

MICHIGAN STATE UNIVERSITY

The African e-Journals Project has digitized full text of articles of eleven social science and humanities journals. This item is from the digital archive maintained by Michigan State University Library. Find more at:

<http://digital.lib.msu.edu/projects/africanjournals/>

Available through a partnership with



Scroll down to read the article.

Achieving Selfreliance in Food Production in Nigeria: Maximising the Contribution of Rural Women

CHRISTIANA OKOJIE *

ABSTRACT

Development policies in Nigeria have emphasised industrialisation leading to the neglect of agriculture. The oil boom of the 1970s worsened the neglect of the agricultural sector, while the oil glut of the 1980s made it mandatory to revamp the economy. The Structural Adjustment Programme was therefore adopted in 1986, and included a package to revamp the agricultural sector as an integral part of the programme. One of the objectives of the agricultural sector is the achievement of selfreliance in food production to eliminate food imports.

The paper argues that if the objective of selfreliance in food production is to be achieved, rural women who produce and process a substantial part of Nigeria's food crops must become a target group for agricultural policies. They face constraints such as lack of or limited access to education, land, agricultural extension services, agricultural inputs, credit and appropriate technology. Policies to eradicate these constraints should become an integral part of agricultural development programmes in Nigeria.

Introduction

Development efforts in the post-independence period in Nigeria have produced mixed results. These results are due largely to the growth-oriented approach to development planning which emphasised growth in macroeconomic variables such as Gross National Product (GNP), investment, etc. Thus Nigeria experienced growth up until the 1970s. Average annual rate of growth of GDP was 4% in the 1950s, 3,5% per annum in the 1960s, and 6,5% per annum in the 1970s (Diejomaoh; 1984). Growth rates in the 1970s were very impressive: 8,7% in 1976-77; 7,5% in 1977-78; and 8,8% in 1979-80. In many sectors, however, performance was poor. The agricultural sector in particular performed very poorly.

* Senior Lecturer, Department of Economics and Statistics, University of Benin, PMB 1154, Benin City, Nigeria.

When the first National Development Plan was launched (1962-68), agriculture contributed 61.2% of GDP and was the chief foreign exchange earner for the nation. Planning efforts placed emphasis on industrialisation, and concentration on industry led to the neglect of agriculture. This neglect was worsened by the discovery and exploitation of crude oil in Nigeria. The 'oil boom' of the 1970s made Nigeria heavily dependent on oil revenues, to the neglect of other sectors, especially agriculture. By 1977/78 revenue from crude oil accounted for over 90% of export revenue.

The neglect of the agricultural sector meant that it could not perform the roles expected of it, such as providing employment opportunities, selfreliance in food production, higher per capita real income, foreign exchange earnings and industrial raw materials (Federal Ministry of National Planning, 1975). Instead rising food prices, growing food import bills, decline of traditional exports, and increasing rural-urban migration were the results. Imports of food and beverages rose from N61.6 million in 1970 to N2.1 billion by 1981 (Adeyemo, 1984).

In per capita terms, food production showed a declining trend (see Table 1).

In the Third Development Plan Period (1975-1980) efforts were made to revive the agricultural sector. The growth rate of food demand was estimated to be 3.5% per annum while that of food production was only one per cent per annum. Thus increasing food deficits were expected if no efforts were made to increase food production. One of the objectives for the agricultural sector for the fourth plan period was to (Federal Ministry of National Planning, 1981):

promote increased production of food and other raw materials to meet the needs of a growing population and rising industrial production, a basic objective in this respect is the attainment of selfsufficiency in food within the plan period.

The Fourth Plan period witnessed the launching of the Green Revolution Programme and implementation of various other agricultural policies. However, as Table 1 shows, total food production did not grow significantly and per capita food production declined.

While Nigeria could finance food import bills, deficits in food production could be absorbed. However, the oil glut of the 1980s led to dwindling foreign exchange and an inability to pay for food or raw material imports. This, in addition to mounting foreign debt, made it necessary to revamp the economy.

The major economic policy instrument of the 1980s, to bring about greater balance in the economies of developing countries, was the concept of 'structural adjustment'. The Structural Adjustment Programme was adopted in Nigeria in 1986. Among its objectives were to (Central Bank of Nigeria, 1986):

* restructure and diversify the productive base of the economy so as to reduce dependence on the oil sector and imports

- * achieve a fiscal and balance of payments viability
- * lay the basis for a reasonable non-inflationary growth
- * lessen the dominance of unproductive investments in the public sector, improve the sector's efficiency and intensify the growth potential of the private sector.

Emphasis was to be on demand management policies which were to include (Ikpeze, 1988):

- * curtailment of recurrent expenditure through restraint on wage increases and employment freezes
- * reduction in transfers to parastatals, coupled with a policy of cost recovery.

In addition to monetary, fiscal and external policy measures, various sectoral policies were also strengthened to expand and diversify the production base of the economy. In the agricultural sector, for example, the major objectives were to:

- * increase domestic food production in order to improve nutritional standards and eliminate food imports
- * increase the supply of raw materials to the manufacturing sector
- * increase production of exportable cash crops
- * raise rural employment and incomes.

