

FOCUS

Vietnam

Farmer
Options for
Crops
Under
Saline conditions

FINAL REPORT

SLAM/2018/144 – Farmer Options for Crops Under Saline Conditions (FOCUS) in the Mekong River Delta, Vietnam

Component: Gender

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Executive Summary

This report presents the findings of the Gender Equality and Social Inclusion (GESI) assessment conducted within the FOCUS project (Farmer Options for Crops Under Saline Conditions in the Mekong River Delta), funded by ACIAR. The study examines gender roles, participation, opportunities, and challenges among both project team members and farming households in salinity-affected areas, aiming to inform strategies for more inclusive and effective climate change adaptation in FOCUS 2.0.

Key Findings

Gendered Division of Roles: Men predominantly occupy leadership positions, conduct fieldwork, and engage in strategic decision-making, while women are concentrated in laboratory work, data analysis, and logistical support. This pattern is mirrored at the household level, where men perform heavy farm tasks and women focus on early-stage crop care and post-harvest activities.

Access to Opportunities: Professional development, technical training, and conference participation are unevenly distributed. The Soil team attends more events compared to Socioeconomic and Gender teams. Fieldwork and strategic roles remain male-dominated, with limited opportunities for women to engage.

Ethnic and Social Perceptions: In Khmer communities, persistent stereotypes—rather than actual capacity gaps—limit participation in training and technical decision-making.

Strengths of Female Participation: Where women are actively engaged, such as in community liaison roles, they build trust, improve data quality, and enhance the relevance of technical recommendations.

Barriers and Challenges: Safety concerns in remote field sites, gender stereotypes in partner interactions, and limited female representation in high-level meetings restrict women's participation. Safety protocols and institutional support remain inconsistent across teams.

Opportunities Identified

Empowering women through leadership, negotiation, and communication training.

Increasing representation in field coordination and strategic decision-making.

Leveraging women's strengths in community engagement to enhance project outreach and impact.

Recommendations for FOCUS 2.0

Integrate GESI as a core component in all project phases, with dedicated objectives, indicators, and monitoring.

Ensure gender balance (30–40% female participation) in leadership, fieldwork, and strategic meetings.

Implement standardized safety protocols and provide additional resources to ensure equitable working conditions.

Connect GESI data with technical datasets (GIS, salinity risk) for more targeted adaptation strategies.

Use gender-sensitive facilitation to engage women and vulnerable groups effectively.

Establish continuous GESI monitoring, with expert involvement to ensure depth and consistency in gender integration.

Conclusion

The FOCUS project has made progress in embedding GESI considerations, but gaps remain in representation, access to opportunities, and structural support. Addressing these issues in FOCUS 2.0 will not only promote gender equity but also strengthen the project's scientific outputs, community engagement, and resilience-building objectives in the Mekong Delta.

1 Introduction

The Mekong Delta (MD) holds a particularly vital role in ensuring Vietnam's national food security and driving agricultural exports. The region accounts for over 50% of the country's rice production and up to 90% of rice exports, contributing approximately 20% to the national GDP (Loc et al., 2021). However, the MD is undergoing profound transformations due to the impacts of climate change—most notably, the increasing severity, frequency, and spatial extent of saline intrusion. This phenomenon not only alters natural conditions and traditional farming systems but also significantly affects the livelihoods and well-being of local populations, particularly women.

Women have long played an indispensable role in agricultural production and family care. Nonetheless, they often face limited conditions and opportunities to access essential resources for adapting to climate change. Numerous studies have highlighted that adaptive capacity depends not only on material assets such as land, income, or technology, but also on social, institutional, and cultural dimensions—including access to information, participation in decision-making processes, and the ability to proactively pursue livelihood changes (Cohen et al., 2016; Cinner et al., 2018). In the Mekong Delta, where gender inequality remains prevalent in socio-economic life, rural women frequently experience constrained decision-making power in production activities, lower rates of participation in technical training, and reduced access to livelihood transformation programs (Phan et al., 2019). Moreover, constraints related to time, transportation, and traditional gender roles within the household further hinder their engagement in capacity-building activities such as training sessions or group-based interventions (Hulke & Diez, 2020; Tran et al., 2020). These barriers not only diminish individual women's adaptive capacity but also undermine the overall resilience of their communities in the face of increasingly complex climate-related shocks.

In light of these challenges, this study, conducted within the framework of a broader development project, focuses on analyzing the adaptive capacity of female farmers in areas most affected by saline intrusion in Soc Trang and Hau Giang provinces. Using focus group discussions and semi-structured in-depth interviews, the research examines women's roles in agricultural production and daily life, the specific barriers they encounter in climate change adaptation, and their expressed needs for future support. The objective is to better understand women's adaptive practices and constraints, thereby contributing to the formulation of effective intervention policies and programs that align with local contexts, promote gender-inclusive participation, and enhance the role of women in sustainable rural development.

1.1 Gender in VMD cropping systems

The Vietnamese Mekong Delta (VMD) is a highly productive agricultural region, supplying the majority of Vietnam's rice and significant volumes of aquaculture and fruit for both domestic consumption and export. Within these cropping systems, women play diverse and essential roles that extend beyond primary farm labour. They contribute to planting, weeding, harvesting, post-harvest processing, and marketing, as well as managing household resources that directly influence agricultural productivity.

However, gender norms and socio-cultural expectations continue to shape the division of labour in farming communities. Men often dominate activities that require heavy machinery use, technical decision-making, and engagement with agricultural extension services, while women are more involved in labour-intensive and time-flexible tasks compatible with domestic responsibilities. This gendered allocation of roles limits women's access to agricultural training, technological innovations, and decision-making opportunities, thereby constraining their adaptive capacity to environmental changes such as salinity intrusion. Addressing these gender disparities is critical to ensuring inclusive and effective agricultural development strategies in the VMD.

1.2 The FOCUS project

The Farmer Options for Crops Under Saline Conditions (FOCUS) project, funded by the Australian Centre for International Agricultural Research (ACIAR) under project code SLAM/2018/144, aims to enhance the resilience of farming systems in the Mekong Delta to the growing challenges of climate change—particularly saline intrusion. Implemented in collaboration between Vietnamese and Australian research institutions, the project works with local communities, agricultural extension agencies, and women's organisations to identify viable crop and livelihood options under changing environmental conditions.

A key component of the FOCUS project is the integration of a gender perspective into adaptation research and interventions. This involves assessing the specific roles, needs, and constraints of women in salinity-affected areas, and ensuring that proposed solutions—such as alternative crop varieties, improved farming techniques, and diversified livelihood strategies—are accessible and beneficial to both men and women. By incorporating women's voices and experiences, the project seeks to promote equitable participation in adaptation planning and to strengthen the overall

resilience of rural households in the Mekong Delta.

2 Chapter 1: Adaptive capacity of female farmers to address salinity challenges in the Mekong Delta

2.1 Introduction

The Mekong Delta (MD) holds a particularly vital role in ensuring Vietnam's national food security and driving agricultural exports. The region accounts for over 50% of the country's rice production and up to 90% of rice exports, contributing approximately 20% to the national GDP (Loc et al., 2021). However, the MD is undergoing profound transformations due to the impacts of climate change—most notably, the increasing severity, frequency, and spatial extent of saline intrusion. This phenomenon not only alters natural conditions and traditional farming systems but also significantly affects the livelihoods and well-being of local populations, particularly women.

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needs for future support. The objective is to better understand women's adaptive practices and constraints, thereby contributing to the formulation of effective intervention policies and programs that align with local contexts, promote gender-inclusive participation, and enhance the role of women in sustainable rural development.

2.2 Research questions

In order to better understand the adaptive capacity of female farmers in salinity-affected areas of the Mekong Delta, this chapter is guided by the following research questions:

- (1) What are the current roles and contributions of rural women in agricultural production, non-agricultural livelihoods, household management, and community activities in the study areas?
- (2) What barriers and constraints do female farmers—particularly in Hau Giang and Soc Trang provinces—face when adapting to climate change and saline intrusion?
- (3) To what extent do women participate in decision-making processes related to household management, agricultural production, and community governance, and what factors influence their level of participation?
- (4) What adaptive strategies are currently employed by women to cope with and respond to the impacts of salinity and climate change, and how effective are these strategies?
- (5) What types of support and interventions do women identify as necessary to strengthen their adaptive capacity and enable them to become active agents in sustainable rural development?

