KINGDOM OF CAMBODIA

Nation – Religion – King

MINISTRY OF WATER RESOURCES AND METEOROLOGY

CLIMATE ADAPTIVE IRRIGATION AND SUSTAINABLE AGRICULTURE FOR RESILIENCE (CAISAR)

GENDER ASSESSMENT & GENDER ACTION & SOCIAL INCLUSION PLAN

Draft for Disclosure

December 2024

Contents

List of Tables

List of Figures

Abbreviations

CAISAR	Climate Adaptive Irrigation and Sustainable Agriculture for Resilience
EA/IA	Executing Agency/Implementing Agency
ESCP	Environmental and Social Commitment Plan
ESF	Environmental and Social Framework
ESMF	Environmental and Social Management Framework
ESMP	Environmental and Social Management Plan
ESO	Environmental and Social Officers
ESS	Environmental and Social Standards
FPICon	Free Prior and Informed Consultation
GASIP	Gender Assessment and Social Inclusion Plan
IDA	International Development Association
ILO	International Labour Organization
IP	Indigenous People
IPP	Indigenous Peoples' Plan
IPPF	Indigenous Peoples Planning Framework
MoWRAM	Ministry of Water Resources and Meteorology
MoSALVY	Ministry of Social Affairs, Labor, Vocational Training and Youth Rehabilitation
NCDD	National Committee for Sub-National Democratic Development
NGO	Non-Government Organization
PDWRAM	Provincial Department of Water Resources and Meteorology
PMU	Project Management Unit
PIU	Project Implementation Unit
PPC	Project Preparation Consultants
RGC	Royal Government of Cambodia
RP	Resettlement Plan
RPF	Resettlement Planning Framework
SA	Social Assessment
SEA	Sexual Exploitation and Abuse
SEP	Stakeholder Engagement Plan
SEP	Stakeholder Engagement Plan
SH	Sexual Harassment
SIB	Subproject Information Booklet
VAC	Violence Against Children

1. INTRODUCTION

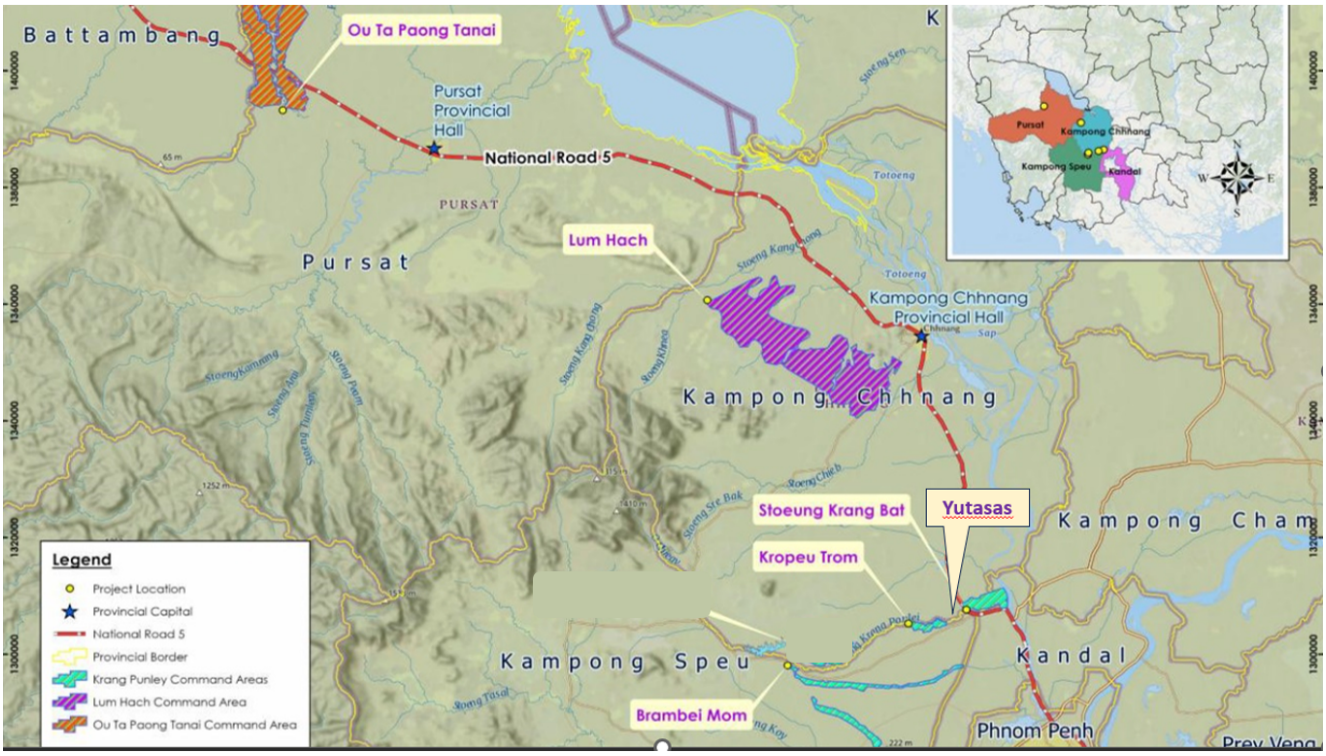
1.1 Project Background

1.1.1 Project objective

The project objective is to increase climate adaptation, mitigate the negative impact of extreme climate events, and improve livelihoods of smallholder farmers and vulnerable rural communities in four provinces of Cambodia. Mitigation is a co-benefit of this adaptation project, as it will also contribute to reduce GHG emissions, including methane emissions from rice fields. These objectives will be achieved by implementing three components that aim at addressing climate change vulnerabilities, increasing agriculture productivity, and developing institutional capacities. The investments to be implemented will (i) combine robust climate-resilient water management and agricultural practices at the farm level, (ii) establish climate-proofed irrigation and flood control infrastructure and (iii) develop institutional capacity to plan, maintain and operate irrigation and flood control infrastructure in a changing climate context.

The project objective is to increase climate adaptation, mitigate the negative impact of extreme climate events, and improve livelihoods of smallholder farmers and vulnerable rural communities in four provinces of Cambodia, including Pursat, Kampong Chhnang, Kampong Speu, and Kandal provinces (see map below).

Figure 1 – Map showing six irrigation sub-schemes located in four provinces



1.1.2 Beneficiaries

The CAISAR project aims to bring about benefit to 100,000 households (500,000 people, 3% of the population). The project will be executed through the Ministry of Water Resources and Meteorology (MOWRAM) and the National Committee for Sub-National Democratic Development Secretariat (NCDD-S), a Direct Access Accredited Entity to the GCF.

1.1.3 Project activities

The Project will carry out a wide range of activities in the four project provinces. These activities are organized into three project components:

Component 1. ***Improving farm-level climate adaptation, resilience, and water use efficiency***

The objective of this component is to build climate resilience (CR) of smallholder farmers and enhance sustainable production through evidence-based planning and context-relevant climate resilient practices at the farm level. This component is designed to address the lack of knowledge and skills to deploy technologies and practices at farm level by farmers and the lack of appropriate extension services to propagate them. It will introduce farmers with various climate resilient technologies and practices for both rice and non-rice activities such as vegetable production, poultry and aquaculture.

Sub-component 1.1 Deployment of farm-level climate adaptation and water use efficiency measures

Output 1.1: Increased capacity of farmers to deploy climate resilient (CR) practices at farm level

This output will focus on developing farmer's capacity in deploying CR technologies and practices to transform the agricultural production system to adapt to the changing climate context. Farmer's will be trained to first develop Action Plans (AP) to re-orient farmer behaviour and assist them in transforming the agriculture production system in a manner that is better adapted to factoring in the agro-ecological context and expected climate change impacts.

- Activity 1.1.1 Preparation of community-based action plans (AP) to transform agriculture with CR practices.
- Activity 1.1.2 Preparation of training materials to support implementation of the AP.
- Activity 1.1.3 Conduct trainings to create a pool of expertise to demonstrate and propagate the CR technologies and practices.
- Activity 1.1.4 Train farmers on applying CR technologies using the FFS approach.
- Activity 1.1.5 Strengthening and fostering tailored mechanization service providers for improved mechanization service delivery.
- Activity 1.1.6 community-based monitoring and evaluation (CBME) of implementation

Sub-Component 1.2 Climate adapted, value added, and market led agricultural investments

Output 1.2 CR value added, and market led agriculture investments secured.

This output involves improving and enhancing some value chains that are key for the project area and include rice, vegetable, chicken and aquaculture value chains, through the use of Public Private Producer Partnerships (4Ps) and increased access to finance, which will improve market access, climate adaptability, and ensure increased income for smallholders in the value chains.

- Activity 1.2.1 Value chain study and planning
- Activity 1.2.2 Establish District Multi-Stakeholder Platforms (MSPs)
- Activity 1.2.3 Public Private Producer Partnership Facility (4PF)

Sub-component 1.3 Improve enabling conditions, capacities and disaster risk management strategies

Output 1.3. Increased access to and use of climate information and advisory services for climate responsive agriculture planning

This sub-component will strengthen the production and dissemination of tailored agro-meteorological information to inform climate responsive management and planning of agriculture in the project target areas through ICT technologies. The aim is to ensure that agro-meteorological services are accessible and useful to farmers to manage climate risks, access to and use of water and efficient cropping systems.

- Activity 1.3.1 Establish ICT based multi-disciplinary platform at provincial level.
- Activity 1.3.2 Building the capacities of the platform to deliver services.
- Activity 1.3.3. Establish the agromet information systems and the outreach mechanisms.
- Activity 1.3.4 Awareness raising and capacity building of farmers and stakeholders in applying the *services.*

Sub-component 1.4 Rural roads

Output 1.4: Increased resilience of farm road infrastructure to climate change

- Activity 1.4.1 Initial planning and identification
- Activity 1.4.1 Initial planning and identification
- Activity 1.4.2 Technical survey and design considerations, preparation of cost estimation
- Activity 1.4.3 Improve 50 Kilometers of farm roads.
- Activity 1.4.4 Handing over of the completed works.

Component 2: Irrigation Infrastructure for increased resilience

Component 2 is linked with Component 1 such that it facilitates the implementation of CR on farm crop and water management practices through improved field level water supply delivery and drainage. It will focus on rehabilitating and modernizing of irrigation and flood protection/drainage infrastructure in the six sub-projects, including irrigation and drainage canals, flood control embankments, and ponds, to provide high-efficiency climate-resilient irrigated agriculture systems for adapting to both increasing flood and drought conditions.

Sub-Component 2.1: Modernization of irrigation scheme and ponds

Sub-Component 2.2: Flood-proofing and Drainage improvements

Sub-Component 2.3: Establishments and training of Farmers Water User Communities (FWUC)

- Activity 2.3.1 Formation of institutional strengthening of the FWUC
- Activity 2.3.2 Build technical capacities of FWCU for canal structure O&M
- Activity 2.3.3 Prepare long term financing plan for O&M of the systems including the WUAS.

Sub-Component 2.4: Water information and Management (SCADA)

Component 3. Institutional Strengthening

Sub-Component 3.1 MOWRAM capacity Support.

Output 3.1 Strengthened MOWRAM Capacity

Sub-Component 3.2 Strengthening of NDA and NCDD.

Output 3.2 Improved capacities for climate action monitoring

- Activity 3.2.1 Preparation of Loss and Damage Strategy
- Activity 3.2.2 Strengthen national M&E process for climate action
- Activity 3.2.3 Enhancing Capacity of NDA and other stakeholders.

1.1.4 Project's Environmental and Social Risks and Impacts

While the project will bring about an overall positive, long-term social and environmental impacts, some project activities, particularly those under Component 2 (Upgrading and Climate-Proofing Water Infrastructure for Increased Resilience) are anticipated to generate the following environmental and social risks and impacts:

During project implementation, the following environmental risks and impacts are anticipated – at specific construction sites, due to implementing some of the above mentioned project activities:

Environmental Risks and Impacts

- Generation of noise and vibration due to construction operation
- Pollution of air (dust), water (disturbance), soil (leakage of oil, chemicals…)
- Generation of solid, hazardous, domestic waste (temporary during construction stage)
- Potential impact on biodiversity at farming ecosystem and health of farmers due to crop intensification in the target command area (during scheme's operational stage)
- Occupational health and safety (for project workers, particularly contractors' workforce)
- Disease transmission (for project workers, particularly contractors' workforce)
- Road and traffic safety (for project workers, particularly contractors' workforce)
- Unexploded ordinance (associated with physical construction activities that involve ground-breaking, excavation…).

Most of these risks and impacts are temporary, localized and small-scaled. Mitigation measures for these environmental risks and impacts are being proposed to avoid theses impacts, including measures through construction measures. Where avoidance is not possible, these environmental risks and impacts will be minimized during construction phase – based on the following principles:

- Technical standards and regulations must be abided by.
- Disturbance to the livelihoods of the local people must be minimized.
- The proposed measures must be environmentally and socio-economically feasible.
- Construction equipment and methods must be environmental friendly.
- Monitoring activities must be conducted on a regular basis.

Social Risks and Impacts

During project implementation, the following social risks and impacts are anticipated – at specific construction sites.

- Potential land acquisition (mostly linear impact for rehabilitating/construction of irrigation canals)
- Temporary restricted water access for farmers in target command area during construction phase
- Gender inequality (e.g., during the process of crop intensification)

- Sexual Exploitation and Abuse (SEA), Sexual Harassment (SH), Gender Base Violence (GBV) due to labor influx
- Child labor and forced labor
- Exclusion of vulnerable group(e.g. ethnic minorities, poor, people with disabilities, female-headed (e.g. because of their restricted access to project information, language, and other personal disadvantages…)
- Disease transmission (due to labor influx and locations that is specific for certain diseases)
- Road and traffic safety (during to increased transportation activities during construction)
- Hunting, trading, and consumption of animal from the wild (due to labor influx).

1.1.5 Mitigation Measures

To ensure project's risks and impacts are avoided/minimized/mitigated, the project has prepared the following documents:

- Resettlement Policy Framework (RPF)
- Indigenous People Planning Framework (IPPF)
- Stakeholder Engagement Plan (SEP)
- Gender Assessment (including Gender Action Plan)
- Environmental, Social, Climate Management Framework (ESCMF)
- Environmental, Social and Climate Impact Assessment (ESCIA)

These documents have been developed in accordance with the national laws and regulations, the safeguards policy of the AIIB (Environmental and Social Framework), IFAD (Social, Environmental and Climate Assessment Procedures), and relevant policies of GEF (Policy on Environmental and Social Safeguards, Policy on Gender Equality, Principles and Guidelines for Engagement with Indigenous Peoples.

The above documents are prepared to ensure anticipated environmental and social risks and impacts are identified is proportional to the significance of the project's environmental and social risks and impacts that are present during project design, pre-construction, during construction, and operational stages.

1.2 Rationale of Gender Assessment

The purpose of the Gender Assessment (GA) is to understand the status-quo of key gender related issues in the context of agricultural production/irrigation management in Cambodia, particularly at project level. Based on these understandings, actions for gender mainstreaming will be proposed, and monitoring and evaluation plan will be developed through a proposed action plan. The plan will ensure the project enhances the participation of beneficiaries (women and men) in project planning, implementation, monitoring and evaluation.

The GA will be identify gender gaps– through examining the situation of women and examing gender stereotypes, gender roles and responsbilities in farming practices, constraints to and opportunities for gender mainstreaming. Based on the gender gaps, which are identified between the current gender practices, national policies, and gender policies of the AIIB, IFAD and GCF. Specific actions are being proposed to ensure gender mainstreaming actions will be implemented in an integral manner with appropriate project investments activities.

The gender action plan aim to:

1) Support climate change interventions and innovations through a holistic gender mainstreaming approach;
2) Promote gender equity through climate change mitigation and adaptation interventions whereas minimizing social, gender-related and climate-related risks in all project activities; and

3) Contribute to reducing the gender gap caused by inherent social, economic and environmental vulnerabilities and exclusions as well as potential impacts induced by the climate change in four project provinces

2. METHODS

2.1 Research Design

2.1.1 Data Collection

Most quantitative data collection described below were conducted in 2022 by the Livelihoods and Vulnerability Survey Team. Information and charts that are used in this report are acknowledged.

Focus Group Discussions (FGD)**.** FGDs were conducted in small groups (7-8 persons each). FGD gathered people from similar backgrounds (e.g. ethnic groups, natural resource dependent) and experiences to discuss pre-defined topics. This information was collected to support the gender analysis and gender assessment exercise, and the preparation of the required social and environmental safeguards documents. All FGDs were guided by moderators who are trained local governmental staff. The group facilitators introduced topics for discussion and helped groups to participate and facilitate a lively and natural discussion. FGD aimed to obtain the insight of local people on specific issues, particularly the range of their opinion and ideas, and any inconsistencies and variation that exists in their community with regards to their beliefs, knowledge, attitude and practices with regards to their agricultural productions and their access to land and water resources to support their subsistence and long-term livelihoods.

No.	Time	Number of Community meeting	Number of participants		
			Male	Female	Total
1	26-39 June 2023	7	270 (82%)	58 (18%)	328 (100%)

Key Informant Interview (KII). KII aims to collect information about select pressing issues and problem in the target community – through individuals who are locally known as experts in the topics under question, and who have a broad social network with individuals and parties who play certain roles (e.g. production, consumption…) in a value chain that are likely to be supported by the project. About one-hundred key informant interview have been conducted by the Livelihood and Vulnerability Survey Team.

Household Survey. Household surveys were administered to invited representatives of local households using questionnaire uploaded through personal mobile devices of local government staff who conducted the survey.

2.1.2 Research Participants

Sampling and Sample size for household survey

Province	Irrigation Schemes	Between from Canal Up to 100 M from a Canal (Close to Canal)	Between 100 M to 2.5 KM	Beyond 2.5 KM	Total
		N	N	N	n

Pursat	O Ta Paong Tanay Scheme	74	64	14	152
	Sub-total 1	**74**	**64**	**14**	**152**
Kampong Chhnang	Lum Hach Scheme	65	43	23	131
	Krang Ponley Kandal Scheme	6	3	5	14
	Anlong Chrey Scheme	37	14	2	53
	Sub-total 2	**108**	**60**	**30**	**198**
Kampong Speu	Brambei Mom Scheme	25	42	20	87
	Kra Peu Troum Scheme	22	17	19	58
	Krang Ponley Kandal Scheme	11	7	16	34
	Sub-total 3	**58**	**66**	**55**	**179**
Kandal	Krang Ponley Kandal Scheme	34	51	16	101
	Sub-total 4	**34**	**51**	**16**	**101**
	Grand Total	**274**	**241**	**115**	**630**

2.3 Data analysis

2.3.1 Qualitative analysis

Qualitative data obtained from focus group discussion and key informant interviews were analyzed using content analysis.

2.3.2 Quantitative analysis

Household survey data was collected through questionnaire prepared by the Livelihood and Vulnerability Survey Team using KoboToobox platform. KoboToolbox was selected because it supports offline data collection, it offers functionality appropriate to the needs of this survey. Data collected on field were submitted to KoboToolbox platform after each day of household interview. Data were cleaned using Microsoft Excel and were analyzed by author using the statistical package IBM SPSS Statistics for Windows (version 28.0, Armonk, NY, USA).

Descriptive statistics were collected for select questions in the questionnaire to describe the sample distribution. Various other statistical methods were used as appropriate for additional analysis.[1] For this study, all significance levels were set to $p < 0.05$.

