

Towards integrating gender and biodiversity dimensions into sustainable agricultural and financial landscapes in the Philippines



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| EXECUTIVE SUMMARY

The Philippines faces a critical challenge of biodiversity loss and climate change. Agriculture serves as both a contributor to greenhouse gases and land degradation while also providing opportunities for mitigation and adaptation interventions, including nature-based solutions, that can address these interlinked crises. Agriculture is also a sector that is vulnerable to hazards. When designing interventions, gender dynamics within land management significantly affect decision-making processes and resource distribution. Despite comprehensive laws that enshrine the participation of women in land rights and management, significant disparities persist in achieving gender equality. This hinders the full and equitable participation of women in agriculture and biodiversity protection.

This report examines the intersections of biodiversity, agriculture, climate change, and gender dynamics in the Philippines, with a focus on how sustainable finance initiatives can better integrate gender perspectives to promote sustainable agriculture, particularly considering women's roles in protecting and managing biodiversity. The report utilized a scoping review of literature and expert interviews in order to present the state of knowledge and develop a case study on banana production. A content analysis of sustainable finance policies and frameworks are also in this report.

Key findings highlight the multifaceted roles of women in agriculture, the constraints on their agency and decision-making power, and gaps in access to resources and opportunities.

Women share significant roles in agricultural production, in addition to their existing roles in ensuring household food security, nutrition, childcare, and other responsibilities.

However, current systems and legal frameworks – while showing progress in different aspects of their implementation – lack resources and capacity to close the gender gap in agriculture and effective land management, which also affect biodiversity. These findings underscore the need for sustainable finance mechanisms that prioritize gender equality and empowerment to address systemic inequalities, and promote sustainable agricultural practices and the protection of biodiversity.

The analysis of existing sustainable finance policies, particularly the Sustainable Finance Taxonomy Guidelines (SFTG), reveals gaps in addressing gender considerations within agriculture. While the SFTG focuses on climate change mitigation and adaptation,

biodiversity is not yet explicitly considered.

The phased and iterative approach emphasized by the Roadmap is helpful and allows for the building of capacities for both financial institutions and civil society.

However, this means that the rate of progress is gradual. The SFTG could be used as a catalyst for financing underfunded sectors and improving the accessibility towards marginalized groups. Still, this potential remains to be realized with the continued development and improvement of this new tool in the sustainable financial landscape.

The report offers guide questions based on gender-inclusive criteria that should be considered in the usage of the SFTG. Additionally, recommendations for how biodiversity could be better centered in sustainable finance are also offered. Ultimately, more partnerships are needed between scientific and academic institutions, government and non-government organizations, and rural communities to chart and monitor progress.

This report serves as an analysis that is hoped can be used as evidence for policymakers, financial institutions, and stakeholders to prioritize gender-responsive and biodiversity-centric approaches to sustainable finance, paving the way for a more sustainable and resilient future for the Philippines.



INTRODUCTION

The Philippines faces an urgent dual challenge of biodiversity loss and climate change. Among the many complex and interconnected impacts of these environmental emergencies, the nexus of biodiversity, agriculture, and climate change merits more attention in both science and policy (Ortiz et al., 2021). Biodiversity is essential for agriculture, as it provides ecosystem services that support production while also being the source of diverse, nutritious foods, and other products essential to food security and human health (Intergovernmental Panel on Biodiversity and Ecosystem Services (IPBES), 2019). Because of current threats to biodiversity driven by the expansion of agriculture, food security itself is put at risk because of biodiversity loss. In addition, biodiversity loss and its subsequent impacts are accelerated by climate change, which will continue to impact communities that are reliant on biodiversity and natural resources for their livelihoods and well-being.

Agriculture is already negatively affected by climate hazards that can reduce productivity. In the case of the Philippines, tropical cyclones and heavy rainfall that cause flooding (Cinco et al., 2016; Villarin et al., 2016) can have significant multiple effects on agriculture, people, and nature, including food security (Ortiz et al., 2023; 2021). And yet, despite being vulnerable to negative impacts, agriculture is the sector that has

great potential to capture carbon emissions, for example, through nature-based solutions, agroforestry, and conservation agriculture, which are essential for adaptation (Cardinael et al., 2021). This underscores the importance of decision-making in agriculture to achieve sustainable development. Here, it is crucial to emphasize the significant influence of gender in decision-making in agriculture and land management. Globally, women and men participate in agriculture, yet their roles greatly vary by region (Quisumbing & Doss, 2021).

In the Philippines, gender influences people's access to resources and opportunities, with women often facing limitations in acquiring assets, inputs, and services in agriculture.

Often seen as 'farmers' wives' rather than farmers themselves (Tapia et al., 2018), women are offered fewer opportunities, access to knowledge, and financial resources compared to men. This is problematic – beyond the fact that women make up roughly half of the population – because women play critical roles in agri-food systems and have distinct livelihood roles and responsibilities (United Nations Food and Agriculture Organization (FAO), 2023).

Mothers, or female heads of household, are largely responsible for their household's consumption of nutritious foods (Johnson et al., 2013), as they are typically in charge of food gathering, its preparation, and feeding young children. Thus, if gender disparities are addressed, and women are provided with greater resources and agency, women could contribute more effectively to achieving the multiple goals of enhancing agricultural productivity, and increasing resilience, household health, and well-being (Bryan et al., 2024).

In the Philippines, agriculture is practiced by roughly five (5) million farmers, the large majority of whom operate at the subsistence, small-scale level (Philippine Department of Agriculture (DA), 2018). Numerous initiatives prioritize gender considerations, evident in Philippine laws and programs related to agriculture, climate change, and sustainability. As a pioneer of gender-sensitive policies in Southeast Asia, the country strives for gender equality across all sectors (Jalagat et al., 2024). Key legislative mandates like Republic Act No. 9710, the Magna Carta of Women, underscore the need for Gender and Development initiatives to integrate or “mainstream” gender equality into development processes and programs in the Philippines, including in the Gender and Development divisions and programs of the Department of Agriculture (DA) and the Department of Environment and Natural Resources (DENR). However, despite these efforts, women still encounter significant obstacles in these spaces that must be addressed (FAO, 2023).

In research, a number of key studies have investigated gender perspectives and women's roles across a number of different locations and contexts, including farming and fisheries in the Philippines. However, more interdisciplinary research oriented towards policy action and implementation is urgently needed to understand where and how evidence can aid in closing the gender gap in agriculture. Key questions remain unaddressed on how to move from research into practice and implementation, for which financial resources are needed.

With Philippine institutions and legal instruments in place to potentially support gender and development initiatives, how can resources be mobilized to implement programs? Can existing barriers for marginalized groups, particularly women, be addressed with sustainable finance to support the just transition of agricultural systems towards greater equity and sustainability in the Philippine context? In this report, these interactions between biodiversity, agriculture, and climate change are examined with a gender lens to provide insight into how sustainable finance initiatives can take these important factors into account, and the barriers in doing so.

Structure of the Report

The main question that drives this research is: “How can Philippine sustainable finance initiatives better integrate both gender perspectives and biodiversity considerations to aid in the transition towards sustainable agriculture?” To address this question



this report is structured as follows: Firstly, a scoping review of literature was conducted to characterize the biodiversity-agriculture-climate change nexus in the Philippines and provide context of the state of knowledge. This was carried out with a gender lens, with special attention on how gender dynamics and differences affect decision-making in rural communities and agriculture. Secondly, as the focus of the report is on how sustainable finance initiatives can better take these dynamics into account, existing and relevant sustainable finance policies related to biodiversity, agriculture, and climate change in the Philippines were reviewed.

The definition of sustainable finance used in this report is the process of taking environmental, social, and governance considerations into account when making investment decisions in the financial sector. In particular, this report focuses on the Philippines' Sustainable Finance Taxonomy Guidelines (SFTG) proposed by the Bangko Sentral ng Pilipinas (BSP, or the Central Bank of the Philippines). This taxonomy was developed to aid financial institutions in determining whether projects are in line with the key principles and characteristics expected for sustainable finance projects.

The report focuses on the SFTG as it outlines major criteria for sustainable finance initiatives in the Philippines; as previously outlined, agriculture is a major sector where these themes overlap and where there is significant intersectionality between rurality and gender.

It is therefore important to assess whether this key document already considers the important dynamics of gender in its approaches toward agriculture, as well as its conformity with regional frameworks, such as those from the Association of Southeast Asian Nations (ASEAN). Currently, the inclusion of biodiversity is not yet explicitly considered in the Philippine SFTG, which at present only focuses on the objectives of climate change mitigation and adaptation, with a view to adding biodiversity in future iterations.

The complexity and intersectionality of agriculture, finance, and biodiversity necessitate expert knowledge and understanding. Therefore, expert interviews from these diverse domains were conducted to provide insight into this complex nexus, and their perspectives are incorporated directly into the report. A special case study on a major Philippine crop, banana, is also included. This is because banana production in the Philippines is a complex example of how gender differences, biodiversity impacts, and land reform interact and affect farmers' well-being and socio-economic outcomes. The final section of this report is to discuss the nexus, and offer recommendations and ways forward, particularly for incorporating the research findings towards the development of biodiversity-relevant guidelines, with the objective of promoting greater inclusion of marginalized groups that are more vulnerable to the joint impacts of biodiversity loss and climate change.

METHODOLOGY

Review of literature



A scoping review of peer-reviewed literature was conducted to explore the intersections of gender, agriculture, and biodiversity in the context of the Philippines. This review encompassed searches across multiple databases, including PubMed, Web of Science, Scopus, and Google Scholar, using keywords “gender,” “agriculture,” “biodiversity,” and “Philippines.” While not a systematic review, the approach allowed for the investigation of the status and breadth of scientific literature on the theme.

Content analysis of Philippine financial policies



Content analysis, a method used to systematically analyze qualitative data by categorizing themes and patterns (Erlingsson & Brysiewicz, 2017), was applied to the SFTG proposed by the BSP, as well as the ASEAN Sustainable Finance Taxonomy Guidelines. This analysis aimed to identify key criteria, principles, and characteristics outlined in the documents related to sustainable finance initiatives, with a specific focus on gender within the nexus of biodiversity-agriculture-climate change.

