

FOOD SECURITY IN RURAL COMMUNITIES: AN ASSESSMENT OF THE EFFECTIVENESS OF GOVERNMENT INTERVENTION IN EKET AND ONNA LOCAL GOVERNMENT AREAS OF AKWA IBOM STATE, NIGERIA. 1989-2010

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ABSTRACT: *This study examines the agricultural projects initiated by AKADEP in its effort at achieving food security in the two local government areas under study. It takes a close look at its objectives, goals, achievements and challenges and assesses the problems that have militated against the successful realization of AKADEP projects 24 years after its inception. The study posits that women who make up over 75 percent of the farmers in these communities have been largely ignored by policy makers. Limited access to land, proliferation of very small land holdings along with the traditional land tenure system (leaving large portions of arable land fallow for several years) have conspired to negate meaningful agricultural development. Besides, poor entrepreneurial skills of 90 percent of the farmers interviewed, poor funding of agricultural development projects, incoherent government policies, insincerity on the part of government at all levels and a clear distrust of government intentions by farmers all threaten food security in these rural areas.*

KEYWORDS: Onna, Eket, Akadep (Akwa Ibom Agricultural Development Programme)

INTRODUCTION

In the last five decades, successive governments at the federal level have increasingly assigned the agricultural sector an ambitious role in its strategic planning frameworks. Virtually all the strategic development documents for national development and poverty alleviation in Nigeria and efforts to jump-start the economy on the path to success have always had agriculture at its nerve-centre. Nigeria's development engineers agree that agriculture is the matrix around which every other development plan revolves.

Attempts to elevate agriculture to the centre-role it occupied in the pre-colonial and immediate post-colonial periods have been met with varying degrees of success and at most time's outright failure, due in part to the insincerity of the executors, endemic corruption, incoherent and misguided government policies, policy summersaults, policy reversals, outright political mischief and politicizing very important agricultural issues. The Nigerian political elites have been constantly reminded that food security is in itself a basic human development issue and that food insecurity is not only a threat to our nascent democracy, but it could also trap millions of generations of Nigerians in a vicious circle of underdevelopment and poverty.

Nigerian agriculture had for decades been on the receiving end of the country's total dependence on oil and governments at various levels have embarked on several intervention measures to grapple with the problem. Iwuchukwu, J. C and Igbokwe E.M¹, are of the view that in the post colonial era, 1960 – 1966, the policies formulated were geared towards equitable growth in agriculture and the pursuit of an export oriented growth.

This led to the demarcation of the country into the Western Region (Cocoa), Northern Region (Groundnut) and the Eastern Region (Oil palm). There was also an import substitution policy which saw industrialization as the best strategy to achieve economic growth². They pointed out that, there were no programmes, projects or schemes laid out to accomplish the policies enunciated during the period. They argued that for any policy to have meaningful impact and achieve the desired out-comes, it must have well articulated strategies, that is, programmes, projects or schemes geared towards achieving specific objectives and eventually the goal of the policy.

The military era of January 1966 – May 1999 witnessed the following policies, the Agricultural Policy for Nigeria, 1988, the River Basin Development Authorities (1976) and the Land Use Act (1978). There was the National Accelerated Food Production Programme NAFFP in (1972), the Agricultural Development Projects, ADPs, the Operation Feed the Nation, the Green Revolution, the Directorate of Foods, Roads and Rural Infrastructure, Better Life Programme for Rural Women (1986), National Agricultural Land Development Authority (NALDA) (1979), Family Economic Advancement Programme (FEAP) (1990), the National Economic Empowerment and Development Strategy (NEEDS) (1999) and currently the National Special Programme on Food Security launched in 2002 in all the thirty-six states of federation by President Olusegun Obasanjo. The broad objective of the National Special Programme on Food and Security was to increase food production and eliminate poverty. The Root and Tuber Expansion Programme (RTEP) launched in 2003 by President Olusegun Obasanjo were designed to address the problem of food production and rural poverty. The Agricultural Development Programme is relatively the most successful of all the agricultural initiatives so far embarked upon by the federal and state governments.

Scope

This study focuses on the contributions of AKADEP to improving the productivity of farmers thereby raising their income levels, while at the same time ensuring the availability of affordable food items for their citizens. The study focuses on Eket and Onna Local Government Areas, but mention would be made of other Local Government Areas only to the extent in which they throw more light on the subject under review.

Definition of the Concept Food Security

There is an avalanche of information on what constitutes food security and the indicators of food security. There are about 200 definitions and about 450 indicators of food security. Maxwell and Frankenberger's³ report listed 194 studies on the concept and definition of food security and 172 studies on indicators. Life Sciences Research Organization⁴ defines food security as access by all people at all times to enough food for an active healthy life and includes at a minimum, the ready availability of nutritionally adequate and safe foods and the assured ability to acquire acceptable food in socially acceptable ways, that is without resorting to emergency food supplies, scavenging, stealing and other coping strategies. The Food and Agriculture Organization (FAO)⁵ of the United Nations sees food security to mean that food is available at all times, that all persons have means of access to it, that it is nutritionally adequate in terms of quantity, quality and variety and that it is acceptable within the given culture. The organization pointed out that only when all these conditions are in place can a population be said to be food secure.

The 1996 World Food Summit⁶ at the Rome Declaration on World Food Security defined food security to imply that all people at all times have physical and economic access to

sufficient, safe and nutritious foods to meet their dietary needs and food preferences for an active healthy life. The city of Toronto⁷ in 2000 defined food security as the availability of a variety of foods at a reasonable cost, ready access quality grocery stores, food service operations, or alternative food sources, sufficient personal income to buy adequate food for each household member per day, the freedom to choose culturally and personally acceptable foods, confidence in the quality of foods available, easy access to understandable, accurate information about food and nutrition and the assurance of a viable sustainable food production system. The Ontario Public Health Association⁸ defines food security as a strategy for ensuring secure access to adequate amounts of safe, nutritious, culturally appropriate food for everyone produced in an environmentally sustainable way and provided in a manner that promotes human dignity. The Public Health Association of British Columbia⁹ is of the view that food security exists when all citizens obtain a safe, personally acceptable, nutritious diet through a sustainable food system that maximizes healthy choices, community self-reliance and equal access for everyone.