3. RESULTS OF GENDER ASSESSMENT

3.1 Overview at Country Level

3.1.1 Background on gender issues

Social norms for gender

Cambodia is ranked 92th on the The Global Gender Gap Index 2023 rankings. This is improvement compared to the The Global Gender Gap Index 2013 where it was on 104th rank. Gender norms are often considered a key underlying cause of gender inequalities in Cambodia. Underlying gender inequalities are cultural and traditional

[1] For descriptive analysis, Person's correlation and Spearman's correlation were applied. For inferential analysis, Chi-square χ^2 test statistics was used to examine associations between categorical variables.

norms that limit girls' and women's choices and options[2]. Back in history, traditional code (Chbab Srey/ Proh) have been adopted for several centuries. The code specifies the role of men in a family as 'head of the household' and advise women "to maintain peace within the home, walk and talk softly, and obey and respect her husband" [3]. The codes, however, posited men as heads of the family, bread winners, and are responsible for protecting women and making decisions[4]. For women and men who have never heard of Chbab Srey/ Proh, they hold the views that are consistent with those codes – quoting common proverbs that reflect the same beliefs[5]. Even for students today who are not explicitly taught to know and follow Chbab Srey /Proh, the expectations for a 'virtuous Khmer woman' are still communicated which affect how girls perceive about themselves that shape the gender norms in the next generation. The ideals described in Chbab Srey/Proh influence public policies – in a manner that shape the operation of public and private organizations thereby contributing to maintaining women in a subordinate position[6]. Although these codes have been no longer taugh at schools, these teaching are still disseminated through families and other social institutions.[7] In fact, social expectations for Khmer woman are reinforced and negotiated in day-to-day interactions in households, communities and workplaces. Women entrepreneurs face negative judgements by their family (54%), and community (71%) when starting their businesses[8].

Women are traditionally responsible for household expenditure including expense control. When it comes to loan, they also take on responsibility of seeking out locals credit and assume greater responsibility for loan repayments than their husbands. However, limited credit access and high interest rate is commonly known[9].

Gender discrimination is deeply embedded in, and reinforced by, social attitudes[10]. According to the United Nation (2022), women, gender norms are related to vastly unequal distribution of unpaid domestic and care work in which women undertale, on average, 90% of the work. During COVID-19 pandemic, a substantial proportions of men and women spent increased time on domestic work whereas about 30% of employed women reported that their partners did not provide any additional assistance. It is noted under such circumstance, elder women and girls assumed extra unpaid work in the absence of other support. The need to maintain livelihoods by carrying on more unpaid responsibilities keeps many women in vulnerable work, and is a constraint to women's participation and expansion of business, or advancing in their careers, or taking leadership roles[11]. However, in practice, the household division of labor has been changing: women engage in a broader range of tasks, including those normally associated with men[12]. Prevailing cultural norms encourage young men to engage in paid work, but discourage women. Although it has been increasingly recognized that

[2] UNIFEM, WB, ADB, UNDP and DFID/UK. 2004. A Fair Share for Women: Cambodia Gender Assessment. UNIFEM, WB, ADB, UNDP, DFID/UK. Phnom Penh, ISBN:1-932827-00-5

[3] Anderson, E., & Grace, K. (2018). From Schoolgirls to "Virtuous" Khmer Women: Interrogating Chbab Srey and Gender in Cambodian Education Policy. Studies in Social Justice, 12(2), 215–234. https://doi.org/10.26522/ssj.v12i2.1626

[4] Lamb, V., Schoenberger, L., Middleton, C., & Un, B. (2017). Gendered eviction, protest and recovery: A feminist political ecology engagement with land grabbing in rural Cambodia. The Journal of Peasant Studies, 44(6), 1215–1234. https://doi.org/10.1080/03066150.2017.1311868

[5] Brickell, K. (2011a). "We don't forget the old rice pot when we get the new one": Discourses on Ideals and Practices of Women in Contemporary Cambodia. Signs: Journal of Women in Culture and Society, 36(2), 437–462. https://doi.org/10.1086/655915

[6] United Nation 2022. Gender Equality Deep-Dive for Cambodia – Common Country Analysis.

[7] United Nation 2022. Gender Equality Deep-Dive for Cambodia – Common Country Analysis.

[8] UNIDO & UN Women 2021. Policy Assessment for the Economic Empowerment of Women in Green Industry – Country Report: Cambodia.

[9] ADB - Gender Analysis for Climate-Friendly Agribusiness Value Chains Sector Project. Accessed September 13, 2023 (https://www.adb.org/sites/default/files/linked-documents/48409-002-sd-06.pdf).

[10] Ledgerwood, J. 1996. Women in Development: Cambodia. Asian Development Bank. Manila.

[11] United Nation. 2022. Gender Equality Deep-Dive for Cambodia – Common Country Analysis.

[12] UNIFEM, WB, ADB, UNDP and DFID/UK. 2004. A Fair Share for Women: Cambodia Gender Assessment. UNIFEM, WB, ADB, UNDP, DFID/UK. Phnom Penh, ISBN:1-932827-00-5.

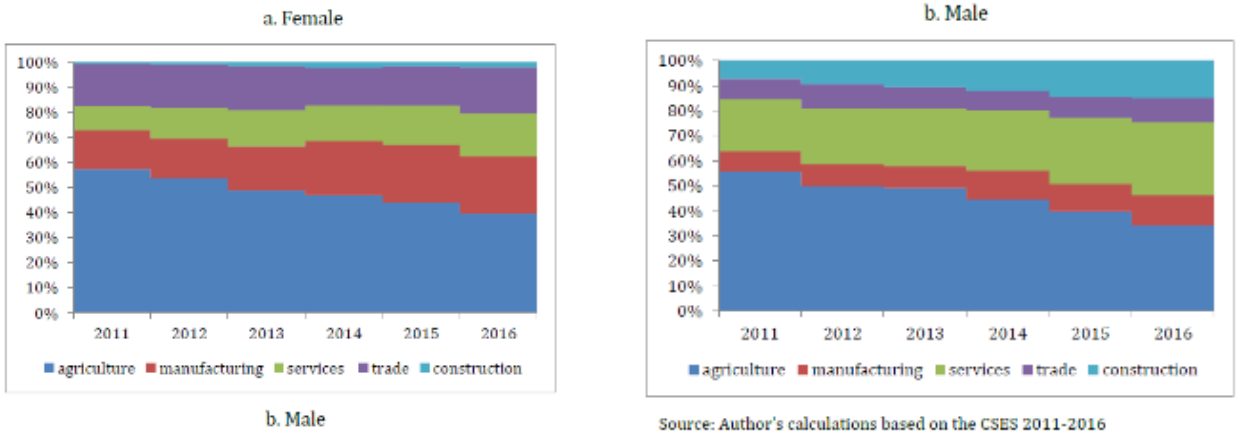
there are more paid job opportunities for women than for men, such as in garment industry, people still feel that young women should remain in their villages[13].

Women assume a wider range of domestic and nondomestic roles than men. They also wake up before men and go to sleep after men. Women are generally responsible for 90% of the household work, including care of dependents and the sick. People in households, mostly women and girls, spend from one to two hours each day collecting water for the family's needs. Women and girls work longer hours than men and boys. Despite that unpaid domestic work is one of the biggest obstacles to promoting gender equality in Cambodia, it is rarely addressed by public policies or development efforts[14].

Labor Force in Key Sectors

The Cambodian labor force participation (LFP) rate for both the male and female population (aged 15 to 64) is high compared to other countries in the EAP region. Cambodian LFP rates are similar to those of Vietnam, perhaps Cambodia's closest regional peer in terms of structure of their economies[15]. Agriculture plays an important role in Cambodia's employment landscape. About 40% of all employed men and women work in the sector. This is on par with agricultural employment in Vietnam and Myanmar, though higher than Indonesia and Thailand. It is noted that during the period 2011-2016, there was a rapid shift out of agriculture because women move into manufacturing while men move into construction (at a similar rate). Men also shifted out of agriculture with a similar patterns albeit they moved out of agriculture at a faster rate – 17.2% compared to 11.5 percent of women – and moving into construction (from 7% to 14 percent) and services (from 20.7 to 26.2%)[16] (See also "Internal Migration" below).

Figure 2 – Education attainment of survey participants



Source: Dimitria Gavalyugova & Wendy Cunningham (2020)

Internal Migration

By 2013, there are about 25 percent of the Cambodian population (or 3.7 million) who migrated. Of the total internal migration, rural-rural accounts for 58.4%, followed by rural-urban (24.5%, mostly to Phnom Penh), and urban-urban (12%). Men dominated rural-rural migration (60%) whereas women dominated rural-urban

[13] Asian Development Bank (ADB), 2001. Participatory Poverty Assessment: Cambodia. Manila.
[14] United Nation. 2022. Gender Equality Deep-Dive for Cambodia – Common Country Analysis.
[15] Dimitria Gavalyugova & Wendy Cunningham. 2020. Gender Analysis of the Cambodian Labor Market. The World Bank.
[16] Dimitria Gavalyugova & Wendy Cunningham. 2020. Gender Analysis of the Cambodian Labor Market. The World Bank.

migration. A large percentage of men migrants were engaged in construction while 58.5% of women migrants migrated to Phnom Penh for work in garment factories (32.2%), small business (23.4 percent), domestic work (11.1 percent), and the service/entertainment sector (10.3 percent)[17]. By 2023, there are around 1,326 garment factories in Cambodia. In Kampong Speu, there are 189 factories, including textile, garment, and footwear sectors with a total of 145,399 workers (110,843 women). Kampong Chhnang has 18 factories with 30,207 employees.

Migration has a strong influence on gender based division of labor in rural Cambodia. This affects the level of participation of women in agriculture value chains, particularly in the face of increasing migration of young women and men to garment factories, construction work, and service industry, etc. Low income from farming activities and debts are key driving factors for rural people to migrate, leaving elderly, women, and children home[18].

Gender Based Violence

One in five Cambodian women have experienced physical or sexual violence from an intimate partner, and more than one third of men report having perpetrated partner violence. Common understanding that men are entitled to sex regardless of consent, directly contribute to gender-based violence. These harmful gender norms are a root cause of gender-based violence. During the COVID-19 surge, the progress made in reducing gender-based violence was slowed, or reversed. There is no national data on sexual harassment. However, small studies Indicated that sexual harassment affects even more women than domestic or partner violence. Public spaces and public transport are common sites for sexual harassment[19]. Studies on sexual harassment found that 89% of all respondents (not just those who reported harassment) felt unsafe working or studying at night and 24% felt unsafe when using public spaces at any time[20]. Significant gender inequalities continue with particular implications for women who face intersecting forms of discrimination such as women from ethnic minority group, people with disabilities, LGBTQI, and women living in rural areas of Cambodia where gender inequalities tend to be larger[21]. There is no national data on sexual harassment. However, small studies suggested that sexual harassment affects even more women than domestic or partner violence[22] (See ESCIA for more).

3.1.2 Background on impacts of Climate Change on Women

In Cambodia, women in rural areas are especially dependent on local natural resources for their livelihood, because of their domestic responsibilities to secure water, food and energy for cooking and other household activities. The effects of climate change, including drought, uncertain rainfall and deforestation, make it harder for them to secure these resources. Compared with men, women face historical disadvantages, including limited access to decision-making and economic assets that compound the challenges of climate change[23].

High dependence on rainfall for agriculture makes Cambodian agriculture vulnerable to weather shocks. Male and female farmers reported the negative impacts of shorter rainy seasons, floods, and more frequent drought

[17] Ministry of Planning (2013) A Crump series study: Women and migration
[18] MAFF 2022. Gender Mainstreaming Policy and Strategic Framework in Agriculture (2022-2026).
[19] United Nation. 2022. Gender Equality Deep-Dive for Cambodia – Common Country Analysis.
[20] Ministry of Women's Affairs. (2014). Violence Against Women and Girls: Cambodia Gender Assessment [Policy Brief]. Ministry of Women's Affairs.
[21] Evans, A. 2019. How Cities Erode Gender Inequality: A New Theory and Evidence from Cambodia. Gender & Society, 33(6), 961–984.
[22] United Nation. 2022. Gender Equality Deep-Dive for Cambodia – Common Country Analysis.
[23] 52nd session of the Commission on the Status of Women (2008) Gender perspectives on climate change. http://www.un.org/womenwatch/daw/csw/csw52/issuespapers/ Gender%20and%20climate%20 change%20paper%20final.pdf

spells[24]. Climate change is leading to more variable growing seasons and water deficits. Gender inequality intersects with climate risks and vulnerabilities. Poor women have particularly limited access to resources, restricted rights, limited mobility and muted voice in shaping decisions, making them highly vulnerable to climate change. The nature of that vulnerability varies widely and climate change will magnify existing patterns of inequality, including gender inequality[25].

Though rural women play an equal (and somehow influencing role) in intra-household decision making such as keeping money, deciding selling prices (jointly with husband), spending money for daily living activities (See Section 3.3.13 below), they are less involved in day-to-day farming in the field (compared to men). Thus, they are not up-to-date as to new farming techniques (e.g. how to select appropriate pesticide and fertilizers formula), new technology. Women's involvement in direct farming activities os poorer for the householding doing one crop per year (vis-à-vis two or more crops per year) due to lack of irrigation access during dry season.

There is ample evidence that women have less access to irrigation water than men and have less say in how their local water districts allocate the water.Several sources report26 that the number of women in FWUCs is lower than that of men. Most of the important positions in FWUCs, such as chair and first and second vice-chair, are dominated by men, who tend to take overall management control, including water allocation, irrigation system operation and maintenance and water use conflict resolution, as well as in rice planting. Men also provide technical input and final (household and community) decision-making. In meetings where water allocation is discussed are dominated by men and women do not speak up as much as men do to voice their needs. There is also a gender imbalance in receiving information on water supply.

Women farmers currently have limited capacity and opportunities to diversify agricultural practices and lessen dependency on climate sensitive and stressed natural resources; limited access to knowledge regarding new agricultural production and post-production techniques and technologies; and limited mobility to avoid disasters stemming from their domestic and agricultural responsibilities.[27]

Vulnerability is further heightened for women in agriculture, as they are often unpaid family workers with few options for coping with disasters. Climate change vulnerability of both the agriculture and fisheries sectors heightens the level of risk for women's livelihoods, as they have significant involvement in post-harvest activities.[28]

Recommendations for climate change mitigation and women's economic empowerment

[24] Thomas, T., T. Ponlok, R. Bansok, T. De Lopez, C. Chiang, N. Phirun, and C. Chhun. 2013. 'Cambodian Agriculture: Adaptation to Climate Change Impact.' IFPRI Discussion Paper 1285, Washington, DC.

[25] Ministry of Women Affairs 'Standardized Guideline Mainstreaming Gender and Climate Change in Sectoral Ministries' Planning, Budgeting and Implementation' December 2015.

[26] CDRI, 2014 Gender and Water Governance: Women's Role in Irrigation Management and Development in the Context of Climate Change.

[27] Ministry of Women Affairs 'Standardized Guideline Mainstreaming Gender and Climate Change in Sectoral Ministries' Planning, Budgeting and Implementation' December 2015.

[28] Gender Assessment. Accessed June 28, 2023 (https://www.greenclimate.fund/sites/default/files/document/gender-assessment-fp076-adb-cambodia.pdf)

The 4th East Asia Gender Equality Ministerial Meeting entitled "Building Resilience to Economic Crisis and Moving Forward", held in Siem Reap in November 2011[29], made the following specific recommendations for Cambodia on a green economy:

- Women entrepreneurs: Mechanisms (such as women's business associations) should be strengthened to promote entrepreneurship, access to business-related information, green technology and financial services.
- Organic and sustainable agriculture: the Ministry of Agriculture, Forestry and Fisheries should develop an organic agriculture policy framework and program. Extension services should proactively target female farmers and women's groups.
- Green procurement: Public sector procurement should prioritise wherever possible green products and services, especially sustainably produced (organic and chemical free) food and other products for government offices, schools, hospitals and embassies. Priority should be given to women-led enterprises.
- Public Private Partnerships (PPP): Promotion of PPPs will be a key strategy for promoting green growth. Regulatory frameworks need to be adjusted to provide appropriate incentives. Sector-based policy research is needed to identify the most important opportunities.
- Women's economic empowerment bears largely untapped potential for the development of green products and services, including finance, skills, and especially knowledge and information on how to start, manage and grow a competitive, sustainable green business. Women should be widely encouraged to start and improve their own businesses as entrepreneurs, where urgently needed productivity increases, innovation and employment could be generated by and for them.
- **Progress and Challenges**

MOWA's Gender Mainstreaming Guidance Manual (2017) has reviewed the progress of national gender mainstreaming methods. As part of this exercise, challenges that remain are identified. Both progress and challenges are summarized by MOWA in table below.

Topic	***Progress***	***Challenges***
Awareness on gender & gender mainstreaming issues	There is a certain level ofawareness and initiatives have been taking on gender & gender mainstreaming in different planning fields e.g. CC and DRR	Gender mainstreaming in CC investments is new to thesector ministries, civil society organizations and other sectors.

[29] Ministry of Women Affairs 'Standardized Guideline Mainstreaming Gender and Climate Change in Sectoral Ministries' Planning, Budgeting and Implementation' December 2015.

Institutional and community capacity and cross-sectoral coordination with a focus on women's role in CC adaptation and mitigation	The NSDP and national level Rectangular Strategy, the Gender Master Plan on Gender and CC, the Cambodia CC Strategic Plan (CCCSP), and the CC Action Plans are sector and theme specific policy documents. The Pilot Program on Climate Resilience (PPCR) Coordination Team, TWGs, etc. are strengthening institutional capacity and cross- sectoral coordination measures. The Gender and CC Committee (GCCC) was established to facilitate gender mainstreaming in CC investment initiatives.	Limited technical and financial resource limits the planned initiatives. Gender mainstreaming in CC investment initiatives have yetto become part of the regular agenda. Lack of defined roles in CC adaptation, DRR and mitigation.
Gender mainstreaming in CC investment become a regular part of the development agenda	The RGC recognized genderconcerns as a part of all development initiatives.	No specific initiative has yet been taken to incorporate gender mainstreaming in CC investments as part of the regular agenda.
The Government, CSO and private sector dialogue platform	There are different networks, gender and development network etc. have been working.	Absence of the platform that brings national policy makers from the Government, DPs, CSOs and private sectors and individual experts for the discourse on gender mainstreaming in CC and economics of gender mainstreaming in CC etc. fields.

3.1.3 National Policies related to Gender & Climate Change

National Legal frameworks

Cambodia has adopted a legal framework that aims to promote the role of women as part of national effort towards economic empowerment for women and gender equality. At the constitutional level, anti-discrimination are prohibited and are included in the Constitution. Article 36 of the Constitution recognizes the value of women's work in the home as equal to that performed outside of the home. The Labor Law, which was adopted in 1997, specifies provisions that protect female laborer.

Ratification of international convention

In terms of international convention, the Royal Government of Cambodia has ratified 13 International Labor Organization conventions (See table below). Cambodia is also a signatory to various United Nations' human rights covenants and conventions. These include the Convention for Elimination of All Forms of Discrimination against Women, which was ratified in 1992. However, it is noted that the C006 - Night Work of Young Persons (Industry) Convention, 1919 (No. 6) has not been yet in force.

Convention	Date	Status
C029 - Forced Labour Convention, 1930 (No. 29)	24 Feb 1969	In Force

Convention	Date	Status
C087 - Freedom of Association and Protection of the Right to Organise Convention, 1948 (No. 87)	23 Aug 1999	In Force
C098 - Right to Organise and Collective Bargaining Convention, 1949 (No. 98)	23 Aug 1999	In Force
C100 - Equal Remuneration Convention, 1951 (No. 100)	23 Aug 1999	In Force
C105 - Abolition of Forced Labour Convention, 1957 (No. 105)	23 Aug 1999	In Force
C111 - Discrimination (Employment and Occupation) Convention, 1958 (No. 111)	23 Aug 1999	In Force
C138 - Minimum Age Convention, 1973 (No. 138)*Minimum age specified: 14 years*	23 Aug 1999	In Force
C182 - Worst Forms of Child Labour Convention, 1999 (No. 182)	14 Mar 2006	In Force
C122 - Employment Policy Convention, 1964 (No. 122)	28 Sep 1971	Not IF
C006 - Night Work of Young Persons (Industry) Convention, 1919 (No. 6)	24 Feb 1969	In Force
C013 - White Lead (Painting) Convention, 1921 (No. 13)	24 Feb 1969	In Force
C150 - Labour Administration Convention, 1978 (No. 150)	23 Aug 1999	In Force
C122 - Employment Policy Convention, 1964 (No. 122)	28 Sep 1971	In Force

Despite the presence of antidiscrimination legislation, there is no provision for 'equal remuneration for work of equal value', although 'equal pay for the same work' is included in the Constitution[30]. Provision for minimum wage is in place and has been applied to the garment, textile, and shoe industries, the industries where a large number of female workers are employed. However, the adequacy of the minimum wage is still open to question. Many women working in the domestic, tourism, and entertainment sectors are not covered with regards to minimum wage.

