

STRATEGIES FOR IMPROVING THE PRODUCTIVITY OF RURAL WOMEN FARMERS FOR INCREASED AGRICULTURAL PRODUCTION

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Abstract

The paper focused on the strategies for improving the productivity of rural women farmers. As a result, it x-rayed the production activities carried out by women farmers in the continent of Africa and Nigeria in particular. Such production activities range from animal production, crop production, transportation of crops from farm to the house, processing, storage and marketing, child bearing and rearing etc. The paper went further to reveal some of the constraint faced by these rural women in the production system. Some of these constraints are inherent in the governmental systems while others are inherent in the socio-cultural milieu. Such constraint discussed were difficulty in land acquisition because of land title in most African countries, difficulty in obtaining loans/credits, illiteracy, use of crude implements etc. Based on these constraints, some of the strategies that may help improve the productivity of rural women farmers were identified such as the use of appropriate technologies to help rural women, provision of loan/credits, education and gender equality. Following from the strategies it was recommended that both government and non-governmental agencies should provide the rural women with the necessary skills and technologies to enable them effectively improve their agricultural productivity as well as lighten their household chores; agricultural loans and credits should be made available to women to enhance their productivity and income among others.

Keywords: Agricultural Production, Productivity, Production Systems, Rural Women,

Introduction

The development of agriculture is an integral part of national economic growth and development. This is why various tiers of government from the time of independence till date have made several concerted efforts to ameliorate the poor food production and supply situations in Nigeria. These they have done by the formulation of various agricultural development programmes and schemes such as back-to-land programme of Dr. M.I Okpara, (1960), the National Accelerated Food Production Programme (NAFPP) in 1974-1975; the Green Revolution of 1980-1983; the Operation Feed the Nation of 1976-1979; the Agricultural Development Programme (ADP); the Rural Agricultural Industrial Development Scheme (RAIDS) etc. All these programmes are geared towards increased agricultural production (food), improved health care and better nutrition for rural dwellers which

forms the bulk of the entire population. These rural dwellers according to Stocks (2005) is mainly made up of women and children.

Women have been found to play an active role in agricultural productions in Africa especially Nigeria. It has been estimated that about 60-80 percent of all agricultural production activities are carried out by women farmers in the continent of Africa (Adisa and Okunade 2011). On the average, in all African countries, Nigerian women like their counterparts in other developing parts of the world are found to do most of the work in the area of primary production, animal production, transportation of crops from farm to the house, processing, storage and marketing, child bearing and rearing etc. These tasks take up a large part (almost all) of the peasant women's time and energy. Not only do they fetch water and collect wood, they must travel long distances everyday carrying heavy loads on their head and backs. Under these conditions, the position of rural women seem much more difficult and compounded by the burden of tasks and responsibilities that fall on their shoulders in producing food, keeping a stable atmosphere and bringing up children. In supporting this Michelle (2016) stated that in Africa farmers contribute 80% of the agricultural production and this come from small farmers who are mostly rural women. Women comprise the largest percentage of the work force in the agricultural sector – 80% of food producers, 10% of those who process basic foodstuff. They undertake 60-90% of the rural marketing but do not have access or control over land and other productive resources.

Since the beginning of time, women throughout the world have always worked. However, this work is not recognized by economists because it is considered as part of a natural division of essential tasks into men's work and women's work. Men work outside the home while women stay at home, but if we study closely what is accomplished by a woman in the home, we realize that her work is actually productive and essential to the economy of her society. Recent findings indicates that going by 1991 National Population Census figure, Nigerian Women Constituted 49.6 percent of the total population and are found to be responsible for 60-80 percent of the food produced in the country in addition to the traditional reproductive and community management roles (Maduekwe 2011). Madukwe maintained that the International Labour Organisation in 1998 estimated that 78% of the women in Africa are active in agricultural production in contrast with only 64% of the men and that women play a vital role in food security because of their strategic position in the household and the productive work they do.

