

Redefining the Role of Women in Agricultural Development in Developing Countries

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Abstract:

The focus of the paper is to advocate the need to redefine the role of women librarians in agricultural development in line with sustainable development goals (SDGs). The paper described the various roles that women in developing countries can play in ensuring that the agricultural-related sustainable development goals are realized. The highlights of the paper are: the place of women in the society, the position of women in agricultural development, understanding the gender dimension of agricultural activities in developing countries, challenges to women contribution to agricultural development in developing countries analysis of agricultural-related SDGs, redefining the roles of women librarians in agricultural development in line with SDGs and strategies for successful inclusion of women

in the agricultural re-engineering for enhanced food security. The position of the paper is that women occupy a central position in agricultural development in developing countries.

Keywords: Agriculture, Agricultural Development, Developing Countries, SDGs, Women Librarians.

Introduction

The practice of agriculture is as old as man. It has been part of the human race from the point of creation. There is a nexus between divinity and human practice of agriculture because the first noble assignment given to mankind after creation of the universe is to take care of the garden and all living creatures which is agriculture in practice. Ever since then, human race of different ages and dispensation has been fully engaged in one form of agricultural practice or the other. Agriculture today is one of the forces that drive development in different nations of the world especially in most developing countries. Agriculture occupies a central place in the economic activities and development of developing countries. Agriculture improves food security in many ways, most fundamentally by increasing the amount of food and also by providing the means to purchase food (Nchuchuwe & Adejuwon, 2012). Agriculture will remain for many years a major contributor to the economies of most developing countries. Agriculture is a prime sector for development in an agrarian economy (Mahapatra, 2012).

Agriculture is inextricably linked to development and therefore plays an important role in economic and social developments of developed and developing countries. No wonder, it occupies a central place in the actualization of the 2030 sustainable development goals (SDGs) agenda. However, in as much as agriculture is fundamental to ensuring food security, women impact and contribution to food security agenda cannot be ignored.

Women are clearly an important part of the agricultural labour force, but agriculture and agricultural value chains are equally important to women as a source of improvement (Njuki, Kruger & Starr, 2013). Women no doubt occupy a central position in agricultural development. They play significant role in the different facet of agricultural activities such as crop production, horticulture, livestock production, fisheries and others. Women play vital roles in agricultural production in all parts of the world. They play an indispensable role in farming and in improving the quality of life in rural areas (Nuhu, Donye & Bawa, 2014; Prakash, 2003).

Women have been the focus of attention of all international and national development programmes and efforts have been directed at empowering them in all fields of activity (Prakash, 2003). Women produce between 60 and 80 percent of the food in most developing countries and are responsible for half of the world's food production, yet their key roles as food producers and providers and their critical contributions to household food security is only now being recognized (Bolarin & Adamade, 2015). However, if sustainable agricultural development is to be translated into food and nutrition security, the active engagement of women is absolutely necessary because women also have the right to be equal partners in the agricultural sector (Raidimi, 2014).

Women have a significant role in the global food security agenda as enshrined in the global sustainable development goals (SDGs). No doubt, food security is said to exist when people, at all times, have physical and economic access to sufficient safe and nutritious food to meet their dietary needs and food preferences for an active and healthy life. Agriculture remains an important engine of growth and poverty reduction, however, the sector seems to be underperforming in many countries in part because women, who are often a crucial

resource in agriculture and the rural economy, face constraints that reduce their productivity (Njuki, Kruger & Starr, 2013). However, achieving food and nutritional security requires every member of society to have access to nutritious food and the information and freedom to make appropriate choice concerning good nutrition (Sustainable Development Solutions Network, 2013).

Justification for the Paper

The role that women play and their position in meeting the challenges of agricultural production and development are quite dominant and prominent (Ogunlela and Mukhtar, 2009). According to Raidimi (2014), it is time to take into account the role of women in agricultural production and to increase concerted efforts to enable women to move beyond production for subsistence to higher-value market oriented production. Also, women's role in the economy has often been underestimated, and their work in agriculture has long been invisible (Olumakaiye & Ajayi, 2006). According to Amenyah and Puplampu (2013), if women farmers constitute critical human resources in agricultural development, it is essential to shine some light on their role and significance in the sector. It is on this note that the researchers purposed to x-ray and redefine the role of women in agricultural development with emphasis on developing countries.