2.3 Study area

Hau Giang Province is among the regions in the Mekong Delta most severely affected by climate change, with saline intrusion intensifying in both frequency and severity. According to forecasts, during the 2025 dry season, salinity intrusion is expected to become increasingly complex, particularly between March 26 and 31, coinciding with peak tidal periods in late February and early March according to the lunar calendar. Salinity levels in major waterways such as the Hau River, Cai Lon River, and Chac Bang Canal were recorded at unusually high concentrations, ranging from 4.2‰ to 6.2‰. These levels directly threaten daily life and agricultural production in several localities, including Long My, Vi Thuy, and Vi Thanh City (Hydrometeorological Station of Hau Giang Province, 2025). In addition, areas such as Long My Town have also been identified as being at high risk of

serious water shortages.

In response, Hau Giang Province has actively implemented adaptive measures, including the operation of salinity prevention sluice gates, encouraging adjustments in crop and livestock structures to better align with salinization conditions, and promoting the use of salt-tolerant and short-season crop varieties. Farmers are also advised to monitor salinity levels before irrigation, especially for fruit trees that are economically valuable but have low salinity tolerance (Hydrometeorological Station of Hau Giang Province, 2025).

Similarly, Soc Trang Province—located at the downstream end of the Hau River and adjacent to the sea—has experienced increasingly complex and unpredictable saline intrusion. During the 2024–2025 dry season, salinity levels in coastal districts such as Tran De, Long Phu, and Dai Ngai exceeded 20‰, severely impacting rice cultivation and domestic water supplies (Soc Trang, Online Newspaper, 2025).

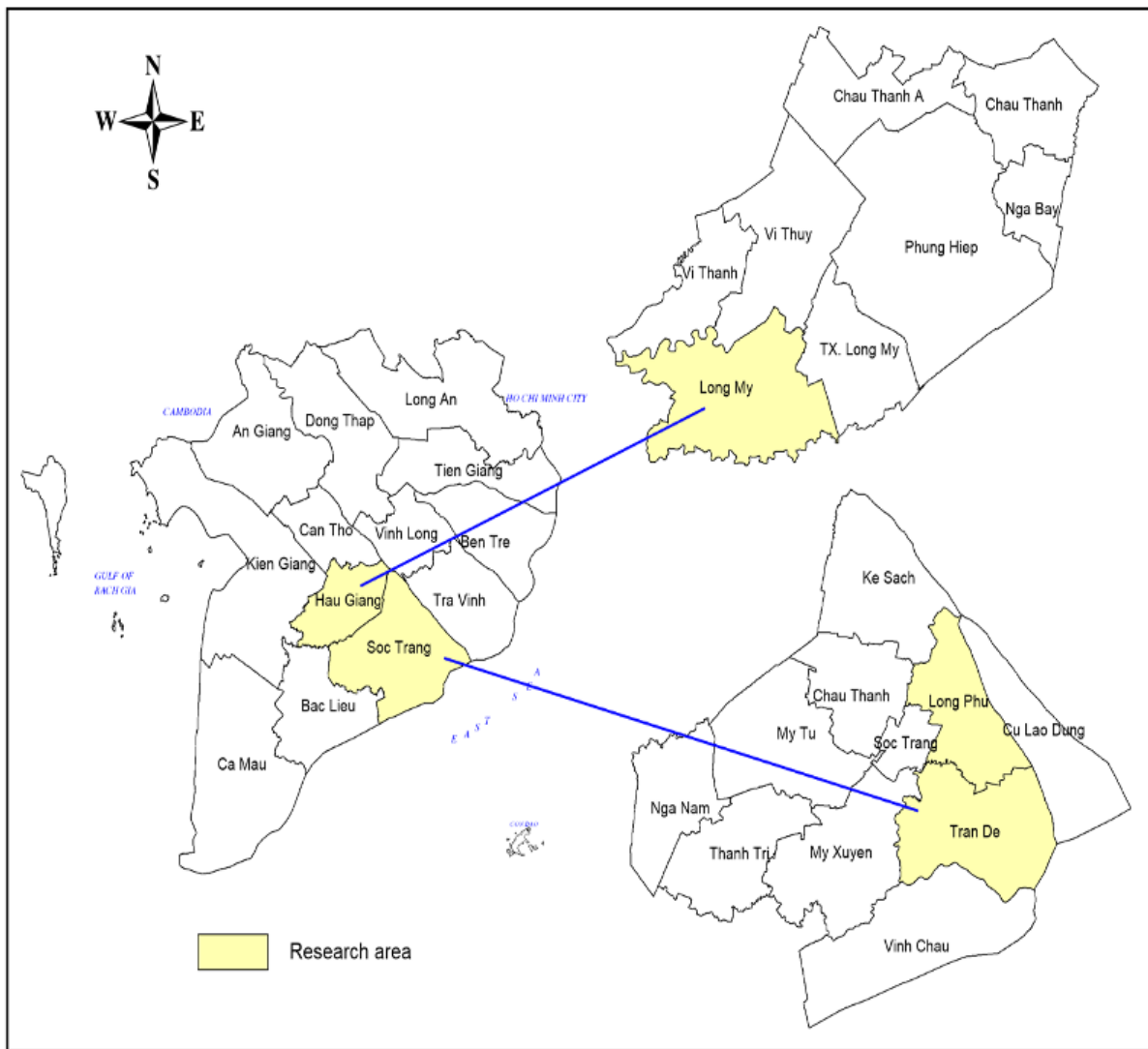


Figure 1. Research study in Soc Trang and Hau Giang province, including Tran De and Long Phu districts; Long My district

In Long Phu District alone, approximately 1,000 hectares of late winter-spring rice have been affected by water shortages and saltwater intrusion (Soc Trang Provincial Party Committee, 2025). With over 70% of the population relying on agriculture, Soc Trang faces the significant threat of livelihood disruption for hundreds of thousands of farming households. In response, local authorities have deployed a range of mitigation strategies, including real-time salinity monitoring, freshwater storage, and the promotion of water-saving practices to minimize damages (Soc Trang Provincial Party Committee, 2025).

2.4 Data collection and analysis

This study employed qualitative research methods, primarily through the organization of focus group discussions (FGDs), to gather the perspectives and lived experiences of women farmers -

including Khmer women - regarding their adaptive capacity in response to saline intrusion. A total of six FGDs were conducted, involving 68 female participants. Among these, two groups were held in Long My District, Hau Giang Province, and four groups were conducted in Soc Trang Province, specifically in Long Phu and Tran De Districts.

At each research site, participants were selected to ensure representation of women directly engaged in agricultural production, as well as those involved in non-agricultural activities contributing to household livelihoods. This diversity aimed to capture a comprehensive understanding of women’s adaptive strategies across different livelihood contexts.

Items	Hau Giang	Soc Trang	Note
FGDs	3	4	<i>One FGDs with the staff in the Women Union and People committee in Luong Tam Commune</i>
KIIs	4	6	

Source: Survey results 2022

The discussions were guided by a semi-structured framework and focused on the following key themes:

- Primary and supplementary livelihood activities;
- Household and agricultural decision-making processes;
- Access to information, training, and technical resources;
- Challenges caused by saline intrusion and current coping strategies;
- Needs and recommendations for enhancing future adaptive capacity.

In addition to FGDs, the research team conducted ten semi-structured in-depth interviews with key informants, including representatives from the Women's Union, agricultural extension officers, and exemplary female farmers. These interviews were designed to obtain deeper insights into the local socio-economic context, institutional support mechanisms, and distinctive livelihood patterns in the study areas. The combination of group and individual perspectives enriched the dataset and contributed to a more nuanced analysis of gendered adaptation to climate change in rural settings.

All discussions and interviews were conducted in Vietnamese (with translation support in Khmer where needed), audio-recorded with participants' consent, and subsequently transcribed verbatim. The transcripts were analyzed using thematic content analysis. This involved coding responses according to pre-defined themes, followed by identifying emerging sub-themes to capture recurring patterns and context-specific nuances. The qualitative data analysis was supported by a manual coding process and cross-checked by multiple team members to ensure consistency and validity.

