

Enhancing Food Security In Ghana Through Women Empowerment: The Role Of Ngos

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ABSTRACT

The study was conducted to find out how NGOs help empower women in Ghana through enhanced agricultural activities, and how this affects food production in the country. It was conducted, using basically primary data from a field survey of 220 respondents, including women who have been part of NGO women empowerment programmes, women who have never been part of such programmes, and some NGO workers in the Nadowli District of the Upper West Region of Ghana. The study found that women who have participated in the NGO women empowerment programmes are more likely to go into commercial farming, own their own farms and hire labour for farming than those who have never participated in such programmes. The study also found that empowered women are more likely to increase their food production on farms they work on, whether it belongs to them or not, and that women empowerment indeed, leads to higher food production in the country. The study recommends more women should be encouraged to take advantage of these programmes organized by the NGOs and that other organizations should join in this effort. It was also recommended that the study be replicated in other parts of the country and further studies conducted on the factors that determine a woman's decision to participate in these women empowerment programmes organized by the NGOs in the country.

KEY WORDS: Food Security, Women Empowerment, Non-Governmental Organizations

BACKGROUND

Women represent an indispensable human resource within the matrix of household food security. In Africa, as in most developing countries, this indispensability is peculiar when viewed within the context of feminization of food crop production (Muntemba 1982, Ghana-CIDA Grains Development Project, 1993, Ezumah and Domenico 1995, United Nations Economic Commission for Africa 1996). The matrix of food security raises complex questions about how global food sufficiency can adequately and sustainably respond to household food insufficiency in the developing world. Globally, there is enough food for all. Average food availability rose from 2290 calories per person per day in 1961 – 63 to 2700 calories in 1988 – 90 despite the world's population increasing by some 1800 million (Food and Agricultural Organization 1992; and Pinstrup-Andersen 1994). Irrespective of this, we need to understand that global food availability does not guarantee household food security, particularly in food deficit countries.

At the root of the food crisis is poverty. Whether in the rich or poor countries, food insecurity exists whenever there are extremely poor or severely handicapped people. In a publication of the Food and Agriculture Organization of the United Nations (1992), it was revealed that three types of countries are particularly prone to national food

security problems. The first is the type that the average food consumption level is very low, the second is one that has large fluctuations in food supplies coupled with low consumption and the third type has large numbers of very poor people.

Poverty comes in at the root of food crisis because food security entails a condition of stable food supplies that are both physically and economically accessible to all. In other words, the household must have both access to the food that meets its nutritional requirements and the means to purchase same to be considered food-secure. In the event that this is not possible, it is likely that the household exists and subsists within an impoverished resource base and has either a weak purchasing power (i.e. low income) to procure needed food or cannot produce its own food to meet its needs.

The three types of countries particularly prone to national food security problem as identified above are overwhelmingly represented in developing regions of the world (Africa, Asia-Pacific, Latin America and Caribbean) than in any other. It is at the regional and national levels of assessment that the food-deficit status of human population becomes more and more pronounced. According to the Food and Agricultural Organization (1987), world per caput supplies (measured as dietary energy) rose from 2340 to 2630 kcal/day during the period between 1961 – 63 and 1978 – 81 (i.e. 12% increase). Regional statistics from the same source reveal that Africa's share grew from 2120 to 2260, Far East from 1940 to 2160; Latin America from 2370 to 2620; and Near East from 2230 to 2840, within the same period among the developing countries. In the developed countries' category, North America's share grew from 3280 to 3620; Western Europe 3150 to 3440; while Oceania's dropped from 3160 to 3150 and that of Western Europe and former USSR grew from 3170 to 3420. In all, most of the decline in per capita dietary-energy supplies (DES) took place in African countries.

Sub-Saharan Africa, hitherto a net exporter of food until the early 1960s, increasingly became a net importer of food. As revealed in "The State of

Food and Agriculture" by Food and Agricultural Organization (FAO, 1991), the Sub-Saharan region's per caput food production actually declined since the early 1970s while the region's overall food supplies as a whole declined from 210kg (wheat equivalent) per caput in 1970, to 179kg per caput in 1980. According to this report, the situation deteriorated further between 1980 and 1984 with agricultural production growth decreasing from slightly over 3% in 1981 to less than 1% in 1984 and thereafter appreciated during the second half of the 1980s by rising up to 6% in 1988. This, however, failed to keep pace with the high population growth of many countries (Food and Agricultural Organization, 1992:108).

Following fluctuating domestic food production, there was a startling increase in food imports from the 1970s, and by the mid-1980s, commercial food imports were the equivalent of almost 20 percent of the region's export earnings (FAO 1992: 107). As the rate of food imports increased, various structural and food aid programmes were forced upon countries of the region. It was during this period that Ghana went from food-sufficiency to import dependency under the various structural adjustment and food aid programmes (Shiva 1996: 22).

The significant increase in the volume of Ghana's food importation is not unconnected with the growth of cocoa, pineapple, and other cash crop farming (and now oil), in the country. Coupled with their inaccessibility to productive resources as compared to men, women are subjected to the strain of providing for their families in "an environment of worsening food insecurity which has implied reduced availability of food and higher prices" (Chole 1995, quoted in United Nations Economic Commission for Africa 1996:47). Aside domestic responsibilities, women spend their daily hours either managing the compound or backyard garden, working full-scale on food crop production, engaged in non-agricultural activities, or in a combination of these, all in a bid to meet the food needs of their family members. As studies such as Muntemba's (1982) and Saito's (1994) have shown, the situation is not significantly different across sub-

Sahara Africa. Given the foregoing, therefore, this thesis seeks to determine the role of women within the matrix of household food security.

The international development community has recognized that agriculture is an engine of growth and a force in poverty reduction. This is especially the case in countries where agriculture is the main stay of the economy and a major occupation of the poor. But the agricultural sector in many developing countries is underperforming, in part because women, who represent a crucial resource in agriculture and the rural economy through their roles as farmers, labourers and entrepreneurs, almost everywhere, face more severe constraints than men in access to productive resources. Women farmers are constrained in several ways from meeting household food security, both within the contexts of food production and food procurement. According to available evidence (see Muntamba 1982; Awe and Ezumah 1991; Saito 1994; Baba and Yusuf 1995; Ezumah and Domenico 1995; Ezumah and Ezumah 1996; United Nations Economic Commission for Africa, 1996), these constraints border on land, credit, labour and improved technologies, among others.

Women empowerment refers to the process by which women acquire “power” individually and collectively, allowing them to act independently. The process involves conscientization, mobilization, access, and control. By making rural women aware of the contribution they can make to ensuring food security and the fact that they can get access to land, labour, credit, technology, and other resources, they become conscious of their rights to these productive resources. After these rural women are made aware of their rights to farmlands and other resources, they need to be mobilized into groups and individuals to acquire the needed credit, farmlands, implements, labour, and others to start production. They begin to take control over their farming activities and with the evidence in literature (Food and Agriculture Organisation, 1987; Buvinic and Mehra: 1990; Ogunwale and Hassan 1993; Saito, 1994; Ezumah and Domenico: 1995; and United Nations Economic Commission for Africa, 1996) that women produce more food products than men, it

will increase household food security, and increase food production for national food security to be ensured (Clark 1985 and Ellis, 1992).

A number of NGOs in Ghana have realized the need to empower women (especially those in rural areas) to enable them increase their participation in agriculture and other productive activities that will ensure food security, poverty alleviation, and higher female welfare in these areas. These NGOs mobilize these women and sensitize them about their rights to land, credit, labour, and other farm implements. They also help these women acquire farm inputs, guide them to manage their farms well, provide extension services to enable the rural women increase their food production and help alleviate food insecurity. This study examined the activities of these NGOs with regards to the contribution to women empowerment and its effect on food security in the country. This was done by studying how NGOs in the Nadowli District of Ghana have contributed towards empowering women and ensuring increased household food security through their women empowerment and participation in agricultural activities.

THEORITICAL ISSUES

Women Empowerment

Empowerment is a process of change by which individuals or groups, with little or no power, gain the power and ability to make choices that affect their lives (Kessey, 2005). Women in Africa are drowned in a flood of prejudices and biases most of which are culture-rooted. According to Bhatt et al. (1998) women face under-employment and a casual nature of work; lack of skills and education; lesser mobility, heavy responsibilities; a systematic social practice of under-rating women's work, and lack of access to better technologies, tools and productive assets. Many NGOs have taken on the task of women's empowerment through micro-enterprise in recognition of the impact it can have on women, their families, and poverty alleviation. In doing so, however, these NGOs and the women they support often find themselves confronting a reality

where attitudinal biases, lack of collateral security with women (land and real estates, among others) and women's lack of awareness and reluctance to approach banks for facilities create lack of access to credit, raw material, and markets (Premchander, 2003). As a result, various accords and affirmative actions have been signed and undertaken to promote the welfare of women. It is therefore not surprising that female empowerment is one of the cardinal goals of the millennium development document. The eight goals of (MDGs) are: poverty and hunger reduction, universal primary education, female empowerment and gender parity, improvement of maternal health, reduction of child mortality, combating diseases, like HIV/AIDS, malaria and environmental sustainability (Mahjabeen, 2008). Now, accelerated human development can take place through financial and social empowerment of the poor, specifically, women. NGO microcredit, advocacy, and collective (women) farming programmes are mainly directed towards women. Evidence shows that through these NGO programmes, women are empowered in terms of decision making, asset (land, labour, technology, etc) ownership and political and legal awareness (Chestonand Kuhn, 2002). This eventually enables women to make decisions regarding the feeding, education and health of their children, specifically, of female children. Studies have found that the children of these women are guarded against starvation, disease and illiteracy (Wydick, 1999). The programmes also enable women to stand together in their quest to access productive resources like farmlands and other agricultural inputs; increasing their potential to produce more food and earn more income for their families' welfare.