Expert interviews



Lastly, semi-structured interviews were conducted with key informants (experts) from agriculture, finance, gender studies, and biodiversity conservation in the Philippines. Experts were selected based on their roles in academia, government agencies, non-governmental organizations (NGOs), ensuring diverse perspectives. Interviews were guided by a set of questions on sustainable finance, perceptions of gender in agriculture and conservation, and challenges and opportunities for integrating these considerations into finance guidelines.

Experts were contacted with the study context and asked to participate with free and informed prior consent. As the focus of the interview was on their expertise rather than the experts themselves, an ethical review by an Institutional Review Board (IRB) was not needed based on the definition of human subject research (See National Institute of Health guidelines §46.102). The interviews were conducted according to international standards and data was stored securely. Interviews were transcribed and synthesized for the report. C. Moser's gender planning framework (1993) was used as a theoretical framework for analyzing gender.

REVIEW OF LITERATURE

Women's land rights in the Philippines



The Philippine Constitution, alongside other national laws and policies, have improved the situation of women in attaining gender equality in land rights. Based on a review by the National Confederation of Small Farmers and Fishers Organizations (PAKISAMA), a number of legal frameworks recognize the role of women in nation building and ensure the fundamental equality before the law of women and men (Corral, 2015). These include the Philippine Constitution itself, and other laws such as the Women in Development and Nation Building Act of 1992 (RA 7192). RA 7192 promotes the integration of women as full and equal partners of men in development and nation building, including in land development and governance. This law allocates at least 5% of all agencies and local governments' funds to Gender and Development (GAD) programs.

Land reform laws such as the Comprehensive Agrarian Reform Program Extension with Reforms (CARPER, RA 9700), assert: "The State shall recognize and enforce, consistent with existing laws, the rights of rural women to own and control land, taking

into consideration the substantive equality between men and women as qualified beneficiaries [...] These rights shall be independent of their male relatives and of their civil status". However, there remain many significant challenges in implementing these frameworks enshrined in Philippine laws, policies and other legal instruments. For further information, please see the PAKISAMA report (Corral, 2015) for their detailed gender analysis on land tools in the Philippines.

Scientific studies on women's participation in agriculture and biodiversity



In the diverse agricultural landscapes of the Philippines, women play multifaceted roles that intersect with gender disparities, shaping the dynamics of rural livelihoods and resource management. This review focuses more on agriculture, as there is less research on women's participation in the protection of biodiversity within agricultural landscapes in the Philippines, revealing it as an area needing more research. Across various studies, women are portrayed as integral contributors to agricultural activities,

albeit often in roles that are marginalized or undervalued.

- In a study by Paing et al. (2022), focusing on the Cordillera region, women were perceived to possess a stronger association with and understanding of ecosystem services. While men still took over most farming roles, women were in charge of wine-making activities within their communities.
- The research of Tapia et al. (2018) in Albay observed that men typically made farm decisions independently, while women tended to make them jointly with their husbands. Agricultural extension programs were criticized for not adequately catering to the specific needs of women, who were often viewed merely as “farmers’ wives” rather than farmers themselves. Women demonstrated greater knowledge of marketing farm products. For example, all farming decisions (e.g., choice of food crops, cash crops, and tree species to be planted and farm production) were decided by the farmer-husband in farming households. Growing coffee was valued by women, who believed they would contribute to flood protection.
- In Bukidnon, there was noted unequal access to resources and opportunities between men and women in agriculture. For instance, women received less agricultural training and credit, and earned 50% less than men. Women were in charge of the nutrition and care of household members, which may explain the priority assigned by women to the

contributions of farming to both household income and food supply. Male farmers gave more weight to production-related farming system attributes, preferring crops with shorter growing periods and reliable marketing channels (Ureta et al., 2016).

- In Southeast Asia, women were often at the end of the production process and delegated to marketing tasks. This left them out of direct decision-making for land management. However, the study also notes that there have been increases in women-headed households in rural areas, and women have emerged from their traditional reproductive roles and are now engaged in the market economy. This study also found that women in the region were often excluded from decision-making roles and had less access to information and education compared to men (Catacutan & Villamor, 2016).
- The research of Buenavista et al. (1994) in Agbanga, Leyte underscored the role of social capital in livelihood strategies, with male-dominated activities limiting women’s options in farming. The distribution of work between women and men was shown to be flexible relative to productive work, as both women and men were involved in different facets of agriculture. However, this remained rigid in terms of reproductive and domestic work: managing the childcare and the household were tasks still delegated largely to women.
- In Misamis Oriental, gender disparities in access to assets and perceptions affected the adoption of

conservation agriculture (Harman Parks et al., 2015). Land tenure insecurity was highlighted as an impediment to adoption, with a clear gendered division of labor observed, with men primarily engaged in farming and women in household management. Women did not own land as often as men; they generally obtained or accessed land through their husbands. In fact, there were four different ways people claimed to access land: (1) inheriting from the husband's or wife's parents; (2) "mortgaging;" (3) cultivating family or friends' land with permission; or (4) applying for land through the Certificate of Land Ownership Award (CLOA) Program. In the case that a woman inherited land, the title usually was in the husband's name because he was considered head of the household.

- As a counterpoint to these studies, a study conducted by Lu (2011) investigated women's participation in Benguet, which is considered the vegetable-growing capital of the Philippines. There, female household members who were engaged in any agricultural activity in Benguet numbered 129,000 persons, outnumbering their male counterparts by at least 45,700 persons. In Benguet, women were regarded by men in Benguet as integral partners in farming, and they hold and control agriculture-derived incomes (Lu, 2011). This study highlights the cultural and context-specific differences in gender-based norms in agriculture, even within different regions of the Philippines.

The role of women and gender in fishing practices in the Philippines



Fishing is a major part of agricultural activities in the Philippines. Although fishing and aquaculture are not the primary focus of this study, many of these roles are often linked and overlap with women's roles in the household and in agriculture. For example, women are often more involved in the processing and sale of fish products rather than the physical labor related to fishing and fish-rearing, and also have key roles in contributing to household nutrition.

- In Palawan Marine Protected Areas (MPAs), men tended to display higher levels of consciousness regarding MPAs, leading to greater attendance and participation (Jontila et al., 2022). However, both genders expressed the benefits of MPAs. Active engagement from both men and women was emphasized as crucial for the successful establishment and management of MPAs. Despite only a small percentage of women being involved in fishing, they constitute a significant portion of the workforce involved in processing fish.
- De Guzman (2019) emphasized the importance of edible invertebrates and seaweeds as essential protein sources, particularly for poor households. The role of women in small-scale fisheries was often overlooked, despite their significant contributions to household activities and food supply, such as in gleaning (i.e., foraging) activities on reef flats. This was an activity that was also

increasingly performed by men due to declining fish catches.

- In Calatagan, Batangas, Ladia et al. (2019) highlighted that women's productive activities were concentrated during the wet season, primarily focusing on household duties, while men were predominantly engaged in fishing activities. Women

tended to utilize natural resources for household consumption, while men focused on generating income. Additionally, women were involved in tourism-related activities. As they are not directly involved in going out to sea, their knowledge was largely limited to the intertidal zone.



Photo by FAO

INTERVIEWS WITH EXPERTS ON GENDER, AGRICULTURE, AND BIODIVERSITY



Gender roles in agriculture and biodiversity management

In terms of gender roles in biodiversity and land management, Ms. Joan Abes from the Forest Foundation Philippines shares key insights from their engagements. The Forest Foundation is a non-profit organization that works with local communities and Indigenous Peoples through grants and technical assistance that protect and conserve Philippine forests and support forest-dependent communities. In their numerous engagements, they observe that:

“Men are more typically able to reach higher elevations, while women stay in lower areas. Most of the activities of the women, in terms of forest management, are confined to clerical work. For example, they serve as the secretary of their organizations, they’re the treasurers, or they’re involved in backyard gardening. Whereas men are usually involved in forest patrolling. They have the perceived notion that it’s too dangerous for women to go up the mountain, especially in areas where there are peace and order considerations.”
(Ms. Joan Abes, Forest Foundation Philippines).

Their engagements show that more men attend activities regarding forest conservation, because women are not able to leave their household responsibilities to participate actively. Sometimes, training and capacity building events are located in places far from their homes, signifying a day’s worth of work “lost” if they were to attend. Ms. Abes also shared the experience from working with community members that women are perceived by their communities as more adept in conflict management and negotiations, because of their disposition. This context changes in different regions in the Philippines where there are more cultural norms within ethnic groups.

For example, tribal chieftains (e.g., *datus*) are men, and this is also common in Indigenous communities. Many organizations are now approaching forest conservation with women’s empowerment as an objective. This may come into contrast with male chieftains who are accustomed to holding these roles of leadership within their own communities. For example, Ms. Abes notes that gender roles are not necessarily material to them; different communities and ethnic groups have their own perspectives and worldviews on gender roles. *“We [explain] that it doesn’t mean that we’re trying to go against their culture, but to help them*

at least realize that there is a role for women in terms of forest conservation, as well as in implementing the projects. [...] Women working in the field [have reported that they] feel that they can join, except for the fact there are things they have to do at home."

The roles and responsibilities of women at home were also a prominent point in the discussion with Ms. Hazel Tanchuling, an agricultural expert with Rice Watch. Rice Watch has engaged with rural agricultural communities and climate field schools for over two decades. Ms. Tanchuling emphasizes that beyond the usual reproductive roles that they fill, women also have a lot of roles within the community and are active within local organizations. This includes organizing activities and finding other sources of income when there is not enough income from the main crop. This aligns with the concept of the 'triple burden' of women in gender planning (Moser 1993).

"There are still multiple burdens when you look at it because [women] also work at home. If there was a better distribution within the domestic and reproductive roles, this would ease the burden on women and allow them to engage in more economic work, but because they are burdened by many other things... we have to be careful that the projects we implement do not contribute to the increase of multiple burdens because their domestic and reproductive work doesn't lessen." (Ms. Hazel Tanchuling, Rice Watch).

In their work on building resilience, Ms. Tanchuling says that women are usually the ones who attend training sessions.

