EMPOWERMENT OF RURAL WOMEN FARMERS AND FOOD PRODUCTION IN RATHNAPURA DISTRICT IN SRI LANKA: A HOUSEHOLD LEVEL ANALYSIS

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Abstract: Women empowerment and gender equity are two significant aspects of the sustainable development of a country. As Sri Lanka is on the way towards sustainable development, this study was conducted to assess the situation of women farmers' empowerment and food production in Rathnapura district of the country. A sample of 300 women farmers was randomly selected for the study, from two selected Divisional Secretariat (DS) of Rathnapura district. Data was collected from a field survey using a pre-tested, self-administered questionnaire survey from April to July 2019. Empowerment was analyzed using the empowerment framework used by RAHMAN AND NAOZORE in 2007 in the study of "Women Empowerment through Participation in Aquaculture" with necessary modifications. Data analysis was conducted using descriptive statistics, correlation analysis and multiple linear regression analysis. Results revealed that majority of the women farmers were middle aged, married and had children. Furthermore, most of them had education up to secondary level. While average family size was four, average farm size was 1.25 acres. They had around 16 years of farming experience. The average monthly income of them was 25,000.00 LKR whereas 20% of it was from agriculture. The main sources of empowerment of women farmers were the Agrarian Service Center (55%) followed by village organizations/societies (30%) and microfinance institutions (26%). Furthermore, women empowerment index was 0.65. It is a moderate level of empowerment. However, there were women farmers under three categories of empowerment levels: low empowerment (4.1%), medium empowerment (58.5%) and high empowerment (36.1%). Out of the socio-economic factors; age, education, family size, land size, number of training programs participated, monthly income, experience in agriculture and number of organizations participated, education and number of training programs attended had significant and positive effect for the empowerment. Accessibility of credit facilities and agricultural extension program participation showed that there was a considerable impact on food production rather than the cultivable land size and utilization of modern farming technologies for food production. Therefore, proving of timely important agricultural education and training programs, enhance awareness level of modern farming technology utilization, better micro finance programs and agricultural credit facilities will be able to enhance the empowerment level of the women farmers of this area furthermore.

Keywords: Women empowerment, sustainable development, gender equity, farming activities, Sri Lanka (JEL Code: Q01, Q12)

INTRODUCTION

The women empowerment is a basic concept according to the Developmental Goals (DG) to the emergence of poverty alleviation programs in a particular country (IBHARHOKANRHOWA, 2016). Women empowerment is a process of enhancing the freedom of decision making within the family, access to assets and resources, social participation, freedom of mobility and spending ability (RAHMAN & NAOZORE, 2007). The potentials for agriculture accountable for the buildup of a proper avenue to unleashed the well-being of people through food production. In Sri Lanka, more than half of the working population is constituted of women. But only about 18% share constitute as employed women from the total working age population. And also, the highest unemployment rate of women reported within the rural sector rather than the other sectors of the country. Sri Lanka is predominantly an agriculturally based country with 82% of the households still in the rural sector. Women constitute 50.7% of the Sri Lankan population are considered to be a valuable resource potential needed to be in the rural agricultural sector. Women contribution to agriculture is gradually increasing to the national economy. Most of the

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Sri Lankan women are participated in agricultural sector rather than industrial sector (ANNUAL LABOR FORCE REPORTS, 2017). Measuring the empowerment status of rural women and food production 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 of behind the empowerment of women. But in this research mainly clarify about the women which engaging in farming activities how create deviation on agricultural sector through achieving the overall empowerment in the society. Rural women are highly contributed to the agricultural activities in Sri Lanka. But with most of them don't have necessary power and facilities to do the work well. In some households, men are working in cities. Women have to do household activities and also agricultural activities. If they have sufficient level of empowerment, they can contribute to rural development up to a significant level. However, it is necessary to identify the issues related to empowerment of women farmers. These are the key aspects which constitute the attention on this study. Therefore, this study was used to find out the situation of empowerment of women farmers and also what are sources of empowerment relevant to the women famers in the study area. Empowerment calculated by using five dimensions according to the literature findings relevant to the field of empowerment.

Food security and production in a global point of view

The concept of food security is a target goal of United Nations Sustainable Development which valid during the period of 2015 - 2030. Most of the developing countries have common critical issue, such as unavailability of foods for the consumption or food insecurity. According to the demonstrations of the World Food Conference, evidence that wide range of crop failures and disasters causes for food insecurity (FAO, 2018). MAXWELL AND SMITH (1996) recorded about the other factors which are responsible for food insecurity. such as,

- Shortages of agricultural production and supply.
- Problems associated with the employment and wages.
- Health and morbidity related problems.
- Market status and price fluctuations.

