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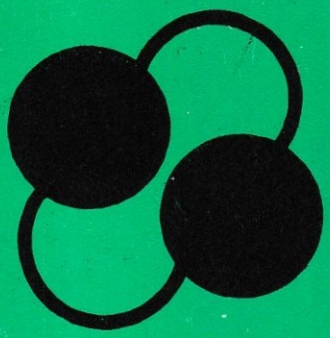

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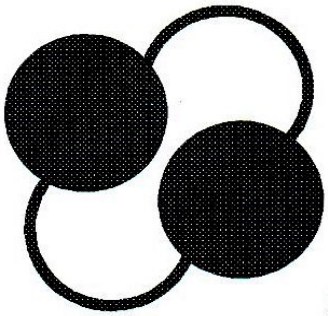

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EFFECT OF INDUSTRIALIZATION ON SUSTAINABLE AGRICULTURAL LIVELIHOOD IN IKOT ABASI, NIGERIA

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Abstract: This study analyses the effects of industrialization on the sustainable livelihood of rural dwellers in Ikot Abasi industrial area of Akwa Ibom State, in relation to the present moribund status of the Aluminum smelter company of Nigeria (ALSCON). Primary data collection techniques were utilized to elicit information from 120 respondents in the host and nearby reference communities. The negative effects of industrialization have culminated in loss of arable land, shift from agriculture to over-dependence on industrial employments, income losses, poverty, malnutrition and increased cost of living. The Study ultimately proffers recommendations to ameliorate the negative effects of industrialization on livelihood, including introduction of micro-credit schemes, skills acquisition opportunities and provision of improved agricultural inputs for indigenes of host communities. Basic amenities are also recommended for provision in host communities.

Keywords: Industrialization, livelihood, Ikot Abasi.

INTRODUCTION

A great majority of the World's poor reside in rural areas and are involved in agro-related livelihood activities as farmers, labourers, transporters, marketers and processors of produce. They also pick non-timber forest products (NTFPs) for sale and household consumption, and supply non-agricultural services to households whose income is principally agriculturally derived. In essence, '*small holder agriculture is presently a key sustainer of a significant majority of the World's poorest people*' (Kydd, 2002).

Livelihood is an important concept in any rural area. Farrington *et al.* (1999) define livelihood as '*the capabilities, assets, (material and social resources) and activities required for a means of living*'. Olujide (2000) explains further that livelihood focuses on the activities people undertake to meet basic needs and to generate income. In essence, livelihood comprises a variety of life sustaining activities and embraces not only the present availability of the means to make a living, but also the security against unexpected shocks and crises. A livelihood is sustainable when it can cope with and recover from stresses and shock (e.g. drought, flooding, capital, environmental degradation and loss of land) and maintains or enhances its capabilities and assets both now and in the future, while not undermining the natural resource base (Farrington *et al.*, 1999).

A nation's economic development is in part measured by its level of industrialization. It is therefore apparent that no nation can truly develop economically and socially without industrialization (Adeniji, 1999). Industrial development in Ikot Abasi (formerly Opobo) started in the colonial era and by 1933, a total number of 35 European factories were in existence (Chessman, 1951). These industries engaged in various economic activities

relating to the purchase and export of palm produce and forest products. They also imported European goods for sale to local people. Nigeria's premier boat building industry (Opobo boat yard) was also established in the area in 1951. Most of these industries however collapsed during the period of 1950 – 1970 due to political and economic reasons. From the late 1980s an industrial rejuvenation occurred in the area, mainly due to the commencement of industrial activities at the Aluminum smelter company of Nigeria (ALSCON) that resulted in the springing up of more than 15 feeder and downstream industries.

Industrialization has both positive and negative implications (Eboh, 1993; Udo, 1996). Industrialization also has significant impacts on agriculture. During the process, there is in part, a shift in composition from agriculture to small-scale manufacturing, and ultimately, from traditional to modern industries. In the process agriculture may become more mechanized to produce more food with less number of people, or may become virtually neglected, due to loss of land and environmental degradation. In essence, many people who used to rely on the land and agriculture for sustenance become losers and are exposed to socio-economic vagaries. Industrialization is an important component of globalization and its impact may be pervasive if not controlled. It is against this background that this study was conducted, to ascertain the effect of industrialization on the sustainable livelihood activities of the residents of Ikot Abasi, Akwa Ibom State. Specifically, the study attempted to:

- Document the existing livelihood activities of residents in the study area; as a fist step towards.
- Ascertaining the effects of industrialization on livelihood activities and ultimate effect on resident's contribution to family and communal wellbeing.

