

Gender Inclusive Policy approaches in Agroforestry Management: Some Insights

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Abstract

Agroforestry primarily provides several benefits by growing sustainability, by providing food, wood energy, shelter, fodder and fibre; generating economic gains to allow communities and societies to flourish; and promoting ecosystems. Various literature has shown that in the agroforestry system in connection to gender, policies have been ignored. Discrepancies are addressed in this particular section with few case studies, such as on the lack of clear statistics on the women and men participants engaged in different livelihoods in the agroforestry sector; gender-responsive project activities and policy action plan for sustainable development; commercial agenda of policy-making bodies in agroforestry system; gender blindness of policymakers about women and energy transformation, the right of women to access land; women in the value chain and extension service and concerning forestry associations and forest users' groups; etc. The invisibility of women in the workforce, more particularly in agroforestry scenario is undeniable. Unfortunately, the department of each concerning state have no detailed database on women in agroforestry to increase the job participation of women in the forestry sector and it is also true in the case of agriculture database of women. It is simply not possible to get a true picture for some academic purpose or because of curiosity if anyone checks data from women who work in the agroforestry sector. In the case of the agriculture scenario, documents of agricultural statistics and planning in the state also do not provide any information on the number of farmers or families engaged in the sector.

Keywords: Agroforestry, Ecosystem, Sustainable, Transformation, Forestry

Introduction

Gender is crucial for agroforestry development and also for the attainment of the SDGs. And it is well articulated in the Census 2011 about the low participation rate of women in economic productive activity for decades. As part of the national policy, the state is expected to practice gender mainstreaming and gender budgeting in agricultural planning and programme implementation. It is high time to recognize that work participation of the various categories of women affianced in the farming sector is largely ignored by the inappropriate definition of 'farmers' adopted in the census and by the national sample surveys (ISF Guideline, 2015). Hans et al (2008) had rightly pointed out that lack of women's data involved in agroforestry activities is a significant barrier to effective gender budgeting in India. Lack of clarity among the development functionaries on the purpose and need of gender budgeting and lack of monitoring guidelines to collect sex-disaggregated data of the participants in the published reports are other noted

constraints in the context. It is high time the concerned agencies recognize that without reliable statistics on the women and men participants engaged in different livelihoods in the agroforestry sector of the state, and the sex- disaggregated data of men and women participants covered by development programmes, effective gender budgeting and women inclusive planning cannot happen.

One of Kerala Agricultural University and Kerala Women's Commission (2012) recommendations in the context of women inclusive farmer policy for introducing registration and farm livelihood cards for women in agriculture is a viable approach for the required database development from the grassroots. Hence a proper database on these different categories of women in agriculture, if developed at the level of grama panchayaths, will be breakthrough support for practising gender-responsive planning and budgeting. The idea was women who earn livelihood in the regions via agriculture and allied operation must be registered and issued card (Women's Farm Livelihood Card) in the respective offices of local self-government institutions such as grama panchayath/municipality/corporation. The agricultural and allied offices (agriculture, animal husbandry, fisheries, the forest, etc.) and the Local Self-Government Institution in the region concerned will jointly provide these cards. In addition to the person's details, the card should contain specific information on the particular field of work (agriculture, dairy farming, fisheries, and the collection of forest products). The card shall signify the holder's socio-economic status, such as households with heads of females, tribal families and farmworkers. These cards should be recognized as a valid document on access by the respective institutions to loans, manufacturing inputs, equipment, cattle feeder subsidies, marketing and insurance without having to submit other documents such as lease agreements, title certificates etc. In a similar context, Kristjanson referred to gender-responsive investment, project activities and policy action in the forest catalysing gender –forest actions funded by the Forestry Program (PROFOR) and it needs sex-aggregated data in the agroforestry sector that can make investment an imperative for the government and others.

