

Gender Issues in Agriculture and Rural Development in Nigeria: The Role of Women

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Abstract: Most farmers in Nigeria operate at the subsistence, smallholder level in an extensive agricultural system; hence in their hands lies the country's food security and agricultural development. Particularly striking, however, is the fact that rural women, more than their male counterparts, take the lead in agricultural activities, making up to 60-80 percent of labour force. It is ironical that their contributions to agriculture and rural development are seldom noticed. Furthermore, they have either no or minimal part in the decision-making process regarding agricultural development. Gender inequality is therefore dominant in the sector and this constitutes a bottleneck to development, calling for a review of government policies on agriculture to all the elements that place rural women farmers at a disadvantage. The women-in-agriculture programme in Nigeria, which was established in cognizance of this and the shortcoming in extension services for women farmers, has been a huge success. Women's groups, non-governmental organizations (NGOs) and civil societies have empowered and given rural women farmers a voice and effectively championed their cause. Women farmers now have better access to farm inputs and credits although many barriers remain and would have to be addressed to further enhance their role. Rural women farmers deserve better recognition and greater appreciation of their tangible contributions to agriculture and rural development and food security. Other aspects of gender issues in Nigerian agriculture are discussed.

Key words: Agriculture % Food security % Gender inequality % Household economy % Nigeria
% Women farmers

INTRODUCTION

The bedrock of agriculture and agricultural development in developing countries of sub-Saharan Africa is rural development, without which all efforts at agricultural development will be futile. A large majority of the farmers operate at the subsistence, smallholder level, with intensive agriculture being uncommon. A characteristic feature of the agricultural production system in such countries, Nigeria inclusive, is that a disproportionately large fraction of the agricultural output is in the hands of these smallholder farmers whose average holding is about 1.0-3.0 hectares [1]. Also, there is very limited access to modern improved technologies and their general circumstance does not always merit tangible investments in capital, inputs and labour.

Household food and nutrition security relies heavily on rural food production and this contributes substantially to poverty alleviation. Consequently, the first pillar of food security is sustainable production of food [2]. It has been noted

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that in the early 1980s, while the population grew rapidly, food production and agricultural incomes declined in many African countries [3]. In many of the countries the diminishing capacity of agriculture to provide for household subsistence increased the workload shouldered by women as men withdrew their labour from agriculture. Hence the increased attention that is being given to the role of smallholder subsistence agriculture in ensuring food security of the continent, since some 73% of the rural population consists of smallholder farmers [4].

The bulk of the poor, some three-quarters according to a recent World Bank estimate, live in rural areas where they draw their livelihoods from agriculture and related activities [5]. Evidently, development, food security and poverty alleviation will not be truly achieved without rapid agricultural growth. Assisting the rural poor to enhance their livelihoods and food security in a sustainable manner is therefore a great challenge. Broadly put, increases in agricultural productivity are central to growth, income distribution, improved food security and alleviation of poverty in rural Africa [6]. In all of these, the rural woman plays a pivotal role and she is crucial to the overall success of efforts directed at agricultural development in rural areas.

The role that women play and their position in meeting the challenges of agricultural production and development are quite dominant and prominent. Their relevance and significance, therefore, cannot be overemphasized [7, 8]. Findings from a study financed by the United Nations Development Programme (UNDP) revealed that women make up some 60-80 percent of agricultural labour force in Nigeria [9], depending on the region and they produce two-thirds of the food crops. Yet, in spite of these, widespread assumption that men – and not women—make the key farm management decisions has prevailed. Sadly, female farmers in the country are among the voiceless, especially with respect to influencing agricultural policies. Such policies, which are aimed at increasing food security and food production, tend to either underestimate and totally ignore women's role in both production and the general decision-making process within the household. Socio-economic characteristics of the farmers, among other factors, affect their decision-making in agriculture. The various contributions of women to agricultural production in Nigeria have been variously described in the literature [8,10-13] but their role in decision-making process in agriculture has not been widely employed or at best, remains minimal [3,8,13].

Ironically, women are known to be more involved in agricultural activities than men in sub-Saharan African (SSA) countries, Nigeria inclusive. As much as 73 % were involved in cash crops, arable and vegetable gardening, while post-harvest activities had 16 % and agroforestry, 15 percent [14]. Their involvement in agriculture in Nigeria has attracted greater attention in recent years. Reasons for their involvement are as many as are diverse. In some states rural women have virtually taken over the production and processing of arable crops [15], being responsible for as much as 80 % of the staple food items. Estimates of women's contribution to the production of food crops range from 30% in the Sudan to 80% in the Congo [3]; contributing substantially to national agricultural production and food security, while being primarily responsible for the food crops.

However, factors militating against women in their participation in agricultural production are many, some of which are socio-cultural and economic in nature. The task of surmounting such obstacles can be very daunting, even though women have largely succeeded in overcoming some of them. Thanks in no small measure to the actions and persistence of women's groups and community-based organizations and the civil society organizations fighting their cause.

