

Inequality Gaps: Issues for Smallholder Farming in Nigeria

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Abstract

In Nigeria both Women and Men play very significant roles in socio-economic activities at the family and community levels through subsistence smallholder farming. The fact remains that the contribution of both gender in food security and agriculture is the untapped green oil of Nigeria. The exclusion of Women in most agricultural development schemes is due to lack of access to land, technology, credit and many other challenges. This article reviews from secondary data the unequal relationship in the agriculture sector. At National and the different geopolitical zones of the country, low education and cultural biases prevent women's participation in decision-making. Across the geopolitical zones intersect also exist within the female gender, evident in the disparity in education and unpaid labour observed from available data. Overall there has been improvement in extension services for female smallholder farmers. With no disaggregated data to show, even women targeted empowerment programmes cannot be acknowledged to have created a change.

Keywords: Agriculture, Food security, Gender inequality, Smallholder farmer

1.0 Introduction

After nearly four decades of work related to women and development, the subject of gender remains a key issue for the agenda of most international development agencies. The Food and Agriculture Organization (FAO) of the United Nations is no exception. FAO's Plan of Action for Women in Development (1996-2001) and the FAO Gender and Development Plan of Action (2002-2007), are the major policy guidelines for FAO's work related to gender.

Food security is a development priority and a programming objective. It is founded on and aimed specifically at redressing the global problem of food insecurity (CIDA, 1989). Food security as defined by the World Bank in 1986 means "access by all people at all times to enough food for an active, healthy life. It entails the availability of food and the ability of all members of society to have access to adequate amounts of food.

Gender equality a basic human right like Food security requires that men and women be treated equally with respect to resources, services, legislation and policies. It is therefore important to examine how women and men are positioned differently in society. These differences often result in significant forms of discrimination and gender based oppression. In fact, these differences result in serious gaps in political, social and economic participation. The end result is a situation of persistent gender inequality (United Nations, 2013).

At the **household level** a food secured household is a household that has assured sets of entitlement from food production, cash income, reserves of food or assets and /or government assistance programmes-such that in times of need they will be able to maintain sufficient nutritional intake for physical wellbeing. At the aggregate level, the country should have adequate food production, stocks and imports to meet its citizen's food needs for an active healthy life. At household and individual level, all citizens should be entitled to adequate food (Sen, 1982). The World Food Summit held in Rome in 1996 provides a definition which is more encompassing : Food Security exist when all 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.

In assessing the state of agricultural budget in Nigeria from 1995-2002, the Centre for Democracy and Development (CDD) using a Gender –Aware Analysis concluded that; the pattern of expenditure in agriculture is such that the capital budget goes to finance construction of buildings and structures, and the purchase of office machinery and equipment that add little or no value to agricultural products .This pattern runs through the federal, state and local government agriculture budgets. The agriculture budgets have thus failed to meet even the practical needs of men and women for the basic needs of food shelter, water supply, sanitation and energy.

Across the developing world, women account for 60 to 80 per cent of these farmers (ACTIONAID, April 2010, p.9.) Yet, the majority of people going hungry worldwide are women and girls (ACTIONAID, April 2010, p.3). So, the very women who are producing our food are the ones who are most likely to go hungry. One key reason for this is that agricultural policies are simply not supporting smallholder farmers. Even where smallholder farmers do get support, a huge gender gap exists in terms of what women receive in relation to men. Women farmers, have less access than men to productive resources and government support, even though they make up the majority of farmers (ACTIONAID, 2011).

The State of Food and Agriculture (FAO) 2010–11 makes the “business case” for addressing gender issues in agriculture and rural employment. The agriculture sector is underperforming in many developing countries, in part because women do not have equal access to the resources and opportunities they need to be more productive. Smallholder farmers currently produce 90 per cent of food in Africa and around half of all food worldwide (Action Aid, April 2010, p.2.).These farmers have farm holding in the range of about 1.0-3.0 hectares (C.T.A.2000) and they form the bedrock of agriculture and agricultural development in developing countries of sub-Saharan Africa (Y.I. Ogunlela and A.A.Mukhar, 2009).

This study is concerned with the gender relationship of men and women’s in farming activities .It also seeks to state the persistent inequality gaps that continue to exist in this sector in the 21st century. The following research questions were used during this study;

What gaps were prevalent in the gender relationship within the different farming activities?