The general emphasis was on the attainment of selfsufficiency in food production and basic raw materials. Measures adopted included:

- * disengagement by government from direct involvement in food
- * setting up the Directorate of Food, Roads and Rural Infrastructure (DFRRI) in conjunction with State governments
- * provision of necessary support services to private farmers.

Since the adoption of the Structural Adjustment Programme, an Agricultural Policy was launched in 1988. This was a comprehensive policy package to be used over the next fifteen years to improve the performance of the nation's agricultural sector. The main goals of the policy were (Central Bank of Nigeria, 1988):

- * attainment of selfsufficiency in food production
- * selfsustained growth in the agricultural sector sector.

Policy instruments to achieve these objectives included:

- * selective subsidies on farm inputs and equipment in order to reduce the cost of agricultural production and producer prices
- * tariff regulations to help promote exports and discourage non-essential imports
- * favourable fiscal and credit guidelines to increase the competitiveness of agricultural commodities on world markets
- * review of land acquisition and allocation laws in favour of agriculture.

Strategies to achieve these objectives included (Central Bank of Nigeria, 1988).

- * ecological specialisation in crops, livestock and forestry production
- * encouraging all scales of production, namely, large, medium and smallscale farming
- * input supply, ie production/procurement and distribution of relevant agricultural inputs by government
- * expansion and rationalisation of the various support services rendered by government.

While the Federal Government is to provide a general policy framework for agricultural development, state governments were to be primarily responsible for:

- * promotion of extension services
- * ensuring effective access to land for farming
- * involvement in training and development of appropriate personnel
- * pest and disease control at state level
- * agricultural credit administration at state level
- * provision of storage for price stabilisation.

Local governments were to assist in extension services, the provision of rural infrastructure and the promotion of farmers' organisations, while the private sector was expected to play a leading role in investment, and the production, marketing, processing and storage of farm produce. It was also expected to participate in input supply and distribution, agricultural mechanisation, and research and the provision of basic infrastructure (Central Bank of Nigeria, 1988).

Thus over the years, an overriding objective for Nigeria's agricultural sector has been the attainment of selfsufficiency in food production. Selfsufficiency in food production implies that Nigeria should grow enough food to feed herself and have a surplus to export if possible. In the past, agricultural policies have tended to focus on male farmers who grow most of the cash crops which are exported or used as industrial raw materials. Increasingly, however, available data shows that food crop production and processing in Nigeria are dominated by rural women, as in many other African countries. This paper examines the roles rural women play in food production and suggests how to maximise their contribution towards achieving the country's objective of selfsufficiency in food production.

This paper focuses on the roles of rural women because they have been largely neglected, until recently, in Nigeria. However, women's greatest contribution to the Nigerian economy, though as yet not fully realised, is in the agricultural sector in rural areas where the majority of Nigerians live. The thesis of this paper is that any efforts to boost food production must recognise the important role played by rural women who should be integrated into agricultural development programmes. Section two of the paper examines the agricultural activities of rural women in Nigeria. Section three examines past planning efforts in the agricultural sector, ie

in the pre-SAP period. Section four examines the constraints on their activities. Section five suggests ways to enhance women's role in food production within a Structural Adjustment Programme.

The role of rural women in agriculture

It is only since the late 1970s that increasing attention has been paid to the integration of women into development programmes. Rural women in particular had been neglected in the past, partly because of the erroneous belief that men are the farmers while women assist with farm work (Tewe, 1978; Makinwa-Adebusoye, 1985; Enumah, 1985; Longe, 1985; Okojie, 1989a, 1990a).

However, there are variations in the nature and intensity of women's participation in agricultural activities between the various regions of the country, depending on vegetation, religion and other sociocultural practices (See Table 2).

While Yoruba women of Western Nigeria are mainly traders, Igbo women of Eastern Nigeria are active farmers. The Hausa-Fulani women of Northern Nigeria participate in farming activities in varying degrees depending on the extent of the practice of female seclusion, they however actively participate in food processing activities (Simmons, 1975). In discussing women's agricultural activities, the country is divided into four zones following the old division of Nigeria into regions. The new federal capital territory (Abuja) is discussed separately.

Rural women in food production

Western Nigeria

Western Nigeria is made up of four states inhabited by the Yorubas, namely Oyo, Ogun, Ondo and Lagos States. Yoruba women are involved in the production of grains (especially maize) and tubers (cassava and yam). They do not generally participate in bush clearing and tilling (Patel and Anthonio, 1973; Oshuntogun, 1976). Yoruba women are predominantly traders though they also participate actively in food processing (Oshuntogun, 1976; Adeyokunnu, 1981).

Midwestern Nigeria

Midwestern Nigeria includes Bendel State, and was formerly called the Midwest Region. Unlike Yoruba women women in Bendel State participate in bush clearing and tilling, although to a lesser extend than men (Okojie, 1989b). They also participate in planting, weeding, harvesting and transporting food crops. Major crops grown by women include rice, cassava, maize, cocoyam, tomatoes, pepper, beans, melon, plantain, and palmnuts (Okojie, 1983). Women assist husbands plant yams. In the riverine areas, women participate in fishing and fish processing.

