



PATHWAY TO ADDRESS THE NEGLECTED NEEDS AND UNDERVALUED ROLES OF WOMEN FARMERS IN TIMOR-LESTE

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Abstract: This article aims to reassess the daily role of women farmers, which is affected by gender norms and customs in decision-making in households, farmer groups, and communities. Desktop research reveals that several current agricultural programs aiming to increase agriculture productivity continue to neglect the needs of female farmers. Some studies and surveys on gender roles in agriculture continue to fall into misconceptions and mislead. There is a contradiction in research findings relating to the different roles of women and men in agriculture production. The article contributes to the debate on the dilemma of women-targeting policy, which could be relevant to the collective effort to work for better economic empowerment for women in agriculture.

Keywords: Women and Agriculture; Productivity; Market; Gender Roles; Gender Relations.

Proposta para Abordar as Necessidades Negligenciadas e os Papéis Subestimados das Mulheres Agricultoras em Timor-Leste

Resumo: Este artigo visa reavaliar o papel diário das mulheres agricultoras, que é afectado pelas normas e costumes de género na tomada de decisões nos agregados familiares, grupos de agricultores, e comunidades. A investigação revela que vários programas agrícolas actuais que visam aumentar a produtividade agrícola continuam a negligenciar as necessidades das mulheres agricultoras. Alguns estudos e inquéritos sobre os papéis do género na agricultura continuam a cair em concepções erradas e a induzir em erro. Existe uma contradição nos resultados da investigação relacionada com os diferentes papéis das mulheres e dos homens na produção agrícola. O artigo contribui para o debate sobre o dilema da política de orientação das mulheres, que poderia ser relevante para o esforço colectivo de trabalhar em prol de um melhor empoderamento económico das mulheres na agricultura.

Palavras-chave: Mulheres e Agricultura; Produtividade; Mercado; Papéis de Género; Relações de Género.

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Introduction

Twenty years after the restoration of its independence in 2002, Timor-Leste continues fighting for its population's basic livelihoods and decent living standards. From the pre-colonial period until the present moment, its people have relied on subsistent agriculture. However, this sector continues to be unable to respond to the cereal demands of more than 1.2 million people annually. For some time now, market-based agriculture has been considered by various governance actors in Timor-Leste as one of the viable sectors for job creation for young men and women in the context of enormous unemployment and economic vulnerability. It is claimed this would help to reduce the dependency on imported agricultural products and enhance the income of communities in rural areas. Nevertheless, the census of 2015 showed that only 2.9 per cent of households focus on sales of agricultural goods, suggesting that the commercial agricultural sector is tiny (General Directorate of Statistics [GDS], Food and Agriculture Organization [FAO] and United Nations Population Fund [UNFPA], 2015).

In this context, increasing agricultural production for food security and increasing commercial production is strategised and implemented in different institutions in Timor-Leste, namely the government, community groups, and international and national NGOs. These various programmes plan to boost the productivity in agriculture to overcome the problem of the food shortages that 64 per cent of the population face at various times of the agricultural cycle due to low harvest yields and lack of income (Islam, *et al*, 2016).

The most recent agricultural census (MAF, 2019) showed that around 80 per cent of men, compared to only 20.3 per cent of women, involve in full-time work in non-perennial crops. This data is a bit different from the 2015 household census, which reveals that 56 per cent of women and 62 per cent of men rely on agriculture as their main livelihood (General Directorate of Statistics [GDS] and United Nations Population Fund [UNFPA], 2018). Many studies about women's agriculture continue to recognise women's significant role in cultivating, harvesting, processing food, bartering or selling produce, and rearing livestock (Seeds of Life [SoL], 2015; Tomak, 2017; Market Development Facility [MDF], 2014; Oxfarm, 2007; Asia Foundation 2015). Therefore, it is important to increase agriculture production to turn crops and animals into commercial products and this activity should be part of a vital governance strategy for women's economic empowerment.