What mechanism and policies the government and International organisations were using to reduce these gaps?

In order to answer these questions, the research examines the inequality gaps that are common in the management of agricultural resources. Detailed literature in the research provides an overview of how men and women differ in accessing agricultural resources. On the overall, the research shows how women spend a great deal of these resources amidst gender biases and lack of commitment from government and other development agencies in closing these gaps even where policies do exist.

2.0 Patriarchy and Power Relations

Friedrich Engels in ‘The Origins of Family, Private Property and the State’ (1972) observes that, at the earliest phases of development which he called savagery and barbarism, gender inequality favoured women rather men, there was a division of labour by sex, with men mainly responsible for producing food and women mainly responsible for domestic spheres, but women were not subordinate to men. Unfortunately several criticism have arisen to Engels theory, however Engels pioneered work on the origin of gender inequalities and the foundation upon which later Marxists and socialist feminist have built. Several proponents on the history of patriarchy like Kate Millett have attempted to justify patriarch as a basis for male domination and subordination of the female gender. While critics like Sheila Rowbotham (1979) see the disadvantaged position of women in power relations as attributes of biology and capitalism rather than patriarchy as the basis of woman’s oppression in modern societies.

In Africa patri-lineal and matri-lineal societies exist, however patri-lineal societies are highly evident and have been socialized into people’s way of life in Nigeria like in most African cultures. Women play a critical role in food security in this region by fulfilling their role as food providers. There are 2 basic variants of household food production systems in Sub-Saharan Africa:

- (1) Women are responsible for production of all or most food crops. In this variant, food plots are considered women's plot.
- (2) Men and women jointly cultivate staple food crops in fields controlled by male household heads. In this type, male household head controls the output.

(3) Men are responsible for food production, while women specialize in food processing. This variant is mainly encountered where Islamic practices of female seclusion prevent women from engaging in fieldwork (Koopman Henn, J.1992).

ACTIONAID in a recent report highlights the fact that donors are misallocating resources and deepening inequality: ACTIONAID's Fertile Ground report shows how governments and donors can halve hunger by supporting small farmers; the report found that agriculture budgets have overwhelmingly failed to focus on women smallholder farmers, and nearly all agricultural policies ignore the needs and rights of women. ACTIONAID'S Hunger FREE Scorecard 2010 report on Who's really fighting hunger? demonstrates the devastating costs of not investing in smallholder farmers, and poor women farmers in particular (refer to misallocation of resources from Bill and Belinda Gates Foundation: Farming as Equals-ACTIONAID).

Damisa, M.A. and M. Yohanna, (2007), 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 (refer to 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. 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.

3.0 Division of Labour and Unpaid Work

Perception of the appropriate division of roles in homes and family, paid employment, and the political sphere are shaped by the predominant culture-the social norms, beliefs, and values existing in any society, which in turn rest on levels of societal modernization and religious traditions (R. Inglehart and P.Norris,2003). Gender division of labour varies across societies worldwide. In Africa, there is a rigid division of labour by gender in agriculture. The division of labour is based on patriarchal norms that typically require women to care for the needs of the male members of the household, while men are required to bring cash income to the household (Adepoju,1997). In Nigeria women are responsible for carrying out 70% of agricultural labour, 50% of animal husbandry related activities and 60% of food processing activities (National Gender Policy, 2006).

Women in Anambra State from the south eastern part of Nigeria contribute more than the men in terms of labour input in farming and are solely responsible for household management duties (NAERLS. 2000). Studies elsewhere in Nigeria, involving the *Jukun* people (Meek, C., 1981) and the nomadic *Fulfude* women and *Kulka* women farmers, observed that between 70 and 80% of agricultural labour force is provided by the women (Ngur, N., 1987). 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 (1973) in three Zaria villages, he observed that 90% of the women were involved in at least one food processing activity or the other. In the south western zone of Nigeria, Osuntogun (1988) through- a study of four communities observed that rural women in his area of study play very significant roles in the farming operations of their communities. They were involved in bush clearing, land preparations, ploughing, hoeing, planting and weeding. Men did not engage in farming but would clear the land for their wives, and spend more time hunting and producing palm oil a by-product from palm kernel.