This observation brings in a broader thinking about food security including the accessibility to consume insufficient quantity or quality of foods within the society. Household level food security demonstrate about the availability of food structures within the households to eradicate the crises related to low level of food consumption of women and other family members (NEGIN et al., 2009). Food security is the availability of adequate amount of food and ability to access to the expected proportion of foods at right time by each and every individuals (IBHARHOKANRHOWA, 2016). The International Food Policy Research Institute (IFPRI) define food security based on the three sections, such as food production, food access and food utilization. Food security at household level refers to production of foods for their household consumption and earning additional revenue through selling of surplus to the market. But, rural women try to adapt to the latest opportunities and constraints regarding the production of foods while ensuring the adequate level of foods within their families (NEGIN et al., 2009).

Food security has been generally responsible to build up the sustainable development throughout the world. Because, United Nations already focused as a developmental goal in particular country.

Accessibility of modern farm technologies and food production

Farming is an aggregate concept which describing the entire process of crop cultivation: preparation of lands, planting, weeding, harvesting, and post-harvesting activities (IBHARHOKANRHOWA, 2016).

Women has less ability to participate in economic opportunities because they face a work related with social mission rather than the men. In most societies, women are responsible for most of the household supervision and caring and sharing of family members as well as rearing of small livestock. According to the FAO, 2015 report, Novel Sri Lankan Agriculture is suffering from several major problems. Such as,

- Low adoption of modern farming technologies
- Lower utilization of mechanization
- Higher level of cost of production and lower profitability
- Increases in post-harvest losses
- High amount of transportation cost
- Lower level of market-oriented products
- Poor level of value addition to primary agricultural products
- Low crop productivity
- Research & Development in central government
- Less priority to extension

For developing countries, more potential benefits associated with Contract Farming (BELLEMARE, 2015). Because farm scale tends to be small, farmers are consist with poor level of awareness about the agricultural activities, total agricultural production and utilization of management technologies are less efficient, and infrastructure facilities such as transportation of agricultural inputs and production, and poor flow of information within the supply chain, contracting with a large agribusiness firm may be the only way of farmers can access higher-end markets and receive beneficial returns from it (WANG et al., 2014).

Generally two types of farming technologies used,

- Local farming technology.
- Modern farming technology.

Local technologies obtain small-scale manner, conducted simple operations, lower cost and build up with indigenous materials. When considering about the modern technology, is consist with large-scale, higher operating cost, overall operational activities conducted as profit-oriented and maintaining with complex operations (IBHARHOKANRHOWA, 2016).

Extension service and food production

Rural economy basis with the Agriculture. Agricultural extension is the most prominent type of extension occurred in non-metropolitan areas (FAO, 2018). In other words, extension is a process related with an informal educational background focused toward the population in non-metropolitan areas. Extension process allows for several advices and dissemination of information to solve their existing problems. Extension aims to optimize the efficiency of the family farming activities, maintaining maximum level of food production and generally support to upgrade the standard of living and overall development of the farm family (IBHARHOKANRHOWA, 2016).

The basic objective of the extension is to build up a proper foundation for farmer's outlook by focusing their opportunities and threats. Extension is not centralized with physical and economic development of the non-metropolitan population. Agricultural extension agents, help to gain a sustainable development through disseminating knowledge with the rural people (FAO, 2018).

An improved information and knowledge flow within the agricultural sector support to improve the small-scale agricultural production and create a proper path way to optimize the production surpluses to the agricultural markets, increased rural livelihoods, optimizing quality and yield (MOJAKI & KEREGERO, 2019). Rural farmers obtain with a very few information regarding the agricultural sector, but innovative modern knowledge occurring in research institutions, universities, public offices and libraries consist with poor level of dissemination. It causes to build up the poor linkages between research, extension, not for profit and non-profit organizations, libraries etc. (LWOGA et al., 2011). Most of the developing countries are suffering from gender inequality focused under millennium development goals, cause to increase the knowledge barrier for the women farmers (QUISUMBING et al., 2014).