The number of women participants increased when programs on farm income diversification were introduced. While they used to have quotas to reach more women farmers, Rice Watch no longer needs to do that because women already actively participate. They need more male farmers to join in the process, as they are the ones who apply for programs or projects. Ms. Tanchuling also notes that in a recent survey they conducted with over 75 households, women do have decision-making powers over their lands: *"[Women are] the ones who buy the supplies, and if you're buying supplies, you'll buy what's available. So, if you ask them, they're the ones buying the seeds and fertilizers, and even taking out loans. That means that they are the ones making decisions over what to buy."* (Ms. Hazel Tanchuling, Rice Watch).

Considering the importance of fishing and aquaculture in agriculture, the Biodiversity Management Bureau, which is under the Department of Environment and Natural Resources, their actively seeks to expand the participation of the youth and continue to mainstream gender and development work.

Ms. Jhorace Tupas, who is a conservation professional in the coastal and marine environment sector, says, *"We want to see fishermen included in decision-making on the ground, we want to see wives of the fisherfolk also included. Even the youth, even the young people. We are surprised to see many young people already involved in ocean conservation. That's very positive for us and something we can build on to continue the work."*



Climate-resilient agriculture and shifting to organic systems

Director Alicia Ilaga of the Department of Agriculture Climate Resilient Agriculture Office (DA CRAO) has been directly involved in shaping the Adaptation and Mitigation in Agriculture Program (AMIA). The DA CRAO provides policy support and strategic direction for agriculture and fisheries sectors in addressing climate change challenges. It also promotes the establishment of climate-resilient villages and scaling them up for broader regional initiatives through a farmer-centric approach. The program offers tailored support services and training in climate-resilient farming and fishing, along with diversified livelihood options to help farmers enhance their resilience to climate change. It also offers skills training, access to credit and insurance, and marketing support to the communities.

The AMIA program has 18 villages in Region 6 (Western Visayas), and a recent survey revealed the participation of 116 male and 132 female farmer respondents. The study showed that one of the constraints on women is that they participate in agricultural activities, but that farm machineries are not suitable for them. Another constraint is that most women are involved in marketing, but it remains challenging for them to market their products because of their distances from the market. AMIA helped develop farm equipment that was more suitable for their stature and physical abilities, and brought in equipment and transportation

to sell their products in the market more easily.

In 2023, AMIA replicated the study in Region 5 (Bicol Region), and they found that women were mostly involved in marketing and processing the products and enterprise development, similar to Region 6. They also found that women lacked the necessary skills and knowledge to process their projects further. This is where their work continues to build capacities. Given the current and future threat that climate change poses to agricultural communities throughout the Philippines, Dir. Ilaga emphasizes the importance of accessible climate information.



AMIA training and capacity building emphasizes women's participation in understanding and accessing climate information. Photo courtesy of DA CRAO AMIA.

"A difference in the AMIA program is that we start with the knowledge of climate risks. How can you adapt to something you don't know? So, climate information is what makes [AMIA] different from other programs, because we don't give any recommended technology or practice

without identifying climate risks first. Our provision of climate information also includes the dissemination of climate- and weather-informed farming and fishing advocacies, which assist farmers and fisherfolk in better decision-making in their farms. These advisories help women in their day-to-day activities at the farm, household, and community levels—assisting them in performing their triple roles in productive, reproductive, and community spheres. Climate information is thus a gender-responsive intervention.” (Dir. Alicia Ilaga, DA CRAO).

Differences in strength and the capacity for physical labor were also key points in the interview with Mr. Jerry Sabay of the Nueva Visayas Agrarian Reform Cooperative (NUVIARCO) and Mr. Jesmar Lozada of Initiatives for Dialogue and Empowerment through Alternative Legal Services, Inc. (IDEALS) who have partnered together for Project GROW (Project on the Guidance for Agrarian Reform Beneficiaries on Organic Farm Development and Sustainable Way of Working), a project which seeks to empower elderly Agrarian Reform Beneficiaries (ARBs) by providing them with the necessary skills and resources to establish and sustain profitable organic banana farms. Through practical training and support, the project seeks to transition conventional farmers into successful organic farming entrepreneurs, promoting environmental sustainability and economic income.

In their perspective, they shared that the farm labor related to banana production is physically demanding and thus delegated to men. The transition to

organic agriculture involves a lot of preparation and connection with the international market to make sure that there are buyers of their organic produce. For this, Mr. Sabay and Mr. Lozada emphasize that the capacity-building of agricultural families – both women and men – is key to their program, which seeks to empower and inspire other ARBs to join the transition towards organic agriculture, with multiple benefits for the environment and the communities with the reduction of hazardous chemical inputs.

Mapping the dynamics and interactions in the nexus



Based on these studies and the expert interviews, a systems diagram was constructed to show the different variables that affect gender equality in agricultural activities, including biodiversity management in agricultural systems, where possible. Causal loop diagrams and systems thinking are useful for disentangling complex systems, often highlighting that causes and effects are less straightforward than suggested by studying just parts of the system (Ballew et al., 2019; Lezak & Thibodeau, 2016; Ortiz et al., 2021). Systems thinking is also viewed as fundamental to understanding and addressing complex environmental problems, such as climate change.

The review of the literature showed that women are lagging in terms of their agency and decision-making power. Factors that affected these included: more responsibility (measured in working hours) for reproductive tasks like

childcare. These take away their time available for performing tasks related to agriculture, which were mostly in marketing and post-processing. Cultural norms and the weaker perceived physical abilities and stamina of women also limited the number of tasks they participated in. Decision-making power and the recognition of land rights (e.g., through land titles) are also tipped highly in favor of men compared to women. This was also affirmed by interviewed experts; while women's participation in the diverse programs is high, men still own the land titles and, thus, still often have “the final say”.

In fact, while the land tools exist and the legal and policy frameworks to support and implement them, local women are largely unaware of it (“we do not know

that we could have our own land in our name”); it is not in their knowledge to fight for their rightful land entitlement (Bejeno, 2010). All of these restrictions limit women's incomes and access to other opportunities to enact change within this system (Figure 1).

On the other hand, a negative sign (-) indicates negative feedback, where an increase in one (1) variable decreases the other. For example, an increase in the time women spend doing reproductive tasks reduces the number of agricultural activities they can participate in, thereby reducing their income. The constructed systems diagram illustrates the various factors perpetuating women's limited agency and decision-making power, including the unequal distribution of tasks and disparities in land rights.

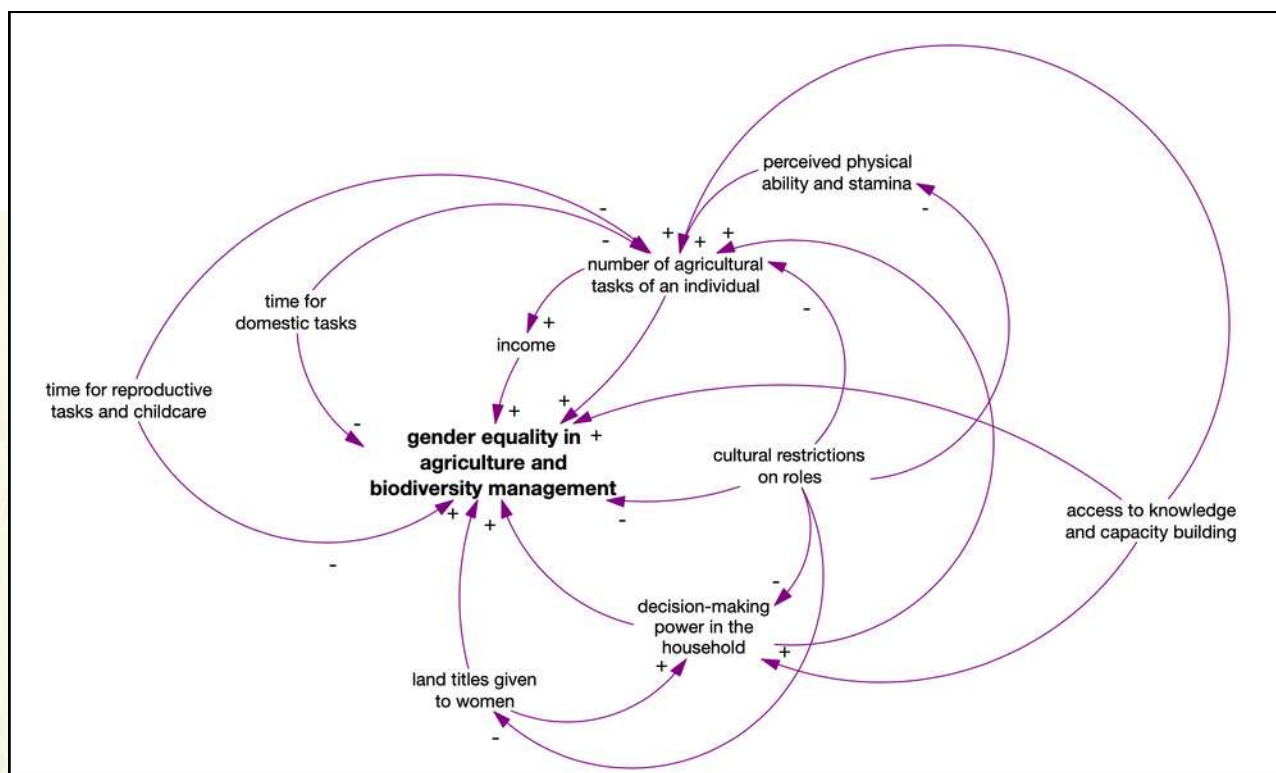


Figure 1. A causal loop diagram shows interacting variables that affect gender equality in agriculture and biodiversity management. Arrows indicate a (+/-) relationship between two (2) variables. This is a simplified diagram of a very complex system that includes cultural norms, traditions, social and policy environments. However, it aims to show the identified main factors that affect gender equality in agriculture and biodiversity management, based on the reviewed studies and interviews

In the figure, a positive (+) sign indicates positive feedback, meaning that an increase in one (1) variable increases the other. For example, if women's incomes were to increase, this would increase equality and close the gender gap in agricultural income.