A recent 2013 National Agricultural survey on exportable commodities also shows a great gender disparity in labour and unpaid work between men and women engaged in the farming of Nigeria's priority exportable agricultural products (refer to table 2). Within the same gender, these disparities could be viewed as a result of differences in the socio-cultural, religious, tribal, educational levels across the states.

A result of intersect issues common in Nigeria's geopolitical zones. The data indicates that, more women are involved in unpaid family farming than in the paidwork category observed to be prevalent in core Muslim states. One hypothesis, initially proposed by Ester Boserup (1970), is that the origin of these differences lies in the different types of agriculture traditionally practiced across societies. In particular, it highlights the important differences between shifting agriculture and plough agriculture. Shifting agriculture, which uses hand-held tools like the hoe and the digging stick, is labour-intensive with women actively participating in most of the farm work. By contrast, plough agriculture is more capital-intensive, using the plough to prepare the soil. Unlike the hoe or digging stick, the plough requires significant upper body strength, grip strength, and bursts of power, which are needed to either pull the plough or control the animal that pulls it. As well, farming with the plough is less compatible with simultaneous childcare, which is almost always the responsibility of women. As a result, men tended to specialize in agricultural work outside the home.

While the roles of women in agriculture vary widely by region, age, ethnicity and social status, their participation rates in the agricultural labour force in sub-Saharan Africa is the highest in the world. For example, the percentage of women in agricultural activities ranges from 36 percent in Côte d'Ivoire and Niger to over 60 percent in Lesotho, Mozambique and Sierra Leone (FAO2011b). In Nigeria women are responsible for carrying out 70% of agricultural labour, 50% of animal husbandry related activities and 60% of food processing activities (National Gender Policy, 2006).

4.0 Access to Land and Ownership

The land tenure systems in Africa vary across the continent. Both women's access to land and security of women's land tenure affects overall productivity. Traditionally, land may be allocated through lineage or village heads which is a model which still persists despite increasing private or state ownership of land.

In patri-lineal lineages women have access to land through male relatives in Nigeria. According to Bohannan and Bohannan (1968), women's land rights among the Tiv of Nigeria depend on either residence or marriage. A wife or widow has the right to a plot of land large enough to support herself and her dependants. A wife who does not gain a plot of land after marriage has the right to leave and re-demand her bride wealth. Invariably therefore, despite variations in customary law across regions and nations, there are some commonalities.

When allocations are made by village heads, a lot depends on their perception of different individuals' need for land. To the extent that women are perceived to be less capable of farming, their allocations are smaller (Doss, Cheryl R, 1999).

In some communities, a daughter does not receive land when her father dies and even a widow does not inherit land; she generally acts as a caretaker until her sons come of age. In some cases, a widow is willed along with the land to her deceased husband's brother. She may remain on the land and cultivate it if she marries the successor; but if she refuses she may lose access to the land and her livelihood. In all of these, a childless woman or a woman who bore only daughters is in a precarious position as she does not stand any chance of acquiring any form of land within the family (T. C Iruonagbe 2008). For example, in the Beti of Southern Cameroon, women cannot inherit land. They are granted food plots by their husbands but they are not allowed to plant cash crops (Koopman Henn, J.1983 and 1992).

In the Federal Capital Territory of Nigeria, my experience with local communities shows that female members of Gbagayi tribe in the Pyakasa area inherit farmlands.

Most customary law is not codified but emerges from unwritten social rules that ostensibly are derived from shared community values and traditions but which often reflect patriarchal relations between women and men. Under most systems of customary law, women – regardless of their marital status – cannot own or inherit land, property, or housing in their own names, and whatever property rights they may enjoy are dependent upon their male relatives (COHRE, 2003).

Although the Nigerian constitution gives equal property rights to women, tradition and women's low social and economic status limit their ownership of assets. Only 18% of women own a house, either alone or jointly, and only 15% own land. Eight in ten women do not own a house (82%) or land (85%). In comparison, men are more than twice as likely to own a home alone or jointly (40%). Men are also more than twice as likely to own land alone or jointly (34%). Six in ten Nigerian men do not own a house and nearly two-thirds do not own land.

Overall, women's access to land in African societies is quite restricted, even in cases where the law protects women's rights to land, traditional customs inhibit their access and control over land (NPC, 2013).