Access to credit facilities for food production

The demand for agricultural credit facilities are prevalent by the socio-economic factors in most of the non-metropolitan areas of developing countries (YADAV & SHARMA, 2015). Most of the low income farmers persuade to accessibility of credit facilities to minimize the financial hazards occurring with the fertilizer and agrochemicals in virtually all of the developing countries (REHMAN et al., 2015).

Research has provided a greater platform for the credit facilities to empower women in taking decisions within the household, having proper social networks, having proper access to financial and economic resources, more bargaining power with their husbands within the family and having considerable freedom of mobility. However, women still suffering from various difficulties for the accessibility of such kind of credit facilities. The major case of lower accessibility of credit facilities, the rural women has low level of literacy and dependent on their husbands for agricultural inputs (IBHARHOKANRHOWA, 2016). Agricultural credit obtains with the several credit vehicles for financing the agricultural transactions, including loans, notes, bills of exchange and bankers' acceptances etc. These types of financing methods are supported to the specific financial needs of farmers, which are determined by planting, harvesting and marketing operations. In other words, credit is regarded as a major factor for the both agricultural development and rural development (MARTIN et al., 2014). Low interest rates of credit facilities for the purchasing of agricultural productive inputs, deviations of a traditional practice (tenure farming). Therefore, to obtain a significant improvement in food production, good agricultural credit system is an essential requirement. The government policy makers are focusing to bloom the sustainable financial system for the development of the agricultural sector. It cause to build up the accessibility of credit and other financial services (including banking) to the rural farmers (WORLD BANK, 2019).

RESEARCH METHODOLOGY

This research was conducted in Rathnapura district of Sri Lanka where many agricultural activities are performed. Questionnaire Survey used as the primary data collection method. The respondents of the research were the women farmers in Rathnapura district.

Around 1200 women farmers obtained in Rathnapura district. Among them, 300 women farmers were randomly selected for the study. Two DS divisions were selected according to the base of the purposive sampling technique across the 17 DS divisions in the study area.

Pre-tested self-administrated structured questionnaire was used as the data collection instrument of the study. Descriptive statistics and regression analysis were conducted as the data analysis method using SPSS software version 23. A pilot study was undertaken with 10 copies of the questionnaire to avoid ambiguity in further data collection process.

Table 1: Measurement of selected	empowerment dimensions
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Empowerment	Number of	Assigned scores based on the selected responses	Possible
Dimension	indicators		score
	used		range
Decision making within the family	10	 0 - No influence, 1- Low influence, 2- Moderate influence, 3- Full influence 	0 - 30
Spending ability	10	0 – No ability, 1– Low ability, 2– Moderate ability, 3- Full ability	0 - 30
Access to resources	8	 0 - No access, 1 - Low access, 2 - Moderate access, 3 - Full access 	0 - 24
Freedom of mobility	7	0 – Not at all, 1 – Rarely, 2 – Occasionally, 3 – Frequently	0 - 21
Social participation	7	 0 - No participation, 1 - Seldom participation, 2 - Occasionally participation, 3 - Frequent participation 	0 - 21

A unit score was represented to make a comparison among the five selected measures of empowerment, by the following formula:

Formula 1: Onit empowerment score
Unit score of empowerment $=$
Mean score of a particular dimension
Maximum possible score of the dimension
Formula 2: Overall empowerment
Overall empowerment = $\underline{\text{Total empowerment}}$
Number of respondents
Formula 3: Empowerment Index
Empowerment Index = $\underline{\text{Total empowerment}}$
Total score of dimensions

Seven variables were selected to identify the relationship of rural women's empowerment through participation in agriculture. Such as: age, education level of the respondents, family size, and size of the farm land, number of training attended, experience in agriculture, number of participated organizations of the village, number of extension services used and number of credit facilities used.

RESULTS AND DISCUSSION

Socio-demographic profile of respondents: The sociodemographic factors related with the women farmers obtain in table 2. All the respondents were women; therefore, gender variable is missing in the below data.

