

STRATEGIES AND OPPORTUNITIES FOR YOUTH PARTICIPATION IN DRY SEASON CULTIVATION OF CROSS RIVER BASIN FLOOD PLAIN, ITU, SOUTH SOUTH NIGERIA

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Abstract

The study appraised strategies and opportunities opened for youth participation in dry season cultivation of the Cross River Basin Flood plains. Data for the study were obtained from 250 farmers in Itu Irrigation, Drainage and Flood Control Project, Oku Iboku at early and late seasons of 2011 – 2014. The data were analyzed using frequencies and percentages. Results showed that majority of the farmers were within 41 – 65 years. Over 80% of the farmers were females and over 20% married. Majority of the farmers were secondary school leavers (38%, 51%, 42% and 31%, for 2011, 2012, 2013 and 2014, respectively), 32% were primary school leavers and less than 10% with tertiary qualifications. Findings also indicated that over 70% of the farmers were self-employed with 32% (in 2012) and 51% (in 2013), enrolled in Growth Enhancement Scheme (GES). All the farmers adopted mechanical method of land preparation with mixed cropping. The flood plain farmers were constrained by access to farm credit, capacity building, irrigation facilities, crop damage by cattle and low profit after sales of their farm produce. However, the 9.2km dyke and tractor services provided by the Cross River Basin Development Authority enhanced timely dry season farming. The Akwa Ibom State Government also provides micro-credit facilities for Women in Agriculture (WIA) and Youth of Integrated Farmers' Scheme (IFS). The Federal Government of Nigeria Agricultural Transformation Programmes such as Dry Season Farming, Youth Employment in Agriculture Programme (YEAP), Youwin Agriculture Programme and Growth Enhancement Scheme (GES) provided opportunity for youth participation in Agriculture.

Keywords: Youth participation, Agricultural Transformation Programmes, dry season farming, Cross River Basin.

Introduction

According to the Nigerian Bureau of statistics (NBS, 2013), the national unemployment rate is 23.9% with the youths accounting for more than 80%. Also, the Nigerian National Youth Manifesto on Agriculture (NNYMA, 2013), revealed that the youth population of around 75 million is set to double by 2023, heightening youth unemployment. Courtcury (2013) observed that the average age of farmers is 52 in Brazil, 57 in the USA and 60 in Africa. This compelling evidence of ageing farmers' population in Nigeria must be addressed through youth engagement in agriculture to facilitate sustainable livelihoods and agricultural production (Suriname, 2009). Nigeria has over 84 million hectares of arable land not fully utilized because of predominantly rain-fed agriculture and the prevalence of ageing farmers in the country (Adesina, 2013). The country has large potentials for agricultural development, like cheap labour, largely untapped water and human resources, with more than two seasons of farming (Ochekpe, 2014).

The nexus between agricultural development, regional and nutritional stability are inextricably linked. Nigeria ranks 32nd out of 136 countries with seventy five (75) percent of her population living below the poverty level (Asa et al., 2010; Adesina, 2013). This agrees with the Human Development Report (HDR, 2005), that Nigeria is one of the poorest among poor countries of the worlds. Food and Agricultural Organization (2013), showed that the number of Nigerians suffering from hunger reduced from 19.31 million (19.3%) in 1990-1992 to 13.38 million (8.5%) by 2010 – 2012, yet forty-one percent of children under the age five are stunted, and twenty-three percent are under weight (Adesina 2013). With an average life expectancy of about fifty-five years in Nigeria, if young farmers do not replace the ageing producers, productivity of foods and nutritional complications will be seriously compromised in the next ten to fourteen years.

National food import bill of rice for Nigeria is close to \$3 billion annually while regional agricultural production and output falls. Nigeria being the highest importer of rice exports jobs to Thailand and Indian (Adesina 2013). Increased involvement of youth in agricultural activities would help revert high importation charges, reduce hunger and youth unemployment (Adego, 2003). The poor image of persons involved in agriculture needs to be redeemed with young people as the ideal catalysts for their willingness to adopt innovations, concepts and technology which are critical to changing the way agriculture is practiced and perceived. Decreasing unemployment, restiveness and insurgence through agriculture requires excellent strategies.

