activity 2.1.1.1: Updating the CCPAP including the identified action of the AFOLU sector with transformative and system-change potential based on the findings	FAO	CCPAP updated and endorsed.	CCPAP published	0	1

⁵ Global programme indicators for Output 2.1: 1) Number of ministries having adopted sectoral plans and/or budget submissions that (i) incorporate gender-responsive NAPs and NDC land use and agriculture priorities and (ii) are based on consultations that increase the participation of women and women's representatives in decision-making; 2) Number of MRV and/or M&E systems are operationalised at national and/or sectoral level for monitoring and reporting on mitigation and/or adaptation in land use and agriculture, including sex-disaggregated data; and 3) Number of NDCs and/or NAPs enhanced with updated land use and agriculture priorities and gender-responsive targets



	and recommendations of the Activity 1.1.1					
	Sub-activity 2.1.1.2: Conduct participatory systems-level assessments to define evidence-based transformative and inclusive implementation options (value chain-Agriculture-CSA, landscape, agro-ecosystem) Including baseline assessment	FAO	System level assessment		0	1
	Activity 2.1.2. Support the improvement of the existing M&E/MRV systems reporting in regard to mitigation and/or adaptation in land use and agriculture, including collection of gender disaggregated data.	FAO				
	Sub-activity 2.1.2.1: Based on the results of the technical and financial analysis made by CBIT on the M&E and MRV system in MAFF, develop the M&E/MRV Guidelines/roadmap/action for MAFF regarding to adaptation and mitigation actions for AFOLU sector.	FAO	M&E/MRV guidelines/roadmap/action Developed	M&E/MRV guidelines/roadmap/action drafted	0	1
	Sub-activity 2.1.2.2: Support MAFF and MOE to improve their MRV capacities for monitoring and reporting (this includes the review, identification of set of sector-specific adaptation/mitigation indicators).	FAO	Capacity building activities delivered	Training reports	0	TBD



	Activity 2.1.3 Capacity building support for the integration of land use/agriculture into government policy, planning, budgeting.	FAO				
	Sub-activity 2.1.3.1: Capacity needs assessment and capacity building plan of relevant/key stakeholders for integrating land use/agriculture into government policy, planning, budgeting and M&E/MRV.	FAO	Capacity needs assessment and capacity building plan developed	Capacity needs assessment and capacity building plan endorsed/drafted	0	1
	Sub-activity 2.1.3.2: Relevant capacity building activities conducted for the relevant key stakeholders.	FAO	Capacity building activities delivered	Training reports	0	TBD
Outcome 3: Private sector engagement in climate action in land use and agriculture increased						
Output 3.1. ⁶ Enabling environment and incentives enhanced for private sector engagement in NDCs and NAPs implementation	Activity 3.1.1. Identify policy and financial de-risking measures and business opportunities.	UND P				
	Sub-activity 3.1.1.1: Study the key commodities driving deforestation in the Stung Treng Province, including the social (livelihood, cultural), financial and environmental impact of supply chains of those commodities in the province and the	UND P	2 reports of missions, Report of partners and stakeholders consulted Final Study.	2 missions 2 workshops 1 report	0	4

⁶ Global programme indicators for Output 3.1: 1) Number of gender-responsive de-risking strategies validated by existing institutional coalitions of public, civil society and private sector actors taking into account well-being of local communities/different actors along value chain and 2) Number of project concept notes for transformative and gender-responsive climate action with public private partnerships



	opportunities to enhance the partnership for sustainable development, share knowledge technology and resources.					
	Sub-activity 3.1.1.2: Propose sustainable interventions and potential effective public-private and civil society partnerships, addressing social and environmental risks in the supply chain, and supporting the government in meeting the NDC commitments.	UND P	Technical report of the sustainable intervention and potential PPP to develop in the province.	report	0	1
	Activity 3.1.2. Develop project concept notes to leverage investment for transformative and inclusive action in partnership with the private sector.	UND P				
	Sub-activity 3.1.2.1: Support the development of a project concept note of a sustainable land use solution (agroforestry, reforestation, and so on) leveraging investment for transformative and inclusive action in partnership with the private sector.	UND P	At least one project concept note, engaging civil society and private sector actors, is validated and registered under the Plan Vivo Standard (or similar community-based standard)	1 mission 1 workshop	0	2



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Information

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