Wikileaks¹⁰ the online encyclopedia defines food security as the availability of food and one's access to it. A household is considered food secure when its members do not live in hunger or fear of starvation. The World Health Organization¹¹ defines three aspects of food security: food availability, food access and food use. Food availability according to the body is having available, sufficient quantities of food on a consistent basis. Food access is having sufficient resources, both economic and physical to obtain appropriate foods for a nutritious diet. Food use is the appropriate use based on knowledge of basic nutrition and care, as well as adequate water and sanitation. Food security could be easily defined as the ability of individuals or group to have easy access to quality food items at all times; the food varieties must be available and affordable without subjecting the individuals to indignities.

Akwa Ibom State Agricultural Development Programme

Akwa Ibom Agricultural Development Programme (AKADEP) was excised from the Cross River State Agricultural Development Programme (CRADP) after the creation of Akwa Ibom State (AKS) from the former Cross River State (CRS) in September, 1987. Until recently, AKADEP concentrated most of its development efforts on arable crop production, but due to the significant shortfall in animal protein in the diet of its local population, AKADEP¹² had in the last five years intensified its development efforts in the area of fish production, agro-forestry and food processing. Besides, a balanced agricultural development should include not only crop, but also animal production, since proteins in diet are necessary for human health.

Before the creation of Agricultural Development Programmes (ADP), the Nigerian government formulated series of agricultural policies and programmes from the pos-colonial era to the civil war period (1st October 1960 to 15th January 1966). During this period, policies were formulated to actualize more equitable growth in agriculture. The pre-independence policy of surplus extraction had translated into the demarcation of the country into the Western Region (Cocoa), the Northern Region (Groundnut) and the Eastern Region (Oil palm). At that time, manufacturing organizations were considered the best method of achieving industrialization in the country. But it was mind-boggling that inspite of the ambitions agricultural policies formulated, there were no corresponding programmes, projects, initiatives or schemes with which to actualize these lofty agricultural development policies.

This in itself was a major policy-flaw, due to the fact that for any policy to have meaningful impact, it must have clearly defined projects, or schemes which would be a road-map towards the accomplishment of specific objectives and the overall goal of the policy. Before the establishment of the Agricultural Development Programme (ADP), the Nigerian authorities experimented with Farm Settlement Schemes, the 1978 Land Use Act had a tremendous impact on the local land tenure systems particularly in eastern Nigeria, the River Basin Development Authorities in 1976, the National Accelerated Food Production Programme (NAFPP) in 1972, the Agricultural Development Programmes (ADPs) were established in 1974 and in 1976, the Operation Feed the Nation held sway along with the River Basin Development Authorities. President Shehu Shagari brought with him his Green Revolution Programme in 1980 and in 1986; General Ibrahim Babangida's regime initiated the Directorate of Food, Roads and Rural Infrastructure (DFRRI)¹³. Wife of the then Military President, Mrs. Mariam Babangida founded her very own Better Life for Rural Women in 1987. Come 1992 there was, the National Agricultural Land Development Authority (NALDA).

Though this policy was aimed at giving strategic public support for land development and to promote better usage of Nigeria's land and their resources and to create employment opportunities for rural people, in actual terms, NALDA had inherent loopholes and was subjected to various interpretations and high ranking military officers used the policy to dispossess poor rural dwellers of their ancestral lands. In 1999, the National Economic Empowerment and Development Strategy (NEEDS) were initiated by President Olusegun Obasanjo in response to the New Partnership on Africa's Development (NEPAD) initiatives. Among other benefits, NEEDS was expected to be used to achieve 6 percent annual growth in agricultural GDP of 3 billion USD per year on agricultural exports and 95 percent self-sufficiency in food production.

At the state level where it was known as SEEDS, the policy was expected to achieve a participatory process that will ensure ownership, sustainability and coordination of development efforts between the federal and state governments¹⁴. In 2002, the National Special Programme on Food Security (NSPFS) was launched by President Olusegun Obasanjo. The main goals of the programme were: assisting farmers in increasing their output, productivity and income, strengthening the effectiveness of research and extension service training and educating farmers on farm management for effective utilization of land resources. The Root and Tuber Expansion Programme (RTEP) were launched in 2006 under Obasanjo's administration. Among other things, small holder farmers with less than two hectares of land were the target audience, along with the rural women who play a dominant role in rural food production, processing and marketing. The main thrust of the RTEP was to multiply and introduce improved root and tuber varieties to thousands of farmers to improve productivity and raise their income levels. The National Fadama Development Project (NFDP) was designed in the 1990s to promote low-cost improved irrigation technology under World Bank financing. One of the major objectives of the Fadama Programme was to increase the sustainability of the income of Fadama users through the expansion of farm and non-farm activities.

In spite of all these agricultural development policies and programmes, Nigeria faces acute food shortage, as increasing concerns about the galloping population figures and over 70 percent dependence of the population on agriculture for existence and the attendant economic effects on the environment. AKADEP was set up to effectively contain these problems in the

state and the programme has recorded relative success vis-à-vis other agricultural programmes, in its efforts to address to food insecurity.