Women and Agriculture in Sub-Saharan Africa: Women shoulder the primary responsibility for food security in Africa yet development agencies have devoted minimal resources to researching the impact of their agricultural policies and new techniques on the wellbeing of Africa's women farmers [16]. Now is the time to push for a paradigm shift: the urgent need for a gendered approach to agricultural policy in Africa. The supporting argument is that women are an integral part of the African farming structure and that the dominant agricultural policies developed for Africa, with the disproportionate involvement and influence of external experts, have ignored this gender dimension at a very real cost to African agriculture and to gender equity within the continent [17-19].

The institutional reality remains that of operational inattention to gender issues in agriculture and related areas such as transport and microfinance. A disturbing feature of this inattention is that it coexists with public statements that actively promote participation and consultation as part of the development agenda. The participatory protocol and measures

necessary to ensure that gender is integrated into this process have not been put in place. In the absence of a willingness to begin to set up precise measures around gender split in benefits within a gender mainstreaming paradigm and in the absence of a willingness to directly target gender inequalities within operational development agenda, then the paradigm which disregards women's problems and contributions in relation to the agricultural economy of Africa is likely to stay in place. This should not be allowed as its consequences are likely to be unfavourable to all concerned.

African women have begun to make major demands for their participation and inclusion in the policy and economic processes relevant to agriculture. Indeed, they have started to develop and promote local expert materials in the field of agriculture [20]. Through these materials, being those which emerge out of consultation with women farmers on their needs and opportunities, we now know from existing evidence that there are gender differentiations of immense dimension within African agriculture.

The position and capability of women meeting the challenges of agricultural development cannot be overemphasized [8]. Women make significant contribution to food production and processing, but men seem to take more of the farm decisions and control the productive resources. In Nigeria, women play a dominant role in agricultural production; their active participation in African agriculture is also not new. This was confirmed by a study financed by the UNDP, which revealed that women make-up 60-90% of the agricultural labour [21,22], depending on the region and that they produce two-thirds of food crops. Women in Africa have generally been known to play an important role in small-scale traditional agricultural production [23,24].

A World Bank-sponsored study undertaken by Saito and Weidemann [25] showed that women in the sub-Saharan Africa, including Nigeria, provide most of the labour and make certain key decisions, albeit randomly, for many agricultural activities. It seems that it does not apply to only food production but also to other activities, such as cash cropping and animal production [26]. This is to the extent that women in general constitute up to 90% of the workforce involved in direct arable crop production and this is not easy to overlook [27].

Bryson [28] in his study assessed the overall importance of women in agriculture in sub-Saharan Africa using data available on the predominance of female labour in crop production in this area. A series of studies covering African villages showed that generally, more women than men in cultivator families did agricultural work and that women were usually working more hours than the men. Furthermore, it has been noticed that female labour in production tends to be less important in societies where intensive agricultural systems are more dominant than the extensive systems. Although agricultural systems in sub-Saharan Africa tend to be extensive cultivation systems, it has also been observed that there is no significant difference between the labour usage practices of societies having extensive cultivation systems. This difference, wherever it exists, can be explained, at least in part, in factors such as social structures.

African family and inheritance systems combine to produce an agricultural system which assigns the major role to women. Such a system is unique to this region and is rarely seen in other parts of the world. It was concluded that failure to recognize/enhance female labour activities is contributing to current problems with food supply but these can be overcome most effectively by working with, rather than against, women [28]. The merits of such collaboration cannot be overemphasized or quantified.

Beyond politics, the broad domains involving women of various classes are agriculture, urban workplace, the law and education. Women contribute tremendously to agricultural output but unfortunately they hardly, until recently, benefited from agricultural incentives and innovation because of economic suppression and social and traditional practices which undermine the constitutional provisions on the equality of men and women. Gender discrimination, rather than ignorance, is the reason for the lack of women participation in agricultural programmes and projects.

In subsistence agriculture, particularly in Africa, food production is mainly done by women, with little from men [17]. That assertion was supported by the observation from the *Heluo* community in Kenya many years later, where Pala [21] found that the percentage of work done by women farmers far outweighs that of men. Similarly, in Ghana, for instance, smallholdings kept by women provide about 80% of the total food production in the country. In Tanzania, however, 87% of the women who live in rural areas play similar roles; while Zambian women contribute up to 80% of their labour for household crops [14].

Table 1: Extent of the participation of women in decision-making in agriculture in parts of Kaduna State, Nigeria

Decision-making area	Nil	Only consulted	Opinion considered	Final decision
Land preparation	176 (88.0)	21 (10.5)	3 (1.5)	0 (0.0)
Time of sowing	156 (78.0)	34 (17.0)	8 (40.0)	2 (1.0)
Manure/Fertilizer types and time of application	162 (81.0)	19 (9.5)	15 (7.5)	4 (2.0)
Time of weeding	189 (94.5)	9 (4.5)	2 (1.0)	0 (0.0)
Number of hired labourers and wages to be paid	135 (67.5)	39 (19.5)	17 (18.5)	9 (4.5)
Time of harvesting	111 (55.5)	37 (18.5)	49 (14.5)	3 (1.5)
Storage and marketing of farm produce	28 (11.5)	37 (18.5)	92 (46.0)	48 (24.0)
Purchase and sale of farming implements	156 (73.0)	29 (14.5)	13 (6.5)	2 (1.0)
Purchase and sale of farmlands	161 (80.5)	23 (11.5)	11 (5.5)	5 (2.5)
Farm credit	117 (58.5)	57 (28.5)	26 (13.0)	0 (0.0)

* Figures in parenthesis are the percentages

Source: Damisa and Yohanna, 2007.