Not by chance, various policy studies and strategies have been elaborated to guide governance actors in projects aimed at gender leverage and the economic empowerment of women. This article addresses gender inequality and challenges to promote better women's livelihoods in rural environments. It suggests that many Timorese women are central actors in the domestic economy in rural areas, acting in different areas of food production and livestock rearing, besides all the work done for household maintenance



and the caring of people, for example, in food preparation and child-rearing. Cultural gender expectations prevent them from receiving political benefits – agency in the decision-making processes – in matters of economic and social reproduction. They are not able to participate freely in education, invest in a business, and most importantly, be mobile and reach out to other spaces to explore new opportunities for personal growth and self-realization. In another word, this article mainly discusses the social, cultural, and structural barriers faced by women farmers whether working on family farms or group farms. It also points out the limitations of the agriculture policy in better supporting women in agriculture.

Ultimately, policy-making bodies can make use of this discussion to deliberate on the policy option that can best optimise women's participation and productivity in agriculture as means of economic empowerment in Timor-Leste.

Literature review – Women's empowerment framework

Many significant scholars have been contributing to discussing, understanding, mapping, measuring, and appreciating the concept of empowerment. In the 1990s, the concept of women's empowerment was the starting point for challenging unequal power relations and boosting women's capacity to have control over resources and power (Batliwala, 1993, Kabeer, 1999, Sen, 1997). To incorporate this concept to analyse the cause of women's marginalisation in development processes in the agricultural sector in Timor-Leste, Mokta's (2014) elaborated model of empowerment in her research with Indian women is relevant to this topic and the Timor-Leste context. According to Mokta (2014), cognitive, psychological, economic, political and physical dimensions are the five key components of the empowerment process. The cognitive dimension is defined as women's ability to be aware of their current conditions, as well as the causes of their subordinate positions at different levels. The psychological dimension relates to psychological power and the belief that women can act at personal and societal levels to improve their realities and the society in which they live. The economic dimension pertains to taking control and access to resources (land, labour, knowledge, skills, technology, credits and employment opportunities). The political dimension is related to the capacity to organise and mobilise for social change. The physical dimension refers to control over one's own body and reproductive health, and to the ability to make decisions and choices about one's reproductive role.

The analysis of this article will deepen the economic and political dimensions to justify and explain why we need to respond to farmer women's needs, and that the process of empowerment can be individual or collective.

Concerning Mokta's economic dimension, it is crucial to look at women's roles and neglected needs in agriculture in terms of access to natural resources and technology. For decades around the world, scholarly articles and research have been discussing the

contribution of women to agriculture and family nutrition. Different studies confirmed that women's needs in agricultural work are continually neglected and their important roles are undervalued (Carr and Hartl, 2010; FAO, 2011; Quisumbing, Meinzen-Dick, Raney and Croppenstedt, 2014). Consistently, elsewhere in the world, women addressed the same problems of lacking or not having title to land and other productive resources as the principal causes of gender inequality in agriculture productivity. Poor farmers – most are women – lack appropriate production technology (Kelkar, 2007). Women are left behind in the rural areas; they are in charge of most of the rural farming work, while men take on casual, non-agricultural jobs.

Because women's needs in agriculture are often neglected, their labour-intensive and time-consuming tasks tend to rely on traditional and simple means of production. As Carr and Hartl (2010, p.3) note:

Women's agricultural technologies – traditional technologies that are labour-intensive – tend to be overlooked in technology support, particularly those for land preparation, weeding, drying, and energy. The tools that are available tend to be oriented towards men's physique or activities and will often be too heavy or culturally inappropriate for women to use them comfortably.

The benefits of extension services

Timor-Leste's agriculture is at the stage of pre-industry. The intensification of agricultural activities and extension services² are still minimal. The ministry of agriculture has introduced several extension services which have not covered all the communities in the country. There are signs indicating women access lesser extension services than men. According to Akter, Erskine, Spyckerelle, Branco, and Imron (2020), women from households that receive extension services are more familiar with the improved varieties than households with only men having access to extension in Timor-Leste.