Strength of Youth Participation in Agriculture and their Constraints in Cross River Basin

Studies by Dauda et al. (2009) showed that the youths played important roles in the supply of labour, donation of material and the initiation of projects for agricultural development. The energy they possess and their significant number in Nigeria

population provides tremendous opportunity for increasing agricultural productivity. Suriname (2009) maintained that the youths are endowed with the capacity and ability to produce. Besides, the youths are the main market for food products, possessing knowledge and skill of their own eating peculiarity. According to NNYMA (2013), youths are of significant impact in public policy and action. The youths not oil, will be the country's most valuable resource in the twenty-first century (British Council Report, 2010).

Despite acknowledging the fact that youths are needed in agriculture to feed a growing population like Nigeria and their significant impact in public policy, elders are the core custodian of land imposing several challenges on access to the land for agriculture. Access to finance is yet another problematic issue since banks are reluctant to provide them with loans and youths are considered as being risk-laden (Udoh, 2013). Lack of access to markets and inputs suppliers is very often a constraint that youth in rural areas face and this prevents them from engaging meaningfully in agriculture. Besides the youths who have completed higher studies in agricultural sciences over years are presently finding themselves in situation where there is no job available in the formal sector. Consequently, they took to jobs in other sectors. Eventually, the country is losing manpower in agriculture. Further more, those staying in the agricultural sectors take low-salary jobs which do not require a degree and are de-motivated while others are discourage to study or take agriculture as a profession. Lack of incentive is another debilitating factor. Youths are often encouraged to start up an agri-business and become entrepreneur but reluctantly fold up due to absence of opportunities and incentives. Furthermore, the certificate derive labour market operational in Nigeria neglects practical skill acquisition in agriculture, and related sector. Also the alarming nature of rural urban migration and lack of access to basic resource of agricultural production continues to cripple and turn our unemployed youths into cardinal manifesto item of political leaders.

Although various schemes and measures have been put in place by banks and investors, access to the resources is inhibited by weighty conditions. Lack of information and proper guidance in accessing the channels of resources also inhibit the strength of the youth participation in dry season farming in the Cross River Basin. Decaying social infrastructures including poor road networks, epileptic power and poor storage facilities, and overdependence of the country on importation of agricultural products are some of the impediments to youth participation in agriculture in Nigeria. Youth involvement in agriculture as further observed by Suriname (2009) is hampered by absence of training since modern agriculture requires trained personnel. Responsibilities and functions also placed the youth at the disadvantaged position of having to wait for the interventions of adults before they become integrally involved in agricultural pursuits. There is a negative stigma of pursuing agriculture as a means of livelihood. Agriculture is stigmatized as an ageing profession whose compelling evidence is the present-day ageing farming population.

To unlock the potentials in Nigeria agriculture, the current administration developed a robust Agricultural Transformation Agenda (ATA) and flag-off dry season farming with release of funds. The agenda is founded on achieving the following targets:

- Adding an additional 20 million MT to domestic food production in four years.
- Making Nigeria self-sufficient in rice production by 2015.
- Reducing the level of wheat importation by 40% from the current level of ₦635 Billion per year, by substituting 40% of wheat flour used in bread and other confectioneries with High quality Cassava Flour (HQCF).
- Creating more than 3.5 million jobs by 2015 (Adesina, 2013).

The lurching of Youth Empowerment in Agriculture Programme (YEAP) with the goal of engaging 750,000 "nagropreneurs" young graduates and school leavers in Nigeria is another strategy for youth empowerment and participation in dry season farming. Also with the establishment of eighty (80) agricultural equipments hiring centres across the country, drudgery on farming will be reduced, speeding up mechanization of agriculture and awakening consciousness of youth in farming. Agricultural inputs have also been provided to farmers under the Growth Enhancement Scheme (GES) and the number of seed companies in Nigeria increased from 11 to 77 (Adesina, 2013). Today, there exists vibrant and expanding market for primary and secondary agricultural commodities which offers some more opportunities for young people to earn good income from agricultural activities. Beside, there are existing incentives and policies that target youth involvement in agriculture one of which is dry season farming with many training opportunities.

Cross River Basin: Home of Opportunistic Participation in Agriculture

Following the 1972 – 1974 drought in Nigeria, the River Basin Development Authority (RBDA) was created. The vision was to harness efficiently and effectively the nation's water resources for multipurpose uses in integrated and sustainable manner and optimize its agricultural resources for food sufficiency. These raised hopes among the populace that development is brought to the grassroots hence a stop to rural urban migration and control on unemployment. Objectively, this is achieved through impoundment of surface water by constructing small, medium and large dams enabling all-year round farming activities.