Conceptual Clarification of Agriculture

There are different perceptions about agriculture depending on the discipline that one is examining it from. Agriculture, like any economic activity, requires relevant resources and rewards for optimum performance (Amenyah & Puplampu, 2013). Agriculture is essential for inclusive development because it produces good as well as economic wealth for many of the worlds' poorest people - wealth that allows for improved livelihoods through better healthcare, education, infrastructure improvements and greater investment in environmentally sound practices. Nchuchuwe and Adejuwon (2012:47) conceptualized agriculture as the:

cultivation of plants and husbandry of animals, which is the management of living things and ecosystems to produce goods and services for the people. Agriculture to them, includes farming; ranching, aquaculture, apiculture, horticulture, animal husbandry, including but not limited to, the care and raising of livestock, equine, and fur-bearing animals, poultry husbandry and the production of poultry and poultry products, dairy production, the production of field crops, tobacco, fruits, vegetables, nursery stock, ornamental shrubs, ornamental trees, flowers, sod, or mushrooms, timber, pasturage, any combination of the foregoing: the processing, drying, storage, and marketing of agricultural products when those activities are conducted in confirmation with, but are secondary to, such husbandry or production.

From the above concept, it is obvious that agriculture plays an important role in enhancing income growth thereby reducing poverty among individuals. The profession of agriculture includes a wide diversity of practices and specializations because it is virtually limited to production of the fundamental necessities of man-derived food-stuffs from plants and animals (Sharma, 2014). Agricultural production therefore, occupies a prominent position in every economy that is aimed at alleviating poverty and through growth in agricultural productivity and higher farm profits, the rural poor can generate additional income to purchase more food, including more diverse kinds of food (Nchuchuwe, & Adejuwon, 2012).

The practical benefits derived from agriculture include sustainable food production and overall economic development, factors that are of strategic importance to all nations.

Developed and developing countries alike, recognize the importance of agriculture by according it the priority it deserves (Aguolu, 2000). Agriculture's important role is one of production, both of food for the rural and the urban population and of cash crops for the export market to earn foreign currency (Onuekwusi, 2010).

As noted by Chinyanba , Muchena and Hakutangwi (2006), agricultural programmes and policies in most African countries have not adequately addressed the needs of women farmers. Quisurnbing, Brown, Feldsterin, Haddad and Pena (1995:1) referring to the agricultural scenario in Africa, stated that:

Sustainable production of food is the first pillar of food security, in every region of the developing world, but perhaps most in Africa, millions of women work as farmers, farm workers, and natural resource managers. In doing so, they contribute to national agricultural output, maintenance of the environment and family food security.

The agriculture sector is becoming more technologically sophisticated, commercially oriented and globally-integrated; at the same time, migration patterns and climate variability are changing in the rural landscape across the developing world (FAO, 2011:3). As noted by FAO (2011), the roles and status of women in agriculture and rural areas vary widely by region, age, ethnicity and social class and are changing rapidly in some parts of the world.

Women and their Place in the Society

Women over the years play dual responsibilities in virtually every society. It is worthy to note that beyond their primary roles as home makers, they also contribute significantly to the development of the society through their participation in different activities that promote national and international development. Women's roles and status all over the world are generally determined by social eco-systems and by class positions (Prakash, 2003). They are involved in the production and processing of food for the family, they also act as the primary care takers of children, the elderly and the sick, with their income and labor directed toward children's education, health and well-being (Gupta, 2012). They make essential contributions to the agricultural and rural economies in all developing countries with their roles varying within and between regions (SOFA Team and Doss, 2011). However, Butt, Hassan, Mehmood & Muhammad (2010) affirmed that the involvement of women in the family and the national economy has been grossly underestimated and even unrecognized.