This mixed approach of FGDs and in-depth interviews provided a comprehensive understanding of

the gendered dimensions of climate change adaptation in the Mekong Delta and informed the formulation of context-sensitive recommendations for policy and practice.

2.5 Findings

2.5.1 *The role of women in agricultural production and family life*

In rice cultivation, certain stages are predominantly carried out by men. These include land preparation (80% male vs. 20% female), sowing (100% male), and fertilizing and pesticide application (90% male vs. 10% female). These tasks typically require significant physical labor, proficiency in operating machinery, or direct exposure to agricultural chemicals. Consequently, women's participation in these stages is often limited, largely due to prevailing social perceptions that categorize such work as physically demanding or potentially hazardous. Moreover, restricted access to technical training further hinders women's engagement in highly mechanized agricultural activities—an issue that will be discussed in detail in Section 4.4.

Conversely, women play a dominant role in the weeding stage, accounting for up to 80% of the labor force, compared to only 20% male participation. This task demands meticulousness, patience, and time commitment but does not require considerable physical strength. As a result, it has traditionally been deemed “suitable” for women within the agricultural division of labor. This pattern reflects the persistence of gender stereotypes in rural labor allocation, where tasks are often assigned based on gender norms rather than individual capacity or preference.

In the harvesting stage, participation is more evenly distributed between men and women, with each accounting for approximately 50%. Harvesting is a time-sensitive and highly seasonal activity, often requiring the mobilization of all available family labor, which leads to greater flexibility in gender roles during this period. Additionally, in many rice-farming communities today, the harvesting process is increasingly mechanized through the use of combine harvesters operated by external service providers. As a result, the direct involvement of household members—regardless of gender—has diminished compared to earlier production stages.

Post-harvest product sales, however, are entirely managed by women (100%). This highlights women's essential role not only as contributors to production but also as key actors in managing output distribution and household finances. Women's responsibility for sales reflects their confidence in handling financial matters, their communication skills, and their agency in making every day economic decisions.

Beyond socio-cultural expectations, another major factor limiting women's participation in various production stages is the dual burden of agricultural labor and domestic responsibilities. During group discussions, many women shared that they must prioritize tasks with more flexible schedules to accommodate household obligations such as childcare, cooking, and cleaning.

In summary, although women play a central role in rice production, the gendered division of labor remains deeply influenced by traditional norms, limited access to technology, and the pressures of balancing productive and reproductive roles.

2.5.2 The role of women in non-agricultural production

In addition to their participation in agricultural production, women in the surveyed areas are also actively involved in various non-agricultural activities to diversify income sources and stabilize household economies. Among these, water hyacinth weaving stands out as a traditional and distinctive livelihood, particularly prevalent in localities such as Long My (Hau Giang) and Long Phu (Soc Trang).

No.	Tasks	Men	Women
1	Handicraft (knitting water hyacinth)	0	100
2	Hired work (normal)	50	50
3	Builder (hire work)	90	10

Sources: Result of FGDs, 2023

Focus group discussions revealed that weaving activities are exclusively carried out by women, with minimal to no participation from men. This gendered division of labor not only reflects local socio-cultural realities but also underscores the success of support programs tailored specifically for women. In many areas, vocational training initiatives—especially those focused on water hyacinth weaving—are regularly implemented with a strong emphasis on female participation, including Khmer women. These programs aim to provide alternative income-generating opportunities for women who do not own farmland or are less involved in traditional agricultural activities. As such, they serve as tangible evidence of women's expanding roles beyond domestic work, highlighting their contributions to independent economic production within the community.

In terms of general wage labor, such as daily hired work, participation is relatively balanced between genders, with both men and women contributing equally (50%-50%). This indicates that, in certain sectors, non-agricultural employment opportunities are more equitably shared. However, in labour-intensive or highly technical fields such as construction, men dominate the workforce (90% male vs. 10% female). This discrepancy continues to reflect persistent gender-based limitations—stemming from physical expectations, skill access disparities, and entrenched social norms regarding “appropriate” work for men and women.

4.1.3. Women’s role in family life

Findings from group discussions clearly indicate that women continue to bear the primary responsibility for household tasks, including cooking, shopping, laundry, childcare, and managing daily expenditures. With participation rates ranging from 80% to 90%, these responsibilities have become almost the “default” for women in many rural households. Although often unrecognized in economic terms and absent from income statistics, such work demands substantial time and energy. As a result, the domestic burden within rural family structures remains disproportionately placed on women, reinforcing traditional norms.

Table 1. Division of labor between men and women in family life (n = 6 groups)

No	Tasks	Men	Women
1	Cooking/ Going to markets	20	80
2	Cleaning the house, washing, hanging, folding clothes	10	90
3	Taking care of family	15	85
4	School Drop-offs and Pick-ups of children	20	80
5	Money management (Income and expenditure)	10	90

Sources: Result of FGDs, 2023

Because women are primarily tasked with sustaining family life, they must continuously juggle between domestic duties and productive labor. This dual role creates a significant burden, compelling many women to opt for flexible income-generating activities—such as weeding, vegetable gardening, small-scale livestock raising, or home-based trading—which allow them to simultaneously fulfill household responsibilities. This fragmentation of time is one of the key reasons why women are underrepresented in production stages that require advanced technology or long

working hours. The barrier is not solely due to professional capacity, but is also shaped by time constraints and caregiving obligations.

Notably, women also play a central role in household financial management. With participation rates reaching up to 90%, women are typically responsible for budgeting, planning daily expenditures, and ensuring that household needs are met. This role highlights that even within the domestic sphere, rural women contribute significantly to the family's economic stability. Their role as financial managers underscores their influence in maintaining internal household balance, despite the lack of formal recognition.

Nevertheless, the current division of labor still reflects deeply embedded gender stereotypes, with caregiving and financial management largely perceived as women's default responsibilities. Without a more equitable redistribution of domestic tasks among family members, opportunities for women to expand their roles in other domains—such as agricultural production, leadership, or entrepreneurship will remain constrained.

2.5.3 The role of women in the community

Women in the surveyed localities are not only actively involved in production and household responsibilities but also participate in a variety of community-level activities. According to qualitative data from group discussions, approximately 50–60% of local women are members of the Women's Union at the hamlet or commune level. This estimate, while not derived from quantitative surveys, was consistently reported across all six groups. Many participants stated that their membership in the Union was primarily motivated by the desire to receive information, access support, or join local initiatives. However, they were generally less proactive in proposing new ideas, organizing events, or assuming leadership roles within the organization.

Table 2. Role of women in the community (n = 6 groups)

No	Tasks	Men	Women
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1	Participation in socio-political organization (Women's Union)	-	60
2	Participation in community leadership and management roles	80	20
3	Social activities (Wedding, funeral attendance)	50	50

Sources: Result of FGDs, 2023

The proportion of women holding leadership or decision-making positions in the community—such as heads of branches or members of hamlet/village executive boards—remains limited, with women estimated to occupy only about 20% of such roles, compared to 80% held by men. This gender gap in access to governance and decision-making positions reflects persistent structural and cultural barriers. Many women expressed an interest in contributing more actively to community affairs but cited several challenges, including a lack of self-confidence, limited leadership skills, and difficulties in balancing domestic responsibilities with public engagement. Some participants also noted that leadership positions are often reserved for men or individuals with prior experience in social or political work.

In contrast, participation in cultural and social events such as weddings and funerals was found to be relatively equal between men and women (50%-50%). These events, being communal in nature and not defined by formal roles or responsibilities, offer more open opportunities for participation regardless of gender. However, it is important to note that these activities are largely ceremonial and do not involve influence over community governance or policy-making processes.

Overall, the findings suggest that women are actively engaged in areas related to social cohesion, caregiving, and participation in mass organizations. However, their involvement in activities that shape community governance and development strategies remains limited. This underlines both the untapped potential of women's contributions and the need for targeted support programs that enhance leadership capacity, promote confidence, and create enabling environments for women to participate more fully in community decision-making and governance structures.