In terms of land ownership, Land Law (2001) stipulates that women have equal rights to land ownership. Overall, 70% of all land titles are issued jointly between husband and wife. In practice, however, there are examples of gendered land ownership in which men take over the legal title to land even when women have an equal rights to land ownership as per Land Law (2001). It seems that women are not aware of their rights and have little recourse to legal advice[31].

Cambodia's Rectangular Strategy (Phase IV):

The Government of Cambodia's Rectangular Strategy Phase IV (2018-2023) provides a framework for policies and strategies addressing poverty reduction and promoting the economic empowerment of women. The objectives of RS III relate to economic growth, employment particularly for youth, and strengthening institutional capacity and governance. The four strategic rectangles of the RS IV are:

- **Rectangle 1** - Human resource development: 1). Improving the quality of education, science andtechnology; 2). Vocational training; 3). Improving public healthcare and nutrition; and 4). Strengthening gender equality and social protection.
- **Rectangle 2** - Economic Diversifications: 1). Improving logistics system and enhancing transport, energy and digital connectivity; 2). Developing key and new sources of economic growth; 3). Readiness for

[30] ADB & ILO 2013 Quarterly Briefing Note GMS TRIANGLE Project Oct-Dec Geneva.

[31] GCF, Gender Assessment, 2018, Climate-Friendly Agribusiness Value Chains Sector Project.

digital economy and industrial revolution 4.0; and 4). Promoting financial and banking sector development.

- **Rectangle 3** – Promotion of private sector development and employment: 1). Job market development; 2). Promotion of SME and entrepreneurship; 3). Public-private partnership; and 4). Enhanced competitiveness.
- **Rectangle 4** – Inclusive and sustainable development: 1). Promotion of agricultural and ruraldevelopment; 2). Strengthening sustainable management of natural and cultural resources; 3). Strengthening management of urbanization; and 4). Ensuring environment sustainability and readiness for climate change.
- Master Plan On Gender And Climate Change (2018-2030)

Cambodia Climate Change Strategic Plan 2014-2023

The threat of climate change, manifested by the increase of droughts, storms or floods, has been recognized as a key global development challenge. Not only does climate change have broad impacts on the natural environment, it also impacts the economy and social development. The gravity of these impacts varies among regions, income groups and occupations, as well as between women and men. In Cambodia, the impacts of climate change are crucial for agriculture and the lives of mostly rural communities. As the majority of Cambodian people still rely on rain-fed rice farming as a main source of household income, a change of climate directly threatens people's livelihoods, in both the short and long term. Poor management of natural resources has had serious impacts on the local economy, as most communities rely on natural forest cover; a majority of these people are women and children.

The RGC recognizes that the rural poor of Cambodia, the majority of whom are women, are most vulnerable to climate change impacts due to their high dependence on agriculture and natural resources. This vulnerable group is susceptible to diseases due to their limited resources and capacity to adapt to climate change impacts, including a lack of preparedness to cope with climate risks and hazards. There is a need to mainstream gender into climate change response measures, such as into existing policies and laws and sector climate change strategic plans (SCCSPs) in order for this cross-cutting issue to be supported by all government agencies, especially at national and sub-national levels, by development partners, NGOs, civil society organizations (CSOs), research and academic institutions and the private sector. In response, the Government has put in place 'Strategic Objective 2: Reduce sectoral, regional, gender vulnerability and health risks to climate change impacts'.

Generally, all policies, strategies and projects dealing with climate change are either about climate change adaptation or climate change mitigation. It is important to draw a distinction between the two. Climate change adaptation aims to reduce vulnerabilities and build resilience to the impacts of climate change. This is done by strengthening national institutional capacity for vulnerability assessment and adaptation planning. It includes national eff orts to integrate climate change adaptation measures into development planning and ecosystem management practices. The overall work on climate change adaptation is guided by and contributes to the Nairobi Work Program on Impacts, Vulnerability and Adaptation, a program developed by the UN-Framework Convention for Climate Change (UNFCCC)5 to help countries understand climate change impacts and adapt to climate change.

Climate change is expected to compound and amplify development challenges, stresses and problems in Cambodia, further affecting poor and marginalized people, particularly women and children. Women have disproportionate access to financial resources, land, natural resources, education, health, rights and other

development services that are essential for effective adaptation to climate change. For the vast majority of women working in the informal sector and in small enterprises who lack capital and access to credit, information or knowledge, recovering from the devastating eff ects of environmental disasters is nearly impossible[32].

3.1.4 Existing implementation arrangements

The institutions to support women's economic empowerment include the Ministry of Women's Affairs (MOWA) and gender mainstreaming action groups (GMAGs) in each line ministry that prepare and implement sectoral gender mainstreaming action plans (GMAPs). In 2013, MOWA launched a Millennium Development Goal (MDG) Acceleration Framework Cambodia Action Plan focused on women's economic empowerment to contribute to the achievement of other MDGs in poverty reduction, health, and education. The plan prioritizes three areas of intervention: (i) providing training for jobs for women that are consistent with market demands; (ii) ensuring that women have the capacity to lead and grow their micro, small, and medium-sized enterprises and can move from the informal to the formal sector; and (iii) improving livelihoods in rural communities, especially for poor women. In 2014 MoWA launched the Cambodia Gender Assessment and 5 Year Strategic Plan for Gender Equality and Women's Empowerment (Neary Ratanak IV), which includes policy recommendations on Women's Economic Empowerment (including Agriculture), education, health, political participation, and climate change.

MOWA also manages a network of 13 women's development centers (WDCs) nationwide, which are vocational centers offering training programs in areas such as handicraft production, hairdressing, tailoring, and food processing. WDCs face a host of challenges and are not reaching their full potential as centers that promote women's economic empowerment. There is scope to improve training to be more responsive to the labor market and include entrepreneurial skills training, business development services, and current market information. There is considerable interest in MOWA to introduce public–private partnerships at WDCs as a way of increasing their market and entrepreneurial orientation, and to ensure sustainable financing.

The Ministry of Agriculture, Forestry and Fisheries (MAFF) has prepared a Gender Mainstreaming Policy and Strategy in Agriculture 2016–2020 which includes objectives relating to greater participation of women in the civil service; enhanced capacity to integrate gender; increased ability of rural women to access and manage resources; and building and promoting gender equality in access to extension services. With regard to the latter, specific mention is given to assistance with social land concessions, participation in the private sector, participation in village and community groups, and access to credit, and extension services. The CFAVCP GAP is designed to align to and support the operationalization of the MAFF Gender Policy.

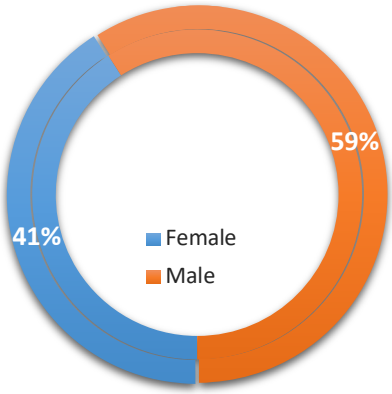
3.2 Profiles of Project's Target Groups

3.2.1 Demographic Information

Of the total 630 households who were interviewed in household survey, 40.95% of respondents (n=258) are female and 59.05% (372) are male. There are 20.8% (n=131) of surveyed households who are female headed households. Most households in the survey are Khmer (98.9%, n=623). Only 7 households are from Khmer Islam group. These households are located in the O Ta Paong Tanay Scheme which is located in three villages of Prasat, Rumlech, Koun Tnaot villages of Rumlech commune, Bakan district, Pursat province. All Khmer people in the survey are Buddhist and all 7 Khmer Islam households follow Muslim. There are 71 people with disability (2.6%) out of total 2,687 people of 630 households in the survey).

[32] Oxfam America (2010) Rural Women, Gender and Climate Change. Cambodia.

Figure 3 – Gender of Survey Respondents



The household size is 4.27 people (n=2,688), of which 1,399 (52%) are female and 1,289 (48%) are male. Average age of household head is 50.9 years.

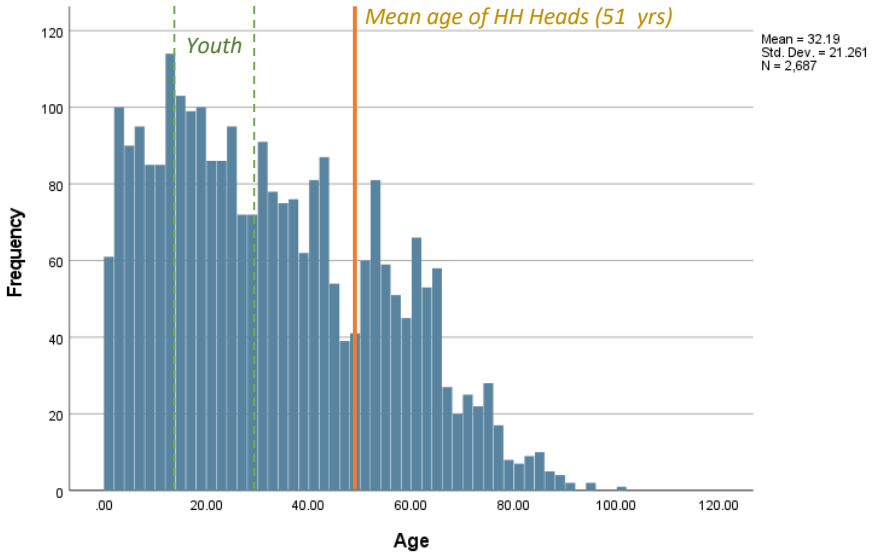
Table 1 – Descriptive Statistic of Age of Household Head and Household member

Statistics	Household Head	Household members
Mean	51.0	32.2
SD	13.3	21.3
Min	18.0	1.0
Max	85.0	100.0
Median	52.0	30.0
Mode	53.0	18.0

Survey participants live in the villages for an average of 33 years (min=1, max=85, SD=18.7).

Youth. It is noted that the youth (members from 18 to under 30 years of age) takes up 23.8% (n=572) in the sample. If extended to cover those between 18 and 50, the percentage would go up to 44.1% of the survey population (with average age of 32).

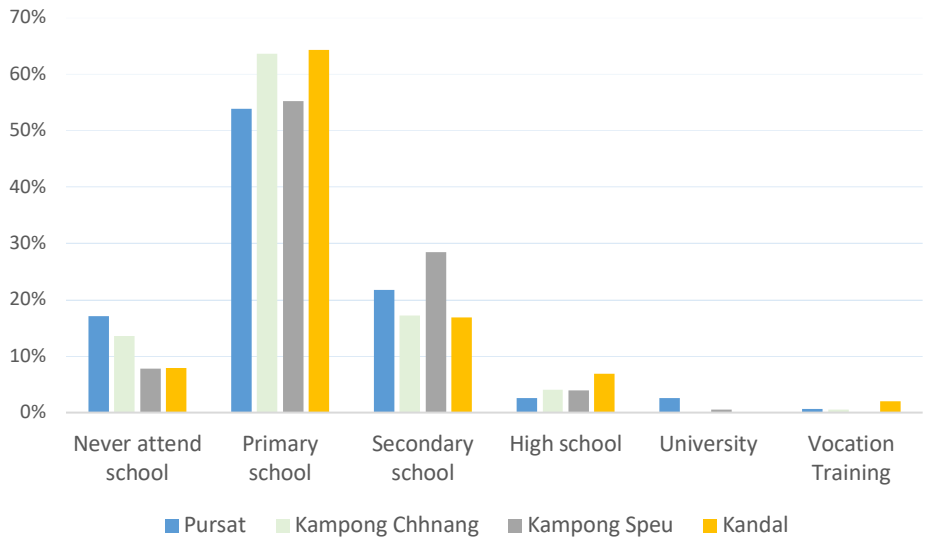
Figure 4 – Age distribution of all household members (n=2,787)



3.2.2 Education

Nearly half of respondents (46.04%) completed primary school, followed by secondary level (21.70%), high school (10.33%). Higher education attainment is 2.36%./ About 9.1% of respondents dropped out of school or never attended. According to focus group discussion that was carried under the Livelihood and Vulnerability survey, elderly people typically had very limited/no access to education due to the history of Cambodia, and they have not been able to find relevant education to catch up. Younger generation is different. They took the opportunities to learn and have higher education. Some households have sent their children to Phnom Penh or abroad for education.

Figure 5 – Education of survey participants



3.2.3 Assets

- Houses

Of the 630 HHs, 96% own a house. Only 4% said they are living in their children's, or relatives' house. For those who own a house, house status is as follows:

Table 2 – Types of House

No.	House type	Percentage
1	Wooden/iron on walls (corrugate iron roof/roofing cement)	29%
2	Semi- permanent houses (roof of brick or tiles)	28%
3	Simple house (corrugated wall wood and roofing sheets)	28%
4	Permanent house with one or more floors (15%),	15%
5	temporary houses	0.48%

In terms of land status for the house, 48% of respondents have land title registered. 49% are still under in the processing of registration with local authorities but their land are recognized as legal. Some people are using land that are not under their ownership for temporary farming.

- Land access

Most survey participants (95.7%, n=603) own the land that they currently use. Only 2.4% (n=15) use lands of their relatives. The remaining (1.6%) use land from their children (n=5), parents (n=3), state (n=3), and renting (n=1). The average land area owned/used by surveyed households is 5,668.5 m (SD=8,720.1).

Table 3 – Descriptive statistic of land use owned/used by survey households

Statistics	**Agricultural Land** (m^2)	**Residential Land** (m^2)
Mean	12,824.9	5,668.5
SD	14,398.7	8,720.1
Min	354.0	66.0
Max	130,000.0	100,000.0
Median	8,900.0	2,200.0
Mode	10,000.0	5,000.0

Below is land distribution in four project provinces.

Table 4 – Land Ownership

Province	Subproject	Ownership		Renting		Relatives		Children		Parents		State land		Total	
		N	%	N	%	N	%	N	%	N	%	N	%	N	%
Pursat	O Ta Paong Tanay Scheme	320	94.67%	4	1.18%	10	2.96%	2	0.59%	2	0.59%	0	0.00%	338	100.00%
	Sub-total 1	**320**	**94.67%**	**4**	**1.18%**	**10**	**2.96%**	**2**	**0.59%**	**2**	**0.59%**	**0**	**0.00%**	**338**	**100.00%**
Kampong Chhnang	Lum Hach Scheme	300	67.11%	3	0.67%	4	0.89%	5	1.12%	0	0.00%	0	0.00%	312	69.80%
	Krang Ponley Kandal Scheme	25	5.59%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	25	5.59%
	Anlong Chrey Scheme	108	24.16%	1	0.22%	1	0.22%	0	0.00%	0	0.00%	0	0.00%	110	24.61%
	Sub-total 2	**433**	**96.87%**	**4**	**0.89%**	**5**	**1.12%**	**5**	**1.12%**	**0**	**0.00%**	**0**	**0.00%**	**447**	**100.00%**
Kampong Speu	Brambei Mom Scheme	174	51.03%	0	0.00%	6	1.76%	0	0.00%	2	0.59%	0	0.00%	182	53.37%
	Kra Peu Troum Scheme	120	35.19%	0	0.00%	0	0.00%	1	0.29%	0	0.00%	0	0.00%	121	35.48%
	Krang Ponley Kandal Scheme	37	10.85%	0	0.00%	1	0.29%	0	0.00%	0	0.00%	0	0.00%	38	11.14%
	Sub-total 3	**331**	**97.07%**	**0**	**0.00%**	**7**	**2.05%**	**1**	**0.29%**	**2**	**0.59%**	**0**	**0.00%**	**341**	**100.00%**
Kandal	Krang Ponley Kandal Scheme	147	91.88%	3	1.88%	5	3.13%	1	0.63%	0	0.00%	4	2.50%	160	100.00%
	Sub-total 4	**147**	**91.88%**	**3**	**1.88%**	**5**	**3.13%**	**1**	**0.63%**	**0**	**0.00%**	**4**	**2.50%**	**160**	**100.00%**
	Grand Total	**1231**	**95.72%**	**11**	**0.86%**	**27**	**2.10%**	**9**	**0.70%**	**4**	**0.31%**	**4**	**0.31%**	**1286**	**100.00%**

Source: CAISAR Livelihood and Vulnerability Report 2022

Table 5 – Land Title

Province	Subproject	Land Title		Commune/village Title		illegal Possession		Don't Know		Total	
		N	%	N	%	N	%	N	%	N	%
Pursat	O Ta Paong Tanay Scheme	239	70.71%	90	26.63%	3	0.89%	6	1.78%	338	100.00%
	Sub-total 1	**239**	**70.71%**	**90**	**26.63%**	**3**	**0.89%**	**6**	**1.78%**	**338**	**100.00%**
Kampong Chhnang	Lum Hach Scheme	225	50.34%	77	17.23%	8	1.79%	2	0.45%	312	69.80%
	Krang Ponley Kandal Scheme	11	2.46%	13	2.91%	0	0.00%	1	0.22%	25	5.59%
	Anlong Chrey Scheme	19	4.25%	80	17.90%	4	0.89%	7	1.57%	110	24.61%
	Sub-total 2	**255**	**57.05%**	**170**	**38.03%**	**12**	**2.68%**	**10**	**2.24%**	**447**	**100.00%**
Kampong Speu	Brambei Mom Scheme	78	22.87%	104	30.50%	0	0.00%	0	0.00%	182	53.37%
	Kra Peu Troum Scheme	14	4.11%	104	30.50%	0	0.00%	3	0.88%	121	35.48%
	Krang Ponley Kandal Scheme	1	0.29%	37	10.85%	0	0.00%	0	0.00%	38	11.14%
	Sub-total 3	**93**	**27.27%**	**245**	**71.85%**	**0**	**0.00%**	**3**	**0.88%**	**341**	**100.00%**
Kandal	Krang Ponley Kandal Scheme	26	16.25%	129	80.63%	0	0.00%	5	3.13%	160	100.00%
	Sub-total 4	**26**	**16.25%**	**129**	**80.63%**	**0**	**0.00%**	**5**	**3.13%**	**160**	**100.00%**
	Grand Total	**613**	**47.67%**	**634**	**49.30%**	**15**	**1.17%**	**24**	**1.87%**	**1286**	**100.00%**

Source: CAISAR Livelihood and Vulnerability Report 2022

3.2.4 Occupation

Overall job pattern.

72.86% of respondents (n=459) are farmers. 99% of farmer respondents said they grow rice and no other crop. Main crop takes place during the wet season albeit slight difference between project provinces. It is noted that main crop in Kandal is in dry season (see graph below).

Job of households heads.