Eastern Nigeria

Eastern Nigeria includes Anambra, Imo, Rivers, Cross River and Akwa Ibom

States. Rural women in Eastern Nigeria participate in land clearing and tilling activities like their Bendel State counterparts. They also participate in planting, weeding and harvesting activities. Tubers such as cocoyams and especially cassava are grown by women. Vegetables such as greens, pepper, tomatoes, and okra are cultivated by most women.

Northern Nigeria

Northern Nigeria includes the ten states which made up the former Northern Region. There are wide variations in women's participation in farming activities in Northern Nigeria. Generally participation rates in farming activities are higher in states with larger proportions of Christians and/or where female seclusion is not rigidly practised. Rural women participate in planting, weeding and harvesting activities. They mainly grow grains (millet, sorghum, wheat), legumes (cowpeas), and vegetables (carrots, cabbage, peppers, and tomatoes).

Rural women in food processing and storage activities

In 1985, the Nigerian Stored Products Research Institute estimated that between 30-50 % of grains, roots and tubers, and nearly 100% of the fruit and vegetables grown in Nigeria end up as waste because of poor processing and storage. In June 1989 the Chairman of the Directorate of Food, Roads and Rural Infrastructure (DFRRI) asserted that an estimated N17,9 billion of agricultural produce was lost annually in Nigeria through spoilage and wastage, an undesirable situation because it leads to a reduction in national income and nutrition standards and substantial reductions in the nation's food supply (Olatoye, 1989). Better processing can reduce this loss by making improved technology available in the rural setting.

All over Nigeria, food processing and preservation activities are handled primarily by rural women, mainly using traditional methods which are tedious and often inefficient. Table 3 shows the major crops processed by rural women in various geographical zones in Nigeria.

The list of processed items shown in the table is not exhaustive. The table shows that rural women are responsible for the processing and preservation of most of the food crops grown in the country. Most crops are either dried, or dried and milled into flour, or processed for final sale, consumption, or for storage. Some crops (grains and tubers) are soaked or fermented before further processing. Preservation of vegetables in a semifresh form by canning or bottling is not known to rural women, this accounts for the very high wastage rates for vegetables in Nigeria.

Clearly rural women play a vital role in food production and processing in Nigeria. Policies to increase food supply in Nigeria need to recognise this fact and efforts made to raise their productivity. It is therefore important to identify the constraints on rural women's agricultural activities if their contribution to agriculture is to be enhanced.

Women and agricultural development programmes in Nigeria

The poor performance of the agricultural sector in Nigeria has not been due to lack of policies or programmes. Over the years, various programmes have been formulated for the agricultural sector. For example in the Third (1975-80) and Fourth (1981-1985) Plan Periods, policies and programmes formulated for the agricultural sector included:

- * The National Accelerated Food Production Programme
- * The River Basin Development Scheme
- * The Operation Feed the Nation Programme
- * The Green Revolution Programme
- * Agricultural Development Project
- * Agricultural Credit Guarantee Scheme.

The National Accelerated Food Production programme

This programme was designed to use private farmers to produce and multiply improved seeds such as rice, maize, sorghum, wheat and cassava for distribution to farmers. The farmers' fields were to serve as demonstration and seed multiplication plots. Under the programme, agroservice centres were established to serve as points for the supply of necessary inputs to farmers, including seeds, fertilisers, agricultural implements, storage and credit facilities.

Operation Feed the Nation programme (OFN)

The programme was launched by the Obasanjo administration in April 1976. It was a mass mobilisation programme which aimed to sensitise the populace to the need for accelerated production of food and to make farming 'respectable'. Supraministerial institutions were set up to coordinate the needs of the agricultural sector. Implementation involved massive procurement and subsidy of fertilisers, day-old chicks, tractors and other inputs. Food production did not increase significantly, while fertiliser and other input distributors made enormous gains.

The Green Revolution programme

This programme was launched by the Shagari regime. The objective was to make Nigeria selfsufficient in food staples by 1985 and an exporter of crops by 1987. The programme involved the formulation of a National Food Production Plan which had as its main elements (Idachaba, 1984):

- * a detailed state-by-state programme of action for constructing over 26 000 kilometres of rural feeder roads between 1981-85
- * establishment of a network of agroservice centres within easy reach of farming families in all the states of the federation

- * a farm input delivery system which ensures that farmers receive needed farm inputs promptly and in the quantities required
- * a reorganised and revitalised agricultural extension system.

Agricultural development projects (ADPs)

The ADPs are World Bank assisted projects which were first introduced into Nigeria in the early 1970s. The first ADPs commenced in Gusau (1974) and Gombe (1975). Later, others were established in Ayangba (1977), Lafia (1977), Funtua (1979), Bida (1979), and Ilorin (1980). By 1989 every state in the country had a statewide APD. The objectives of APDs were (World Bank, 1984, 1986):

- * to increase food production and incomes of small farmers
- * to strengthen agricultural services
- * to improve the coverage and maintenance of supporting rural infrastructure
- * to strengthen the management and technical staff capabilities of the ADPs.

One of the main strategies for achieving the objectives of increasing the food production and incomes of small farmers was the increased use of a new technology package based on fertilisers and inputs.

