PLANNING PROPOSAL FOR RURAL INDUSTRIALIZATION OF MUBI REGION, ADAMAWA STATE, NIGERIA

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BACKGROUND OF THE STUDY

Attempts by different administrations in the past to bring rural Nigeria to limelight in terms of development had been made but resulted to failure due to many issues associated with the design and implementation of the programmes meant for rural areas. Some of these issues include lack of understanding of the structure and attitudes of the basic population (Filani, 1977), inadequate unfreezing of the existing social organizations (Mabogunje, 1973), selfishness on the part of people in charge of national affairs (Idike, 1992) and lack of spatial focus in rural development planning. Most of the programmes and schemes that were put in place for rural development from independence (1960) through 90s were programmes meant to boost agriculture so as to improve the productive capacities of rural dwellers because rural development was equated with agricultural improvement. The agricultural improvement did not do well because various studies have shown that no significant success had been achieved by a way of influencing the peasant farmers within agricultural approaches (Adeboye, 1969) to rural transformation. However, Aisha, (2006), explained the reasons for the very limited impact or failure of the National Development efforts on rural environment of Nigeria to be many and varied. The first is the divergence between planned and expenditure and the resultant distortion of the capital programme. For instance, the first National Development Plan (1962-1968), made provision for a total capital expenditure of N1,353.6 million distributed among the economic, social, administrative and financial sectors in the proportions of 67.8%, 7.2%, and 0.6% respectively. Over the plan period, actual public expenditure amounted to N 1,073.0 million of

which the economic, social, administrative and financial sectors accounted for 58.3%, 19.8%, 19.5% and 2.4% respectively (FRN, 1970:13). Thus, there was an overall shortfall of about one-fifth in actual expenditures, but also the allocation was little in favor of administrative sector. The shortfall between planned and actual expenditure amounted to 42.8% and 47.3% in primary production (in rural areas), and trade and industry respectively. The distribution of actual expenditure by sectors over the period of (1970-1974) also revealed a high degree of distortions in the implementation of the second Development Plan.

The second and the most potent impediment to effective plan implementation in Nigeria had been the inadequacy of executive capacity with increase in the scope and capital expenditures of successive plans. The executive capacity constraints on plan implementation had become more serious. The limitations of executive capacity had accounted for not only the general under expenditure towards non-priority areas, but did affect all sectors proportionally (Aisha, 2006).

The third factor is resource constraints, which had hindered plan implementation in the country. The restrictive effects of these factors were particularly strong in the 1962-68 Development plan period when several projects had to be abandoned for lack of funds. Another major shortcoming of the national rural development strategies all those years was that they had been largely sporadic and uncoordinated in nature in most cases, emergency reactions, to crises situations and thus lacked meaningful spatial impact. For instance, the National Acceleration Food Production programme (NAFPP) the Operation Feed the Nation and Green Revolution was all the same in terms of objectives. None of them was given enough time to mature and be appraised before being discarded (Tomari as cited in Aisha, 2006).

Fifth, there is lack of appropriate ideological framework for the total mobilization of the neglected rural majority, their resources and institutions for the purpose of transforming the rural environment. The non-interventionist approach to development planning in Nigeria's capital peasant-based economy perpetuates exploitation and improvisation of the rural peasantry.

The sixth is the perception of development by Nigerians and development policy makers and planners as a colonial legacy consequent upon this is the obsession of this class of people with western bourgeois status quo theories and

models of developments, which are alien to our historical antecedents, cultural background and present economic realities. Nigeria had unknowingly but painfully adopted western underdevelopment models and strategies for developing her economy (Aisha, 2006).

Finally, the Nigerian political system and its occasional approval have very often constituted an impediment to effective plan implementation. Political instability has therefore hindered the evolution of a political culture for the nation and a broad midstream meaningful development programmes. Added to this is the long stay of the military (for more than two decades with their long transition programmes) in the political scene of the country had hindered development because their training and orientation are not in the intricate art of governance and development planning (Aisha, 2006).