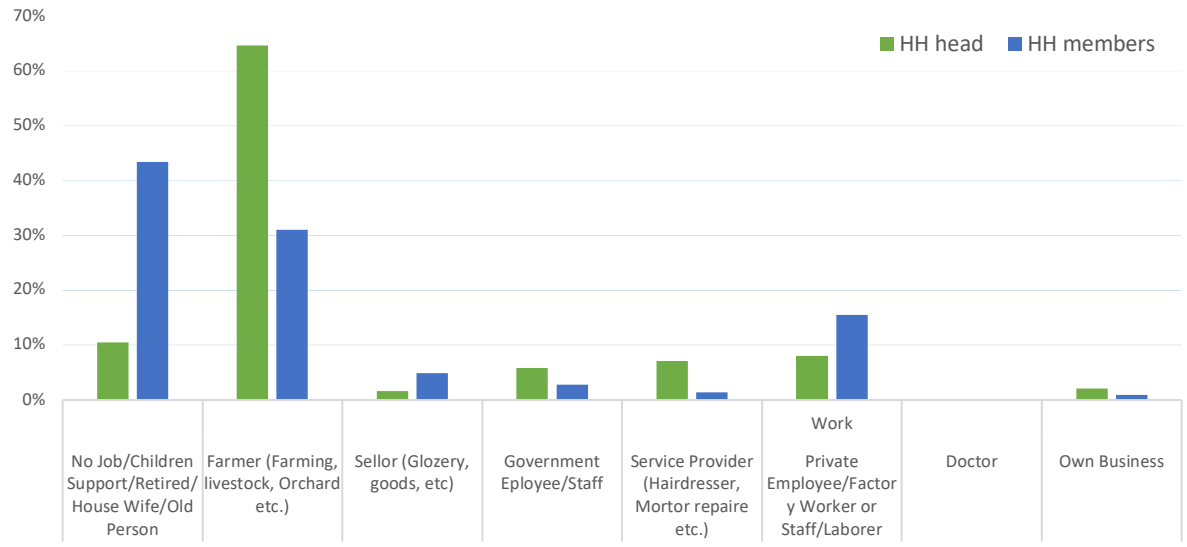
64% of households head in the survey (n=407) do farming, followed by unpaid work (10.5%, n=66), paid workers (8.1%, n=51), retailed service (7.1%, n=45), government employee (5.9%, n=37), etc. For those who are involved in farming. It is noted that in addition to cultivating rice, 73% indicated they are involved in animal husbandry to earn additional income. Children is most popular (50%), followed by cow (34%), duck (9%), buffalos (2%), and another livestock. 48% of respondent do animal husbandry for income. About 23% raise livestock for home consumption.

It is noted that 32% of household heads (n=201) do two jobs compared to 68% who only do 1 jobs. The reason why they do the second jobs because they want to earn more income[33] to meet family's expenditure[34].

Job of households members.

While 64% of households head do farming to earn income, and half of them (32%) do the second job, only 30% of household members are involved in farming. These members are usually children and tend to work in non-farm work such as work for private sector (15.6%), services (4.8%), and government (2.8%). It is noted that 43.4% of household members are not income earners. They are retired, doing household chores, or jobless.

Figure 6 – Job of household heads and household members



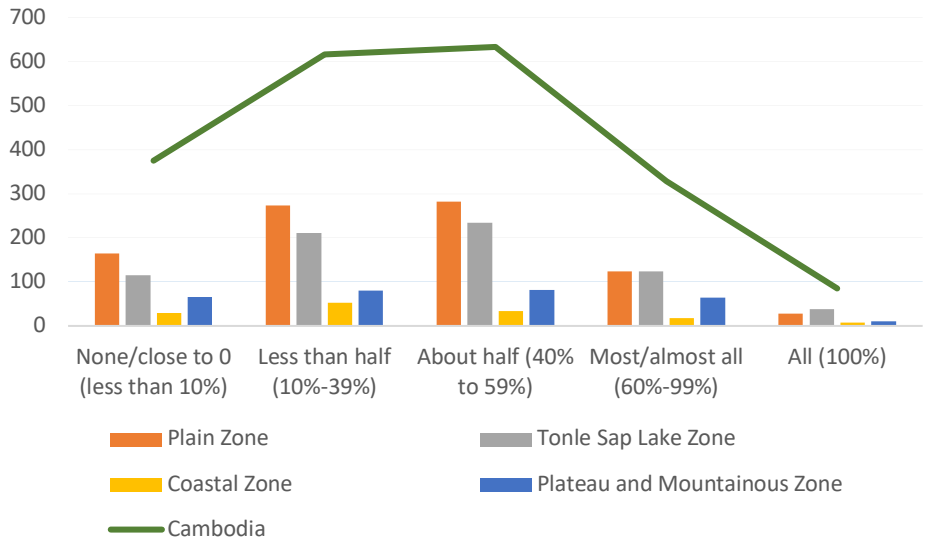
Source: Livelihood and Vulnerability Data 2022. Graph by author

[33] $\chi^2(202)=238.085$, $p<0.05$

[34] $\chi^2(55)=77.458$, $p<0.01$

The level of main key income (64%) of households head matchese the findings from the national Agriculture Survey 2020.

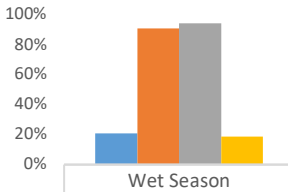
Figure 7 – Share of household income accounted for by agricultural income



Source: Data from Cambodia Agriculture Survey 2020. Graph by author

3.2.5 Agricultural production

Figure 8 – Cropping Pattern by project provinces



	Wet Season	Dry Season	No Cultivation (N/A)
Pursat	20.86%	10.70%	3.74%
Kampong Chhnang	91.13%	3.23%	1.61%
Kampong Speu	94.44%	0.62%	3.70%
Kandal	18.64%	76.27%	0.00%

Source: Data from Livelihood and Vulnerability Survey. Graphed by author

Table 6 – Crop Type

Province	Subproject	Banana , Corn		Cashew Nuts		Mengo		No Cultivation (N/A)		Orang		Rice		Vegetable crops		Total	
		N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Pursat	O Ta Paong Tanay Scheme	0	0.00%	0	0.00%	0	0.00%	7	3.74%	0	0.00%	177	94.65%	3	1.60%	187	100.00%
Sub-total 1		**0**	**0.00%**	**0**	**0.00%**	**0**	**0.00%**	**7**	**3.74%**	**0**	**0.00%**	**177**	**94.65%**	**3**	**1.60%**	**187**	**100.00%**
Kampong Chhnang	Lum Hach Scheme	0	0.00%	1	0.40%	0	0.00%	3	1.21%	0	0.00%	176	70.97%	0	0.00%	180	72.58%
	Krang Ponley Kandal Scheme	0	0.00%	0	0.00%	0	0.00%	1	0.40%	0	0.00%	10	4.03%	0	0.00%	11	4.44%
	Anlong Chrey Scheme	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	57	22.98%	0	0.00%	57	22.98%
Sub-total 2		**0**	**0.00%**	**1**	**0.40%**	**0**	**0.00%**	**4**	**1.61%**	**0**	**0.00%**	**243**	**97.98%**	**0**	**0.00%**	**248**	**100.00%**
Kampong Speu	Brambei Mom Scheme	0	0.00%	0	0.00%	1	0.62%	4	2.47%	0	0.00%	89	54.94%	1	0.62%	95	58.64%
	Kra Peu Troum Scheme	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	62	38.27%	1	0.62%	63	38.89%
	Krang Ponley Kandal Scheme	0	0.00%	0	0.00%	0	0.00%	2	1.23%	0	0.00%	2	1.23%	0	0.00%	4	2.47%
Sub-total 3		**0**	**0.00%**	**0**	**0.00%**	**1**	**0.62%**	**6**	**3.70%**	**0**	**0.00%**	**153**	**94.44%**	**2**	**1.23%**	**162**	**100.00%**
Kandal	Krang Ponley Kandal Scheme	1	1.69%	0	0.00%	0	0.00%	0	0.00%	1	1.69%	56	94.92%	1	1.69%	59	100.00%
Sub-total 4		**1**	**1.69%**	**0**	**0.00%**	**0**	**0.00%**	**0**	**0.00%**	**1**	**1.69%**	**56**	**94.92%**	**1**	**1.69%**	**59**	**100.00%**
Grand Total		**1**	**0.15%**	**1**	**0.15%**	**1**	**0.15%**	**17**	**2.59%**	**1**	**0.15%**	**629**	**95.88%**	**6**	**0.91%**	**656**	**100.00%**

Source: Livelihood and Vulnerability Report

Table 7 – Cropping Season

Province	Subproject	Wet Season		Dry Season		Both Season		No Cultivation (N/A)		Total		Total of harvest (Ton/Kg)
		N	%	N	%	N	%	N	%	N	%	Average
Pursat	O Ta Paong Tanay Scheme	39	20.86%	20	10.70%	121	64.71%	7	3.74%	187	100.00%	5558
Sub-total 1		**39**	**20.86%**	**20**	**10.70%**	**121**	**64.71%**	**7**	**3.74%**	**187**	**100.00%**	**5558**
Kampong Chhnang	Lum Hach Scheme	168	67.74%	0	0.00%	9	3.63%	3	1.21%	180	72.58%	2036
	Krang Ponley Kandal Scheme	2	0.81%	8	3.23%	0	0.00%	1	0.40%	11	4.44%	1790
	Anlong Chrey Scheme	56	22.58%	0	0.00%	1	0.40%	0	0.00%	57	22.98%	1850
Sub-total 2		**226**	**91.13%**	**8**	**3.23%**	**10**	**4.03%**	**4**	**1.61%**	**248**	**100.00%**	**1983**
Kampong Speu	Brambei Mom Scheme	89	54.94%	0	0.00%	2	1.23%	4	2.47%	95	58.64%	1401
	Kra Peu Troum Scheme	62	38.27%	1	0.62%	0	0.00%	0	0.00%	63	38.89%	1096
	Krang Ponley Kandal Scheme	2	1.23%	0	0.00%	0	0.00%	2	1.23%	4	2.47%	1100
Sub-total 3		**153**	**94.44%**	**1**	**0.62%**	**2**	**1.23%**	**6**	**3.70%**	**162**	**100.00%**	**1274**
Kandal	Krang Ponley Kandal Scheme	11	18.64%	45	76.27%	3	5.08%	0	0.00%	59	100.00%	1189
Sub-total 4		**11**	**18.64%**	**45**	**76.27%**	**3**	**5.08%**	**0**	**0.00%**	**59**	**100.00%**	**1189**
Grand Total		**429**	**65.40%**	**74**	**11.28%**	**136**	**20.73%**	**17**	**2.59%**	**656**	**100.00%**	**2750**

Source: Livelihood and Vulnerability Report

Table 8 – livestock production (household level)

Province	Subproject	Cow		Buffalos		Pig		Duck		Chicken		Goose		Total		b. Number
		N	%	N	%	N	%	N	%	N	%	N	%	N	%	Mean
Pursat	**O Ta Paong Tanay Scheme**	**71**	31.56%	**5**	2.22%	**8**	3.56%	**28**	12.44%	**113**	50.22%	**0**	0.00%	**225**	100.00%	**18**
	Sub-total 1	**71**	**31.56%**	**5**	**2.22%**	**8**	**3.56%**	**28**	**12.44%**	**113**	**50.22%**	**0**	**0.00%**	**225**	**100.00%**	**18**
Kampong Chhnang	**Lum Hach Scheme**	**83**	26.18%	**11**	3.47%	**20**	6.31%	**19**	5.99%	**99**	31.23%	**2**	0.63%	**234**	73.82%	**9**
	Krang Ponley Kandal Scheme	**3**	0.95%	**0**	0.00%	**0**	0.00%	**0**	0.00%	**6**	1.89%	**0**	0.00%	**9**	2.84%	**8**
	Anlong Chrey Scheme	**31**	9.78%	**0**	0.00%	**2**	0.63%	**4**	1.26%	**36**	11.36%	**1**	0.32%	**74**	23.34%	**7**
	Sub-total 2	**117**	**36.91%**	**11**	**3.47%**	**22**	**6.94%**	**23**	**7.26%**	**141**	**44.48%**	**3**	**0.95%**	**317**	**100.00%**	**9**
Kampong Speu	**Brambei Mom Scheme**	**50**	24.63%	**0**	0.00%	**2**	0.99%	**8**	3.94%	**55**	27.09%	**0**	0.00%	**115**	56.65%	**17**
	Kra Peu Troum Scheme	**27**	13.30%	**0**	0.00%	**1**	0.49%	**7**	3.45%	**38**	18.72%	**0**	0.00%	**73**	35.96%	**8**
	Krang Ponley Kandal Scheme	**2**	0.99%	**0**	0.00%	**0**	0.00%	**3**	1.48%	**9**	4.43%	**1**	0.49%	**15**	7.39%	**9**
	Sub-total 3	**79**	**38.92%**	**0**	**0.00%**	**3**	**1.48%**	**18**	**8.87%**	**102**	**50.25%**	**1**	**0.49%**	**203**	**100.00%**	**13**
Kandal	**Krang Ponley Kandal Scheme**	**11**	16.92%	**0**	0.00%	**0**	0.00%	**3**	4.62%	**50**	76.92%	**1**	1.54%	**65**	100.00%	**9**
	Sub-total 4	**11**	**16.92%**	**0**	**0.00%**	**0**	**0.00%**	**3**	**4.62%**	**50**	**76.92%**	**1**	**1.54%**	**65**	**100.00%**	**9**
	Grand Total	**278**	**34.32%**	**16**	**1.98%**	**33**	**4.07%**	**72**	**8.89%**	**406**	**50.12%**	**5**	**0.62%**	**810**	**100.00%**	**12**

Source: Livelihood and Vulnerability Report

Table 9 – Use of livestock production (household level)

Province	Subproject	Yes		No		Total	
		N	%	N	%	N	%
Pursat	O Ta Paong Tanay Scheme	129	84.87%	23	15.13%	152	100.00%
	Sub-total 1	**129**	**84.87%**	**23**	**15.13%**	**152**	**100.00%**
Kampong Chhnang	Lum Hach Scheme	114	57.58%	17	8.59%	131	66.16%
	Krang Ponley Kandal Scheme	7	3.54%	7	3.54%	14	7.07%
	Anlong Chrey Scheme	42	21.21%	11	5.56%	53	26.77%
	Sub-total 2	**163**	**82.32%**	**35**	**17.68%**	**198**	**100.00%**
Kampong Speu	Brambei Mom Scheme	67	37.43%	20	11.17%	87	48.60%
	Kra Peu Troum Scheme	41	22.91%	17	9.50%	58	32.40%
	Krang Ponley Kandal Scheme	10	5.59%	24	13.41%	34	18.99%
	Sub-total 3	**118**	**65.92%**	**61**	**34.08%**	**179**	**100.00%**
Kandal	Krang Ponley Kandal Scheme	53	52.48%	48	47.52%	101	100.00%
	Sub-total 4	**53**	**52.48%**	**48**	**47.52%**	**101**	**100.00%**
	Grand Total	**463**	**73.49%**	**167**	**26.51%**	**630**	**100.00%**

Source: Livelihood and Vulnerability Report

3.2.6 Current practices

Mechanization. Due to internal migration over the past few decades for better income, rural labor force has been reduced, leaving room for increased use of machinery to compensate traditional human labor. In the project provinces, an average 66% of sample (n=630) think that mechanization is very frequently used while 32% think is used frequently. Harvesting needs more machinery use (75%) compared to land preparation (65%). It is noted that while 60% of surveyed households use machineray for heavy works such as land preparation and harvesting, the remainder (40%) still use buffalo and manpower for the heavy works. Where needed, family reach out to neighbors to ask for labor help and return to them when the need (labor exchange).

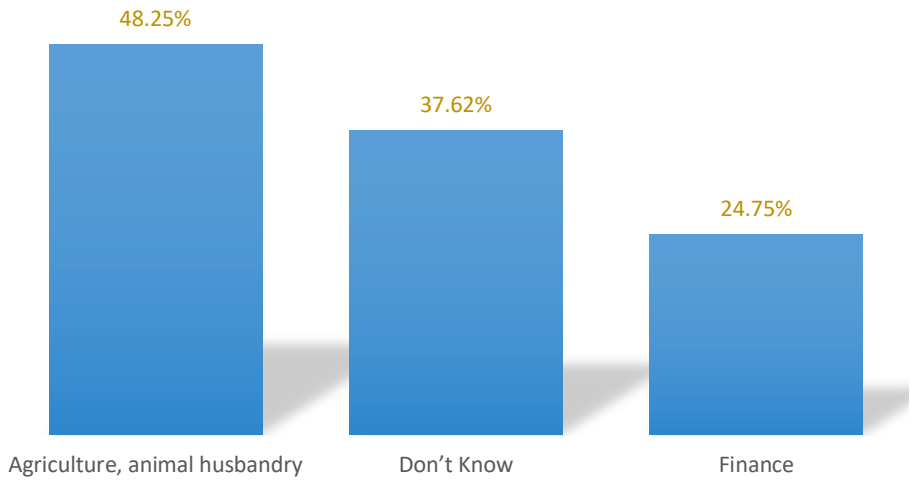
Use of new farming technology. 65.3% of surveyed households (n=319) have been using traditional rice cultivation practices. With regards to applying new farming techniques, 21.7% (n=106) use occasionally, 11.6% (n=57) use frequently, and 1.2% used very frequently. 61.2% (n=299) think mechanization is better whereas 38.7% (n=189) think new farming techniques are better. Data suggested that those who have already applied improved farming practices find it better. They think that it crop is better because of appropriate use of fertilizers (33.8%, n=408), pesticides (29.3%, n=354), use of machinery (12.2%, n=147), training (10%, n=121), and use of organic farming (10%, n=122). On the contrary, crop is less productive when land is less fertile (26.6%, n=303), lack of irrigation (24.3%, n=277), overuse of fertilizers and pesticides (15.5%, n=177), use the same farming practice (14.2%, n=162), and same crop (10%, n=116). It is noted that 65.5% (n=426) used pesticides and fertilizers whereas the remainder (32.3%) don't. Those who use pesticides and fertilizers think these boost growth of crop (42.8%, n=330), improve crop yield (41.6%, n=321), and improve soil fertility (14.6%, n=113).

Climate change and new technologies

Most surveyed households (90%, n=568) are not aware of the potential impact of climate change on their agricultural production. However, 40% (n=256) think they have experienced the impact of climate change and the remainder have not experienced. 63% (n=397) have never heard of improved farming technology that helps increase their income.

Training Needs

When asked about the support/training that women need, half (48%) preferred training in agriculture/animal husbandry and finance (24.7). However, 37% of household don't know that they need in terms of knowledge to support their livelihood development.



3.2.7 Income level

In this survey, monthly income of the surveyed households were collected. Monthly household income refers to the total income that all members of the household could earn each month, on average, excluding children. It is noted all family members who can make income contribute their income to family's common expenditure. The level of individual contribution varies depending on family. Below is the distribution of monthly household income across four project provinces. The average monthly household income is 152.8 USD (SD=126.7).

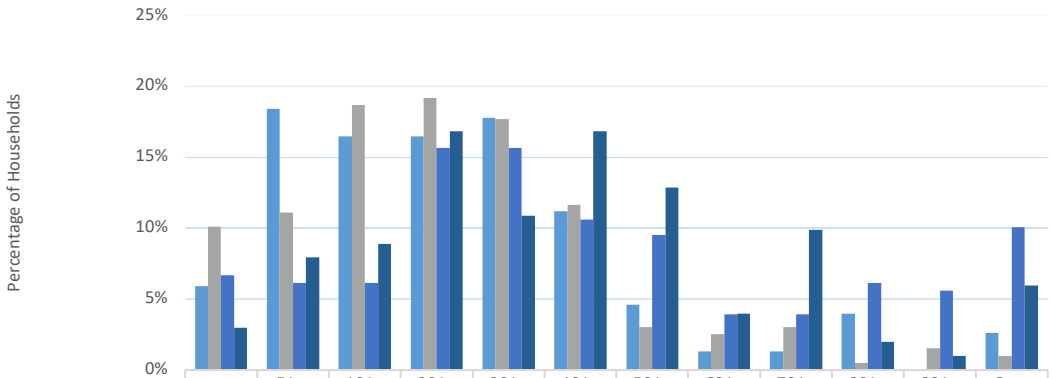
Table 10 – Descriptive Statistic of Monthly Income of Household

Monthly household income	USD
Mean	393.1
SD	327.6
Min	10.0
Max	2,150.0
Median	322.5
Mode	100.0

Source: Analyzed by author using dataset from Livelihood & Vulnerability survey

Below is the distribution of various level of monthly income of household across 4 provinces. It is noted that of 630 household interviewed, about one-third (34.6%) said their income is stable. The remaining (65.4%) do not think their income, which is already low, is stable. Distribution of monthly income of the survey households are summarized in the graph below.