The Agricultural Credit Guarantee scheme

The scheme was established to increase the access of smallscale farmers to agricultural credit, by providing guarantees for loans granted by commercial banks for agricultural production. A maximum of N50 000 to individuals and N1 million to corporate bodies or cooperative societies was given as loans under the scheme, with 75% of the value of the principal and outstanding interest guaranteed.

All these programmes were directed at raising the output of individual private farmers in different ways:

- * by providing inputs such as fertilisers, seeds, chemicals and irrigation water
- * by providing economic subsidies, for example subsidising inputs
- * by improving the institutional system, for example providing agricultural credit.

In addition to assisting private farmers, Nigerian governments (Federal and State) also participated in direct food production. For example, the Federal government established the National Grains and Root Crops Production Companies to directly cultivate grains and roots crops. The River Basin Development Authorities established by the Federal Government also participated directly in food production in addition to water resource development (dams), land development, etc. Emphasis was on activities directed at private farmers.

Impact of agricultural programmes on rural women

None of the Programmes described above, or the two Development Plan documents (1975-80 and 1981-85), made any direct reference to rural women as a target group.

The targets were private farmers. Female farmers were regarded as farmers' wives, and the 'trickle-down' effect from husbands to their wives was assumed. The implementation of these agricultural programmes left much to be desired (Idachaba, 1984). More importantly, they resulted in discrimination in favour of urban dwellers and against rural dwellers, male and female, but especially against rural women, as will be seen in the following sections.

Input delivery systems

Under the National Accelerated Food Production Programme 237 Agroservice centres were provided for as centres for supply of necessary inputs such as seeds and fertilisers to farmers. Given the wide dispersal of such centres it would be difficult for rural women to travel to them for input supplies. Furthermore, as was recognised in the Fourth Plan document, inputs such as seeds had not been sufficiently improved, fertiliser consumption in Nigeria was low and was biased towards cash/export crops (grown mainly by men) and against food crops (grown mainly by women). The plan further noted that the application of improved practices seemed to have been restricted to export/cash crops. One can deduce from this evaluation that rural women had limited access to farm inputs which were essential aspects of most of the programmes implemented in the agricultural sector.

Economic incentives - subsidies

Most of the programmes involved enhancing the access of farmers to inputs which were subsidised, such as fertilisers and tractors. As discussed earlier, women who produced mainly food crops benefited little from fertiliser distribution, and did not benefit from fertiliser subsidies, which were up to 50% of the cost at some periods. Given women's small plots, they also did not benefit from subsidised tractor hire/purchase services. The benefits were reaped mainly by larger-scale farmers, many of whom were not even rural dwellers.

Access to agricultural credit

Most banks (headquarters and branches) are located in urban centres, and so discriminate against easy access for rural dwellers. The Agricultural Credit Guarantee Scheme is managed by the Central Bank of Nigeria and commenced in 1978. An evaluation of the progress of the scheme, after its first five years, found that only 46 per cent of applicants were accommodated. About 65 per cent of total loans granted were extended for livestock, of which ninety per cent was for poultry production. Most peasant farmers, and rural women in particular, operate outside the commercial poultry sector. In addition, 53 per cent of the loans and project locations were in urban centres (Ojo, 1984). Thus, the operation of the credit scheme was biased against rural farmers in general. Rural women, who are mainly illiterate, farm on small farms and earn very low incomes, they benefited little, if

at all, from the scheme. Rural women lack any collateral to offer to banks to secure loans.

Access to agricultural extension services

Women have benefited little from agricultural extension services provided under some of the programmes described earlier. Women have been neglected by extension service agents for the following reasons (Blumberg, 1986):

- * ignorance of the roles of women in agriculture
- * the belief that husbands will inform their wives
- * the belief that husbands will not permit their wives to listen to male extension agents
- * the belief that women farmers are not interested.

The procedures for extension service delivery discriminate against rural women. The Training and Visit System is used in Nigeria. Even within the ADP programme, aimed at stimulating the adoption of new technology packages, the procedures for selecting contact farmers discriminated against rural women. They were:

- * He must be a potential leader or influential person
- * He must be willing to adopt new innovations
- * He must not be a controversial figure - so that others are willing to listen to him and emulate him
- * He must be willing to give out part of his farm for demonstration plots where all recommended innovations are practised (Okojie, 1987).

Given these criteria, it is not surprising that few women qualified to be selected as contact farmers. By 1987, it was only in Imo State ADP that a few female contact farmers had been selected. Since the Women in Agriculture Programme commenced in 1986, new criteria for selecting female contact farmers are being adopted. A phased programme for integrating women into ADP extension services is to be adopted.

In addition to the marginalisation of rural women in the implementation of agricultural programmes, rural women have generally benefited less from development programmes in other sectors. Rural women have the highest illiteracy rates, limited access to health facilities and other basic needs such as potable water supply, roads, adequate housing, etc (Okojie, 1985). This has been due partly to a neglect of rural areas in general and cultural restraints on rural women, which limit, among other things, rural girls' access to education. This neglect by development programmes, including agricultural programmes, is responsible for the existing constraints on women's agricultural activities, which will be discussed in the next section.

