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Chapter Six

Women in Agriculture

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Chapter Content

This chapter presents the role of women in agriculture, the historical perspective of women in agricultural extension programmes in Nigeria, the women-in-agriculture programme, the use of ICT in women's programme, the use of the e-wallet, constraints to women participation in agriculture and selected women empowerment programmes in Nigeria.

1.0 Introduction

Women have broadened their involvement in agriculture over the last few decades due to war and migration of men from rural areas. Women around the world are transforming agriculture to be more resilient and sustainable. The percentage of households headed by women has also increased. Hence the gender-based division of labour according to task is declining with more women undertaking tasks previously done by men. These women have potential to be the key change agents in agriculture, food security and rural development with better access to information, training and technology. They have a significant stake in environmental preservation and environmental degradation because they provide basic foods, fuel and water for their families. Their empowerment promises significant contributions not only to agriculture but also to development as a whole.

However, women have less assets (land, livestock and human capital) and less access to inputs (seeds, fertilizer, labour, financing) and services (training, insurance) than men. It is necessary to address the disparities in women's access to resources such as land, credit, water, seeds and markets because despite the apparent neglect of women's role and contributions to agriculture, they have remained the nation's food basket. As a result, it is impossible to overstate the importance of putting things into context. There is now a global acknowledgment of the need to include women in the design and execution of change and development programmes.

1.1 Role of Women in Agriculture

Women's role in agriculture cannot be over-emphasized. They are farmers, farmworkers and entrepreneurs. Globally, the proportion of women farmers is put at around a quarter of the world's population (Patil and Babus, 2018) and their roles vary considerably within and across regions that keep undergoing rapid changes in many parts of the world. Crop production (planting, weeding, applying fertilizers and pesticides, harvesting and threshing crops), food processing and marketing activities, and small livestock animal husbandry are all tasks performed by women in agriculture. Thus, rural women are fully involved in all agricultural operations including final food preparation and marketing (Doss, 2018; Udemezue and Odia, 2021). In addition, in Asia, Latin America, and Africa, women are the primary producers of vegetables, poultry, and farm animals raised for food and other products (Rao (2020) stated that in Asia, women are an integral part of the agricultural sector, making up the majority of the agricultural workforce, and are

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frequently compelled to work to meet the basic needs of their families. Women according to Oxfarm International (2021), account for 43 percent of agricultural labor in developing countries, where they grow or raise much of the world's food. Significant contributions of African women to agriculture made the region be described as a 'region of female farming per excellence'. The role of women in Nigerian agriculture cannot be trivialized, they perform approximately 70% of farm work, particularly in food production, harvesting, and processing. About 73 per cent of women are involved in cash crops, arable and vegetable gardening, while postharvest activities accounted for 16 per cent and agro-forestry recorded 15 percent (Baba *et al.*, 2015). Over the years the role of women in Nigerian agriculture has attracted greater attention, while production and processing of arable crops are being undertaken by women in some states. they are also responsible for as much as 80 % of the production of staple food in the nation.

1.2 Historical Perspective of Women in Agriculture Extension Programme in Nigeria

Women continue to be the focal point of efforts to address food security, as well as the key to a stable and healthy economy. Generally, women who are employed are more likely to be employed in agriculture than in other sectors in Asia and in sub-Saharan Africa (Patil and Babus, 2018). Hence, the attainment of food security in developing countries to a great extent is dependent on women's empowerment without which all efforts at agricultural development will be futile (Godson-Ibejiet *al.*, 2019). Empowering and investing in rural women increases productivity, reduces hunger and malnutrition, and improves livelihood. Hence, the achievement of Sustainable Development Goals one, two and three (end poverty, zero hunger, achieve food security and improve nutrition, good health and wellbeing) will be feasible by recognizing and strengthening women in agriculture. The realization of this led to the establishment of the Women-In-Agriculture (WIA) Unit of ADP and introduction of many programmes which focus on the empowerment of all women in agriculture and rural development.

2.0 The Women-in-Agriculture (WIA) Programme

The 'women-in-agriculture' initiative is an attempt by government to integrate women into the development process with specific reference to agriculture. It was formerly known as "Home Economics Unit" of Agricultural Extension. The unit was established in late 1986 when it was realized that the development of a farm family will not be complete without educating the women.