Production systems are the activities and methods which the focus is centred on all areas of agricultural endeavors relating to crop and livestock enterprises for the benefits of mankind. Improvements in these activities will in turn improve the women who are indicators of development

and nation building. Women in rural areas are working hard to improve the family's standards of living. Improvement of women so that they may perform their tasks more effectively and efficiently are necessary. Women working in agriculture have specific tasks which vary according to the order they live in. This ranges from tilling the soil, sowing, weeding, harvesting fruits, vegetables and basic funds for the community. It is worthy to note that women's main source of energy comes from their physical strengths and they use it to ensure the family's sustenance. In order to earn some money, these women must sell their excess food stuffs or handicrafts at a nearby market. In effect, they are responsible for feeding their family and making the best of their excess produce. For these reasons therefore, there is need to improve the productive capacity of rural women farmers.

Furthermore, rural women in their dual roles as producers in the farm, home and care givers need appropriate technologies to ease their work stress and to improve productivity. In developing countries, technology development and extension programmes have not been responsive to household drudgery associated with different production activities undertaken by women. Hence, rural women's demand for technology that improves their productivity while reducing drudgery must be recognised.

Historical Background of Women in Agriculture

African women's involvement in agriculture is not a new phenomenon. It is as old as agriculture itself. A review of the role of women in African economies as indicators by Economics Commissions for Africa (ECA) in Madukwe (2011) indicated that in the pre-colonial era, African women were generally engaged mainly in food farming, while men were occupied in hunting, weaving, clearing, and perhaps some cultivation.

In supporting the above review, Wikigender (2017) postulates that women provide approximately 70% of agricultural labour and produce about 90% of all the food. Adekanye (1981) in Madukwe (2011) conducted a survey of about six hundred (600) rural women in the eastern, western, and northern parts of Nigeria and found out that the Igbo women of eastern Nigeria are mainly farmers, while the Yoruba women of western Nigeria are mainly traders and the Hausa/Fulani women of northern Nigeria are farmers. These women who are farmers grow mainly food crops such as maize, rice, cassava, and palm oil at subsistence level and for sale. They perform almost all farm operations themselves, even when such heavy works as land clearing or ridge making is involved. The traders among them produce food and non-food commodities as soap, pottery, oils, clothes, beverages, cooked food etc. They sell the processed commodities as well as the unprocessed farm commodities especially those of their husbands.

Statistics available show varying estimates of 70% and 86% of the nation's food been produced, processed and marketed by women as reported by Ogundipe (1996). Ogundipe further reported that as far back as 1930, Agbaja women of Owerri Province have been growing 19 out of every 20 traditional "men" crops and women form 70-80% of the labour force in most farm operations. Women grow virtually all traditional food crops such as yam, cassava, cocoyam, maize, melon, vegetables etc. This was why in 1987, as reported by Madukwe (2011). The Nigerian government publicly acknowledged the contributions of women to national economy through agricultural production by setting certain programs to empower the women. Such programmes as Better Life for Rural Women launched in 1987, the Women-in-Agriculture (WIA) established by the Federal Agricultural Development Programme (ADP) in 1991, the Family Support Programme of 1994 for transformation of the Better Life Programme and the Family Economic Advancement Programme (FEAP). The basis for all these programmes is the understanding that national development cannot be effective without the full participation and empowerment of rural women who constitute more than 70% of the total population of women in Nigeria. This was also to encourage and stimulate rural women towards improving the standard of living of their families.

Agricultural Production

African women have been found to be involved in agricultural production practices. Reports from studies show that African women are responsible for 100% of the work in food processing, 50% in animal husbandry and 60% in marketing (Adisa & Okunade, 2011). In the eastern part of Nigeria men were known to perform back breaking operations of bush clearing on the farm, bush burning, mound making, staking, tilling the soil etc. As a result of rural-urban drift, women have taken over such operations. In addition, they are found to have made important inputs into decision making as well as supporting their husbands financially.