5.0 Crop Production and Animal Husbandry

In rural areas of sub-Saharan Africa, women make up majority of subsistence farmers producing a large percentage of food crops for consumption. According to Foster (1986) and the Food Agriculture organisation of the United Nations (FAO, 1990) women produce more than 80% of the food in Sub-Saharan Africa, 50-60% of Asia's food, 46% in the Caribbean, 31% of the food in North Africa and the middle East and more than 30% in Latin America.

This distinction can be explained as a result of gender norms that assign women with the responsibility of feeding family and men with the responsibility of providing cash income (Pitcher, M. 1996). Though women mainly grow food crops for household consumption, but if there is any marketable surplus, they sell it in the market. However, women's primary responsibility is to feed the family and only after that they can engage in other income earning activities. The distinction between crops is sometimes not very clear especially in the case of maize which is a staple crop in several Sub-Saharan African countries as well as a cash crop (Doss, Cheryl R. 1999).

In male –and female headed households the story is not different. Available statistics shows that a direct comparison can be made regarding production between these two groups. Female headed households have smaller farms and use fewer purchased inputs, their output is naturally smaller. The table below presents a set of countries which data is available (refer to table 3).

Female headed households represent between 3 and 38 percent of all households and produce 2 and 17 percent of the value of food produced. These data suggest that female-headed households produce less than their share would predict if resources use and productivity were equal with male-headed households (SOFA Team and C. Doss, 2011).

Inequality in livestock holdings appears to be particularly acute in Bangladesh, Ghana and Nigeria, where male holdings are more than three times larger than those of female-headed households. In Indonesia and Pakistan, for which the RIGA database contains information on incomes from livestock but not livestock holdings, net incomes from livestock are significantly higher in male-headed households than in female-headed households. These vary by culture and context but, in general, men are responsible for keeping and marketing large animals, such as cattle, horses and camels, while women tend to control smaller animals, such as goats, sheep, pigs and poultry (FAO, 2009a).

6.0 Access to Markets

In Nigeria like in most African countries, culture determines if women can access markets to dispose off their agricultural products, the men often access the bigger markets for the female counterparts. Usually the women's holdings are small and thus consumed by the immediate family or sold at community level.

This is a serious constraint for women smallholder farmers. Several issues for consideration include modes of transportation; harassment due to high cost of permits; time burdens because of caring responsibilities which then affect selling prices; potential household conflict; appropriation of crops by men once they enter into the market economy (Agnes R. Quisumbing and Lauren Pandolfelli, 2010). As noted in the FAO report of 2011, other barriers include market standards, limited information, requirements for large initial capital investments, limited product differentiation, and handicapping policies. While almost any of the farm produce sells at the village level market, consumers are quick to discriminate against produce that is comparatively inferior, hence farmers have, over time, adapted to selling only that which will sell. This is a highly subjective process that has worked traditionally.

However, when the same farmer wants to sell the produce to high-end markets, then subjective standards no longer work. The farmer is forced to meet objective standards such as size, quantity, and quality. The quality aspect of the standards is of major concern and gets more rigid where the food crop is for export. It is as detailed as the nutritional content per serving size, allowable bacterial load, and residual pesticide. Some markets have zero tolerance on the latter. The other aspect of the problem is the variation in the standards between markets. They are so varied that they necessitate the farmer to identify the market before production. Yet, the markets are not static. The volumes required and sometimes the standards vary.

The farmers' risk is increased. Apart from the fact that standards in themselves provide a bottleneck as to the crop and amount thereof that a farmer can produce, standards also put a strain as to who can produce. Lastly, Africa's high export costs limit farmer's access to the international markets.

As such, interventions to support women's access to markets need to be highly sensitive to these and other context-specific issues. Furthermore, lack of access to transportation technology often limits the mobility of women and their capacity to transport crops to market centres (FAO 2010 and 2011).

7.0 Education and Access to Information

Global statistics show a gender gap in education, it indicates that it is particularly acute in rural areas, where female household heads sometimes have less than half the years of education of their male counterparts. And also indicates a significant and widespread gap (refer to Figure 11 of FAO 2011 report). With reference to figures shown in the report, Female heads have less education than their male counterparts in all countries in the sample except Panama, where the difference is not statistically significant. The data suggest that female household heads in rural areas are disadvantaged with respect to human capital accumulation in most developing countries, regardless of region or level of economic development.