The Structure of AKADEP Field Extension Services

Contrary to misconceptions among members of the public, AKADEP does not engage in farming, the main mandate of the organization is in the dissemination of information, organizing workshops, demonstration, extension services to farmers not only to improve their productivity, raise income levels, but also to address the scarcity of affordable food in the country. For effective integrated agricultural development, AKADEP divided the state into six zones, Abak, Etinan, Eket, Ikot Ekpene, Oron and Uyo. Ikot Ekpene zone covers agricultural extension activities in Ikot Ekpene, Ikono, Ini, Obot Akara, and Essien Udim Local Government Areas; Uyo zone covers extension activities in Uyo, Ibesikpo Asutan, Itu and Ibiono Ibom Local Government Areas; Eket zone covers activities in Eket, Esit Eket, Onna, Ikot Abasi, Mkpato Enin, Ibeno and Eastern Obolo Local Government Areas; Abak zone covers activities in Abak, Ukanafun, Etim Ekpo, Oruk Anam, and Ika Local Government Areas; Etinan zone covers activities in Etinan, Nsit Ibom, Nsit Ubium and Nsit Atai Local Government Areas; Oron zone covers activities in Oron, Mbo, Okobo, Udung Uko and Uruefong Oruko Local Government Areas¹⁵. It should be noted that each of the local government mentioned above represents a bloc, eight to ten villages make up a cell, five to six farm families make a cell. The entire Akwa Ibom State was divided into forty blocs and 274¹⁶ cells, each of these blocs are manned by Block Extension Supervisors and Extension Agents. The Extension Agents are also saddled with the Gender Specific activities of Women in Agriculture in the blocs under their supervision.

In terms of policy guidelines in its mandate, AKADEP was expected to cover all specific fields of agricultural productivity in collaboration with small scale farmers. But in practical terms, AKADEP limits its activities to the following areas: crops, Agro-forestry, women in agriculture (which deals primarily in the processing of food crops), fisheries and livestock. Some of the inputs from AKADEP to the small scale farmer include the following: assist farm families/cooperatives to access loans and introduce new improved seed varieties and teach new farming techniques. Until recently AKADEP assisted farm families /cooperative farmers' societies to procure fertilizers and the organization and also advises farmers on which fertilizer to use for specific crops and pesticides for specific livestock.

AKADEP Operations in Onna and Eket

This paper's concern is with the contribution of AKADEP to food security in Eket and Onna. Until September 1989, Onna Local Government Area was an integral part of Eket Division, one of the oldest districts in the defunct Eastern Region of Nigeria. The administrative headquarters of Onna is at Abat. With a population of about 123,000¹⁷, the people of Onna are primarily farmers. Until recently, the demographic pattern of Onna and Eket was unverified. Onna is bounded on the North by Etinan Local Government Area, on the West by Eket Local Government Area, on the East by Mkpato Enin Local Government and on the South by Ibeno Local Government Area. Eket is bounded on the West by Onna Local Government Area, on the East by Esit Eket Local Government Area, on the North by Oron Local Government and on the South by Ibeno Local Government Area, as at the time of writing this paper the exact population of Eket could not be ascertained.

According to Imoh Atauyo Akpan¹⁸, the Zonal Manager for Eket,

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AKADEP creates awareness among farmers by directing them to loan sources and recommend farm families/groups for loans. It also demonstrates new, improved seed-bed preparation techniques to farmers and also introduces disease-resistant crops to them.

He pointed out that before any meaningful agricultural development can succeed in the rural communities, there must be intensive enlightenment campaigns of the rural dwellers especially farmers, to inform them that there are agencies sponsored by government to assist farmers to improve their productivity. He pointed out that before any extension agent meets with any farm family; they have to be introduced to the entire community by the village authority which in most cases would be the village head and occasionally members of the village council. In addition, he stressed that...

It is the outcome of the OFAR (On Farm Adaptive Research) that would determine whether a particular technique would be accepted or rejected by the farmers. Easy access of the extension agent to the farmers, the size of the land, the level of education of the farmer and the size of farm families in question determines the success of a farmer¹⁹Cynthia C. Cook and Mikeal Grant²⁰ are both of the view that a rapid population growth without a corresponding improvement in agricultural technique has increased pressure on the limited arable lands available in most countries in sub-Saharan Africa, leading in part to shortened fallow cycles and the extension of cultivation into unsuitable or marginal lands. They are also of the view that projects to introduce new technologies should follow the established pattern of farming systems research. They pointed out that this pattern starts with the diagnostic research at the farm level to identify problems, it then moves to the on-station research to find possible solutions, then to adaptive on-farm linked to extensions, demonstrations and adoption.

The Eket Manager²¹ pointed out that there are 40 cells in Eket managed by 7 extension officers who also have to manage demonstration farms with some farm families. He stressed that there is a ratio of one extension agent to about 2000 farmers (ratio 1:2000)

These extension officers have to train and visit farm families at least four times a week. When you add the workshops, conferences, and the fortnight training programmes, you will realize that under the current dispensation, it is difficult to adequately cover the existing farm families in the state. In his unpublished work, *Proposals for the Development of Akwa Ibom State Fisheries*, B. S. Moses²² pointed out that AKADEP over concentrates all its development efforts on arable food production, with only marginal interest in fish production. He added that Akwa Ibom State has 129 kilometres representing 16 percent of Nigeria's 800 kilometres coastline which means Akwa Ibom State has the longest coastline in Nigeria, and is supposed to be one of the topmost fish producing states in the country. Moses is of the view that

Akwa Ibom is a very small state. The smallest in Nigeria after Lagos State with approximately a total geographic area of 7,246 square kilometers and a population estimated at 4,998,941 (1990 Census), giving a mean population density of 690 persons per square kilometer²³.

To him, the state is well positioned to benefit immensely from a vibrant fishing industry considering the fact that the state encloses a continental shelf of 516 square metres which represents about 71 percent of the state's entire landmass, with three large estuarine area covering approximately 2000 kilometres and three river systems – Qua Iboe, Cross and Imo River. He pointed out that the major fishing ports in the State – Oron, Ikot Abasi, Uquo Ibeno, Ibaka and Mbo can churn out enough fish not only to adequately meet the protein

needs of the local population, but with huge quantity of assorted sea foods to earn the state billions of naira in exports.