According to Kristjanson on catalyzing gender –forest actions, supported by the Program on Forest (PROFOR) has mentioned that issues of gender inequalities should not be seen as problems, but as potential opportunities to take action that enhance gender equality and agroforestry management, resulting in a transformational change on both fronts. Colfer and Minarchek, 2012 argue that more attention to the interaction between men and women, gender dynamics and power issues and men's role and behaviour from the household to the political arena is needed more attention. Research has also witnessed that project designer, policymaker and other making a decision affecting agroforestry and women development are not receiving much guidance on exactly what gender-responsive project activities and policy action should be considered, which will vary according to a different context.

REDD+ is a global drive but a nationally implemented forest-related initiative well recognized for reducing carbon emissions from forest and has led more emphasis on inclusive process and including gender-responsive actions that address gender gaps but a concern that these efforts have been ineffective to date. (Chomba et al 2017). Larson et al (2015) in a recent study has analyzed subnational REDD+ initiatives in seven countries (Mexico, Ghana, Uganda, Cameroon, Vietnam, Nepal and Guatemala) to see how well they were doing concerning desired gender outcomes and found that perceived wellbeing decreased in REDD+ villages relative to control villages for both men and women, but the decrease was much worse for women. Thus REDD+ experience gave an idea that gender

is often addressed superficially, even when women participate, they lack awareness and information of REDD+, many actions increase women's workload; women are often left out of REDD+ benefits, and women preference regarding benefits are not considered. Failing to address gender thus has a serious detrimental impact on women's well-being and program delivery.

Gender – Neutral Policy And Gender Equity

Gender-neutral policies and gender equity also may fail to empower women because they fail to take account of the fact that men and women live different lives. These policies presume women will be autonomous, unencumbered individuals. On the other hand, a gender lens ensures that change is local – owned and data-driven in ways that address the local context, help you see what's not seen properly value what's seen, and manage what's likely to be the flow of evolving gender roles and norms. In a similar situation, a case study of the West Bengal project offers insight into the many benefits that women receive and help to mitigate and adapt to climate change by encouraging local action by the organization. Women were members of the Nivedita self-help community and have struggled hard to manage a green area along the Gobadia River in West Bengal's South 24 Parganas district as a common resource. The district contains the UNESCO Sundarbans Mangrove Forest World Heritage Site. Women have planted a total of 4000 trees including 31 different types such as coconut, neem with a medicinal and insecticide properties, Sundari (a mangrove species) and minjiri. The project was initiated by the NGO, Development Research Communication and Services Centre (DRCSC), which works with rural poor to implement sustainable management projects. These programmes encourage local governments to recognize unused land that can be leased or rented for the provision of food, biodiversity conservation, erosion control and carbon sequestration activities, for example. Previously the women collected fuelwood from the forest where they were at risk from tigers, but now they collect and share the timber harvested from the communal land. They also get fodder for their cattle from the trees and food for their families. Their activities are helping to build resilience to the impacts of climate change. The project has empowered the women to liaise with panchayats (governing elders) and participate in group discussions with villagers on the social, financial and environmental matter. The women in Sunderbans are now participating in group discussions with villagers on matters of social, financial and environmental significance. Thus, it can be inferred that the intervention enables women to become economically independent, to take part in decision-making and to provide agroforestry with a sustainable level.

Gendered Policy Dimensions of Energy Discourses

One of the areas in agroforestry where the discourse about energy transformation and women is gender-blind, whereas energy is a feminized domain. Despite a range of measures, energy shortage is prevalent and gender inequality is emerging at all levels of the energy sector. In developing countries, national development goals and policies stress the importance of sustainable development that focuses on marginalized parts of society, including women. These policies also provide a basis for gender-responsive policies and programmes in the sector. Yet there is no mention of women or gender in energy policy. Generally speaking, the priority of national energy policies has been on electrification, with almost no mention of women or gender. The conjecture is that men and women benefit equally from electrification, implicitly assuming that men and women will use electricity to fulfil their needs (ENERGIA, 2016). Petroleum fuels and electricity and fossil-fuel subsidies are mainly the focus on energy policy and investment with minimal investment in non-commercial energy. In India, the Eleventh Five Year Plan