Nigerian Women in Agriculture and National Development: The Nigerian woman has proved to be more than a mere “bench-warming” spectator, even in the midst of the male-dominated professional congregation. If given the opportunity, women can effectively participate in policy-making and governance. They can hold their own in very difficult and stressful circumstances and can do as well, if not better, than men. The steady advancement of women in contributing to the nation’s economic development and their progressive prominence in the national scheme of affairs have, to a large extent, impacted on the Federal government and government has responded positively in diverse ways.

On the basis of available evidence and statistics, the role of women in agricultural production in Nigeria cannot be trivialized. They perform crucial roles in the domestic and economic life of the society. Rural and national development can hardly be achieved with the neglect of this important and substantial segment of the society [29]. In recognition of the importance of women in national building, the Nigerian government, more than ever before, is keen on rural poverty alleviation as a way of improving the economy. Focus is on planned and desirable change in the rural societies in the form of agricultural development. The success of these planned change programmes is hinged largely on the rational decision-making process of the women. A lot of literature has shown that the various contributions of women to agricultural production in Nigeria [10, 11, 12, 30, 31]. The role of women in decision-making process in agriculture has however not been widely explored.

Damisa and Yohanna [13], using Zaria in Kaduna State of Nigeria as their study area, examined the level of participation of rural women in the decision-making in different areas of agriculture and studied factors influencing their participation in the decision-making process in farm management. They found that women’s participation in decision-making was quite minimal (Table 1). In each of the farm operations, less than 20% of the women were consulted, except in the sourcing of farm credit, where about 28% were consulted; about 13% or less of the women had their opinion considered in each of the farm operations. However, only between 1.0 and 2.5% took the final decision in all of the farm operations. Women’s participation in farm management decision-making process is said to increase with age, older women participating more in decision-making in the different areas of agriculture than their younger age group counterparts. The high level of knowledge and experience about improved farm practices acquired by the educated women farmer had positive influence in that regard [13]. Wealth status of women is also another major determinant of the role of the women in farm management decision-making; richer women being more involved than their poorer counterparts.

Women in Anambra State of Nigeria contribute more than the men in terms of labour input in farming and are solely responsible for household management duties [32]. In studies elsewhere in Nigeria, involving the *Jukun* people [33] and the nomadic *Fulfude* women and *Kulka* women farmers, between 70 and 80% of agricultural labour force is represented by women [34]. A survey of peasant agricultural women in northern Nigeria also revealed that rural women take part in

income-generating activities, particularly in the processing of agricultural produce. In a related survey of food processing and cottage industries by Simmons [35] in three Zaria villages, he observed that 90% of the women were involved in at least one food processing activity or the other.

Women's Groups and Organizations: In an attempt to bridge the gap between men and women farmers in Nigeria, various women groups and organizations have emerged. Such groups and organizations have contributed substantially to the gains women farmers have recorded and the voice that they now have in overall national policy on agricultural development. One such group is the Women Farmers' Advancement Network (WOFAN), a private initiative founded in the early 1990s whose headquarters is in Kano, Nigeria. WOFAN works with 250 women's groups in five different states in northern Nigeria in an effort to mobilize and train rural women in the management of information and communication. Community participation is a key strategy [36]. The network also organizes a weekly radio broadcast that features the efforts of rural women.

The main thrusts of WOFAN include: providing a forum through which members of rural Nigerian communities can express themselves; encouraging the formation of commodity groups to garner access to agricultural credit and insurance facilities; and introducing labour-saving technologies, including modern farm implements and the use of solar energy. Initially, WOFAN helped women farmers in rural areas with issues of health and agricultural technology. It has since inevitably expanded to address other needs.

The role of national and international non-governmental organizations (NGOs) in reaching the rural population in Africa is being increasingly documented. The importance of NGOs to rural women varies from country to country, as does their focus on rural issues. In most of the countries examined, the growth in recent years of NGOs and women's associations which pay attention to gender issues has benefited rural women immensely.

Experiences from a few African countries are worth mentioning here. In the Sudan, the number of national NGOs working in the area of agriculture increased, as the number of regional and international NGOs decreased [37]. As many as 21 projects are targeting women in the area of livestock and dairy. In Tanzania, on the other hand, NGOs have become a dynamic arena for women's empowerment and support to rural women in agriculture has increased with the formation of women-in-development at NGOs headquarters. An increasing number of international NGOs are dealing with women and agriculture, among others. In Namibia, there are a few women's groups and NGOs which work to enhance women's role in agriculture and food production and advocate on behalf of women farmers.

Making efforts to engage and involve women can bring significant benefits and be quite rewarding. It has been found that women's groups have proved to be one of the most effective entry points for initiating activities and reaching poor households. In the Nigeria's women-in-agriculture (WIA) example, government fields, recognizing that more than one-third of Nigeria's women belong to cooperative societies and other locally recognized formal and informal associations, built on these indigenous women's groups to expand the newly established state WIA programmes. For instance, the WIA programme used NGOs to help identify women beneficiary groups and for WIA field staff to target for the initiation and execution of project activities.