In Nigeria, O.I. Aina notes that, women are generally disadvantaged in education due mainly to socio-cultural factors rather than individual ability to cope with educational challenges. She also observed that till date lack of education is a strong barrier to female participation in the formal sector. However zonal variations exist across the country with higher gaps in specific cultural zones.

She has cited that the socio-economic status of women and girls in the northern region lags behind those of the south because of poor access to education; over two-thirds of girls in the north aged 15-19 years are unable to read compared to less than 10% in the south; in the north only 3% complete secondary school and more than 50% are married by age 16 (Gender in Nigeria, 2012).

A 2014 UNESCO report indicates that, currently, Nigeria with a population estimate of 160 million people and a female population of 77 million has adult literacy of 57.9% comprising of 48.6% female and male literacy level of 65.1 %

Also with reference to the data in table 2, it is clearly evident that the core Northern states of Northeast and Northwest still lag behind their counterparts in other zones in agricultural participation.

The education gender gap – both in levels of enrolment and attainment – remains widest in Southern Asia and sub-Saharan Africa. Beyond general educational attainment, higher education for women in agricultural science and technology is particularly relevant in regions where women comprise large part of the agriculture sector. The number of women working in science and technology research in industrialized and developing countries has increased substantially in recent decades, but remains low in most countries. There is an urgent need for a greater representation of women in agricultural research, particularly in sub-Saharan Africa, where women participate heavily in the agricultural workforce. Education has seen improvements in gender parity at the national level, with females even exceeding male attainment levels in some countries, but in most regions women and girls still lag behind (FAO, 2011).

8.0 Use of Technology and Farming Techniques

In Nigeria access to improved use of farm technology is yet to be seen, most of the farming is done using hoes and hand crafted tools. This makes farming a time intensive venture, without the necessary technology it takes time to accomplish tasks. With a majority of women participating in small holder farming, it is common to note that women spend significant time for most of these activities.

The use of agricultural technology is an area of great concern for women. It is clearly evident that shifting agriculture favours women especially in Africa and less developed countries as it employs less technology. The growth in ploughing agriculture has gradually led to the decrease in number of women participation in agriculture in some countries. According to the agricultural intensification hypothesis, as the population pressure increases and agricultural production moves away from a more traditional practice to a more tool based or mechanized ,However, this decline in women's role is more in relative terms than in absolute terms (Boserup, E 1970).

The evidence points to significant gender differences in the adoption of improved technologies and the use of purchased inputs across regions (see Peterman, Quisumbing and Behrman (2010), for a comprehensive literature review). For example, male headed households show much wider use of farm inputs in Burkina Faso, women use less fertilizer per hectare than men (Udry *et al.*, 1995). Studies that disaggregate mechanization— tools and other farming equipment – by gender are rare. This may, in part, be because modern farming equipment such as tractors and tillers are not commonly available to any farmer, especially in sub-Saharan Africa.

The share of farmers using mechanical equipment and tools is quite low in all countries, but it is significantly lower for farmers in female headed households, sometimes by very wide margins (refer to Figure 15 of FAO report 2011). A few studies from the late 1980s and early 1990s point to gender differences in ownership of, or access to, tools. In a Gambian irrigated rice scheme, none of the women owned a plough and fewer than 1 percent owned a weeder, seeder or multipurpose cultivation implement; the proportions of men owning these tools were 8, 12, 27 and 18 percent, respectively (von Braun, Hotchkiss and Immin (1989).

A gender equality and women's rights approach also needs to be adopted when looking at technical issues and services such as agricultural inputs, soil fertility, new varieties and technologies and agricultural research. Women smallholder farmers have very specific needs, which are often not the same as men's. For example, though they are suitable for men, the irrigation equipment and ploughs designed for smallholder farmers are often too heavy or are otherwise inappropriate for women, who tend to use hand-held hoes (ACTIONAID 2011).

Hazards in agricultural production have also remained a grey area for discussion. If women are the majority in smallholder farming then, it is no surprise that documentation and data is lacking on the impact of hazards associated with farming and its techniques. The International Labour Organization considers agriculture "one of the most hazardous of all economic sectors." (ILO, 2011). It estimates that the annual work-related death toll among agricultural employees is at least 170,000, twice the average rate of other jobs. In addition, incidences of death, injury and illness related to agricultural activities often go unreported (ILO 2009).