The peculiarity of authority's job prescription makes it impossible for its project to be cited where they can be easily accessed, but in river basin as the name implies. All-the-same, policies have been changing from time to time. In the eighties, the policy for river basin was to produce food and services, but when the policy change, (1987), the perception of people changed mandating authority to create enabling environment for farmers to operate. The Act No. 35 empowered Authority to acquire parcels of land and hold them in trust for communities. Thus, they prepare the land for farmers, who now grow their crops and pay for the services at subsidized rate. These opened opportunities for the youths/farmers to be gainfully employed in agriculture.

The flagging off of dry season farming by all River Basin Development Authorities in Nigeria with commendation to best farmers was an integrated approach for youth participation in agriculture with the ultimate goal of bringing about food security. Youth currently in agriculture should be honored and commended as adjudged by the Cross River Basin Development Authority, so that others will be interested.

Making agriculture attractive needs an investment in education at all levels, support to agro-innovation and improvement in the business environment. The establishment of Cross River Basin Development Authority's Nursery, Primary and Secondary Schools where agriculture will be taught is a practical way of catching the needed farmers young. With the aid of authorities, the challenge of mechanization became resolved as tractors are being used to prepare land for farmers who in turn pay economy rate. This goes a long way to reduce the drudgery on farming. The Authority also embarked on efficient monitoring of both surface and underground water level in their areas of jurisdiction and informed ecological fund office about flood disaster.

Hydrological and agrometeorological services are carried out in Akwa Ibom and Cross River States to monitor the rivers in the basin for data generation, flood studies and inputs for the Authority irrigation scheme. Rendering of hydrological services to institutions, researchers, students, government and non governmental agencies is also a mandate of the authority. At present, the operational hydrological stations are eighteen (18) across the two states (CRBDAIB, 2010).

The National Water Resource master plan study undertaken by Japan International Corporation (JICA) identified more than 18,000 ha of irrigable land for development in the catchment, whose ongoing irrigation, drainage and flood control projects are now at various stages of implementation and some completed through the Authority (CRBDAIB, 2010). These provide infrastructures for dry season farming to the farmers. Irrigation development is another key area of authority's manifestation. Authority produces appropriate drainage and irrigation infrastructures for local farmers to boost food production in dry seasons. It is so because dry season farming plays a significant role in food security, employment and income opportunity for a rapidly increasing population. In furtherance, dry season farming ameliorates impact of flood, and reduced weed densities in the field, and increase farmers income.

In order to satisfy the fingerlings requirements of the dam reservoir of the Authority and meet the needs of fish farmers in the catchments, a fish hatchery was constructed in 2007. The fingerlings are sometimes raised to table size to meet the high protein demand of the nation. Other contributions of the CRBDA include making all year round employment for thousands of farming families, introduction of small scale agro-allied industries, technology transfer, manpower development, public enlightenment and advocacy, provision of agricultural machinery and implement to various farming communities (CRBN, Sept, 2013). The CRBDA have become the centre of development, providing education, health and basic infrastructure as strategies for youth participation and employment creation. This study therefore assessed the effectiveness of the adopted strategies and opportunities opened for youth participation in the dry season cultivation of Cross River Basin.

Materials and Method

The study was conducted at Itu Irrigation Erosion/Flood Control Project between 2011 second season planting and 2014 early season planting. Itu is one of the coastal settlements in the Cross River Basin, with a mean annual rainfall of 1830mm – 2,000mm (Slus – Aks, 1989). Rainfall is bimodal beginning in April and ending in November with peaks in July and September (Udoh and Ekop, 2013). Annual temperature ranges between 24 °C in August and 30 °C in February. The relative humidity ranges from 80% - 100% (Slus – AKS, 1989). Primary data were mainly used for the study obtained from 250 randomly sampled farmers at the upland and flood plain farms of the authority, respectively. Structured questionnaire was randomly administered to each of the selected farmer and database generated. Frequencies and percentages were used to determine the opinions of farmers on dry season cultivation of the Cross River flood plain and to assess the effectiveness of adopted strategies with opportunities opened for youth participation in the dry season cultivation of Cross River floodplain.