STATEMENT OF RESEARCH PROBLEM

Statistics on human development and social provision on Nigeria revealed that the population of Nigeria is increasingly becoming one of the poorest in the world (Human Development Index, HDI 0.416 in 1999). In the last 32years, the federal government of Nigeria applied a variety of concepts, models, methods and strategies in order to have a sustained development especially of rural areas in Nigeria. Between 1985 and 1992, the Federal government of Nigeria has experimented with more than eight major programmes for rural development which include: Directorate for Food and Rural Infrastructure (DFFRI) in 1986, Mass Mobilisation (MAMSER) in 1987, Nomadic Education Programme (NEP) in 1986, National Directorate for Employment (NDE) in 1998, River Basin Development Authority (RBDA) in 1976 and Agricultural Development Authority (ADP), Better Life Programme (BLP) for rural women, Family Support Programme (FSP), National Agricultural Land Development Authority (NALDA), Strategic Grains Reserve Authority (SGRA), Accelerated Crop Production (ACP), National Poverty Alleviation Programme (NAPEP) and Vision 2020. With all these programmes in place, the people in Mubi region of Adamawa state still suffering from high level of poverty, inadequate basic infrastructure and services, inadequate water supply, very low standard of living, inadequate or absence of educational infrastructure, health facilities and unemployment. This is an indication of failure of the programmes. This study

is an attempt to adopt rural industrialization as strategy for Rural Development in Mubi region of Adamawa state, Nigeria.

The aim of this study is to assess the resource base of Mubi region with a view of making proposal for rural industrialization of the region. This can be achieved through the following objectives:

a. Identifying existing industries by types and location in the region
b. Investigating the types and sources of raw materials for the industries in the region
c. Examining infrastructure provision in the urban and rural settlements in the region
d. Advancing rural industrial development proposal for the region.

THE STUDY AREA

Mubi region of Adamawa state was under the control of Northern Cameroun before the independence of Nigeria as a German colony of the Cameroun. In 1961, the first and last premier of Northern Nigeria, late sir Ahmadu Bello urged the inhabitants of this region (after a UN plebiscite) to join Nigeria as a Republic and was later named Sardauna province (Aminu, 2011). However, with the creation of Adamawa state in August 1991, out of the former Gongola state, the region became one of the four administrative divisions of Adamawa state. These administrative divisions include: Adamawa, Ganye, Numan and Mubi. The region is made up of five local government Areas of Madagali, michika, Maiha, Mubi North and Mubi South (Aminu, 2011). The location of Adamawa State in Nigeria, Mubi Region in Adamawa State and settlement distribution in the Region are shown in Figures 1, 2, and 3.

Mubi region is located within the North East basement of Nigeria. The rocks are pre pan African orogenic rocks (gneiss magmatite rocks) or pan African granitites. The gneisses and migmatites occupy mainly the lowlands as small outcrops. They are bended, foliated with felsic and ferromagnesian minerals forming the light and dark bands respectively (Adebayo, 2010).

The geological structures predominant in the area are dykes, quartz veins, folds, shear zones etc. The dominant tectonic directions are NW-SE marking pre African deformation and NE-SW marking Pan African thermo tectonic episode (750 + 150 m.y.) (Bassey, 2004).Basic extrusive rocks belonging to the

Cameroun volcanic line are found in the area but are minor in spatial occurrence. They are tertiary-recent in geologic age (Adebayo, 2010).

Mubi region generally belongs to the highland relief region of Adamawa state (Adebayo, 1997; Tukur, 1999). The region has a distinct relief configuration with series of mountain ranges lying along its eastern border with Cameroun. The elevation of the region above sea level is generally high compared to other parts of Adamawa state. Elevation ranges from about 400m to 1500m.Basically, the relief of the region is divided into three zones: the highlands/mountain ranges, the high plains and the lowlands.
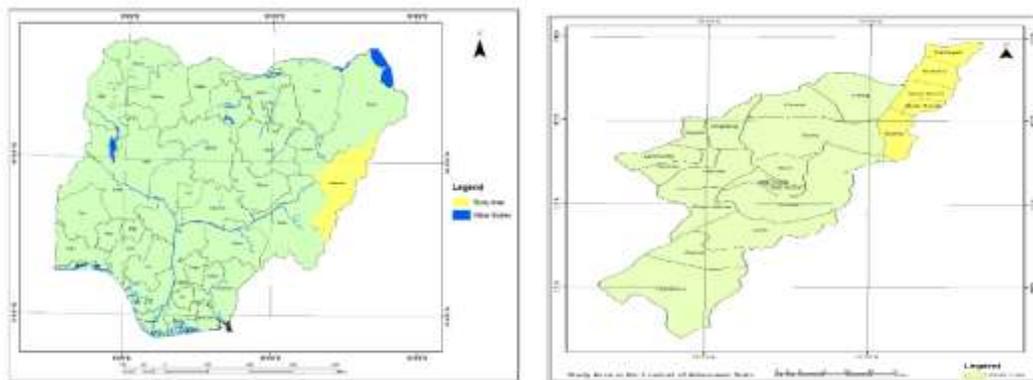
Figure: 1 Map of Nigeria showing Adamawa State (source: GIS)   Figure: 2 Map of Nigeria showing Mubi Region (source: GIS