Table 2: Socio-demographic profile of respondents

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Selected variable	No	%	Selected variable	No	%
Age	No of children				
20 - 29	14	4.7	0 child	9	3
30 - 39	45	15	1 child	56	18.7
40 - 49	93	31	2 children	133	44.3
50 - 59	81	27	3 children	85	28.3
60 - 69	54	18	4 children	27	9
70 - 79	13	4.3	5 children	5	1.7
Marital status			Level of education		
Single	8	2.7	No formal education	6	2
Married	279	93	Primary education	47	15.7
Widowed	13	4.3	Secondary education	242	80.7
Divorced	0	0	Tertiary education	5	1.7
Husbands occupation			Family size		
Farmer	125	41.7	1 member	8	2.7
Clark	22	7.3	2 members	17	5.7
Driver	41	13.7	3 members	133	44.3
Defense worker	19	6.3	4 members	89	29.7
Trader worker	55	18.3	5 members	31	10.3
Machine operator	13	4.3	6 members	15	5
Labor	25	8.3	7 members	7	2.3
Monthly income			Monthly income from Agriculture		
0 - 20000	25	8.3	0 - 20000	27	9
20001 - 40000	208	69.3	20001 - 40000	273	91
40001 - 60000	67	22.3	40001 - 60000	0	0
Husband's education	tion (To purchasing of agricultural inputs for next cultivation)				
No formal education	8	2.7	0 - 1500	9	3
Primary education	41	13.7	1501 - 3000	13	4.3
Secondary education	247	82.3	3001 - 4500	187	62.3
Tertiary education	4	1.3	4501 - 6000	91	30.3

Source: Field survey May-June, 2019

As shown in the table 2, the average age of the respondents was 40 - 49 years indicating that they were matured adults, so they have ability of decision making when it comes to farming and other related household matters. Only 19.7% of the respondents were below 40 years. This is demonstrated from the findings as 4.7% belonged to the age group of 20-29 years. Consider as, less than 30 year's respondents are young 4.7%, in years between 30- 50 as middle age farmers 46% and more than 50 years farmers are adult farmers 49.3%. According to the findings highest value represent as adult farmers. Marital status, above table demonstrated from the findings as 2.7% belonged to the single, married category present highest value 93% among other respondents. But in questionnaire obtain other two categories. Such as separated and divorced. There was not obtain valid cases in respondent sample for these two categories.

Most of the respondents have only 2 or 3 children. No children obtain as 3%. Because of the 8 respondents were single and only 1 respondent in age 20-29 years they have not children. Respondents level of education, 80.7% of the respondents were obtain secondary education as highest category and pathetic situation behind these data, 2% of respondents were consist in no formal education category. Most of the husbands 82.3% of the respondents are obtain with secondary education, Primary education was 13.7%, and only 2.7% of husband have not formal education.

The statistics on family size revealed that 29.7% of respondents have 4 persons within the family, 10.3% was obtained as 5 persons, 44.3% consist with 3 persons, 5% occurred in 6 persons within their family. Monthly income, 91% of income obtain in Rs.20001-40000 highest income present category, Rs.0-20000 category was shows as 9%

According to the household income and expenditure report -2016 rankings,

0 -10000 income = Extreme poor, 10001- 20000 income = Poor 20001-40000 income = Lower middle income,

40001-60000 income = Upper middle income

Therefore, findings are indicated monthly income of the respondents and monthly income from agriculture obtain in lower middle-income category in the study area.

Sources of farm women empowerment: Analysis done by the using of Descriptive statistics-frequency analysis. Sources of empowerment variables are (a) Agrarian service center (b) village organizations/ Societies (c) Micro finance Institutions (d) Bank loans and loan providing institutions (f) Mass media (g) Neighboring farmers.

Table 3: An importance of the Sources fo	r farm women empowerment
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Tuste et this importance of the Sources for furth women empowerment				
Selected Source	Type of source	No	%	Rank
Agrarian Service Center	Internal source	80	55.2	1
Micro finances Institutions	External source	44	30.3	5
Bank loans & loan providing institutions	External sources	38	26.2	6
Mass Media (TV, Radio, Newspaper)	External source	48	33.1	4
Village organizations/ societies	Internal source	75	51.7	2
Neighboring farmers	Internal sources	70	48.3	3

Source: Field survey May-June, 2019

According to the findings in the Table 3, most of the respondents are identify Agrarian Service Center activities have better support to their empowerment. Least supported organization is bank loans and loan providing institutions. Because 81.4% of women farmers are not willing to access credit facilities. But Agrarian Service Center is a better internal source and mass media is a better external source.