This realization led to the development—world's initial strategy of promoting income generating activities (IGAs) for women on a large scale. The strategy did not fully succeed, however, as poor women are faced with fewer and poorer opportunities to work. Women Empowerment is therefore a process by which women can gain power to reduce significantly the forces of institutional deterrents to their development. Equity is achieved when women build the

capacity to challenge the existing power relations which place them in an inferior position to that of men. Gender equality is necessary to achieve social justice. The process towards gender equity and empowerment can be greatly justified if women attain economic independence (Roy and Tisdell, 2004).

NGOs and Women Empowerment

No discussion of poverty, equality or development today is complete without considering the role of NGOs. They are among the many other actors, including the judiciary, media, labour unions and religious bodies, who have shown themselves to be adept at complementing or supplementing the food security efforts of government agencies around the world. The complex set of interrelated factors which cause and perpetuate underdevelopment, and which NGOs address through their activities, are mirrored in the myriad of direct and indirect threats to food security around the globe. By increasing women's ongoing development opportunities and the capabilities on which they can rely for their physical, economic and social needs, NGOs play a key role in reducing these threats and improving their household food security, (Michael, 2002)

There is also a recognition that NGOs can have significant impact on cross cutting issues such as women's empowerment, reducing the spread of HIV/AIDS and environmental degradation as well as improving social indicators such as education, housing and health (United Nations, 2000 cited in Mahjabeen, 2008). Kessey (2005) reports that through NGO activities and interventions, women develop their sense of awareness and increase their power to own farm lands, labour, and other inputs needed to help them produce more food crops and income needed for their families food needs. Arguably, women have a predisposition to use their farm produce and other incomes to meet family needs (Clark, 1991 cited in Kessey, 2005). Kessey (2005) also notes that, women have been shown to use most of their farm produce and spend more of their incomes on their households. Therefore, by helping women increase their food production and incomes, NGOs are

improving the food security and general welfare of the whole family. Whitehead (1985) also adds to the above generosity of women in terms of family welfare in her 'ideologies of maternal altruism'. The 'maternal altruism' often leads women to deny themselves the resources to satisfy their own needs and preference in favour of other members of the family (Kessey, 2005). According to Mayoux, (2000), there are basic links and rationales between NGO activities, women empowerment, and food security. By NGOs' advocacy for the rights of women, their sensitization of women about their economic potentials, and the mobilization of these women through the provision of access to land, credit, labour, and other technological support services, women become empowered to make individual choices and capacities for self-reliance (Mayoux, 2000). These NGO activities ensure that rural women who were basically denied access to economic resources that could support both their ability to farm more and their income earning potentials, ensuring better and improved food security at the household and national level.

By bringing women together in groups, NGOs empower women because the groups are allowed to own land, access credit, educate women about other rights and privileges, and increase their self-awareness and self-reliance. The reason for targeting women for empowerment programmes lies in the higher levels of female poverty and women's responsibility for household well-being, an argument that Mayoux (2000) also articulates. There is also the added advantage that targeting women goes a long way towards achieving both gender equality and human rights, which are important MDGs.

Women Empowerment and Food Security

The World Bank's interest in poverty and hunger has made significant the utility of food security as a household concept that helps to foster an integrated approach to food and nutrition problems. According to the bank, food security is access by all people at all times to enough food for an active healthy life. Its essential elements are the

availability of food and the ability to acquire it (1986; cited in Ellis 1992:310). Recasting the two essential elements of food security in simpler terms, it becomes clear that food security entails "ensuring that adequate food supplies are available and households whose members suffer from under-nutrition have the ability to acquire food, either by producing it themselves or by being able to purchase it" (World Bank 1988:1).

At the household level, four dimensions need to be measured to identify food security/insecurity, viz. The quantity of food, that is, the repleteness of household stores; The quality of food, that is, the nutritional value and safety of available foods; Psychological acceptability, that is, food that is culturally acceptable and obtained without anxiety about supplies; and Social acceptability, that is, the foods have been obtained from socially acceptable sources (Johnson 1992:2). The relevance of gender as an independent variable in the food security matrix is underscored by the proximate impact of socio-economic and demographic variables like household structure and headship, employment, real wage rates, price ratios, role segregation in food production and provision, etc. Whether in the sphere of production or procurement and irrespective of points of overlap, measurable differences in the activities of men and women to ensure household food security have been observed. Argued on the basis of its essentials, therefore, women's role in food security takes two broad specific dimensions, viz. food production and food procurement. While food availability is directly correlated with food production, the ability to acquire food falls within the purview of food procurement.

Food production is not restricted to only food crop production. It involves a motley of activities scholars have tried to appraise. Some classifications suffice. Within the context of food production, Olayide and Bello-Osagie (1980) classify four different activities which women are involved in: cultivation, harvesting, distribution and alimentation. The first activity embodies planting or seeding, input supplies (such as fertilizing, watering, feeding of livestock) and culturing whereas the second activity comprises

harvesting, threshing, clearing, transporting and storing. The third set of activities encompasses transporting to the farm gate, markets, equalizing/sorting/grading and merchandising. The final activity takes in processing for time utility, packaging and preparing into various forms of food items or ready-to-consume dishes. These activities can also be classified on the basis of on-farm and off-farm task. The former includes bush clearing/land preparation, planting, weeding, fertilizer application, harvesting, threshing, milking of cows and tending of sheep and goats. The off-farm tasks embrace storage, processing and marketing of food (Farinde, Jibowo and Odejide: 1995).

Another dimension of women's food production activity is home gardening. These gardens have the potential of satisfying the subsistence needs of poor farmers and, because of their diversity, provide a subsistence supply of fruits and vegetables, starchy staples, medicinal plants and even animal protein (Food and Agriculture Organisation, 1992). Home gardening is one survival system for household food security found to be managed primarily by women, especially in Eastern Nigeria, Uganda and parts of Ghana (Hahn: 1997). The importance of women in food production differs by region. According to United Nations (UN) estimates women's share in family food production is 80 percent in Africa, 60 percent in Asia and the Pacific and 40 percent in Latin America (Snyder 1990). Several studies, such as Muntemba (1982), Ezumah (1990) and Awe and Ezumah (1991), clearly reveal that, following male shifts away from food production into cash crop production over the decades, women carry the burden of food production. Male shift from food to cash crop production has called attention to the proportion of women engaged in the former. The figures vary between regions and years. Sadik (1989, cited in Sadik: 1991) advanced that women were responsible for fifty percent of the food produced in developing countries. Saito (1994) discovered that an estimated seventy-five percent of the sub-Saharan region's food was produced by women whereas Ogunwale and Hassan (1993) had reported that 80 percent of food production is done by the women in some parts of Nigeria like

AkwaIbom, Benue, Cross River and Rivers States. United Nations Economic Commission for Africa (UNECA) (1996) reports 70 – 80 percent of Africa's food production as being accounted for by women.

Generally, women play greater determinate role in food farming, and an even more dominant one in off-farm segments of the food systems. Food and Agriculture Organization (FAO) even contends that "in many parts of the developing world, women carry a very heavy burden of farm work, and, especially in Africa, they are the principal food producers" (Food and Agriculture Organisation, 1987). The prevalence of farming systems which accommodate gender role segregation in farm task gives impetus to women's involvement in food production. There are "female crops" distinguishable from "male crops" Examples of these include vegetables, cassava, and other tubers and roots while examples of "male crops" include yam, rice and maize in some cases, etc. (Buvinic and Mehra: 1990; Ezumah and Domenico: 1995).

Within the context of alimentation activity as identified earlier, women play fundamental roles in the food security of individual family members by providing adequate energy and nutrient intake, normal meal patterns and some choice. That is, they have the major role of preparing balanced meals for all members of the family, in maximizing the nutritional value and safety of the food used, and in making the food acceptable in terms of quality and quantity (Johnson: 1992). This confirms an earlier finding that, as they cook, women choose or buy from among the foods available, reduce waste in preparation, and allocate portions, to individual family members (Clark: 1985). Where food is not produced it has to be purchased. And women also facilitate this procurement. As cross-cultural studies reveal these women preponderate the street food business. Surveys by Tinker and Cohen (1985, cited in Winarno and Allain 1991) found that women involved in 90 percent of the street food enterprises in the Philippines, 53 percent in Senegal and 40 percent in Indonesia. A study by Food and Agriculture Organisation (1992)

discovered similar trend in Ibadan, Nigeria with the data that 90 percent of the street food sellers are women.