Imo Akpannah²⁴ added that AKADEP was structured to reach the rural farmers and mandated to increase food production in the state by 30 percent annually through the participatory community planning programme which is expected to include agricultural extension services to rural farmers, improved seed multiplication, on Farm Adaptive Research for improved technologies, agricultural data collection, and analysis and reporting. The organization is also involved in sourcing and transfer of messages on gender specific issues such as processing, utilization of crops and information dissemination.

Cynthia and Grant²⁵ both agree that for interventions to work in the agricultural sector it must be built on existing indigenous systems to improve their productivity and sustainability and that projects should be designed both to improve farmers income and also to enhance the physical environment and that introduction of new farming technologies should first start at the farm level and not at agriculture research laboratories.

Ufot Johnson Umanah²⁶ of Umanah Farms, one of AKADEP's contact farmers who have been in the farming business since 1973 said the contributions of AKADEP to his business are modest. In his view,

AKADEP was AKADEP in the early 1990s when the organization started operations in the state. Extension agents used to visit my farm once or twice a week. But now, they visit about once in a forth night.

He could not be specific about the inputs he had enjoyed from AKADEP in terms of improved income level but pointed out that the improved variety of maize and cassava had tremendous impact on crop yields. Umanah, who is involved in agro-forestry, livestock, fishing also added that on his 4 hectares of land, he churns out 10 crates of fresh eggs daily, sells dressed chicken and fish to local restaurants, retailers and roadside food vendors in Ndon Eyo and its environs.

Akpan Willie Okpoudoh²⁷ of Kema Farms in Abat who works only as a part time farmer is of the view that AKADEP contributions to his farm have dwindled over the years. To him, AKADEP needs to hold farm exhibitions and competitions to encourage farmers to produce more. Okpoudoh's six hectares of land are used in the production of fish, rabbits, oil palm plantation, and livestock. He could not determine in financial terms the increase in his income, but pointed out that he had made a living off his farm for 10 years.

Owner of Utitukpa Farm, Reuben Friday Udo²⁸ of Ikot Ibiok village, farms mainly cassava, maize and melon. His 2.5 hectares of land are scattered through out Eket, in small plots. Reuben, who is AKADEP's Block Supervisor for Eket explained that his organization had benefited immensely from AKADEP's training and visitation. To him, the cassava variety *afia mma*, Tms 307553 has greatly increased his harvest. Reuben, who is a civil servant works a part time, said the annual yield of cassava from his 2.5 hectares of land was two tons before AKADEP, but after the training, visitation and using improved variety of cassava cuttings, his harvest has increased to over 10 tons. The Growth Enhancement Programme (FGES) of the state government is yet to have the desired impact on the productivity and income of farmers since farmers in Eket area do not have links to microfinance banks and agricultural loans from conventional commercial banks. He pointed out that

AKADEP are cheats, if you are given 30 cassava cuttings, at the end of the farming season, you are asked to refund the 30 cuttings back to AKADEP. They are using farmers to sustain their programme without contributing anything to their farms.

Mr. Edoho Tom Udofia of Ikot Ekpeka²⁹ also in Ikot Ibiok a farmer of livestock, plantain and fish complained about the high cost of using manual labour on his 4.2 hectares of land. In his opinion paying N20 per mount is expensive considering the 4.2 hectares of farmland he operates. At the end of every seed bed preparation, he needs to borrow money for fertilizer and to pay other categories of manual labourers. He complained of poor attitude of AKADEP agents to farmers particularly in the distribution of improved cassava and maize seedlings. He noted that the general believe among farmers in Eket area is that the new improved variety of cassava cannot be used in the preparation of local dishes like *epang*, *asiak*, *otto*, and *esa*. According to Glory Etukudoh Thompson³⁰ The local variety of maize is not good for the present rainy season, as it is vulnerable to maize worms while the new improved variety of maize is given to favoured farmers.

Glory's farm located at Akpasm requires the labour of 10 men on a daily basis to work her 3.2 hectares of farmland. Glory's quality of life, her income and volume of agricultural produce recorded about 32 percent improvement over a period of two years. Getting her tons of cassava, maize and cucumber at the end of every harvest to the local market is an uphill task for the farmer without a farm vehicle of her own. In her view AKADEP extension agents have been of tremendous benefit to her work since they come for visitation and training on a weekly basis.

Successes of AKADEP

In over 24 years of existence; the organization has recorded modest progress, taking into consideration the challenges facing it. In 2010, AKADEP extension agents made 35, 915 visits³¹ to farmers during the same period Block extension supervisors made 6,288 visits to their respective cells. Back in 2000, extension agents made 29, 908 visits to farmers, while during the same period Block extension supervisors' field visits to their respective cells was 5,066. In 1990, extension agents paid 7,536 visits to farmers, while Block Supervisors paid 5,401 visits to their cells³² a total of 6.87million naira was used for the organization's operation in 1990, 36.28 million naira in 2000 and 11.56 million naira in 2010. During the period under review, 194 hectares of cassava was established under the direct labour programme, 14.5 hectares of improved cassava cuttings was planted in 2000 and in 2010. A total of 2,223, small plot adaptive technologies were established on crop production technologies³³

According to the Block extension agent of Onna, Mr. Douglas Udofia³⁴, and AKADEP currently operates a training programme for vegetable farmers at the Cross River State Basin Authority, located at Oniong. These vegetable farmers undergo training programme at the Basin Authority, where they are taught the use of irrigation system in vegetable farming, they are also taught on how to use irrigation pumps and how to determine the choice of vegetable best suited for irrigation techniques. Over 300 vegetable farmers are currently being trained at the Basin Authority, by AKADEP officials. Most of the farmers plant garden eggs, cucumber, pumpkin leaves, carrot, pepper, tomatoes, water melon and other categories of vegetables.