The WIA component was established during the World Bank-supported Agricultural Development Projects (ADPs), which was responsible for grass roots extension and consulting services in all Nigerian states. The Federal Agricultural Coordinating Unit (FACU) established the WIA extension program in all of the Federation's Agricultural Development Programs (ADP) to ensure that the agency (ADP) addressed gender-specific agricultural production and post-harvest technology challenges.

The Women in Agriculture (WIA) programme was created in 1986 within the existing state ADPs, in recognition of women's contribution to agriculture. This was a result of a research study financed by the UNDP, which revealed that despite the

indispensable roles played by women, in agriculture, agricultural extension services had not targeted them as important clientele, as they receive very little assistance and information from the extension agents who had the notion that their domestic roles was childcare and family nutrition and thus presented information on only these areas, whereas, this is just a part of their roles as Nigerian women and farmers. Women-in-Agriculture (WIA) has the mandate to initiate and conduct programmes that would improve the socio-economic status of rural women and their overall living standards. This is to be achieved by training farmers on proven technology in food production, processing, preservation and storage. The WIA programme was equally designed to assist women farmers to access credit from commercial banks and other credit sources as well as monitor their activities. WIA was also helpful in forming women groups and co-operatives. The programme complemented greatly the efforts of other women agencies like the Women Commission, Women-in-Health of all States Ministry of Agriculture and the Family Support Programme (FSP) of the Federal government of Nigeria. ADP is the most recent intervention programme with WIA as a major component. The funding of the ADP by design was to be borne by the World Bank (the major contributor), the Federal Government and the State Government. The main objectives of the WIA unit of the ADP was to improve the living standard of rural women farmers in the areas of increased crop production, introduction of improved technology for food crops processing and utilization and also marketing of farm produce. Other objectives of the WIA unit include:

- i. On-farm activities: crops, livestock, fisheries and forestry production and environmental activities appropriate to women;
- ii. Off-farm activities: processing, storage, preservation, utilization and nutrition activities for the well being of the family;
- iii. Food security: access to adequate food at all times by the majority of the people;
- iv. Others: marketing, credit procurement, drudgery reduction and income generating activities. Emphasis is placed on production and related activities in a 70:30 ratio; and
- v. Other field activities embarked upon by the WIA agents include group formation, farm visit and establishment of Small Plot Adoption Techniques (SPAT). SPATs demonstrate the use of new technologies on inputs or farm practices.

A major policy change that affected the structure, services and sustainability of WIA was the withdrawal of the World Bank participation with a resultant sharp decline in WIA activities, which started gradually in 1995 and was finally withdrawn in 1999. This marked a major turning point for state agricultural extension service in Nigeria, with the state becoming the only financier since 1999.

WIA was saddled with the following responsibilities:

1. Give room for close partnership with academic institutions and develop unique gender-specific initiatives for women farmers.
2. Encourage the development and implementation of appropriate agricultural technology that reduces drudgery and meets women's needs.
3. Assist in connecting women farmers with finance sources.
4. Encourage group/individual female actions targeted at increasing the country's animal protein resources.

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5. Improve women's food processing, utilization, and marketing skills.
6. Form cooperatives of women to acquire access to loans, information and other resources.
7. Encourage female farmers to keep cattle to boost their nutrition.

Generally, WIA bothers itself with farm-related activities (i.e., on-farm and off-farm) that could enhance the income generating ability of women. For instance, in an empirical study, Umunakwee *et al.*, (2017) identified the following on-farm and off-farm activities in which women farmers that are participating in the WIA programme engaged in, in order of their significance, to include the following: crop production; skills on utilization of agricultural produce; formation of women cooperatives; marketing of agricultural produce; use of improved agricultural technologies; processing of agricultural produce; livestock production; fish farming; soap, cream, powder and detergent production; and linking farmers to sources of credit.