Extension services usually reach men more than women; therefore, in general, more men become involved in cash crops than women (EAPGIL, 2018) because cash crops require different new knowledge and inputs. According to a 2019 agricultural survey in Timor-Leste, more men are involved in coffee plantations (MAP, 2019).

Intervention challenges in targeting women in a male-female mixed group

According to Doss (2017), comparison between women's and men's agricultural productivity is a complex task in a joint male-female farming setting. At the same time, Doss (2017) recognised the importance of targeting women in policy intervention and

² Extension service is any support given to the farmers in terms of inputs, new technical support, trainings and other advisory services.



provided evidence that women could increase agricultural productivity if they received extension inputs and training in a male-dominated agriculture setting. Gender analysis in a mixed group of farmers is a complicated task. It is unclear who does what tasks and for how long. In the real context, we will face mixed groups of male and female farmers doing work on the same piece of land. Doss (2017) argued that if we focus on women's groups or men's groups alone, it is impractical and not realistic, because women may be assigned to infertile land and men may choose fertile land.

Research method

This research emerges from my consultancy work that was carried out when I was working on identifying the gender needs in the Ministry of Agriculture and Fisheries with the support of UN Women in 2017. Other important sources for this article are the studies of gender in agriculture that have been conducted by a variety of scholars and international organisations. In-depth interviews were carried out with several extensionists, the Director of the Department of Monitoring, the Director of the Department of Agriculture, the Department of Livestock, and the Department of Post-harvest. The field observation was conducted on field trips visiting the farmer groups. Verbal consent was received before starting the conversation with the members of the groups. I worked as a gender consultant under the collaboration between UN Women and MAF for six months. I also worked closely with the monitoring department supporting them with the development of gender indicators for the monitoring instruments. The conversation with the officers of the department provided insights and observations on gender work in the Ministry.

Rural life and gender roles

Women's role in agriculture and livestock rearing has been well established in the literature (Burr 2016, Seeds of Life, 2015). They are farmers both through necessity and by choice (Belun, 2018). Women farmers carry out a larger range of agricultural and market functions than men. Women's involvement in food production and food processing is more diverse and comprehensive than men. There are more women in the marketplace as traders than men and women dominate the informal economy around food agriculture products (SoL, 2011).

There are gendered differences in the agricultural work of men and women. Men's work is considered more important (Belun, 2018), even though women carry out the same tasks or work for longer hours than men³. Some activities restrict women's involvement due to gender norms. For example, in some places in Baucau, women are not allowed to plough or prepare the land. Women in Selo Kraik, Aileu, cannot build fences and climb trees (MDF, 2014). Given certain social and gender norms, a report

³ Interviewed with the Director of Husbandry Department and Extensionist of Dili, 2017.

from Seed of Life (2015) stated that women participated in all the farming activities in the process of planting corn, including land preparation, making fences, selecting seeds, sewing seeds, weeding, harvesting, husking, grading cobs, shelling, drying, storing, and selling. Importantly, women's triple roles (Moser, 1993) – reproductive, productive, and communitarian – have divided women's time across a wide range of tasks encompassing domestic, farm, and community work. The most demanding role for both single and married women is the reproductive role, which has been undervalued and considered not economically productive.

Research conducted by the Market Development Facility (2014), in Baucau, noted that men collected firewood and looked after children, but only when the women were absent from the house, selling crops in the market, or sick. There was a case in Balibo, Bobonaro, where the husband sometimes did the cooking and looked after the children when his wife was ill, but he still believed that women's main duties are cooking and caring for the children (MDF, 2014). In Aileu, one husband refused to be involved in “*woman work*”, such as cooking, and most of the men said that this was not their responsibility. A case in Selo Kraik, Aileu, manifested a typical traditional division of domestic labour as well as farm work: “*women's main responsibilities are cooking, cleaning, washing clothes, and growing vegetables. Men's main responsibilities are collecting firewood, ploughing, and building houses. Her husband spends a lot of time visiting friends and relaxing at home when he is tired*” (MDF, 2014, p.83).

This traditional perception is rooted in Timorese culture, and unfortunately, the time women dedicate to reproductive work is not considered an economic investment, nor is it valued at the family or the community level.