According to Solomon W. Joe³⁵ AKADEP maintains 685,095 farm families in the state, out of this number Onna and Eket blocs account for about 150,000 and the organization works through cells and blocs. Six to eight contiguous villages make up a cell with one AKADEP extension agent as supervisor, while a block comprises nine cells supervised by a zonal extension officer. As it is presently constituted, each local government area in the state represents a bloc, while a bloc may contain nine or more cells. In this regard, when the total number of 40 blocs and 274 cells, is pitched against a total of 198 extension agents, it then implies that there is one extension agent serving 2,000 farmers (a ratio of 1:2000).³⁶ Currently the organization has only nine bloc extension agents, which suggests that a substantial number of small scale farmers are out of the coverage area of AKADEP facilities.

This shortfall makes the actualization of AKADEP mandate difficult. Specific objectives of AKADEIP include facilitating increase in the production of crops such as cocoyam, maize, melon, cowpea, plantain, banana and sweet potato. It is also expected to facilitate an increase in livestock and fish production, encourage relevant agro-forestry practices and agro-forestry crop production, provide solution to gender-specific agricultural problems in respect of food processing, storage, marketing and value-added products. Part of its objectives also includes strengthening indigenous capabilities of agricultural project planning, monitoring and evaluation.

Technical Services

One of the strategies employed by AKADEP is its unified agricultural extension service that integrates Training and Visits to farmers as part of the farmers education strategies. Atauyo Akpan³⁷ explained that the extension agents give farmers access to improved variety of seeds and seedlings particularly, improved maize and cassava cuttings which are of three basic types, known locally as *okpo eka edung*, *eka uya*, *kam-kere- efre* and *panya*. These are species of cassava TMS30572. TMS 4(2) 1425 and TMS 30555 which are improved cassava cuttings are also disease-resistant and are very expensive for the small scale farmers to purchase. Due in part to the high cost of the improved cassava cuttings, most small scale farmers fall back on the local varieties which are low-yielding and susceptible to diseases.

Another major strategy of AKADEP in addressing food security in ONNA and Eket blocs is in the setting up of seed multiplication centres in the two blocs. The organization was involved in direct seed production of improved yam mini sett, improved varieties of cassava, cocoyam, sweet potato and maize for onward distribution to farmers. At State level, AKADEP distributed 1,500 bundles of improved cassava cuttings, 60 kilogram of cowpea and 180 kilogram of maize to small scale farmers in 2001³⁸. Also the Small Plot Adaptive System (SPAT) is another strategy used by the organization to carry out demonstrations of new improved seeds. This involves small plots on the farmers' land being set aside for use as demonstration farms. Through this method other new improved cassava cuttings 419, 92/0057 and 98/0505 were also introduced.

Most of the SPAT and On Farm Adaptive Research (OFAR) took place in Ukat and Awa areas of Onna, while the demonstrations in Eket took place in Ikot Ibok. Extension agents are expected to visit the farmers four times a week along with the Subject Matter specialist. AKADEP conducts a monthly Training and Review Meeting (MTRM) and also the Fortnightly Training meeting (FNT) held at the zonal level have in attendance the extension officers, zonal extension officers, bloc supervisors and the zonal manager. At this type of gathering, the subject matter specialist who has technical knowledge and skills is expected to

train the farmers. The On Farm Adaptive Research was designed with simplified experiments which can be easily adapted to the farmers need with a view to solve problems encountered on the farm and introduce same to the farmer to be used on other parts of his farm.

Women in agriculture are another sub-programme of AKADEP's technical services unit. This particular unit of AKADEP is saddled with the responsibility of teaching and training the local women groups in diverse areas of agricultural processing, storage and sale. Women groups specialize in the processing of oil palm produce into body cream, vegetable oil, margarine, soap, liquid soap, and detergent. The processing arm is dominated by elderly women and widows. Cassava is processed into starch, fufu, garri, flour and corn are one of the staple food crops in the state is also processed into flour, pap, and corn snacks, plantain and sweet potato are also processed into flour, and chips and sold as local snacks. It must however be noted that most of these women and their groups operate very small cottage business which are outside the formal sectors of the state economy and are therefore not captured by the financial sector. According to Imoh Akpanah³⁹

The food items consumed locally is produced by the rural farmers. The issue is that most of these farmers prefer to take their farm produce to neighbouring states like Aba and Port Harcourt where they expect to get more money for their crop produce.

The usual method of farming processing of agricultural produce and related activities like goatry does not allow for effective utilization of available land.

S/N	ZONES	BLOCS (L.OS)	CIRCLES	NO	OF	STAFF	
				ZEO	BES	EA	BEA
1	Abak	9	59	-	9	49	9
2	Etinan	5	28		4	23	4
3	Eket	7	40	1	7	37	7
4	Ikot Ekpene	8	63	1	8	45	8
5	Oron	4	23	1	4	16	4
6	Uyo	7	61	1	8	61	8
	Total	40	274	4	40	231	9

Figure 1, shows the distribution of extension officers in the state. Source: Akwa Ibom State Agricultural Development Programme, (AKADEP) 2010 Annual Report.