Agricultural activities carried out under the WIA programme places much emphasis on off-farm activities of the women, which include:

- o Cassava processing and utilization- pancake, flour and odourless fufu;
- o Processing and storage of maize gari, cassava flour, tapioca, maize flour, malted maize drink, corn meal, pap (wet and malted maize flour);
- o Processing and utilization of soybean into soymilk, flour paste and soy meal;
- o Processing and storage of fresh tomatoes into tomato paste;
- o Rabbit meat processing and utilization;
- o Processing and storage of melon;
- o Cocoyam processing and utilization into cocoyam flour for soup thickening and cocoyam chips;
- o Dry season vegetable gardening; and
- o Harvesting and storage of paddy rice.

3.0 Use of Information Communication Technology for Women Programmes in Agriculture

The need to communicate agricultural knowledge and information among the multi-stakeholders required a robust communication system. In the traditional system, which required information communication tasks between the extension agents and the farmers, the system is seriously inadequate as the extension agent: farmer ratio is between 1:5,000 and 1:10,000, whereas 1:1,000 is the recommended ratio. In such a situation, women farmers are at the mercy of their male counterparts to access information through the 'trickle-down approach'. Therefore, for extension agents to fulfill the roles; the traditional visitation method and trickle-down approach will be inadequate (Tijani, 2021). However, with the provision of enablement, information communication technologies can be used to fulfill the emerging service requirements. The adoption of ICTs by women farmers in particular has been the focus of efforts in the integration of ICTs into the agricultural knowledge and information system in developing countries, Nigeria inclusive. A classic example of the integration effort in the Nigerian agricultural system was the e-wallet component of the Growth Enhancement Scheme, which required that the farmers (men and women) be equipped with enabling devices. The effort has proved that with appropriate enablement, women farmers can effectively participate in the use of the

new media. This approach will make it possible for a few extension agents to reach out to several millions of farmers effectively.

Illiteracy has been identified as a major challenge to the adoption of the technology by women farmers (Tijani and Umoh, 2016). About 3.7 billion people worldwide do not have internet access and women make up half of the group (UNWOMEN, 2021). The conclusion is that women farmers' marketing of farm products would be limited since they would have no alternative except to sell their products to intermediaries, who always receive farm products from them at lower prices. In exchange, these intermediaries sell at inflated prices to customers, making them wealthier than the women farmers. Agricultural usage of ICT has been shown to close this gap. Women farmers can use mobile phones, SMS-based services, and mobile alerts to reach out to clients and gather information from the comfort of their own homes. This will connect rural women with customers, either directly or through collective sales, as well as provide them with weather and crop management methods, and market prices, among other things (e.g., telephone, SMS and data).

For example, the e-commerce website Bayu Harvest, which Malaysia established in 2019, allowed women farmers to sell their products directly to end consumers from their homes. They were able to gather orders from far-flung urban marketplaces, including Kuala Lumpur, using a smartphone application. In this light, another fascinating example is the Fisherfolk Enterprise (FE), a Thai women-led social enterprise that launched a Blue Brand based on a set of established standards to ensure clients receive safe and responsibly sourced food. They also provided training and mentoring to female fishermen to improve the quality of their catch by following pre-determined organic processing and packaging standards and protocols. As a result, small fisher entrepreneurs in Bangkok were able to get timely information about sales prospects at huge organic food markets.

Finally, through promoting responsibly-produced and formalin-free fish products, the FE assisted local fishing communities in tackling environmental concerns.

Use of the E-wallet

The Nigerian government created the e-wallet (a method for distributing agricultural inputs to farmers via mobile phones) to help the country's agricultural sector. The e-wallet is an ecosystem technology that ensures a Nigerian farmer receives government farm input subsidy support through accredited agro-dealers and receives critical agro-information alerts from the agricultural extension system. Farmers receive agricultural input allocations via SMS alerts through the e-wallet, eliminating the use of unscrupulous middlemen in the agricultural sector. However, as a result of the political differences between the old and the new administrations, the program was discontinued in 2015, but was reintroduced in 2016. Due to the cultural and traditional environment, which is rooted in ideas, norms and practices that create discrimination and feminized poverty, Uduji et al. (2018) found that rural women rarely benefitted/engaged in the e-wallet scheme.

4.0 Sustaining Women's participation in Agriculture

1. Promulgation of less discriminatory laws and policies: Legislation and policies that limit women's access to factors of production like land, financing, inputs, knowledge, and technology must be replaced with less discriminatory laws

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and regulations. Gender and situation-specific policies must guide agricultural efforts. Actions must be technically sound and tailored towards the farming community's socio cultural and religious beliefs, as well as its resources.

