
Assessment of the constraints encountered by women farmers in empowerment leading to poverty reduction in Imbulpe DS Division in Sri Lanka

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Abstract

Many countries have proved that there is a strong relationship between empowerment of farmers and agricultural production. Empowered farmers have a considerable level of potential to enhance their agricultural production and thus alleviate poverty in rural areas. However, women farmers who live in most of the developing counties have obtained in lower level of empowerment. Simultaneously, Sri Lankan agriculture is moving towards feminization and the role of women in agriculture growth and development has increased considerably. The level of empowerment of the women farmers and constrains of them for agricultural production haven't been studied yet in Imbulpe DS division. Therefore, this research was conducted to assess the awareness level of empowerment of these women farmers and constrains of them for agricultural production to reduce the poverty in this area. Out of all the women farmers in the area, 238 was used in this study. Necessary primary data was collected using a pre-tested, self-administered questionnaire survey from March to July 2019. Data analysis was conducted using descriptive statistics and multiple linear regression analysis. The results of the descriptive statistics showed that majority of the women farmers were within the middle ages (40–59 years), married, belonged to families with 4–5 members and *literate* up to junior secondary education level. Average land size was 0.84 acre and they had farming experience about 15 years. Moreover, findings reported that 82.2% of respondents knew about meaning of empowerment and they had received these knowledge through training programs and workshops, village organizations and meetings and government extension officers. When constraints of the women farmers were considered, according to the result of the multiple linear regression analysis, lack of initial capital, poor access to resources, difficulties in marketing facilities, and storage facilities were statistically significant. These are the main constraints for the women farmers' empowerment and poverty alleviation in this area. Also these women farmers are facing the problem of lower access to potential services which could help them to smooth their agricultural production activities. Therefore, government and developing practitioners should help to empower them by providing access to agricultural production resources such as land ownership and other requirements for them to enhance the active involvement in agriculture.

Key words: farm women empowerment; agriculture; constrains; feminization; poverty reduction; Sri Lanka

Introduction

Nowadays, gender equity and poverty reduction are considered as one of the important factors to achieve the sustainable development of a country (UNDP, 2017). Gender equity and wom-

en empowerment are the paramount objectives that influence to enhance the development of man-kind in the world (Shuai et al., 2019). Women empowerment and poverty reduction has bidirectional relationship for achieving the sustainable development in the world (Khan et al., 2017).

Therefore, women empowerment acts as a driving force for alleviating poverty in most of the developing countries (Nadim and Nurlukman, 2017). The reduction of poverty can be achieved mainly through the reduction of gender discrimination. All over the world, gender inequality has caused women poverty, depriving them of basic rights and opportunities for well-being (UN Women, 2015). And also, empowerment of women is a basic requirement according to the Sustainable Developmental Goals (SDGs) for the emergence of poverty alleviation programs in a particular country (Pabuccu, 2017; Meetei et al., 2015). Women empowerment is a process of enhancing the contribution to household income, access to resources, ownership of assets, participation in household decision-making, perception on gender awareness and coping capacity to household shocks (Parveen and Leonhäuser, 2004).

In general, women empowerment is a process of encouraging participation of women in developmental activities related to economic, social and environmental, giving freedom of mobility to them and power of speech (Khan et al., 2017). Rural cultures basically obtain with the farming activities and rural women support for the farming activities behind the men. Farm women should empower to reduce the household poverty in rural community. According to the definition of the World Bank (Pabuccu, 2017), poverty is defined as the situation in which minimum living conditions have not been achieved. Furthermore, poverty can be defined in terms of lack of basic capacities to participate effectively in society and enjoying decent living, violation of human dignity, not having enough to food and clothing for family, not having access to credit facilities, not having the productive land to grow food crops or a good job to earn money, not being able to access education, powerlessness, insecurity and exclusion (Khan et al., 2017). Women's role in agricultural production activities has a symbolic relationship to national and international development in crop farming, processing and marketing of agricultural products (Ogebe et al., 2018).