As food system “develops” and food becomes a commodity rather than a satisfier of subsistence needs, women are turned increasingly from producers to consumers who must go to the market place to purchase what they can no longer produce at home (Gussow, Muchena and Eide: 1984). This predisposes women to two possibilities: either they sell some of the food they produce in order to meet family food needs or they become income-earning from other sources of production other than farming in order to acquire the economic resource needed to produce food. The two possibilities have pushed women into cash crop production and other non-agricultural income-generating activities as a means of raising cash for purchase of food. For instance, apart from owning more than half of the staple food and vegetable farm, women in Ghana own one-third to one-fourth of the cash crop farms (Clark 1985). United Nations Economic Commission for Africa (1996) recorded that women provide 73 percent of the labour force in tea estates in Rwanda while in Cameroon about 90 percent of labour force in tea estates and 50 percent in rubber estates have been predominantly women. Though women earn relatively lesser income than men, even in circumstances where they work more, their additional income serves as proximate determinant of food security. Dey (1984) argues that husband and wife in Africa often have separate incomes and expenses. As such daily food supplies, especially the nutritionally important vegetables and beans, fall into the wife's department in many cases. Another research extends this further by the discovery that additions to women's income go directly into improving family nutrition, while men more often use additional income for consumer goods or prestige purposes (Clark 1985). The likely conclusion that the size of a mother's income has a direct bearing on the nutritional health of her children is informed by the fact that in countries as dispersed as Jamaica, Botswana, Guatemala, Sri Lanka and Ghana, studies show women

spending their incomes on nutrition and everyday subsistence.

Nevertheless, it need not be overlooked that the separate access of women to productive activity is often the only way that women obtain cash income over which they have some control (Ellis: 1992). It is arguable to what extent women's engagement in food production meets family requirements for food security.

Firstly, several studies point to the prevalence of constraints facing women in this sphere of activity. The general argument is that there are widespread gender-oblivious policies to which women remain invisible with regards to pricing, marketing, credit input, mechanization, land reform and even research (Ellis: 1992; Ezumah and Ezumah; 1996; United Nations Economic Commission for Africa, 1996). Second, there are constraints that border on women's reproductive and domestic responsibilities, which compete with time expendable on food production.

The intricacy of resource ownership and control seems to account for women's drift with the men into cash crop production. This drift depresses food production and security in spite of the women's increasing allotment of labour time and effort to cash crop production. This is because women work more and get less pay (United Nations Economic Commission for Africa, 1996). However, we need to recognize the role children play in assisting the women in the food system. Several studies show that children's contribution to farm production is as high as 57% of total labour (Ngure: 1985)

Given that in many farming systems, men and women have different but complementary spheres of obligation in food production, the specific role of women is beclouded in some contexts. For instance, in Asia, the household garden is small but it is never entirely women's sphere because its produce is normally destined for the market (Palmer 1985). The probable reason is that in Asia, joint cultivation by spouses is more typical, farm management decisions usually taken by men (Snyder 1990). The problem surrounding resource ownership and control embraces income control

and distribution as a valid means of food entitlements. Alderman (1986) for instance, posits that increases in income are associated with increases in caloric intake of staple foods, especially for the poorer households, but to a lesser extent for those in higher income groups. While Gan's (1999) analysis confirms this, that is, nutrient intake of the 20% poorest households studied reacts considerably stronger to income changes than that of the 20% richest households. He, however, discovered that even the poorest section of the population has an inelastic nutrient intake reaction to changes of income (that is, if income increases nutrient intake increase at a slower rate than income). A good example suffices in Wisner (1988) where he records rising cash incomes, malnutrition and the exploitation of women as being synonymous in Eastern Kenya and this resulted in the rice irrigation scheme in the area. The fact that even in poorer households, increasing income may not be synonymous with rising living standards for the household may be influenced by the fact that when men grow food crops, they often do so in order to sell them rather than for family use, thereby directing the income to prestige purpose (Clark 1985, Snyder 1990). Moreover, there are competing demands for fuel, water, healthcare, education and clothing. And, in cases where the care of children, their clothing and education, especially in female-headed households, is the responsibility of women from their own sources of funds, family food entitlements, and invariably nutrient intake, is depressed. Hence, it becomes difficult for some women to sometimes ensure viable food procurement consistent with basic human needs, even with increased income.

There are some critical points highlighted in the forgoing especially as regards the adequacy and stability of the food supply and access. First, gender-oblivious policies and lack of resource control have the capacity of militating against women's production of nutritionally adequate, culturally acceptable and safe and good quality food to meet household food needs. This could adversely affect environmental sustainability and hinder both the adequacy and stability of the food supply. Secondly lack, or inadequacy, of income,

demands for other necessities and absence of support may militate against socially sustainable and viable procurement means of accessing food by women. These critical points become clearer when we assess women's involvement in the production of specific crops (e.g. vegetables) and the utility of these in meeting household food security, while giving consideration to relevant variables (urbanization, availability of land, labour, credit, etc) that may intervene in the production of the food crop on the one hand and its actual utility in meeting family food needs on the other.

Constraints Faced by Women Farmers

Women farmers are constrained in several ways from meeting household food security, both within the contexts of food production and food procurement. According to available evidence, these constraints border on land, credit, labour, improved technologies, among others (Muntemba(1982); Awe and Ezumah(1991); Saito (1994); Baba and Yusuf (1995); Ezumah and Domenico(1995); Ezumah and Ezumah(1996); and United Nations Economic Commission for Africa (1996)). These constraints impact on women in twodimensions: in their status-activity as female food producers and in their occupational activity as farmers.

In Africa, land has become a critical issue in food production especially because evidence exists of cases of poor quality land, of land shortages and of outright landlessness. Registration and privatization (individual ownership of land) of land has particularly affected women peasants, and consequently food production, quite adversely (Muntemba, 1982). In Ghana and most parts of Africa, land privatization has reached a very broad stage as evidenced by the common land disputes since the 1960s. This struggle over land is partly explained by the intensification of commercial uses for land such as cocoa farming, cotton farming, mining, other commercialized farming activities, and private home buildings (Clarke, 1980).

In a study of selected African countries including Kenya, Nigeria, Zambia, Burkina Faso, etc,

contrasting patterns of land acquisition were discovered. In Nigeria, there was little gender difference in the means of land acquisition; inheritance of land dominated both genders and purchase was comparatively rare for both genders. This contrasts with Kenya where inheritance and purchase are dominant means of acquisition. However, women's plots compared to men's tend to be more widely dispersed, small in size and poorer in soil quality (Saito, 1994). In Ghana, especially in the north, women have usage rights to land through their husbands, fathers, brothers and sons due to the patriarchal structure of the societies, and are precluded from inheriting land as a means of ensuring that family land is not dispersed to their husband's lineage (Ezumah and Domenico, 1995). Alternative sources of access to land are purchase, leasing of land with cash payments or by sharecropping. United Nations Economic Commission for Africa (1996) argument is that land allocation in Africa generally re-emphasizes the male superiority position. Land settlement schemes, in most countries, for instance, have generally been effected in the name of the male heads of household to the total neglect of women members of the families (Ellis, 1992). The consequence is that women have control over small size of cropland for farming purposes.

The quality of land is also a major limiting factor in food production. In a literature review by Dregne (1990) (cited in Scherr, 1999) compelling proofs of serious land degradation in sub-regions of thirteen countries (Algeria, Ethiopia, Ghana, Kenya Lesotho, Mali, Morocco, Nigeria, Swaziland, Tanzania, Tunisia, Uganda and Zimbabwe) were recorded. The decreasing quality of available agricultural land, caused primarily by water and wind erosion, chemical degradation, over-grazing, agricultural activities, deforestation, and over exploitation, has resulted in decrease in crop yield in Africa (Scherr, 1999). Since environmentally beneficent management of land is closely related to security of tenure, women's incentives and capacity to manage the land in an ecologically sound way is impaired because the introduction of agro-forestry or alley farming has proven very difficult due in part to the hesitancy

of women to plant trees - an action which implies land ownership (Cashman 1990, cited in Saito, 1994).

Access to labour is also a constraint women face in food production in Africa. The extraction of male labour from local into capitalist production (Muntemba, 1982), male predominance in rural-urban migration for wage employment resulting in the intensification of women's work in agriculture and in labour shortages in food production, particularly in female-head households (Rogers, 1980, cited in Ezumah and Ezumah, 1996) account in part for this constraint. In their review of some studies on access to labour as a constraint in women's farming activities, Ezumah and Ezumah (1996) record the following: women's lack of access to credit constrain them from being able to purchase paid labour (Roberts, 1998); women's cultural obligation to provide labour on their husband's farm limits the amount of time they can devote to their own farms. Ezumah and Domenico (1995) found limited access to labour as constraint in Eastern Nigeria. Following the production of food crop for domestic and commercial uses, the farmers and their household members are no longer able to provide sufficient labour for land preparation and other cropping activities. This increases the demand for the use of hired labour and where cash payment has to be made for hired labour, women are more hit. The impact is more on widows or women in female-headed household or ones with absentee husbands, especially where they lack alternative sources of income such as secondary occupations.

Additionally, formal agricultural credit has been noted to be less accessible to women than men farmers (D'Silva and Raza, 1983; and Okuneye, 1984, all cited in Awe and Ezumah, 1991). Ownership of collateral such as land, membership of cooperative and farmers' association (Loutfi, 1980; Cloud 1985, cited in Ezumah and Ezumah 1996) often determine access to credit. Supporting these findings, United Nations Economic Commission for Africa (1996) argues that since male heads of households generally hold titles to land or other property and are required to sign loans, women's independent access to credit is

hardly possible. Among the reasons that facilitate lack of access to credit as operative constraint in women's food production activities are: women's predominance of small-scale farming, often unregistered as a business, distance from rural areas to town and cities where credit facilities are available, lack of hereditary rights and other means of obtaining land as a collateral. Others include attitudes and beliefs which underestimate women's potential agricultural productivity and their ability to repay loans and the habit of some credit officers and their institutions to assume that the activities for which loans have been given must themselves yield adequate financial returns to sustain repayment (United Nations Economic Commission for African, 1996).