Results

The socio-economic characteristics of Cross River floodplain farmers are presented in (Table 1). The results revealed that majority of the farmers were 41 – 65 years (48%, 55%, 46% and 41%). Over 80% of the Cross River floodplain farmers were females (81%, 77%, 85% and 87%). The study also indicated that most of the farmers were married (63%, 71%, 76% and 77%). The study further revealed that majority of the farmers read up to secondary (38%, 54%, 42% and 31%) and primary education (31% 30%, 37% and 30%). However, below 10% studied up to the tertiary level while a minority was not literate. It was also observed that over 70% of the respondents were unemployed (78%, 77%, 85% and 79%). The study further revealed that only 32% and 51% of the Cross River floodplain farmers were captured in the national farmers database (GES) in 2012 and 2013 cropping seasons, while 68% and 69% were not registered. Findings also revealed that land preparation in the floodplain was mechanical except for 2013 second season cropping, and the farm population increased as the years progressed (562, 984, 1176, and 258) with no remarkable increase in youth participation (23%, 25%, 25%, 28%).

Their cropping system is dominantly mixed at the floodplain. From this study, Cross River floodplain farmers are constrained by access to farm credits, weak profits from sales of farm produce, capacity building, absent of all-year-round irrigation facilities and crop damage by cattle.

Discussion of Results

Majority of the Cross River floodplain farmers falling within 41 – 65 years revealed that the farming population is ageing. This is not a good index to improve productivity because farmers' productivity is deemed to decrease as they age. Hired labour will increase significantly, while the area under cultivation would equally decrease, increasing food prices and threatening food security (Ugwoke et al, 2005). There is therefore an urgent concern of getting young persons to invest in agriculture as a way of turning the threats to opportunities. These observations agrees with Courturcy (2013), that the average age of a farmer is 52 in Brazil, 57 in the USA and 60 in African. Suriname, (2009) also asserted that the compelling evidence of ageing farmers' population must be address through youth in agricultural production. Consequently, if young farmers do not replace the ageing producers, the production of food will be seriously compromised in the next 10 – 15 years. The credence given to female farmers in the floodplain implies that activities are gender sensitive as the males are mostly fishermen and sand-miners. According to Udoh (2013), the non involvement of men in floodplain agricultural activities is not as a result of managerial and technical inefficiency but due to some socio-cultural and socio-economic factors. Beside, the Akwa Ibom State Government micro-credit facility for Women in Agriculture (WIA) is another economic push factor for the females.

Majority of the Cross River floodplain farmers being married with children indicated that there is abundance of family labour. Fasina (2013) observed that married couples engaged in co-operative effort in farming activities or operation with their husband and children as source of support for them even in their old age. Similarly, the studies revealed that majority of the farmers were literate indicating their willingness to adopt technologies and alleviate production constraints. With good education, adoption of innovation by farmers is easy as they are likely to read with ease, and understand technologies easily. Furthermore Adoga (2013) observed that improving youth involvement in agriculture demands that youth be trained on modern ways of agriculture and agri-business immediately after school for only the educated ones are willing to accept positive change and adopt innovation. This is further compensated by the free and compulsory education at primary and secondary levels instituted by the Akwa Ibom State Government to abreast the youth on scientific, technical and managerial education in agriculture and develop their entrepreneurial capacity. Significantly, over 70% of the Cross River floodplain farmers were unemployed. According to NBS (2010 & 2013), in 2009 the national unemployment rate in Nigeria was 19.7% with youths accounting for more the 80% and in 2013; unemployment was 23.9% with the youths accounting for more than 70%. These agrees with Udoh et al (2011), that youth unemployment, poverty and other related social maladies are prevalent in Niger Delta region, resulting in high rate of youth restiveness.

Increased involvement of youth in agricultural activities will help reduced the problem of increasing unemployment (Adoga, 2013). Through the Youth Employment in Agriculture Programme (YEAP) pursued under the Agriculture Transformation Agenda (ATA) with the goal of engaging 750,000 nagropreneurs young graduates and school leavers in Nigeria and flagging off the dry season farming since 2012 with other programmes, unemployment will be reversed in Nigeria. Only 32% and 51% of Cross River floodplain farmers were captured in National Farmers' Database indicating imminent need for re-capturing the farmers to authorize them to modern farm inputs of the government. Land preparation at the Cross River floodplain is basically mechanical, indicating government intervention by providing mechanization and irrigation facilities for farmers and at subsidize rates through the Cross River Basin Development Authorities for all year round cropping. As compliment, the Akwa Ibom State government have prioritize rural electrification to promote mechanize farming and have adequately maintained good road networks to rural communities and farm settlements to ease transportation. The State Government has further improved access to credit for the youths and women by instituting the