Figure: 3 Map of Mubi Region showing Settlement Distribution (Source: Adamawa in Maps 1998)

Conceptual Framework of the Study

The word "rural" means different thing to different people. The American Bureau of Census classifies a group of people living in a community having a population of not more than 2,500 people as rural, whereas in Nigeria, the Federal Office of Statistics defines a community with less than 20,000 people rural.

Generally speaking, according to Afolayan (1995) as quoted in Basil (2012), rural areas are easily identified by other various criteria, apart from population. Such criteria include level of infrastructural development, occupational differentiations, housing, community planning, and abject poverty as a result of the combination of these factors.

Road networks, educational institutions, water supply, electricity, health facilities, communication, etc. The rural area lacks most if not all of these infrastructures and where they are available the quality as well as quantity is usually below desirable standard. Most rural dwellers earn their living by engaging in subsistent agriculture production. Housing in rural areas is generally below the standard an average person will be proud of. Community development activities in the rural areas are often carried out with little or no planning at all, such that future development activities cannot be undertaken without interfering with the existing structures.

Rural industrialization has therefore been described in different ways by different authors, depending on the discipline or line of thought of the person concerned. This is because the subject of rural development is multidisciplinary and the definition of such author will depend on the area where he/she focuses attention. But all definitions have a central theme, which is "improvement of living conditions of the rural people". What the different definitions do is to lay emphasis on the process of getting the central objective of rural development achieved. Industrialization is the period of socio-economic change that transforms a human group from an agrarian society into an industrial one. It is part of a wider modernization process where social change and economic development are closely related with technological innovation particularly with the development of large scale energy and metallurgy production. It is the extensive organization of an economy for the purpose of manufacturing (Aisha, 2006).

Industrialization also introduces a form of philosophical change where people obtain different attitudes towards their perception of nature and a sociological process of ubiquitous rationalization. Rural industrialization is considered as a vehicle for the generation of productive employment and income for the rural poor and as a means of productively absorbing a part of the addition to the rural labor for that. Chuta and Selthuraman (1984) defined rural industrialization as an employment-oriented development strategy necessarily implying greater emphasis on small-scale activities. These not only offer greater employment and income opportunities for the rural poor in particular but also facilitate their participation in development.

THEORETICAL FRAMEWORK OF THE STUDY
A.   The Central Place Theory

Theories are generally an impression of situations based on simplifications of reality to enable reconstruction and modelling of the reality. They are based on assumptions therefore, that holds certain things 'constant' and allows the variation of others to analyse behaviour or create scenarios (Sani, 2013). The theory of Central Places envisioned what happens in a space economy (or region as we refer to it here) regarding the structure of the settlement system under natural circumstances should the following assumptions be upheld:

- That the region has an initial uniform distribution of population
- That the region has a uniform (ubiquitous) distribution of natural resources
- That there is no obstacle to movement apart from distance being the only source of friction.

Furthermore, Sani (2013) posits if the above assumptions are upheld, a natural self-reinforcing process will be at work such that a settlement system will emerge with concentrations of activity in a few places which will become 'central' to their immediate area of influence. A core-periphery relationship will arise and sustain the set up and the status will be self-reinforcing but subject to limitations imposed by the presence of similar centres that also have a corresponding sphere of influence. The net effect will be for the emergence of a lattice of 'central places' with corresponding areas of influence covering the whole space.