Indeed, these concerns need to be addressed at the policy-making level and put into implementation the gender policy from the lowest unit to the higher rank in the authority structure of MAF. To secure women's leadership and their representation in farmer groups, and even in the government institution of the MAF itself.

Women's needs were neglected and marginalised in the group's decision making

In this section, I will present two case studies to intersect and analyse the differences between her direct observation on the field and the observation from the key respondents from the Ministry of Agriculture and Fishery. It was found that women take on more time-consuming tasks, which are not as well recognised as important work as those of their male partners. The following is one case study analysing the labour divisions among the female and male group members, and women's access to extension services. The author visited one farmer group named Hajeku, a youth group established in 2016. This group uses land near the seashore located in Liquiça. The youth group planned to develop the place to become a tourist resort. They received financial support from MAF



for less than a year. At the time we visited them, the group had two projects of raising chickens and salmon fish. Baby fish were provided by the MAF, which has a breeding place in Ulmera, not far away from Liquiça. Hajeku are applying for a fund transfer from UNDP to develop their programmes; however, they have not yet received any feedback from this organisation. After a long conversation with the male leader of the group, the author found that the group had management issues. Not all the members were active contributors to the project.

Although teamwork is the key to success, some members were too anxious to see immediate results and were not focused on working together as a group. The group had 15 members (eight women and seven men). This number does not manifest gender equality but rather responds to the funding criteria. During an in-depth interview, one woman revealed that five women were no longer active in the group. The other three women were active in the group; however, they were excluded from some technical training. For example, women were not trained in how to convert chicken residues into fish feed. They were assigned to certain tasks – feeding the chicken every day and sweeping and cleaning the chicken residues three times a week. Concerning the chicken feed supply, the group received the supply of imported industrial fish feed from MAF which was distributed by MAF extension workers.

This case is one of many examples of women being excluded from important decision-making and the new technical methods of producing and farming.

The second case study was also about a farmer group creating and working on fish ponds in Loes, Atabae and Bobonaro. This case unveils how gender matters in decision-making in rural settings in Timor-Leste. The dynamics of this farmer group demonstrate how women have been excluded from the decision-making process, concerning how to use the group's money in future investments.

The interview was conducted with three men and one woman who were the members of the group. When we arrived at the site, the group leader was not in the field. We told a man that we needed to talk to a female member of the group, and he sent a child to look for her. We had to wait for around 15 minutes. One woman, carrying a baby, came to see us; as she did not speak Tetum, the field staff in Liquiça helped to translate her dialect into Tetum. The woman that we interviewed had no idea of how financial management worked in the group. She was not aware that after the first harvest they shared the money among the members. She has four children to look after. She did not catch fish to eat without the consent of the group. The children did not like fish because there are many bones in it. The group comprised five women and seven men. The other four women were not active and only showed up when the team leader called on them. Most of the women in this group were the wives of the male group members; therefore, they entrusted most of the work to the men. The women in the group were asked to clean the grass growing along the sides of the ponds because grass can create shelter for frogs which will eat the small fish in the pond.

The group had already sold fish twice to a supermarket which came to the field to fetch the fish themselves. When we asked the woman about the instruments that she used to clean the grass, she told us that she only uses her hand. She appealed to us that she needed an instrument as a grass cutter that could help her to do the work faster. It took her six days to clean the grass around the fish pond (with a length of 8 x 6 m)⁴.

This case depicts women's voicelessness in decisions relating to financial issues, budgeting, and getting benefits from the work they are doing. Unlike some cases in Baucau and Dili where women were involved in trading in markets, in this case in Loes, the woman did not participate in the fish sale because the shop lorry came to their fish bond and the transaction was made with the male members. The women had no notion of how the balance fund was broken up; they were told that most of the money was kept for further investment. In this case study, the women had barely the authority to mediate or have a say on consuming the fish as nourishment for their families, exclusively the children. This matter is essential regarding family food security. Another research from MDF (2015) noted that men dominated the decision-making in agriculture productivity, for instance in Ermera, Ponilala village, men make decisions on farm equipment, livestock purchases, and land purchases; in Viqueque, Makadiki, the husband decides on farm items but informs the wife beforehand. When men talk about women's work they do not consider it as work; they use the term "helping" with crops and livestock (Belun, 2018). Therefore, challenges for the policymakers to secure gender-equal opportunities in agriculture are the conscious designs and practices that bear women in their minds in all the actions they take. The two mentioned cases address the need of introducing some labour-saving devices to alleviate the workload for women. Solely the applicable gender analysis can identify all the necessary information to serve the purposes of gender budgeting.