2.5.4 Women's decision-making power in activities

Table 3. Women's decision-making power in activities (n = 6 groups)

No	Tasks	Men	Women
1	Buying household essentials	20	80
2	Arrange a marriage	50	50
3	Educating children	60	40
4	Buying valuable property	80	20
5	Building or repairing a house	60	40
6	Applying new technology	100	0
7	Spending on farming	100	0

Sources: Result of FGDs, 2023

2.5.4.1 Decision-making power in family activities

Findings from focus group discussions reveal that women play a prominent role in making decisions related to daily household management and consumption. Specifically, approximately 80% of decisions regarding the purchase of essential household items—such as food and basic domestic supplies—are made by women, reflecting their central role in managing routine expenditures. This finding aligns with earlier observations about women’s responsibility for overseeing household finances and caregiving activities.

However, when it comes to more strategic and long-term family decisions, such as children’s education or the construction and renovation of housing, women’s involvement decreases significantly. In these cases, women account for only 40% of the decision-making power, with men making the majority of decisions (60%). This disparity becomes more pronounced in decisions involving large financial investments—such as the purchase of land or vehicles—where men are said to hold as much as 80% of the decision-making authority. Although women carry out most daily household duties, their influence diminishes in matters involving substantial assets or long-term planning. This reflects not only existing social norms but also a lack of self-confidence and limited access to knowledge or experience, which many women cited as reasons for deferring to male household members in such matters.

With regard to decisions about children’s marriage, gender parity is more evident. Decision-making responsibility is reportedly shared equally between men and women (50%-50%). However,

discussions indicate that, in practice, decisions about marriage are increasingly being made by the children themselves, with parents playing mainly advisory and supportive roles. This trend suggests a shift in family dynamics, where parental authority is gradually giving way to individual autonomy. Moreover, cultural and ethnic factors influence the degree of parental involvement. For instance, in Khmer communities, the bride’s family often takes an active role in organizing and deciding on marriage arrangements, contrasting with Kinh traditions in which the groom’s family traditionally holds more decision-making power.

2.5.4.2 4.3.2. Decision-making power in agricultural production

In agricultural production, women's participation in decision-making remains minimal. According to group discussions, 100% of decisions regarding the application of new farming techniques and expenditures related to agricultural production are made by men. Women are largely excluded from key decisions such as the selection of crop varieties, investment strategies, and the adoption of new agricultural practices.

This imbalance reflects deeply rooted gender norms in the production domain and raises concerns about the sustainability and inclusiveness of decision-making processes in rural development. The absence of women’s voices in technical and financial aspects of agriculture limits their ability to benefit from agricultural support programs or to participate in climate change adaptation strategies that are increasingly being implemented at the local level. Without efforts to promote shared decision-making and capacity building for women in agriculture, these exclusions may continue to reinforce structural inequalities and undermine the long-term resilience of farming households.

2.5.5 Women’s limitations in accessing technology and training

Table 4. Women’s limitations in accessing technology and training (n = 6 groups)

No.	Tasks	Men	Women
1	Attending local meetings and training sessions	80	20
2	Attending a livestock training course	50	50
3	Attending a workshop on sewing and knitting water hyacinth	0	100

Sources: Result of FGDs, 2023

Findings from focus group discussions reveal a significant gender gap in access to technical training and technology transfer programs at the local level. In training courses related to farming techniques or production-oriented meetings, men accounted for approximately 80% of participants, while women comprised only 20%. This disparity illustrates that women rarely participate in, or proactively engage with, learning activities aimed at enhancing technical knowledge—particularly in the domain of agricultural production.

This limitation is closely associated with women's marginal role in production-related decision-making, as previously discussed in Section 4.3.2. Women are largely absent from decisions involving the adoption of new techniques or investment in agricultural innovations, and their involvement is typically restricted to labour-intensive tasks such as weeding or post-harvest product sales. These roles generally do not require specialized knowledge or training, which reduces both the necessity and motivation for women to engage in technical training opportunities.

Importantly, the root causes of women's limited participation in training do not stem from individual capacity, but from structural constraints—most notably, the dual burden of productive labor and domestic responsibilities. Training courses are often scheduled according to rigid administrative timetables and span multiple sessions, making it difficult for women to attend due to time constraints. Another practical barrier frequently mentioned in group discussions is transportation. Many women shared that they do not know how to drive a motorbike or lack the confidence to do so—despite motorbikes being the most common form of transportation in rural areas. This limitation makes women more hesitant to travel to training venues located far from their homes, while men tend to be more mobile and willing to participate in such activities.

Nevertheless, when training programs are designed to align with women's daily routines and responsibilities—particularly those that can be conducted at or near home—women demonstrate a high degree of initiative. For instance, in vocational training classes on hand-weaving with water hyacinth, 100% of participants were women. This not only reflects women's ability to adapt flexibly to changing livelihood conditions (as detailed in Section 4.1.2) but also affirms that, when given suitable conditions, women are entirely capable of playing proactive and productive roles in the household economy.

Similarly, participation in livestock training programs shows a gender balance, with men and women each accounting for 50% of attendees. Livestock production is often manageable alongside household duties, does not require long-distance travel, and is less physically demanding or technologically intensive. This reinforces the idea that the appropriateness of training content and

the design of implementation logistics are key determinants of women's ability to access and benefit from capacity-building initiatives.

2.5.6 The importance of rice and the impact of climate change on women

Findings from focus group discussions and in-depth interviews conducted in the surveyed localities confirm that rice cultivation is the primary livelihood and occupies a central position in the socio-economic life of rural households. Almost all participating women affirmed that "rice cultivation is the main and most stable source of income available." However, this high dependency on rice production renders women's livelihoods particularly vulnerable—especially in the context of climate change, saline intrusion, and the volatility of agricultural commodity prices.

According to the discussions, agricultural livelihoods are perceived as being the most severely affected by climate change. Unpredictable weather patterns have led to reduced rice yields, rising input costs, and unstable output markets. This directly diminishes household income, particularly in households where rice is the main source of livelihood. As women are typically responsible for managing household expenses and ensuring family care, they are often the first to adjust, economize, or seek alternative strategies in response to crop failures. Consistent with the literature (Duffy et al., 2021), agricultural incomes are highly susceptible to sudden weather-related shocks such as droughts and floods. In many cases, personal and household assets—including livestock, agricultural equipment, and savings—are sold off or depleted to compensate for lost income, thereby eroding the household's ability to recover and placing women in prolonged states of economic insecurity.

While non-agricultural income-generating activities such as small-scale trading or handicrafts are generally more stable and less affected by climate variability, they are often insufficient to fully substitute for rice-based income. This is particularly true for poor households or for women with limited resources to pursue alternative livelihoods. Thus, although non-agricultural work is often viewed as a supplemental strategy, it has not yet emerged as a sustainable primary income source for the majority of rural women.

From the perspective of physical and mental health, many women acknowledged that they experience fatigue and temporary anxiety due to the pressures of declining income and unpredictable climate events. However, most reported that these impacts are currently

manageable and that they maintain psychological resilience by adjusting household expenditures, taking on side jobs, or sharing responsibilities with other family members.

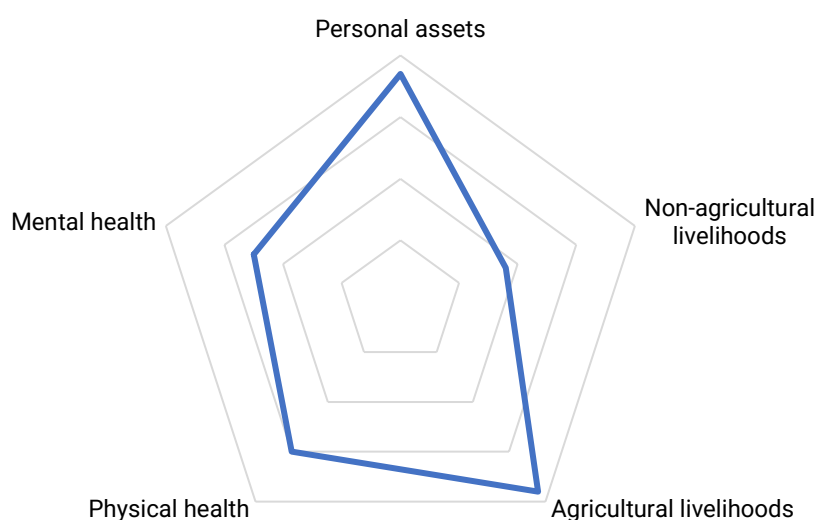


Figure 2. Effects of climate change on rural women

Sources: Result of FGDs, 2023

In summary, climate change not only disrupts agricultural production but also undermines the overall adaptive capacity of rural women—economically, physically, and psychologically. Women’s vulnerability stems from the intersection of environmental pressures and entrenched social inequalities. Therefore, it is critical that climate change response strategies place women at the center of their design and implementation, ensuring that support mechanisms address both gender-specific needs and broader structural challenges.