Table 4: Dimens	ions of	Empowerment
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Table 4: Dimensions of Empowerment		
Dimensions of Empowerment	Mean value of each vari- able respondents score	Level of Empowerment
Decision making ability within the family,	20.22	0.16
Family household expenditure Agricultural production activities Buying and selection of agricult Marketing of agricultural produ Family health issues Education of children, Selecting and using family plant Constructing and repairing of he Celebration of social and religion Giving loans to others	cts ning methods ouses	
Spending ability	17.85	0.14
Spending money on agricultural Expenditure on Medicare and he Sending money on children's ed Buying household food items Purchasing and selling of land a Buying household furniture and Lending and borrowing money Providing financial help to other Spending money for social func Making donations to charity	ealth lucation. Ind other assets other items	
Access to assets and resources	13.22	0.10
Access to family income and resources Access to land and farm lands Access to valuable instruments and machinery Access to a bank (e.g. having their own bank account) Access to credit facilities in institutions Ability to contact public services (health, nutrition, education etc.) Access to farm management and budgeting		
Freedom of mobility	14.75	0.11
Market place, Friends and relatives' houses ou Agrarian Service Center The neighboring houses Capital city Other districts Grama Niladhari office Religious places	itside the home village,	
Social participation	16.67	0.13
Participation in training and edu Participation in village organization	s, meetings and arbitrations	
Participation in social functions su programs, religious activities et	с.	
Helping neighbors in crisis situat		
Working with people in emerge	•	ural disasters)
Arbitration in the conflicts of neighbors and family		
Casting votes in local and national elections without outside interference.		
Source: Field	survey May- June, 2019	

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Based on each dimensions, Overall empowerment = 82.73Empowerment Index = 0.65

According to the findings 58.5% of women were obtained in medium empowerment situation. Sample shows that 0% obtained in very low empowerment, 4.1% of respondents were indicated as low empowerment and 36.1% of respondents are high empowerment situation (Categories are based on the RAHMAN & NAOZORE, 2007)

Table 5: The contribution of five empowerment dimensions
to overall empowerment score based on the stepwise multiple
regression analysis

Model	Dimension entered	Multiple R	Coefficient of determination R2	Percentage of variation
1	Freedom of decision making within the family	0.871	0.756	75.6
2	Social participation	0.927	0.857	10.1
3	Access to resources	0.967	0.935	7.8
4	Freedom of mobility	0.985	0.970	3.5
5	Spending ability	0.99	0.99	3.0

Source: Field survey May- June, 2019

Among five dimensions, freedom of decision making within the family had been explained the highest percentage variation in the empowerment score. And also, spending ability showed the lowest percentage variation on the empowerment score.

Factors affecting women Empowerment: Analysis done by the using of Descriptive statistics and step wise multiple regressions analysis. Independent variables are age, education in years, family size, Land size, number of training attended, monthly income, experience in agriculture in years, number of participated organizations in the village, number of extension services used, number of credit facilities used dependent variable is empowerment score. Other factors which are relevant to the empowerment score, consider their relationship strong from the correlation coefficient (r) > 0.05.

Table 6: Relationship determination between the rural women's
empowerment and selected predictable variables

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Independent variable	Correlation coefficient (r)
Education	0.644
Size of the farmland	0.376
Experience in Agriculture	0.121
No of organizations participated	0.243
No of training attended	0.477
Age	0.307
Monthly income	0.136

Table 7: The variation of women's empowerment score to the
selected predictable variables based on the stepwise multiple
regression analysis.

Mode	Variable	Multiple R	Coefficient of determination R square	Percentage variation expressed
1	Education	0.734	0.620	62
2	No of training attended	0.779	0.601	60.1
3	Size of the farmland	0.793	0.536	53.6
4	Monthly income	0.799	0.628	62.8

Source: Field survey May- June, 2019

Monthly income of the respondents had been explained highest percentage variation as 62.8%, Education represent the 62% variation and number of training attended indicate as 60.1% variation. Therefore, monthly income, number of training attended, education and size of the farm land affect for the empowerment of person.

Impact of the cultivable land size and food production: Research findings were noted as 50.7% of respondents had less than 0.5-acre size of farm land and 2-acre size was the largest acreage of farm land that showed by the respondents 2.8% within the study. Cultivable land size and food production impact were assessed through the chi-square analysis. The P-value of Pearson Chi-Square value is 0.007 which is less than the significance level (0.05). And also, the relationship is moderate 68.7%, we conclude that there is an association between cultivable land sizes to the food production in the study area. Even though the farm land size increases food production may be less, the way of using agricultural inputs, farming experiences of the respondents, location of the farm land and soil structures and adequate agricultural extension services. According to the findings of the SRABONI at al., 2014 noted that household food security varies by the size of the farm land owned by the household.