Sri Lanka is predominantly an agricultural country with 81.2% of the households still in the rural community (World Bank, 2020). Women

constitute of 50.7% of the Sri Lankan population and are considered to be a valuable resource potential that is needed to develop the agricultural sector in rural areas. Women contribution to agriculture and also to the national economy of Sri Lanka is gradually increasing. Majority of the Sri Lankan women are participated in the agricultural sector rather than service sector (Annual Labor Force Reports, 2017; FAO, 2017). Imbulpe DS Division basically depends on the agriculture rather than service sector and women support for the agricultural activities alongside with men (Census and Statistics of Agriculture Report – Rathnapura District, 2013/14). Women perform numerous labor-intensive activities in agricultural production such as land clearing, land tilling, planting, weeding, fertilizer/manure application, harvesting, food processing and livestock Management (Malkanathi, 2016; Gamhewage et al., 2015). Measuring the empowerment status of rural women is timely important to make future decisions for achieving the sustainable development related with social, economic and environmental aspects. Most of the researchers are only focusing on measuring the women empowerment and diagnose the factors behind the empowerment of them. But this research mainly emphasis on the women which engaging in farming activities and also how empowerment can be used to reduce poverty through achieving the significant level of women empowerment within them. Rural women are highly contributed to the agricultural related activities in Sri Lanka.

In Imbulpe DS Division, most of the women are engaged in agricultural activities, as the agricultural sector involvement is the prominent way of earning in this area. According to the statistics of the Imbulpe divisional secretariat office, monthly average income of the families in this area is about LKR 20,000–30,000. And also most of their household expenses are fulfill by the agricultural productions.

Sources of women empowerment are support to build up higher women farmer capacity. This study also focus on rural women farmers involvement to reduce the household poverty.

According to the available information, most of women farmers don't have necessary power and facilities to do the agricultural activities well.

If they have a considerable level of empowerment, they can contribute more to the alleviation of poverty up to a significant level. However, it is important to understand the main constrains of empowerment of women farmers which are negatively affecting for reducing of poverty of them. It is difficult to find out literature on important aspects of women farmer’s empowerment and poverty reduction in this area. Therefore, this study was conducted to assess the level of empowerment of women farmers and also impact of constrains for the empowerment of women farmers and effect of them in reduction of poverty in this area.

Materials and method

Imbulpe DS Division is located in Rathnapura district in Sri Lanka. Target population was the registered women farmers in Agrarian Service Center of Imbulpe DS division. Firstly seven GN divisions were randomly selected for the study. Thereafter, 238 respondents were randomly selected from the seven GN divisions in order to ensure adequate representation of the GN divisions, thereby providing the same opportunity for each woman farmer to be chosen. A self-administered

questionnaire survey was used to collect data from the respondents from March to July. Before data collection, a pilot study was undertaken to determine the ability of the questionnaire to elicit the required information about the research aim to be achieved and avoid ambiguity in further data collection process. Data were analyzed with the use of descriptive statistics and multiple regression analysis. Women empowerment was measured by using five dimensions based on the study of Rahman and Naoroze, 2007 with necessary modifications according to the study area. Namely – access to assert and resources, social participation, freedom of decision making ability within the family, freedom of mobility and spending ability. The impact of constrains on the empowerment of women farmers was assess by using constrains as the independent variables and empowerment as the dependent variable.

Results and discussion

Socio-Demographic Profile of Respondents

Important socio-demographic factors of respondents’ were studies in detail. Findings are presented in Table 1.

Table 1. Socio-demographic profile of respondents (n = 238)

Factor	Category	Frequency	Percentage
Age	20–39 Years	40	16.8
	40–59 Years	149	62.6
	> 60 Years	49	20.6
Marital status	Single	09	3.8
	Married	215	90.3
	Widowed	14	5.9
Educational level	No Primary education	08	3.4
	Primary education (up to grade 5)	68	28.6
	Junior Secondary education (up to GCE O/L)	153	64.3
	Senior Secondary education (up to GCE A/L)	09	3.8
Monthly income (LKR)	Less than 20,000	61	25.6
	20,001 – 40,000	156	65.5
	40,001 – 60,000	21	8.8
Number of children	1–2	79	33.2
	3–4	128	53.8
	more than 5	31	13

Source: Field survey March to July 2019.