The Director and staff from the Husbandry Department of the Ministry of Agriculture also observed that women are not involved much in rearing cows and buffalos (Director of livestock Department, 2017); therefore, they do not know much about the techniques of tendering and caring for cows and buffalo⁵. Traditionally, boys and men take on the tasks of "*hein karau*" or watching, feeding, and walking the cows and buffalos to the faraway fields where they can find more grass and leaves for these animals. Women and girls are more restrained in the domestic spheres that are closer to the household domain; they usually look after the animals that are closer to the house, such as pigs, chickens, and the like.

Despite this, women do not benefit from or participate equitably in agriculture, market institutions, programmes, technology, leadership, or governance. A report from World Bank (2019) addressed that women have limited access to additional hired labour,

4 A female farmer was interviewed in Liquiça, 2017.

5 Consultation with the Director of Husbandry Department June, 2017.



farming tools, and equipment, and their participation in cash crop production as well as in farmer groups organized by extension workers was also scant.

The reports done by Tomak (2017) also addressed the problems of gender asset disparity. Men accumulate more and have greater diversity in their assets than women. Men mostly own land, except for matrilineal areas. The security of property rights remains a critical determinant in a woman's willingness to engage and increase their time and financial investment in agricultural production compared to non-agricultural-based livelihoods.

Observations were done by the field workers and staff from the planning and monitoring Department of MAF (Ministry of Agriculture and Fishery), who related that women usually work intensively for several hours⁶ in the field during crop plantation and also work for long hours in periods of post-harvest, such as drying, cleaning, packing, processing and preparing for market.

These are the issues that need to be addressed at the policy-making level and down to the implementation of gender mainstreaming in smaller areas of work in MAF as well as in NGOs working in the agriculture area, to secure women's leadership and their representations in farmer groups and even in the government institution of the MAF itself.

The Gender Approach in the Ministry of Agriculture and Fishing

Lack of policy and technical support for women's work in agriculture is the main problem recognized by the staff and the decision-makers of MAF. The consultation work on gender was provided by UN women from time to time but continuous work was not undertaken to assist the gender focal point staff of MAF to do gender analysis in their work and also in the monitoring system. The ministry has not applied gender analysis to know which areas of work men and women are more involved in, for example, men undertake the task of preparing the land, specifically, digging the soil; for this task, some men benefit from the hand tractor programme, which was launched in 2008. This means that the hand tractor distribution lightens the men's work. In contrast, the work of women, weeding, harvesting, and food processing, requires a wider range of technology and these needs are neglected.

Like other ministries, MAF also has a gender working group which was installed in 2008. However, the implementation of the policy is still fragmented and uncoordinated in this ministry; a report by Seed of life (2015) stated that: No significant or sustained effort was made to overcome the deficiency in staff capacity. Consultants were hired from time to time to fill the gap in gender competency. However, such efforts have been scattered and ad-hoc. The lack of capacity of the gender team raises concern regarding MAF's capacity to address gender gaps in the seed system after the cessation

⁶ The estimation was made without measuring by hours or minutes.

of the Seed of Life project. SoL's engagement and partnership with the Consultative Group on International Agricultural Research [CGIAR] centre would be beneficial in this respect. Learning from the best practices and the experience of other large-scale agricultural projects within and outside Timor-Leste would also help build the capacity to tackle gender issues (Seed of Life, 2015, p.18). The capacity building and knowledge enhancement on gender analysis for MAF staff are crucial to making a change in the implementation and monitoring which would bring about a tremendous increase in the productivity of women farmers. The Seed of Life report also pointed out the insufficient gender analysis capacity of MAP staff: *The gender coordinator's self-rated knowledge and skills to handle gender issues was 'very low'* (Seeds of Life III, 2015b, p. 12).