2.5.7 Assessment of women’s adaptive capacity to climate change

The assessment chart of women’s adaptation capacity indicates that most female participants fall within the low to medium range, with only a small number demonstrating strong adaptive capacity. This outcome reflects a broader reality: despite playing key roles in both agricultural production and

family care, rural women continue to face significant limitations in independently coping with increasingly complex environmental challenges.

The primary barriers to adaptation stem from limited access to information, skills, and support resources. As discussed in previous sections, women have few opportunities to participate in technical training or engage in key decision-making processes related to agricultural production—such as the application of new techniques or the allocation of investment capital. Additionally, the dual burden of domestic and productive responsibilities, combined with restricted mobility (e.g., the inability or lack of confidence to operate a motorbike), further constrains their adaptive options.

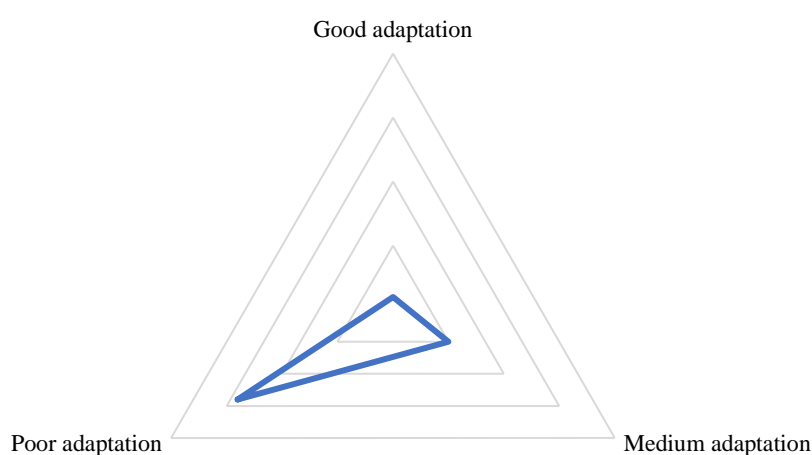


Figure 1. Rural women's resilience to climate change

Sources: Result of FGDs, 2023

Nonetheless, some women have demonstrated flexible adaptation by engaging in non-agricultural livelihood activities such as weaving, small-scale livestock rearing, or home-based commerce—occupations that align with their domestic obligations and available resources. This suggests that while the adaptive potential of rural women is real, it remains underutilized due to systemic barriers. Unlocking this potential requires targeted support, including access to skills training, alternative livelihood opportunities, and improved information dissemination and decision-making inclusion.

2.5.8 Women's adaptation strategies to climate change

Survey results indicate that the majority of women in the study areas remain in the "coping" phase or lack a clear adaptation strategy altogether. Proactive approaches—such as livelihood diversification, occupational shifts, or labor migration—were reported by only a small proportion of participants. This highlights a pressing concern: while rural women are increasingly exposed to the risks of climate change, they often lack the necessary tools, resources, and enabling conditions to respond effectively.

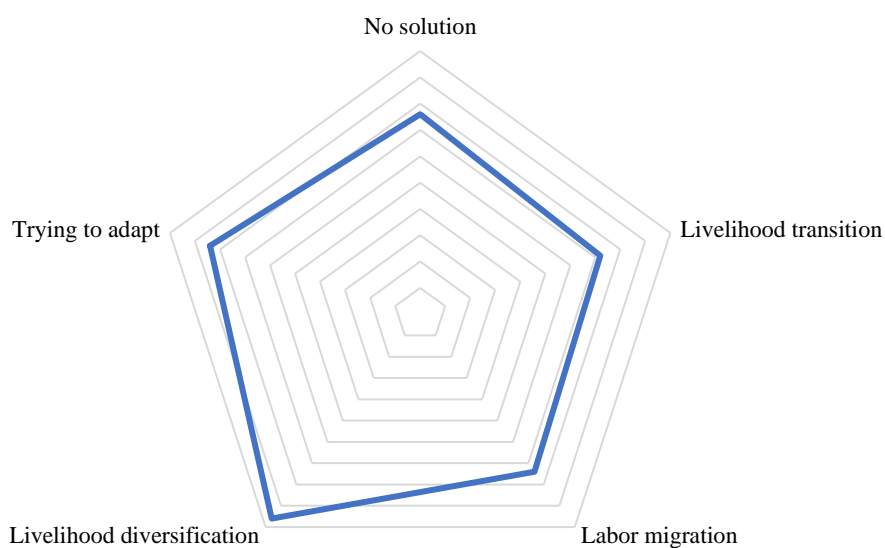


Figure 2. Women's Climate change adaptation strategies

Sources: Result of FGDs, 2023

The findings underscore a need to move beyond short-term coping mechanisms toward building long-term, proactive adaptation strategies that are gender-responsive and context-appropriate. This includes integrating women more fully into local planning processes, increasing their access to education and training, and designing climate adaptation programs that recognize and accommodate their specific constraints and capabilities.

While many women demonstrated a clear awareness of the negative impacts of climate change on their livelihoods and daily lives, most reported responding in passive ways—primarily through "trying to adapt" strategies such as adjusting planting calendars, reducing household expenditures,

or simply relying on favorable weather conditions. The underlying causes of this passivity lie in the lack of access to reliable information, limited skill development opportunities, and especially restricted access to alternative livelihood options. These constraints hinder women's ability to pursue long-term adaptive strategies such as changing occupations or investing in new income-generating models.

Labor migration emerged as a frequently mentioned strategy to mitigate climate-related risks. However, this option is often infeasible for many women, particularly elderly or single women. According to participants, older women are generally unable to migrate due to poor health, childcare responsibilities—especially caring for grandchildren—or a lack of employable skills. Consequently, labor migrants tend to be young men or working-age youth, leaving behind women who face increasing economic and social vulnerabilities in their absence.

In this constrained context, some women choose to diversify their livelihoods locally. They engage in supplementary activities such as growing vegetables, weaving, small-scale trading, or raising poultry at the household level. While these efforts reflect a degree of resilience and flexibility, they are largely informal, small-scale, and heavily dependent on available family resources. As such, women's current adaptive strategies remain fragmented and unsustainable without the support of targeted, context-specific policies and programs designed to meet their practical needs.

2.5.9 Expectations for support from the government and the future

During group discussions, most women expressed a strong desire for practical government support to enhance their climate adaptation capacity and achieve more sustainable livelihoods. The most commonly cited need was access to training programs tailored to women's specific conditions—particularly vocational courses that could be conducted at or near home, such as hand-weaving, small-scale animal husbandry, or vegetable cultivation. Participants emphasized that these training programs should be flexible in terms of timing, conveniently located, and delivered in a hands-on format, rather than relying heavily on theoretical instruction.

In addition to skills training, many women proposed increased support in the form of microfinance, access to seeds, and appropriate credit mechanisms for small-scale farming households. These resources are critical in helping women make the initial investments needed to diversify livelihoods and improve household resilience.

Looking toward the future, women expressed aspirations for a more stable and secure living

environment—one in which they no longer have to live in constant fear of weather extremes, saline intrusion, or crop failures. They want to have a voice in local planning and development processes, shifting from passive recipients of support to active participants in shaping their communities. Some younger women also highlighted their interest in developing soft skills such as communication, financial literacy, and digital literacy—including the use of smartphones for selling goods and accessing market information.

In short, women's expectations extend beyond material support. They seek empowerment through knowledge, skills, and institutional inclusion—enabling them to become proactive agents of change in both climate adaptation and broader community development.