Integrated Farmers' Scheme (IFS) and Women in Agriculture (WIA). This may be responsible for the increasing number of farmers in the floodplain coupled with the presence of other basic infrastructures. The non remarkable improvement in youth participation at the flood plain may be attributed to lack of incentives, motivations, rural urban migration and their lack of access to basic resource of agricultural production, etc.

The Federal Government of Nigeria Agricultural Transformation Programmes (ATP) such as the Dry Season Farming, Youth Employment in Agriculture Programme (YEAP), You Win Agriculture Programme and Growth enhancement Scheme (GES) provided opportunity for youth participation in agriculture. The Cross River Basin Development Authority have also constructed 9.2km dyke along the course of Cross River with an access road and irrigation scheme designed for all year farming on 1,252ha of land in the flood plain. However, the farmers are constrained by access to farm credits, weak profitability, capacity building and crop damage by cattle and irrigation facilities.

Conclusion

Youths are very significant resource to facilitate sustainability in agricultural production. With an average life expectancy of 55years in Nigeria, if young farmers do not replace the ageing producers, productivity of foods and nutritional complications will be seriously compromised. Besides, producing outside normal rain-fed season will unbundle the potentials in Nigeria agriculture and open opportunities for youth employment. Strategic to successful dry season farming are the services of the River Basin Development Authorities through creating enabling environment for farmers to operate. Making agriculture attractive to the youths needs investment in education at all levels, motivations and honorarium, public enlightenment and advocacy, provision of agricultural machinery and implements, credit facilities, access to land and professionalizing the discipline as obtainable in law, medicine, pharmacy and engineering.

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TABLE 1: SOCIO ECONOMIC CHARACTERISTICS OF THE CROSS RIVER FLOODPLAIN FARMERS, ITU

VARIABLE	PLANTING SEASON												
	FREQUENCY					PERCENTAGES							
	2011		2012		2013		2014		2011-2012		2013-2014		
	Early	Late	Early	Late	Early	Late	Early	Late	Early	%	%	%	%
Age (years)													
15-40		130	62	184	88	203	73	23	25	25	28		
41-65		270	134	411	108	428	106	48	55	46	41		
Above 65		162	90	103	87	262	79	28	20	30	31		
Gender													
Male		104	43	183	56	122	34	18	23	15	13		
Female		458	243	515	227	771	224	81	77	85	87		
Marital status													
Single		208	80	201	64	217	59	37	29	24	23		
Married		354	206	497	219	676	199	63	71	76	77		

Source: Field Survey 2011 – 2014

TABLE 2: EDUCATIONAL LEVEL AND GROWTH ENHANCEMENT SCHEME STATUES OF CROSS RIVER FLOODPLAIN FARMERS

Level of Education											
No & dwelling	61	24	93	46	104	82		11	11	13	32
Primary	209	98	197	136	302	77		31	30	37	30
Secondary	213	148	386	84	414	80		38	54	42	31
Tertiary	79	16	22	17	73	19		14	4	8	7
GES Status											
Registered	-	-	311	146	147	-		-	32	51	-
Not registered	-	286	387	137	436	-		-	68	49	-

Source: Field Survey 2011 – 2014

TABLE 3: LAND PREPARATION METHODS AND CROPS PLANTED IN CROSS RIVER FLOODPLAIN, ITU

<u>Land preparation</u>										
Manual	0	0	0	0	720	0	0	0	0	0
Mechanical	562	286	698	283	173	258	100	100	-	100
<u>Crops Planted</u>										
Root and tuber										98
Vegetable & fruit										100
Maize										76

Source: Field Survey 2011 – 2014

TABLE 4: FARM POPULATION IN THE CROSS RIVER FLOODPLAIN ITU

PLANTING SEASON	2011	2012		2013		2014
	LATE SEASON	LATE	EARLY	LATE	EARLY	EARLY
UPLAND	187	286	273	283	243	258
FLOODPLAIN	375	-	425	-	650	-
TOTAL	562	984		1176		258

Source: Field Survey 2011 – 2014