Therefore, integrating a gender perspective into sustainable finance mechanisms is crucial for addressing

systemic inequities and empowering women in agriculture. It is argued that decision-making power in agriculture also extends to decisions made in land management, which affect biodiversity. These dynamics between gender and biodiversity are also exemplified by banana production in the Philippines, which is a major source of income and livelihood all over the country, particularly in Mindanao.



Photo by CCAFS-CGIAR

CASE EXAMPLE. GENDER-BIODIVERSITY DYNAMICS IN BANANA PRODUCTION

Banana production contributes to both the economy and the livelihoods of many rural communities in the Philippines. However, the sector is also well known for its environmental impacts. In plantations, large areas of land are cultivated with a single variety (e.g., Cavendish for export). In the Philippines, the expansion of intensive industrial banana plantations has led to habitat loss, soil degradation, and the decline of native species (Ortiz & Torres, 2020). Moreover, intensive pesticide use in conventional banana farming further exacerbates environmental degradation, impacting soil health, water quality, and pollinator populations, in addition to human health impacts. Climate change is thought to affect the dynamics of pests and diseases in what is already a high-input system saturated with synthetic chemical inputs (Salvacion et al., 2019; Aguilar et al., 2008).

The sector is highly vulnerable to climate change and its extremes. Typhoon Pablo in 2012 set the banana industry back by five (5) years before it could regain the same level of production (Ortiz, 2023). However, at present, current policies that regulate banana production and its impacts are mostly related to phytosanitary standards rather than the

protection of biodiversity or adaptation to climate change (Ortiz & Torres, 2020). This makes climate-resilient approaches, as well as diversification and a shift away from monocropping, urgent in this sector. In part to address these challenges, there is a growing movement towards sustainable banana production practices. Agroecological approaches, such as intercropping, agroforestry systems, and organic farming, offer promising alternatives to conventional monoculture systems. These practices not only enhance biodiversity but also improve soil fertility, pest management, and resilience to climate change.

However, there must also be greater efforts to promote gender equality and fair wages in the sector to truly transform the sector towards sustainability. In the Philippines, banana production often involves and perpetuates distinct gender roles. While men typically dominate the labor-intensive tasks, such as land preparation, planting, and harvesting, women are heavily involved in post-harvest activities, like packing, sorting, and marketing.

This division of labor reflects societal norms and cultural expectations, but also contributes to gender disparities in income and decision-making power within

the industry. Moreover, women's participation in banana production is marked by limited access to resources, training, and extension services.

A report by Oxfam Philippines (2018) sheds light on the harsh reality faced by banana farmers in the Philippines, despite being part of a lucrative industry. Although agricultural reform is enshrined in Philippine law, even when land rights are granted to Agricultural Reform Beneficiaries (ARBs), there are many challenges that limit farmers' financial and decision-making freedoms (Oxfam Philippines, 2018). Many ARBs find themselves trapped in a cycle of poverty due to exploitative contracts with multinational companies. Mr. Jerry Sabay, chairperson of Nueva Visayas Agrarian Reform Cooperative (NUVIARCO), shares that prices for bananas would go as low as PHP4 (0.07 USD) for a kilo. These contracts perpetuate the economic struggles of farmers.

In the case of NUVIARCO, when a large multinational closed shop in the Philippines, many were left without a contract. Project GROW, an ongoing project between NUVIARCO and law advocacy NGO IDEALS, allows for the capacity-building of banana growers to transition into organic agriculture. Mr. Sabay shares that there are 119 ARBs participating in Project GROW; a third of these farmers have already become certified organic, a process which takes approximately three years. Mr. Sabay said, "Because of our shift to organic agriculture, we no longer use synthetic nputs, just organic matter. To be honest, it's hard going organic. But it's sustainable. Especially for our health."

Organic agriculture was selected as the key tool for empowering ARBs in Project GROW, according to Mr. Jesmar Lozada (IDEALS). *"Based on the research of the organization, conventional agriculture is not sustainable. This was one of the reasons why [we advocated for the shift with Project GROW]. Another is that it increases the market value, because bananas are bought at higher prices, because they were being deprived of better income by the low prices that they were forced to sell their bananas [to the multinational]."*

Organic farming has emerged as a transformative approach within many agricultural sectors, albeit only recently in the banana industry in the Philippines. It offers a sustainable alternative to conventional practices, while empowering smallholder farmers. While they tend to produce lower yields, they are more profitable and environmentally friendly, and deliver equally or more nutritious foods that contain less (or no) pesticide residues. Organic agricultural systems deliver greater ecosystem services and social benefits (Reganold & Wachter, 2016).



AMIA training and capacity building emphasizes women's participation in understanding and accessing climate information. Photo courtesy of DA CRAO AMIA.

While the efforts of projects and partnerships in civil society and rural communities are meaningful, substantial support from both the government and industry is essential to bring about large-scale and long-term change. Despite some governmental recognition of the issues at hand, effective measures to address the systemic inequalities in these contracts have been lacking. Efforts by farmer cooperatives and other NGOs have attempted to renegotiate contracts and empower farmers, particularly women.

Women within these farming communities continue to bear a disproportionate

burden, with traditional gender roles limiting their opportunities for economic empowerment and leaving them with few avenues to improve their livelihoods (Oxfam Philippines, 2018).

While efforts such as Project GROW and community-driven initiatives are valuable, ultimately, there should be fairer business models that ensure a dignified standard of living for all involved in banana production.

In this regard, where do Philippine institutions stand in their readiness to support the just transition with sustainable finance?



ANALYSIS OF THE PHILIPPINE SUSTAINABLE FINANCE LANDSCAPE

In its Sustainable Finance Roadmap, the Philippines acknowledges the necessity of transitioning to a more sustainable and environmentally conscious society, particularly towards a circular economy, given its growing population, resource limitations, and susceptibility to climate change. This transition not only addresses pressing environmental crises but also presents opportunities for investment, economic growth, and job creation. Mobilizing finance to support sustainable initiatives is, therefore, key to the just transition. The Philippine government outlines its roadmap for fostering the development of the Philippine sustainable finance ecosystem, detailing specific actions and initiatives to be pursued. But what is sustainable finance, in the first place?

Sustainable finance is an emerging field within the financial sector. It represents a pivotal shift towards aligning economic activities with environmental, social, and governance considerations. As the international community grapples with the environmental crises, sustainable finance emerges as a mechanism to channel capital towards investments that generate positive social and environmental impacts alongside financial returns. This transformative approach to finance integrates sustainability principles into

investment decision-making processes, fostering long-term resilience and prosperity. The Bangko Sentral ng Pilipinas (Central Bank of the Philippines, or BSP) defines sustainable finance as the following: “Sustainable finance refers to any form of financial product or service which integrates environmental, social and governance criteria into business decisions that supports economic growth and provides lasting benefit for both clients and society while reducing pressures on the environment. This also covers green finance which is designed to facilitate the flow of funds towards green economic activities and climate change mitigation and adaptation projects” (BSP Circular No. 1085 2000, p.1-2).

With this in mind, the report analyzes the newly released Philippine Sustainable Finance Taxonomy Guidelines (SFTG), which provide guidelines for financial institutions, making it a key document in the sustainable finance landscape of the country.

About the Philippine Sustainable Finance Taxonomy Guidelines

The Philippine Sustainable Finance Taxonomy Guidelines (SFTG) are guidelines created by the Financial



Sector Forum (FSF) member agencies, namely the BSP, the Securities and Exchange Commission (SEC), and the Insurance Commission (IC).

The FSF is a voluntary inter-agency body that provides an institutionalized framework for consultation, coordination and exchange of information relative to the supervision and regulation of the financial system, while preserving each agency's mandate. This means that the SFTG is a commitment of the whole FSF. As indicated in the BSP Circular No. 1187, "The Philippine SFTG was developed under the auspices of the FSF, following the recommendations in the Philippine Sustainable Finance Roadmap released by the Inter-agency Technical Working Group for Sustainable Finance (or the Green Force) in October 2021."

Similar to the biological concept of taxonomy, which is the science of naming, describing, and classifying organisms, the SFTG is a means for classifying initiatives that will undergo an evaluation process to see if they are eligible for sustainable finance.

BSP Circular No. 1187 incorporates the SFTG into the Manual of Regulations for Bank (MORB), giving banks a period until the end of 2024 to understand and familiarize themselves with the SFTG, and informing them that the collection of information related to the use of the SFTG shall start in 2025, for consistency with the BSP Circular 1187. The interviewed financial expert shared:

"The SFTG is designed to be aligned with the national policies and strategies under the Philippine Development Plan 2023-2028, the Nationally Determined Contributions and the National Adaptation Plan."

The SFTG was released as part of the commitment of the BSP under the Philippine Sustainable Finance Roadmap ("Roadmap") released in October 2021, with the first version being released at the end of February 2024. The SFTG aims to create guidelines for the decision-making of financial institutions and to be "a guide for a variety of users, including companies, investors, financial institutions, regulators and consumers, to help them make an informed decision to originate, invest, finance, purchase or monitor an asset" (FSF 2024, p. 4). The interviewed financial experts concur that this tool could be also used by policymakers, non-financial institutions, MSMEs (micro, small, medium enterprises), large enterprises, depositors, providers of capital for investors, and green and sustainability bond insurers. It aims to direct and increase capital inflows to activities to direct and increase capital inflows to activities that further sustainability objectives, including climate resilience building. Lastly, it promotes transparency and credibility by reducing greenwashing risk and supporting a just transition. In the next section, the content analysis of the SFTG is presented to gauge whether it adequately addresses agriculture, gender, and biodiversity in its guidelines.

GENERAL FRAMEWORK OF THE SFTG 2024 DOCUMENT

The framework of the proposed SFTG has three major aspects.

First, the SFTG is aligned with the Philippine Sustainable Finance Guiding Principles (“Guiding Principles”),

which include resilient food systems and environmental management (Figure 2). Second, the SFTG adopts a Principles-Based Approach. Third, the SFTG adopts a Phased Approach.



Figure 2. Sustainable Finance Guiding Principles. (Source: FSF p. 14)

ALIGNMENT WITH THE PHILIPPINE SUSTAINABLE FINANCE GUIDING PRINCIPLES

The Guiding Principles define the objectives of the SFTG and are the basis for the strategies developed therein. The Guiding Principles are based on the United Nations Sustainable Development Goals (SDGs) and envision a Sustainable Finance Taxonomy that broadly aids in achieving the SDGs. Based on these Guiding Principles, Guiding Principles 1, 4, and 5 allow for the integration of

gender issues as an approach to sustainable finance (Table 1).