Women are the majority of the world's agricultural producers, playing important roles in agricultural sector and as well in fisheries, livestock management (Butt, Hassan, Mehmood & Muhammad, 2010). The rural women for instance are greatly endowed with the special knowledge to ensure the survival of the family and their domestic activity and essentially contribute to the maintenance of the local economy to enhance sustainable development (Ugboma, 2014).

Raidimi (2014) examining the roles and activities of women conclude that they play multiple roles in agriculture and households, that is, productive, reproductive and social. The productive roles focus on various economic activities, whilst their reproductive roles include child-bearing and nurturing. Also, household maintenance relating to cooking, fetching of water and fire wood were identified. The social roles include arranging for funerals, weddings and related social events.

The Position of Women in Agricultural Development

Regardless of the level of development achieved by the respective economies, women play a pivotal role in agriculture and in rural development in most countries of the Asia-Pacific Region (Prakash, 2003). However, recognizing common assumptions about women

and agriculture, Chinyemba, Muchena and Hakutangwi (2006) maintained that the role of women in agriculture first needs to be considered in relation to the position of women within the household, the community and within the nation. They contend that women cannot be treated as homogenous because they are different classes in relation to land owning, landless or tenants. Similarly, Ugboma (2014) appreciating the place of women in agricultural activity affirmed that women possess an enormous amount of knowledge about food production and processing, child nurturing, breeding of food crop species, preservation of seeds, and the domestication and use of wild edible plants. In other words, women not only play a dominant role in food farming but an even more important role in the processing, storage and marketing of food crops (Raidimi, 2014).

Women according to Mtsor and Idisi (2014) are suppliers of labour, food crop and livestock producers, processors of food and fish products, marketers of peasant farm surplus and transporters of farm supplies and farm products between the farm and the home. Women are also responsible for post harvest food processing, storages, transport and marketing (Karl, 2009). They have been making prominent and important contributions to agriculture right from creation and they actually constitute the bulk of the world's food producers (Okwu & Umoru, 2009). Also, Abdullahi Abdullahi and Mohammed (2012: 56) highlighting the role of women in agriculture stated that:

Also, in the area of food utilization, women's role in this regard is very critical for food security, which underscore their importance in food production. Their responsibility in food preparation is essential for dietary diversity of their households, especially in the area of selecting complement stable foods like fruits, vegetables, animal as sources of food etc. This reveals their critical roles in food security both within the household and the society at large.

The above statement is a pointer to the important place that women occupy in the realization of sustainable food security in both developed and developing nations of the world. Women work in agriculture as farmers on their own account, as unpaid workers on family farms and as paid or unpaid labourers on other farms and agricultural enterprises. They are involved in both crop and livestock production at subsistence and commercial levels (FAO, 2011, p.7). Women play a key role in ensuring household food security through both farm and non-farm activities that bring income for food purchases (Yambi, 1997).

Food Security

Food security is becoming a phenomenal problem in developing nation of the world. It is a multi-dimensional development issue (Boakye-Achampong, Mensah, Aidoo & Osei-Agyemang, 2012). Food security according to Bolarin and Adamade (2015) does not necessarily imply food self-sufficiency alone. The key elements of food security to them are adequacy of food, not only in terms of quantity but also in quality, as well as stability of supply and access by all the people to food at all time.

Olumakaiye and Ajayi (2006) explained household food security as access by all people at all times to sufficient food required for healthy and active life in the household which can be ensured through nutritionally adequate and safe food supply at household level, reasonable degree of stability in the supply of food during the year and access by each household to sufficient food to meet the needs of all.

Women however, contribute to food security in the area of preparation of food for farm workers' consumption, provision of labour for rice production, thinning and supplying farm operations, marketing agricultural produce, sowing of seeds, weeding farmlands and application of fertilizers and pesticides (Ben, 2015). However, Boakye-Achampong, Mensah,

Aidoo & Osei-Agyemang (2012), aptly pointed out that women's role in ensuring household food security remains largely unrecognized in policy and resources allocation, especially in developing countries. However, it is disheartening to note that most developing countries could not produce enough food for their local consumption, only few countries in the least developed nations can boast of growing enough foods for its teeming population.