Figure 9 – Distribution of monthly household income by project provinces

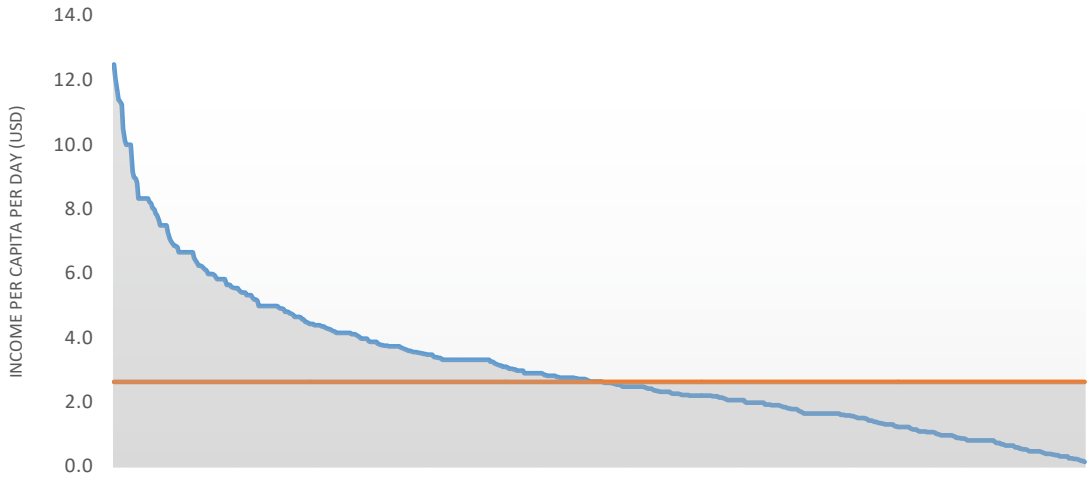


	< 50$	51 - 100$	101 - 200$	201 - 300$	301 - 400$	401 - 500%	501 - 600$	601 - 700$	701 - 800%	801 - 900$	901 - 1,000$	Over 100$
Pursat	5.92%	18.42%	16.45%	16.45%	17.76%	11.18%	4.61%	1.32%	1.32%	3.95%	0.00%	2.63%
Kampong Chhnang	10.10%	11.11%	18.69%	19.19%	17.68%	11.62%	3.03%	2.53%	3.03%	0.51%	1.52%	1.01%
Kampong Speu	6.70%	6.15%	6.15%	15.64%	15.64%	10.61%	9.50%	3.91%	3.91%	6.15%	5.59%	10.06%
Kandal	2.97%	7.92%	8.91%	16.83%	10.89%	16.83%	12.87%	3.96%	9.90%	1.98%	0.99%	5.94%

Source: Data from Livelihood and Vulnerability Survey. Graphed by author

It is noted that given the mean income of 152.8 USD per household per month, the mean income per capita per month is estimated 35.87 USD (or 148.161.75 Riel) per capita per month. This is equivalent to 1.19 USD (4,938.72 KHR) per day which is below the national poverty line – as established by the World Bank for Cambodia (which is KHR 10,951 per person per day using at 2019/2020 prices.

Figure 10 – Distribution of income per capita per day vs poverty (orange) line (about 2.65 USD, or KHR 10,951, per day)



Source: Data from Livelihood and Vulnerability Survey. Calculated & graphed by author

It is noted that although 49.7% (n=313) are under the poverty line (based on self-reported income), only 14% of the survey households (n=88) have ID poor cards. It is also noted that the no relation is found between the level of household income and the area of agricultural owned by the households[35]. This suggests that the

[35] *r*=.059, p>.05

income currently earned by households are not from land. In other others, land has not been made full use of because of lack of irrigation water.

3.2.8 Expenditure

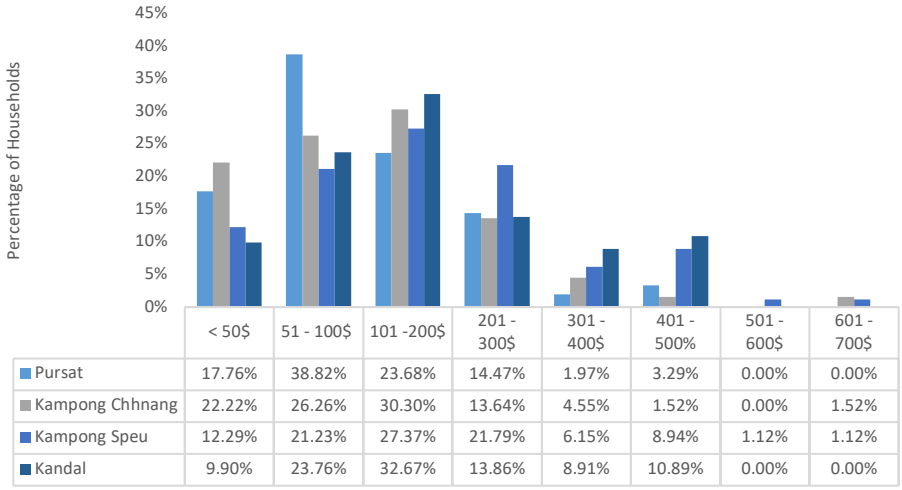
The average monthly expenditure of the surveyed participants is 176.6 USD. This is lower than the average monthly income which is 393.1USD.

Table 11 –Descriptive Statistic of Monthly Household Expenditure

Monthly household expenditure	USD
Mean	176.6
SD	131.8
Min	10.0
Max	700.0
Median	150.0
Mode	100.0

Below is the distribution of various level of monthly expenditure of sampled households (n=630) from four provinces.

Figure 11 – Distribution of monthly expenditure at household level (by project province)



	< 50$	51 - 100$	101 -200$	201 - 300$	301 - 400$	401 - 500%	501 - 600$	601 - 700$
Pursat	17.76%	38.82%	23.68%	14.47%	1.97%	3.29%	0.00%	0.00%
Kampong Chhnang	22.22%	26.26%	30.30%	13.64%	4.55%	1.52%	0.00%	1.52%
Kampong Speu	12.29%	21.23%	27.37%	21.79%	6.15%	8.94%	1.12%	1.12%
Kandal	9.90%	23.76%	32.67%	13.86%	8.91%	10.89%	0.00%	0.00%

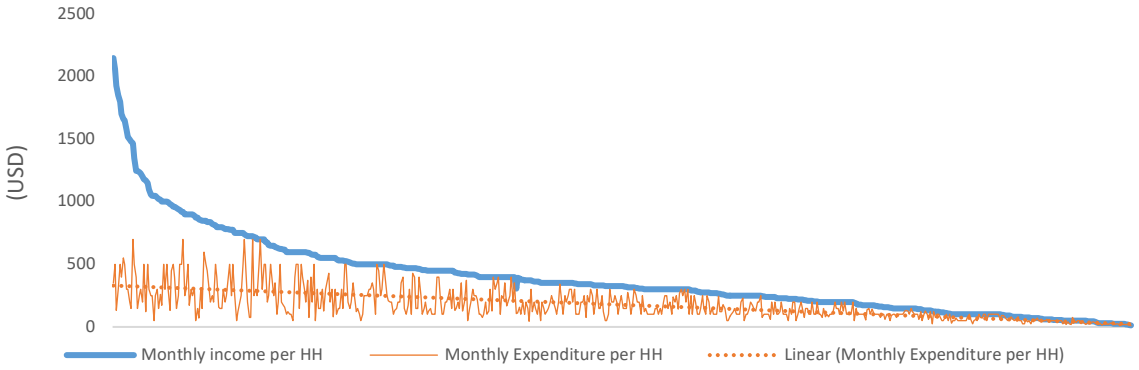
Source: Data from Livelihood and Vulnerability Survey. Graphed by author

There is a fairly strong positive relationship between household size and income[36], and a strong positive relationship between income–expenditure[37]. However, the data (graph below) suggests that surveyed households appears to confine their expenditure within the income they are capable of earning. Households that earn more tends to spend only basic costs to save money.

Figure 12 – Expenditure vs Income (Monthly at Household level)

[36] r_s=.51, p<.001

[37] r_s=.74, p<.001



Source: Data from Livelihood and Vulnerability Survey. Graphed by author

The reasons why both income and expenditure are unstable are due to the variation between wet season and dry season, according to the explanation from focus group discussion and key informant interviewed conducted by the Livelihood and Vulnerability Survey Team. In particular, during wet season, key expense include income lower than expenditure (24.3%), medical costs (19.9%)family expenses (18.7%), children's education (13.4%), loan repayment (10.4%), investment in agricultural production (9.5%), flooding (2.4%), and, less cultivation (1.5%).

During dry season reasons given, key reasons include income lower than expenditure (19%), children's education (14.8%), social expenses (13.6%), medical care (10.4%), rice drought damages (9.2%), debt payment (8%), lack of irrigation water (6.8%), payment for fertilizer cost (1.8%), , and low product income (1.5%).

3.2.9 Social networking

61.1% of respondent (n=385) have had no experience working in a community farmer group. 68.3% of them (n=430) are not involved in any group activities at village/commune level. Most women in the country use their own resources to start their business, or rely on informal sources and savings to expand their businesses. They have no other choice since women are underserved by banks[38].

3.2.10 Loans

At country level, according to the Cambodia Microfinance Association (CMA), 80% of their clients are women. However, loan size offered by these institutions are typically small whereas interest rate is higher than commercial banks[39].

In this survey, 28.9% of surveyed households (n=189) got a loan over the past one year. The purpose of loan (in descending order) is for house repair, investment in business, living expenses, purpose of consumables, and buy land (See graph below). Most of them will try to take a loan from a legitimate bank, and not the local lender because of the high interest.

[38] International Finance Cooperation 2021. Exploring the Opportunities for Women-owned SMEs in Cambodia (page 6).
[39] MAFF 2022.

There is an association between borrowing loan and family's income[40], expenses[41], household size[42]. No association can be found between loan borrowing and area of riceland[43], suggesting that surveyed households have not borrowed loan for investment in rice production.

Figure 13 – Expenditure vs Income (Monthly at Household level)

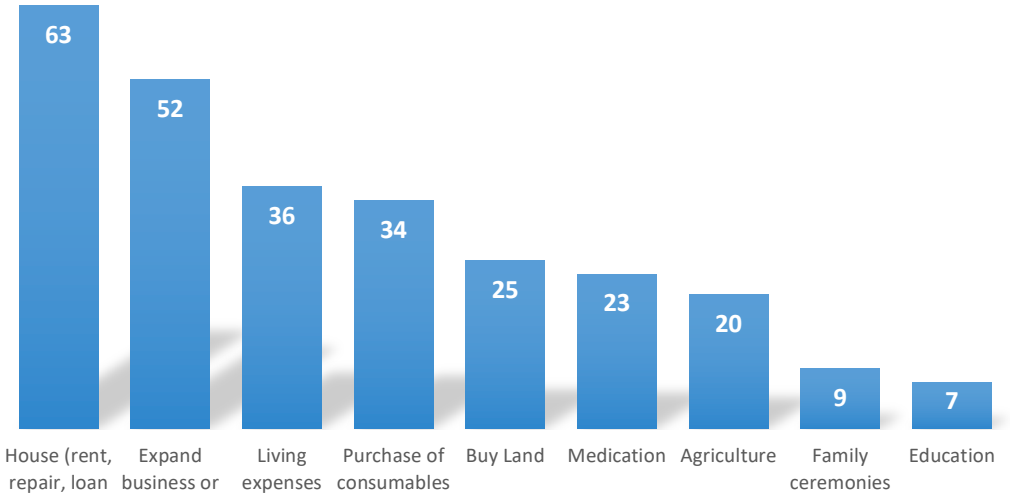


Table 12 – Descriptive Statistic of Loan size

Statistics	Loand size (in Riel)
Mean	6549.0
SD	7189.9
Min	2000.0
Max	50,000.0
Median	4000.0
Mode	10,000.0

It appears that participants prefer taking loan from private lender or money lender (67%), followed by relatives (9.3%). The average interest rate (per month) is 1.36%. 33.5% of loan borrower (n=61) indicated they faced challenges repaying the loans. Most households in the survey (94.7%, n=597) are not members of any microcredit/self help group. 93.9% (n=592) of women in surveyed households don't have any personal saving although 80.4% (n=507) say that women in their family have a freedom of determing how money is used in their family and 17.3% (n=109) don't have.

[40] $\chi^2(202) = 246.337$, $p<0.05$
[41] $\chi^2(55) = 89.307$, $p<0.05$
[42] $\chi^2(11) = 52.649$, $p<0.01$
[43] $\chi^2(107) = 110.593$, $p>0.05$

Province	Subproject	Private lender or money lender		Communitylender		Team lender		Relative lender with interest rate	
		N	%	N	%	N	%	N	%
Pursat	O Ta Paong Tanay Scheme	68	68.69%	6	6.06%	14	14.14%	4	4.04%
	Sub-total 1	**68**	**68.69%**	**6**	**6.06%**	**14**	**14.14%**	**4**	**4.04%**
Kampong Chhnang	Lum Hach Scheme	42	35.00%	1	0.83%	2	1.67%	8	6.67%
	Krang Ponley Kandal Scheme	8	6.67%	0	0.00%	1	0.83%	3	2.50%
	Anlong Chrey Scheme	29	24.17%	10	8.33%	6	5.00%	2	1.67%
	Sub-total 2	**79**	**65.83%**	**11**	**9.17%**	**9**	**7.50%**	**13**	**10.83%**
Kampong Speu	Brambei Mom Scheme	41	33.61%	4	3.28%	8	6.56%	6	4.92%
	Kra Peu Troum Scheme	26	21.31%9.3	0	0.00%	2	1.64%	7	5.74%
	Krang Ponley Kandal Scheme	15	12.30%	0	0.00%	1	0.82%	0	0.00%
	Sub-total 3	**82**	**67.21%**	**4**	**3.28%**	**11**	**9.02%**	**13**	**10.66%**
Kandal	Krang Ponley Kandal Scheme	55	71.43%	3	3.90%	5	6.49%	9	11.69%
	Sub-total 4	**55**	**71.43%**	**3**	**3.90%**	**5**	**6.49%**	**9**	**11.69%**
	Grand Total	**284**	**67.94%**	**24**	**5.74%**	**39**	**9.33%**	**39**	**9.33%**

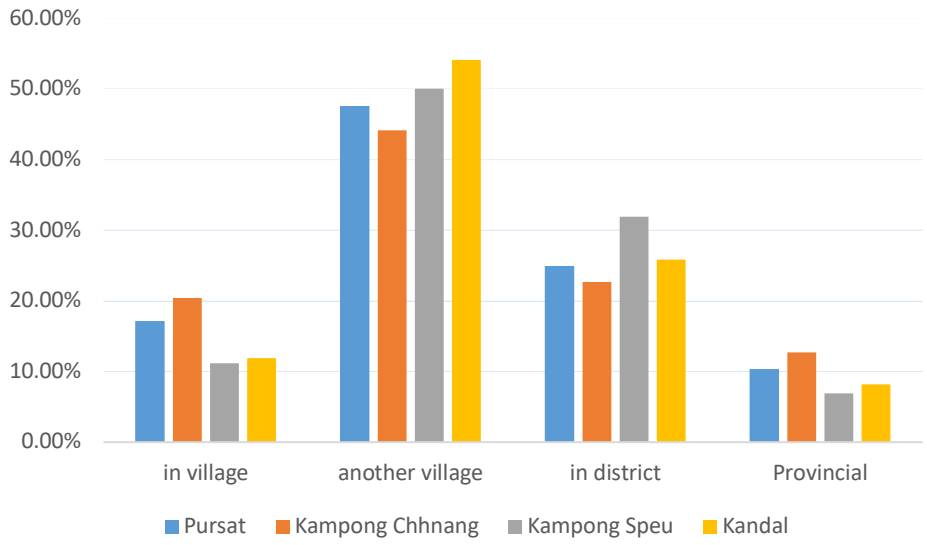
Source: CAISAR Livelihood and Vulnerability Survey (2022)

3.2.11 Public services

- Health services

Based on the survey results, health services do exist in many villages, but respondents told enumerators that often people would travel to neighboring villages (1-2 KM) or to a district (more advanced health service) further away (around 5 KM) where there is a more advances health service (Figure 5-26).

Figure 14 – Access to local or provincial health care facilities

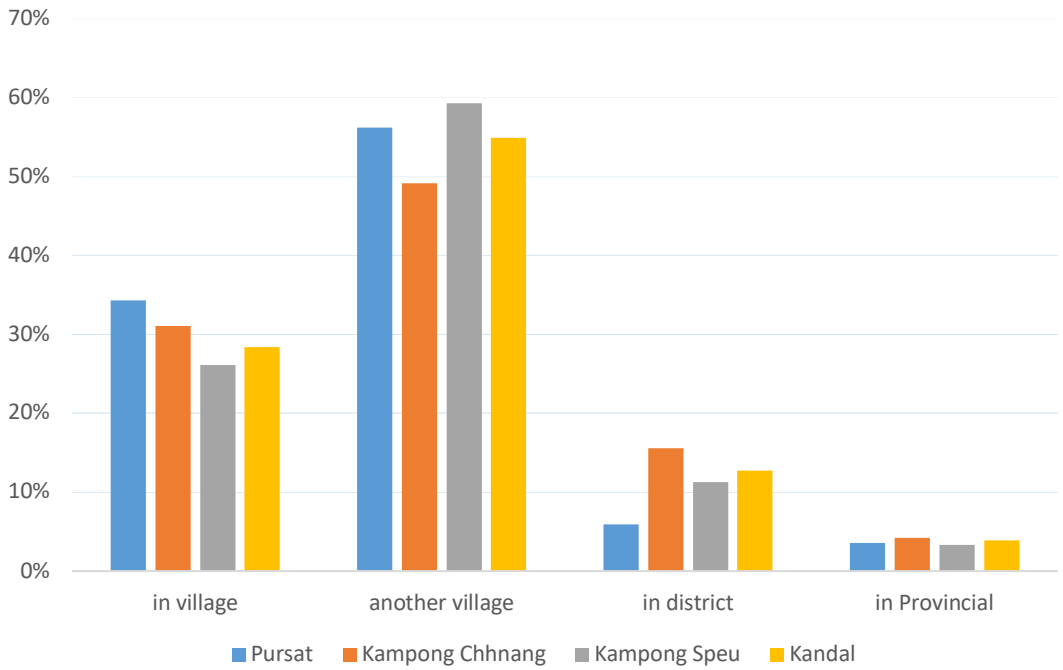


Source: data from CAISAR Livelihood & Vulnerability report. Graphed by author.

- Education services

Based on discussions held with the FGDs and KIIs, enumerators found that students usually go to study in another village and for upper secondary school (High School) students must go to the district center. As discussed above, this poses a difficulty as it costs money, as students may have to stay away from home, which means they cannot participate in household chores. Students can travel 1-2 KM to a neighboring village school or 4-5 KM if travelling to a district center.

Figure 15 – Access to local or provincial educational facilities by province



Source: data from CAISAR Livelihood & Vulnerability report. Graphed by author.

3.2.12 Vulnerability of Households with less than 1ha of riceland

In the survey sample (n=630), there are more than half of households (62%) who have less than 1ha of riceland (as shown in table below).