According to the results in Table 1, a larger proportion of the respondents (62.6%) was come under the age category of 40–59 years. Therefore, most of the respondents are economically active and productive ages and there is high prospect for positive change of agricultural productivity, if they are well empowered. Moreover, 90.3% of respondents were married and majority (64.3%) of the women farmers were consisted of junior secondary education. But 3.4% of the respondents have not received even primary level of education. A significantly higher level of education of them implies that they would easily access and adopt new technologies which can enhance their agricultural productivity and can ensure food security in the area. The study also revealed that the majority of respondents (53.8%) had 3–4 children within their families. Average land size was 0.84 acre and they had farming experience about 15 years. 65.5% of respondents reported that their monthly income ranges between LKR 20,001–40,000 and 25.6% of women farmers’ monthly income was less than LKR 20,000. This situation is highly emphasis the importance of women empowerment to reduce the household poverty.

Awareness on Empowerment by Women farmers

Awareness on empowerment of women farmers by them were evaluated well. The findings are recorded in Table 2.

As per Table 2, majority of respondents (82.2%) had aware on the level of empowerment of them. However, 13.9% of women farmers had not any idea about women empowerment. 82.2% of respondents reported about their knowledge sources related to women empowerment.

Table 2. Awareness of the level of empowerment by women farmers (n = 238)

Awareness on women empowerment	Frequency	Percentage (%)
Yes	197	82.2
No	33	13.9
No idea	08	03.4

Source: Field survey March to July 2019.

Knowledge sources of empowerment of women farmers

In analyzing the sources of knowledge helping women farmers’ empowerment, nine main sources are identified. They are mentioned in Table 3.

According to the results of the Table 3, 70.6% of respondents had received their knowledge about women empowerment through radio, TV and newspapers. And also, government officers, training programs and village meetings were provided knowledge about the women empowerment. However, contribution of school education and agricultural instructors’ knowledge to disseminate the information about empowerment considerably lower than other knowledge sources.

Table 3. Knowledge sources helping women farmers’ empowerment (n = 197)

Knowledge sources about empowerment	Frequency	Percentage (%)
School education	07	2.9
Information from family members	24	10.1
Friends and Relatives information	39	16.4
Information from Radio/TV/ Newspapers	168	70.6
Information from Agriculture Instructors	22	9.2
Information from other Government Officers	76	31.9
Information from Training Programs	59	24.8
Information from NGO’s	34	14.3
Information from village Meetings	84	35.3

Source: Field survey March to July 2019.

Constraints to empower women farmers’ efforts in agricultural production

Constraints to women farmers’ efforts in agricultural production were investigated using descriptive statistics. Findings are presented in Table 4.

Table 4. Constraints to empower women farmers in agriculture

Model	Standardized	t	Sig.
	Coefficients Beta		
(Constraint)		7.449	.000
Storage facilities	.167	2.733	.007
Extension service	-.125	-1.800	.073
Participation in Decision making	-.009	-.138	.891
1 Husband Influence	-.090	-1.460	.146
Technical knowledge	-.119	-1.962	.051
Marketing	.174	2.721	.007
Access to resource	.302	4.925	.000
Initial capital	.199	2.807	.005

a. Dependent Variable: empowerment

Source: Field survey March to July 2019.

According to the results of the Table 4, access to resources (land and capital agro-inputs), marketing, initial capital and storage facilities, extension service, participation in decision making, husband’s influence and technical knowledge were identified as the main variables of constraints of women empowerment.

When consider the Beta coefficients of these selected variables, extension service, participation in decision making, husband’s influence and technical knowledge were not statistically significant with the empowerment. But, access to resources (land and capital agro-inputs), marketing, initial capital and storage facilities were statistically significant variables with the women empowerment. Therefore, access to resources (land and capital agro-inputs), marketing, initial capital and storage facilities were indicated as the constraints towards the empowerment of rural women’s effort in agriculture in this area. The results noted that access to resources such as land and capital was positively significant at the 5% level ($p < 0.05$). This shows that a higher percentage of positive relationship is in between access to resources such as land and capital with the higher agricultural productivity/output ceteris paribus. This shows that the inability to access resources act as a major constrain in empowerment of rural women’s effort toward increasing agricultural productivity and reducing poverty at

household level. Most of the respondents stated that they have an ability to access the resources and results showed a positive and significant coefficient at the 5% level ($p < 0.05$).

Furthermore, initial capital act as a considerable constraint to women farmers in this area. Respondents stated that they have an ability to apply for loans to find out initial capital from banks or other financial institutions, because of number of obstacles including higher interest rates, inability to collateral of their property and fear of repayment of loans. The results showed a positive and significant coefficient for initial capital at the 5% level ($p < 0.05$).