Impact of utilizing modern farming technologies and food production: Most of the respondents had less than 1-acre farmland and utilization of modern farming technologies obtained as considerably very low in the study area. Therefore, hybrid seeds, hybrid seedlings, ploughing equipment and plant growth regulators were used as the modern farming technologies in the study area. Research findings showed that 53.3% of respondents utilize modern farming technologies while doing their cultivations and 46.7% of respondents were not use any kind of modern farming technique for their cultivations. Utilization of modern farming technologies and food production impact were assessed through the chi-square analysis. The P-values of Pearson Chi-Square value is 0.08 and Cramer's chi-square value 0.08 which is not less than the significance level (0.05). And also, the relationship is at lower level 38.7%, we conclude that there is not a considerable association between utilization of modern farming technologies to the food production in the study area. Based on the findings of the IBHARHOKANRHOWA, 2016; FAO, 2013 showed that utilization of modern farming technologies increases the quantity of food produced by the rural women farmers.

Impact of agricultural extension program participation and food production: Agricultural extension services are available for most of the respondents 62.1% in the study area, as only 39.9% of respondents were found to have not ever attended an agricultural training. Reasons were sought from other respondents on why they have not participated any agricultural extension training. There are four factors to justify their absence for the agricultural extension programs. Such as (a) Not registered in the any agricultural organization (b) Financial constraints (c) Not invited for any one (d) Not important to me (e) Not enough time. Among them most of the respondents 50.4% answered as not registered in any agricultural organization.

Agricultural extension program participation and food production impact were assessed through the chi-square analysis. The P-values of Pearson Chi-Square value and Cramer's V test is 0.000 which is less than the significance level (0.05). And also, the relationship is very strong (0.977), we conclude that there is an association between agricultural extension program participation and farmer education to the food production in the study area. Chi-square analysis of the relationship between Agriculture extension services accessibility and food production. But according to the ABBEAM et al., 2018; IBHARHOKANRHOWA, 2016 findings, agricultural extension services have impacted positively on food production capacity of rural women farmers.

Impact of credit accessibility and food production : Access to credit facilities was found to be low as only 18.6% respondents and many of those who did not access loan reported that they had fear of inability to repay 49%, the frustration that comes from the bank's demand for collateral 18.6%, and higher interest rate from the bank 28.3%. Most of the respondents among those who access loan facilities, reported as loan accessed before one year ago or two year ago. Because, most of the respondents find initial capital through bank loans. After that they keep savings to the purchasing of agricultural inputs to the next cultivation. And also, those access loan, 7.6% of respondents' highest category present as Rs.25000-50000. Rarely reported more than Rs.50000 loan amount. Impact of loan accessibility on food production revealed that all the respondents 11% who had obtained the loan for a period of one or more years reported increase in food production as less than double. 5.5% respondents reported as convert their food production double after the credit accessibility. Only 1 respondent indicate as increase their food production more than double. The other respondents reported as no increase from their loan without fully utilization of it. Because it has been less than a year ago. The women responded that lack of access to finance remains a considerable barrier to their food production as they need necessary funding to be able to purchase agrochemicals, fertilizers, pay for farm labor and so on. The results show that rural women farmers cannot increase to significant level of their food production even if they access to credit facilities.

Credit accessibility of respondents and food production impact were assessed through the chi-square analysis. The P-values of Pearson Chi-Square value and Cramer's V test is 0.000 which is less than the significance level (0.05). And also, the relationship is very strong (0.954), we conclude that there is an association between credit facilities accessibility and food production in the study area. Based on the findings of the IBHARHOKANRHOWA, 2016; AINA, 2012 showed that accessibility of credit facilities increases food production among rural women farmers.

CONCLUSION

This study revealed that women farmers in Rathnapura district are medium empowered in their efforts in food production. Decision making ability within the family involves to contributing more weight to the empowerment than the other factors. Such as, spending ability, social participation, access to assets and resources and freedom of mobility. Other factors which are responsible for the empowerment are highlighted as education, monthly income and number of extension services participated. Under impact on empowerment, lower access to modern agricultural techniques engendered by improper institutional participation failures. They have not enough money to spend for the modern farming equipment and poor knowledge about the innovative agriculture.

However, When considering about the constraints regarding the empowerment of by women farmers as land ownership and accessibility aspects of it. Because most of the women farmers gain their farmland through their husbands. Accessibility of credit facilities and agricultural extension program participation showed that there was a considerable impact on food production rather than the cultivable land size and utilization of modern farming technologies for food production.

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