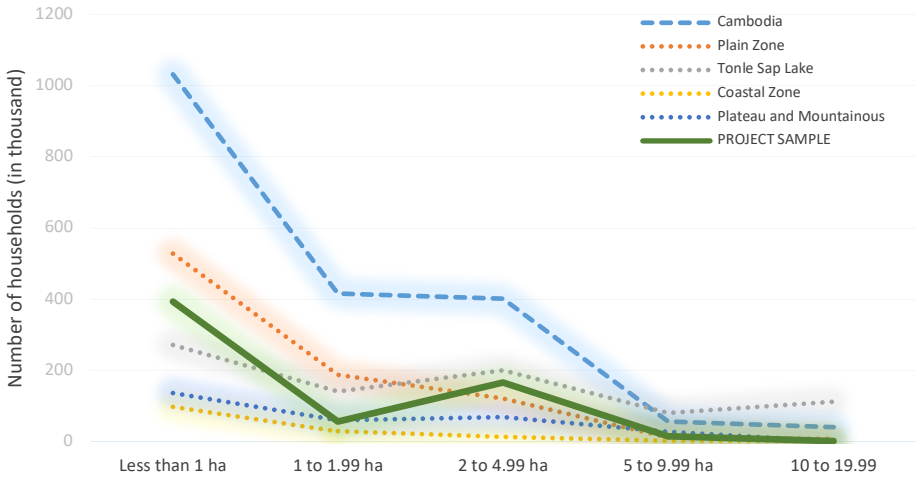
Table 13 – Distribution of agri-land size of the sample

Groups	n	Percentage
Poor (less than 1ha)	393.0	62%
Middle (≥1 ha, <2ha)	55.0	9%
Better-off (≥2 ha)	182.0	29%
TOTAL		100%

Source: Dataset of Livelihood Survey. Calculated by author.

Compared to the regional, and the national land distribution data, distribution of agri-land size from the project's sample appears to follow the same distribution at regional and national levels. It is noted that the proportion of households who have less than 1ha of agricultural landholding makes up the largest percentage, followed by the group with landholding from 1 to 4.99ha per households (See chart below).

Figure 16 – Distribution of agricultural land – project data vs national data



Source: Data from CAISAR Livelihood Survey and 2020 National Agriculture Census. Calculated by author. Project data is timed by 1,000 to show its patten vis-à-vis national data.

The households with less than 1ha of riceland is characterized by the followings:

- Average HH size is **lower** than that of those having more than 1 ha of riceland[44]
- Average size of residential land is **lower** than that of those having more than 1 ha of riceland[45]
- Average age of HH head is **higher** than that of those having more than 1 ha of riceland[46]
- Average percentage of monthly food expenditure is **higher**[47]
- Have **one job** while those having more than 1 ha have two jobs[48]
- **More likely to borrow loan** compared to those having more than 1 ha [49]
- Average HH income is lower that of the non-youth[50]

3.3 Gender Analysis

3.3.1 Labor Division

For those who are involved in farming as their main livelihood activities, virtually all of them (97.6%, n=451) dedicate their full-time farming. The male workers spend, on average, 59.4% of their time for farming vis-à-vis female counterpart who spend 40.5% of their time for farming.

In rice farming, traditionally, the first stages of rice cultivation are male-designated and the latter stages female designated. Men generally perform land preparation tasks, while seedling preparation and weeding are

[44] $t(628)=2.168$, $p<0.01$, mean difference: 0.47
[45] $t(628)=4.726$, $p<0.01$, mean difference: 535.9
[46] $t(628)=3.270$, $p<0.01$, mean difference: 3.5
[47] $t(628)=3.542$, $p<0.01$, mean difference: 3.7
[48] Chi-square test is statistically significant: $\chi^2(5.578)=$, $p<0.05$
[49] Chi-square test is statistically significant: $\chi^2(5.578)=$, $p<0.05$
[50] Chi-square test is statistically significant: $\chi^2(5.172)=$, $p<0.05$

commonly assigned to women[51]. All other jobs such as transplanting, uprooting, harvesting, and marketing are generally shared tasks[52]. However, given the migration of men for better income, mechanichanization has become more popular. As a result, in households with men migrating, women undertake all farming tasks: land preparation, irrigation, threshing, and recruitment of labor, farm management, harvesting, and selling. Growing secondary crops such as vegetables also increase. These secondary crops are mainly grown in home gardens, increasing nutritional status for household as well as households' food security. [53].

In livestock, most rural women (70%) are involved in raising small livestock such as chicken and ducks, and pigs. These are are important source of food and supplementary household's income. For most poor women, livestock serves as a primary form of savings, as well as insurance against economic shocks due to accidents, illness, death and natural disasters. However, as livestock in Cambodia faces rapid market restructuring, poor livestock producers, particularly women, experience constraints to meeting a growing number of regulations with regards to sanitary standards, animal transportation, storage standards, etc) required by more structured markets.[54] In general, women raise poultry, men do cattle and pigs.

For household chore, women still do 90% of the work. During COVID-19 breakout, women spent even increased time on domestic and care work[55]. Elders carry full responsibility for raising grandchildren whose mothers have migrated[56]. In project area, similarly, in family where female labor has to work in nearny garment factories, or migrant for paid works, domestic works are transferred to young girls and old people. According to the National Institute of Statistics (2021), unpaid household workers are more than twice as likely to be women and are in a particularly precarious situation, depending on other members of their household for any income[57].

3.3.2 Income

At individual level, the average income of all female household members is 121.4 USD per month (n=238). This is lower than the income of male members which is 166.6 USD per month (n=366). The difference in income between male and female members is 45.2 USD, and is statistically significant[58]. However, at household level, there is no statistically significant difference in the mean income between female-headed household and male-headed households[59]. The average income between two groups are small (mean difference=17.3 USD).

In term of use of income, according to the national Demographic and Health Survey (2020-2021), when men were asked about who makes decisions regarding how their earnings are used, 48% of married men (aged 15–49) reported that they jointly make decisions with their wives, 46% said that their wives mainly make decisions, and 6% said they make these own decisions. In fact, 97% of married women (aged 15–49) who can make cash earnings for their employment participate in making decisions about the use of their earnings whereas 63% make these decisions mainly alone.

[51] MAFF 2015. Gender Mainstreaming Policy and Strategic Framework in Agriculture (2016-2020).
[52] ADB 2012.Cambodian Climate Change Resilient Rice Commercialization: Socio Economic Assessment and Gender Analysis.
[53] MAFF 2015. Gender Mainstreaming Policy and Strategic Framework in Agriculture (2016-2020).
[54] MAFF 2015. Gender Mainstreaming Policy and Strategic Framework in Agriculture (2016-2020).
[55] United Nations 2022. Gender Equality Deep-Dive for Cambodia – Common Country Analysis.
[56] Green, W. N., & Estes, J. 2019. Precarious Debt: Microfinance Subjects and Intergenerational Dependency in Cambodia. Antipode, 51(1), 129–147. https://doi.org/10.1111/anti.12413.
[57] MAFF 2022. Gender Mainstreaming Policy and Strategic Framework in Agriculture (2022-2026).
[58] $t(602)=3.996$, $p<0.01$, Cohen's $d=0.333$
[59] $t(628)=0.653$, $p>0.05$, Cohen's $d=0.053$

3.3.3 Decision Making

- **Children & Livelihood**

Data from the Livelihood Survey indicated that issues around children (education, childcare, marriage) are decided mainly by both husband and wife albeit there are a remarkable proportion of households where women are the only one who make the decisions related to their children. In terms of livelihoods, while decision related to daily livelihoods (e.g. expense for households, same of home-based produce, visit friend and family are decided by both husband and wife, there is a considerable part of respondents who indicate decisions related to livelihood of women, family expense, attending trainings, etc. are decided solely by women (See table below).

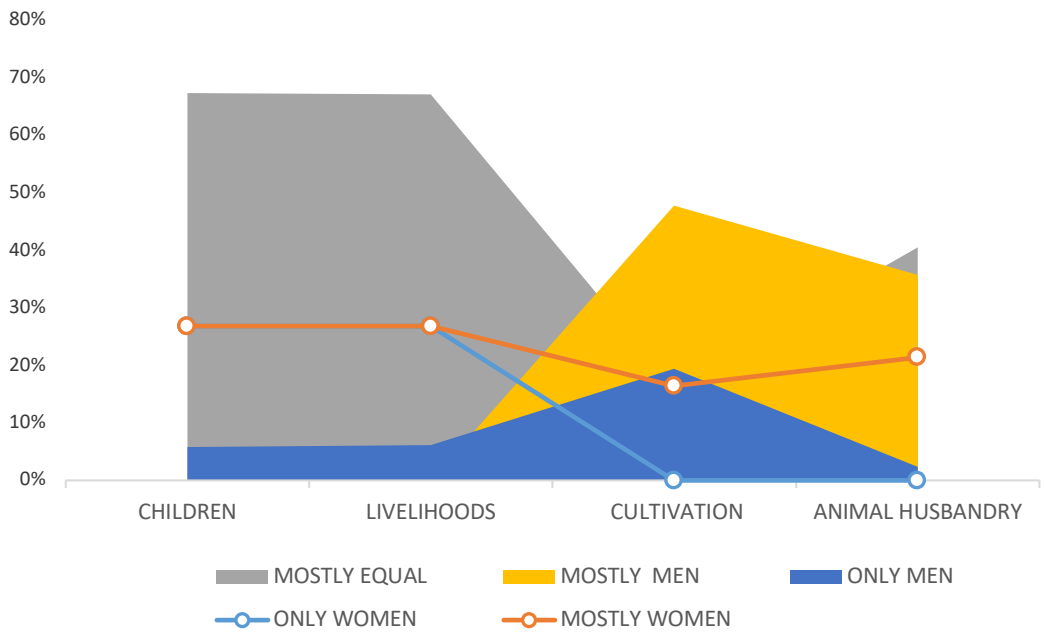
	ONLY WOMEN	MOSTLY WOMEN	MOSTLY EQUAL	MOSTLY MEN	ONLY MEN
CHILDREN	**1352**	**0**	**3393**	**0**	**295**
School enrolment of children, particularly for girls	189		426		15
Continuing education for girls beyond primary	191		416		23
Girls' age at marriage	144		464		22
Selection of match for girls	158		447		25
Place of delivery	140		379		111
No. of child to be born	186		416		28
No. of male child preferred	165		431		34
Child immunization	179		414		37
LIVELIHOODS	**1181**	**0**	**2958**	**0**	**271**
Type of livelihood for women	191		414		25
Spending on Household necessities/items	215		387		28
Sale of home-based products	214		389		27
Visits to parents' family/friends	136		477		17
Attend skill training	138		438		54
Forming/joining commune FWUCs/FWUSG	143		429		58
Participating in commune meetings	144		424		62

Source: Data from Livelihood Survey. Analyzed by author.

- **Cultivation & Animal husbandry**

While Children & Livelihood issues tend to gravitate to women, issues related to agricultural production (cultivation and animal husbandry) tends to be mostly with men. This is explained by the fact that agricultural works are physically heavy and poisonous in some instances such as pesticide application (See chart below). It is interesting to learn from the consultation from 7 communes in 4 provinces in June 2023, consultation participants indicated that most trainings are attended by women.

Farm works	ONLY WOMEN	MOSTLY WOMEN	MOSTLY EQUAL	MOSTLY MEN	ONLY MEN
CULTIVATION	**0**	**11**	**11**	**32**	**13**
Buy seeds, fertilizers, pesticides					
Prepare land					
Daily crop care					
Hire additional labor					
Irrigate					
Spray pesticides					
Apply fertilizers					
Harvest					
Decide selling prices					
Attend trainings					
ANIMAL HUSBANDRY	**0**	**9**	**17**	**15**	**1**
Select/buy varieties					
Buy feed					
Daily care (e.g. feeding, bathing)					
Choose veterinary services					
Decide selling prices					
Attend training					

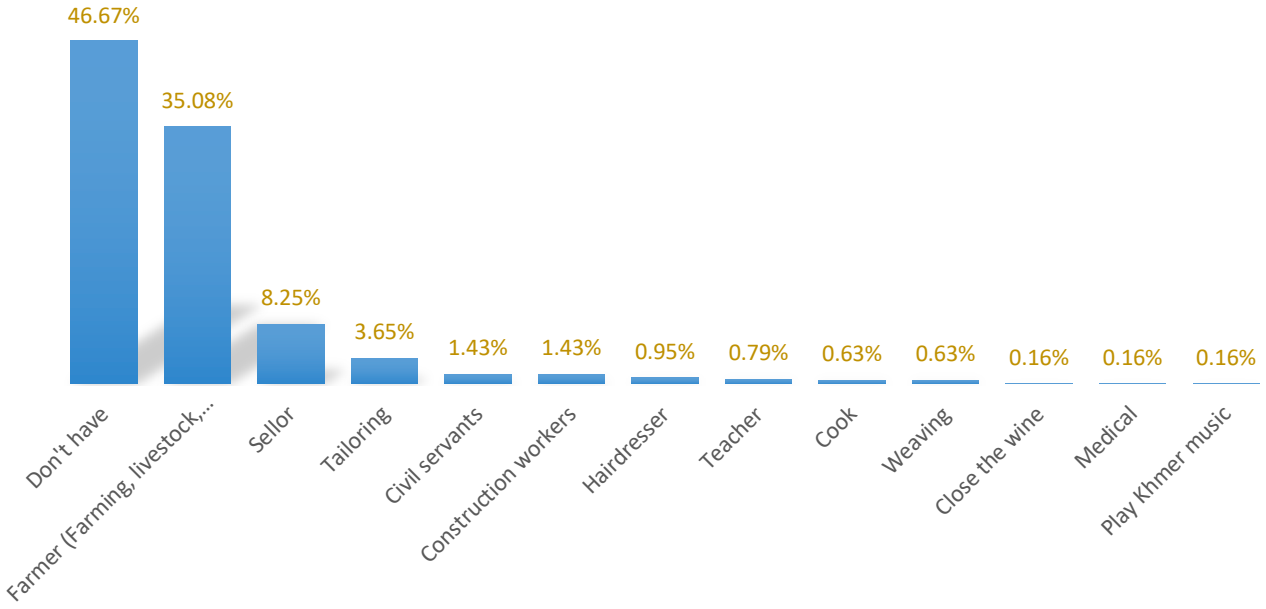


Source: Data on Children and Livelihood from CAISAR Livelihood Survey report. Analyzed by author.

At national level, when it comes to spending money for women's health care, purchasing major household, and visiting their family and relatives, 88% of currently married women aged 15–49 can decide on their own or jointly with their spouse (Demographic and Health Survey 2020-2021).

- ***Skills of female household member***

Of total 630 households in the survey, in 46% household (n=294), female members don't have working skills. 35% (n=221) have farming skills such as farming, livestock, orchard.



In the opinion of the surveyed households, woman should have the following education, followed by freedom of decision making, good husband, income opportunity, and own saving.

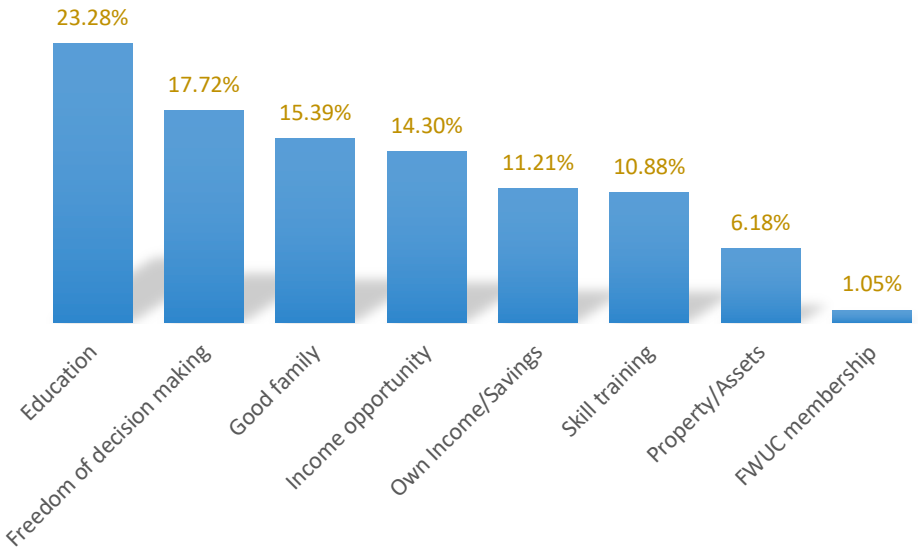
- ***Access to Agricultural Extension Service***

It is estimated that only 10 per cent of the Cambodian farmers with access to agricultural extension services are women[60]. The constraints affecting rural Cambodian women's ability to have adequate access to agricultural extension services include distance to the point of service provision; insensitivity to the level of literacy; time; lack of childcare options; household responsibilities; mobility; and socio-cultural characteristics[61]. Men are still traditionally regarded as household head and are often automatically the recipient of new information[62].

- ***Market access***

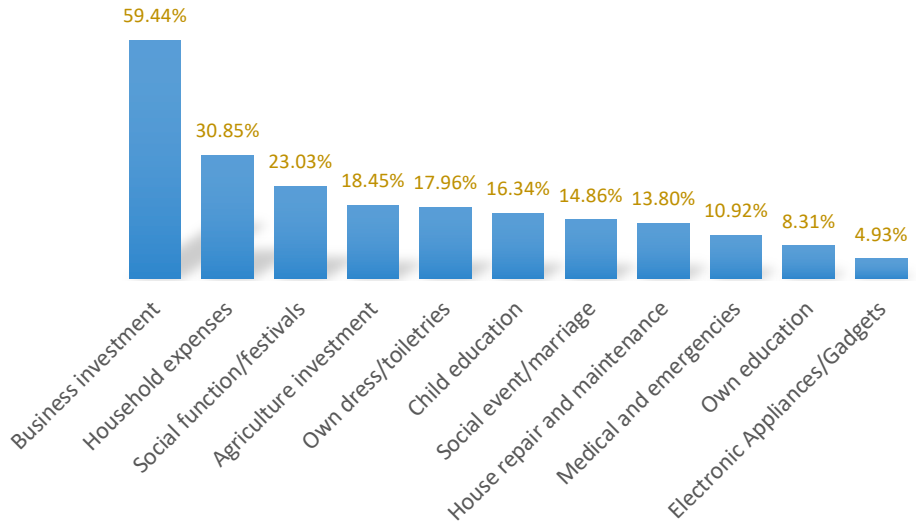
Women face a number of disadvantages: lower mobility, lower level of literacy, less access to training, less access to market information, and less access to productive resources. Lower financial literacy of women and travel safety are identified as the main gender gaps in Cambodia to access to markets for women[63].

[60] https://www.phnompenhpost.com/national-post-depth/cavac-empowering-women-farmers-through-tech (accessed September 17, 2023).
[61] MAFF 2015. Gender Mainstreaming Policy and Strategic Framework in Agriculture (2016-2020).
[62] MAFF 2022. Gender Mainstreaming Policy and Strategic Framework in Agriculture (2022-2026).
[63] MAFF 2022. Gender Mainstreaming Policy and Strategic Framework in Agriculture (2022-2026).



- ***Potential financial investment***

80.48% of survey respondent (n=507) said female member have freedom of spending household income. If they have financial resources, they plan to spend on the followings:



3.4.4 Key gaps

This section summarized the key **gaps in working skills** among female members:

- **64%** of surveyed households (n=407) **do farming as household's main income generation activity**. However, only **half of them** (35.08%, n=221) have female members with farming skills.
- **In 46%** of surveyed households (n=294), female members (working age) **don't have working skills**.

- There is a **big dismatch** between **current income generation activities** (64% in farming) and **desired investment** (59% in non-farming).

4. GENDER ACTION & SOCIAL INCLUSION PLAN

From the above analysis, kep gaps with regards to participation of women in farming activities and household chores have been identified. To reduce the gender gaps, it is important that barriers to reducing the gaps be pinpointed, opportunities that facilitate the gender mainstreaming effort be identified, and priorities set forth to address the barriers while maximizing the opportunities. The section below identified key barriers, opportunities, and priorities in promoting participation of women in economic empowerment process.

