



Mainstreaming Gender in ASEAN Energy Policy and Planning



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Key Messages

- The ASEAN Ministers on Energy Meeting (AMEM) has acknowledged the importance of a Just and Inclusive Energy Transition through the 39th and 41st Joint Ministerial Statements (JMS). The concept of a just and inclusive energy transition is highly relevant to the commitment to integrate social equity considerations into the shift towards sustainable and low-carbon energy sources in order that both economic and social benefits can be maximised.
- Challenges to mainstreaming gender in ASEAN energy policy arise mainly because of the limited representation of women in regional decision-making processes to champion the agenda, and a lack of the necessary energy-gender data to make informed energy policy and planning decisions.
- The next cycle of the ASEAN Plan of Action for Energy Cooperation (APAEC), as the regional blueprint in the energy sector, should consider establishing dedicated strategies for a "Just and Inclusive Energy Transition" to encompass the energy-gender nexus and its activities.
- The recommended action plans and activities can be integrated and pursued through various perspectives: intensifying learning exchange and awareness raising campaigns, establishing and continuously improving an energy-gender database, developing in-depth studies on energy-gender dynamics (i.e. the impact and role of women), mainstreaming gender analysis in energy reports, and organising annual multistakeholder dialogues.

1. Background

The just and inclusive energy transition towards sustainable, low-carbon technology use aims to transform the energy system inclusively, fairly and equitably. Upholding the principle of "Leave No One Behind", integral to all Sustainable Development Goals, including Goal 7, ensures universal access to affordable, reliable, sustainable and modern energy. This necessitates a multidisciplinary approach to address the energy trilemma—securing a balanced, affordable and sustainable energy system throughout the transition [1]. Comprehensive planning should involve inclusive dialogues with various stakeholders including both men and women in energy policy and planning that consider both the role of women and the disproportionate impacts of current policies.

The ASEAN Ministers on Energy Meeting (AMEM), as the highest body of regional policymaking processes in the energy sector, has recognised the relevance of "Just and

Inclusive Energy Transition" in the 39th and 41st Joint Ministerial Statements (JMS) [2], [3]. However, since this concept has not yet been clearly defined within a framework which would facilitate its implementation, the region continues to experience challenges in this regard. As formulated on the basis of several global sources, the concept asserts the importance of an integration of social equity considerations that creates both economic and social benefits from the shift towards sustainable and low-carbon energy sources [4], [5], [6], [7]. Thus, it also encompasses the importance of gender mainstreaming in energy policy.

In 2022, ASEAN launched the Roadmap on Accelerating ASEAN Renewable Energy Development through Gender-Responsive Energy Policy (ASEAN RE-Gender Roadmap). This initiative promotes the integration of women's contribution and participation into ASEAN's growing renewables market, fostering gender equity, enhancing climate mitigation efforts

and bolstering investments in renewable energy [8]. This roadmap outlines specific steps to incorporate a gender-responsive approach to renewable energy policymakers in the region.

Many of the millions of people who remain in energy poverty are highly vulnerable to the impacts of climate change and intersecting crises. In 2020, it was estimated that 8 million ASEAN households still lacked electricity, and 200 million people have no access to clean cooking [9]. The energy transition does not automatically benefit all when energy poverty is still deeply rooted in ASEAN. In the fossil fuel industry, 92% of the crude, petroleum and natural gas extraction workforce is carried out by men in ASEAN [10]. This widens the opportunity for women to become more actively engaged as it is reported that currently about 32% of the people employed in the renewable energy sector globally are women [11]; with fast the transition to this sector in ASEAN in the coming years, larger economic opportunities may well be created for women.

However, women are more likely to bear a greater share of the socio-economic impacts of energy transition. Skilled male workers are better able to find new employment and the small numbers of women who lose their jobs because of such closures make the impact invisible [12]. Hence, governments may overlook their interests in transition planning. Therefore, it is imperative to recognise the specific needs of women in the energy workforce and invest in supporting transferrable skills.

Gender inclusion will bring more financial opportunities to the energy transition. Empowering women is known to contribute to economic growth and stability, and result in better performance in the public and private sectors and a decline in income disparity [13], [14]. The ASEAN Energy and Gender Report: Development Finance highlights that creating an enabling environment for gender inclusiveness may attract much-needed investments in renewable energy in the ten ASEAN Member States (AMS) [15]. However, the region received only 6.2% of the world's total USD 11.4 billion budget on energy and gender projects from 2010 to 2019 [15].