(2007–2012) detailed an investment of more than \$100 billion in the energy sector. But less than 2 per cent of that investment was likely to ever alleviate the burden on women and girls, who collected close to 28 per cent of primary energy at that time (Government of India, 2010). Overall negligible progress has been observed between 2010 and 2012, where annual growth in access to non-solid fuels has dropped globally by 0.1 percent well below the 1.7 percent target growth rate needed to achieve universal access by 2030 (Putti et al., 2015). In India, Pradhan Mantri Ujjwala Yojanain 2016, which also comes largely with unfulfilled promises, the discussions around energy change at the policy level have largely been gender-blind. According to IEA and World Bank, 2015 the Asia Pacific region today has at least 455 million people who lack access to electricity and more than 2 billion people still relying on biomass, or solidfuel, for cooking. Women, especially in rural areas, bear the brunt of energy poverty and are heavily affected by this dependence on biomass. According to the WHO, of the 4.3 million deaths worldwide attributed to household air pollution in 2012, 80 per cent werein Asia and the Pacific (ADB, 2015c) and globally, household air pollution is the second-most important health risk factor for women and girls (WHO, 2016). In China and India combined, more than 1 million premature deaths annually are attributed to household air pollution (WHO, 2016). The lack of access to safe, affordable energy exacerbates the many challenges women face every day, even though the challenges differ in space, across time, across classes, between urban and rural areas and across countries. Focusing on closing the gender gap is not enough to end the gendered energy inequality that continues to plague India's growth. According to a field survey conducted in 2011 by the Indian NGO Vasudha Foundation reveals key primacies and energy needs of women in rural India. Of those surveyed, on average rural women felt that 10 per cent of energy resources were needed for cooking, 30 per cent for flour millsand livelihoods activities, 40 per cent for water pumping and irrigation (15 per cent of which was needed for household drinking water), 20 per cent for lighting, particularly for students to study, and 5 per cent for entertainment. What comes across clearly is that energy for cooking, and electricity for pumping drinking water are the most pressing issues for women concerning energy (Bast and Krishnaswamy, 2011). Women also value streetlights: "Now, we have access to light from the street lights... The street lights have also prevented anti-social elements and robbers from entering into thevillage, thus making the villagers, specifically the women feel safe" (Bast and Krishnaswamy, 2011, p. 22). Further, Energy poverty begets time poverty, which in turn leads to a large cost of opportunity for female labour (WHO, 2016). In India, the Self-Employed Women's Association found that women in rural Gujarat State spend as much as 40 per cent of their waking time collecting fuel for cooking (World LP Gas Association, 2014). Another survey of 700 rural households in Himachal Pradesh State in northern India found that women walked an average of 2 km to collect fuel wood. Women spend an average of 40 hours per month gathering firewood and have 17-19 hours of daily working holidays. Reduced time for fuel collection and water collection will enable women to invest in education or entrepreneurial opportunities in their newly discovered independence. More economic and social freedom for women promotes the empowerment of women and gender equality, which directly drive the development of India.

Policy Prescriptions of Access to and Control over resources by rural Women

Further, in the context of the agroforestry system the right of women to access and control rural land is overlooked. The prevalence of unsecured or ambiguous land and tree tenure creates long-term uncertainty for land managers, further restricting the success of agroforestry initiatives and this situation is more vulnerable for women Bernard, F., M. Bourne, D. Garrity, C. Neely, and S. Chomba. 2019.). Trees on