Nigerian women's role encompasses other sub-sectors of agriculture such as fisheries and livestock production. They are found to pick forest products such as *Sacculus*, mushrooms, vegetables, and spices for sale and family consumption. Women are also found in the raising of small ruminant animals like sheep and goat. Some engage in production of pigs and rearing of local birds. All these are kept in small stocks in their backyard to serve as emergency sources of funds for family use. Women in riverine areas are involved in fishing, processing and marketing of fish. Apart from women active involvement in farm work such as sowing, weeding, harvesting, processing, threshing, etc. they also engage in domestic duties such as food preparations, child care, compound cleaning, fire wood collections, fetching water from streams, etc. These roles are very significant as it points to the indispensable function of women in ensuring societal development.

In appreciation of the extent of women's participation in agriculture it seems that there is a loss of potential economic growth in many agricultural policy that neglects the role of women in food production. These shortcomings notwithstanding, women have made worthwhile contributions towards the agricultural development in Nigeria which is worthy of commendation. Women engage in several farm activities and this is why they constitute the larger percentage of rural farmers. In many African countries according to Food and Agriculture Organisation (FAO, 2011) and Mario (2017) rural women account for 80% of the agricultural labour forces and up to 80% of total food production. Not only do women out-number men in the agricultural labour force, they also contribute more hours in agriculture than men. As such women contribute greatly to food security at household and national levels.

Constraints Faced By Women in Agricultural Productions

Women participation in agricultural development would lead to national food security and a vibrant economy which will greatly improve the per capita income of the country. However, there are still obstacles to the total integration of women in agricultural development. Some of the constraints are inherent in the governmental system while others are inherent in the socio-cultural environment.

In most countries, land title is in the name of the male head of the household. The defector situation in many countries is that women do not have right to lands. Many have difficulty in having access to land. In South Africa for example, even when women are legally entitled to land, custom keep control in the hands of male members of the family or kingship group. In china also, it is reported that during rural reform women were allocated both less and inferior land on per capita basis. A new law allows daughters to inherit, but many women marry out of the village and thus denied their share of land after marriage (Carlson, 1987) in Nwosu (2012). Legal protection may exist in theory but in practice women ownership rights remains highly restricted in Sub-Saharan Africa. According to Saquina (2017) women comprise the largest percentage in the agricultural sector but do not have access and control over land and productive resources.

The lack of land title discourage women's participation in agricultural support services particularly extension and credit facilities. More so, in most countries, title to land is required as a collateral for obtaining credit from formal lending institutions and sometimes from cooperatives. Women's insecure access to land makes it harder for them to obtain credit they may need to fully implement extension advice or to make the most productive use of labour. Often the land women are allocated to consist of smaller fragmented plots and extension agents be reluctant to work with such shattered

plots. Women's labour productivity is reduced and their time management problem are magnified when their holdings are geographically dispersed. They need more time to move from one plot to the other and must transport tools, inputs and harvested products.

Further, many child care is particularly difficult when fields are far apart. Women must decide whether to take their children or make other child care arrangements. As a result, women have insufficient time to carry out recommended extension practices in distant fields. This has not only reduced women's yield in agricultural productions but extension system reach more men than women farmers. This is because extension messages and the timing and channels of communication are targeted to men. Male extension agents are generally unaware of the need to communicate differently with women and view women as farmer's wives, not farmers in their own right.

Development planners have assumed that information given to male farmers will be passed along to other family members of the household. This does not often happen because agricultural knowledge acquired by men, unless they themselves will benefit often does not "trickle across" effectively to women in the family. More so in a polygamous household, men are usually not expected to share information.

Another constraint to rural women productivity is child bearing, care and inflexible chaotic responsibilities. Women are less mobile and have uncommitted time than men. In Nigeria, women spend considerable time and energy providing the family with food, fuel and water. Also livestock rearing add to their burden (Ashby, 1985) in Nwosu (2012). Around the world, rural women work extremely long hours. They rarely have access to transport or to labour saving technologies. As a result, women have little time to participate in regular extension programmes. Ashby maintained that sixteen to seventeen hours of a woman's day is spent working as a mother and wife in the home and at the farm. Her work is time consuming and back breaking, and the pattern of work does not change whether she is pregnant or rearing a child. The woman is therefore over worked.