Box 1. What is APAEC?

The ASEAN Plan of Action for Energy Cooperation (APAEC) is a series of guiding policy documents or regional blueprints that aims to promote multilateral energy cooperation and integration to meet ASEAN Economic Community (AEC) targets.

APAEC Phase II: 2021-2025 builds on the success of APAEC Phase I: 2016- 2020 and sets out ambitious targets and initiatives to enhance energy security and sustainability, which also supports the United Nations Sustainable Development Goal 7 (UN SDG7). Phase II takes sub-theme of "Accelerating Energy Transition and Strengthening Energy Resilience through Greater Innovation and Cooperation." It encompasses 7 Programme Areas: ASEAN Power Grid; Trans-ASEAN Gas Pipeline; Coal and Clean Coal Technology; Energy Efficiency and Conservation; Renewable Energy; Regional Energy Policy and Planning; Civilian Nuclear Energy.

APAEC Phase II: 2026-2030 is started to be developed by APAEC Drafting Committee starting January 2024 under Lao PDR ASEAN Chairmanship and plan to be endorsed and launched in September 2025 under Malaysia's ASEAN Chairmanship. This development is taking into consideration the ASEAN interests and alignment with the ASEAN Economic Community vision and strategies, latest ASEAN policies and frameworks such as ASEAN Carbon Neutrality Strategy, and insights from ASEAN external parties.

The publishing of this policy brief provides an opportunity to strengthen the energy-gender nexus in the region, as it coincides with the ongoing development of the next phase of the ASEAN Plan of Action for Energy Cooperation (APAEC) 2026-2035. A baseline assessment conducted in 2023 calls for systemic changes in drafting the contents of the APAEC that value inclusion and equality in society [17]. Hence, this policy brief explores the steps needed to mainstream gender in the energy sector, specifically in regional energy policy and planning.

2. Methodology

Given that the relation of energy and gender is still a nascent topic among ASEAN policymakers, this policy brief provides a gendered analysis by identifying challenges and opportunities of gender-responsive policy in the energy sector. The results offer recommendations that can be considered by the APAEC Drafting Committee (ADC) as a way forward to mainstream the gender-energy nexus, specifically within regional energy policy and planning. The study employs a mixed-method research approach through a comprehensive literature review, public

survey and learning exchange to understand the existing body of knowledge and identify gaps in gender-related aspects of energy policy within the AMS. The combination of these methodologies ensures a comprehensive and nuanced analysis of gender issues in ASEAN’s energy policy.

This literature review provides a foundational understanding of, and context for, two methods to acquire insights, namely:

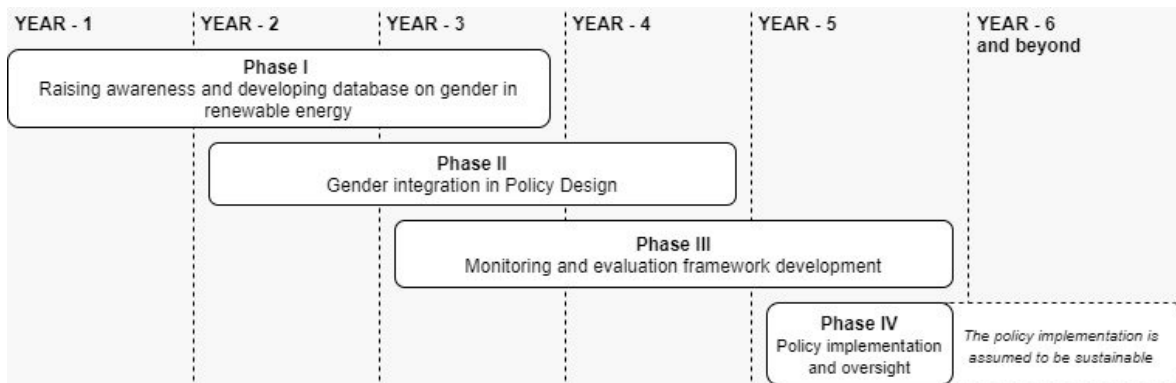
1. A public survey on energy-gender carried out from 27 March to 30 May 2024. The framework of the questions was divided into three sections: gender awareness in the energy sector, mainstreaming gender in ASEAN energy policymaking and energy-gender statistics data. The survey results represent nine AMS (N=88): about 69% of the respondents were women, 74% were affiliated with the energy sector (STEM, Non-STEM, and administrative jobs), 13% were senior-level and 3% were C-level [“Chief level”] executives.
2. A virtual learning exchange was conducted on 29 May 2024 among the AMS featuring experts’ insights from the ASEAN Centre for Energy, United Nations