So far, MAF has not strategized a gender policy that can secure women's voices in farming decision-making. A cash-transfer programme of MAF that provides cash to farmer groups has been implemented; however, those groups have mixed female and male members. Women-only groups are still under consideration in the plan.

In the case of mixed groups, most of them are youth groups; they have family connections among the members. One reason why women stay in a mixed group is that they do not own land. Land usually belongs to extended family; therefore, it is convenient and advantageous to work together as family members. However, in these groups' structures, women have less power in decision-making because women continue to be under the hierarchy of the patriarchal family structure; some are the relatives or spouses of male leaders. Another reason for working in a blended group is that all the members will distribute the workload in accord with the varied skills that men and women have. Some monitoring personnel asserted that women likewise require men's physical strength to take over some tasks that are heavy for women to perform.

Even though the farmer groups comprise men and women who were beneficiaries of the cash-transfer programme of MAF between 2015–2017, only 23% of women farmers benefitted from this programme, despite the quota set in the Maubise Declaration⁷ of 35%.

The discussion has been ongoing as to whether to measure the productivity of men and women separately. This is challenging because most of the time women and men work jointly in the same lot or in the same husbandry. However, a concrete, effective strategy to boost women's decision-making in agricultural work in male-controlled families has yet to be strategised (Quisumbing, 1996; Jacoby, 1992; Doss, 2017).

Concerning natural family settings, where women and men live together in the same household, how can extension services reach women, who spend most of the time in their kitchens? Some female extension workers in the MAF have started to question the absence of women in the meetings and training; one female extension worker, with her effort and flexibility, gave her training to farmers close to a kitchen so that the female farmers could listen or join the training (Author's interview, 2017).

7 A joint declaration among six ministries to improve the livelihoods for rural women in 2015.



It is not impossible to target women in a blended group because the Seed of Life programme has proved its success in targeting women in a female–male mixed group by introducing labour-saving technology, such as screens and grinders to the group. The project successfully targets women users, in the past, around 87% of whom were sorting seeds manually (Seed of Life, 2015).

Seed of Life is a short-term project experimenting with some prominent pilot farmer groups. How about government institution as MAF? The two mentioned case studies of farmer groups working on fish ponds have failed to consider the voices and the decision of women. The lessons learned should be taken for future better policy because when we listen to women, we can respond to their needs accordingly. For instance, Seed of Life (2015) indicated that some tasks have been done exceptionally by women such as coping maize and sorting maize. More practices need to be studied thoroughly and carefully analysed. Therefore, creating a responsive system for helping men and women in agriculture is crucial to increasing productivity for both sexes depending on which tasks their labour concentrates more. Targeting women in the intervention of aiding with knowledge, subsidy inputs and technology is hence still relevant and implementable.

However, strategies to target women can be varied and optional depending on the characteristics of the groups and also on the politics of the funding institutions. There are agriculture projects that target at only-women groups, for instance, the food processing women group. There are also mixed farmer groups that received financial support from the government.

There are several success stories of using the only-women group to advance and increase women's voices and capacity in decision-making in agriculture activities. This type of model could be suitable for some agriculture project-based programmes. This creates chances for women to exercise their leadership and capacitates them to be productive in agricultural work. Only-women approach has been proven its success by many research proving significant changes in economic empowerment, besides leadership development and community development (Molesworth, *et al.* 2017; Galie *et al.* 2017, Niner, 2018).

Conclusion

Women contribute enormously to food production in agriculture; they are the main household managers to assure daily meals on family tables, fetch water and collect firewood in remote rural areas. Women and children are more vulnerable to climate change risks because their food crops mostly depend on rainwater. The traditional farming tasks assigned to women are time-consuming and repetitious. Women contribute greatly to the auto-subsistence of the family through their constant work on farms and gardens. They produce meat and contribute to the family income by raising pigs, chickens, and other animals and, at the same time, face several challenges to increase their productivity, lacking backup policies and financial and technical support from institutional authorities.