farms, community forests, and pastoral lands require clear and secure tenure rights. Not only in India, but globally the absence of clearly defined property rights significantly affects women farmers' decisions about long term investment in the land, such as investing in trees and establishing agroforestry. Various types of tenure insecurity were noted among the reviewed countries, such as the lack of formal titles to land (Ethiopia), the rights to trees being separated from rights to land (Ghana, Senegal), forest regulations inhibiting tree growing on farms (Mali, Ghana) and lack of rights for farmers to manage the trees on their land and to market their tree products, including a bureaucratic and expensive permit system (FAO and ICRAF. 2019 and Bruce, 1998). In India, the Orissa Tribal Empowerment and Livelihoods Policy confers ownership rights on indigenous groups that have been farming hillsides without a title for many decades. It is expected that special attention will be provided to indigenous women (UNDP 2008). Availability of gender-disaggregated land rights information is a matter of concern in India, with most states not documenting 'gender' in land records where 75 per cent of the female workforce, largely marginal or landless, depends on agriculture for survival (Agriculture Census, 2010-11). The National Land Record Modernization Program (NLRMP), which supports the digitization of land records, has attempted to preserve and disseminate such information at the necessary scale. However, the framework also needs to be in place. In India, women's ownership rights are promoted by incentives provided at the state and local government levels, including a reduced rate of stamp duty on land registered jointly or on behalf of women only (Department of Planning Government of Rajasthan, 2006).

The commercial agenda should be secondary in policy, but gender integration and the challenges affecting women in the forestry, trees and agroforestry should be central. For example, Wood is a good India campaign where policies are not developed in a gender-sensitive forest conversation and promoted in the sense of a commercial agenda. In 2017, Wood is Good campaign was launched by The Union Ministry of Environment and Forests and Climate Change under Partnership for Land use Science which governs the formulation of all laws and schemes related to forestry – returns zero result. The campaign mainly promoted timber for industrial or commercial use. It collected over Rs50,000 crore through a Central Compensatory Afforestation Fund, which should be used for afforestation. Instead, the fund is being directed mainly towards building timber plantation in forests and private properties, often without the consent of households and gram sabhas. As a result, (a) The Compensatory Afforestation Fund is giving the private corporate a say, (b) is destroying the rights of tribal peoples under various legislations, and (c) destroying the conservation and biodiversity of the environment. Under the campaign, eucalyptus tree is also seen as new plantation areas which are useful for paper industries (FAO. 2016). Few environmentalists reported that the rights of nature and indigenous communities are not recognized. Women and indigenous people have been uprooted from their farm land, their knowledge about various forest product which is used for food, medicine and preservation of biodiversity is not taken into consideration and guardian of the forest is not been recognized while introducing any policy, programme or campaign. To fix it, there is a need for gender mainstreaming and women's involvement in the making of the policy. Even when efforts are being taken up, continual analysis and monitoring of progress are required.

Similarly, the role of women in the value chain continues to be poorly supported by policymakers and extension services was mentioned in an article by the Food and Agriculture Organization of the United Nations (2014). Involvement in forestry value chains is indeed essential to rural women's livelihoods and

the well-being of their households. For example, in Ethiopia, sorting and cleaning gums and resins are the primary source of income for 96 per cent of the women involved, while in Burkina Faso, women engaged in sorting gum arabic report that this is the most significant source of income for 3–4 months of the year (Shackleton et al., 2011). While women often make a significant contribution to forest value chains, particularly in the selection, processing and marketing of non-wood wood products (NWFPs), most of their activities tend to be relatively low. This is partly true because many key contenders (e.g. policymakers, industry players, extension services) pay little attention to the potential of NWFPs for local markets. This relative neglect is exacerbated by a lack of data and empirical work on gender disparities in forest value chains. In Gujarat, a similar situation was found where thousands of very poor women depend on the collection of gum karaya for their income. Most of them do not have collection licenses and are forced to sell at very low prices. The presence of the Self-Employed Women's Association (SEWA) enabled female gum collectors to organize into groups. These groups obtained collection licenses for their members and were able to negotiate higher sales rates with the Gujarat State Forest Development Corporation. Eventually, women have acquired the right to sell on the free market, where prices are higher (Carr, Chen and Jhabvala, 1994; SEWA, 2000).

Various researches have also mentioned that policy in agroforestry which multifunctional values could adopt decentralized planning and implementation of strategies that promote local production in agroforestry systems that could mitigate multiple issues at the time. Such decentralized systems in India can provide critical inputs for livelihoods improvement and archive sustainable development.