2.6 Discussion

2.7 Conclusions and recommendations

2.7.1 Conclusions

Based on field research conducted in selected districts of Soc Trang and Hau Giang provinces, the study reveals a compelling reality: rural women are simultaneously shouldering multiple responsibilities in both domestic life and agricultural production. They prepare daily meals, care for children, manage household finances, and contribute significantly to farming activities—particularly in tasks such as weeding, harvesting, and post-harvest sales. Despite their substantial contributions, women remain largely excluded from critical decision-making processes, including investment planning, adoption of new agricultural techniques, and the organization of production.

Climate change—most notably through the increasing threat of saline intrusion—has placed additional stress on rural livelihoods, particularly for households dependent on rice cultivation. When crops fail or yields decline, women are often the first to adjust: cutting expenses, seeking supplementary income, and coping with mounting emotional pressure. In response, some women have proactively diversified their livelihoods by engaging in weaving, small-scale commerce, or home gardening. However, these adaptive efforts remain fragmented, small in scale, and largely informal, owing to a lack of access to financial capital, skills development, and reliable information.

Testimonies gathered through group discussions illustrate that women have a strong desire to improve their situations. They express a need for practical vocational training, small-scale financial support, and—crucially—the opportunity to participate in decision-making processes within their communities. Their expectations extend beyond material assistance; women are seeking meaningful inclusion and empowerment that will allow them to realize their full potential.

In conclusion, the issue is not that rural women lack the capacity to adapt, but rather that they lack access to the necessary conditions and opportunities. When barriers such as time constraints, limited mobility, skill gaps, information asymmetry, and gender bias are effectively addressed, women can emerge as key agents in building resilient livelihoods and contributing to community-based climate adaptation efforts. Supporting women in this role is not only a matter of equity—it is a strategic imperative for sustainable rural development in the face of climate change.

Recommendation:

2.7.2 Recommendations

Based on the practical findings of the study, enhancing the adaptive capacity of rural women to climate change—particularly in the face of saline intrusion—requires targeted, context-sensitive interventions that align with the lived realities of local communities.

First, technical training programs should be redesigned with greater flexibility in both content and delivery. Rather than being held during standard working hours or at locations far from participants' homes, training sessions should be scheduled in the afternoons, on weekends, or within close proximity to the communities they serve. The content of these programs should prioritize practical, home-based skills that are accessible and applicable to women's daily lives—such as small-scale livestock rearing, vegetable cultivation, handicrafts, and micro-enterprise management.

In addition to technical training, it is essential to integrate soft skills development into these programs. Topics such as household financial management, communication, digital literacy (e.g., using smartphones), accessing market information, and idea presentation are particularly valuable for younger women. These skills not only expand livelihood opportunities but also foster self-confidence, autonomy, and greater control over one's life. Instructional methods should be participatory and supportive, encouraging women to share personal experiences, engage in peer learning, and cultivate a sense of solidarity. Creating such an enabling environment can enhance women's confidence in learning, decision-making, and participation in community affairs.

Second, increased support is needed in the form of small-scale capital, agricultural inputs, and appropriate tools. Many women expressed the desire to change or diversify their livelihoods but cited financial barriers as a major constraint. Expanding access to preferential credit schemes, microfinance opportunities, and community-based revolving funds can help women overcome initial startup challenges and facilitate more sustainable livelihood transitions.

Third, local authorities and mass organizations should actively create inclusive spaces for women's participation in community planning and decision-making. Women's voices—especially those of individuals directly affected by climate change—must be meaningfully included in discussions on local response strategies. Their firsthand knowledge and practical experience are invaluable in ensuring that adaptation measures are not only equitable but also effective and grounded in reality.

In sum, for rural women to become genuine agents of change in climate adaptation, support programs must place them at the center—not just as beneficiaries, but as co-designers and implementers. This begins with listening to their needs, recognizing their contributions, and

empowering them through access to knowledge, resources, and influence. Only through such a comprehensive and inclusive approach can rural communities build truly resilient and sustainable futures in the face of climate change.

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3 Chapter 2: The influence of gender on the scientific process

3.1 Introduction

The “Farmer Options for Crops Under Saline Conditions in the Mekong River Delta” (FOCUS) project, funded by the Australian Centre for International Agricultural Research (ACIAR), was implemented to address these challenges. The project aims to develop and promote diverse farming systems on saline-affected land, applying adaptive management solutions to improve productivity, profitability, and resilience for agricultural production systems in the Mekong Delta. Technical components include identifying and testing salt-tolerant crop varieties, improving soil management, applying water-saving technologies, and developing optimal farming models suitable for climate change conditions.

However, beyond technical solutions, gender is also a crucial factor to ensure successful adaptation. In previous analyses, the GESI research team within the FOCUS framework focused on examining gender-specific characteristics among farmers, the direct beneficiaries of technical solutions. Nevertheless, gender influences are not only evident at the community level but also clearly visible within the project’s own team of scientists, technical staff, and project personnel. In many agricultural research contexts, men often take on leadership, coordination, and fieldwork roles, while women are typically concentrated in laboratory work, data analysis, or logistical tasks, with fewer opportunities to participate in strategic planning or direct field trials.

Based on this reality, the present study delves deeper into gender-specific characteristics and opportunities within the very workforce implementing the FOCUS project. The objective is to build a more comprehensive picture of gender impacts across the research and development value chain—from design to implementation and knowledge transfer. The findings will serve as the basis for proposing strategies for the FOCUS 2.0 phase, ensuring that GESI is integrated not only into community-level activities with farmers but also within the internal research system, contributing to a fair, sustainable, and highly adaptive working environment in the face of climate change.

3.2 Research questions

This study addresses the following questions:

- (1) How are scientific roles and tasks distributed between male and female members within the FOCUS project teams?
- (2) To what extent do women and men participate in different types of scientific work, such as fieldwork, laboratory research, modelling, and interdisciplinary collaboration?
- (3) What is the gender distribution in leadership positions and decision-making roles within the project?
- (4) What barriers and enabling factors influence the participation of women in various scientific activities, particularly in technical and leadership domains?
- (5) How can project design and team structures be improved to promote gender equity and inclusion in scientific research?

3.3 Methodology

This study applied a qualitative research design to explore the influence of gender on scientific roles and participation within the FOCUS project. Data were collected through in-depth interviews with project team members across different disciplines, including the Socioeconomic, Soil, Crop & Soil, and Spatial teams. The interviews focused on participants' main responsibilities, working environments (fieldwork, laboratory, modelling), decision-making roles, and perceptions of gender-related opportunities and barriers in scientific work.

A total of 12 participants were interviewed, comprising 8 men and 4 women. Male participants predominantly held roles involving fieldwork, technical modelling, and leadership positions, while female participants were more engaged in laboratory work, greenhouse research, socio-economic data collection, and interdisciplinary collaboration.

The in-depth interviews were conducted using a semi-structured guide to ensure both consistency and flexibility. Key themes included:

- Distribution of tasks by gender and discipline;
- Access to leadership roles and decision-making processes;
- Opportunities for skill development and training;
- Perceived challenges and enabling factors for gender equity in scientific work.

Interviews lasted between 45 and 60 minutes, were audio-recorded with consent, and transcribed verbatim. Data were then coded thematically to identify patterns, differences, and similarities in experiences between male and female participants, as well as across scientific disciplines.

3.4 Findings

General information

Among the 12 interview participants, men made up the majority with 8 individuals (66.7%), while women accounted for 4 individuals (33.3%).

In terms of disciplinary distribution, the Soil team had the largest number of members (5 people, both men and women), followed by the Spatial team with 3 members (all men), the Socioeconomic team with 2 members (1 man and 1 woman), and the Crop & Soil team with 1 member (a woman).