9.0 Access to Financial Support and Extension Services

The gender gap in access to credit is also confirmed by other evidence. In Nigeria, for example, 14 percent of males but only 5 percent of females obtain formal credit, while in Kenya the percentages are 14 and 4 for males and females, respectively (Saito, Mekonnen and Spurling, 1994).

Nigerian commercial banks are never willing to grant loan facility to farmers indicating fears due to losses that could be incurred, in addition to lack of collateral and several other reasons. The banks also charge very high interest rates, thereby discouraging both male and female small holder farmers.

Central Bank of Nigeria (2010/2011) in considering the challenges faced by women in accessing micro credit is currently working on revising its Microfinance policy through a fund that will increase women's access to financial services by 15% annually, that is 5% above the stipulated minimum of 10% across the board in order to eliminate gender disparity. At the launch of the National Financial Inclusion Strategy on 23rd October, 2012. The Bank indicated it was ready to increase savings from 24.0% to 60%, access to payment services from 21.6% to 70%, access to credit from 2% to 40% and access to insurance from 1% to 40% by 2020.

Currently, the Association of Nigerian Women Business Network (ANWBN, 2014), a coalition of seventeen women business associations, formed in February 2013 and supported by the United States Centre for International Private Enterprise (CIPE) has designed a project to identify the type of credit facilities available to women, the barriers they face in assessing them and the improvements that are needed. The project has identified the following challenges; Property rights and control over assets; Cultural norms and family responsibilities; Biased attitude of banks; Lack of collateral and start-up capital.

In Uganda, women entrepreneurs receive just 1 percent of available credit in rural areas (Dolan, 2004). Also in Uganda, nearly all female headed households reported a desire to expand agricultural activities but lacked the money to purchase land and inputs such as seeds, fertilizer and pesticides, and/or to hire-in labour. They cited the lack of access to credit as one of the most prominent barriers to livelihood diversification (Ellis, Manuel and Blackden, 2006). In Bangladesh, women received about 5 percent of loans disbursed by financial institutions to rural areas in 1980 and only slightly more than 5 percent in 1990, despite the emergence of special credit programmes for women in Bangladesh during the research period (Goetz and Gupta 1996).

Global statistics as observed by deBrauw *et al.* (2008) and Fletchner(2009) are not different . Women are less likely to use credit than men under equivalent socio-economic conditions and that they are not always able to rely on their husbands to help them overcome credit constraints. These constraints on women's access to capital have a measurable negative impact on their production capabilities. For example, in addition to the efficiency loss associated with the husband's credit constraints, when women are unable to meet their credit needs their households experience an additional 11 percent drop in efficiency (Fletschner, 2008). Female control of income has been associated with shifts in household expenditure patterns towards family nutrition and health. T.C.Iruonagbe (2008), observed that income uncertainty can result into significant fluctuations in consumption with a negative impact on the welfare of both women and men.

Extension services encompass the wide range of services provided by experts in the areas of agriculture, agribusiness, health and others and are designed to improve productivity and the overall wellbeing of rural populations.

In Nigeria the Women in Agriculture programme (WIA) had as some of its core objectives to facilitate women's access to agricultural innovations, access to farm inputs and credit. Along with WIA several other were initiated and most went through the same challenges as cited in other journals.

Quisumbing (2003) has compared the reasons why it is important to address gender and agricultural extension issues. These range from **business case** arguments that link reducing gender inequalities in extension services and agricultural production with improved institutional efficiency and development outcomes to **development arguments** that stress the importance of upholding international and national policy commitments eliminating discrimination between men and women and upholding gender equality(refer to table 4).

The provision of agricultural extension can lead to significant yield increases. Yet, extension provision in developing economies remains low for both women and men, and women tend to make less use than men of extension services (Meinzen-Dick *et al.*, 2010). According to a 1988–89 FAO survey of extension organizations covering 97 countries with sex disaggregated data (the most comprehensive study available) only 5 percent of all extension resources were directed at women. Moreover, only 15 percent of the extension personnel were female (FAO, 1993).

Agricultural extension service has a significant impact on productivity and output. However, there is evidence that women farmers are not reached by extension services (Saito, K.A., and C.J. Weidemann.. 1990).A study in Malawi found that women had no contact with extension agents and their participation was very limited (Hirschmann, D., and M. Vaughan (1984). Besides the deficiency of extension program to target women farmers, women's participation is constrained by practices like the expectation that women need husband's approval for any legal transaction (Doss, Cheryl R. 1999). Lack of education and higher levels of illiteracy among women is another constraint to women receiving extension services (FAO 2011).