Constraints on rural women's agricultural activities

Studies have shown that differences in agricultural productivity are due to resource endowment, technical inputs and human capital (Hayami and Ruttan, 1971). Resource endowment includes land and capital accumulation in the form of land reclamation and other developments. Technical inputs include mechanical devices and biological and chemical materials from the industrial sector. Human capital includes the education, skill and knowledge embodied in the farming population. These three factors, particularly the last two, account significantly for differences in agricultural productivity between nations (Hayami and Ruttan, 1971). It has been suggested, therefore, that the modernisation of agriculture can come about through changes in farming technology, new husbandry techniques, improved seed varieties, investment in agricultural research, and the education of farmers to use new techniques and inputs (Schultz, 1964). Investment in physical and social infrastructure in rural areas is also important. This paper emphasises the role of technical inputs and human capital with particular reference to rural women.

The agricultural programmes described earlier have tried to increase agricultural output and productivity by improving resource endowment (building dams, etc), making technical inputs available to farmers, and improving human capital through agricultural extension services. As has also been pointed out, rural women, who produce a substantial proportion of Nigeria's food supply, have benefited little from these programmes as well as other development programmes in other sectors of the economy. As a result, rural women's productivity is still inhibited by various constraints as follows:

Limited access to education

Lack of formal education is a major constraint on rural women in Nigeria. Illiterate women are tradition-bound, they are surrounded by various taboos and restrictions on their behaviour (Okojie, 1989b). Most rural women are illiterate. In 1980, 16.3 per cent of adult females were literate, increasing to only 17.3 per cent by 1984. In 1983/84, only 6.1 per cent of women 30 years and over were literate. The situation is extremely grave in some of the Northern States in the country. It is easier to target new technologies (agricultural or food processing technology) at the educated who are usually more willing to adopt new ideas. They can also read and follow instructions, sign documents, etc.

Access to agricultural extension services

Agricultural extension information is required to impart knowledge to rural women about new forms of agricultural technology, especially biological and chemical technology. Biological (high-yielding, pest, drought and disease resistant

seed varieties) and chemical (fertilisers, pesticides, herbicides) technology are vital if food crop yields are to increase. Biological and chemical technology is scale-neutral, ie it can be used profitably on both small and large farms. Given rural women's small farms, biological and chemical technology can help them to expand outputs without incurring excessive additional costs. It is essential, therefore that rural women are visited by agricultural extension officers to teach them how to apply the new types of technology, to raise their yields on the farm.

Access to technology

Relevant technologies include farming (mechanical), food processing and storage technologies. Rural women have limited access to appropriate technology, ie improved traditional or simple modern technology that is appropriate to rural women's needs in terms of simplicity of design and use, low cost, easy maintenance, etc. Women use, in the main, traditional (manual) technologies in their food production and processing activities. Most farming activities (clearing, weeding, planting, harvesting) are done manually using the hand hoe and cutlass. Simple traditional implements are used in food processing activities such as mortar, grinding stones, bowls, etc. Using traditional technologies makes farming and food processing activities time-intensive and arduous. It also leads to low productivity in food production and high wastage rates in food processing (Okojie, 1990a).

Sophisticated mechanical technology is irrelevant for rural women for various reasons, viz:

- * too sophisticated to operate and maintain
- * cost effective only on large farms, whereas rural women's farms are usually small
- * too expensive to acquire
- * labour-saving, and will exacerbate the already high levels of unemployment in rural and urban areas in Nigeria.

Designers of appropriate technology for rural women should bear these points in mind.

Access to land

Under traditional inheritance systems women have no individual right of access to land in many parts of Nigeria. Males inherit family land. Women depend on their husbands for small portions of family land on which to farm. Their farms are, therefore, very small and it may not appear worthwhile or cost-effective to adopt new farming techniques which are often costly and/or labour-intensive.

Access to credit

Women in general and rural women in particular have limited access to credit facilities. Credit is essential to purchase farm inputs or mechanical devices for food

processing, or to expand scale of output. Husbands whose incomes are usually low are often the major source of capital for women (Okojie, 1989b). Rural women (and even urban women) have virtually no access to bank loans given their lack of education and the collateral to secure loans.

Marketing/distribution outlets

Many rural areas cannot be reached, especially during the rainy season, because of lack of good roads. Most earth roads leading to rural areas are in a poor state of disrepair. This makes it difficult for rural women to transport their goods to or sell their farm produce in nearby towns. As a result, much of their perishable produce wastes away or has to be sold at give-away prices to urban middlemen and women who brave the bad roads to reach rural markets. Poor processing methods and poor storage facilities lead to further waste of food. All these sources of waste lead to greatly reduced incomes for rural women and discourage them from further increasing their outputs.

If food supply is to be significantly increased in Nigeria more concerted efforts have to be made not only to raise the productivity of rural women in their farming and food processing activities, but also to improve transportation and marketing facilities. This will enhance rural women's incomes and serve as an incentive to stimulate an expansion of output.