However, despite this integration of gender in the Guiding Principles, the proposed SFTG itself has major gaps on integrating gender as it does not adopt the same extent of gender discourse as the Guiding Principles. A content analysis of the SFTG reveals very little consideration of ‘gender’ or ‘women’.

Gender is considered under the Nationally Determined Contributions (NDC) of the Philippines under the Paris

Agreement, rather than the taxonomy itself: “The NDC also recognizes the important role of cross-cutting issues, such as gender, indigenous peoples, and poverty reduction, in achieving sustainable and climate-resilient development in the Philippines” (FSF 2024, p.24).

Therefore, while there are gender considerations under climate change mitigation and adaptation, sustainable cities, and sustainable infrastructure, there is little in terms of Guiding Principle 3, which relates to Resilient Food Systems.

GUIDING PRINCIPLE	Examples of gender-responsive activities under the Guiding Principle
Guiding Principle 1: Climate Change Mitigation and Adaptation	• Optimize energy consumption, e.g., promoting energy efficiency projects; facilitating access to finance for energy efficiency products aimed at women/Small Medium Enterprises (SMEs) • Promote green buildings, e.g., use of products and systems that are energy efficient and low carbon building materials; encourage green construction jobs for women • Foster low carbon mobility, e.g., establish public walking and cycling infrastructure; use of energy efficient transportation; use of an electric vehicle; and implement women-friendly road infrastructure
Guiding Principle 4: Sustainable Cities	• Promote clean cities, e.g., through the promotion of sustainable consumption and production practices, pollution prevention and waste minimization and more efficient waste management within a particular urban area or city; communication campaign aimed at women on waste recycling and prevention. • Foster resilient cities, e.g., gender-smart financing mechanisms to support investment in resilient infrastructure, supporting capacity development of cities while promoting gender equality
Guiding Principle 5: Sustainable and Resilient Infrastructure for Inclusive Growth and Poverty Reduction	• Decrease production costs, e.g., infrastructure decreasing transport costs and decreasing spoilage, such as construction of railways and roads; provide basic infrastructure services to home-based workers in the informal sector (majority of whom are women), such as water and electricity • Improve access to key facilities , e.g., infrastructure that provides improved access to health, education, childcare and other key facilities, such as the construction of rural roads; and construction of bridges that transport farm inputs and outputs; infrastructure in line with requirements of RA 344, “An Act to enhance the mobility of disabled persons by requiring certain buildings, institutions, establishments and public utilities to install facilities and other devices”; infrastructure that is responsive and sensitive to all (e.g., women, gender groups, and differently-abled people)

Table 1. Analysis of gender integration in the Roadmap.

PHASED APPROACH OF THE PHILIPPINE SFTG

As set out in the Prioritization Clause of the SFTG, the taxonomies will first focus on the “objectives of Climate Change Mitigation and Adaptation. Within Climate Change Mitigation, an initial focus may be on those sectors responsible for the most greenhouse gas (GHG) emissions”. There are two primary objectives of the proposed SFTG, which are:

- Environmental Objective 1: Climate Change Mitigation (“EO1”), meaning to reduce GHG emissions
- Environmental Objective 2: Climate Change Adaptation (“EO2”), which is to build resilience to mitigate and endure the physical effects of both current and future climate change.

In the current phase, only environmental objectives on climate change mitigation and adaptation are considered, with minimal social safeguards (MSS) for social aspects. In the next phases, the SFTG will develop guidelines regarding biodiversity and circular economy, “as well as potential social objectives” (FSF 2024, p. 4). The Consultative Taxonomy Guidelines released in 2023 reveal that the reason for adopting the phased approach is the lack of resources and data for broad taxonomy guidelines: “The readiness of the financial sector and the limited availability of data favor this approach” (FSF 2023, p. 45). However, in Version 1 of the 2024 SFTG released, the FSF reframed the prioritization as to reaching the “2030 target of 75 percent GHG emissions reduction” (FSF 2024, p.

19) in consideration of the increasing GHG emissions in the Philippines as the economy expands. The SFTG names the energy and agriculture as the sectors with the highest GHG emissions in the Philippines with 56 percent of total GHG emissions and 27 percent of emissions, respectively, recognizing that these sectors are priorities sectors for the first phase of the implementation.

Several issues with this Phased Approach can be identified, when it comes to addressing gender disparities. First, there are only minimal safeguards regarding gender (see the next section regarding MSS). Second, there is no clear timeline when gender guidelines as specific social components will be released as gender is merely a “potential social component” in the subsequent phases (FSF 2023, p. 31).

PRINCIPLES-BASED APPROACH OF THE PHILIPPINE SFTG

The proposed SFTG adopts a Principles Based Approach which will evaluate activities based on qualitative frameworks, rather than quantifiable thresholds. The BSP aims to adopt the Principles Based Approach temporarily and a “steppingstone towards developing an activity- based approach supported by more detailed ‘Technical Screening Criteria’ and will allow users time to adapt their internal processes” (FSF 2023, p. 29).

The international taxonomy landscape is delineated by three (3) distinct design

approaches, as elaborated in the SFTG. Firstly, an ‘Activities Based’ or ‘Technical Screening Criteria’ approach employs scientifically derived criteria to determine when economic activities contribute to taxonomy objectives, as seen in entities such as the European Union and South Africa. Secondly, a ‘Whitelist’ approach outlines specific products, projects, or technologies that automatically qualify if they meet predefined sustainability objectives, exemplified by existing

systems in China and Mongolia. Lastly, a ‘Principles-based Approach’ utilizes qualitative frameworks to evaluate economic activities’ alignment with taxonomy objectives without specifying activities or quantifiable thresholds, as demonstrated by examples from Malaysia and New Zealand. Under the principles-based approach, the SFTG adopts a ‘traffic light’ classification system which classifies an entity’s activities as “Green”, “Amber”, or “Red”.

Category	Definition
Green	The Activity is making a substantial contribution to an Environmental Objective (EO) and meets the Essential Criteria of Do No Significant Harm (DNSH) and MSS.
Amber	The Activity makes a substantial contribution to an EO but causes significant harm to another EO. However, that harm can be remediated within five (5) years or an independent verification supports a claim that remediation will take less than 10 years. It must also meet the Essential Criteria of DNSH and MSS.
Red	The Activity does not serve any EO or meet the Essential Criteria.

Table 2. Summary of Classification of Activities for SFTG. (Source: FSF 2024, p. 23)

GENDER AND BIODIVERSITY GAPS IN THE CURRENT TAXONOMY

Based on the analysis, there is no set biodiversity framework in the 2024 SFTG due to the Phased Approach, meaning that, at present, the SFTG does not yet offer explicit consideration of biodiversity. There are some opportunities that are already present, however, which can be built upon for the iteration of biodiversity considerations. For example, the climate mitigation objective does consider biodiversity and ecosystems in forested and coastal areas, in the context that

degraded land and loss of carbon storage release emissions:

“For the climate change mitigation objective, these sectors reflect the nation's top priorities for lowering GHG emissions and mitigating climate change's effects:

VI. Agriculture, Forestry, and Other Land Use (AFOLU): This sector includes emissions from agricultural activities, such as livestock and rice production, as well as emissions from deforestation and forest degradation.

VI, Coastal and Marine Resources: This sector includes emissions from coastal and marine ecosystems, such as

mangroves and seagrasses, which can release carbon when they are degraded or destroyed.” Moreover, the principles-based approach offers indirect measures that regulate agriculture and biodiversity. The SFTG outlines the process of assessing an activity under the principles-based approach (Figure 3). The first question to be asked is whether an activity is among the list of Excluded Activities in the SFTG. Among the excluded activities is “Non-RSPO-certified palm oil” (FSF 2024, p. 26), where RSPO is the Round Table on Sustainable Palm Oil certification,

which aims to provide a model for responsible oil palm plantation management and includes standards in addressing gender inequalities in the palm oil sector (RSPO, 2019). This requirement of a certification offers an indirect way for the SFTG to influence gender inclusion in Philippine agriculture. The FSF can further look into other agricultural certification systems, including organic agriculture and other agroecological approaches to production that promote the SFTG’s objectives.

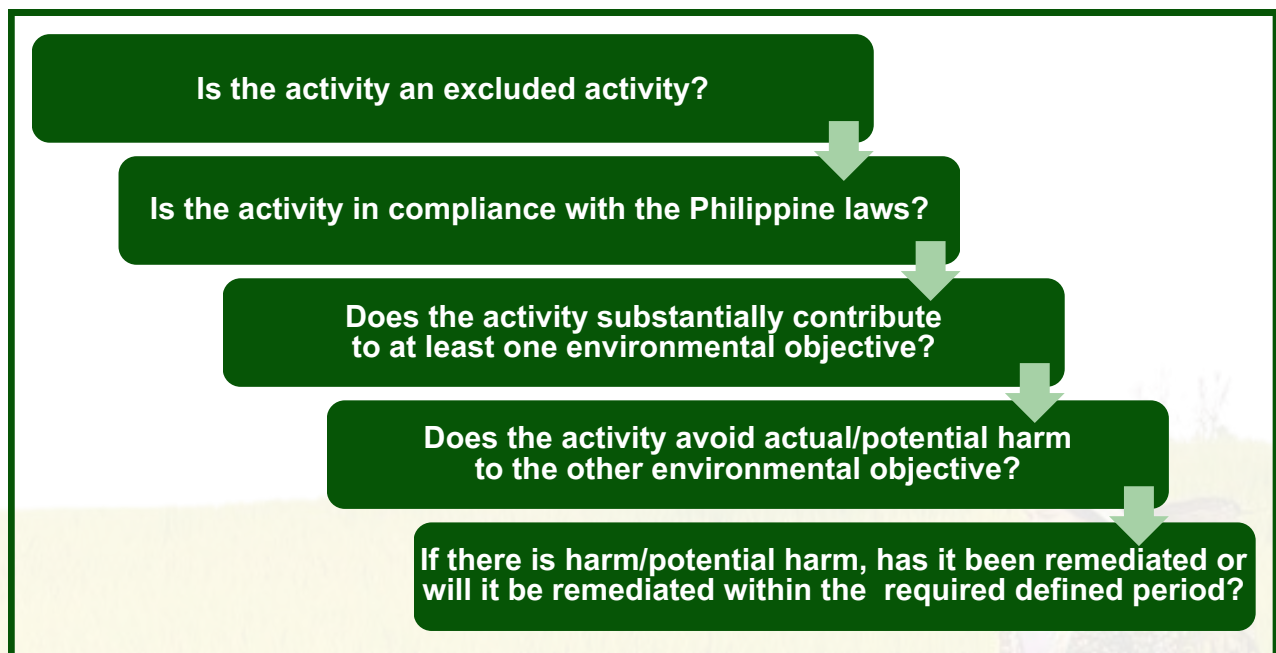


Figure 3. Questions to be asked when assessing an activity. (Source: FSF 2024, p. 26)