Gill (1987) reported that most rural women are illiterate. Women's access to agricultural extension and their ability to understand and use technical information are compromised by their lack of basic education. Wikigender (2017), reported that primary education of females is still at a striking low estimate of 67% despite international endeavors such as Second Millennium Development Goals to achieve Universal Primary Education by year 2015. Where about 25% of Nigerians are illiterates, and if there are more women than men, by implication therefore, a greater percentage of the illiterates are women. Taking into consideration the role of women in the society as well as in the economic and political development, it means that women are ill-equipped as human resources for development

and they have to be literate to be able to perform their numerous functions in the society (Azikiwe, 1989).

Furthermore, women in the rural areas still practice traditional agriculture with hoe, cutlass, spade, sickle etc. The same plot of land is cultivated year in, year out hence the poor harvest. Mechanized agriculture and use of fertilizer are provided for cash cropping and under the control of man. Under this condition women cannot be expected to contribute effectively to agricultural production despite the fact that they are estimated to be responsible for 70% of food production, 50% of domestic food storage, 100% of food processing, 60% of marketing and 100% of domestic chores (Madukwe, 2011). It might not be plausible to talk of food security in Nigeria when the women who are currently involved in food production, processing, distribution, storage, and marketing have been neglected instead of being made direct beneficiaries of agricultural development projects, agricultural loans, extension services and technical assistance as well as ownership of land. Women have less opportunity to receive land, even when their productive activities call for it. Connected with these problems there is also the issue of climate change, which includes irregular rainfall, floods, droughts and cyclones, whose effects have greater impacts on rural women and make their lives difficult.

It appears that enough efforts have not been made towards providing health facilities for women particularly with respect to pre and post-natal services, family planning, and immunization. To perform their duties, the women must be healthy and strong because a woman who is not in a good health will not be fit to work. Good health is a result of a whole complex of factors: water, sanitation, hygiene, nutrition, and family planning. The lack of appreciation of the role of rural women in agriculture is harmful and gives rise to lack of specific policies, high levels of poverty, illiteracy and non-involvement in the design and planning of programmes. When women are empowered and can claim their rights, an access to land, leadership, opportunities and choices, economies grow, food security is enhanced and prospects are improved for current and future generations.

Strategies Needed For Improvement

The constraints to the development of the productivity of women farmers in rural areas should be seen as the nation's problem and not as women problem only. There are some suggested strategies needed for improving the productivity of rural women farmers. These suggested measures are discussed under the following sub-headings:

1. The use of appropriate technologies to help rural women.
2. Provision of loan/credits

3. Education.
4. Mobilization of women by policy makers
5. Gender equality.

The Use of Appropriate Technologies to Help Women

Appropriate technology (AT) is a strategy to provide rural women with the necessary skills and technologies to enable them effectively improve their agricultural productivity as well as lighten their household chores. Appropriate technology, covers tools, equipment, training, and techniques to be identified, adapted and developed for use and the system for their acquisition, transmission and control.

Simple cheap and well balanced farming tools with better cutting edges, carts, animal drawn or manual ploughs for clearing and tilling the land and for transportation of water, fuel, and crops would all help to make their work less tedious and more productive. In the area of processing, manual mills, graters, Sheller's, and threshers should be fabricated. Different types of stoves and solar cookers could also be produced for cooking. These cookers and stoves are all ways of conserving our dwindling forest and save devastation of the soil by erosions and desert encroachment.

Simple solar dryers could be devised for preserving crops. Furthermore, simple solar dryers can be made at very low cost by village women from mud, wood and polythene to enable surplus vegetables and fruits to be preserved for home consumption or for sale throughout the year.

Provision of loans/credits

Agricultural extension service should be provided for women who produce the food crops for consumption instead of providing them only for men who produce cash crops that does not benefit the people generally. These services will provide training and skills which the women could use to improve their land crops and animals.