Enhancing rural women's roles in food production within the context of structural adjustment

Post-SAP agricultural policies have been described in detail earlier in this paper. An important aspect of Structural Adjustment Programmes is the emphasis on market forces and the reduction of government expenditures and subsidies. Like earlier development planning efforts, Structural Adjustment Programmes are growth-oriented. Consequently, adjustment packages have led to a worsening of the quality of life of the poor as wages were drastically reduced. Per capita spending on education, health and other services, was reduced. Subsidies on kerosene, gas, petrol, and agricultural inputs were slashed. In Nigeria, prices of basic food stuffs have rocketed, unemployment has increased, and generally the cost of living has risen phenomenally. The quality of life of the majority of Nigerians has worsened, especially that of the poor who include farmers, especially female farmers, unskilled or low-paid workers, and women and children in low-income households, the majority of whom are in rural areas.

These events have led to questions about the impact of adjustment programmes on the poor. Such concern has led to the elaboration of the concept of 'adjustment with a human face.' Such adjustment calls for expansionary macroeconomic policies, the use of well-targeted mesopolicies or programmes to meet the needs

of vulnerable groups, sectoral policies to raise the productivity of smallscale producers, and restructuring public expenditure in favour of lowcost basic services (UNICEF,1989). Thus while the need for structural adjustment is no longer contested, it is now widely recognised that the poorest segment of the population tend to carry the heaviest burden of economic adjustment (UNICEF, 1989). While in the early 1980s it was assumed that the negative repercussion of structural adjustment were unavoidable, recent studies have shown that it is possible and highly desirable to design adjustment packages that protect the poor and vulnerable groups in the society (UNICEF, 1989).

How can rural women, who are one of the vulnerable groups in Nigeria, be protected from the consequences of SAP and the same time maximise their contribution to the achievement of selfreliance in food production? For this to be achieved, it is essential that:

- * policy-makers and planners recognise the essential roles women play in food production, and the constraints they face as producers, housewives and mothers
- * appropriate policies for enhancing the status of rural women are formulated
- * special compensatory programmes and projects with rural women targeted as beneficiaries should be planned and implemented
- * these programmes should be monitored and evaluated periodically to measure their impact on the status and quality of life of rural women.

With regard to the first, there is data available to inform policy-makers about the roles played by rural women in food production and processing in Nigeria. Numerous conferences and workshops on the subject have been held. Furthermore, the Better Life Programme for Rural Women launched in Nigeria in 1987 is helping to highlight the activities of rural women and the constraints they face.

With respect to the second aspect, compensatory programmes can be of three types:

- * larger projects that include components for women (for example, the Agricultural Development Project with women in agriculture components)
- * projects designed mainly or solely for rural women (for example, the Better Life for Rural Women programme)
- * mainstream or general programmes that include rural women (for example, the Directorate of Foods, Roads and Rural Infrastructure Programmes).

The three programmes mentioned above are between them addressing some of the constraints faced by rural women. Agricultural development projects were first introduced into Nigeria in the early 1970s and every State in Nigeria (twenty-one) now has an ADP. However, it was not until 1986 that women farmers were incorporated into ADP programmes and a Women in Agriculture Unit established. The unit is concerned with providing agricultural extension services to female

farmers. Already, criteria for selecting female contact farmers have been developed (Okojie, 1990b).

The Better Life Programme for Rural Women was launched in Abuja in 1987, at the instance of the first lady Mrs Maryam Babangida, during a Workshop on Women in Rural Development. State chapters have been launched in all States. Under the auspices of the programme, the following constraints are being tackled (Okojie, 1990b):

Access to credit: Rural women have been mobilised to form cooperatives which are being assisted to obtain loans for farming or food processing activities. Revolving loan funds for rural women have been created in some state chapters.

Farm inputs: Rural women's farming cooperatives are being assisted to obtain inputs such as seedlings, fertilisers, tractor hire, etc.

Technology: Various cooperatives have been assisted to purchase food-processing equipment such as cassava-processing machines, rice mills, gin distilling mills, fish smoking ovens, etc. Workshops on food processing technologies have been organised by some state chapters.

Storage/packaging/marketing: Efforts are being made to improve storage and packaging methods and to expose rural women's wares to wider markets through rural women's fairs at local government, state and national levels. Some Better Life markets and shopping complexes have been established.

The Directorate of Foods, Roads and Rural Infrastructure (DFRRI) was one of the agencies established in 1986. Its main objectives was to promote rural transformation by undertaking construction of rural feeder roads, water and electricity supply, etc (Okojie, 1990b).

DFRRI programmes are targeted at rural dwellers as a group. By enhancing the quality of life in rural areas, the quality of life of rural women will improve. DFRRI activities are helping to reduce the drudgery of rural women's activities in areas already covered. For example, good roads mean that farm produce can be easily transported to markets using motor vehicles instead of transporting them on their heads or shoulders, or leaving them to rot away on the farm. Rural water supplies will eliminate long treks to the stream or river to fetch water, thus facilitating domestic and food processing activities.

These three programmes are only a few years old, it is too early to measure their full impact on rural women, but they are moving in the right direction. It is hoped that they will not be abandoned after the transition to civilian administration in 1992. Their activities should be regarded as part of the programme package for rural and agricultural development in Nigeria. Furthermore, they are helping to compensate for decades of neglect of rural areas and to cushion the social costs of structural adjustment for rural dwellers.