Environment Programme (UNEP), UN Women and Oxfam. The session was followed by discussions which became the foundation of this brief through practical insights and experiences from AMS participants, contributing valuable qualitative data to the study.

3. Key Findings and Analysis

As efforts to promote an inclusive energy policy and mainstream gender in the energy transition have been underway in the region through the ASEAN RE-Gender Roadmap (Figure 1), which will serve as the foundation for gender integration in the energy policy design. This initiative aims to integrate women’s contributions into the emerging renewables market in ASEAN, and foster a ripple effect that promotes gender equity, accelerates climate mitigation efforts and boosts investments in renewable energy. The Roadmap built on n ASEAN’s challenges to mainstream gender in renewable energy policy and identified four phases to formulate RE-Gender policy. In Phase I of the Roadmap, the goal is to develop a database on gender in renewable energy and carry out initial work on Phase II, the goal of which is to advocate gender mainstreaming in policy through several workshops.

Figure 1. Roadmap Development Phases



Source: ACE, 2022 [8]

This Roadmap can serve as a concrete base for the APAEC to formulate a just and inclusive RE action plan through a gender approach. This adopted Roadmap provides milestones and parameters for the integration of gender equity in the energy policy design. Incorporation of the implementation of the ASEAN RE-Gender Roadmap under the next phase, the APAEC can amplify how gender is being responded to and increase the likelihood of a just and inclusive energy transition at the regional level.

The challenge of insufficient awareness and recognition of the gender-energy nexus continues to impede progress in this area. This lack of focus not only marginalises the issue but also has a ripple effect on efforts to engage with and understand existing gender-disaggregated data. This, in turn, hinders the analysis necessary for implementing the Roadmap and establishing a supportive environment. Furthermore, the impetus to drive the implementation of this Roadmap is limited, as it is neither explicitly mandated nor acknowledged as an essential component in the current ASEAN Plan of Action for Energy Cooperation (APAEC).

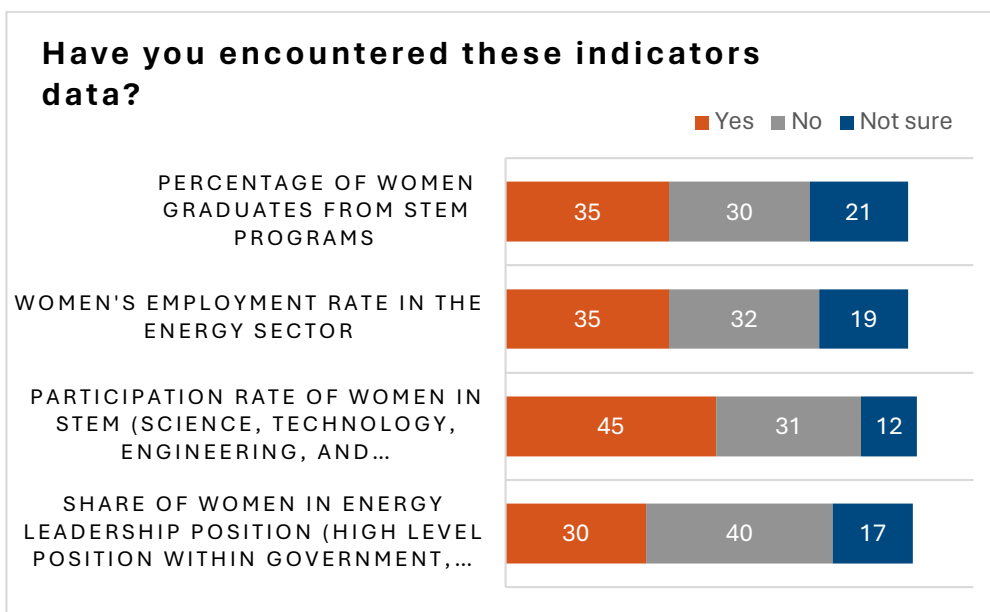
To address this issue, it is essential to update the assessment of challenges to include the implementation and mainstreaming of recommended actions as explicit milestones in the new APAEC. By doing so, we can ensure that the energy-gender topic receives the attention it deserves, facilitating better data analysis and a more robust enabling environment, ultimately leading to more effective

policy implementation and progress in gender equality within the energy sector.