Also marketing of agricultural products acted as a constraint for women farmers in the study area and it noted 0.07 as their p value. Lack of market information, lower product quality and operational errors pre and post harvesting of agricultural products cause to marketing of agricultural products.

In addition to that, food storage facilities act as a constraint to empowerment of women farmers and its p value 0.007. I shows that the use of poor storage facilities negatively affect for the agricultural productivity. Imonikebe (2010) has reported that the government need to support to reduce the post-harvest losses and promote food security by provisioning of processing and storage facilities. In addition to that, lack of access to resource-

es (land and capital agro-inputs), marketing, initial capital and storage facilities were acted as the major constrains for the women farmer’s participation in the agribusiness activities. Therefore, empowerment of women farmers is needed to overcome these constrains to reduce the household poverty in this area. However, extension service, participation in decision making, husband’s influence and technical knowledge were identified as less important constraints for the empowerment of women farmers in this area.

Impact of constraints for the empowerment of women farmers

Impact of constraints for the empowerment of women farmers was analyzed using regression analysis. Results are shown in Table 5.

As per Table 5, lack of initial capital, husband’s negative influence, lack of storage facilities, poor access to resources, lack of technical knowledge, poor participation in decision making, marketing and extension service of women farmers have created significant impact on low level of empowerment of women farmers.

Kahn et al. (2017) reported that, education, freedom of decision making and paid work involvement are statistically significant to women empowerment and poverty reduction. Based on the findings of the Wei et al. (2021), education, access to asset and resources, decision making ability within the family and access to medical facilities have played a significant role to reduce the income poverty and multidimensional poverty. Hence when consider about the Sri Lankan context, access to resources, marketing, initial capital and storage facilities have created a

significant impact on empowerment of women farmers and poverty reduction.

According to the Ibhahokanrhowa, 2016; Ogebe et al., 2018 identified, storage facilities, extension service, husband influence, technical knowledge, marketing, access to resources and initial capital as the constraints of empowerment of women farmers.

Conclusion and recommendations

According to the findings of the study it can be conclude that majority of the respondents are in between the age of 40–59 years. Therefore most of the respondents are economically active productive ages and there is high prospect for positive change of agricultural productivity if they are well empowered. Most of the respondents has received education up to junior secondary level. Therefore, they would easily access and adopt new technologies that can enhance their agricultural productivity and ensure food security in the area.

Higher number of respondents aware about the meaning of women empowerment and their level empowerment. Main sources of empowerment of them are radio, TV and newspapers. Also, government officers, training programs and Village meetings are providing knowledge about the women empowerment. Contribution of school education and agricultural instructors’ knowledge to disseminate the information about empowerment are considerably lower than other knowledge sources.

Food storage facilities, marketing of agricultural products, access to resources and initial

Table 5. Impact of constraints on women empowerment

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	.720	8	.090	6.459	.000 ^b
1 Residual	3.179	228	.014		
Total	3.899	236			

a. Dependent Variable: empowerment

b. Predictors: (Constant), Initial capital, Husband Influence, storage facilities, access to resource, technical knowledge, Participation in Decision making, marketing, extension service

Source: Field survey March to July 2019.

capital act as major constraints of empowerment of women farmers in agriculture.

There is a potential to enhance in agriculture production if more attention is paid on women farmers empowerment. Better agricultural productivity and production can cause to earn more profits and its leads to the reduction of poverty in this area.

Based on the conclusions following recommendations can be suggested

- Empowerment of women farmers furthermore by providing suitable empowerment programs and also providing more accessibility for the required resources
- Enhancement of accessibility for market information through various kind of ICTs
- Establishment of proper credit facilities for the women farmers at concessionary rates for the fulfillment of initial capital requirement.

Abbreviations

DS Division: Divisional Secretariat Division
UNDP: United Nations Development Program
UN: United Nations
SDGs: Sustainable Development Goals
FAO: Food and Agriculture Organization
GN Division: Grama Niladhari Division
LKR: Sri Lankan Rupees
TV: Television

References

Gamhewage, M. I., Sivashankar, P., Mahaliyanaarachchi, R. P., Wijeratne, A. W., & Hettiarachchi, I. C. (2015). Women participation in urban agriculture and its influence on family economy-Sri Lankan experience. *The Journal of Agricultural Sciences*, 10(3), 192-200.