The formation of WIA farmer groups has facilitated the dissemination of agricultural innovations and provided women farmers with better access to farm inputs and credit than they would have as individuals. Assisted by WIA agents, women are now able to participate through these groups in all aspects of subprojects, from identification through to planning and implementation [5].

Women-in-Agriculture in Nigeria: This programme came about in 1988 when it became obvious that in spite of a decade of World Bank's assistance in building up Nigeria's agricultural extension service, women farmers were still receiving minimal assistance and information from extension agents [9]. Consequently, the WIA programmes within the existing state agricultural development programmes (ADPs) were created in 1990 to address the gender-related deficiencies within the

existing extension programme. The programme was created to integrate women into development process with specific reference to agriculture since the participation of women farmers in planning and policy-making as well as the beneficiaries is important [26]. A serious lapse in the country's agricultural extension system had hitherto being that it was pro-male and gender-insensitive towards women farmers. This arises from the fact that agricultural extension services in Nigeria had traditionally been focused on men and their farm production needs, while neglecting the female half of the production force. Up until that point, the ADPs contained only a home economics wing responsible for home-related women's activities. The WIA programme, which was launched as a pilot, therefore sought to improve agricultural extension services for women. This entailed the retraining of existing home economics agents in agriculture and extension methodologies, with emphasis on women's activities.

The WIA programme was plagued by initial teething problems which threatened its success. Different WIA initiated in various states of the federation seemed to occur sporadically and in ad-hoc manner, some ADPs making tremendous progress and others doing nothing at all. To address this disparity, a National Planning Workshop in July 1989 brought stakeholders together to take stock of various WIA programmes initiated country-wide, share lessons and experiences among regions and develop a 3-year action plan for each state [9].

There was determination to give female farmers a voice in the WIA policy reform process, even though they were uncertain as to the best way to achieve this. The clue seemed to lie with the female extension agents who interacted with women farmers on a regular basis. They were better able to articulate constraints faced by women farmers and proffer solutions on their behalf. They had firsthand knowledge of the situation and good working relations with women farmers. Bringing about change in favour of women farmers required ownership by both men and women at all levels. Consequently, each state ADP demonstrated commitment to taking action in improving services for women farmers.

Establishment of the WIA programme ensured that extension service in each state in Nigeria has female extension workers at every level of operation from state headquarters down to the grassroots. The formation of WIA farmers' groups facilitates the dissemination of agricultural innovations and provides women farmers with better access to farm inputs and credit than they would have as individuals. A rural household survey in three parts of the country was conducted to monitor and measure achievement of the WIA programme. Positive results of recommendation and action plans manifested from the survey. The programme developed better than expected due to the dynamism and resourcefulness of Nigerian women.

In spite of the laudable achievements recorded by WIA, a number of problems have been encountered. Such problems include shortage of WIA extension agents as the ratio of extension staff to farm families is still low, making it non-feasible to individually meet all the women farmers. Most of WIA extension workers are not purely agriculture-based, not trained in agriculture [38]. Lack of adequate support from ADP management is another problem faced by the WIA programme. It has taken quite some time for the WIA concept to find its way into the heart of most decision makers in the ADPs, with even some yet to be reconciled with the fact.

Areas of Importance and Roles of the WIA Programme Have Been Said to Include the Following:

It contributes substantially to poverty alleviation, notably in rural areas.

Contributes to economic development of the nation, bringing about improved household food security, thus underscoring the fact that the productivity of women farmers must be the centerpiece of agricultural strategy [39].

Boosting the income-earning capability of women farmers [40, 41], empowering them to be part of the decision-making process.

It will improve food supply and supplement the staple food need of the farm family while also reducing malnutrition among children [42].

This has reinforced the view that women farmers contribute significantly to agricultural production. Thus, they contribute substantially to household welfare and farm income.

Odurukwe *et al.* [2] studied the impact of the WIA programme on the lives of women in Imo State of Nigeria with a view of strengthening their agricultural production. They alluded to the need to develop a suitable extension service that is gender-specific and tailored to women farmers and the importance of this cannot be ignored. The formation of farmers' groups facilitates the dissemination of agricultural innovations and provides women farmers with better access to farm inputs and credit than they would have as individuals. It was reported that the WIA extension agents disseminate technologies of the WIA programme to women's groups. Unfortunately, as the result of their study reveals, high awareness level does not imply high adoption rates [2], a situation the women attributed to the complexity of such technologies. Fortunately, most of the transferred WIA technologies were found to be very relevant to their socio-economic wellbeing. The positive effects of women adoption of WIA packages were most felt on the women than the men and children. Similarly, there were high positive impacts on rural women than their urban counterparts. Greater dependency of men on their wives for economic support was a result of women's involvement in the WIA programme was also one of the positive impacts of the programme. Improved family food security and increased financial contribution to household needs were other reported benefits of the WIA programme.

Gender Inequality in Sub-Saharan Africa: It is common knowledge that gender inequality is one of the most pervasive forms of inequality, particularly because it cuts across other forms of inequality [37]. Different rules, norms and values govern the gender division of labour and the gender distribution of resources, responsibilities, agency and power. These are critical elements for understanding the nature of gender inequality in different societies.