MATERIALS AND METHODS

Ikot Abasi is one of the oldest local government councils in Akwa Ibom State. It is located on the South-western part of the State with a year 2001 projected population of 88,912; which reveals a higher percentage of females (55.8%) than males (47.2%). The primary occupation of the predominant (more than 90%) Ibibio people is farming and fishing.

The universe for the study was all dwellers inhabiting the 6 core villages directly affected by the industrialization process in Ikot Abasi LGA. These villages were all purposefully selected based on close proximity to industrial activities, and they included Ikpetim, Ikot Akpan Ata, Utaewa, Ikot Etetuk, Ikot Aba and Ikot Essien. The Ibekwe Akpan Nya community (Mkpat Enin LGA), which is relatively free from the effects of industrial activities, was used as a reference community. A validated structured questionnaire and focus group discussions were thereafter utilized to elicit information from 120 randomly sampled respondents, made up of 15 respondents from each of the six core communities and 30 from the reference community. Descriptive statistics were utilized to analyze collated data.

To determine the major and minor livelihood agro-related activities, respondents were requested to rank a list of livelihood activities into major (2) or minor (1); based on their level of involvement in such activities. Attitude scores were thereafter computed, after

which a mean score of 1.5 (2 + 1 / 2) was utilized to differentiate between major (above 1.5) and minor (below 1.5) livelihood activities.

RESULTS AND DISCUSSION

Agricultural Livelihood Activities of Rural Women

The findings (Table 1) reveal that no agro-based activity was regarded as a major livelihood activity in the core study area, while two activities were considered major livelihood activities in the reference community. These were: root and tuber crop production and maize production. Vegetable cropping and maize production however accrued relatively high involvement scores in the core study area. It is obvious that farming is no more a viable livelihood option in Ikot Abasi because of land appropriation and exclusion by the [powerful] government and industrial concerns. A similar finding is reported by chambers and Conway (1992). An environmental degradation of the remaining marginal land areas has also been observed, thereby rendering land unfit for crop production. This situation may also be viewed in reference to the de-agrarianisation concept of Bryceson (1996) where, because of industrialization and its concomitant effects, there is a (supposed) shift of people and resources from agricultural to non-agricultural production, as an option for independent livelihood in marginalized rural areas. The unfortunate irony is that the major industrial company (ALSCON) that engendered the above scenario has since become comatose, and with it, is myriad of subsidiary and service companies. This situation has led to more people resorting to unsustainable forms of livelihood. The level of poverty and concomitant deleterious effect on the environment is quite high.

Collection of water-based and non-timber forest products in the core area have minor livelihood scores even though for women in most riverine tropical areas, these are sustained sources of non-farm diversified income. Collection of firewood and processing activities (cassava into garri and fufu; and oil palm fruits into palm oil) were important though, non-major livelihood activities in the core area. The importance attached to these two forms of livelihood may have waned over time due to lack of suitable land for cultivation and deforestation which has affected many tree crops and hence scarcity of these products. These are however indisputable important means of livelihood in the core area.

All agricultural activities in the reference area recorded higher levels of involvement than agro-based livelihood activities in the core area. It is obvious that the negative effects of industrialization have exerted a great toll on agro-livelihood activities in the core area.

Effect of Industrialization on Agricultural Livelihood

Focus group discussion sessions revealed that income from agricultural activities in the area was negligible, unlike in the control community where farmers even marketed their raw farm produce in nearby towns, including Ikot Abasi. Core area communities have become net importers of raw foodstuff, and which are normally priced beyond their financial capacity. Hunger and nutritional deficiency are the end products of such situations and as Jafry (2000) asserts, nutritional inadequacy impairs the ability of

people to perform biologically, which in turn effects working capacity. These have more serious consequences on the female folk due to their multiple roles (Lewenhak, 1992).

Enormous reductions in size of cultivated land and outright losses of farmlands have been recorded in Ikot Abasi. This is in consonance with Eboh's (1993) assertion that industrialization often involves the displacement of farmers from their land holdings, thus forcing them to become landless labourers or to cultivate marginal farmlands. The latter are so intensively cultivated, such that when coupled with the abject scarcity of soil replenishing inputs, crop yields are negligible.