Inaccessibility to credit facilities precludes women from accessing relevant and timesaving inputs. However, due to the persistent lack of access to formal credit facilities, women have improvised informal credit schemes as innovative response to their needs. For instance, on a much smaller scale than bank, women save together through rotating savings and credit associations. These self-help or cooperative groups are reported in several countries: *isusu* in Nigeria (Ezumah and Domenico 1995), *tontines* in Burkina Faso (Saito 1994), *pasanaku* in Bolivia, *susu* in Ghana, *piahueyin* Thailand and *bui* in China (Snyder 1990). Access to improved technologies: The dissemination of information about innovations in agriculture as well as access to training, fertilizers and other inputs, and extension services have been directed mainly to male farmers with adverse effects on women's productivity (Ezumah and Ezumah 1996). The marginalization of women in terms of access to production inputs such as fertilizers, improved seed varieties, storage techniques, etc has often resulted in the deterioration of women's productive capacity (Muntamba 1982).

Extension service remains one practical means of providing farmers access to improved technologies. This remains part of the objectives that underlie the Women-in-Agriculture (WIA) programme of Agricultural Development Projects (ADPs) in Nigeria. Nevertheless, the programme has been constrained by inadequacy of

experienced and skilled personnel (Akpoko and Arokoyo 1995), lack of good access road to farmers, lack of enough vehicles for operation, insufficiency of teaching materials and nonchalant attitude of women farmers (Farinde et al. 1995).

Extension service as a means to improved technologies operates as a constraint for the women due to the fact that male agents "do not consider the time element involved in child rearing, food preparation, fuel gathering and household chores" in scheduling meetings convenient for female farmers. Another reason is the fact that extension contacts days in Eastern Nigeria occasionally conflict with local markets operating on a 5-day cycle, and few women can afford to forego the income of a market day in order to meet the extension agent. In this era of significant growth in biotechnology, expanded extension facilities backed by intensified agricultural research have been found to be gender-biased. Food crops that are pre-dominantly cultivated by women are hardly part of research (Wisner 1988).

Apart from access to land, labour, credit and improved technologies, vegetable farmers face several other constraints in their bid to meet household food security. Food can either be procured from subsistence production or from purchasing on the market. Where the former is nonexistent or not adequate and stable, the latter option is inevitable. Given that income-control has proximate impact on household food security (von Braun et al 1992), and incomes controlled by women are more likely to be directed towards enhancing food security than men's (Clark 1985; Snyder 19980), women's lack of control over income is a barrier to family food security, both as a resource for purchasing farm inputs as well as for the purchase of food. Women's practical needs and the constraints they face are often related to their overall low-income status which comes about through a combination of factors. These factors include their lower levels of literacy and formal education, and skill training, which in turn has an impact on their position in the labour force (Ghana-Cida Grains Development Project, 1993).

Women generally have elaborate and demanding reproductive and household responsibilities: It is they who have always taken care of children, prepare the family meals and fetch water and fuel wood from long distance most often on foot. With high fertility prevalence of sub-Saharan Africa, women are increasingly drawn to spend more time on rearing children and more energy in providing food and services for household consumption thereby restricting their access to paid employment as a means of raising family income (United Nations Economic Commission for Africa, 1996; Federal Government of Nigeria, 1989).

When we consider the energy cost of pregnancy, lactation, carrying fuel wood and water, walking to distant fields, and cooking, childcare and resting energy, women have less energy available for food production. Hence, in an event food produced (in kcal) and sold on market for cash value is less than food purchased for cash value (in kcal) there is net loss of energy. That is, ignoring other nutritional assets. It is this unseen landscape of class-stratified scarcity and abundance, arising primarily from the interaction of socio-economic factors with demography and ecology that Wisner (1988) terms a “fuelscape”.

The relevance of the foregoing for the present study is that it is possible to assess what possible hindrances women farmers experience and how NGOs respond to them through empowerment. Beyond this, the present study considers what potential impact the farmers ability to surmount these constraints has on family food security.

METHODOLOGY

Research Design

The study adopted a descriptive survey design in examining the issues surrounding the contribution of NGOs in Nadowli towards women empowerment and how this helps rural women to increase their food production and incomes, especially in the areas where their programmes are undertaken. This is informed by the fact that the effect of women empowerment on rural women

food production and incomes will best be gotten by asking the women who have participated in such NGO programmes. This approach is also useful for identifying variables and constructs that may warrant further investigations while also providing an indirect way to find answers to key research questions, which in this case may lead to increased benefits of NGOs to the ordinary Ghanaian woman and a clearer description of food security and other related issues (Patton, 1987).

Research Population and Sample

The population of the study is the universe of women farmers in Ghana who have benefited or not benefited from the empowerment programmes of NGOs. However, for the reasons of access, sampling was limited to the women in the Nadowli district in the Upper West of Ghana. The reason for limiting the study to Nadowli is that, the researcher hails from the Nadowli District and is more familiar with the situation there. Additionally, the Upper West has a high density of NGOs which allows for an extensive research on the topic, which also allows for generalization of the findings of the study.

The study therefore used a stratified sample of 200 women chosen based on whether they have been part of the empowerment programmes of any NGO or not. This was to enable the study compare the responses of empowered women to those of un-empowered women so as to bring out the effect of women empowerment activities of NGOs on food security in Ghana. The reason for using stratified sampling, according to Williams, Sweeney, and Anderson (2006), is that the issues under study are heterogeneous and the researcher believes that the views of the two different groups could differ and sampling different women from these two groups could ensure a more holistic analysis of the situation and help guard against biased responses. This is to take care of possible disparities in their views on the subject matter and enhance a clearer conclusion on the issues under study and also allow for generalization of the findings from the sample to the population. Also, 20 NGO employees were also sampled to get their opinions on the effect of their empowerment

programmes on the food security of the participants' families and the communities at large. The choice of this number was guided by the number fact that only three (3) NGOs in the district concentrate on women empowerment, and their total employee size is 45. Therefore, the selection of 20 employees (mostly project team members and management) is expected to reflect the opinion of all employees.

For the purposes of choosing specific respondents to issue the questionnaires or interview, convenient random sampling techniques were adopted. This technique was used at this stage because every woman in the Nadowli District needed to be given equal chance of being sampled. This was also to prevent sampling bias based on the researchers views and opinions on the various respondents. This is expected to boost, to a large extent, the validity of the information gathered by the study and the generalization of the findings.

The validity of this study refers to whether the questionnaire or survey measures what it intends to measure and their reliability refers to their consistency (Green, Salkind, and Akey, 1999 as well as Salkind, 2008). Both the validity and reliability of the study will be ensured through a pilot study where a pre-test of the initial questionnaire was carried out on ten (10) randomly selected NGO workers and 10 women in the Nadowli District. Their responses were studied and the questionnaires modified, or maybe standardized to ensure validity and reliability of the research instrument (Tuckman, 1994).

Data Type, Sources and Collection

The data for the study will be collected mainly through the survey approach and this shall involve cross-sectional data. The instruments that will be used to collect the data shall mainly consist of structured questionnaires. The questionnaires will be modelled along the framework of the literature review. This shall ensure that the literature review provides a reference point from which the gaps being filled by the study can more easily be identified. The rationale for using a structured questionnaire is to ensure that responses do not

deviate from the scope of the study (Williams, et al, 2006).

The questionnaires will consist of closed ended questions for ease of comparison of responses and for analytical purposes. Considering the fact that some of the respondents may be illiterate, the questions shall be explained to them as they fill them to ensure that a biased conclusion is avoided. The questions will be fashioned to solicit the needed information to draw conclusions on the subject matter.

The use of primary data collected using field surveys is also informed by the issues under study and the nature of the explanatory variables. Since the study focuses on NGO activities, women empowerment, and food security, using a survey will allow the study to gather first-hand information and the direct views of respondents regarding their practices and opinions on the issues under study. Additionally, however, secondary data will also be collected from the monitoring teams of the various NGOs and the Ghana Statistical Service regarding the food security situation in the Nadowli District and related information for comparison with that revealed in the questionnaires.

DATA ANALYSIS

The primary data collected from questionnaires will be coded and analysed using the Statistical Package for Social Sciences (SPSS) software and displayed in the form of tables and graphs. These outcomes will be backed by explanatory notes and descriptive assessment to enhance clarity of the results and ease of understanding of the study findings, (Alreck, & Settle, 1985). These pieces of information will then be assimilated and correlated into summary findings of the research which allowed for constructive recommendations and/or suggestions to be arrived at.