The recommendations highlighted below are considered enablers of gender mainstreaming in energy policy and activities.

3.1 Lack of Relevant Gender Disaggregated Data for Energy Policymaking

Figure 2. Survey Results on the Awareness of Energy-Gender Data Availability



Source: ACE Survey. Note: STEM (Science, Technology, Engineering, and Mathematics)

The limitations in the existing energy-gender data, such as outdated and missing data for a few countries, are leading to minimal influence towards producing inclusive energy policy and planning. They are exacerbated as well by the low public awareness of these data. The ACE survey results found that on average, 35% of the respondents were unsure about the availability of energy-gender data in the respective countries. Moreover, not all respondents had encountered specific data indicators related to energy-gender. Only a third were aware of women's employment in the energy sector, or of female students in and graduates from Science, Technology, Engineering and Math (STEM) education (Figure 2). In fact, several studies have been conducted to quantify ASEAN women's participation in the energy sector (Table 1). Additional comprehensive data are essential to identify the barriers and to monitor the progress towards gender inclusion in the energy sector. Another issue is the absence of data in a few of the AMS relating to particular variables in the energy sector, such as GHG emissions, energy employment and energy investment. Therefore, it is

recommended that a centralised, reliable and high-quality ASEAN database on energy-gender be established that can be used to influence policymakers on gender mainstreaming in the energy sector.

During the learning exchange, the Philippines presented the example of a dedicated government body under the Department of Energy (DOE), called the Gender and Development Program (GAD), that focuses on gender mainstreaming in the energy sector. The country has also established the Gender Toolkit for the Energy Sector that allocates a budget towards establishing and maintaining a database that includes sex-disaggregated data and other gender statistics [22]. The AMS participants at the learning exchange agreed on the continuation of such exchanges and the need for capacity building to collect and monitor energy-gender data. A workshop which includes training from experts on how to raise awareness and establish gender-disaggregated data can be planned under Programme Area No.6 (Regional Energy and Policy Planning) of the APAEC.

Table 1. Energy-gender data in ASEAN that are available

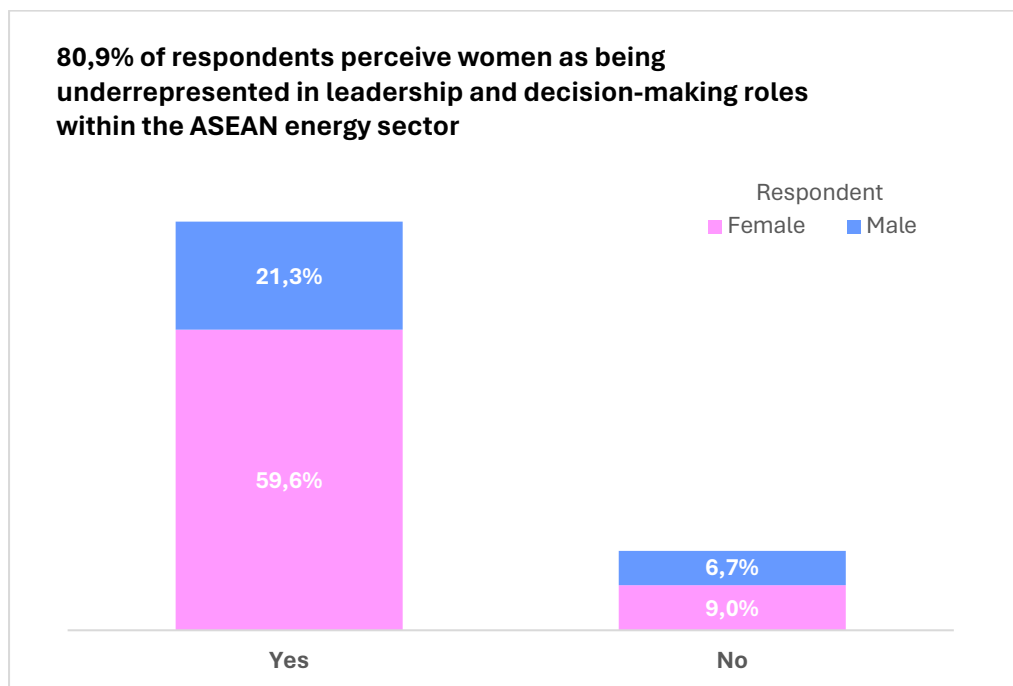
Indicator	Share Percentage	Source
Women graduates from STEM education	19.3%	USAID, 2022 [18]
Women students in STEM education	42% (Average)	WEF, 2022 [19]
Women' employment rate in the energy sector	8%	UN Women, 2021 [20]
Women in energy leadership position	11% Women Cabinet Ministers	UN Women, 2023 [21]