Gender Inclusive Policy Approaches at National and Local Level: A Bird's Eye View

In Odisha, Mission Shakti and the Odisha Millets Mission signed an agreement to promote millet entrepreneurship and millet awareness campaigns through WSHGs in 14 districts in Odisha which is a classic example where tribal women have participated and sustainable empowerment has taken place with multiple benefits. The Odisha Millets Mission has been launched in 72 blocks spread over 14 districts and the budget allocation of Rs 536.92 Cr has been granted by the Odisha Government. In FY 2019-20, Odisha Millets Project reached 51045 farmers. Finger millet (mandia) and tiny millet (Suan / Gurji) cover much of the territory in the state of Odisha from various millets. The main crop covering more than 80 percent of the region is finger millet (Mandia). Mandia (finger millet) is highly nutritious. According to CSIR-CFTRI, Calcium is 34 times higher than rice, iron 7 times higher than rice, minerals 4 times higher and rice is 13 times higher. Odisha's State agricultural policy also highlighted the promotion of millets (Nutri-cereals) for improved nutritional protection. Furthermore, the Government of Odisha has authorized Ragi laddoo's inclusion in the ICDS. It also considers pilots the inclusion of ragi related products in ICDS through a technical collaboration with CSIR-CFTRI. Government of India and Niti Aayog have recognized OMM as the best model and asked all the states to follow the model. Emphasizing the importance of Finger millet (Mandia) to the culture and history of Odisha, Government of Odisha has chosen "Mandia" as a mascot for the Krushi Odisha 2020. Key features are such that 15 Millet Shakti Cafe (Quick Service Restaurant) will be developed in Odisha's urban areas by SHG funded by Mission Shakti in the next year. Millets will be sold in those urban outlets with hot cooked items, bakery products, packed millet grains and ready-to-cook products. However the Odisha Millet Mission has taken into account the nutritious aspect, historical and cultural significance, low ecological footprint, climate change (drought) resilience aspect, has promoted various millet recipes and inclusion of women in the sustainable empowerment process. In

this programme, various changes have resulted like women have made sufficient money from organic farming style, became more confident and started selling in the market, have been trained and are now technological friendly in producing various millet related products. One of the interesting elements of the mission was that while millets like finger millet and millet were traditionally grown in the Koraput region, they did not know they could eat them as biscuits, upma and kheer. Due to the project interference, they learn numerous new ways to cook millets and hope that the new generation will increase consumption, improving nutritional status, thus meeting SDG goals 2030.

Another example can be cited from Uttarakhand where Women in the hill regions spend a lot of time and energy in procuring fodder for their livestock and fuel wood. To reduce their drudgery, G.B. Pant Institute of Himalayan Environment and Development promoted fodder banks. Mahila Mangal Dals in Garhwal region have been strengthened to help women make decisions in forest use (Misra et al., 2011). The locals dwelling in higher Himalayan valleys of India (Niti, Mana, Gangotri, Bhyundhar, Yamunotri etc.) of Uttarakhand also prefer horticulture trees like Apple, Plum, Aadoo, Hippophae for their agroforestry systems along with their medicinal crops to maximize their benefits from their meager landholdings. Successful and sustainable farming need collective action from government agencies, a local institution and community participation thus empowering women economically and socially to strengthen gender equality in rural societies which is prerequisite for increasing agricultural productivity, reducing poverty and hunger and promoting innovative investment opportunities.