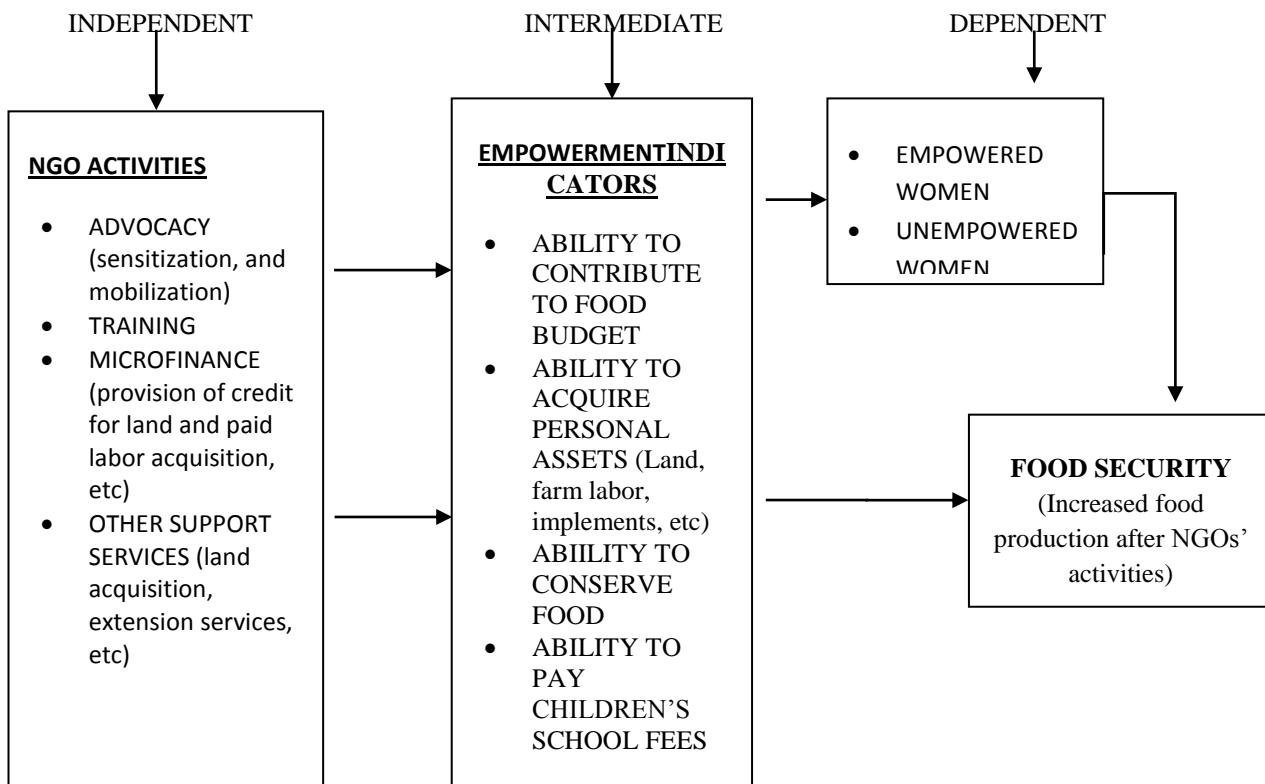
ANALYTICAL FRAMEWORK

There are some indicators which one can use to measure economic empowerment of the woman. These include the ability to contribute to food



budget (housekeeping); ability to pay children’s school and hospital fees; and ability to acquire personal assets. Moreover, evidence establishes that women save to provide for their families (Mwenda and Muuka, 2004). Consequently, these three abilities constitute the framework for

measuring how the activities of NGOs are economically empowering rural women in the Nadowli District and how these are translated into food security. The diagrammatic representation of this conceptual framework is presented below:





RESULTS AND DISCUSSIONS

Demographic Characteristics of Respondents

The study has a main objective of finding out how the activities of NGOs involved in women empowerment are impacting on the food production levels of the women in the Nadowli District. To this end, the study sampled 200 women and 20 NGO workers to give their opinion on issues relating to impact of these empowerment programmes on food production among women in the district. The next few sub-sections discuss these issues.

Categorization of Respondents

The study was meant to find out whether NGOs' activities in Nadowli district are helping empower women and whether this is replicating in food production increases. To this end, respondents were asked to indicate whether they were women who have been part of any NGO empowerment programme or not or whether they were NGO workers. Table 4.2.1 shows their responses.

Table 4.2.1: Categorization of Respondents

Respondent Category	Frequency	Percent
NGO Employee	20	9.1
Women with NGO Programme Encounter	130	59.1
Women without NGO Programme Encounter	70	31.8
Total	220	100.0

From Table 4.2.1, it can be observed that, of the 220 respondent were sampled for the study. Out of this number, 59.1 percent were women who have partaken in a women empowerment programme organized by an NGO in the area. 31.8 percent were women who have not been part of such empowerment programmes organized by NGOs and the remaining 9.1 percent were NGO workers. The workers were sampled to compare their responses on a few issues with that of the women sampled.

Occupation of Respondents

The respondents were also asked to indicate the kind of occupation they had. Majority of the respondents revealed that they were farmers. This is evidenced by the fact that, apart from 9 percent who said they were NGO workers, 57.27 percent of the women respondents said they were into farming and related activities. The remaining women said they were into trading (21.81 percent), teaching (1.82 percent) and other occupations (0.91 percent) respectively. This information is displayed in Table 4.2.2.

Table 4.2.2: Occupation of Respondents

Occupations	Frequency	Percent
Traders	48	21.81
Farmers	126	57.27
NGO Workers	20	9.1
Teachers	4	1.82
Others	2	0.91
Total	220	100.0

Number of Years since First participated in NGO Empowerment Programmes

The respondents were also asked to indicate how long ago their participation in the NGO sponsored empowerment programme has been. This was because it was believed that the number of years an individual spend practicing a new skill has a positive correlation between the persons understanding and perfection of the skill for maximised benefits. Therefore, we envisaged a similar positive relationship between the length of time between the study period and the date a respondent learnt to be empowered by an NGO. Their responses, as displayed in Table 4.2.4, show that most women have been part of these NGO empowerment programmes less than a decade ago. This is because; a cumulative of 72 percent of

the women who participated in such programmes reported that their first participation has been 10 years or less ago. The remaining 28 percent said they have been part of these programmes over 10 years today and still benefiting from them.

Table 4.2.3: Number of Years since Respondents first Participated in NGO Empowerment Programmes

Number of Years	Frequency	Percent
0-5 Years	54	41.54
6-10 Years	40	30.77
Above 10 years	36	27.69

Table 4.3.1: Participation in NGO Programmes and Awareness of Rights as a Woman

Participation in NGO women Empowerment Programmes		Awareness of Women Rights		Total
		Yes	No	
Yes	Frequency	125	5	130
	Percentage	96.15%	3.85%	65%
No	Frequency	12	58	70
	Percentage	17.14%	82.86%	35%
Totals	Frequency	142	58	200
	Percentage	71%	29%	100.0

Table 4.3.1 shows that a woman who has been part of an NGO empowerment programme is more likely to be sensitized and made aware of her rights as a woman than a woman who has never participated in such programmes. This assertion is based on the fact that, when participation in such programmes was cross tabulated with awareness of women rights, the study finds that 96.15 percent of the women who have previously participated in such programmes were aware of their rights as women. Contrarily to this, only 17.14 percent of the women who have

Total	130	100.0
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This could be explained by the fact that the majority of NGOs in the area have been in operation for less than 10 years and probably might not have started their empowerment programmes early.

NGO Activities and Women Empowerment

Participation in NGO Programmes and Awareness of Rights as a Woman

The study asked the respondents to indicate whether or not they were aware of their rights as women. Their responses are displayed in table 4.3.1 below.

never been part of the NGO women empowerment programmes were aware of their rights as women.

Participation in NGO Programmes and Membership of Women Development Association

One way NGOs and other civil society groups help empower women is to give them a voice through association with women with similar

challenges. The NGOs try to mobilize these women into groups that possess a higher bargaining power in society than the individual women. This helps reduce their vulnerabilities.

The women were therefore asked to indicate whether or not they currently belong to any women development association. Their responses are displayed in Table 4.3.2.

Table 4.3.2: Participation in NGO Programmes and Membership of Women Development Association

Participation in NGO Women Empowerment Programmes		Membership of Women Development Association		Total
		Yes	No	
Yes	Frequency	100	30	130
	Percentage	76.93 %	23.07 %	65%
No	Frequency	37	33	70
	Percentage	52.86%	47.14%	35%
Totals	Frequency	137	63	200
	Percentage	68.5%	31.5%	100.0

Table 4.3.2 shows that 76.93 percent of the women who have been part of the NGO programmes are members of a women development association. Only 23.07 percent of these women said they were currently not members of such associations. Also, 52.86 percent of the women who have never been part of the NGO women empowerment programmes revealed that they also belong to such associations. Therefore, it is clearly seen that though a higher percentage of the women who have participated in the NGOs belong to such women associations than those who do not, most of the women in both categories of respondents reported being members. This shows that women in Nadowli are mobilizing themselves into groups to chart shared causes and overcome shared challenges.

The respondents were further asked to indicate what they believed was the role of women in the family. Cross tabulating the responses with their participation in the NGO women empowerment programmes, the study found that most of the women who have been part of the empowerment programmes said the woman's role has changed

and a woman should be increasing the family wealth through engagement in economic activities. This is because 70 percent of the women who have been part of the NGO programmes said the role of a woman is to increase family wealth through engagement economic activities. However, some of them still said that a woman's role in the family is to cook, clean, give birth, and help her husband on the farm (16.92 percent), cook, clean, and give birth (9.23percent), and help her husband on the farm (3.85 percent).

However, majority of the women who have not been part of such programmes before said that a woman's role in the family is to cook, clean, give birth, and help her husband on the farm. This was the opinion of 51.43 percent of these women. An additional 25.71 percent said the woman should only clean, cook, and give birth. 15.71 percent said the woman's role is to help her husband on the farm whiles the remaining 7.14 said the woman is to increase the family wealth through engagement in economic activities.

This clearly shows that most of the women who have participated in the NGO women

empowerment programmes are getting enlightened as to the changing role of the woman and the need to empower the woman to contribute

meaningfully towards the development of her family and society at large. These analyses are displayed in Figure 4.3.1.