2. Public enlightenment on the perils of social cultural restrictions against women: Governmental and non-governmental organizations must collaborate by creating a public awareness campaign to educate people, particularly men, about the dangers of socio cultural constraints on women. Programs to help women gain confidence in themselves and find their potential and responsibilities in national development should be implemented.

3. Poverty alleviation programmes and economic policies should be women-centred: Since women are disproportionately affected by poverty, many poverty alleviation programs and policies should be targeted at Nigerian women. Poverty reduction strategies should be based on the economic, sociopolitical, structural, and cultural contexts of women, as well as other factors. Agriculture policies and programmes should have a favorable economic impact on the rural poor, including rural women. Governmental and non-governmental organizations should be able to improve women farmers' access to better seeds, tools and equipment, reducing drudgery and time spent on the agricultural process.

Improving water and electricity supply, communication, roads, schools and health facilities will encourage women's participation in agribusiness. Developing agricultural markets and increasing market access for women farmers including small to medium scale agro-processors must be embarked on.

4. Promoting the girl child education and women's participation in adult literacy programmes:

Governments should prioritize expanding girls' school enrollment and encouraging women to participate in adult literacy programs. Initiatives that provide financial incentives for women or girls to attend a school or enroll in courses should be supported. Education policymakers must devise practical methods to ensure equal access to education for women, with a special focus on rural areas. They must also ensure that women who dropped out of school due to family obligations are given the chance to finish their degrees. With a higher literacy rate, women farmers would be able to adopt farm technologies and access more agricultural information in form of written materials such as publications, bulletins, brochures and booklets; and packaged hybrid seeds, herbicides; fertilizers and other products. Ultimately, this will contribute to agricultural development by increasing women's participation in all stages of agribusiness and their income, reducing maternal and child mortality as well as reducing women's fertility rate. Education of women is therefore one of the major keys to ensuring their progressive participation in sustainable agribusiness development.

5. Women's voices and representation in decision-making need to be raised in rural areas: Women's engagement in collective actions, farmer's associations, and decision-making groups have a substantial impact on projects and programmes aimed at removing gender barriers in rural contexts. Given their key duties in securing stable access to fuel sources, safe drinking water, and sanitation facilities for families, women can play a leadership role in the change toward renewable energy consumption, safer public service facilities, and public utilities. Consequently, the overall health of the rural community will improve.

6. Supportive actions could effectively unlock women entrepreneurial activities in rural areas: Integrating gender stereotypes into training is one possible way to combat gender stereotypes and discrimination. This also requires broadening the scope of training programs to emphasize the importance of equal treatment of men and women farmers as economic players, including land rights and the systems that protect them. Women farmers can establish stable upstream and downstream ties along value chains by developing safe transportation infrastructure in rural areas.

7. Access to credit and financial services for rural women : Women farmers should be able to assess financial products and make decisions based on a thorough comprehension of the features and terms of the available products. Women's limited mobility and time constraints require meeting times and communication channels that are adapted to their needs. Setting up co-operative projects to pool village savings and develop lending organizations to make microfinance more available to community members, particularly women with travel limits, could be one of these methods.

Constraints to Women's Participation in Agriculture

Agriculture is more likely than other industries to offer a wide range of opportunities for women's empowerment. Women farmers in rural areas are critical to increasing agricultural production and productivity. While their contributions are recognized as critical to household and community food and nutrition security, their work is not adequately recognized or supported by public policy and social institutions. In comparison to men, women have access to a smaller proportion of productive resources such as land, credit, inputs (improved seeds and fertilizers), agricultural training and information. They received no formal acknowledgment in the form of a policy pronouncement to encourage, protect and facilitate their access to inputs and services". Women themselves tend to underreport their employment as contributing family members. Thus, they have not progressed from subsistence level to an agribusiness.