Gender segmentation in household arrangements in sub-Saharan Africa is prevalent in the face of highly complex lineage-based homesteads. Much of SSA is matrilineal, with women's access to land being through usufruct rights through their husband's lineage group. Since women's obligation to the family includes provision of food and caring for their children, they are granted this access to enable them carry out these responsibilities. In parts of West Africa, including Nigeria, women generally have usufruct rights to separate holdings through their husband's lineage.

Women's low participation in national and regional policy-making, their invisibility in national statistics and their low participation in extension services have meant that those issues of most concern to women have been neglected in the design and implementation of many development policies and programmes. In some countries such as the Benin Republic, the programmes developed were far from addressing the main concerns of women as they were neither involved in policy making decisions nor were they directly consulted to articulate their needs. In some countries, despite legislative and tenure changes in favour of smallholders, women continued to be placed in a disadvantaged position in terms of access to land. Women's access to land was rarely discussed and thus their benefits from land reforms were few [43].

In the nine countries examined by Franklin [37] in a recent study, as throughout Africa in general, he found that while women are present in greater degrees in agricultural/rural organizations, they tend to comprise a low proportion of the membership and are often not represented in the higher levels of leadership. While women's membership is most often limited by their lack of formal land ownership, many rural organizations do not sufficiently concern themselves with the needs of rural women. Women's participation as office holders in these organizations tends to be even more limited. The most striking example is in Zimbabwe, where despite the fact that women constitute 75% of the members in the Zimbabwe Farmers Unions, only 5% of the officials are women. The largest numbers of women decision makers are found in the Sudan, where 14% of the office holders in agricultural cooperatives are graduate women.

In Africa, few women hold policy-making positions at the national level and those that do tend to be concentrated in social ministries such as education, health and women affairs. Only rarely do women hold such positions in technical ministries such as agriculture, which has far-reaching implications for the policies generated there. Overall, women hold an extremely low number of decision-making positions in the ministries dealing with agriculture and rural development. It is clear that the sharing of decision-making between genders varies substantially from country to country and among different cultural and ethnic groups within the same country. While women's decision-making power tends to increase in many countries when the husband is not present, men may remain involved in many of the most important decisions.

Lack of access to land remains a major constraint for women farmers in Africa and land reform programmes have led almost exclusively to the transfer of land rights to male heads of households [44]. Even in countries where ownership and inheritance laws have been reformed in favour of women, in practice women do not necessarily have more rights to land, as local customs and lack of information act as barriers. In the rare cases where women own land, they are still at a disadvantage in the sense that their land holdings tend to be smaller and less fertile than men's. There is distinct division of labour between men and women as far as agricultural activities and tasks are concerned. Women and junior men provide labour on household fields that are controlled by the compound head.

In the same vein as land holdings, women have less access to credit than men. Women receive as low as 5% of agricultural loans in Burkina Faso to as high as 32% in Zimbabwe. In Benin Republic, less than 5% of the rural female-headed households have access to credit. It should be noted that in terms of women's access to credit, none of the countries was able to supply national figures while the information supplied by individual institutions varied considerably. There is need for caution when making generalizations about the situation of rural women at the regional level as it often differs not only among countries but also within a country, depending upon the socio-economic and ethnic groups to which women belong and other factors characteristic of a particular area. Several studies on women's status and problems have shown that gender discrimination exists throughout the world [45] but that its intensity is felt in daily lives of women and children in developing countries.

Tagwireyi [46] noted that despite providing about 60-80% labour in food production, women in Africa receive little from the agricultural extension services in that country due to the traditional prejudiced attitude towards women, lack of time on their part to attend meetings and their limited decision-making powers.

Rural women in Gambia are increasingly being drawn into development process through their involvement in various income-generating projects. Malina [47] who studied the problems women face in Tanzania suggested that the impact of women's activities on the farming system should be appreciated for agricultural research to be successful. Their needs and concerns should be understood, their traditional roles and needs taken account of and their potential fully explored.

Reasons for Women's Involvement in Agricultural Activities and Barriers to Achievement: Women embark on agricultural activities for a variety of reasons. Prominent among such reasons is that of being able to earn financial resources, as well as being a family tradition and personal interest. The scenario whereby more and more of men either temporarily or permanently migrate has caused shortage of labour in rural areas. As a result, more women are left behind to do much of the farm work as paid or unpaid family labour [14]. Other reasons that have been identified include ease of handling; lack of other alternative occupations; acquisition of technical know-how; and husband's influence. It has been observed that religion and availability of funds or farming facility also influence degree of women's involvement in crop production. Apart from providing employment and income for resource-poor small farmers, especially women, family poultry also serves as a means of capital acquisition and accumulation [48].

In an effort to reach and engage the poor, we must recognize that some issues and constraints related to participation are gender-specific and stem from the fact that men and women play different roles, have different needs and face different challenges on a number of issues and at different levels. We cannot therefore assume that women will automatically benefit from efforts involving poor people in project design and implementation. Experience has also shown that unless specific steps are taken to ensure that women participate and benefit, they usually do not.