To address these problems, the organization holds a Forthright Training (FNT) and Monthly Technology Review Meetings. At such meetings, the women are taught the new methods of processing, preservation and new technologies are demonstrated. In 2009 alone the following demonstrations were carried out: 107 processing and utilization of cassava into confectionary, 14 enrichment of food stuff with soya bean, processing and utilization of plantain 10, processing of soya bean into milk 42, processing of plantain into chips, 5, processing of palm oil into soap, detergent and pomade 98, processing of orange, mango, ginger and pineapple into juice 6 preservation of vegetables⁴⁰

One notable strategy of AKADEP in addressing the problem food is in the set up of what is known as the Small Plot Adaptive Technique (SPAT). In 2009, a total of 2,269 farmers took

part in the establishment of SPAT: 46 farmers took part in 46 SPAT on fisheries, 543 farmers holding a total of 286.33 hectares of land took part in agro-forestry and 365 farmers participated in 260 women in Agriculture (WIA) demonstrations⁴¹. These demonstrations have had a positive impact on the income and living standards of the farmers. Atauyo, said apart from about 37 percent increase in their earnings, some farmers also increased the land are put under cultivation. In Onna and Eket, land under cultivation increased from about 35 hectares to 42 hectares.

It was observed that, there are no farmers in the entire Eket and Onna blocs who own up to four hectares of land at the same location. Atauyo said⁴² there are no private land holdings up to the size of two or three hectares of land in the entire Eket local government area. He pointed out that the traditional land ownership system allocates farm land to families through the male children and through communal land ownership. As more children are born into a family, the land allocated to that family is constantly sub-divided among the male offspring. It then follows that the larger a particular family is, the smaller the size of land available for cultivation or for building. Reuben Friday Udo⁴³, The AKADEP Bloc Supervisor in charge of Eket stressed that those farmers who own up to two hectares of land brought land from other landowners. It is virtually impossible to see an individual own two hectares of land at the same location without buying neighbouring lands. The usual trend is that farmers do have small land holdings scattered throughout the villages, but not one sizeable plot of land usually 100sqm by 100sqm at the same location. In his view, Atauyo emphasized that small landholdings, makes mechanized agriculture, not only expensive, but also difficult as the land is usually littered with tree stumps which do not allow tractors and other agricultural machines free movement within the farm lands.

Due to these constraints land cultivation is mainly through direct labour. Uche C. Amalu⁴⁴, in his view said “manual, human energy or animal power, and usage of simple tools like fire, axe, cutlass, hoe, machet, digging invariably leads to low land utilization, low yields and consistently low income for the rural farmers. In addition, even when a particular family owns a sizeable plot of land, some family members who do not have interest in agriculture would prefer to sell their own plots and put the money to other uses, while others may want to build on their own plots. The family member who is a farmer may be left with a very small plot, which may not be useful for meaningful agricultural purposes.

CHALLENGES OF AKADEP

There are a myriad of problems facing AKADEP in the discharge of its mandate, these problems will be analyzed from two perspectives - internal factors and external factors.

Internal

Since its inception, the Akwa Ibom Agricultural Development Programme has not had permanent staff of its own. The usual practice is to redeploy staff from existing ministries and parastatals to take up appointment in the organization. Reports have revealed that while some members of staff are agriculturists and specialists from related disciplines, there are some members of staff who were before their appointment to AKADEP school teachers and administrative staff. The implication is that very important decisions in the operation of the programme are taken or carried out by persons without any training in agriculture or its related disciplines.

Most agricultural policies and programmes in operation in Nigeria are imported. Imported agricultural policies and programmes tend to ignore the social, economic cultural and environmental issues in the countries where these policies are to be implemented. One of the reasons for the limited success of the organization in Onna and Eket local government areas is the land ownership and tenure system. Had the cultural practices, traditional technical knowledge been studied in-depth these would have imparted positively on AKADEP's operations in these two local government areas, as some aspects of its techniques would have been adjusted to make it suitable for small farm holdings.

Paucity of funds is a major challenge to AKADEP operations in Akwa Ibom State. One thousand naira is the stipulated monthly transport allowance for extension agents who have to visit between six to ten villages at least four times a week. Taking into consideration that the programme currently has 180 extension agents, it then follows that ninety-four cells are without AKADEP extension services. Besides this important shortfall, zonal managers do not have vehicles attached to them. In his view,⁴⁴ without mobility our operations are severely handicapped. During the rainy season and even the dry season, some communities are inaccessible even with motorbikes. Most of the project's motor bikes are at various stages of disrepair and neglect. The Fortnightly (FNT) meeting venue at Ikot Akpan Ishiet has developed a major leak with the roofing sheets and ceiling boards threatening to carve in.

A major obstacle to AKADEP operations in Akwa Ibom State is the high level of insincerity on the part of the state government. Research findings have revealed that since the inception of the current administration, the government has not released funds for AKADEP operations. Since the National Programme for Food Security (NPFS) was established, the current government has not given a kobo by way of counterpart funding. With about 74.8 million naira from the state, the federal government would then release its own counterpart fund of 103.4 million naira.⁴⁵

He is of the opinion that the government is not doing its duty with regard to food security adding that politicians now sell fertilizer and seeds, while briefcase farmers' corner government subsidized seeds and fertilizer. He pointed out that a situation whereby an extension agent receives N1000 naira a month, as transport allowance to visit, train and advice farm families in ten villages is an impossible situation. Under these situation over 94 villages and thousands of farmers and farm families are left outside AKADEP coverage and facilities. Motorcycles purchased years ago for transportation by extension agents have over the years become disused and in various stages of disrepair and neglect. In the last two years, reports have revealed that the organization has not embarked on any major operation. Besides, during the rainy seasons most villages in the riverine areas are inaccessible even on motor bikes.

Another major constraint to AKADEP operations, not only in Onna and Eket but also in the entire state is in the area of funding. Atauyo and William Joe both agree that funding is a major handicap to the organization. As it stands AKADEP has the task of executing the National Fadama III Development Programme, the Root and Tuber Expansion Programme (RTEP), the National Programme for Food Security (NPFS) and the Farm Management and Advisory Services (FAMAS). But out of an estimated revenue of 136,968, 880.00 (one hundred and thirty-six million, nine hundred and sixty-eight thousand, eight hundred and eighty-eight naira for 1997, only the sum of (N26,120,505) twenty six million, one hundred, and twenty five thousand and five hundred and five naira was released, representing 19.07

percent of the total estimate. In 2010, the state government did not release funds to the organization while the federal government released only 14.84 million naira ⁴⁵, out of a proposed budget of 104 million naira. The flow of funds from the World Bank and the International Federation of Agricultural Development (IFAD) has dwindled considerably over the past 24 years.