The second question asked is whether an activity is in compliance with law. If an activity is “illegal under Philippines law, or is in breach of environmental laws and regulations [...] the activity is considered out of scope of the SFTG” (FSF 2024, p. 27). The SFTG provides a non-exhaustive list of environmental laws activities must comply with:

1. **Presidential Decree No. 1152** - Philippine Environment Code
2. **Republic Act No. 9275** - Philippine Clean Water Act of 2004
3. **Republic Act No. 8749** - Philippine Clean Air Act of 1999
4. **Republic Act No. 11038** – Enhanced National Integrated Protected Areas System Act

5. **Republic Act No. 9147** - Wildlife Resources Conservation and Protection Act
6. **Republic Act No. 9003** - Ecological Solid Waste Management Act of 2000
7. **Republic Act No. 6969** - Toxic Substances, Hazardous and Nuclear Waste Control Act of 1990
8. **Presidential Decree No. 1586** - Environmental Impact Statement of 1978
9. **Presidential Decree No. 705** – Revised Forestry Code
10. **Republic Act No. 7942** - Philippine Mining Act of 1995
11. **Presidential Decree No. 1899** - Small-Scale Mining Law
12. **Republic Act No. 4003** - The Fisheries Act
13. **Republic Act No. 9367** - The Biofuels Act of 2006
14. **Republic Act No. 9513** - The Renewable Energy Act of 2008
15. **Republic Act No. 11285** - The

Energy Efficiency & Conservation Act of 2019

16. **Republic Act No. 11697** - The Electric Vehicle Industry Act (the "EVIDA") of 2022

17. **Republic Act No. 7611** – Strategic Environmental Plan for Palawan Act

This question of compliance offers a way for the SFTG to enforce environmental laws affecting biodiversity and agriculture, more so if future iterations of the SFTG recognize international environmental treaties promoting biodiversity, like the United Nations Convention on Biological Diversity (UN CBD) and the United Nations Convention on the Law of the Sea (UNCLOS). The Philippines is replete with environmental laws but is lagging with enforcement. The SFTG may offer a way to promote existing environmental laws in the entities' activities.

Under the SFTG, the activity undergoes assessment of its significant contribution to environmental objectives and compliance with the following three (3) Essential Criteria:

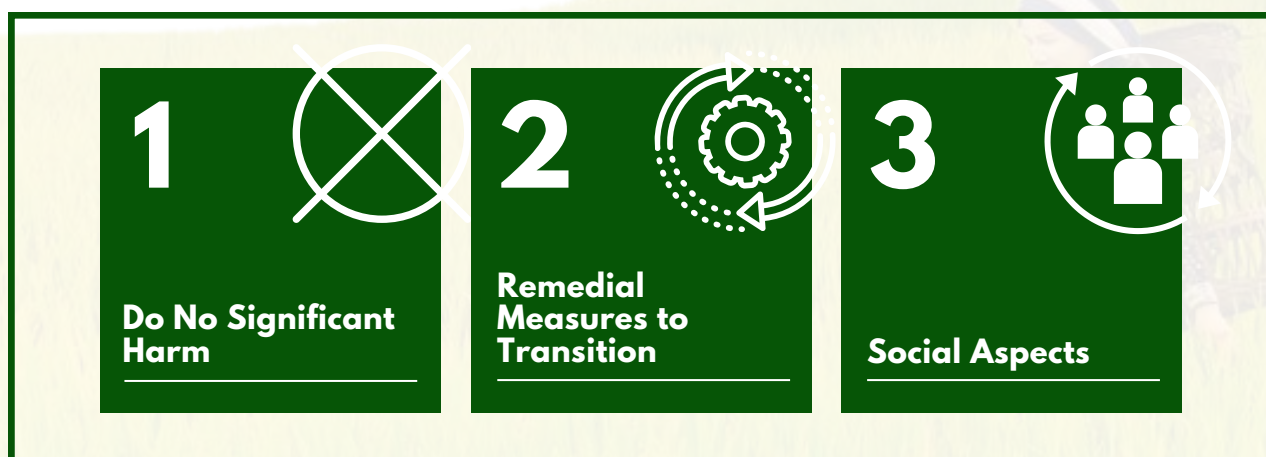


Figure 4. Three essential criterias under the SFTG

The MSS are “standards to ensure that the entities doing the activities comply at a minimum with Philippines social

regulatory requirements. This assessment is typically done at the company level as opposed to the activity

level. Applying this principle ensures that the activity achieving an Environmental Objective is not done while harming a social aspect.” (FSF 2024, p. 40). However, there is no taxonomy guideline on gender, but merely encompassed on the broad first protection on human rights. In addition, Appendix 1 of the SFTG provides a non-exhaustive list of laws, rules, and regulations for the MSS compliance.

The interviewed financial expert shares the following, in response to the study’s question on the feasibility of creating more demanding considerations for gender, given its large role in decision-making in landscapes. *“There are minimum social safeguards in the taxonomy which consider gender. Even if the activity is environmentally sustainable per the taxonomy, if it does not meet the minimum social safeguards it will be classified as red because it’s not aligned with the taxonomy guidelines. That’s how important the social aspect is, and the SFTG underscores this. If an activity contributes to environmental objectives and complies with the other essential criteria, but the company doing the said activity is not compliant with the MSS, the activity will be classified as “red” under the SFTG, which means that the activity is not eligible for sustainable financing. The SFTG explicitly mentions three social safeguards aligned with the ASEAN Taxonomy which include the Promotion and protection of human rights, Prevention of forced labour and protection of children’s rights, and Impact on people living close to investments.”*

Therefore, while gender as a theme is not featured explicitly in the SFTG, its

presence in the MSS should be able to safeguard women and other vulnerable communities. In the following section, the Philippine SFTG is compared to the regional guidelines for the ASEAN region.

Comparison to the regional ASEAN sustainable finance taxonomy



The ASEAN Taxonomy Board (ATB), established in March 2021, developed the ASEAN Taxonomy for Sustainable Finance (ASEAN Taxonomy). It is designed as a science-based and inclusive method of classifying individual activities based on their contribution to the region’s environment. An inclusive approach to development, regional progress, and cooperation is necessary for the region due to its inherently diverse characteristics. The first version of the ASEAN Taxonomy was published in November 2021, and the second (current) version was published in June 2023 after the ATB called for a stakeholder consultation regarding the first report. During the stakeholder consultation, the majority of the respondents stressed the importance of having a common language and identified the lack of standardized and credible data as the biggest challenge in implementing the policy.

Despite being tailored to the specific needs of the region, it is still well-aligned with other international green investment standards. The ATB also encouraged other ASEAN Member States to develop their own taxonomies with varying scopes and approaches. This means that the

ASEAN Taxonomy was made flexible to cater to the different needs, priorities, and contexts of the ASEAN Member States.

The primary objective of the ASEAN Taxonomy is to enable a just transition and foster sustainable finance adoption by the ASEAN Member States by providing harmonized principles and overarching guidelines for classifying assets and sustainable activities across ASEAN. It has set coal phase-out as an activity that can be classified as Green or Amber.

The ASEAN Taxonomy has five (5) underlying principles (Table 3) related to its role as a guide within ASEAN. The ASEAN Taxonomy also introduced two (2) assessment approaches that guarantee the inclusive treatment of all users from varying economic backgrounds – the Foundation Framework and the Plus Standards. The Foundation Framework is a principles-based qualitative assessment framework on activities, while the Plus Standards utilizes the Technical Screening Criteria used to categorize Activities.

Principle 1

The ASEAN Taxonomy will be the overarching guide for all ASEAN Member States, providing a common language and complementing their respective national sustainability initiatives.

Principle 2

The ASEAN Taxonomy will take into consideration widely used taxonomies and other relevant taxonomies, as appropriate, and shall be contextualized to facilitate an orderly transition towards a sustainable ASEAN.

Principle 3

The ASEAN Taxonomy shall be inclusive and beneficial to all ASEAN Member States.

Principle 4

The ASEAN Taxonomy shall provide a credible framework, including definitions, and where appropriate, be science-based.

Principle 5

The ASEAN Taxonomy will be aligned with the sustainability initiatives taken by the capital market, banking, and insurance sectors, or at least not in conflict.

Table 3. Five underlying principles behind the ASEAN Taxonomy.

As the Philippines’ SFTG is patterned after the ASEAN Taxonomy, the regional guidelines also consist of environmental objectives; however, they have progressed further, containing four (4) rather than the Philippines’ two (2) EOs (i.e., climate change mitigation and adaptation). The ASEAN Taxonomy

already contains EO3 for the Protection of Healthy Ecosystems and Biodiversity and EO4 for the Circular Economy.

While the Philippines lags in its environmental objectives, the BSP highlighted that depending on the maturity of the market, there could be

more coverage of more specific areas that might include ecosystems, biodiversity, circular economy, and other aspects in the future (SFTG 2024, p. 4). The ASEAN Taxonomy's environmental objectives are the following:

1.Climate Change Mitigation

EO1 focuses on decarbonization pathways, indicating that Activities should be aligned with the Paris Agreement's decarbonization trajectory of the 1.5C target. It is important to note, however, that each ASEAN Member State has varying decarbonization pathways, which are reflected in each country's NDC and Long-term Low Emission Development Strategies.