Figure 4.3.1: Participation in NGO Women Empowerment Programmes and Perception of the Roles of Women in the Family

Participation in NGO Empowerment Programmes and Training on Farming

Table 4.3.3: Participation in NGO Empowerment Programmes and Training

Participation in NGO women Empowerment Programmes		Training on Farming and Related Activities		Total
		Yes	No	
Yes	Frequency	101	29	130
	Percentage	77.69%	22.31%	65%
No	Frequency	18	52	70
	Percentage	25.71%	74.29%	35%
Totals	Frequency	119	81	200
	Percentage	59.5%	40.5%	100.0

Cross tabulating women participation in NGO empowerment programmes and training on farming and related activities, the study finds that even though 59.5 percent of the 200 women sampled said they have had some training on farming and related activities, only 25.71 percent of the women who have never been part of an NGO women empowerment programmes have received such training. However, majority of the women who have participated in such NGO women empowerment programmes have received

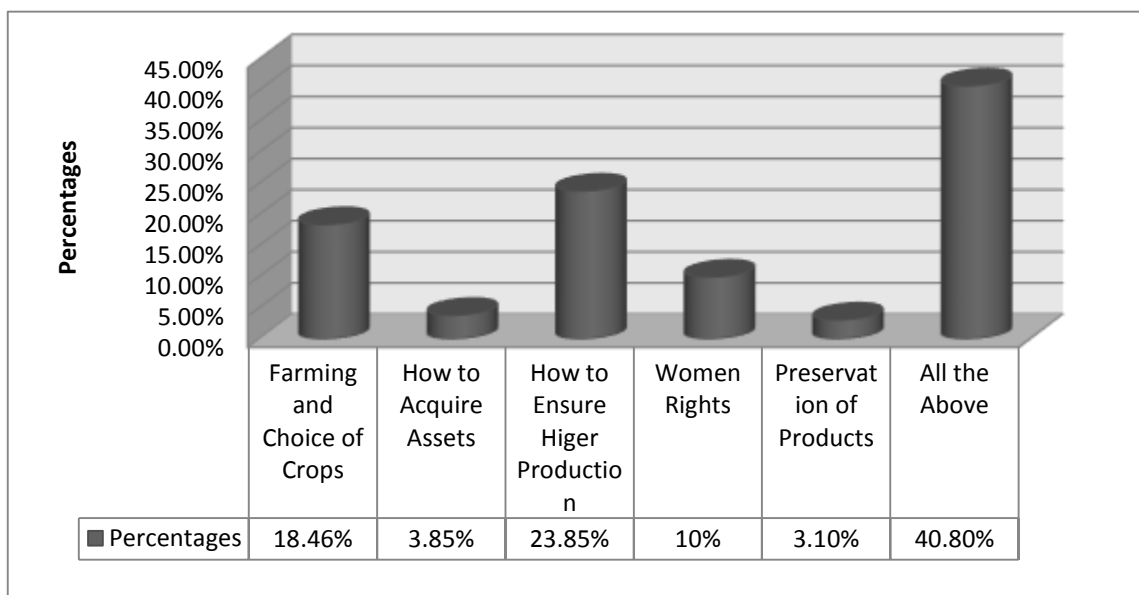
training on farming and related activities. This is because, out of the 130 women in this category, 101 women, representing 77.69 percent said they have received such training before. The result could be that such women will be more equipped with the knowledge to farm more profitably than those who have not partaken in the programmes organized by the NGOs in the district.

The respondents were further asked to indicate the kind of training they received from the NGOs. Figure 4.3.2 reveals their responses. So, out of the

119 percent of the women who responded to the questionnaire, 23.85 percent said they were trained on how to ensure higher productivity on the farm, 18.46 percent said they were trained on farming and choice of crops and what to farm, 10 percent said they were taught women rights in farming, 3.85 said they were taught how to

acquire farms and other assets, and 3.1 percent said they were taught how to preserve farm products. However, majority of the respondents said they received training on all of the above. This was what 40.8 percent of these women said. Figure 4.3.2 displays the results.

Figure 4.3.2 Type of Training Offered by NGOs to Women farmers in Nadowli



Participation in NGO Empowerment Programmes and Access to Financing

The study asked respondents to indicate whether they get access to financing for their farming activities. This is because; access to financing has been a problem of most farmers in rural areas and this study wanted to find out whether the empowerment programmes organized by the NGOs for women help give them a better chance at getting finding. The responses from the women are displayed in table 4.3.4.

Table 4.3.4: Access to Financing and Participation in NGO Empowerment Programmes

Participation in NGO women Empowerment Programmes	Access of Rural Women to Financing for Farming and other Business activities	Total

		Yes	No	
Yes	Frequency	69	51	130
	Percentage	53.1%	46.9%	65%
No	Frequency	26	54	70
	Percentage	37.1%	62.9%	35%
Totals	Frequency	95	105	200
	Percentage	47.5%	52.5%	100.0

Table 4.3.4 shows that most of the 200 women sampled for the study do not have access to financial resources for their farming activities. This is because, 52.5 percent of the 200 respondents revealed that they do not get access to farming and business loans from financial institutions. However, Table 4.3.4 shows that the respondents who have been part of the women empowerment programmes indicated that majority of them get access to such farming loans. This is because, 53.1 percent of this group of women said they get access to such loans. This, one of them intimated, is because of their membership of the women associations in the district. Only 37.1 percent of the women who have never been part of the NGO women empowerment programmes said they are able to access credit for their farming and business activities.

The study further asked the women to indicate whether the NGOs which organise women and women empowerment programs offer credit to women in the district to help solve the funding problems faced by women farmers. Their responses are displayed in Table 4.3.5.

Table 4.3.5: NGOs and Financing of Women Farmers' Activates

Responses	Frequency	Percentages
Yes, Individually	37	16.8

Yes, But Collectively	95	43.2
No	88	40
Totals	220	100

Table 4.3.5 shows that most of the respondents (including the NGO workers) indicated that the NGOs in Nadowli offer women loans for their farming activities. However, 43.5 percent of the respondents said these loans come to women associations and they in-turn finance their members' farming activities. 16.8 percent said the NGOs also give individual farming loans. However, 40 percent of the 220 respondents said that the NGOs just come and mobilize these women, sensitize them on their rights, and leave them with no financial backing to implement the new knowledge. The study also asked the respondents to state whether the NGOs also teach women on how to get access to funding for their activities. Their responses are displayed in Figure 4.3.3 below.

Figure 4.3.3: Respondents View on NGOs Role in Teaching Women How to Get Funding for Farming

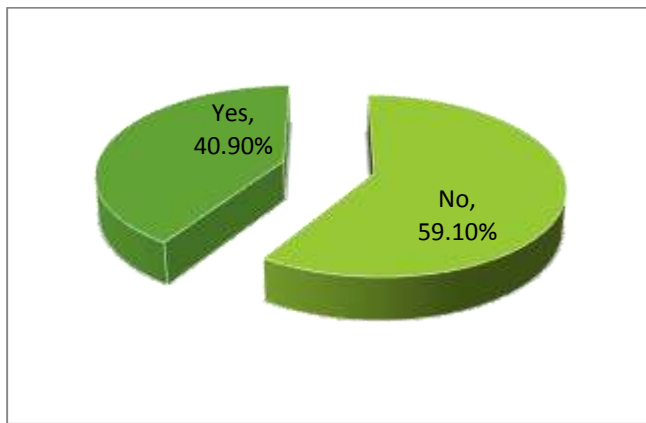


Figure 4.3.3 shows that, out of the 88 respondents who indicated that NGOs in Nadowli do not give loans to individuals or groups to go into farming, 59.1 percent still insist that these NGOs do not

even attempt to help the women farmers acquire needed financing for their farming activities. The remaining 40.9 percent said the NGOs help the women to secure funding.

Effect of Participation in NGO Programmes on Women Sensitization

Respondents were asked to indicate whether they agreed or disagreed with the statement that the participation of women in NGO women empowerment programmes help sensitize and inform women and also help them to come together to form a unified strong force. Their responses are displayed in Figure 4.3.4.

Figure 4.3.4: Respondents View of Effect of Empowerment Programmes

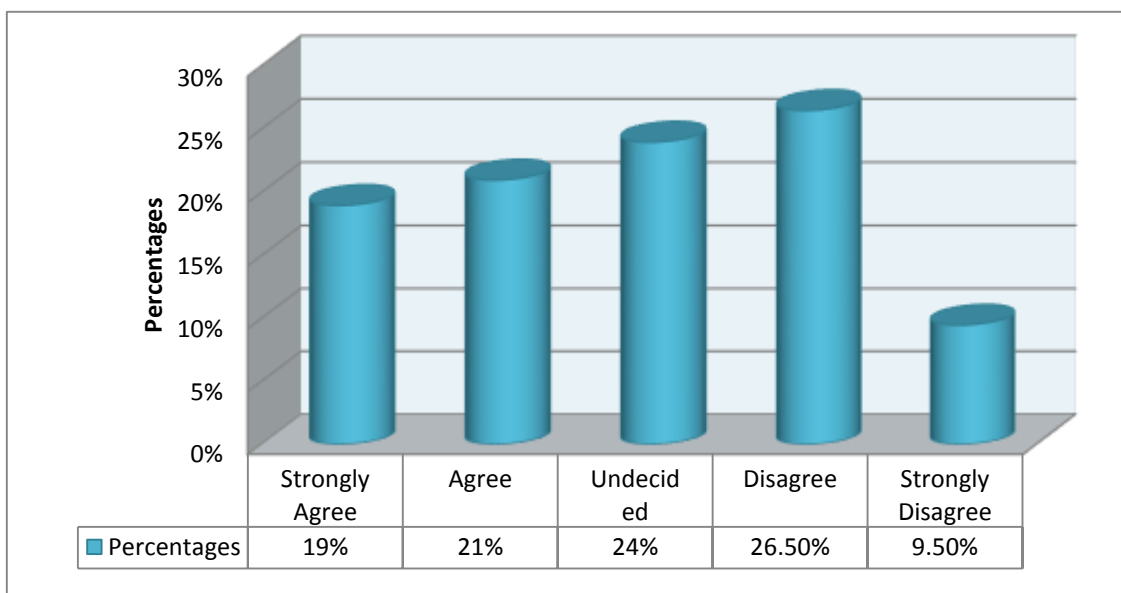


Figure 4.3.4 shows that 40 percent of the respondents revealed that they agreed with the statement. This includes 21 percent who said they agreed and 19 percent who said they strongly agreed. Additionally, 24 percent of the respondents indicated that they were not sure about the effects of such programmes on women sensitization. Also, 26.5 percent of the 200 women said they disagree while 9.5 percent said they strongly disagree with the statement. This means, a cumulative of 36 percent of the respondents said they disagree with the statement.