Year	FGN Million	SG Million	IFAD Million	W. Bank Million	Internally Generated Revenue
1990	2.5	2.5	1,878.46	1,878.40	165,650
1991	3,225.00	3,235.13	0	5,396.74	220,52
1992	2,700	481.30	782.810	7,796.70	282,14
1993	3,000	5,083.27	1,579.04	5,053.55	272,47
1994	4.5	0	0.106.04	45,489.29	1,056.82
1995	NA	NA	NA	NA	NA
1996	2,775	0	0	0	1,582.04
1997	625.00	16,391.11	8,062.05	0	478,64
1998	NA	NA	NA	NA	NA
1999	NA	NA	NA	NA	NA
2000	2.66	19.19	0	24.43	0
2001	5.855	25.48	0	0.625.00	0
2002	N/A	NA	NA	0	0
2003	13.18	22	5.01	0	0
2004	46.20	60.00	0	0	0
2005	20.36	78.5	7.18	0	0
2006	8.72	13.90	5.68	0	0
2007	3.51	54.64	0	0	0
2008	0.40	8.00	2.40	0	0
2009	5.36	75.56	2.99	0	0
2010	16.76	52.00	0	0	0

Figure 2, shows the dwindling resources available to AKADEP. Source: Akwa Ibom Agricultural Development Programme, Annual Reports 1990-2010.

Lack of motivation of the extension agents, was identified as one of the primary reasons for the poor performance of AKADEP. The role of the extension agent to the farmer in the improvement, visitation, training and on-the-farm demonstrations to farmers is not being given the necessary importance it deserves. Most of the field superintendents and extension agents, recruited are yet to be absorbed into the state civil service. Situations such as these results in low staff moral, particularly if these employees have been working under uncertain conditions like these for years.

One notable problem to AKADEP operations is the lack of tractors and other agricultural machines which could be loaned out to farmers. In the view of Atauyo⁴⁶For agriculture in the state to be revolutionized and move beyond the subsistence level, farming has to be mechanized. The problem is usually in the area of land preparation and seed bed preparation. A machine can do the work of 10,000 people faster, with precision and cheaper. A farmer who wants to cultivate 10 hectares of land would find it an uphill task handling the labourers

and getting the best of out of them, that is not to mention, the length of time that would be wasted.

He stressed that AKADEP extension staffs are constrained when dealing with farmers who own large hectares of land. Besides, the one metre spacing between seed-beds can only be accurately achieved by machines not through human labour. Other issues the farmers have to contend with are the removal of the vegetation corner of the soil and the actual planting of the seeds.

Ataayo and William Joe are of the view that corruption is a major problem in the state's agricultural sector. They also believe that government is responsible for the low productivity of Akwa Ibom farmers as most of the flow of incentives to farmers from the federal government and international agricultural agencies do not reach the real farmers in the state. The incentives would have been diverted by politicians, government officials and other political stalwarts to other uses. A situation whereby a bag of fertilizer which has already been subsidized by the federal and state governments by 25 percent, still gets to the actual farmer at the original price of N6, 000 per bag instead of the subsidized price of N3, 000 this reduces the profit and income level of real farmers.

CONCLUSION AND RECOMMENDATIONS

It is already public knowledge that agriculture is the matrix around which every other development plan revolves. In fact most economists and agriculturists have come to the conclusion that Africans, particularly Nigerians have to produce or perish. Production does not only come in terms of finished products, but also in agricultural products. Any nation that cannot feed its people does not have any reason to continue to exist.

In the light of these conditions, agriculture and by extension food security are always on the front burner of national development policies of many countries, particularly a developing country like Nigeria. More so when about 70 percent of our population live in the rural areas and depend solely on agriculture as a main source of income. Agriculture has become a global force, particularly in the last few decades. Western European countries with successful agricultural policies, based on subsidies and distortions of the local markets have amassed such huge surpluses in food production which have in turn led to staggering wealth in such countries. It is ironic that Africa which according to the Central Intelligence Network, possesses 50 percent of the world's arable land, should also be the poorest with about 90 percent of her people plagued by poverty, hunger and disease.

AKADEP was established 24 years ago to tackle the low productivity among Akwa Ibom farmers as part of efforts to ensure that quality foods are available and affordable to all Akwa Ibom people and at all times. The traditional land ownership system, the traditional land use system and the federal government's Land Use Decree of 1978 have all conspired to limit the average farmer, 75 percent of which are women. Land ownership in Ibibio area starts and stops with the male members of the family. Female members of the family do not have rights to the family lands and women who want land have to either buy or depend on the whims of their husbands, sons, brothers and in-laws⁴⁷. It then follows that the most important resource in agriculture - land are not in the hands of those members of the community who want to use it for farming purposes. For any meaningful progress to be made in the area of food crop production there must be extensive land reforms starting from the family, community levels

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to the federal and land reforms needs urgent attention to make land available and affordable to those who need them for agricultural purposes, that is the women.

There is also the problem of very small land holdings. Out of 70 farmers who responded to our questionnaires, only four of them own farmlands of between 4-8hectares. The rest have farms as small as 0.01hectares to 3 hectares.

The importance of food to the general wellbeing of the individual cannot be over-emphasized. According to the World Health Organization 2002 Report, 4.8 million⁴⁸ children die of malnutrition in Africa annually, 4.2 of that number are in sub-Saharan Africa. Nutritionists agree that the right type of food for a growing child is very important to the development of the cognitive faculty of the brain, without proper nutrition, occasioned by affordable, available and quality foods at all times the average child in Akwa Ibom State cannot be expected to compete with their peers in other parts of Nigeria, let alone compete at a global level.