2.Climate Change Adaptation

EO2 is on lowering the expected adverse effects of climate change, as well as increasing resilience to current and future physical impacts of climate change. One of the general principles under EO2 is that Activity should not negatively affect the adaptation efforts and further endanger stakeholders.

3. Protection of Healthy Ecosystems and Biodiversity

EO3 highlights the need to implement conservation, restoration, and protection mechanisms when dealing with natural ecosystems and biodiversity. Additionally, it talks about equitable use of biodiversity and ecosystem services.

4.Resource Resilience and the Transition to a Circular Economy

EO4 stresses the adoption of principles of circularity, including (1) reducing the

use of resources; (2) maximizing resource yield, and (3) closing resource loops by enacting effective waste management practices.

The ASEAN Taxonomy only classifies an Activity as compliant with the guidelines if it contributes to at least one of the aforementioned objectives; importantly, it should not have adverse impacts on others.

While an Activity is only required to fulfill at least one EO, it is mandated to satisfy the three (3) minimum requirements of three (3) Essential Criteria:

1. Do No Significant Harm

This principle states that the achievement of one (1) EO should not do significant harm to other EOs.

2. Remedial Measures to Transition (RMT)

This criteria requires Activities to put measures in place to remove or render not significant any actual or potential significant harm. The ASEAN Taxonomy provided a minimum of five (5) years for using the framework, which is much shorter compared to the Philippines, wherein: "Any RMT should be fulfilled within a five (5)-year timeframe without independent verification from the assessment date.

If the remediation is longer than five (5) years but not exceeding ten (10) years, this must be supported by an independent external verification lending credibility to the longer RMT timeframe" (BSP Circular No. 1187 2024, p. 2).

3. Social Aspects

Activities should do no harm to employees and surrounding communities throughout their whole life cycle. Much like the Philippine SFTG, Assessment under this level is done at the company level rather than activity since it is the company that develops social policies. These social aspects primarily include: (1) promotion and protection of Human Rights, (2) prevention of forced labor and protection of children's rights, and (3) impact on people living close to investment. In the updating of version 2, the ATB will also consider poverty reduction, job creation, and human capital investment.

CONSIDERATION OF GENDER AND BIODIVERSITY IN THE ASEAN TAXONOMY

The ASEAN Taxonomy provides a comprehensive yet flexible framework for classifying individual Activities as sustainable, as well as environmental and social safeguards for them. In the guiding document for sustainable finance in the Southeast Asian region, there was a balanced prioritization of both environmental and social goals, which was most evident in the four (4) EOs. The ASEAN guidelines place importance on the fact that while the goals are primarily environmental, their achievement should never be at the expense of other stakeholders and communities.

This issue was discussed during the stakeholder consultation after version 1 was released— some stakeholders advocated that there should be both social and environmental objectives; others voiced that the objectives should be environmental and the minimum criteria are social. It is evident that the Philippines adopted the latter approach, given the title of the country's third essential criterion, Minimum Social Safeguards.

In terms of biodiversity, there was also a strong emphasis on the need for

conservation, restoration, and protection through EO3, as well as the importance of equitable use of these resources. However, while it is clear how the ASEAN Taxonomy works with and for biodiversity in the region, its role on gender and its dynamics with land management – with implications for agriculture and biodiversity management – is less clear. There is no explicit mention of how adverse climate change impacts disproportionately harm women and girls in general; women's rights are only mentioned in relation to the prevention of forced and child labor in Annex V section. Despite women and children being more vulnerable than other social groups, they are clustered with the general others in the social aspects of the ASEAN Taxonomy. Since there are no social objectives in the document, the discussion on gender remains on the “protection” level and does not equate to “empowerment.” The Taxonomy's lack of specific gender dimensions may be due to two (2) reasons: (1) lack of capacity and demand to implement women-specific Activities; and (b) the existence of other national laws or frameworks already mandating them to do so.

Given the ATB's decision to “provide an overarching flexible framework for national taxonomies” (ATSF 2023, p. 76), it is possible that the Taxonomy was less clear on its role on gender and women to ensure interoperability with other ASEAN Member State Taxonomies. This decision may also be aligned with its fifth principle, which is to “...be aligned with the sustainability initiatives taken by the capital market, banking, and insurance sectors, or at least not in conflict” (ATSF 2023, p. 21).

STATUS OF THE BIODIVERSITY GUIDELINES: FINANCIAL EXPERTS' INSIGHTS

Financial and regulatory experts with high level of knowledge of the SFTG and other sustainable finance frameworks were also interviewed as part of the study. A set of questions was related to the status of the development of guidelines for biodiversity, which are planned for the future. The interview with financial experts describes the current status of the document and processes:

- The SFTG was recently released in February 2024, with a one (1)-year observation period to allow stakeholders to familiarize themselves with it before full implementation. During this time, workshops and pilot testing will be conducted to address any challenges or concerns. This indicates that updating the taxonomy will depend on the feedback received during the observation period, particularly regarding biodiversity considerations.
- While the taxonomy's focus is primarily on adaptation and mitigation, there are guiding questions within the document to assess potential harm to biodiversity. These questions prompt users to consider whether an economic activity affects biodiversity alongside other environmental objectives.
- Although biodiversity is not explicitly listed as a separate environmental

objective in the current version, it could be considered in future updates to the taxonomy, with specific questions related to biodiversity included. The financial experts emphasize that the taxonomy is a dynamic document that can evolve to address emerging concerns and incorporate additional environmental objectives like biodiversity as needed.

The experts acknowledge the necessity of tailoring the taxonomy to local contexts while maintaining compatibility with regional standards (such as the ASEAN Taxonomy), recognizing the diversity in economic activities and regulatory frameworks across jurisdictions. The financial experts shared that the SFTG provides that RMT should be fulfilled within the prescribed 5-year timeframe from the assessment date. To suit domestic circumstances, the SFTG also allows longer remediation period of up to 10 years, provided that the same is supported by an independent verification.

There is a consensus-driven approach towards integrating biodiversity considerations, with short-term efforts focused on capacity building and pilot testing. When asked whether it would be helpful to be specific in the guidelines to better include considerations, such as gender or biodiversity, the financial

experts said that there are several issues that should be taken into consideration: *“Current policies are gender neutral and flexible, allowing financial institutions to put greater weight, when extending credit, on activities or enterprises led by women. The policies may be supplemented with use cases of range of banks practices focusing on gender.”*

Deliberate guidelines that specify gender or biodiversity guidelines will be similar to enumerating activities within the taxonomy, which may create a notion that only the enumerated projects are possible. More flexible, criteria-based approaches will be better suited to accommodate emerging practices. However, the experts also acknowledge challenges related to addressing biodiversity within the taxonomy, given its complex nature and multifaceted impact on sustainable development. Slow

progress in the biodiversity guidelines is due to a preference to address firstly the capacity building and pilot testing of the SFTG in the first instance.

This shows that stakeholder engagement emerges as a key priority, emphasizing the need to increase the taxonomy’s usability across sectors through collaboration and input from diverse stakeholders. A gradual, phased approach allows the taxonomy to evolve systematically over time, aligned with market maturity and stakeholder needs. Overall, the experts highlight the iterative nature of taxonomy development and the importance of adaptability, stakeholder engagement, and gradual expansion to encompass a broader range of sustainability objectives. *“There’s still a lot of ground to cover [...], but as everyone matures in this space it will mature also.”*



DISCUSSION AND RECOMMENDATIONS

In this report, the state of knowledge on the dynamics and interactions between biodiversity, agriculture, and gender was reviewed, and enhanced by the expert knowledge of agriculture and biodiversity experts. This report reviews essential points of the Philippine Sustainable Finance Taxonomy Guidelines, and the regional ASEAN guidelines to understand the status of integration of these complex, nuanced dynamics in sustainable finance guidelines. The report finds the current sustainable finance taxonomy does consider gender, but in a manner that is insufficient in deepening its consideration beyond minimum social standards. They are based on the assumption that national frameworks and policies that support gender and development programs are already well-implemented. However, as with the case of the many laws and legal frameworks of the country, it is the implementation and enforcement of the law where there are great deficiencies.

Likewise, the analysis in this report also shows that at present – even without the availability of the biodiversity-specific guidelines of the SFTG – biodiversity does appear as an emerging theme, particularly in the ASEAN taxonomy and the Philippine sustainable finance policy documents. This is crucial, as among the international treaties of

the United Nations Convention on Biological Diversity (UN CBD) and UN Framework Convention on Climate Change (UNFCCC) that the Philippines has ratified, the new Kunming-Montreal Global Biodiversity Framework of the UN CBD includes targets to restore biodiversity, protect 30% of all of earth's and the country's ecosystems, thus protecting species and ecosystem services that are essential for agricultural production. Biodiversity is essential for water cycle regulation, hazard and climate protection, cultural values, and the diversity of the animal and plant species that humans consume, in addition to being the primary source of health and fuel for billions of people worldwide (IPBES, 2019).

However, the lack of urgency to better protect and center biodiversity initiatives is concerning, as evidenced by the delays in the development of the biodiversity guidelines. In addition, because of the role and influence of gender across all the domains of biodiversity, agriculture, and even climate change, gender-oriented considerations should be given greater weight and emphasis beyond minimum social safeguards. This would mean providing women with opportunities to know their rights for equal access to land as already enshrined in several

Philippine laws; giving them opportunities to participate in training and extension services, making them able to access knowledge, information and credit to empower them to actively participate in decision-making processes and adopt sustainable farming practices. Importantly, these processes must be cognizant of the considerable 'triple burden' that women already carry (e.g. Moser, 1993).

The following section provides a synthesis of the information generated in this report to offer recommendations and ways forward for both policy and institutions (Summary in Table 4).

1. Support climate-resilient and sustainable agriculture, but also include biodiversity

- The resulting analysis from this study and the experts emphasize the importance of integrating climate-resilient agricultural practices into financial systems. This includes not only providing financial support for smallholders but also encouraging lenders to invest in climate-resilient practices to better confront climate-related risks.
- The integration of climate information and building capacities in climate-resilient practices across the gamut of agencies and organizations engaged with communities will result in better aligning lending decisions with climate forecasts to reduce risks associated with climate change, extremes, and variability, such as increasing temperatures, tropical cyclones, and El Niño.