Women Participation in NGO Empowerment Programmes and Women Farming

Table 4.3.6: Participation in NGO Empowerment Programmes and Women Farming

Participation in NGO women Empowerment Programmes		Women Farming		Total
		Yes	No	
Yes	Frequency	97	33	130
	Percentage	74.6%	25.4%	65%
No	Frequency	41	29	70
	Percentage	58.6%	41.4%	35%
Totals	Frequency	138	62	200
	Percentage	69%	31%	100.0

Table 4.3.6 shows that 69 percent of the 200 women sampled are into farming activities. Also, out of the 130 respondents who have participated in the NGO women empowerment programmes before, 74.6 percent were into farming while 25.4 percent are not. In the same vein, 58.6 percent of the women who have never joined such women empowerment programs from the NGOs said they were also into farming. This shows that farming is a major occupation by most of the women in the Nadowli District, either directly or indirectly through family activities. The women were further asked what kind of farming women in the district are engaged in. Their responses show that most women in Nadowli District are into subsistence and backyard farming. This is because, as

displayed in Table 4.3.7, 61.5 percent of the respondents said they are either into subsistence farming (42 percent) or backyard farming (19.5 percent).

However, a careful study of Table 4.3.7 reveals that, though most women were reported to be into subsistence and backyard farming, this was not the case within both categories. Most of the women who have participated in the women empowerment programmes of the NGOs have reported that they are into commercial farming. 51.6 percent of these women said they are into commercial farming. For the women who have never been part of these programmes, only 14.3 percent are into commercial farming. Most of them (74.3 percent) are into subsistence farming.

Table 4.3.7: Participation in NGO Empowerment Programmes and Type of Farming Women Engage In

Participation in NGO women Empowerment Programmes		Type of Farming Women Are Into			Total
		Subsistence Farming	Backyard Farming	Commercial Farming	
Yes	Frequency	32	31	67	130
	Percentage	24.6%	23.8%	51.6%	65%
No	Frequency	52	8	10	70
	Percentage	74.3%	11.4%	14.3%	35%

Totals	Frequency	84	39	77	200
	Percentage	42%	19.5%	38.5%	100.0

Women Participation in NGO Empowerment Programmes and Women Ownership of Farms

The study wanted to know whether the advocacy and all the training on women rights farming and related issues, as well as financial wisdom among others that these NGO women empowerment seeks to achieve has an impact on women's orientation towards ownership of assets, a basic tenet of women empowerment. Therefore, cross tabulating the responses from asking the women who the owner of the farm they work is with their participation in the NGO empowerment programmes, the study reveals that only 38.5 percent of the 200 women own their own farms. 46 percent were farming on their husbands' farms, 6 percent on their children's farms, while only 4.5 percent worked as hired labour on people's farms. This is displayed in Table 4.3.8.

Table 4.3.8: Participation in NGO Empowerment Programmes and Women Ownership of Farms

Participation in NGO women Empowerment Programmes		Ownership of Farm				Total
		My Own Farm	Husband's Farm	Children's Farm	Hired Labour	
Yes	Frequency	71	48	9	2	130
	Percentage	54.6%	36.9%	6.9%	1.5%	65%
No	Frequency	16	44	3	7	70
	Percentage	22.9%	62.9%	4.2%	10%	35%
Totals	Frequency	77	92	12	9	200
	Percentage	38.5%	46%	6%	4.5%	100.0

Table 4.3.8 also shows that majority of the women who have been part of an NGO women's empowerment programme own their own farms, 36.9 percent worked on their husband's farms and the remaining 8.4 percent were either working on their children's farms (6.9 percent) or worked as hired labour (1.5 percent). However, unlike these women, those who have never participated in the empowerment programme revealed that most of them were working on their husband's farm. This is because, 62.9 percent of these women stated that they were not the owners of the farms in which they work but that their husbands own them. 22.9 percent of them however said they owned their farms.

Participation in NGO Empowerment Programmes and Ownership of Land

Table 4.3.9: Participation in NGO Empowerment Programmes and Ownership of Land

Participation in	Ownership of Land Used for Farming	Total
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NGO women Empowerment Programmes		I Own It	My Husband	My Children	Family Land	Rented Land	
Yes	Frequency	36	51	8	22	13	130
	Percentage	27.7%	39.2%	6.2%	16.9%	10%	65%
No	Frequency	14	35	0	16	5	70
	Percentage	20%	50%	0%	22.9%	7.1%	35%
Totals	Frequency	50	86	8	38	18	200
	Percentage	25%	43%	4%	19%	9%	100.0

Table 4.3.9 shows that only 25 percent of the women in Nadowli owned the lands on which their farms are established. This is a reduction from the 38.5 percent of them who said they owned their farms. For both categories of women, less than 30 percent of them own the land the farm on. Most of them reported that the land is either for their husbands (43 percent) or their family.

According to the literature review and conceptual framework, empowered women are also able to acquire labour and other inputs for their farms. Therefore, the women were asked to indicate whether the labour used on their farms was acquired by them or otherwise. 44.5 percent said their farms were tilled by their husbands and children, 30 percent said they hired labour, while 25.5 percent said they tilled the land by themselves. This is displayed in Table 4.3.10 below.

Table 4.3.10: Participation in NGO Empowerment Programmes and Labour Acquisition for Farming

Participation in NGO women Empowerment Programmes		Labour Acquisition for Farming			Total
		Self	Hired Labour	Husband/Children	
Yes	Frequency	37	41	52	130
	Percentage	28.5%	31.5%	40%	65%
No	Frequency	14	19	37	70
	Percentage	20%	27.1%	52.9%	35%
Totals	Frequency	51	60	89	200
	Percentage	25.5%	30%	44.5%	100.0

The women also said that they learned a lot of ways of conserving food from the NGO empowerment programmes. This is because, when they were asked to indicate whether they knew many food conservation skills, 73.8 percent of the women who have been part of such programmes said they did vis-a-vis 44.3

percent for those who have never taken part in such programmes. However, in total, 63.5 percent of the 200 women said they know lots of food conservation methods. Table 4.3.11 displayed these results.

Table 4.3.11: Women Participation in NGO Empowerment Programmes and Food Conservation Skills

Participation in NGO women Empowerment Programmes		Acquisition of Food Conservation Skills		Total
		Yes	No	
Yes	Frequency	96	34	130
	Percentage	73.8%	26.2%	65%
No	Frequency	31	39	70
	Percentage	44.3%	55.7%	35%
Totals	Frequency	127	73	200
	Percentage	63.5%	36.5%	100.0

Women Participation in NGO Empowerment Programmes and Generation of Revenue

The respondents were also asked to indicate whether they generate any revenues personally from their farm products. 66.6 percent of them said yes while 33.5 percent said no. Also, majority of the women from the two categories said they do generate some revenue from their farming activities. This is shown on Table 4.3.12. Table 4.3.12 shows that 69.2 percent of the women who have been part of the NGO programmes and 61.4 percent of those who have never been part of these programmes indicated that they generate revenue from their farming activities. This suggests that, even though most women farmers in Nadowli are

subsistence farmers, they still generate some revenue from farming, probably for the purchase of other necessities for their household. When the women were asked to indicate what they did with such revenues, 31 percent said their husbands did the selling and so keep the money for the household use. 27 percent said they use it to pay their children's school fees, 25 percent said they use it to buy necessities for the household, and the remaining 17 percent said they give the money from their farm produce sale to their husbands. Therefore, cumulatively, 52 percent of the women use the money to either pay school fees or buy necessities for their household, contributing to the upkeep of the house and increasing family wealth.

Table 4.3.12: Participation in NGO Empowerment Programmes and Generation of Revenue

Participation in NGO women Empowerment Programmes		Generation of Revenue to Support Family		Total
		Yes	No	
Yes	Frequency	90	40	130

	Percentage	69.2%	30.8%	65%
No	Frequency	43	27	70
	Percentage	61.4%	38.6%	35%
Totals	Frequency	133	67	200
	Percentage	66.5%	33.5%	100.0

However, Table 4.3.13 further shows that, cumulatively, 66.2 percent of the women who have been part of the NGO women empowerment programmes reported being able to pay school fees and buy necessities for their household from their farming activities. This is not true for the women who have never been part of these programmes. Cumulatively, only 25.7 percent of them said they do the same. However, majority of them (74.3 percent) said their husbands handle the revenue from their farm sales, making them appear vulnerable and in-supportive.