4.1 Key Barriers to Participation of Women

This section highlighted five key barriers that may potentially affect the participation of women in project activities. The barriers are inter-related thus need to be addressed together to reduce the constraints.

Barrier 1 – Gender norms

In Cambodia, gender stereotype, which grounds on social norms, has long shaped how rural men and women divide their responsibilities and time for household chores and income generation activities. This affects their mobility, arragements in decision making, and their wellbeing. This gender norm was originally based on labor division between women and men based on their physical and reproductive health. While men are generally responsible for physically heavy works in farming, including works that are considered harmful to health (e.g spraying pesticide), women's role focus on child bearing, child care, household chore. Because of these fuctions, women are involved in farm works that is physically suitable for them at home such as home gardening, animal husbandry (e.g. raising poultry). Given this responsibility pattern, men generally represent his family for works that happen outside the family (e.g. community works) and has more social interaction compared to their female counterpart (See opportunities and priority for project to overcome this barrier in the next sections).

Barrier 2 – Household chore

The gender norm defines that domestic works are key women's responsibility. Traditional code (Chbab Srey/ Proh) have been adopted for several centuries. The code specifies men as 'head of the household' and advise a woman to maintain peace at home and respect her husband" [64]. As such, women spend most of their time at home, taking care of domestic works that are unpaid. Chore works does not only take them most of their time of the day but also prevent them from taking part in activities outside their home: attending community meetings, agricultural trainings, visit friends or relatives, or keeping up with their peers in the neighborhood. Because of their work burden, only a few women have the time to join FWUCs and village and commune development activities, particularly in water and irrigation management or in disaster risk reduction. This can negative affect women's adaptive capacity,this jeopardizing the resilience of poor rural households.

For families that are involved in home gardening and animal husbandry, household chore and home farming reinforces the gender stereotype. This keeps women busy at home, depriving them of opportunities to update their general knowledge, social trends, or even refreshing the skills that they use daily in their domestic work and animal husbandry. This forms a vicious cycle that maintain existence of the gender norms (See opportunities and priority for project to overcome this barrier in the next sections).

[64] Anderson, E., & Grace, K. (2018). From Schoolgirls to "Virtuous" Khmer Women: Interrogating Chbab Srey and Gender in Cambodian Education Policy. Studies in Social Justice, 12(2), 215–234. https://doi.org/10.26522/ssj.v12i2.1626

Barrier 3 – Human capital

Education, adult literay and skills are low for both men and women, and particularly lower among women. Income generation in rural are is difficult. Thus children start involving in farming and household chore from a very young age. Therefore, they tend to drop out from school as they move move through primary, secondary and high school. According to the 2021 national socioeconomic survey, main reasons why persons aged 6-17 years did not attend school are: a) work to contribute to family income (27%), b) don't want to study (16.2%), c) do not do well in school (13.5%), d) too poor to continue education (8.3%), and e) Must help with household chores (7.3%). Surprisingly, the rates are higher among female when it comes to work to contribute to family income (29.7% and 25.0% for female and male, respectively), and do households chore (10.3% and 4.9% for female and male, respectively). Early marriage in rural area is still common. This reduces the opportunities of young female to take on further education because of child bearing and household chore (mentioned in Barrier 1 and 2). Adult literay is overall 85% at country level. However, adult literay among women is lower than men – 80% and 90%, respectively. In rural area, adult literacy is even lower − 75.3% and 86.7% for women and men, respectively, and tend to decrease among both men and women who are 25 years and above[65]. More than two-thirds of households in the lowest income quintile depend on agriculture. However, agriculture is maily held back by low level of mechanization, inadequate irrigation, little use of fertilizer, and predominant use of low-value rice strains [66]. Farming skills that are associated with old farming practices are also limited (See opportunities and priority for project to overcome this barrier in the next sections).

Barrier 4 – Wage, Job, Migration

Although the gender wage gap has gone down − from 24% in 2017 to 19% in 2020, the wage gap between women and men remains a challenge, representing an enduring barrier for women jobseekers, and for both men and women under the unfavorable impacts on productivity and economic growth. Also, average women are found to work less hours than men in wage employment. But this does not take into account the time women typically spend for their household chores[67]. In the rural area, in general, and in four project provinces, in particular, job market is not active. This is especially evident in remote, mountainous areas where farm works are dominant. Given this, when searching for jobs, women tend to look for jobs near home while men can travel far to work as migrant workers. In the context of this project, it is likely that women, including women in ethnic minority communities, are likely to focus on their domestic farming, or farming activities (for those who having access to productive land). There is a high level of out-migration of young people (60-80% in each project commune) (See opportunities and priority for project intervention in the next sections).

Barrier 5 – Adoption of New Farming Technologies

Traditional farming practices − characterized by dominent use of old varieties, low mechanization, old crop caring techniques, monocrop, and local market, are among potential constraints to project's effort in promoting adoption of new technologies that take into account factors related to crop intensification (e.g. more crops per year, short crop duration, better crop care), environment protection, loan, and market for new rice strains. It is also important to note that since 30-50% of rice are retained for home use, farmers may encounter challenges in adoption of new varieties that they may not be interested in eating new rice varieties. They may also be concerned about how they sell the new strains (market), and how to learn quickly to apply successfully new technology packages that will come alongside new varieties, shorter crop duration, labor shortage, market demand and and how to ensure better selling prices. Trial and adoption of new technologiy package may take a few years: from Knowledge, Persuasion, Decision, Implementation, and Confirmation[68]. To achieve project

[65] National Institute of Statistics, Ministry of Planning, 2021. Cambodia Socio-Economic Survey 2021.
[66] World Bank. 2012. Matching Aspirations - Skills For Implementing Cambodia's Growth Strategy
[67] UNDP. 2021. The Gender Wage Gap in Cambodia. Phnom Penh, Cambodia.
[68] Le Anh Tuan & Grant R. Singleton. 2018. Promoting Adoption of Agricultural Technologies - A Guidance Note.

goal, project farmers need to trial and apply new farming techniques that project will introduce. Since most farmers don't change the current farming practice overnight, it is important that the project walk the farmers through a well designed learning and adoption process, which needs to be facilitated with project interventions, to promote full adoption of introduced technologies and achieve the one of the project goal – enhancing income and livelihoods of rural people in the context of climate change (See opportunities and priority for project intervention in the next sections).

4.2 Opportunities for Gender Mainstreaming into Project Activitiess

The project offers a unique opportunity where participation of women in project design and implementation is subject to monitoring and evaluation. This ensures the target on gender mainstreamings as to different project activities are set (as baseline) and monitored for changes (mid-term and endterm). Although 73% of surveyed households do animal husbandry, this activities serve as family's saving as income is low. There is still chance for developing more in animal husbandry and other farming activities such as cash crop, income from post-harvest (e.g. straw, mushroom production).

Opportunity 1 – Increasing sharing of household chore between men and women

While household chores remain key responsibility of women, at national level, there has been an increased share of household chore, particularly among households where demand for job/income necessitates adjustment to traditional intra-household labor division. This is indicated during COVID-19 pandamic when men participated more in household works, and in households where women work full-time in garment/footwear factories (including women who migrate and those who work in nearby communes). This suggested that there has been a gentle shift in labor division in situations where adjusted workload between men and women in a family is essential to maintaining/improving family income. The willingness of men to share household chore is fundamental to reducing time and workload a women typically take on a daily basis. This fosters women additional time for self-care, child development, learning opportunities, and new income opportunity such as attending project trainings on new farming technology, financial management, take up new jobs created in the value chain development process promoted under the project.

Opportunity 2 – Female are increasingly involved in household decision makings

Though gender norms traditionally limit women's participation in decision making at household and community levels, empirical evidence suggests a new opportunity: while women's participation in public decisions (community level) are still rare, women have been playing an increasing role in decision making at household level, particularly those related to income/financial management and children development. This suggests that men have increasingly recognized the role of women in their family well-being, especially in child care/ development, management of family expenditure, loans, and trading of farm produce. Most women have participated in deciding selling prices of their farm produce – jointly with their husbands albeit their participation in agricultural production process as a labor has decreased due to increased mechanichanization which frees up their time and participation in labor intenstive tasks such as soil prepraration and haverest. Improved water access (thanks to project investment) will generally double income from rice production and reforce the existing roles of women but will require more particiapiton of women in decision making process, particularly for household that join project's valua chain for long-term and sustainable rice production.

Opportunity 3 – Increasing female participation in waged jobs and migration

Poverty (exacerbated by natural disasters) have left rural people with no choice but to migrate. This is especially true to migrant who don't have sufficient land for farming and monthly income cannot cover expenditures[69]. Data has suggested that migration of women to Phnom Penh and other provinces has been increasing, and more remarkably over the past decade. Of 58.5% of rual women who moved to Phnom Penh, 32.2% work as garment workers, 23.4% as small business owners, 11.1% as domestic workers, and 10.3% as service/entertainment workers. Most migrant women (82.9%) sent remittance home (compared to men - 75.9%[70]). In project area where a high level of women participation in garment factories already exists (e.g. at Krapeu Troum scheme of Krang Ponley subproject in Oudong district, Kampong Speu), there would be a significant lack of women's participation in rice production under the project. However, opportunity for farming households to increase the number of rice crops (from one to two crop a year) will increase income for all farming households, including households in which women worked full time in nearly factories. Increased mechanization also frees up labor intenstive farm workers and reduce physical works of women in rice farming.

Opportunity 4 – Project opportunities for gender awareness raising among youth farmers

Various studies suggested that income gap are not common among youth households (compared to income gap in households headed by persons more than 40 years of age). The openness of youth facililiates sharing of household chores and other farming works. Targeting farming youth households may gain low bearning fruit with regards to gender equality. This will be a great opportunity to maintain this momentum since intervention among youth to minimize gender gaps, and effectives. This does not only serve as a good example at local level but also prepare for transgenerational transmission of gender equality.

Opportunity 5 – Project opportunities for increased women participation in project activities

The project offers a unique opportunity where participation of women in project design and implementation is subject to monitoring and evaluation. This ensures the target on gender mainstreamings as to different project activities are set (as baseline) and monitored for changes (mid-term and endterm). Although 73% of surveyed households do animal husbandry, this activities serve as family's saving as income is low. There is still chance for developing more in animal husbandry and other farming activities such as cash crop, income from post-harvest (e.g. straw, mushroom production).

4.3 Priorities for Gender Mainstreaming

Priority 1 – Alleviating women's workload and taking into account their labour needs and constraints.

Women are traditionally responsible for most of household chore. This unpaid work take them not only most of their time in a day but also restrict them from learning chance to upgrade their farming skills which are essential for improved crop yield, and for being accepted into a value chain. To free up women gradually from traditional household chore, it is essential that their husband share the household chore, such as childcare, cooking, home gardening, animal husbandry. When women have more time to participate in trainings, community meetings, and farming activities, they contribute to increasing family income – through optimized labor and farm yield. Hence, the use of gender tools and approaches that tackle discriminatory gender norms and promote mindset and beavhioural changes among rural households, towards greater sharing of household chores and responsabilities is essential. Promoting women's access to water for irrigation, livelihood activities and domestic

[69] World Food Programme 2019. Vulnerability and Migration in Cambodia
[70] Ministry of Planning 2013. A CRUMP series study: Women and Migration.

uses couples with the adoption of labour-saving climate-smart technologies will also contribute to alleviate women's workload in farming and household activities. It is important that the technologes delivered are informed by considerations for women's labour and productive needs.

In addition training and extension activities particularly those targeting women, should be delivered during off-farm season, or during time when farm work is low. It is also important to be sensitive in arranging the timing of such meetings and trainings during the day. Women's workload have diurnal variations and it is important to be sensitive to this aspect. Meetings and trainings should be organized at a time during the day when it does not clash with the time of the day when demands on the women for domestic chores is highest. This is to facilitate sharing of household chore on the part of the male, of work shifting, which enable women to go outside their home for trainings and meetings. Training content and capacity building events need to be designed based on women's need and aspiration. As such, these need to be gender sensitive, e.g. type/focus of technologies/techniques, training events, proximity to villages/communes.

Priority 2 – Improve women's skills, and access to financial resources for Improved Income and resiliance

Improving women's skills that are essential to their family's income is important to economic empowerment that the project intended to foster. Skill to be selected for training, development and usage should be based on the needs of the target households, particularly the female members of the target groups. Nonetheless, it is important that women farmers are trained alongside men on new agricultural practices and technologies, including promoting access to irrigation and mechanization. Involvement of women in agricultural training will vary depending on the context and household livelihood caractheristics. It is clear that women from farming households who are not involved in other non-farm jobs will have different need for skill development compared to women from farming households who work in nearby garment factory. It is also equally important to support women from farming households to develop non-farm skill to diversify their income sources, such as work in small-scaled agribusiness which deal with food processing and trading rather than production itself. Access to loans and grants are equally important to facilitate application of new skills for income generation and small enterprise development Local financial service provider could be supported/encouraged to ensure women participation is a sufficient and necessary condition to quality for a pro-poor loan. Grant schemes should also include special conditions and requirements to facilitate women's participation.

To increase income from rice cultivation, women and men farmers need adopt new rice varieties that are high-yielding (See Barrier No. 5 above), and increase the number of crop from existing one crop per year to at least two crop per year. Gender work is needed to ensure that both women and men are trained on new agricultural practices, that their preferences and labour constraines are taken into account and that joint decisions on adoption of new rice varities, crops and mechanization are made within the household. Increased use of machinery by both women and men is important. This is to ensure increased rice production at commune level does not fact the existing labor shortage (due to increasing migration for non-farm works). Home gardening (vegetable) and animal husbandry (e.g. chicken, duck raising) should be promoted since these works can be done at home which is suitable for women and increase additional income and source of food for children's nutrition. The economic empowerment of women should also be promoted by supporting women's involvement in off-farm activities, such as processing and value-addition as well as investments in green products and women-led green enteprises.

Priority 3 – Promoting women's participation and leadership in community-based planning, decision-making and water governance

Women poor decision-making capacities and participation in community affairs, which is often driven by discriminatory social and cultural norms are still challenges to be overcome. FWUCs, are still heavily male dominated although relevant institutions are very open-minded about women's participation in the community. Yet women's experiences in water and water governance and in community-based climate change adaptation activities remain limited compared with those of men. Therefore it is important that the project strengthen the capacity of women through FWUCs and other local social groups and motivate men and women to work towards gender equality; This will require strengthening water governance by addressing its social and gender dimensions to ensure that water resources and irrigation systems are managed in a transparent, participatory and equitable manner, including handing over responsibilities to women in FWUCs such as planning and decisionmaking in water management and development, early warning system and disaster risk reduction activities;

Overall project activities should require women participation to enable the household to benefit from project activities. This aims to ensure family and husband consistently support the women to participate in project activities in a longer time and women participation is not as ticking the box. Investments that benefit groups or larger community should require at 30% of women participation for the planning meeting to proceed. If this target is compromised, there is no impetus for later meetings that have higher level of women participation. Thus, the target of at least 40% women participation in all project planning and implementation will be compromised. Long-term support to women's participation will facilitate change in the gender norms and behaviours.

Priority 4 – Promote Collective Farming among Smallholder Farmers

Contract farming is a model where farmers and private sectors (e.g. collector, agri-businesses) work togher in the long run – through legally bonded relationship, for mutual economic benefits. When farmers change to new farming practices, it is important that they work closely with each other to ensure the crops (despite individually culvivated) are consistent in terms of variety, technology adoption. Collective farming and contract farming should be facilitated through local Farmers' Cooperatives, or a local agri-business. It is important to ensure that women producers are actively involved in those institutions and agri-business initiatives. Opportunities for developing women-led agri-enterprises should also be explored, particularly in vegetable production, which is one of the target crops.

Priority 5 – Targeting Youth Farmers as Change Agents

Youth under the age of 30 represents 2/3 of the country's population and continues to grow at around 1.6% per year[71]. In the project area, skill of youth and access to land resources are limited. The average income of male and female among youth is not different statistically compared to that between male and female in the group older than youth age (more than 30 years of age). Targeting youth farmers in the project area is one effective way to promote improved income at household level. This could be achieved as youth is more active in learning and applying new knowledge, they are more capable physically and thus can spend more effective time in farming activities and later on value chains. Their initial results achieved from project support can serve as champion in the social change process within their community and thus can create a good spill-over effect in terms of learning for youth outside the project area, including groups that are just above youth age, such as the

[71] UNDP 2023 (https://www.undp.org/cambodia/projects/promoting-decent-youth-employment-cambodia). Accessed on 23 September 2023.

group between 30-50 years of age who are quite active in farming. As there is no income gap between male and female in youth, supporting youth group, including the group just above youth age (i.e. 30-50), can create a long-term impact which may last beyond project life in terms of income equality. Investment for youth should focus on skills, finance access, business development.

4.4 Anticipated Trends during Project Life and Beyond

The project interventions are anticipated to give rise to the following trends. These trends would become clear when construction of irrigation subprojects are completed and put back into operation:

- **Increased labor market** is anticipated to meet increasing demand of intensified rice production, particularly in increasing need in crop care such as fertilizers and pesticide application ➔ more job (hired labor) created, including jobs for women such as crop care.
- **Increased mechanization,** particularly at land preparation and harvesting stages, thanks to increased production scale and road access ➔ more job (hired labor) created and female is freed up from heavy jobs such as harvesting, trauling.
- **Opportunities to target market segments that bring farmers premium** (thanks to selection of rice variery and production technologies that target high-end markets, particularly for farmers with large farm size (e.g. more than 4ha) ➔ increasing opportunities for women to participate in trading and value chain.
- **Increased income** (double or more) thanks to a) increased number of crops per year and b) increased crop yield thanks to better crop production based on improved variety and crop management technologies (e.g. IPM, integrated crop management, alternative wet dry…) ➔ increasing decision making for women, particularly in nutrition and education for children.
- **Increased land concentration** (e.g. farmers with small farm leave farming and sell to better-off), particularly when water access becomes more reliable thanks to project investment.
- **Increased individualized farming** if contract farming (collective farming) is not promoted successfully
- **Reduced labor exchange** because of a) more synchronized irrigation and b) increased labor marget ➔ reduced social networking at farm neighborhood level.
- **Reduced selling prices** due to increased farm output for the same market.

5. GENDER ACTION & SOCIAL INCLUSION PLAN

5.1 Approach to Developing Gender Action & Social Inclusion Plan (GASIP)

The GASIP is aligned with the logical framework of the project. This aims to ensure the activities proposed in the GASIP are aligned up with overall project design and promote gender mainstreaming in all investment areas that are feasible. In addition, GASIP are proposed based on empirical evidence gathered from the project area, in-country and international experience in gender mainstreaming. Gender actions are proposed on the basis of a) analysis of gender gaps, b) constraints to gender mainstreaming, and b) opportunities to overcome such constraints. Key priority (for promoting gender mainstreaming) are identified for the project. This paves the way to proposing various gender activities that are integrated into project investment.

5.2 Mainstreaming GASIP into Project Investment Plan

The following plan, will guide the project to mainstream gender, youth and social inclusion in all project's components and activities.

With regard to gender the plan intends to strengthen women's adaptive capacity so as to contribute to broader household and community resilience. In line with the three SOs of IFAD's Gender Policy, this will be done by:

1) **Alleviating women's workload.** This will be done by a) **raising awareness** on the importance of sharing household chore and farming workload to give women more time to learn new skills (climate-smart farming technologies, irrigation system, financial management, business) that are essential for them to enhance they adaptation capacity.
2) **Promoting women's economic empowerment.** This will be done by enhancing women's access to skills and business development training that are centered around project target value chains for commodities such as rice, poultry, vegetable and fish that are appropriate to them. Women will be encouraged to participate in project trainings that help them address the potential impact of climate changes which include a) adoption of water-saving alternate wet and dry, b) adopt new seed varieties (which are more pest resistant and drought tolerant), c) adopt sustainable intensification packages that reduce seed rate, fertilizers and pesticide to save agricultural input costs and increase crop yield. Women are invited to take part in relevant trainings jointly with their husbands to support adoption of climate-smart technologies that also respond to their needs and preferences. In addition, project beneficiaries will be encouraged to diversity their existing sources of income, to improve the efficacy of existing income sources such as home-based gardening, animal husbandry (poultry and fish); promoting women's access to grant schemes as well as employment opportunities through value-chain development and PPP
3) **Strengthening women's role in decision-making both at the household and community level.** It is expected that the role of women in decision making at household level will be enhanced as the outcome from Item 1 and 2 above. At the household level, gender specific tools will be used to encourage joint decision-making in technology adoption and investment decisions. Women will participate in consultation activities and planning of irrigation infrastructures, value-chain development and early warning system . The project will also promote women's participation and leadership in FWUCs, which will be trained on how to enhance equitable access to water for women and other vulnerable groups.