A number of barriers to women's participation in agricultural activities have been identified. Some of the very important ones will be discussed here. It has been noted that systemic gender biases may exist in the form of (a) customs, beliefs and attitudes that confine women mostly to the domestic sphere, (b) women's economic and domestic workloads that impose severe time burdens on them and (c) laws and customs that impede women's access to credit, production inputs, employment, education, or medical care. A careful examination alludes to the fact that there is definitely need for sensitivity on the social and cultural barriers that may inhibit women's participation in agricultural activities. In the Nigeria WIA, for example, specific steps have been taken to reduce the conflicts in women's schedules and guarantee their regular

attendance at meetings. It is definitely important to seek women's views by obtaining good information about gender roles, needs, activities, access to and control over resources, existing institutions and the constraints operating against women's participation.

Role of Women in Household Economy, Food Production and Food Security: Afolabi [15] focusing on the activities of rural women in Ondo State of Nigeria made a careful analytical study of women's agricultural activities and discovered that they are very strong pillars of the economy in the State. Women in the State are organized into groups, which are often engaged in more than one economic activity. Emerging from the study were the following facts: (a) that rural women in the state are major contributors to food production; (b) that these rural women have successfully managed human and economic resources to achieve optimum results; (c) that they became employers of labour, thereby reducing unemployment; and (d) that output from the farms of these rural women contributed to reduction in food shortage crisis. By so doing, they contribute substantially to national agricultural output, maintenance of the environment and family food security [49].

In sub-Saharan Africa, agriculture accounts for approximately 21% of the continent's GDP and women contribute 60-80% of the labour used to produce food [3]. Estimate of women's contribution to the production of food crops range from 30% in the Sudan to 80% in the Congo, while their proportion of the economically active labour force in agriculture ranges from 48% in Burkina Faso to 73% in the Congo and 80% in the traditional sector in Sudan.

Available data support a common trend throughout Africa: smallholder subsistence farmers and especially women farmers, substantially contribute to national agricultural production and food security and women farmers are primarily responsible for food crops. Given the critical importance of the agricultural sector to the national economies and in view of the important productive role of women within the sector, economic development and food security are affected by the degree of commitment shown by governments to the sector and rural women [3].

In most of SSA, women are exclusively responsible for the production of food for household consumption. As providers of food and nurturers of children, women should play a determining role in any attempt to increase food production and food security [5]. Besides performing household duties, women carry out a variety of agricultural labour. They perform almost all tasks and activities associated with subsistence production and produce more than 74% of household food in African countries and up to 70% of food consumed by families in rural areas [50-52]. The gender division of labour and social responsibilities in the household constitutes the deciding factor in women's commitment to subsistence production to fulfill their responsibility to feed the family and ensure food security for the household. As a result, most women in low-income food-deficit countries (LIFDCs), especially in rural areas, are over-burdened with a wide range of activities and tasks in agriculture, animal husbandry and in the household [48]. They contribute to national agricultural output, maintenance of the environment and family food security. Unfortunately, women belong to disadvantaged groups in most rural communities in LIFDCs. Women are the main poultry owners in LIFDCs, though there are variations within and between countries. According to Gueye [53]; more than the 70% of chicken owners in rural areas of SSA are women. On the whole, women's involvement in poultry farming tends to decrease with increased levels of intensification. Family poultry constitutes an important component of the agricultural and household economy.

Given that women are responsible for the bulk of food production as providers of food security and meaningful contributors to family incomes, any attempt to eradicate poverty should acknowledge their role as producers of food and income-earners and ensure that they have a say in policy and decision-making [54]. Any programme that aims to increase food security among the poor, particularly the rural poor, warrants the full participation of women. Kotze⁵ concluded that the role of women in the household economy and their contribution towards food production and food security would need to be acknowledged in any policy, programme and project aimed at promoting food security and rural and agricultural development.

Recommendations: There should be improvement in women's access to basic economic resources such as land (as owners), labour-saving machines, food processing machines, credit and agricultural innovations.

Rural women's productive role in agriculture continues to be underestimated in many countries as unpaid workers are frequently excluded from national statistics and/or farm women are considered housewives in agricultural statistics. Such underestimation must be addressed in order to clearly demonstrate the importance of rural women-in-agricultural production.

Creating feedback channels between all parties in the development equation would bring about the necessary equalization to the full participation of African female farmers in the economic benefits of African agriculture.

Empowering African women for participation in agricultural decision-making and leadership in Africa represents the most appropriate and effective way forward.

Support systems for women farmers within a holistic gender-sensitive framework are urgently needed to form a policy development, project design and implementation agenda. Women must be directly involved with the development and implementation of the new technology.

CONCLUSION

The contribution made by rural women to agricultural production and rural development in Nigeria is grossly underappreciated in spite of the dominant role women play in the sector. That women compete more favourably with their men folks in terms of their over-participation in agricultural activities and contribution to household economy and food security would be an understatement. The survival and sustenance of agriculture and rural development in Nigeria, as well as in many sub-Saharan Africa countries, rest squarely on the rural women. They therefore deserve to be given due recognition as far as decision-making process in agriculture is concerned.