Recommendations

The failure of the Nigerian constitution in making specific provision for the promotion of women's fundamental human rights and the general lack of a gender sensitive language has been the bane of the developmental strides that women would have made in the last two decades. Currently, the 2006 Nigeria Gender policy is under review to give it a better gender mainstreaming process, mechanisms and structures, but the fact remains, that a lack of political will in its implementation across the line ministries will render this policy useless.

In agriculture, a large percentage of women are involved in some agricultural sub-sectors than others, government s and international organisations must make conscious effort in directing funds to these sectors. Sectors like value chain, access to markets and entrepreneurship can empower women and can give women the economic boost that is needed to enhance their participation in leadership and decision making. Two journal publications on Gender issues in Agriculture and Rural Development in Nigeria: the Role of Women and Impacts of the Women-in-Agriculture (WIA) extension programme on women's lives; implications for subsistence agricultural production of women in Imo State, Nigeria. Clearly, show that there are gaps and challenges that need to be addressed if interventions must make impact in the lives of women.

Nigeria's agricultural programme outlook is promising, several programmes have been initiated by the current administration such as the Commodity Exchange which encourages smallholder farmers to grow and market in clusters to the commodity board instead of selling to the open markets at a loss.

This could provide a window of opportunity for women who are the majority in small holder farming. However, deliberate effort must be made to track such interventions and their impact on both men and women. As observed in the data in Table 2 fewer women are participating in agricultural programmes and the reasons must be investigated.

A thorough gender analysis is required across the entire structure of government taking into consideration women's practical and strategic needs. Re-orientation and Re-socialization across gender mainstreaming frameworks and structures should be encouraged so that both men and women can benefit from any given policy.

Conclusion

When gender gaps become closed and women are able to control decision making and resources significant progress will be evident in smallholder agricultural development. Although several authors have observed that no blueprint exists for closing the gender gap, several have agreed that, some basic principles are universal: governments, the international community and civil society should work together to eliminate discrimination under the law, to promote equal access to resources and opportunities, to ensure that agricultural policies and programmes are gender-aware, and to make women's voices heard as equal partners for sustainable development. As noted by some writers, men easily move into traditional roles termed women's roles where ever such agricultural activities become more profitable. This clearly shows that gender roles are not fixed, and if gender roles are not fixed, then more women can actually be accommodated in the current agricultural revolution that is taking place across the globe.

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 harvest	111 (55.5)	37 (18.5)	49 (14.5)	3 (1.5)
Storage and marketing of farm	28 (11.5)	37 (18.5)	92 (46.0)	48 (24.0)
Purchase and sale of farming implement	156 (73.0)	29 (14.5)	13 (6.5)	2 (1.0)
Purchase and sale of farm	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.

Table 2: Male and Female Employment in Exportable Crops

	Unpaid Family		Paid Worker	
	Male	Female	Male	Female
Abia	189,515	220,144	279,675	135,493
Adam	253,744	125,288	347,767	168,217
Akwa Ibom	381,856	335,477	323,140	166,949
Anam	173,591	240,470	332,723	10,945
Bauchi	747,363	73,615	402,890	14,083
Bayelsa	37,312	31,761	105,211	24,602
Benue	584,438	467,584	239,489	113,062
Borno	407,854	160,682	349,954	19,350
Cross River	278,862	200,848	431,926	95,210
Delta	233,131	98,843	375,544	77,313
Ebonyi	291,963	298,234	126,079	49,869
Edo	265,137	152,650	486,360	52,072
Ekiti	128,568	108,602	262,756	53,864
Enugu	252,098	241,325	257,862	64,006
Gombe	184,276	43,950	239,944	28,824
Imo	148,158	218,015	378,706	92,639
Jigawa	427,620	3,746	409,293	6,550
Kaduna	405,669	109,097	978,237	210,896
Kano	1,288,171	32,163	1,330,253	94,819
Katsina	474,086	64,596	1,561,821	246,667
Kebbi	236,194	14,460	121,682	10,511
Kogi	336,226	207,133	382,746	249,483
Kwara	381,139	242,273	276,463	13,760
Lagos	61,027	58,042	121,995	44,645
Nasarawa	329,341	260,401	228,029	77,432
Niger	256,655	144,969	23,366	11,596
Ogun	133,245	91,819	397,660	100,815
Ondo	187,904	141,561	320,918	81,429
Osun	223,228	157,357	448,896	200,642
Oyo	389,457	291,426	1,201,524	154,107
Plateau	423,649	174,743	463,339	15,791
Rivers	156,405	126,925	230,475	93,794
Sokoto	569,458	45,949	1,063,124	4,933
Taraba	325,506	136,422	204,982	10,280
Yobe	586,619	127,186	447,932	46,111
Zamfara	508,346	14,853	745,144	55,034
FCT Abuja	97,175	36,354	110,644	14,559
National	12,354,988	5,498,964	16,008,547	2,910,350