3.2 Limited Women's Representation in Energy Policy Decision Making

The participation of women in the energy sector is vital, as they offer particular perspectives and solutions, especially in the management of domestic resources. However, the ACE survey revealed that 80.9% of respondents agrees that women are underrepresented in leadership and decision making within the ASEAN energy sector.

As we enter the next development phase of the APAEC, it is essential to recognise the need for a more inclusive and gender-responsive energy transition. This involves enhancing the effective participation of women in decision making space such as in energy policymaking, planning, implementation and monitoring. Currently, women make up only 31% of the APAEC Drafting Committee (ADC) [23]. Efforts to improve gender diversity are ongoing within ASEAN.

Figure 3. Survey Results on Perspectives on Women's Representation in the Energy Sector



Source: ACE Survey

The primary challenges that hinder women from being represented in the energy sector involve educational, cultural and social norms in ASEAN that lead to a lack of awareness in integrating gender aspects in the energy sector. The ACE survey showed that 51% of women respondents experienced gender-related barriers when

engaging with the energy sector in ASEAN. A proposal which surfaced from the learning exchange called for a multistakeholder dialogue under the Programme Area in the APAEC to increase gender mainstreaming in energy policy. It is essential that there be close communication and knowledge-sharing between government, private industry,

academia and civil society organisations to overcome the barriers. In addition, there is a need for learning exchanges and multistakeholder dialogues within APAEC’s Programme Area to facilitate this process.

4. Policy Recommendations

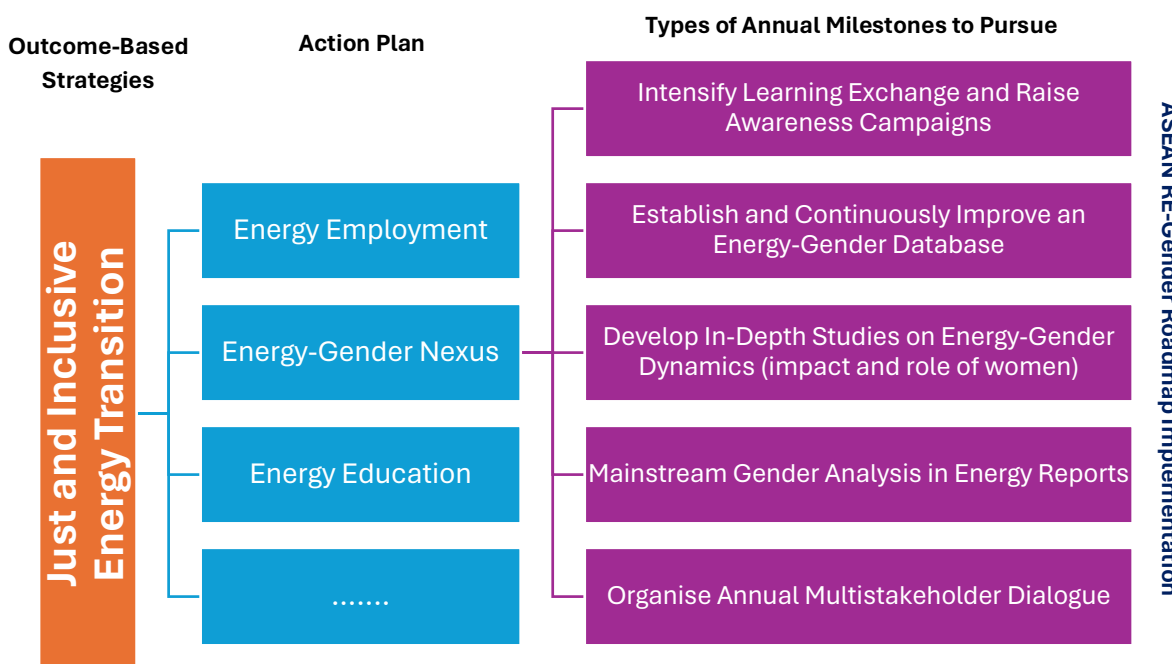
To ensure a balanced response to the energy trilemma and a transition to a low-carbon energy sector, it is essential to analyse the interaction between energy and society. This analysis should be prominently featured in the APAEC. To optimise women’s roles in the energy transition, a bottom-up approach is recommended, focusing on enhancing human rights by ensuring sustainable energy for all, promoting social inclusion and supporting community-