REFERENCES

1. C.T.A. 2000. The role of smallholder farmers in seed production systems. Report and recommendations of a study visit to Zimbabwe, 15-26 February 1999, pp: 49.
2. Odurukwe, S.N., E.C. Matthews-Njoku and N. Ejioku-Okereke, 2006. Impacts of the women-in-agriculture (WIA) extension programme on women's lives: implications for subsistence agricultural production of women in Imo State, Nigeria. *Livestock Research for Social Development* 18(2):
3. F.A.O. 1995. A synthesis report of the African Region: Women, agriculture and rural development. Report prepared under the auspices of FAO's Programme of Assistance in Support of Rural Women in Preparation for the Fourth World Conference on Women; Food and Agriculture Organization of the United Nations, Rome, Italy.
4. IFAD. 1993. The state of world rural poverty: A profile of Africa, International Fund for Agricultural Development, Rome, Italy.
5. Kotze, D.A., 2003. Role of women in the household economy, food production and food security: Policy guidelines. *Outlook on Agriculture*, 32: 111-121.
6. FAO. 2002. F.A.O Report to "The new partnership for Africa's development": Land and water resources issues and agricultural development, 22nd Regional Conference for Africa, Cairo, 4-8 February 2002.
7. Nnadozie, B. and I. Ibe, 1996. Women in agriculture: Problems and prospects, In: *Agricultural Transformation in Nigeria*, Eds., A. C. Nwosu; C. U. Nwajuba and J. A. Mbanasor. Owerri, Nigeria: Novelty Industrial Enterprises.
8. Rahman, S.A., 2008. Women's involvement in agriculture in northern and southern Kaduna State. *Journal of Gender Studies*, 17: 17-26.
9. World Bank. 2003. Nigeria: Women in agriculture, *In: Sharing Experiences—Examples of Participating Approaches*. The World Bank Group. The World Bank Participating Sourcebook, Washington, D.C. <http://www.worldbank.org/wbi/publications.html>
10. Amali, E., 1989. The role of women in agricultural development process. *Development Studies Review Centre Publication*, University of Jos, Nigeria, 1 and 2: 52-60.

11. Okonjo, K., 1991. Acknowledging the existence of women--- Its consequences, *In: Women in Nigerian Economy*, Ed. M. O. Ijere. Enugu, Nigeria: Acena Publishers.
12. Rahman, S.A. and J.F. Alamu, 2003. Estimating the women interest in agriculture: The application of logit regression model. *Nigerian Journal of Scientific Research*, 4: 45-49.
13. Damisa, M.A. and M. Yohanna, 2007. Role of rural women in farm management decision making process: Ordered probit analysis. *Trends in Applied Science Research*, 2(3): 241-145.
14. Abdullahi, M.R., undated. Women in agriculture: The role of African women in agriculture. National Agricultural Extension and Research Liaison Service, Ahmadu Bello University, Zaria, Nigeria.
15. Afolabi, M.M., 2008. Women as pillars of national economy in Nigeria: A study of economic activities of rural women in six local government areas of Ondo State. IAFFE Summer Conference, International Association for Feminist Economics, Torino, Italy, 19 June- 21 July 2008.
16. Grieco, M. and N.A. Apt, 1998. Gender and agriculture in Africa: the “expert” neglect of local practice. Workshop presentation, Spring Workshop on Decentralization Regional Development Planning, Spring Centre, Faculty of Spatial Planning, University of Dortmund, Germany, November 1998.
17. Boserup, A., 1970. *Women’s Role in Economic Development*, London: George Allen and Unwin.
18. Saito, K. and D. Spurling, 1992. *Developing agricultural extension for women farmers*. The World Bank, Washington, D.C.
19. Gladwin, C., 1997. Targeting women farmers to increase food production. *In: Sasakawa Global 2000 (1997) Women, agricultural intensification and household food security*. Sasakawa Africa Association, Mexico City.
20. Duncan, B., 1997. *Women in Agriculture in Ghana*. Accra: Friedrich Eberhart Foundation.
21. Pala, A.O., 1976. The role of African women in rural development research priorities. Discussion Paper No. 203, Nairobi, Kenya: Institute for Development Studies, University of Nairobi, Nairobi, Kenya.
22. Lamming, G.N., 1983. *Women in cooperation: Constraint and limitation to full participation*. A publication of Human Resource Institute and Agrarian Reform Division, Food and Agriculture Organization of the United Nations, Rome, Italy.
23. Spencer, D.C., 1976. African women in agricultural development. A case study in Sierra Leone, Overseas Liaison Committee, Paper No., American Council on Education.
24. Spiro, H.M., 1977. The role of women farming in Oyo State, Nigeria. A case study of two rural communities, Discussion Paper No. 7/80. Ibadan, Nigeria: Agricultural Economics, International Institute of Tropical Agriculture, Ibadan, Nigeria.
25. Saito, K.A. and C.J. Weidemann, 1990. *Agricultural extension for women farmers in Africa*. World Bank Discussion Paper. The World Bank, Washington, D.C.
26. Maigida, D.N., 1992. Women-in-agriculture and unified extension agricultural system. Proceedings of the National Agricultural Orientation Course for Women-in- Agriculture Agents, Zaria, Nigeria.
27. Maliki, D., 1991. Implementation of women-in-agriculture programme, FAO/UNDP/FMANR Workshop on Extension Strategies for Rural Women, 3-7 September 1990.
28. Bryson, J.C., 1981. Women and agriculture in sub-Saharan Africa: Implications for development (an explanatory note). *Journal of Development Studies*, 17: 29-46.
29. Kishor, R., B. Gupta, S.R. Yadav and T.R. Singh, 1999. Role of rural women in decision-making process in agriculture in district Sitapur (Uttar Pradesh). *Indian Journal of Agricultural Economics* 54: 282-286.
30. Auta, S.J., S.Z. Abubakar and R. Hassan, 2000. An assessment of the contribution of women to family farming in north-eastern Nigeria. A Research Report submitted to the National Agricultural Extension and Research Liaison Service, Ahmadu Bello University, Zaria, Nigeria, September 2000.
31. Green, W.H., 2000. *Econometric Analysis*. International Edition, 4th edn., New York: Prentice Hall International Inc.
32. NAERLS. 2000. An assessment of contribution of women to family farming in north- eastern Nigeria. Report of a research sponsored by the National Agricultural Research Programme, Abuja, Nigeria. National Agricultural Extension and Research Liaison Service, Ahmadu Bello University, Zaria, Nigeria.