Timorese male dominance in sacred ritual tradition, politics, and daily life decision-making have been reinforced in the post-conflict era. Women and other voiceless groups in the rural agriculture sector are affected strongly by this tradition. The most challenging task for women's economic empowerment would be the transformation of gender norms, rooted for generations, into more equal and equitable thinking and practices.

Reality tells us that women's productivity in agriculture is conditioned by a larger enabling policy such as state budget, gender policy in agriculture, and conscious implementation of this policy. The annual budget of MAF in 2017 and 2018 failed to allocate a gender-sensitive budget to improve women's production and lighten the workload for women. Research done by Nesbitt, Erskine, da Cruz, and Moorhead (2016) also characterized agriculture in Timor-Leste by the following issues: firstly, investment in agriculture is small, as stated above; secondly, access to markets was limited by the poor public infrastructure and transportation system; thirdly, inadequate production inputs and knowhow also leads to low yields in production; and finally, poor post-harvest management, limited capacity to store, and lack of opportunity to sell out causes a lot of waste post-harvest, leading to high prices and low earnings (Nesbitt, *et al*, 2016). Therefore, to improve rural women's livelihoods in agriculture various backup systems are needed in terms of infrastructure, inputs, technical skills, market, applicable gender policy, and consistent implementation.

Several women's organisations, development partners, government officials, and researchers believe that when women have an income, they will be able to save, and they will take care of children's nutrition and children's education better than men (Quisumbing & Maluccio, 2003; Kabeer & Mahmud, 2004; Roushdy, 2004). Therefore, different models and approaches can be employed to enhance women's productivity and empowerment, whether they are based on women-only target groups or women-men mixed target groups in farming or the natural setting of a farming household. The final objective, surely, is the sustainable development goals; therefore, the promotion of welfare and good lives, equally, for all community members, males and females, through agricultural productivity is essential.



References

- ASIA FOUNDATION. (2015). *Beyond Fragility and Equity: Women Experience of the Economic Dimensions of Domestic Violence in Timor-Leste*. Dili: Nabilan, Asia Foundation.
- AKTER, S.; ERSKINE, W.; BRANCO, L.; AGOSTINHO, O.; IMRON, J.; SPYKERELLE, L. (2016). *Gender in Crop Production in Timor-Leste*. Conference paper.
- AKTER, S.; ERSKINE, W.; BRANCO, L.; AGOSTINHO, O.; IMRON, J. (2020). The Impact of Women's Access to Agricultural Extension on Cropping Practices in Timor-Leste. Food Security. DOI: 10.1007/s12571-020-01007-0.
- BELUN (2018). Leaving no Youth behind, Policy Brief #1 Young Females Farmers. Dili: Belun.
- BURR, S. (2016). *Women in agriculture in Timor*. Accessed July 2019. <http://www.cookingcircles.org/2016/05/women-in-agriculture-in-timor-leste/>.
- CARR, M. & HARTL, M. (2010). *Lightening the Load: Labour-saving Technology and Practices for Rural Women*. Warwickshire: Practical Action Publishing and IFAD.
- DOSS, C. R. (2016). *Women and Agriculture Productivity: Reframing the Issues*. Department of International Development, Oxford University. England: Oxford.
- EAST ASIA AND PACIFIC GENDER INNOVATION LAB (2018). *Women Farmers in Timor-Leste: Bridging the Gender Gap in Agricultural Productivity*. Policy Brief. Timor-Leste: EAPGIL.
- FOOD AND AGRICULTURE ORGANIZATION (2011). *The State of Food and Agriculture*. Rome: FAO.
- GENERAL DIRECTORATE OF STATISTICS AND UNITED NATIONS POPULATION FUND (2018). *Timor-Leste Household Census 2015. Thematic Report Volume 13: Analytic Report on Gender Dimensions*. Dili: GDS and UNFPA.
- JACOBY, H. G. (1992). *Productivity of Men and Women and the Sexual Division of Labor in Peasant Agriculture of the Peruvian Sierra*. Journal of Development Economics 37; 265 -287. DOI: [10.1016/0304-3878\(91\)90090-I](https://doi.org/10.1016/0304-3878(91)90090-I).
- KABEER N. (1999). *Resources, Agency, Achievements: Reflections on the Measurement of Women's Empowerment*. *Development and Change*. 30(3) 435–64. DOI:[10.1111/1467-7660.00125](https://doi.org/10.1111/1467-7660.00125).
- KELKAR, G. (2007). *The Feminization of Agriculture in Asia: Implication for Women's Agency and Productivity*. India: UNIFEM South-Asia Regional Office.