Gender Perspectives of Joint Forest Management Policy

In the framework of agroforestry, a key aspect of the discussion is the joint forestry management policy, as it has an important impact on the role of women in forestry. However, a considerable body of literature demonstrates how women are historically overwhelmingly unrepresented in forest user groups, such as village committees and community forestry organizations. (Agarwal, 01, 2010; Coleman and Mwangi, 2012). It is also quite clearly seen in much past literature that, for the sake of survival and the sake of increasing family income, it is typically the responsibility of women. Women have also always been at the forefront of the conservation movement, be it Chipko or Khejri. (Shiva et al., 1986). Gendered forest-based livelihoods that forestry conservation programmes need to consider in order ensuring equality, as it is increasingly recognized that it is necessary to incorporate social equity into environmental management planning to achieve more robust socio-ecological progress. (Ban et al. 2013; Chan et al. 2012; Kinzig et al. 2013; Redpath et al. 2013). For example, in Bihar, the forest in the Murgabani village of Pargana was degraded by the local people and the government authorities, so women to find fuel-food had to walk 10 to 12 km away from the village. As a result, the women agreed not to cut timber for sale and to preserve the forest with the help of the NGO. This meant a significant source of income, particularly during the lean periods when there was no agricultural product left to sell and no other source of income. Women, however, defended their forests against all odds, even disguised as men. Despite this, when the village agreed to migrate to JFM, no attempt was made to include these women in the Forest Protection Committee (FPC) that was set up. However, women put pressure on their men and, after a lot of work, they were permitted to become members of the FPC. Today, women believe that they benefit more from regenerated forests than men do. While in many villages in Odisha, men have gradually lost their curiosity to support community forest protection for many reasons, one of which is group factionalism (Upadhaya, 2003). At the same time, highly forest-dependent impoverished women have

begun challenging and assuming responsibility for male domination in state-wide informal community forest protection groups. The superimposition of the JFM programme in many such villages has sometimes diminished the involvement of women in forest management. Claiming to promote the participation of women, the JFM committees, despite having one-third reservations for women, are damaging the good work of existing women's initiatives (Upadhaya, 2003).

Forest-based laws in India have undoubtedly helped empower women, but they also have challenges where laws that allow only one person per household to take part in such groups tend in many ways to exclude women by adding to the many constraints to women's participation. (e.g. the gender division of labour and access rights, gender-differentiated behavioural norms, gender segregation in public spaces, social perceptions of women's roles, women's lack of bargaining power, and men's entrenched claims and control over community structure). Various incidents in the past have shown a lack of respect for the role of women. The first incident occurred in the village of Orissa, where Mahilla Samiti took care of the trees informally. During the creation of the committee, the guard found that, according to the law, only one-third of the committee could be women. After the construct, the current women's group was accepted to be turned into a predominantly male JFM group and the management of the funds was also transferred to male hands. "The same situation also occurred in Jharkhand's Santhal Parganas, where 25 women's groups taking up forest protection were denied permission on the same ground that the JFM rules did not allow only women's groups. And in the third case in Palli village in Pauri Garhwal, women already engaged in forest protection were urged to participate in JFM plantation activities. Women are also enlisted only if forest and tree resources are degraded (Agarwal, 2001). As a result, forest societies often adopt rules and regulations that do not completely represent women's strategic priorities and needs. Evidence from Agarwal (2001, 2010) Sun, Mwangi and Meinzen-Dick (2011) and Coleman and Mwangi (2012) indicates that complex shift in women's access to forest resources is not only favoured by women, but also by women who are one quarter to the third part of their membership in the local forest management institutions. Example of enhancing women's participation in community-based forest management in Kyrgyzstan where more than 30 percent of the rural population of Kyrgyzstan live in areas managed by the State Forest Fund or owned by the forestry enterprises "leskhozy". Women's participation in forest-sector institutions is extremely low. For example, of the 54 local-level "leskhozy" directors, only one is a woman. Although the proportion of female-headed households is increasing in rural areas (mainly due to high rates of male migration to cities or abroad), there is no corresponding increase in women's involvement in forest management because of traditional patriarchal social norms, beliefs and practices. The Association of Land and Forest Users of Kyrgyzstan (KALFU), with support from Norway, works to establish village-level forest user groups ("jaamats") to increase participation of local women in forest management processes, thereby facilitating gender-equitable rural development. (Joldosheva (KALFU), E. Batjargal and A. Jamangulova {Mountain Partnership Secretariat}, Bishkek, personal communication, 2013). In India, there is also an instance where with the massive investment through JFM committees, in Andhra Pradesh employment was generated for the people and as a result, it helped in halting of migration of local people to distant places. One of the major activities under the JFM programme was soil and moisture conservation work in Andhra Pradesh. The successful implementation of the programme has shown that water conservation has not only assisted the natural regeneration of degraded forests but also helped to increase agricultural production. Similarly, the availability of water has increased, both in quantity and duration for drinking purposes for people and animals such as cattle and wildlife (Mukherji 2004). Active