33. Meek, C., 1981. *A Sudanese Kingdom*, London: Kegan, Paul, Trench, Trubner and Co.
34. Ngur, N., 1987. Women and development in crop and livestock production in Nigeria. Paper presented at the seminar on Women Studies, University of Ibadan, Nigeria, 4-6 November 1987.
35. Simmons, E.B., 1973. The economics of consumer-oriented food processing technologies in FAO. *Review on Agricultural Development* No. 75 (13:40-41).
36. WOFAN. 2003. Women's Farmers Advancement Network-Nigeria. Last updated 2 July 2003. <http://www.comminit/en/node/126150/38>.
37. Franklin, S., 2007. Gender inequality in Nigeria. Taking IT Global online Publication, 31 May 2007.
38. Chale, F., 1990. Strengthening agricultural extension in Nigeria: A study of problems and constraints in extension strategies and methods for reaching rural women. United Nations Development Programme/ Food and Agriculture Organization of the United Nations, Rome, Italy.
39. Katherine, S.A., M. Halin and S. Dapline, 1994. Raising the productivity of women farmers in sub-Saharan Africa. *World Bank Discussion Papers*.
40. Karikari, S.K. and I.P. Mathew, 1990. *Agriculture: Principles and Practice*. London: Longmans.
41. Hellandedu, J., 2005. The joys and pains of tomato cultivation and marketing in Zuntu village and its environs, Kubau Local Government Area of Kaduna State. Proceedings of the national Conference on Prospects and Problems of Agricultural Development in Northern Nigeria, Zaria, Nigeria, 29 June-2 July 2005.
42. Mohammed, R., 2006. Women in horticulture. 24th Annual Conference of the Horticultural Society of Nigeria, Gombe, Nigeria, 17-21 September 2006.
43. F.A.O. 1988. The impact of development strategies on the rural poor: Second analysis of country experiences in the implementation of the WCARR Programme of Action, Rome, Italy.
44. F.A.O. 1990. *Women in Agriculture Development Series: Gender Issues in Rural Food Security in Developing Countries*, Rome, Italy.
45. Sreekumar, B., 2001. Women in agriculture. An evaluation of the central scheme in Palakkad district (Kerala). *Discussion Paper* No. 30.
46. Tigwareyi, J.T., 1987. The role of women in family nutrition. Improving food production on small farms in Africa. FAO/SIDA seminar on increased food production through low-cost food crops technology, Harare, Zimbabwe, 2-17 March 1987.
47. Malina, V.F., 1988. The role of women in farming systems. Proceedings of the National Workshop on National Agricultural and Livestock Research in Tanzania, Arusha, Tanzania, 25-30 April 1988.
48. Gueye, E.F., 2003. Gender issues in family poultry production systems in low-income food-deficit countries. *American Journal of Alternative Agriculture*, 18(4): 185-195.
49. Brown, L.R., H. Feldstein, L. Haadad, C. Pena and A. Quisumbig, 2001. Women as producers, gatekeepers and shock absorbers, *In: The Unified Agenda-Perspectives on overcoming Hunger, Poverty and Environmental Degradation*. Eds. P.P. Anderson and R. Pandya-Lorch, DFID Livelihoods Guidance.
50. Todaro, M.P., 1994. *Economic Development*, 5th edn. New York: Longman Group Ltd.
51. Geier, G., 1995. *Food Security Policy in Africa Between Disaster Relief and Structural Adjustment. Reflections on the Conception and Effectiveness of Policies: The case of Tanzania*. London: Frank Cass & Co. Ltd.
52. Melamed, C., 1996. *Adjusting Africa. Structural Economic Change and Development in Africa*. Oxford: Worldview Publishing.
53. Gueye, E.F., 1998. Poultry plays an important role in African village life. *World Poultry*, 14(10): 14-17.
54. Al-Sultan, F.H., 2000. IFAD's experiences from two decades of poverty alleviation in rural Africa. *In: The Institutional Context of Poverty Eradication in Rural Africa*, Ed. K. J. Havnevik. Uppsala, Sweden: Nordiska Afrikainstitutet,