Ibharhokanrhowa, O. M. (2016). Empowerment of Rural Women Farmers and Food Production in Esan West Local Government Area of Edo State, Nigeria. *A thesis submitted in partial fulfillment of the requirements for the degree of Doctor of philosophy (Ph. D) in sociology to the Department of Sociology, College of Business and Social Sciences Covenant University.*

Imonikebe, B. U. (2010). Constraints to rural women farmers' involvement in food production in Nigeria. *African Research Review*, 4(3).

Khan, I. A., Shahbaz, B., Naz, M., Umer, S., & Amir, R. M. (2017). Determinants of Women Empowerment and Poverty Reduction: A case study of Faisalabad, Panjab. *Pakistan Journal of Agricultural Sciences*, 53(4), 217-225. doi:10.21162/PAKJAS/17.4563

Malkanthi, S. P. (2016). Gender Development of labor and use of underutilized crops: case in Monaragala district in Sri Lanka. *Int j Agricultural resources, Governance & ecology*, 12(2), 77-92.

Meetei, W. T., Saha, B., Pal, P., & Pal, P. (2015). Factors Influencing Women's Empowerment through Fisheries Activities: A Study in Manipur. *Indian Research Journal of Extension Education*, 15(4), 35-40.

Nadim, S. J., & Nulukman, A. D. (2017). The Impact of Women Empowerment on Poverty Reduction in Rural Area of Bangladesh: Focusing on Village Development Program. *Journal of Government and Civil Society*, 1(2), 135-157.

Ogebe, F. O., Weye, E. A., & Nnama, U. C. (2018). Women Empowerment in Agriculture: A Key to Food Security and Rural Poverty Alleviation in Abuja Municipal Area Council of Nigeria. *The International Journal of Humanities & Social Studies*, 6(12), 23-27. doi:10.24940/theijhss/2018/v6/i12/HS1808-114

Pabuçcu, H. (2017). Measuring Poverty Level of Households by Using Fuzzy Logic. *Advances in Economics and Business*, 5(9), 510-517. doi:10.13189/aeb.2017.050904

Parveen, S., & Leonhäuser, I. U. (2004). Empowerment of Rural Women in Bangladesh: A Household Level Analysis. *Conference on Rural Poverty Reduction through Research for Development and Transformation*. Deutscher Tropentag - Berlin, 5-7 October 2004.

Rahman, H., & Naoroze, K. (2007). Women empowerment through participation in Aquaculture: Experience of a large scale technology Demonstration project in Bangladesh. *Journal of social science*.

Shuai, Y., Shuai, C. M., Li, W. J., & Huang, F. B. (2019). Role of women's empowerment in improving farmer's livelihood: empirical evidence from China. *Quality & Quantity*, 53, 621-639.

Wei, W., Sarker, T., Zukiewicz-Sobczak, W., Roy, R., Alam, G. M., Rabbany, M. G., ...Aziz, N. (2021). The Influence of Women's Empowerment on Poverty Reduction in the Rural Areas of Bangladesh: Focus on Health, Education and Living Standard. *International journal of environment and reasearch public health*, 18, 6909. doi: <https://doi.org/10.3390/>

(FAO) Food and Agriculture Organization. (2017). *Crop and Food Security Assessment Mission to Sri Lanka*. Retrieved from <http://www.fao.org/3/a-i7450e.pdf>

Annual Labor Force Reports. (2017). *Department of Census and Statistics*. Retrieved from http://www.statistics.gov.lk/samplesurvey/LFS_Annual%20Report_2016.pdf

Censuses & Statistics Report of Agriculture report in Rathnapura. (2013/14). Retrieved from <http://www.statistics.gov.lk/Agriculture/StaticalInformation/new>

UN Women. (2015). *Women and Sustainable Developmental Goals*. UN women. Retrieved from

<https://sustainabledevelopment.un.org/content/documents/2322UN%20Women%20Analysis%20on%20Women%20and%20SDGs.pdf>

United Nations Development Program (UNDP). (2017). Retrieved from http://www.undp.org/content/dam/undp/library/gender/Gender_equality_as_an_accelerator_for_achieving_the_SDGs.pdf

World Bank. (2020). Rural population (% of total population) - Sri Lanka. Retrieved from: <https://data.worldbank.org/indicator/SP.RUR.TOTL.ZS?locations=LK>