driven renewable energy solutions. Close collaboration with civil society actors is also crucial.

The next phase of the APAEC should begin by establishing dedicated Outcome-Based Strategies (OBS) under the Programme Area of Regional Energy Policy and Planning (REPP). These strategies should focus on a "Just and Inclusive Energy Transition", serving as the umbrella theme for all energy nexus priorities and milestones, including the energy-gender nexus and related activities.

The ASEAN RE-Gender Roadmap lays the foundation for addressing this often-overlooked topic. It provides guidance for ASEAN’s long-term vision of a gender-responsive energy policy. The proposed activities in the APAEC build upon and update the initiatives outlined in the Roadmap.

Figure 4. Mainstreaming gender in the ASEAN Plan of Action on Energy Cooperation (APAEC)



1. Intensify Learning Exchange and Awareness-Raising Campaigns

Limited awareness of energy-gender issues restrict understanding and recognition of their importance. To address this, awareness-raising campaigns for the general public and events for all ASEAN policymakers such as the ASEAN Member States Energy Focal Points in all levels should be strengthened. These could include continuous presentation of data and facts, capacity-building programmes, and learning exchanges such as webinars. The topics covered

should be diverse and multifaceted, and include such topics as how women are typically manage most of a household’s energy consumption, the impacts of the energy transition on women, the role of women to propel the vision, gender-disaggregated data in energy research, gender and energy poverty, educational and training programmes, gender and energy entrepreneurship, financing and investment in gender-responsive energy projects, and gender-responsive energy policies and governance.

2. Establish and Continuously Improve an Energy-Gender Database

Establish dedicated projects to identify the gender-related data required for further analysis and to support policy making processes, and to consolidate scattered data, if any, related to energy and gender. Collaboration not only with energy ministries, but also with national statistics agencies across ASEAN countries is essential to collect and process disaggregated data. However, not all countries have the capacity to gather such data. Support should be provided to these countries, starting with identifying the necessary data. This database can be used by policymakers and advocates to monitor progress in reducing the gender gap.

3. Develop In-Depth Studies on Energy-Gender Dynamics

Conduct dedicated studies, beyond those listed in the ASEAN Energy Outlook, to further explore the energy-gender nexus. These studies should examine the roles women can play in the energy sector, as well as the impacts they experience, such as access to clean cooking, electrification, affordability, exposure to resource extraction, and land use issues.

4. Mainstream Gender Analysis in Energy Reports

Incorporate a gendered approach in various relevant energy reports, preferably across each sector, such as the ASEAN Energy Outlook. This will ensure that gender considerations are systematically included in energy sector analyses.

5. Organise Annual Multistakeholder Dialogues

As mentioned in the ASEAN RE-Gender Roadmap, organise annual multistakeholder dialogues to facilitate discussions involving policymakers, local communities, the private sector, academia and multilateral bodies. These dialogues should align with existing energy-gender initiatives and modalities, serving as an enabler for broader engagement and collaboration.

6. Monitoring, Reporting and Evaluation Framework

It is necessary to mainstream this action plan within the APAEC framework to ensure it is properly mandated and monitored, allowing for effective tracking of progress towards a just and inclusive

energy transition. The monitoring plan ought to contain gender-sensitive indicators (qualitative or quantitative) and set targets, such as the percentage of women who are aware of the project, the number of men and women trained, the relative participation rates of men and women, and the percentage of women who benefit from the projects.

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