Understanding the Gender Dimension of Agricultural Activities in Developing Countries

It is important to examine the gender dimension of agricultural activities in developing countries. A better understanding of this will help in redefining the role of women in agricultural development. Ogunlela and Mukhtar (2009) observed that women make significant contribution to food production and processing, but men seem to take more of the farm decisions and control the productive resources". No wonder, Chinyemba, Muchena and Hakutangin (2006:640) argue that women need a strong voice for gender to be represented in the land reform policy discourses. They further contend that there is a need to strike a gender balance in the agricultural sector for women to benefit both within and outside the scope of the family. The gender dimension in agricultural activities was noted by Ogunlela and Mukhtar (2009:21) when they stated that:

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.

In other words, despite women's huge contribution to agriculture, they are often relegated to the background when it comes to derivable benefits from the agricultural processes that they promote. Also, in terms of equipment and technology relating to agricultural production, Quisumbing, Brown, Feldstein, Haddad and Pena (1995) confirmed that female farmers generally own fewer tools than men. They further noted that since farm capital contributes positively to yields, female farmers are likely to have lower yields than male farmers. According to Gupta (2012), the gender norms define women's role as largely neglected to the home, as mother and caretaker, and men's role as responsible for productive activities outside the home. This norm as noted, also influence institutional policies and laws that define women's and men's access to production resources such as: education, employment, land and credit.

Also, Njuki, Kruger and Starr (2013) opined that given that gender inequalities run through agricultural systems, at all levels from household and community up to national, regional and international scales. This action will require making research, extension, and market systems inclusive and accessible policy actions that reduce barriers to women access to resources including land engaging man to change gender relations, community structure and cultural norms that perpetuate gender inequalities, and programmatic interventions that integrate the multiple functions of agriculture (food, nutrition, incomes). Fon and Tafah (2012), maintained that the devaluation of women and their contributions to agriculture have been a constant historical feature, as most published statistics on women's involvement in agricultural labour force are misleading because they report women's activities in the area of food production (Alston, 1995).

Okwu and Umoru (2009) contend that considering women's designated roles in agricultural production efforts, agricultural information to farmers should be gender specific and sensitive. FAO (2015) notes that, women make up almost half the agricultural labour force in developing countries, but that they own less land and lack access to resources. FAO (2015) opined that if women are more involved in decision-making and if they had the

required needed access as men to productive and financial resources, income, education and services, agricultural yields would increase and the number of poor and hungry people would fall. Women according to FAO (2011) are farmers, workers and entrepreneurs, but they face more severe constraints compared to men when accessing productive resources, markets and services. This to them, hinders women productivity and reduces their contributions to the agriculture sector and to the achievement of broader economic and social development goals.

According to FAO (2011), despite similarity in women in agriculture and rural areas such as having less access than men to productive resources and opportunities, the gender gap is found for many assets, inputs and services - land, livestock, labour, education, extension and financial services and technology and it improve economy and society as well as on women themselves.

Challenges to Women Contribution to Agricultural Development in Developing Countries

In spite of the significant place that women occupy in the agricultural development process of developing countries, the following encumbrances limit the extent of their contribution to agricultural development.

1. ***Low level of literacy among women:*** No doubt, most women in developing countries especially those in rural settings have low level of educational attainment. This poses a major challenge to their contribution and participation in agricultural-related activities that would enhance agriculture. Because of their poor literacy level, their innovations and creativities are hardly appreciated.

2. ***Land ownership constraints:*** Land ownership is a major constraint to women contribution to agricultural development and food security. In most countries, as pointed out by Prakash (2003), women do not own the land they cultivate.

3. ***Marital constraints:*** The marital status of women has been acknowledged to limit their contribution to agricultural activities. According to Nuhu Donye and Bawa (2014), their correlation test on barriers to women's effective participation in agricultural production shows that only marital status had negative correlation at 5% level of significance, thus, indicating that marriage tends to negatively affect women's participation in agricultural production.