Key activities to support the implementation of the project's GASIP include training of extension staff and implementing partners on gender and social inclusion, including the use of tools and approaches to promote normative and behavioural changes in gender dynamics at the HH and community level; establishing partnership with the Women Development Centers and other specialized service-providers for dellvering training to women; Developing gender-sensitive tools for value-chain analysis and other diagnostic activities.

6. IMPLEMENTATION OF GASIP

6.1 Implementation Arrangements

6.1.1 PMU at Central Level

- Oversee all operational aspects of provincial PMU for the project, including the GAP implementation.
- Provide overall guidance to provincial PMU with regards to GAP implementation, particularly implementing the GAP as an integral part of provincial annual socioeconomic development program and gender mainstreaming in agro- and agricultural sector.
- Monitor regularly PMU's project activities and ensure that activities set forth in the GAP are implemented timely and effectively.
- Undertake specific studies focusing on gender and social inclusion for documenting and disseminating success stories/good practices in a range of relevant topics focusing on the nexus between gender and

climate change (e.g. women adopting climate-smart labour saving technologies; women using irrigation system; how joint decision-making contribute to strengthening farmers' resiliance etc.)

- Organise consultation activities for climate-related policy-dialogues with government institutions to ensure that the voices of rural women are integrated in national strategic frameworks.
- Support and monitor training activities on gender and social inclusion with local implementing partners and extension staff.

6.1.2 PMU at Provincial Level

- Responsible for overall implementation of the project, including the GAP.
- Ensure funding is allocated sufficiently and timely for implementation of the planned activities
- Work as lead agency for GAP implementation and coordinate with other governmental agencies, such as Provincial Hall and functional agencies – at provincial, district and commune levels, to carry out planned activities.
- Establish partnership with Women Development Centers (WDCs) and other women's organizations and service-provider to deliver training to women.
- Train local implementing partners on gender and social inclusion tools and approaches – in collaboration with PMU Gender and Social Inclusion officer
- Maintain regular monitoring of GAP implementation, at quarterly, bi–annually, and annually
- Conduct periodic review and evaluation of GAP implementation to ensure the overall progress and quality of GAP implementation is on track with the planned activities.
- Where necessary, update the GAP based on development needs and feedback from IP communities in the project area. These development needs should be in line with the logical framework of the project.
- Ensure that women and other vulnerable groups have dedicated access points to feedback mechanisms and GRM

6.1.3 District Hall

- Support PMU in selecting communes that are potential for planning and carrying out activities proposed in the GAP.
- Ensure the activities set forth in GAP are carried in a manner that is integrated with the overall socioeconomic development plan of the district, and in connection with other annual district development programs.
- Provide overall guidance to commune hall within the district in GAP implementation.
- Support information campaigns in the project's area with a focus on gender and social inclusion

6.1.4 Commune Governments

- Collaborate and support PMU in implementing GAP.
- Support PMU in carrying out consultation/ training/ workshops/ with effective participation of female representatives of target households and of female headed households.
- Provide regular support and encourage the participation of women and female headed households in all project related activities, particularly consultation meetings, trainings, workshops.

6.1.5 Project Target groups

- At household level, arrangement should be made to enable women to participate in project activities, including consultation and planning meetings, trainings and workshops. This will empower women to participate and make decisions in planning and economic activities to support household's income and well-being.

- Gender transformative approaches, such as GALS should be used to promote joint decision-making at the household level and ensure that climate-smart technologies and farm infrastructure benefit all household members and alleviate women's workload.
- Women and women's groups and enterprises are encouraged to participate in workshops, trainings and grant schemes that are designed to promote their participation and economic empowerment.
- Women are encouraged to participate and lead FWUAs
- Provide gender-sensitive comments/suggestions/feedback, including raising questions for issues they are concerned about.

6.2 Monitoring and Evaluation Arrangement

The implementation of the GASIP will be monitored annually vis-à-vis achievement using suggestive performance indicators (See Annex 1 – Section A. Summary of GASIP Performance Indicators). Evaluation of the GASIP will be conducted at mid-line and end-line. It is noted that the mid-line review will serve the opportunities for the project to update the original plan based of the progress that has been made over the first three years and will be adjusted based on the overall project performance progress

6.3 Costs and Budget

Budget for gender mainstreaming will be from project financing.

No.	Items	Time	Cost	Total (USD)	Notes
1	**Recruit a gender consultant**	Year 1	2,500 x 12	30,000	
	• Update GASIP to reflect detailed project implementation plan • Updated Indicators, Baseline & Target based on IFAD's Gender Monitoring template • Developing data collection monitoring forms • Develop guidelines for mainstreaming gender aspect into awareness raising campaign and relevant training materials • Build capacity for PMU's Gender Officer • Build capacity of extension staff and other implementing partners on the use of participatory gender tools and approaches in diagnostic and extension activities (GALS?)				
3	**Recruit and maintain a gender officer**	6 years	1,200 x 12 x 6	86,400	
2	**Conduct gender awareness raising campaign in Year 1 and repeated at Midline**	Year 1 & 3	2,000 x 6 x 2 schemes	24,000	
4	**Gender mainstreaming** • Training materials • Training delivery			0	Costs integrated into respective

					consulting services
5	**Monitoring & Evaluation by PMU**			0	Costs integrated into project financing (Component 3)
			TOTAL	**140,400**	

Annex 1 – Template of Updating Annual GASIP

- Prepared By: PMU of _____ province
- Submitted to:
- Fiscal Year: _____

HOW TO USE THE TEMPLATE

- This template has two parts, including Part A (GASIP Indicators and Part B (Annual GASIP)
- Provincial PMUs needs to prepare and submit this Plan to MoWRAM before the start of each Fiscal Year to request budget allocation, especially for activities related to Project's GASIP
- Provincial PMUs will discuss with provincial project's stakeholder and fill up targets in Part A before the beginning of each fiscal year such that targets tentatively set for Mid-line and End-line are achieved.

PLEASE NOTE

FOR PART A

- The percentage of IP household receiving project benefit are calculated based on the List of Project Beneficiary Households (not the count of any total IP households that receive project benefit) to avoid duplication of counting.

FOR PART B

- Activities proposed in the Annual GASIP should be aligned with respective Component and Output (based on project's Logical Framework) to allow annual monitoring, and evaluative review by mid-term and project-end.
- Each proposed activity should come with proposed budget, indicating the period (in months) from activity planning to completion. Each activity should indicate the lead stakeholder who is responsible for the expected result of the activity, and relevant stakeholders who need to participate to realize the activity.

A. SUMMARY OF GASIP PERFORMANCE INDICATORS

Project Component				**Indicators**	**TARGETS**					
	Budget Allocation (in USD)				Year 1	Year 2	Year 3 (Mid-line)	Year 4	Year 5	Year 6 (Endline)
			Ethnicity	**% of IP households** (in total beneficiary households) receiving benefited from project)			**20%**			**40%**
				% of Khmer households (in total beneficiary households) receiving benefited from project)			**30%**			**60%**
			Gender	**% of FEMALE people** who benefit from project			**25%**			**50%**
				Of which % of IP female						**40%**
				Of which % of Khmer female						**60%**
				Of which % of female from vulnerable households (e.g. female headed household…)						
				Of which % below the poverty line						
			Youth	**% of YOUTH people receiving <u>services promoted or supported</u> by project**			**15%**			**30%**
				Of which % of IP youth						
				Of which % of Khmer youth						
				Of which % of female person						
				Of which % of male person						
				Of which % below the poverty line						
				% of YOUTH people <u>with new jobs/employment opportunities</u>			**15%**			**30%**
				Of which % of IP youth						
				Of which % of Khmer youth						
				Of which % of female person						
				Of which % of male person						

B. ANNUAL GASIP

PROJECT ACTIVITIES	BUDGET (in USD)	MONTHS												STAKEHOLDERS IN CHARGE			REMARKS
		1	2	3	4	5	6	7	8	9	10	11	12	PMU STAFF INVOLVED	LEAD AGENCY IN CHARGE	RELEVANT STAKEHOLDERS	
Component 1: IMPROVING FARM-LEVEL CLIMATE ADAPTATION, RESILIENCE, AND WATER USE EFFICIENCY																	
Output 1.1 – Deployment of farm-level climate adaptation and water use efficiency measures																	
ACTIVITY																	
ACTIVITY																	
ACTIVITY																	
ACTIVITY																	
ACTIVITY																	
Output 1.2 – Climate adapted, value added, and market led agricultural investment																	
ACTIVITY																	
ACTIVITY																	
ACTIVITY																	
ACTIVITY																	
ACTIVITY																	
Output 1.3 – Improve enabling conditions, capacities and disaster risk management strategies																	
ACTIVITY																	
ACTIVITY																	
ACTIVITY																	
ACTIVITY																	
ACTIVITY																	
Sub-component 1.4 Rural roads.																	
ACTIVITY																	
ACTIVITY																	
ACTIVITY																	

Component 2: UPGRADING AND CLIMATE-PROOFING WATER INFRASTRUCTURE FOR INCREASED RESILIENCE																	
Output 2.1 – Modernization of irrigation scheme and ponds																	
ACTIVITY																	
ACTIVITY																	
ACTIVITY																	
ACTIVITY																	
ACTIVITY																	
Output 2.2. – Flood-proofing and Drainage improvements																	
ACTIVITY																	
ACTIVITY																	
ACTIVITY																	
ACTIVITY																	
ACTIVITY																	
Output 2.3 – Establishments and training of Farmers Water User Communities (FWUC)																	
ACTIVITY																	
ACTIVITY																	
ACTIVITY																	
ACTIVITY																	
ACTIVITY																	
Output 2.4 – SCADA																	
ACTIVITY																	
ACTIVITY																	
ACTIVITY																	
Component 3: INSTITUTIONAL STRENGTHENING																	
Output 3.1 – Strentthening MOWRAM capacity																	
ACTIVITY																	
ACTIVITY																	
ACTIVITY																	
Output 3.2 – Strengthening of NDA and NCDD																	
ACTIVITY																	
ACTIVITY																	
ACTIVITY																	

Annex 2 – Gender Action and Social Inclusion Plan (GASIP)

Project activities	Responsive Activities	Indicators	Base-line	Mid-line	End-line	Responsible institutions	Timeline	Notes
	Activity 1	**Percentage of female beneficiaries** • Of which Percentage of beneficiaries who are youth • Percentage of beneficiaries living below the poverty line. • Percentage of beneficiaries who are IP	**0** 0 0 0	**35%** 20% 10% 5%	**40%** 25% 10% 5%	PMU	Year 1	
	Activity 2	Number of gender and social inclusion training provided per year to relevant stakeholders: at least once per year per province	1	15		PMUs' social inclusion (gender, youth, IP) •		
COMPONENT 1: IMPROVING FARM-LEVEL CLIMATE ADAPTATION, RESILIENCE AND WATER EFFICIENCY **OUTPUT:** • Climate resilient crop water management practices at farm level enabled • Climate resilient value added, and market led agriculture investment secured • Enabling conditions facilitated and capacities for climate resilient on farm water management and agriculture practices improved								
Sub-Component 1.1 Deployment of farm-level climate adaptation and water use efficiency measures								
Activity 1.1.1 Preparing community-based action plans for adapting to climate resilient crop-water management practices and their monitoring **Activity 1.1.2** Implementing climate-smart technologies in crop water management in line with the prepared action plans (LLL, DSR, AWD, SRI, IPM, straw management, and other none-rice crops	1.1.1.Women farmers from both couple and WHHs are actively involved in community-based planning for adoption of climate resilience crop-water management practices. 1.1.2. training women in climate-smart technologies.	1.1.1. • Average % female PARTICIPATING in each of the planning meetings. • Number of action plans integrating specific women's preferences. 1.1.2 • Average % female ATTENDING each awareness raising activities on new technologies	10%	20%	40%			

Project activities	Responsive Activities	Indicators	Base-line	Mid-line	End-line	Responsible institutions	Timeline	Notes
		• Average % female ATTENDING each training to adopt introduced technologies • Average % female participating in decision over adoption of technologies that are labour-saving and suitable to their production • Average % female ADOPTING new technologies						
Activity 1.1.3 Supporting diversification from rice to non-rice crops **Activity 1.1.4** Critical farm infrastructures.	1.1.3. training women in gardening and livestock production.	1.1.3. • Average % HHs ADOPTING one new non-rice crop (diversification)						
Sub-Component 1.2 Climate adapted, value added, and market led agricultural investment								
Activity 1.2.1 Commodity selection with GoKC priorities as set in the Agricultural Development Plan	1.2.1. Participatory gender and social inclusion analysis of value-chains is carried out to identify opportunities for women and youth in value-chain development and 4PF.	1.2.1. • Number of VC studies including attention to gender and social inclusion dynamics. • N. of VCAPs reflecting detailed opportunities for women, youth and vulnerable groups.						
Activity 1.2.2 Public – Private – Producer – Partnership Facility (4PF) that crowd in, de-risk, and co-finance investment with MSMEs and farmers in support of climate-sensitive commodity development and rural employment generation	1.2.2. • 4PF arrangements are selected and co-financed taking into account employment generation impact for women, men and vulnerable groups • Training women and youth in business skills development, processing etc.	1.2.2. • Percentage of women/youth who establishes agri-business/rural enterprises • Percentage of women/youth accessing grant scheme • Percentage of female-headed households participating in value chains supported under the project • Percentage of women participating jointly with their husband in value chain supported under the project						

Project activities	Responsive Activities	Indicators	Base-line	Mid-line	End-line	Responsible institutions	Timeline	Notes
Activity 1.2.3 Leveraging of capital for investment to stimulate the financial sector to invest in climate change adaptation and value chain development activities in the project area		• Percentage of women/youth gaining employment in VC development and 4PF						
Sub-Component 1.3 Improve enabling conditions, capacities and disaster risk management strategies								
Activity 1.3.1 support the establishment of agricultural centres of excellence in partnership with the private sector for the dissemination of improved sustainable agricultural techniques	1.3.1.							
Activity 1.3.2 Building institutional capacity of MOAF for planning and extension of climate smart technologies in agriculture	1.3.2. MOAF Extension workers are trained on the use of gender tools and approaches (GALS?), also including attention to issues of joint decision-making and equitable workload distribution with a focus on climate smart agriculture.	1.3.2. • Number of MOAF staff trained on the use of gender tools and approaches • Extension manuals integrate gender tools and approaches.						
Activity 1.3.3 Preparing water, climate information and agricultural early warning systems to assist farmers in agriculture planning	Activity 1.3.3. gender sensitive analysis and consultations are carried out to prepare a water, climate and agricultural early warning system that is also accessible to women and marginalized groups.	1.3.3. • Average % women/marginalized groups consulted						
Component 2: Upgrading and Climate-Proofing Water Infrastructure for Increased Resilience **OUTPUT:** • Flood proofing and functional drainage system operational • Irrigation System modernized with climate resilient technologies • Capacity of FWUC on water management increased								

Project activities	Responsive Activities	Indicators	Base-line	Mid-line	End-line	Responsible institutions	Timeline	Notes
Sub-Component 2.1 Modernization of irrigation scheme and ponds								
Increasing water availability and storage capacity for irrigation while decreasing the destructiveness of floods on downstream locations; and Implementing crop diversification and new activities to increase farming incomes such as fish farming or duck breeding						MOWRAW		
Activity 2.1.1 technical analysis, field survey and preparing plan for system upgrading	2.1.1. women's water needs are considered in technical analysis, field survey and preparation of plans for system upgrading	2.1.1. • Average % women consulted • N. of plans for system upgrading incorporating specific features, which reflects women water needs.						
Activity 2.1.2 Implementation of infrastructure upgrading	2.1.2. Infrastructure upgrading is informed by women's water needs; construction work generates employment for youth and vulnerable groups.	2.1.2. • Average % youth/vulnerable people gaining mployment in construction work.						
Activity 2.1.3 Preparing canal O&M plans including application of ICT and SCADA for operation.	2.1.3. Preparation of canal O&M plans are carried out in consultation with women and youth.	2.1.3. Average% women/youth consulted for canal O&M planning.						
Sub-Component 2.2 Flood-proofing and Drainage improvements								
Improving disaster prevention and protection of farmlands and assets by establishment of early warning systems and helping to improve capacities of the existing drainage								

Project activities	Responsive Activities	Indicators	Base-line	Mid-line	End-line	Responsible institutions	Timeline	Notes
networks and flood embankments. **Activity 2.2.1** Establish flood monitoring, information, and early warning systems **Activity 2.2.2** Strengthen and construction of flood control and drainage infrastructures. It will be implemented in an integrated manner with component 2.1 activities	Training on early warning system is delivered to women and margianlised groups	2.2.1. Average % women/marginalized groups/ethnic minorities participating in training on early warning system						
Sub-Component 2.3 Establishments and training of Farmers Water User Communities								
Activity 2.3.1 Formation of institutional strengthening of the FWUC	2.3.1. FWCU are trained and develop gender and social inclusion plans, to promote the user rights of women and vulnerable groups and support women's participation and leadership in water governance	2.3.1. • Average % FWUC developing gender and social inclusion plans • Average % FWUC with women in leadership position.						
Activity 2.3.2 Build technical capacities of FWCU for canal O&M **Activity 2.3.2** Prepare long term financing plan for WUS and support its implementation.	2.3.2. Training of women/youth/vulnerable groups trained in O&M	2.3.2. • Women/youth trained in O&M • Youth/women/vulnerable groups gaining employment in O&M						
Component 3: Institutional strengthening **OUTPUT** • Improved capacity of MoWRAM, NDA and stakeholder, and enhanced project sustainability • Enhanced project sustainability								
Sub-Component 3.1 Capacity Support for MOWRAM								

Project activities	Responsive Activities	Indicators	Base-line	Mid-line	End-line	Responsible institutions	Timeline	Notes
Activity 3.1.1 Preparation of climate resilient design manuals for irrigation and train staff **Activity 3.1.2** Building capacities on application of ICT and RS technologies, data management **Activity 3.1.3** capacity building in water Accounting and Auditing	3.1.1. Training of MOWRAM staff on gender and social inclusion	3.1.1. • N. of climate resilient design manuals for irrigation including attention to gender and social inclusion • N. of training on gender and social inclusion delivered to MOWRAM staff				MOWRAM		
Sub-Component 3.2 Strengthening of NDA and NCDD								
Activity 3.2.1 Strengthening the national climate policies and Strategic plans: Initiate the development and promote the implementation of legal instruments, policy, strategic plans, and action plans for climate change rapid response, develop sustainable GHG mitigation strategies	3.2.1. Promote the participation of women's organizations in policy dialogue activities and GHG mitigation strategies.	3.2.1. • N. of policy consultations with women's organizations • N. of Knowledge products on gender developed for evidence-based policy dialogue						
Activity 3.2.2 Enabling national M&E systems for monitoring and evaluating national climate actions	3.2.2. national M&E system also includes gender disaggregated data.							
Activity 3.3.3 Build capacity of the MOE (NDA), NCDD and other relevant stakeholders to design and manage the climate financing projects.	3.3.3. capacity-building of the MOE (NDA) NCDD also focuses on the nexus of gender and climate change.	3.3.3. N. of training on gender and social inclusion						