- MARKET DEVELOPMENT FACILITY (2014). *Analysis of Poverty and Gender in Agriculture in Timor-Leste*. Dili: Australian Aid, MDF.
- MINISTÉRIO DA AGRICULTURA E PESCAS (2019). *National Report on Final Census Results*. Dili: General Directorate of Statistics, Ministry of Finance and Ministry of Agriculture and Fisheries.
- MOLESWORTH, K.; SÉCULA, F.; EAGER, R. A.; MURODOVA, Z.; YARBAEVA, S. & MATTHYS, B. (2017). *Impact of Group Formation on Women's Empowerment and Economic Resilience in Rural Tajikistan*. The Journal of Rural and Community Development, 12 (1), 1-22.
- MOKTA, M. (2017). *Empowerment of Women in India: A Critical Analysis*. Indian Journal of Public Administration 60(3), 473-488. <https://doi.org/10.1177/0019556120140308>.
- MOSER, C. (1989). *Gender Planning in the Third world: Meeting Practical and Strategic Gender Needs*. World Development. Vol. 17, nº 11, 1799-1825. [https://doi.org/10.1016/0305-750X\(89\)90201-5](https://doi.org/10.1016/0305-750X(89)90201-5).
- MOSER, C. (1993). *Gender Planning and Development: Theory, Practice and Training*. London and New York: Routledge.
- NESBITT, H.; ERSKINE, W.; DA CRUZ, C.; MOORHEAD, A. (2016). *Food Security in Timor-Leste Through Crop Production-PR146*. Australia Centre for International Research. Dili: ACIAR.
- ORGANISATION AND UNITED NATIONS POPULATION FUND (2015). *Timor-Leste Population and Housing Census 2015 – Analytical report on Agriculture and Fisheries*. Dili: GDS, FAO, UNFPA.
- OXFARM (2007). *Timor-Leste Food Security Base Line Survey Report*. Dili: Oxfarm.
- QUISUMBING, A. R. (1996). *Male and Female Differences in Agricultural Productivity: Methodological Issues and Empirical Evidence*. World Development, 24, 1579-1595.
- QUISUMBING, A. R.; MEINZEN-DICK, T.; RANEY T.; CROPPENSTEDT, A. (2014). *Gender in Agriculture: Closing the Knowledge Gap – Springer*. <https://doi.org/10.1007/978-94-017-8616-4>.
- SEEDS OF LIFE (2011). *Annual Research Report 2010*. Dili, Timor-Leste: MAF.
- SEEDS OF LIFE III (2015b). *Annual Report for 2014 with Six Monthly Report: July - December 2014*. Ministry of Agriculture and Fisheries. Dili, Timor-Leste: MAF.
- SEEDS OF LIFE (2015). *Gender Assessment of Seeds of Life program in Timor-Leste*. Ministry of Agriculture and Fisheries. Dili, Timor-Leste: MAF.



SINGH, S. AND SINGH, A. (2020). *Women Empower in India: A Critical Analysis*. UGC Care Journal. [Article-written-by-Seema-Singh-BRPID-project-findings.pdf \(graduatewomen.org\)](#).

TO'OS BA MORIS DIAK (2017). Nutrition-related Knowledge, Attitudes, and Practices Survey Report. Technical Report 10. Dili: TOMAK.