In the area of access to education, local government councils have an important roles to play. They should vigorously implement the Women and Education programme launched in 1986. Adult literacy and skill improvement courses should be organised for more women in cooperation with women's bodies. Education is vital for participation in development and rural women's access should be enhanced (Okojie, 1989d).

Vigorous and sustained implementation of programmes to reduce the constraints facing rural women in their food production, processing, storage and distribution activities, and to enhance their access to other basic needs such as water, electricity, roads, etc will give them a sense of belonging to the nation. This will encourage them to face their activities with greater enthusiasm. Evaluation studies to assess the impacts of these programmes should be conducted regularly and policy changes made when necessary. Such studies can be initiated by the Directorate of Women's Affairs created in all states in 1989 to coordinate women's programmes.

Conclusion

This paper has attempted to show that rural women play vital roles in food production, processing, storage and distribution activities in Nigeria. Implementation of past agricultural programmes has been biased against rural women. They are faced by such constraints as limited access to education, land, credit, technology, and agricultural extension services, poor storage facilities and poor distribution networks. These result in low farm yields, and high wastage rates during harvesting, processing and storage thereby reducing available food supply and rural women's incomes. Rural women need to be assisted to overcome these constraints. They should be identified as a target group in agricultural and rural development programmes.

Policies to eliminate constraints faced by rural women should be an essential part of agricultural and rural development programmes. This is even more important now that the Structural Adjustment Programme is being implemented in Nigeria. With their low incomes and limited access to credit, rural women cannot afford to purchase farm inputs at 'market prices' without assistance. Special programmes solely for, or incorporating women's components, are required to overcome these constraints. It is hoped that existing compensatory programmes, focusing on rural women and rural development will not be underfunded. The are important because they focus on rural areas and rural women, who have been neglected in the past at the planning and implementation stages of development programmes. If selfreliance in food production is to become a reality in Nigeria, incomes, conditions of work (in food production and processing activities) and life of rural dwellers in general, and rural women in particular, must be improved.

References

- Adeyemo O A (1984) **Selfreliance and the Fifth Development Plan**, Proceedings of the Nigerian Economic Society Conference on Selfreliant Strategies for Development, May, Benin City.
- Adeyokunnu T (1981) **Women and Agriculture in Nigeria**, UNECA, Addis Ababa.
- Blumberg R L (1986) **Through the Window of Opportunity: Enhancing the World Bank's ADP in Imo State, Nigeria by Enhancing Extension and Incentives for Women Farmers**, Draft Report to Imo ADP, October.
- Central Bank of Nigeria (1986) **Annual Report and Statements of Accounts for the Year Ended 31st December 1986 and 1988**, Lagos.
- Diejomah V P (1984) **Planning for the Nigerian Economy by the year 2000**, Presidential Address to the 25th Anniversary Conference of the Nigerian Economic Society, May, Benin City.
- Ekpo A H (1989) **Food Crop Sector in ECOWAS 1976-1986: Implications for Development**, Paper presented at the Fifth Biennial Conference of the West African Economics Association, November, Lome, Togo.
- Enumah NN (1985) **Women in Agriculture: Neglect of Rural Women's Role in Agriculture**, Paper presented to a Seminar on Women in Development, June, Institute of African Studies, Ibadan.
- Federal Ministry of Economic Development (1975) **Third National Development Plan 1975-1980**, Central Planning Office, Lagos.
- Federal Ministry of National Planning (1981) **Fourth National Development Plan 1981-1985**, National Planning Office, Lagos.
- Hayami Y and Ruttan V W (1971) **Agricultural Development: An International Perspective**, The John Hopkins Press, Baltimore.
- Idachaba F S (1984) **Selfreliance as a Strategy for Nigerian Agriculture: Cornucopia or Pandora's Box**, Proceedings of the Nigerian Economic Society Conference on Selfreliant Strategies for Development, May, Benin City.
- Ikpeze N (1988) **Elements of SAP in Nigeria: liberalisation and deregulation**, Proceedings of the Nigerian Economic Society Conference on SAP and the Nigerian Economic, May, Ile-Ife.
- Longe O G (1985) **The Role of Women in Food Production, Processing and Preservation**, Paper presented to a Seminar on Women in Development, June, Institute African Studies, Ibadan.
- Makinwa-Adebusoye P K (1985) **The Socioeconomic Contribution of Nigerian Women to National Development**, Paper presented to a Seminar on National Development, Institute of African Studies, June Ibadan.