Fishing activities and yield have also decreased due to loss of traditional fishing grounds and the recent dredging of the main water artery in Ikot Abasi (Imo River). Dredging has resulted in increased water depth and increased turbidity, which makes it difficult for non-motorized vessels to ply. There is also intense noise pollution; which scares fish away. Also experiencing declines in abundance are natural swamp resources like periwinkles, mudskippers and clams. Non-timber forest products like bush meat, mushroom, afang (*Gnetum africana*) utazi (*Gongronema latifolium*) mkpafere (*Pterocarpus mildbraedii*) and mfang odusa (*Piper guineense*) are also becoming very scarce due to forest and biodiversity losses. Reduction in forest size has led to scarcity of fuel wood (firewood) and the resultant dependence on exorbitantly priced kerosene for cooking.

The disposal of toxic industrial effluents and noxious gaseous emissions from industrial machines have led to environmental degradation including, acidic soils, atmospheric pollution and soil / water contamination.

CONCLUSION AND RECOMMENDATIONS

The Rio Summit declaration stated that '*human beings are the centre for sustainable development and they are entitled to a healthy and productivities life, in harmony with nature*'. Any industrialization policy that increases people's vulnerability to environmental impacts is most unwelcome and should be discouraged. Enhancing the capacity and capability of Ikot Abasi indigenes, as major contributors to food production, qualitative family life and community development is a course worthy of pursuit, especially now that ALSCON is being reactivated. This is to ensure that the adverse effects of the pre-moribund company on the livelihood of Ikot Abasi indigenes are not sustained.

The following guidelines are worthy of consideration:

- The local and state governments should set up revolving micro-credit schemes to enable the people embark on activities in the informal sector. ALSCON management and NGOs involved in micro-credit provision, alike the support and training entrepreneurship programme (STEP) of the growing business foundation (GBF) currently operating around Eket and environs, may also arrange a loan scheme to enable the people to access funds, that would enable them to set up mini fish ponds and broiler farms and also produce quick maturing crops alike vegetables, cucumber and potato etc.

Table 1. Distribution on agro-livelihood activities in the study area

	A Core communities (n = 90)				B Reference community (n = 30)			
Agro-Livelihood Activities	Major	Minor	Attitude Score	Mean	Major	Minor	Att. Score	Mean
Root and Tuber crops production (cassava, yam, cocoyam)	60	30	150	1.7	30	-	60	2.0**
Arable crop production (maize)	68	22	158	1.8	30	-	60	2.0**
Vegetable cropping e.g. fluted pumpkin/ water leaf	71	19	163	1.8	25	05	55	1.8
Tree crops e.g. citrus & oil palm	07	83	97	1.1	24	01	49	1.6
Livestock rearing e.g. goat /fowl	26	64	116	1.3	24	06	54	1.8
Processing e.g. garri, local gin, palm oil, & fufu	62	28	152	1.7	26	04	56	1.9
Collection of forest products e.g. fuel wood	60	30	150	1.7	27	03	57	1.9
Collection of non-timber forest products e.g. mushrooms & fruits	10	70	90	1.0	19	11	49	1.6
Collection of marine products e.g. fish, periwinkle & clams	06	84	96	1.1	02	28	32	1.1

Key ** Major agro-livelihood activity

These products would be well patronized by ALSCON staff and would result in a reduction in the level of importation of these produce from adjoining and farther towns.

- The ALSCON management, in conjunction with Ikot Abasi local government authorities should provide a skill acquisition centre to train interested indigenes in arts and crafts, mechanical trades, food processing and preservation activities. This programme should occur before exposing them to micro-credit schemes, in order to enable them become job-creators, rather than job fillers. On the other hand, educated indigenes should be exposed to short term training opportunities, alike the Exxon-Mobil training scheme, in order to facilitate their employment in ALSCON and its subsidiary companies.

The Federal and State governments should compensate those whose land holdings were forcefully acquired or have been degraded through industrial activities while the Akwa Ibom Agricultural Development Project (AKADEP) and Local Government authorities, should provide improved farming inputs (seeds, fertilizers, pesticides) for farmers with land holdings in order to improve crop yields.

Efforts should be focused by ALSCON industrial authorities on the provision of basic amenities in the host communities.

Finally, to ensure success in all the above listed recommendation, NGOs should endeavour to organize capacity building training activities for the many farmer groups that abound in these communities, so as to enable them better articulate their needs and also take initial steps to help solve their own problems.

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