Table 4.3.13: Participation in NGO Empowerment Programmes and Women Use of Proceeds from Farm Produce Sales

Participation in NGO women Empowerment Programmes		Use of Proceeds from Farm Produce Sale				Total
		Give to Husband	To Pay Children's School Fees, etc	To Buy Necessaries for My Household	Husband Sells and Keeps Money	
Yes	Frequency	18	47	39	26	130
	Percentage	13.8%	36.2%	30%	20%	65%
No	Frequency	16	7	11	36	70
	Percentage	22.9%	10%	15.7%	51.4%	35%
Totals	Frequency	34	54	50	62	200
	Percentage	17%	27%	25%	31%	100.0

Types of Foodstuff Women Farmers Produce

The respondents were asked to indicate the type of foodstuff they produce on their farms. This was asked because the literature shows that most women produce a higher percentage of essential cereals and vegetables used in several countries. The results are displayed in Figure 4.3.5.

Figure 4.3.5: Types of Foodstuff Women Farmers Produce

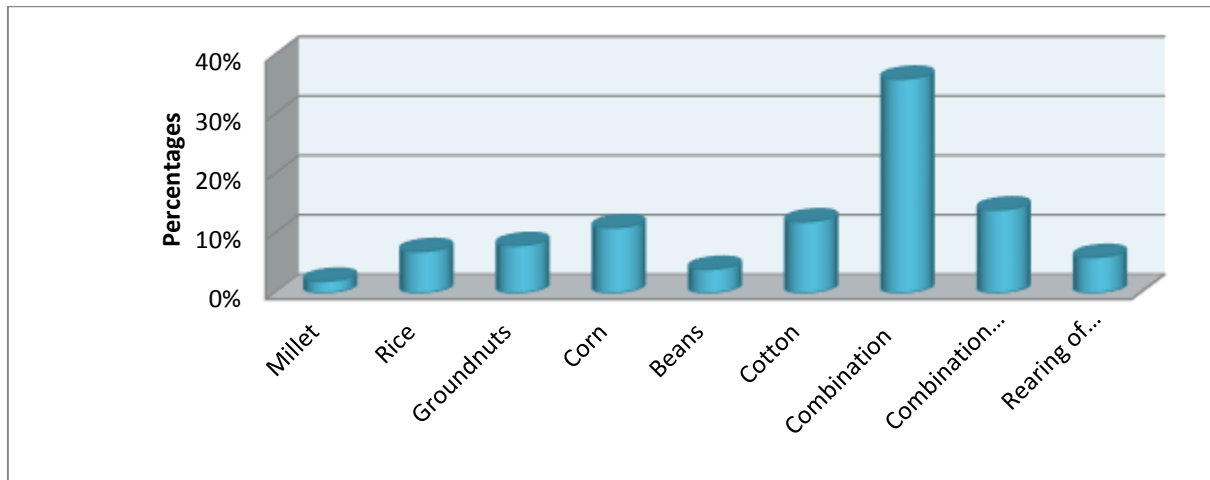


Figure 4.3.5 reveals that most women farmers in Nadowli District are into farming several cereals at a time. This is because 36 percent of these women said they are into farming a combination of cereals on their farms and an additional 14 percent said they combine these with animal rearing. The rest said they farm only cotton (12 percent), only corn (11 percent), only groundnuts (8 percent), only rice (7 percent), animal rearing only (6 percent), only beans farming (4 percent) and only millet farming (2 percent).

The study further asked respondents to indicate the whether women empowerment programmes from NGOs leads to higher food production in the district. Their responses portrayed in Table 4.3.14 overleaf show that most respondents believe that these programmes have led to increased food production by women in Nadowli.

Table 4.3.14: Respondent View on Effects of Empowerment Programmes on Food Production Per hector

Category of Respondents		View on Effect of Empowerment Programmes on Food Production Per hector		Total
		Yes	No	
NGO Workers	Frequency	19	1	20
	Percentage	95%	5%	
Women Who have been part of NGO Empowerment Programmes	Frequency	117	13	130
	Percentage	90%	10%	%
Women Who have never been part of NGO Empowerment Programmes	Frequency	38	32	70
	Percentage	54.3%	45.7%	%
Totals	Frequency	168	52	220
	Percentage	76.4%	23.6%	100.0

Table 4.3.14 shows that, all categories of respondents believe that women empowerment leads to increased food production. This is because, majority of the respondents from all categories said that yes, NGOs empowerment programmes leads to increased food production in the Nadowli District of Ghana. 95 percent of the NGO workers, 90 percent of the women who have been part of the Ngo programmes and 54.3 percent of those women who have not even been part of such programmes affirmed that the women empowerment programmes of the NGOs in the district has led to increased food production per hector in the district.

CONCLUSIONS AND RECOMMENDATIONS

Major Findings

The following are the major findings of the study;

Firstly, the study found that most of the women who participated in the study have been part of an NGO's women empowerment programme before. This shows that the NGOs are doing well in educating women in rural areas concerning their rights and enhancing their social and economic power and status. Also, most of the respondents were found to be into farming in one way or the other. They were either farm owners, wives of farm owners, or labourers on other people's farms. The rest were into other occupations like trading, teaching, among others. Most women in the Nadowli District were found to have associated with these NGOs and have actually been part of their empowerment programmes. However, most were found to have done this in less than a decade ago.

Secondly, the study found that a woman who has been part of an NGO empowerment programme is more likely to be sensitized and made aware of her rights as a woman than a woman who has never participated in such programmes. This was because, a greater percentage of those women who have previously participated in these programmes showed that they were aware of their rights as women and were ready to fight for these rights. Furthermore, most of the women who have previously participated in the NGOs' women

empowerment programmes belonged to a women farmers' association. The explanation was that the NGOs mobilize them together to help them secure funding and a strong voice and bargaining power in society.

Also, the study found a positive relationship between participation in women empowerment programmes and an understanding of the changing role of women in the family. Most of the women who participated in the NGOs women empowerment programmes went through training on farming related issues to equip them with basic farming knowledge. The study found that after these women were trained, they were encouraged to form groups that will facilitate their access to financing. The study then found out that though most women in the district find it difficult to access credit from formal credit facilities, the farmer associations had a better chance at it. Therefore, the study found that those women who have previously been part of an NGO women empowerment programme have a higher probability of securing funds because they belong to a farmers' association, which stands a better chance of securing credit for its members.

Additionally, it was found that, though most women were reported to be into subsistence and backyard farming, this was not the case within both categories of women sampled. Most of the women who have participated in the women empowerment programmes of the NGOs have reported that they are into commercial farming. For the women who have never been part of these

programmes, only a small percentage reported being into commercial farming. Most of them were found to be into subsistence farming. The study also found that most of these women do not own the farms they were working in. These farms belonged mostly to their husbands or their families. . Moreover, an even smaller fraction of these women were found to own the land on which they farm. However, out of the women who owned their own farms and farmlands, those who have been part of the NGO women empowerment programmes were found to be the majority.

The study found that, more women who have been empowered through the NGO women empowerment programmes are able to acquire labour for their farms. They learnt more about food conservation skills, and are able to generate revenue from their farming activities for their families' upkeep. Unlike those who have never participated in the NGO women empowerment programmes, the women who have been part of such programmes were more likely to use the proceeds from their farms to support their families, pay school fees, and other expenses at home.

Lastly, the study found that most of the women who have been part of the women empowerment programmes have reported increases in their farms, whether they owned them or not. They reported that food production have increased per hector of land used due to the implementation of some of the farming practices they learnt during their training with the NGOs.

CONCLUSIONS

The study was successfully conducted on schedule, with key findings being that there are a number of NGOs in Ghana who are doing a great job on empowering our women, especially in rural areas. This has led to a good number of women being empowered. Since women empowerment cannot be achieved alone, the NGOs have decided to link it up with MDG 1, which seeks to eradicate absolute poverty and hunger in the world. In doing so, these NGOs have tried to link their empowerment programmes to women food

production. The Nadowli District was used as a case study, and after a field survey, the study finds a positive relationship between NGO activities and women empowerment, and women empowerment and food production in the country. This is because, more empowered women are able to acquire landed property for farming, which enhanced their farming culture and encourages some of them to go into commercial farming, which was previously not possible in most localities. The women are also able to mobilize themselves into women farmers groups to secure funding for the expansion of their farms as well as the acquisition of farm implements. This study therefore concludes that women empowerment has a positive impact on food crop production in Ghana and the NGOs activities that empower rural women to go into agriculture should be encouraged by all stakeholders.

Recommendations

From the above discussions and policy issues, the study recommends the following;

Firstly, NGOs should be empowered by donors to undertake more women empowerment programmes if the millennium development goals of women empowerment and poverty alleviation and eradication of hunger is to be achieved. This is because; women involvement in food crop production could go a long way to ensure food security in the country.

Secondly, the study recommends all women in the country to take advantage of the women empowerment programmes organized by NGOs and other organizations to enhance their productivity in society and ensure poverty eradication, at least, at the family level.

The study was limited to just one district, and thus recommends similar studies in other districts to ascertain these findings. Further studies should also be conducted into factors that determine a woman's decision to partake in women empowerment programmes in Ghana. This will help bridge the gap between the programmes and

participation, ensuring more women empowerment in the country and beyond.

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