Agricultural loans and credits should be available to women to enhance their productivity and income. Women should be helped to form co-operatives and groups to make obtaining of loans a little bit easier than when they go for loans as individual. Food and Agricultural Organisation (FAO 2011) in their work found that access to credit promotes high productivity.

Education

To educate a man is to educate a single individual but to educate a woman is to educate a nation. Education of women is therefore a step in the right direction for effective participation of women in nation building. The axe of education can cut down the thick roots of tradition, superstitions, ignorance, and backwardness and pave way for modernization. The type of education advocated for women now is not formal education that is to read, to speak and to write English and numerals. What is advocated is functional education, a non-formal education to enable the women acquire training, skills and knowledge that will solve their basic needs – civics, economics, social, political, and literacy.

The functional education which should be non-formal will prepare the women to utilize the human and material resources for their individual enrichment and development as well as for the development of the society. The importance of and the need for educating women for nation building can best be highlighted by enumerating some of the advantages as opined by Saito (1994).

- An educated woman will be able to take care of the mental, physical, social, moral, and health development of her children and the entire family.
- An educated woman is a profitable investment to accelerate social, agricultural, political, and economic development.
- An educated woman will appreciate the introduction of new technologies and use them to improve her agricultural and food production as well as her health.
- An educated woman will not encourage early marriage for the daughters and reduce infant mortality, and death after birth.
- An educated woman will appreciate family planning, immunization and population and help to reduce family explosion.
- An educated woman will help organize activities for the general well-being of other women in the society.
- An educated woman will be equipped with the knowledge to fight for her natural and legal rights in the society especially in politics, employment, taxes etc. an educated woman is equipped for more education for more effective services to her family, community, state and the entire nation.

The advantages of women education are unlimited and the government should realize that the investment in educating and training women is a condition for social, economic and political development of Nigeria.

Mobilization of women by policy makers

For the success of involving women in nation building the government and policy makers should see the problem of women as a national problem not as women's problem. Women organization and individuals should solicit the help of both the government and private bodies for effective mobilization of women for nation building. Organization and bodies such as Directorate for Food, Road and Rural Infrastructures (DFRRI), Better Life Programme, Organizations, retired women, teachers and civil servants, associations and clubs scattered all over the country should help to realize this dream.

The World Bank in recognition of the role of women in food production has for several years through Agricultural Development Programme (ADP) attempted to assist our present farming women via this program. Women in agriculture through this programme, proven technology training and skills will be taught to reduce drudgery and thus enhance efficiency and productivity.

The physiological make-up of women must be taken into consideration when planning and providing farming implements, inputs, technologies etc. to farming communities' e.g women's bicycles, matchets, hoes etc of the right sizes and weights.

The greatest help that can be provided for the many illiterate women involved in agriculture is to equip them with agricultural education relevant to their occupations. Irrespective of the kind of agricultural occupation in which a person is involved, three kinds of information can be provided through agricultural education to help improve the individual effectiveness:

- i. Information about the new inputs that have been tested and found to be capable of increasing the farmers level of productivity.
- ii. Information about new techniques of production which can enhance the farmers level of output if adopted and
- iii. Information about how to apply economic principles in the production process to ensure efficient use of available resources.

Thus, apart from technical knowledge and skills, agricultural education can help women farmers become better managers. It will also provide them with knowledge upon which to base their production design. For instance, agricultural education will assist women farmers on how to react to fluctuations in prices of produce. This will help them select the enterprise or business best suited to their kind and equally teach them the principles of harmonious property relations in the use of

agricultural resources so that farmers can pool the ownership and operation of adjoining land for greater production and maximization of profit.

The required modern facilities to enhance women productivity in Agriculture can greatly be achieved through agricultural education. Education is a vital instrument for modernizing our agriculture for development of food and efficient agricultural mechanization. Failure of our efforts towards sufficiency in agricultural production may be due to lack of appropriate agricultural education of our women who are not conversant with the use of fertilizers. Therefore they apply it indiscriminately.