Regarding main tasks, fieldwork was the most common activity (4 participants), predominantly performed by men. This was followed by leadership roles (2 participants, both men) and several other specialized positions as detailed in Table 1. The findings indicate that men not only outnumber women but also exclusively occupy leadership positions, while women are more concentrated in laboratory, greenhouse, or data analysis work, with limited involvement in leadership and large-scale field activities

Table 5. General information

No.	Gender	Main Work	Role & Team
1	Male	Fieldwork	Socioeconomic team
2	Male	Fieldwork	Soil team
3	Male	Team leader	Spatial team
4	Female	Laboratory in greenhouse & field	Soil team
5	Male	Fieldwork	Soil team
6	Female	Laboratory	Soil team
7	Male	Team leader	Soil team
8	Male	GIS & Bayesian modelling	Spatial team
9	Male	International expertise	Soil team
10	Female	Data collection & analysis	Socioeconomic team
11	Female	Crop & Soil combined, IAS collaboration	Crop & Soil team
12	Male	Spatial statistical modelling	Spatial team

3.4.1 Gender-based Division of Work in the FOCUS Project Team

Table 2. Gender-based division of work among project members

Category	Current situation	Causes
Fieldwork	Men are clearly dominant; they participate in field surveys, soil sampling, and on-site trials; they have greater access to opportunities for testing new technologies and techniques.	<ul style="list-style-type: none"> - Perception that men are more suited to outdoor work, frequent travel, and physically demanding tasks. - Men have greater flexibility due to fewer family responsibilities, enabling them to travel or stay overnight for work.
Lab /greenhouse	Women mainly conduct sample analysis, testing, data processing, and material preparation.	<ul style="list-style-type: none"> - Cultural norms: women are associated with indoor, lighter work. - Travel and safety constraints in remote areas are less favorable for women, especially those with families/young children.
Leadership Positions	Mostly held by men; men make decisions on task allocation and implementation direction.	Perception that leadership is linked to men's roles, particularly in agriculture.
Logistical work	Often assigned to women, even in senior positions (e.g., preparing drinks, food, meeting arrangements).	<ul style="list-style-type: none"> - Organisational habits and gender stereotypes linking logistics to women. - Self-assignment within teams following traditional patterns.

Analysis shows that men hold a clear advantage in fieldwork activities, including conducting field surveys, collecting soil samples, and implementing on-site trials. Most leadership or main coordination positions are also held by men, giving them authority over task allocation and strategic direction. Men's strong involvement in fieldwork stems from their perceived suitability for outdoor, high-mobility, and physically demanding tasks, coupled with fewer family constraints that allow them to travel long distances or stay overnight. They also tend to have more access to opportunities for testing new technologies and techniques in the field.

In contrast, women mainly work in laboratories or greenhouses, focusing on sample analysis, testing, data processing, or material preparation. Their limited assignment to fieldwork is influenced by two main factors:

Cultural and gender norms in some localities, which associate farming with men and indoor/light work with women.

Travel and safety concerns in remote locations—requiring long journeys, overnight stays, and exposure to harsh weather—pose particular challenges for women with families or young children.

It is important to note that this reality is primarily due to objective limitations faced by women themselves, rather than explicit restrictions or imposition by male colleagues or project leaders.

Additionally, logistical duties are often assigned to women, such as preparing drinks, food, and organising meetings. These tasks are frequently allocated to women by other women, even when they hold senior or coordinating positions, reflecting entrenched traditional patterns.

At the household level

At the household level, men often take on heavy farm tasks such as ploughing, tilling, digging canals, operating machinery, and irrigation. They also play the main role in making decisions about cropping seasons as well as testing new technical methods. Men tend to participate more in technical training sessions, especially in hands-on field demonstrations.

In contrast, women are usually responsible for lighter tasks such as sowing seeds, weeding, caring for crops during the early stages, and preparing seeds and fertilizers. They also carry out most post-harvest activities, including sorting, cleaning, and packaging. In training sessions, women participate at lower rates, and when they do attend, it is mainly in indoor sessions or short, theory-based trainings, with less practical field engagement compared to male farmers. Notably, some women from Khmer households or remote areas have limited direct access to technical information, often receiving it second-hand through husbands or male relatives.

Exceptions

In some cases, task allocation is not clearly influenced by gender. For instance, in the Spatial team, tasks such as GIS and spatial data analysis are assigned based on technical expertise rather than gender. However, female members in this group still participate less in fieldwork, mainly due to personal reasons or limitations in traveling long distances.

In the Socioeconomic team, work distribution between men and women is relatively balanced. Female members not only actively participate in interviews and data collection but also excel in community engagement, benefiting from their ability to connect with and build trust among local people. This is a notable strength of women in this field.

3.5 Career and Development Opportunities

3.5.1 3.1. Open Opportunities

The FOCUS project not only creates professional career opportunities but also fosters a balanced development environment for both men and women, contributing to gender equality and social inclusion. From the design to the implementation stage, gender equality and social inclusion (GESI) considerations have been integrated, as reflected in the fact that all members have opportunities to participate in surveys, data analysis, scientific report writing, and agricultural value chain research with a gender perspective.

Several project leaders have proactively empowered women in leadership-oriented roles, such as implementing activities, preparing project proposals, mentoring students, publishing scientific papers, and participating in training. This increases women's presence in strategic activities, affirms their management capabilities, and expands their professional portfolios.

The interdisciplinary work environment also enables members—particularly women—to access knowledge from multiple fields, participate in technical decision-making, and contribute to research direction. At the international level, both men and women are given opportunities to collaborate with foreign experts and attend academic conferences, enhancing women's capacity and standing in agricultural research, a field traditionally dominated by men.

The project also provides equal support in terms of finance, equipment, and technical training for all members. Mentoring activities from experienced experts help women and underrepresented groups feel more confident in leading small teams or managing sub-projects. Opportunities for career advancement, access to scholarships, and international training (Master's and PhD programs) are available to everyone, thereby helping women improve their qualifications, narrow the gender gap, and increase their potential to participate in decision-making positions in the future.

Age and experience also influence how opportunities are taken up. Younger, less experienced staff are often more willing to take on detailed, physically demanding, or repetitive work to gain experience, whereas those with more experience tend to focus on tasks involving orientation, supervision, or management. Therefore, task allocation should be flexible—challenging young staff while leveraging the expertise and networks of senior personnel for strategic activities.

3.2. Gaps

Within the project, opportunities to attend conferences and training sessions have not been equally distributed across technical teams. The Soil team participates in such events far more frequently than the Socioeconomic team and the Gender team. This results in differences in how up-to-date each group is with new knowledge and in their ability to expand professional networks.

In addition, in some teams, men still hold a clear advantage in accessing fieldwork opportunities and playing a role in strategic decision-making, while women have fewer chances to participate in these

activities.

Regarding ethnicity, in Soc Trang—where the Khmer community resides—there remains a perception that Khmer people need to be trained in a different way in order to learn effectively. However, in reality, there is no significant difference in the ability to absorb technical knowledge between Khmer people and other ethnic groups such as Kinh or Hoa, suggesting that the barrier lies more in social perceptions than in actual capacity.

3.6 Gender Roles in Partner engagement

At present, gender roles in the project's partner engagement remain limited, particularly at the leadership and decision-making levels. In meetings with DARD in Soc Trang, participation is predominantly male; women are rarely present, and when they are, they seldom speak. This limits the systematic integration of gender perspectives into strategic discussions and decision-making. As a result, opportunities to develop gender-sensitive solutions are restricted, and the project's ability to address the diverse needs of beneficiaries—particularly women and vulnerable groups in the community—may be reduced.

In contrast, experience from a previous project (the rice–shrimp project) showed that active participation of female staff, such as in the case of Ms. Hoa, brought significant benefits. They often have closer relationships with farmers, especially female farmers, making it easier to create a trusted environment for information exchange. This helps gather information that is more closely aligned with actual production and livelihoods. Moreover, they serve as effective “bridges,” accurately conveying community feedback to the research team while explaining and disseminating results and technical recommendations to communities in a way that is easier to understand and more relevant.

The presence of female staff in the field and in planning meetings also contributes to maintaining continuous two-way communication, reducing the gap between the research team and beneficiaries. However, in the current phase of the FOCUS project, this bridging role has not been consistently maintained. Decisions on who participates in partner meetings still largely depend on individual circumstances and convenience, rather than on a clear strategy to ensure gender diversity and maximize the value female staff can bring.