4. ***Social and institutional challenges:*** Another area of challenge is social and institutional challenges. According to Chinyemba, Muchena and Hakutangwi (2006), women despite their important role in agricultural development face legal, social and institutional barriers. Njuki, Kruger and Starr (2013) observed that in some countries, women are not recognized as farmers and face widespread restrictions on decision making about their basic resources for production, land access to productivity enhancing inputs such as credit, fertilizer, improved seeds and extensive and control over the produce resulting from their labour and other investment.

5. ***Unequal access to agricultural extension services:*** Quisumbing, Brown, Feldstein, Haddad and Pena (1995:4) also note that despite women's prominent role in agriculture, they do not get an appropriate share of agricultural extension advice and other services (such as seeds, fertilizer, and credit delivered through the agricultural extension system).

6. ***Lack of access to credit facilities:*** Women in developing countries hardly have access to credit facilities with which to utilize in procuring modern farming equipment and renting of lands. In other words, women access to credit facilities in developing countries is limited.

Analysis of Agricultural Related Sustainable Development Goals (SDGs)

The sustainable development goals (SDGs) are universal goals aimed at making the global world a better and safe environment. More so, it is an all embracing goal that requires all hands to be on deck (Benson, Anyalebechi & Amaechi, 2015). The SDGs comprised of seventeen goals that focus on different sectors accompanied by specific targets. However, in the context of this paper, emphasis is on the agricultural related goal which is goal number 2. This goal aimed at reducing hunger and promoting food security. The sustainable development goals (SDGs) are seventeen goals that show the eagerness by the governments globally to eradicate poverty and hunger and to provide quality education, good health, gender inequality, good jobs and economic growth and partnerships among international communities (Ubale & Yaheya, 2016). As noted by Food and Agricultural Organization of the United Nations (2015), a dedicated global goal, SDGs 2, based on a comprehensive approach to tackling food insecurity and malnutrition while promoting sustainable agriculture is an important step to achieving zero hunger and ushering in a new era of sustainable development. However, the 17 Sustainable Development Goals form a cohesive and integrated package of global aspirations the world commits to achieve by 2030.

Re-Defining the Roles of Women Librarians in Agricultural Development in Line with Sustainable Development Goals (SDGs)

Women librarians by virtue of their trainings and exposure to global realities are expected to perform the following roles as part of their contribution to agricultural development in line with sustainable development goals (SDGs). Women librarians can perform the following functions as strategy towards redefining of women's role in agricultural development with reference to developing countries.

i. **Analyzing the agricultural information needs of rural dwellers:** Rural dwellers have felt need for agricultural information to enable them improve and enhance their agricultural productivity and as well promote sustainable agriculture. Women librarians i. e. Association of Women Librarians in Nigeria (AWLIN) can help by carrying out an in-depth analysis / study with regards to the agricultural information needs of rural farmers/ dwellers. With the result of such analysis, they (women librarians) can be adequately armed with information or knowledge on how best to meet the rural farmers information needs, thereby contributing to the agricultural SDGs-related goals.

ii. **Identification of local markets for agricultural products:** Most women in rural areas do experience challenges on where to sell their farm produce. This challenge has dual impact on the agricultural sector, i.e. those in need of the agricultural products do not have access to them, while the producers on their part have no knowledge of where their products are needed. Such scenario affects the overall output of the agricultural sector. Hence, the need for the women librarians to help in identification of local markets and nature of products sold. It is important that comprehensive database is compiled. This would go a long way in bridging the gap that exists between women farmers and the consumers that have need for their products.

iii. **Providing agricultural extension workers with timely and reliable research findings that can boost agricultural productivity:** Women librarians in line with SDGs could provide agricultural extension workers with timely and reliable information regarding research findings. No doubt, agricultural extension workers depend heavily on agricultural information. Women librarians could therefore explore this avenue as means of contributing their quota to the realization of SDGs aimed at ending hunger, achieving food security and improved nutrition. In other words, women Librarians could collaborate with agricultural extension agents (AEA) to actualize agricultural development programs.