Source: National Survey on Agricultural Exportable Commodities.

Collaborative survey by National Bureau of Statistics, Central Bank, Federal Ministry of Agriculture and Rural Development and Federal Ministry of Trade and Investment. May, 2013

Table 3: Share of Cops Produced By Female –Headed Household (FHH)

Country	% of rural households headed by women	% of total value of produced by FHH
China	3.1	2.1
Bosnia – Herzegovina	25	13.2
Ghana	33	12
Nicaragua	38	17

Source: Calculated by author from data reported in DeBrauw et al.,(2008) and from the Bosnia and Herzegovina Living Standards Measurement Study(LSMS) survey, the Nicaraguan Programa para el Mejoramiento de las Encuestasy la Medicion de Condiciones de vida (MECOVI) survey and Ghana Living Standards Survey (GLSS).

Table 4: The Business and Development Case

The business case	The development case
<p>Improve the efficiency of business. Men are often perceived as the “real” farmers and receive a greater proportion of technical assistance and extension services, even for tasks and crops that women manage. As a result, EAS do not flow to the appropriate individuals, thus reducing service providers’ impact on the quality and quantity of goods produced and marketed. Adopting business practices that reduce these inefficiencies -- for example, by hiring women extension officers and by targeting both men and women for technical assistance -- will increase the impact of EAS.</p>	<p>Strengthen food security and poverty reduction outcomes. The agriculture sector is considered the engine of growth for many countries. Adopting improved seeds and other inputs and new agricultural practices helps to increase productivity that boosts food availability and, when crops are sold, increases producers’ and processors’ incomes. Providing EAS to women ensures that all household members can benefit from new technologies and practices and increase yields and incomes. “Farming for the family business” approaches mean that sharing extension advice will benefit the household as a whole.</p>
<p>Ensure the flow of quality goods. A significant portion of the individuals involved in producing and handling crops are women. However, as low- wage and unpaid workers, women have few incentives to invest their time and energy into improving production and processing practices. Evidence from Kenya reveals that, under these circumstances, women may withdraw their labour, particularly if others, such as spouses, reap the economic benefits from their work. This then endangers the constant supply of materials necessary for a functioning value chain. Addressing women’s lack of incentives to participate in the value chain can go a long way to ensuring the long-term supply of quality products to the value chain.</p>	<p>Removing discriminatory beliefs and practices. Gender inequalities are often the result of discriminatory beliefs and practices that restrict women’s (or men’s) full participation in agriculture and the terms and conditions of their participation. Biases against pursuing careers in agriculture or discriminatory practices in recruitment and retention of extension officers go against commitments to uphold equality of opportunity and create inefficiencies in human capital and productivity. As humans, both men and women have a right to live free from discrimination that reduces their access to education, skills, and employment opportunities for which they are qualified.</p>
<p>Creating new business opportunities. Women are often invisible and underserved buyers and suppliers in agricultural value chains. Sometimes they are sidelined as chains become more formalized, or they can be inhibited from participating in developed chains controlled by men. EAS can help women to enter chains as suppliers of key inputs and services (e.g., artificial insemination services or packing supplies) or to start production or processing of new products.</p>	<p>Improving household nutrition. Women’s contributions to household food production, including their work with small ruminants and cultivation of vegetable gardens, help to increase essential micronutrient intake needed for child cognitive development. Studies establish a strong relationship between women’s control over earnings and greater investments in children’s health and education (Quisumbing, 2003).</p>

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