- In this context, the AMIA program and the Climate Field School approaches of Rice Watch are highlighted as comprehensive initiatives, promoting climate-resilient and sustainable agriculture practices, encompassing nature-based solutions, adaptation, mitigation, and increasing productivity while protecting the environment and empowering women. Efforts should be made to learn from their successes and where there is still work to be done.

- In particular, it is recommended that initiatives in sustainable agriculture go beyond the short-term and think more long-term about protection and restoration of biodiversity and ecosystem services will be key for transforming the agricultural sector. For this, expert and scientific knowledge is needed from both state and non-government bodies to advise the agricultural transition.

2. Actively engage the private sector in investing in sustainable, nature-based initiatives

- There is a need to explore innovative financing mechanisms beyond traditional corporate social responsibility, to tap into the potential of the private sector in driving environmental sustainability and participating in sustainable finance.
- For example, experts emphasized the importance of attracting private sector investment in climate mitigation and adaptation initiatives. Suggestions

provided by experts projects for carbon sequestration, such as the establishment of bamboo plantations in areas naturally suitable to bamboo and prone to soil erosion; expansion of coconut bands and restoration of coconut plantations in areas prone to storm surge and naturally suitable for coconut; peatland conservation and restoration for effective carbon storage; and mangrove conservation in areas with existing cover, restoration and rehabilitation in areas previously planted with mangroves; and afforestation in areas that are prone to storm surges and sea level rise.

- Here, scientific evidence-based approaches to nature-based solutions are necessary to avoid maladaptation and negative consequences on the environment. Short-term gains should not be prioritized if they lead towards long-term changes to land use and land cover, which will affect the functioning of ecosystems and their services that are beneficial to both people and nature.
- However, it is also important that engagement with the private sector is built upon the principles of transparency and accountability, leading to the following point of concern from experts and this study.

3. Support green financing, not greenwashing

- Experts also raised concerns about the effectiveness of these frameworks in preventing “greenwashing” within financial institutions and ensuring transparency and accountability in reporting environmental impacts.

- Experts also recommended that there should be a focus on reducing the risks of investments in environmental projects, particularly in regions prone to natural hazards. In this case, financial instruments, such as insurance and blue bonds, are suggested as potential solutions to attract more investment in environmental initiatives.

4. Guiding questions to enhance gender equality in sustainable projects under review in the SFTG

- The aim of decision-making tools and taxonomies should also be to help align environmental conservation with economic interests, making it financially attractive for private investors. However, there is also the potential for supplementary guiding questions that consider empowerment of women in these spaces, beyond MSS.
- Understanding the financial experts’ concern that ‘enumeration’ with enhanced gender considerations may limit or constrain the initiatives seeking sustainable finance in the first place, it is offered as a suggestion that sustainable finance initiatives can be incentivized if they meet additional criteria that enhance gender inclusion in sustainable initiatives. These guiding questions can also support the mainstreaming of gender and development priorities in the initiatives themselves.
- Here, the recommendations are built upon the work of PAKISAMA in analyzing current land tools (Corral, 2015), and Fair Finance Philippines’

Comments on the SFTG (2023), and the results of the analysis in this report, which includes the review of scientific evidence and expert input. Fair Finance Philippines recommended that the following guide questions be considered, and this report supports these suggestions:

- Does the Company have a policy that recognizes and respects the rights, capacities, and leadership of women, persons with disabilities, and other diverse gender identities?
- Does the Company have safeguarding, grievance, and other feedback mechanisms and/or platforms for individuals experiencing injustices negatively affecting their rights?
- In addition, as the SFTG is meant to be a tool that can also guide multiple stakeholders involved in sustainable finance, including financial regulators, these guide questions, based on the criteria of gender-based evaluation of land tools (Corral, 2015) should also be considered to evaluate inclusive participation:
 - Does the project consider equal participation of all genders (in its formulation, execution and evaluation)?
 - Does the project include opportunities for education and capacity development, without increasing the existing burdens on women's participation?
 - Does the project align with legal frameworks that respect the equal legal rights of women and men to land ownership?

- Considering the importance of cultural norms in women's participation in agriculture, as well as the need for appropriate facilities and equipment:
 - Is the project respectful of social and cultural considerations, without limiting gender-inclusive participation?
 - Is the project considerate of different abilities, and physical capacities between men and women?
 - Considering the importance of fair wages and gender disparities in participation:
 - What are the economic considerations of the project with regard to fair wages and economic profits?

5. Enhance the awareness of biodiversity's importance in agriculture and in education

- Despite the high level of emphasis and attention on climate change in the current landscape of environmental policy, the lagging focus on biodiversity conservation is revealed by the analysis, and also acknowledged by the experts. Experts acknowledged that biodiversity may be less well-understood and prioritized by financial institutions compared to climate change which is seen as an "acute" problem.
- Here, it is important to emphasize that the biodiversity and climate change crises are concurrent, and greatly influence each other. Indeed, biodiversity is essential to human well-being. Biodiversity is essential for many human activities, particularly

agriculture, and it should be given its due importance in financial policies and frameworks. However, the lack of equal urgency to protect it, means that biodiversity faces many practical challenges related to implementation and finance.

- To better integrate biodiversity considerations into financial frameworks and increase awareness among private sector stakeholders, there should be education and learning platforms to facilitate a better understanding of the role of biodiversity, particularly native species and ecosystems of the Philippines that can provide multiple benefits towards people and nature.
- This may include efforts across all levels of education, including supporting initiatives such as Education for Sustainable Development, and partnerships with non-government organizations related to conservation, environment, and wildlife to better cultivate environmental stewardship in children and young people, including in higher education (e.g. the UN Higher Education for Sustainable Development initiative).
- The SFTG should be seen as also a tool to increase awareness and guide financial institutions in aligning their investments with environmental goals, including biodiversity conservation.
- A number of organizations are already promoting climate-resilient agriculture, and other initiatives to diversify livelihoods and incomes, such as the work of Rice Watch and DA AMIA featured in this report. Recognizing the 'triple crisis' of

biodiversity loss, climate change and contamination (pollution) should mean that efforts should go beyond resilience, and should also focus on restoring and protecting ecosystems and species.

- For this endeavor, it is recommended that scientific organizations and institutions actively engage with NGOs and communities working in these spaces to enhance the potential of nature-based solutions. This is particularly important for when the FSF, BSP and other regulatory bodies begin to prepare the biodiversity-based guidelines for the Philippines.

6. Foster collaboration and learning within institutions

- Collaboration among government agencies, financial institutions, private sector entities, and philanthropic organizations is emphasized as crucial for developing effective sustainable finance mechanisms. Learning from international experiences and adapting successful strategies to the Philippine context is seen as essential.
- Experts expressed a common desire to develop a common language between the finance sector and conservation stakeholders to facilitate collaboration and knowledge exchange, and the SFTG has great potential to develop and transform into this tool.
- Collaborative initiatives can facilitate knowledge exchange, capacity building, and the development of support mechanisms tailored to the needs of women farmers and biodiversity conservation efforts.

7. Recommendations for the banana industry

- Considering the data on the case study on banana production, it is evident from that addressing gender disparities and fair wages is crucial for promoting equity and enhancing the overall productivity and sustainability of banana farming in the Philippines.
- By promoting gender equity and adopting sustainable farming practices, the banana industry can contribute to both rural development and biodiversity conservation, ensuring a more resilient and inclusive agricultural sector for future generations. Greater participation in fair trade programs and organic farming are ways to ensure fairer wages for farm laborers and also minimizing the negative consequences on their health and the environment.
- To move the sector forward towards an agricultural transition that also respects the rights of all genders and considers the sector's significant impacts on the environment, as well as its vulnerability to climate change, fostering partnerships between government agencies, non-governmental organizations, research institutions, and the private sector is essential. This way, projects such as Project GROW can garner more long-term support.
- Addressing these challenges requires a holistic approach that recognizes the interconnectedness of social, economic, and environmental factors. Therefore, accessible sustainable financial mechanisms, especially those that help rural women, ARBs and other farmers' groups, are urgently needed.



Photo by Philstar

CONCLUSION

In this report, a review of the dynamics and interactions between biodiversity, agriculture, and gender was conducted, drawing on state-of-the-art scientific knowledge, and the expertise of finance, agriculture and biodiversity specialists. There is an under-recognized urgency to protect and prioritize biodiversity, which has a critical role in supporting agricultural productivity, ecosystem services, and human well-being. This emphasizes the need for greater urgency in developing evidence-based biodiversity guidelines in the SFTG.

The following considerations are highlighted: Firstly, while there is recognition of gender disparities and biodiversity conservation in current sustainable finance frameworks and tools such as the taxonomy guidelines, there exists a significant gap in their implementation. The lack of gender considerations beyond MSS and the insufficient integration of biodiversity concerns underscores the pressing need for more robust guidelines and policies that address these interlinked issues. As the SFTG is designed to be an iteratively developed tool, it is hoped that there are many future opportunities, particularly in the development of biodiversity-specific guidelines, to discuss these themes and motivate the “ecosystem” of financial institutions and organizations to participate.

To address these challenges and chart a sustainable path forward, the report emphasizes centering biodiversity in sustainability initiatives and simultaneously seeking to address the gender disparities that are related to its management. This is particularly important in the context of agriculture, which is the form of livelihood for millions of smallholder Filipino and Filipina farmers and the key activity for ensuring food and nutrition security. The analysis and interviews reveal that women are gaining more knowledge and decision-making power within their households. Still, systematic biases and gaps in the acquisition of land titles and ownership, as well as persistent stereotypes and cultural norms, perpetuate gaps that preclude them from fairer incomes and greater participation. The case study of bananas is an example of a confluence where climate risks, biodiversity impacts, land rights, and gender issues come into the forefront. The analysis and experts’ insights highlight the importance of supporting climate-resilient and biodiversity-friendly agricultural practices, attracting private sector investment in environmental initiatives, and ensuring transparency and accountability in green financing. Collaboration and knowledge exchange among stakeholders are essential for fostering a common understanding and driving meaningful progress toward environmental sustainability and resilience.

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