3.7 Discussion

Gender-Related Barriers and Challenges

5.1. Safety and Working Conditions

In some field activities, particularly in remote, rural, or isolated areas, safety is a major concern for female staff and students. Interview data show that many female students involved in data collection have to travel to sparsely populated areas with narrow, difficult roads, posing risks related to transportation, weather, or unexpected situations. Specific risks mentioned include motorbike breakdowns, difficulties traveling alone, or encountering unfamiliar environments.

Although most students work in pairs or groups to support each other, concerns about safety remain, especially from supervising lecturers. Accommodation choice is also an important factor, as insecure or poor living conditions can affect women's participation. In practice, some team leaders have proactively chosen safe, clean guesthouses or hotels and arranged reasonable meals to reduce pressure on female students. However, these are mostly individual initiatives and have not become a standard project procedure, resulting in inconsistency between teams and research sites.

5.2. Stereotypes and Power Dynamics

Gender stereotypes remain a potential barrier in certain project work contexts. At the local level, leadership and official representative positions in partner agencies such as DARD are often held by men, creating an imbalance in voice and decision-making power. Women, if present at meetings, often speak less or participate only in technical support roles, without directly influencing strategic direction. This unintentionally reinforces the perception that high-level planning and technical work are "men's domains," while women are suited only for support tasks.

In interactions with communities, women's roles and voices can also be limited by social norms. Some women—especially those in rural areas or from ethnic minority groups—tend to share fewer opinions in large meetings or in front of male leaders. Conversely, when connected through respected local female staff, they are more open in discussions, highlighting the importance of gender-diverse representation in project activities.

These stereotypes not only affect women's opportunities to participate and contribute but also limit the project's ability to collect comprehensive information that accurately reflects the needs and perspectives of all beneficiary groups.

3.8 Conclusions and recommendations

FOCUS should consider GESI as a mandatory component in all project elements, not just an add-on. This requires strategic planning from the outset, ensuring gender representation in leadership and fieldwork, improving working conditions, linking technical and social data, and establishing regular monitoring mechanisms to ensure genuine progress. The recommendations for integrating GESI into FOCUS 2.0 are as follows:

Integrate GESI from the Project Design Stage

- Develop a GESI plan in parallel with the technical plan, clearly defining objectives, indicators, and methods for integrating gender equality and social inclusion into all research components.
- Design a GESI indicator framework to monitor and evaluate throughout the project, covering gender composition in research teams, decision-making roles, participation levels, and benefits for different groups, especially vulnerable groups such as women and ethnic minorities.

Enhance Women's Participation and Representation in Partner Engagement

- Ensure at least 30–40% female representation in strategic meetings with DARD, agricultural extension centers, businesses, and other stakeholders.
- Invite experienced female staff to serve regularly as “bridges” between the project and the community.
- Assign women to leadership and field coordination roles, not just technical support positions.

Ensure Safety and Equal Working Conditions

- Develop standard GESI safety protocols for fieldwork: working in pairs/groups, choosing secure accommodation, using suitable transport, and ensuring nutritious meals.
- Provide additional funding if ensuring women's safety incurs extra costs (e.g., staying closer to survey sites, using safer transportation).
- Organize safety training for all members, focusing on risk situations that women are more likely to encounter.

Strengthen the Capacity and Voice of Women and Vulnerable Groups

- Provide leadership, negotiation, and communication training for female staff within both the project and local partner organizations.

- Create opportunities for female students and early-career researchers to engage in core tasks such as survey design, data analysis, and presenting results.
- When working with communities, use gender-sensitive approaches such as women-only meetings or female-led facilitation to encourage participation.

Connect GESI Data with Technical Components

- Overlay spatial data (GIS, salinity risk, cropping calendars) with gender and vulnerable group information to identify the most at-risk areas.
- Integrate socioeconomic and technical teams from the survey design stage to ensure data collected serves both technical analysis and GESI assessment.
- Use these results to design adaptation solutions tailored to the needs and capacities of both men and women, especially in ethnic minority areas.

Monitoring and Learning Mechanisms

- Conduct periodic GESI assessments (every 6 months or annually) to identify gaps early and adjust activities accordingly.
- Include GESI experts in the project's advisory board to ensure consistency and depth in gender integration.

Reduce Gender Segregation Between Field and Laboratory Work

- Encourage and enable women to participate in field activities where they have interest and capability, including assigning tasks that match their strengths and learning goals.
- Provide technical and safety support such as suitable protective gear, fieldwork skills training, and guidance on using tools/machinery.

Implementing these measures will help balance opportunities between men and women while building a more flexible, experienced, and gender-sensitive research team.

3.9 Chapter references

4 General conclusions and recommendations

4.1 Conclusion

The GESI analysis in the FOCUS project demonstrates that while gender integration has been recognized and partially implemented, structural and cultural barriers continue to influence roles, participation, and benefits for both men and women. Men dominate fieldwork, leadership, and strategic decision-making, while women are more involved in laboratory work, data processing, and logistical tasks. Opportunities for professional development, technical training, and partner engagement are unevenly distributed across teams and genders, with notable disparities in access to conferences, workshops, and field assignments.

At the household level, similar gendered patterns persist, with men responsible for physically demanding agricultural tasks and women handling early-stage crop care and post-harvest work. In ethnic minority communities, particularly Khmer areas, entrenched perceptions rather than actual capacity gaps limit equitable participation in training and decision-making.

Positive examples from within the project—such as women’s success in community engagement, leadership in specific activities, and interdisciplinary collaboration—show the potential for greater gender equity when opportunities are intentionally designed. However, challenges remain in ensuring women’s safety in fieldwork, overcoming stereotypes in partner interactions, and institutionalizing gender diversity in decision-making processes.

The lessons from FOCUS underline that integrating GESI not only enhances fairness but also improves research quality, field data accuracy, and the uptake of adaptation strategies in communities.

4.2 Recommendations

To achieve more substantial and sustainable gender integration in FOCUS 2.0, the following actions are recommended:

1. Institutionalize GESI Integration

- Develop and implement a comprehensive GESI strategy alongside technical planning, with clear objectives, indicators, and monitoring mechanisms.
- Include GESI metrics in project evaluations, covering representation, participation, benefits, and decision-making influence.

2. Balance Representation in Leadership and Fieldwork

- Ensure at least 30–40% female participation in strategic meetings and leadership roles, including field coordination positions.

- Reduce gender segregation between field and lab work through targeted training, mentorship, and safety protocols.

3. Enhance Safety and Working Conditions

- Establish standard safety guidelines for fieldwork, including safe accommodation, transportation, and group travel.
- Allocate budget for additional costs related to ensuring women's safe participation.

4. Capacity Building for Women and Underrepresented Groups

- Offer leadership, negotiation, and communication training for female staff and young researchers.
- Provide equal access to core research tasks such as survey design, data analysis, and result presentation.

5. Leverage Gender Strengths in Partner and Community Engagement

- Assign experienced female staff as community liaisons to improve trust, feedback accuracy, and technical dissemination.
- Use gender-sensitive facilitation methods (e.g., women-only sessions, female facilitators) to encourage participation from women in conservative or minority communities.

6. Integrate GESI with Technical Data and Planning

- Overlay gender-disaggregated and vulnerability data with technical datasets (e.g., GIS, salinity risk) to design tailored adaptation solutions.
- Involve socioeconomic and technical teams jointly in survey design and implementation.

By embedding these measures into FOCUS 2.0, the project can move beyond partial gender consideration to a fully integrated, inclusive approach—building a research and implementation team that is diverse, equitable, and better equipped to address the complex challenges of climate change in the Mekong Delta.

5 Appendices

5.1 Photos of data collection activities

In Long My district, Hau Giang province







In Tran De district, Soc Trang province





In Long Phu district, Soc Trang province

Ruang	Chồng	Vợ
Làm đất	3 green packets	1 green packet
Sạ	10 brown packets	
Phân / thuốc	10 red packets	
Dặm	5 brown packets	5 brown packets
Chăm sóc	10 yellow packets	5 yellow packets
Nhờ Co ²	2 blue packets	5 blue packets
Thu hoạch	3 green packets	5 blue packets
Bán lúa (#)		5 green packets 10 brown packets





Long My, Hau Giang



Mrs Xinh in Long My, Hau Giang after 3 years participating in the Focus project (2025)



Meeting with femal farmers in Long My, Hau Giang in 2025