iv. **Dissemination of information on indigenous agricultural products and its nutritional value:** most developing countries of the world import more foods than they export. In other words, the consumption of imported foods is high in developing countries, hence the need to provide and disseminate information on indigenous agricultural products and its nutritional values. They should also disseminate information to the dangers and health-risks of over consumption of imported foods.

v. **Provision of valuable information on cooperative activities:** Agricultural cooperatives have played significant role in the overall agricultural development both in developed and developing nations. Women librarians are expected to provide rural women with information on what they stand to benefit from participating on cooperative activities.

vi. **Mobilizing and sensitizing women through library-on-the-air programmes:** Women librarians can mobilize women by sensitizing them through “*library-on-the-air programme*”. Through this programme, women both in rural and urban areas can be adequately informed about agriculture-related government policies and how they affect them as well as what is expected of them. As noted by Karl (2009), organizing and mobilization of women are keys to empowering women’s participation in decision-making with regards to food security policy and programme.

vii. **Dissemination of agricultural information:** Agricultural information denotes “knowledge” or “fact” in the field of agriculture (Aguolu, 2000). The dissemination of agricultural information is vital to improve agricultural production because it is a medium through which people get acquainted with new and better farming. According to Benson, Anyalebechi & Ameachi (2015), agricultural related information that could boost agricultural productivity is essential in curtailing the acute hunger and food insecurity that is more pronounced in developing countries. They are of the view that promoting sustainable agriculture in developing countries is not realistic without relevant agricultural information. Agricultural information generation and dissemination as opined by Sani, Boadi, Oladokun and Kalusopa (2014) are necessary for the development of agricultural products. They pointed out that agricultural information interacts with and influences, agricultural activities in a variety of ways which implies that agricultural information help in decision-making regarding land, labour, livestock, capital and management. This points to the necessity of women librarians ensuring that information centres are established in the rural communities. This aligns with the suggestion of Obidike (2011) that there is need for the establishment of information centers in all rural communities for easy access and effective utilization of agricultural information. Farmers need to keep abreast of necessary information that will enhance cultivation and be well aware of issues and developments surrounding any crop before every farming season (Sokoya, Alabi & Fagbola, 2014). Women need access to information on how modern equipment can be harnessed for maximum agricultural productivity.

Strategies for Successful Inclusion of Women in Agricultural Re-Engineering for Enhanced Food Security in Developing Countries

- **Increase of women’s access to and control of land:** Gupta (2012) is of the view that increasing women access to and control of land is another strategy that will improve the economic status of poor women. To her, women who own or control land can use the land to produce food or generate income, or as collateral for credit.

- **Organizing agricultural talks / seminars for women in rural areas:** Agricultural talks and seminars should be organized for women farming in rural areas. Experience has

shown that they lack access to timely agricultural information regarding improved seedling and modern ways to carry out farming activities. No doubt, when the talk shows are organized, it will help in educating the rural women on modern trends in agricultural activities.

- **Women involvement in extension services:** Agricultural extension concentrates effort on locating relevant research results and processing technical information for transfer to existing farmers' structure in rural communities (Onuekwusi, 2010). Women should be incorporated in the agricultural extension services in developing countries. Such services should not be left within the restrictions of men under the illusion that it is a male-dominated profession.

- **Assisting women in procurement of agriculture technologies:** Women in agricultural activities should liaise with government to procure agricultural equipment and technologies at subsidized rates so that rural women involved in farming can actually have access to such technologies.

Conclusion

The paper has extensively examined the various ways through which women can contribute significantly to the agricultural development agenda. It is believed that sustainable development goals relating to agriculture can be realized fully if women are incorporated into the scheme of things. Women are major drivers of sustainable agricultural development, therefore their roles in agriculture ought to be redefined to enable them participate actively in the global agriculture agenda.

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