involvement of women in forest management, including local decision-making, has a positive impact on resource-related outcomes and significantly increases the effectiveness of institutions involved in forest governance and conservation through enhanced monitoring of illegal harvesting of forest products and forest regeneration. (Agarwal, 2010 and Coleman and Mwangi, 2012). And greater involvement of women in forest governance may thus help ensure that forest policy and planning is more sensitive to the food security needs of communities.

The gender-related policies and agroforestry initiatives outlined in the above discussion have tremendous potential for poverty reduction, conservation and women's social, economic and political participation. However, in conclusion, it can be a suggestion to the policy-makers to concentrate on the following:

It is important that to have record national statistics that capture female forestry (both paid and unpaid) jobs and in forest sector, there should increase the availability and use of sex-disaggregated data;

Creating environments that encourage female engagement and leadership in environmental resource management will have a positive effect on conservation and resource quality.

Help to enhance access to alternative energy sources (e.g. solar energy, electricity); and help to improve women's safe access to fuelwood, support the use of healthier, more energy-efficient technologies and equipment (e.g. improved stoves). Thus causing less hampered to women in all aspect like in health, economy, time etc.

helping to identify initiatives in forestry and agroforestry that consider women as forest users (in combination with men) and recognize the useful knowledge, experience and unique needs of women;

Attempts to understand the gender roles of forestry value chains, encourage women's values chain activities and collaborate with existing processing and marketing groups involving women. help sustain the gender balance within forestry associations and forest users' groups and encourage women to be fully involved in decision-making in such associations, e.g. through formal education, training and income generation support;

Stephens stated "policies aimed at narrowing gender differences among the poor should not follow a "warm and cuddly approach to women.". Several studies have recognized that there are multiple gender disparities related to agroforestry initiatives for participation, leadership, tree and land tenure rights, forest use, division of labor and workloads, skills, ecological awareness, access to technology and inputs, access to information, access to benefits and income, access to credit, access to markets, access to jobs, etc. Yet, national and at the global level there are many types of policy and programme initiatives that have been tried, tested and proven effective- including political strategies, program designs, and project cycle activities related to women's inclusion in agroforestry development. (Kristijanson and Jensen, 2018 Marin and Kuriakose, 2017).

Conclusion:

It can be concluded that agroforestry has the opportunity to bring women huge advantages. Gender

equality is a human right and a central goal of growth. Unfortunately, women face a significant barrier in obtaining productive resources to participate effectively actively and meaningfully in agricultural production. However, their involvement is limited by socio-economic, cultural, and policy problems that differ across locations. These problems, if resolved, would go a long way towards ensuring that more women engage in agroforestry with greater benefits accrued to them. Achieving gender equality would guarantee that women and men have equal power and equal opportunities among smallholder family farmers.

Addressing gender equality and empowering women is not only critical in addressing women's rights, but also smart economics. Women in rural communities are key agents of social change, and when women and men have equal opportunities, the rural economy is growing faster, communities are gradually emerging from the cycles of poverty and the overall well-being of their families is improving. By incentivizing the adaptation of agroforestry practises to boost crop production, enhancing women's leadership knowledge and skills, economic empowerment, technology and clean energy solutions such as efficient wood stoves and biogas systems are supporting to create a world where women can thrive.

The role of the policymaker is very critical in this direction. Identifying these interventions requires a context-specific analysis, which is why gender assessment before or during the conceptualization process of projects is so important, along with tracking gender-disaggregated primary outcomes during execution. The pervasive lack of gender-disaggregated data in the forest sector makes this investment imperative for governments and others. Improved comprehension of how sex, race, age, the wealth of assets, and so on, affect agroforestry decision-making is also badly needed in many countries.

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