Meanwhile, the transition from subsistence farming to agribusiness, especially when combined with value-added, opens the door to more significant and long-term increases in living standards. Women farmers however face with a lot of obstacles that prohibit them from feeding their families and reinvesting in their businesses due to:

1. Sociocultural constraints: It has been established that most women in the agriculture industry are marginalized and disempowered (Mohsin *et al.*, 2021; Tsiboe *et al.*, 2018). Many women confront a variety of restrictions and injustices, the majority of which are rooted in cultural traditions and norms. For example, some laws, such as those governing land access, have inequitable and exclusionary measures, therefore institutionalizing gender parity. Women have traditionally found it difficult to receive bank loans or other types of credit through the banking system since they do not possess land or other assets.

The system of land tenure is mostly based on inheritance. As a result of the lack of security of tenure, they are unable to exercise or improve their expertise in crop production and animal husbandry. Women also have significantly more time and mobility limits than men due to socio-cultural constraints. They may work less hours

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on the farm, but they work more total hours on domestic and child care responsibilities. These responsibilities can limit women's mobility.

2. Inadequate or non-access to capital:

While land is required for farming, a successful agribusiness can be operated without it (e.g., many value-added products do not require land per se). However, capital is a requirement for any business, and cash in the form of loans typically requires collateral, such as land and other assets. It is extremely difficult for women to acquire collateral and have the time to build and operate an agribusiness due to traditional land ownership patterns in which men become the key decision-makers and control the productive resources. Exporters also prefer to sign contracts with men rather than women.

3. **Less contact with extension agents:** Lack of training in extension services was noted by Dave (2020) and Ng'ombe et al. (2020) as a key difficulty that women confront in the sector. In areas where male-female contact is culturally prohibited, women farmers have less contact with extension services than men. Men typically provide extension services to men farmers on the mistaken assumption that the message will "cross" to women. However, such agricultural knowledge is rarely, if ever, passed on from husbands to wives.

4. **Poor health status:** Many rural women farmers suffer from bad health. Heavy farm work, pregnancy and childbearing, and poor nutrition may all contribute to this. In Nigeria's rural areas, there are no good roads or social facilities like potable water, health care, or power. Women journey long distances in search of fuel wood and a livelihood when there are no motorable roads, and this wears and tears them down gradually.

5. **Poverty** – New projections of global poverty by UN Women (2022) estimate that, globally, 388 million women and girls would be living in extreme poverty in 2022 (compared to 372 million men and boys). But the outlook could be far worse. In a "high-damage" scenario, this number could balloon to 446 million (427 million for men and boys). This situation is disheartening and confirms a strong correlation between gender and poverty. Nigeria's population is estimated at 211 million and of this number, nearly 104 million are women, thus representing about 49% of the total population. It is estimated that 49.5% of women are below the poverty line (Statista, 2022). The majority of these women are poor rural dwellers whose contributions are typically limited by cultural, economic, and sociological issues, limiting their ability to function on a small scale. The majority of them rely on low-yielding and unimproved planting materials, rudimentary and labor-intensive farm implements, and traditional farming practices, all of which have hindered agricultural production. Because most female farmers are small-scale operators, they are unable to meet standards for quality product. They are also unable to achieve product quality criteria such as health, sanitation, the environment, chemical safety, and food and worker safety. Governments and specific sectors adopt high standards in export markets in response to market demand. Small-scale women farmers may be unaware of these criteria, and even those who are aware of them may be unable to satisfy them since they necessitate large investments in equipment or other resources.

6. **Vulnerability to climate change:** Past research has shown that women in agriculture in Nigeria are more vulnerable to climate change and extreme weather than men. Women's susceptibility may be linked to their rain-fed agriculture

smallholding practices, with their limited or no access to land, loans and inputs, among other essentials.

5.0 Selected Women Empowerment Programmes in Nigeria

Successive governments in Nigeria have implemented several gender specific rural development intervention programmes aimed at rural women empowerment. These programmes include Better Life for Rural Women Programme, Family Support Programme, Family Economic and Advancement Programme and Women in Agriculture. Some of these interventions are explained below.

I. Better Life for Rural Women (BLRW)

The Better Life for Rural Women (BLRW) programme was launched in 1987 by Her Excellency, Late Dr. (Mrs) Maryam Babangida (wife of General Ibrahim Babangida) with the principal purpose of empowering rural women to become self-sufficient and meaningful to their families and society at large (Ozoani, 2019). The programme aimed to relieve poverty by motivating and empowering rural women to improve their living conditions through adult literacy and skills acquisition training. Other objectives of the programme include increasing basic healthcare facilities for women, giving income-generating opportunities in agriculture and cottage industries, integrating rural women in national development initiatives, and developing educational training for women. The programme was headed by the wives of the military governors at the state level.