- Ojo MO (1984) **Redesigning Public Sector Strategies for Food Selfsufficiency in Nigeria**, Proceedings of the NES conference on Selfreliant Strategies for Development, May, Benin City.
- OKojie CEE (1990a) **Enhancing the Access of Rural Women to Appropriate Technology in Food Production and Processing in Nigeria**, mimeograph.
- Okojie C E E (1990b) **The Impact of Government Programmes on Rural Women in Nigeria**, mimeograph.
- Okojie CEE (1989a) **Rural Women in Agriculture in Bendel State of Nigeria**, mimeograph.
- Okojie C E E (1989b) **Women's Status and Fertility in Bendel State of Nigeria: A Comparative Study of Selected Communities**, Research Report, Volume 1.
- Okojie CEE (1989d) **Integrating Rural Women into Science, Technology and Mathematics Education in Nigeria through Nonformal Education**, mimeograph.
- Okojie CEE (1987) **Accelerated human resource development for the rural sector: The roles of ADPs and local governments in resource development with special reference to women**, Paper presented at a Seminar on Human Resource Development in the Nigerian Agricultural Sector, ARMTI, April, Ilorin.
- Okojie CEE (1985) **What needs are really basic for rural women in Nigeria? An examination of the conditions of life of rural Nigeria**, Paper presented at a Conference on Women in Rural Areas, WIN, May, Ilorin.
- Okojie CEE (1983) "Improving the Quality of Life for Rural Women in Nigeria. The role of education and technology" in R Raza and M Ugbozurike (eds) **Rural Nigeria: Development and Quality of Life**, 130-145.
- Olatoye D (1989) "Storage: The Missing Link" in *The Republic*, Friday June 23rd.
- Oshuntogun A (1976) **Rural Women in Agricultural Development. A Nigerian Study**, Paper presented at the Conference on Nigerian Women and Development in Relation to Changing Family Structure, April, Ibadan.
- Patel A U and Anthonia Q B O (1973) **Farmers' Wives in Agricultural Development: The Nigerian Case**, Department of Agricultural Economics and Extension, University of Ibadan.
- Schultz T W (1964) **Transforming Traditional Agriculture**, Yale University Press, New Haven.
- Simmons Emmy (1975) **The Smallscale Rural Food-Processing Industry in Northern Nigeria**, Food Research Institute Studies, 14 , 2, 147-160.
- Tewe B O (1978) **The Role of Women in Farm Labour Supply. A Case of Okitipupa Division of Ondo State**, Department of Agricultural Economics, University of Ibadan.
- UNICEF (1989) **Strategies for Children in the 1990s**, UNICEF, New York.

Table 1
Indices of Food Production, 1977-86 (1976-78 = 100)

	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986
Total food Production Per Capita	100	103	108	114	114	115	101	114	115	120
Food Production	100	100	101	103	103	98	84	93	91	93

Source: Ekpo(1989)

Table 2
Proportions of Rural Women Engaged in Farming Practices
State

	% in Farming
<i>Western Nigeria</i>	
Oyo	38
Logas	7
Ondo	53
Ogun	26
<i>Midwestern Nigeria</i>	
Bendel	43
<i>Northern Nigeria</i>	
Bauchi	19
Benue	84
Borno	67
Gongola	68
Kaduna/Katsina ¹	2
Kano	8
Kwara	8
Niger	6
Plateau	64
Sokoto	30
<i>Eastern Nigeria</i>	
Anambra	86
Cross River/Akwa Ibom ²	62
Imo	81
Rivers	58

Source: Federal Office of Statistics, Social Statistics in Nigeria, December, 1984.

Notes:

1. Formerly Kaduna State, now split into Kaduna and Katsina States.
2. Formerly Cross River State.

Table 3
Major Crops/Products Processed in Geographical Zones

Zone Major Crops/Products Processed

Northern Nigeria

Grains: Millet, maize, sorghum, acha, guinea corn, rice, etc into flour and/or starch for consumption (tuwo, fura, etc).

Roots/tubers: Cassava and yams (where grown) into flours or chips, cassava meal (garri).

Legumes: Beans, melon, groundnuts, are dried for sale, oil extraction (melons, groundnuts), or preparation for consumption (kosai, alele, kuli kuli, etc).

Vegetables: Peppers are sundried.

Meat products: Beef, pork, and game are salted and dried; milk is processed into cheese and butter.

Fish products: Sundried or smoked.

Western Nigeria

Grains: Rice is parboiled and milled, maize is dried and processed.

Roots/tubers: yam and cassava are parboiled and dried and milled into flour (elubo), cassava is processed into flour and garri, yam is processed into pounded yam for sale.

Fruits: Plantain is dried and milled into flour.

Legumes: Melon is shelled and oil extracted; beans are processed for sale as akara or moinmoin.

Tree crops: Palmnuts are processed to extract palm oil.

Vegetables: Pepper is sundried.

Meat and Fish: These are sundried or smoked.

Midwestern Nigeria

Grains: Rice is parboiled and milled, maize is processed (into akamu).

Tubers: Cassava is processed into garri, fufu and starch.

Legumes: Melon is shelled and dried for sale.

Fruits: Plantain is dried, processed into flour or prepared into meals.

Tree crops: Palm oil extraction is very common.

Vegetables: Okra, pepper and other spices are sundried.

Eastern Nigeria

Grains: Rice is parboiled and milled, maize is dried and processed.

Roots/tubers: Cassava is processed into garri and apu (fufu).

Tree crops: Palm oil extraction is very common.

Vegetables: Pepper and other vegetables are dried.

Animal/fish products: Fish is sundried or smoked.

Abuja

Grains: Millet, sorghum etc are dried and milled into flour.

Legumes: Groundnuts are shelled, dried, and oil extracted.

Vegetables: Peppers are sundried.

Source: State Reports, Proceedings of a National Workshop on Enhancing Rural Women's Contribution to Agriculture; Simmons (1975); Longe (1985).