Women can be equipped and taught how to use the following modern facilities to enhance agricultural production. Such facilities as ploughs, harrows ridges, cultivators, fertilizer distribution, seed drills, planters, harvesters etc. Equally, facilities such as incentives, research, equipment, planning, etc. are necessary ingredients for effective agricultural improvement. This will help equip women fully in this age of science and technology.

Gender Equalities

Traditionally, in Nigeria it is males that have right of land ownership thereby depriving women the most important resources of agriculture. Women rely on the use of their husbands' lands in the western part while in the north natal family land is mostly used. In some other cases women resort to using leased land for their farming activities (Maduekwe, 2011). It has been noted that men select land first so they would have selected the most productive part leaving women with land that have either been over-used or land that are prone to erosion, so invariably the women are victims of unproductive land. This mode of temporary land acquisition also prevents women from planting permanent crops like fruit trees, oil-palm, cocoa, coffee and rubber. This should not be so but women should be encouraged as the international labour organization (1986) in Madukwe (2011) found out that women play a pivotal role in African agriculture and rural development. This is true not only of food production – long recognised as a woman's activities but also of agricultural activities such as cash cropping and livestock production. They also estimated that 78% of the women in Africa are active in agriculture compared with only 64% of the men.

Women should be given access to productive resources such as land, credit, agricultural inputs (such as fertilizers, agro chemicals, improved seeds and planting materials), agricultural extension services and appropriate technology to enable them improve their productivity in agriculture, because these have been found to be some of the factors affecting the contributions of women in agriculture.

Summary

The paper focused on the strategies for improving the productivity of rural women farmers. As a result, it x-rayed the production activities carried out by women farmers in the continent of Africa and Nigeria in particular. Such production activities ranges from animal production, crop production, transportation of crops from farm to the house, processing, storage and marketing, child bearing and rearing etc.

The paper reviewed the historical background of women in agriculture. It showed that African women's involvement in agriculture is not a new phenomenon. It is as old as agriculture itself. African women were generally engaged mainly in food farming while men were occupied in hunting, weaving, clearing and perhaps some farming.

The paper went further to reveal some of the constraints faced by these rural women in the production system. Some of these constraints are inherent in the governmental systems while others are inherent in the socio-cultural milieu. Such constraints discussed were:

- i. Difficulty in land acquisition because of land title in most African countries.
- ii. Difficulty in obtaining loans/credits
- iii. Difficulty in child care
- iv. Poor communication network
- v. Illiteracy
- vi. Use of crude implements
- vii. Poor health facilities.

Based on these constraints, the paper identified of the strategies that may help improve the productivity of rural women farmers such as:

- i. The use of appropriate technologies to help rural women.
- ii. Provision of loan/credits
- iii. Education.
- iv. Mobilization of women by policy makers
- v. Gender equalities.

Conclusion

The productivity of rural women in agriculture could be enhanced if the above discussed points are met. There is no doubt that women are essential resources for nation building, but they are neglected

and marginalized in developing countries including Nigeria hence, slow pace for development. Women hold key positions in food production for the family, their communities and entire nation. They are responsible for transporting, processing, and marketing food crops, all the domestic chores- fetching water and fuel, cooking, cleaning, washing, and most importantly child bearing and upbringing are the responsibilities of the women. These important functions of women should not be neglected, hence the need for improvement in their productivity.

Recommendation

Women participation in agricultural development would lead to national food security and vibrant rural economy which will greatly improve the per capita income of the country. In view of this, these recommendations were made:

1. Both government and non-governmental agencies should provide the rural women with the necessary skills and technologies to enable them effectively improve their agricultural productivity as well as lighten their household chores.
2. Agricultural extension services should be provided for women who produce the food crops for consumption instead of providing them only for men who produce cash crops which does not benefit the people generally.
3. Agricultural loans and credits should be made available to women to enhance their productivity and income.
4. Government should provide a functional education, a non-formal education to enable the women acquire training skills and knowledge that will solve their basic needs.
5. For the success of nation building, the government and policy makers should mobilize the women and allow them to be part of malign policies concerning agricultural productions.
6. Gender inequalities should be addressed. This can be done by the government making it possible for women to have access to good lands.

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