At this stage in our development, the era of leaving very important policy issues like agriculture in the hands of wheeler dealer politicians of questionable character should have been done away with. In Akwa Ibom State attitudes towards agriculture and agricultural methods have not changed as most farms operate without electricity and people still hold-tight to small plots and traditional farming practices of leaving land fallow for long periods. Research findings revealed that some farmers do not want to imbibe new planting techniques and the use of fertilizers on their farm. Others go to the extent of chasing extension agents out of their farms.

It was also observed that most farming methods do not spread quickly or widely. In spite of the fact, that AKADEP has been in existence in Akwa Ibom State since 1989, most farmers still view the organization and its agents with distrust. Majority of the local farmers still grow local varieties instead of the 'new' improved seeds and still use the traditional methods which have been in existence for hundreds of years in spite of the fact that it is now widely acknowledged that local varieties produce poor harvest and are vulnerable to diseases.

In the view of Togegnetwork Gettu⁴⁷ Africa must produce its own food and stop waiting for food and other aids. African countries go cap-in-hand begging for aid from the international donor agencies though they have the capacity to produce. Figure 2 of this paper already shows the dwindling resources from foreign donor agencies. With time, even the funds for AKADEP will eventually stop. The government of Akwa Ibom State, like other states in Nigeria has security votes as the lion share of their annual budgets. Such funds are used for the purchase of private aircraft; sustain a battalion of elite force body guards, purchase arms, along with armored tanks and also pay law enforcement agents and military personnel. The 'uncommon transformation' being touted about should be evident in the quality of lives of Akwa Ibom people and not on the pages of paid newspaper publications, bill boards and on the lips of political hangers-on.

It must be noted that while the modest progress of AKADEP is commendable in spite of the daunting challenges facing the organization, the body is still far off from its expected mandate. The current situation of having one extension worker to 2,000 farmers (10 villages) is unacceptable; AKADEP needs to employ more extension agents to bring the ratio to 2:3 (that is two extension agents to three villages.) Besides, the monthly allowance of N1, 000 naira is too meager for the volume of work they are expected to carry out.

Public awareness programmes about AKADEP's activities and its importance to improved crop production need to be aired on radio and television and discussed frequently at town hall meetings, churches, women associations and village council meetings. This will over time reduce if not completely eliminate the farmers' distrust of the agency.

Agricultural machines like tractors and seed planters should be purchased and hired out to farmers at a subsidized rate; this would go a long way in assisting farmers with large hectares in farm preparation and in seed bed preparation, as it is cheaper and faster than manual labour.

AKADEP would need to organize agricultural road shows, at least 2 times a year during which farmers, who had been particularly outstanding in the following areas - volume of produce, increase in income levels, adoption of AKADEP techniques and new improved crop varieties would be showcased. Hard working farm organizations should be showcased as the Most Valuable Farmer (MVF) of the year, recipients should be rewarded with government plaque and an agricultural machine. Besides, most farmers reside in the rural area, so do 70 percent of Akwa Ibom people. There is need for all season road networks to be built in the rural areas. This will facilitate the movement of farm produce from the farm to the urban markets and reduce the losses farmers incur due to accidents on the roads.

Another major area of attention is the issue of loans to tested and trusted farm organizations. AKADEP should be empowered to stand as surety for farm organizations with impeccable managerial integrity and bankable profit margin. This would have the bandwagon effect of galvanizing other farm organizations to emulate their standards. Besides, farmers need to be taught entrepreneurial skills, and the need to see farming as a viable business opportunity that needs massive injection of funds and time in order to be profitable and not just as a part time venture. In the course of this research, out of 70 farmers who responded to our questionnaires, only four of them are graduates, it was discovered that even supposedly well established farms in the state could not quantify their input and output and therefore are unable to monetize their earnings, let alone verify whether their farms are profitable or not.

It must however be noted that the economic strength of Akwa Ibom State does not lie in crop farming, but in the fishing and the oil and gas industries. While it is important to put in place good agricultural policies to stimulate food crop production and use technology in agricultural production to achieve food surplus and create wealth; it should not be the entire focus of government intervention agencies. Non-crop production aspect of agriculture needs government attention too. To start with, the state is the second smallest in the whole country after Lagos state. It has a geographical area of approximately 7,246km and population estimated at 4,998,941 (1990 census figures), giving a mean population density of 690 persons per square kilometres. The state is one of Nigeria's coastal states and it is one of the top fish producing states in the country. Out of Nigeria's 853km coastline, Akwa Ibom State occupies 129 km representing 16 percent,⁴⁸ its coastline stretches from Cross River to Imo River. Akwa Ibom State encloses a continental shelf of 5167metres covering about 71 percent of the state's landmass. It has 3 large estuarine area covering approximately 200km and 3 river systems- the Qua Iboe, Cross River and the Imo⁴⁹. It is home to assorted types of aquatic wildlife—oysters, shrimps, lobsters, croaker, barracuda, crayfish, crab, sharks, sardines, bonga, snappers, bivalves and squids.

As it stands, the fishing ports in the state, apart from Egbuhu are not developed, most of the fishing going on in the state is not captured in the formal sector of the economy. The

management and control of this very important natural resource are in the hands of wharf rats, political stalwarts also known as thugs, motor-park touts and political party officials. Apart from the fishing industry, there is also the petroleum industry; Akwa Ibom State is the second largest producer of crude oil in Nigeria. But besides collecting rent from oil exploration and oil production companies operating in the state, it is not involved in any way in the manufacture of the components used in the oil and gas industry. The local content decree promulgated by the federal government to ensure that Nigerians are directly involved in the oil and gas industry and other sectors of the economy have not been used by the state government to secure a foot-hold in the industry.

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