The programme recorded some positive results. These are the provision of more agricultural inputs to women farmers, the provision of farmland to rural women, cash crop production, and the provision of loans and credit facilities to women. BLRW programme centres also provided recreation and relaxation facilities for rural women after a day's work. It provided water pumps and irrigation pipes to women in the Northern parts of the country during the dry season, agricultural extension services and women's empowerment. However, the majority of its activities, were focused in metropolitan areas. Elite urban women were more prominent than rural women at the centre of these activities. The majority of BLRWPs appealing and eye-catching activities were displayed in national and state capitals. The programme's target audience, rural women, were excluded from most of the program's events and activities. Its stiff co-operative laws demanded a large amount of financial collateral, which most rural women could not afford.

II. Family Support Programme (FSP)

The Family Support Programme (FSP) was founded in 1994 by Mrs. Maryam Abacha, the former First Lady, as a direct response to the United Nations' declaration of 1994 as the International Year of the Family. The programme focused on Nigerian women's position in the context of family life. The premise and aim of the programme emphasize women's strategic role as agents of national development while pursuing family life. It uses the three layers of government (local, state and federal) to deliver services. As an inter-sectorial government institution, the Family Support Programme had the following fundamental principles:

- To promote policies and programs that strengthen the observance and protection of human rights, as well as the advancement of social justice and human dignity;

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- To promote decent health care delivery by reducing maternal and child mortality and eliminating morbidity through improved health care systems to maximize the contribution of the Nigerian family to national development.
- To stimulate the interest of the Nigerian government, the Nigerian people and the international community in the Family Support Programme's (FSP) activities;
- To assist rural families in improving their agricultural productivity and nutritional status;
- To assist members of each family in learning more about the psychological dynamics of families as units from which more effective societal organization and responsibility can emerge;
- To promote the nation's high moral standards, as well as response action against actions and tendencies, both foreign and domestic, that may undermine these standards;
- To promote and improve the well being of society's most vulnerable and disadvantaged groups, including women and children, as well as the disabled, the poor, and the elderly; and
- To organize public awareness campaigns to raise public awareness about issues such as human decency, civic responsibility and concern for the downtrodden.

An appraisal of the FSP by past scholars' (Ahmed *et al.*, 2021) revealed that the programme did not improve the lives of FSP participants because it was plagued by several malpractices, including non-supervision and monitoring of loans and projects by participating banks, inflation of equipment costs, provision of substandard equipment, and poor loan recovery, all of which contributed to the scheme's weakness.

III. Family Economic Advancement Programme (FEAP)

FEAP was launched during General San Abacha's military rule in 1996 to give loans to rural and urban co-operative groups for agricultural production and processing as well as small-scale industries. The programme was also created to create jobs at the ward level, encourage the design and construction of plants, machinery, and equipment and provide opportunity for village-based company operators to be trained.

Its main objective was to stimulate appropriate economic activities in the various wards of each local government area for the people. Specifically, it was designed to:

- a. provide loans directly to people at ward level with the capital needed to set up and run cottage enterprises;
- b. provide opportunities for the training of ward-based business operations;
- c. encourage the design and manufacture of appropriate plants, machinery and equipment;
- d. create employment opportunities at ward level;
- e. improve living standard of the people;
- f. encourage procedures at ward level to form cooperative societies;
- g. promote production and development consciousness;

- h. utilize all available local resources for the benefit of Nigerians, through improved production, storage, preservation, processing, recycling, packaging and marketing;
- i. involve private sector participation; and
- j. involve states and local government areas in its funding.

Studies have shown that the programme succeeded in achieving the following among the agricultural environments;

1. acquisition of farmland for rural women's group farms;
2. distribution of scare input to women farmers; and
3. mobilization of rural women into co-operative group, focusing on agro-processing.

However, rather than focusing solely on women, the programme included all members of the family. Despite the good intentions and money invested in the programme, it proved to be a catastrophic failure with little impact on the rural population.

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