According to this schema, the distribution of the central places under those assumptions will reflect a perfect pattern in terms of the distances between the

centres and the size of their areas of influence. However, following the same principle of initial dominance of a few settlement areas, some of the centres will dominate other centres and assume a higher status. They become centres with higher functions in addition to those of the lower centres. This process continues indefinitely resulting into the emergence of different hierarchies of centres.

Walter Christaller's Theory of Central Places provides that with transport costs at 0 level and ubiquity in the distribution of resources, there is a natural tendency for the formation of centres or cores where commerce and manufacturing is concentrated to serve a peripheral area that is hexagonal in structure. The system graduates to higher and higher hierarchies until the entire space-economy is covered by a lattice of settlements that rigidly structured.

This theory has provided much of the foundation for the development of subsequent refinements and the theoretical underpinnings for development planning policies and strategies that still resonate as the framework for thinking in the field. The relevance of the theory is that

- It provides a basis for conceiving actual patterns in the distribution of settlement in regions, being itself the result of studies conducted in the region of Southern Germany
- It advances the rationale for stimulating growth in the space economy through a rational balance in the structure of the settlement system
- It became the foundation for similar proposals both in theory and practice
  When this approach is applied in Mubi region, it will encourage rural industrialization as every sub-region will have a central place for the provision of facilities and services. However, the constraint that may retard the industrialization processes is that, there is variation in the socio-economic, cultural and physical characteristics which is not match with the homogeneity requirements of the central place within a region (Sani, 2013).

B. **The Growth Pole Theory**

The initial proponent of this strategy and the logic behind it was Perroux (1954) in a proposal for regional development planning in France. This is perhaps the main representation of the thoughts in directing policies for achieving regional development along the lines of utilizing the settlement system. It postulates in line with the basic ideas in central place theory that development impulses in regions are localized in polarized activity centres that to be the engines of

growth for the whole region. By promoting the establishment or growth of these centres, the seeds for further growth in the region could be sown. Proceeding with this is the view in this strategy that these centres are in essence 'poles' that can propel development. Therefore the main thrust of regional development policy is to encourage these poles and have them spread as widely as possible. The development impetus should 'trickle down' from these poles to other parts of the region linked to it (Perroux, 1954 as cited in Sani, 2013). This position is in direct contrast to the existence of primate centres in which a few or one settlement dominates an entire space economy. The growth pole strategy represents the classical top-down approach to development the philosophy of which is for the region to depend on the performance of few growth nuclei from where a spread down effect would result (Sani, 2013).

C.   The Agropolitan Theory

A reversal (somewhat) of the presentations in the theory of Growth Poles was advocated on the principle that rather than relying on a few centres, development impetus should be based on rural settlements which should serve as the propellers of regional growth and development. The kernel of the idea is that agriculture, being the dominant activity in rural areas, should serve as the spring board for development based on localized industrial establishments.

This represents a bottom-up strategy in contrast to the growth pole strategy examined earlier. The rural settlements are to serve in this instance as 'agropoles' the collectivity of which should propel the entire region.

D.   The Polarized Activity Centre Approach

This approach was designed with a view to making available both spatial models and analytical techniques that will be acceptable in all regions it may not be possible to follow a symmetrical pattern due to physical, socio-economic, administrative, historical or political constraints. Models of polarized development are based on the fact that economic and social development has been historically characterized by increasing geographical concentration both at a global level and within single countries as a result of the uncontrolled action of powerful polarizing and centralizing forces inherent to the development process itself (Aisha, 2006). The main aim of these models therefore is to demonstrate how and why regional imbalances in development occur and how eventually the regions of a nation are spatially integrated over time.

E.   The Cumulative Causation Theory

One pioneering attempt to explain the spatial pattern of development was made by Myrdal (1957) and Hirschman (1958). They argued that differences in development are the natural outcome of economic development and the inevitable result of market forces. They emphasized the critical role of innovation adoption in spatial patterns of development. The locations of innovation generation and initial adoption, then, become of major geographical significance, particularly if the same locations keep recurring overtime. The model of cumulative causation therefore suggests that the adoption of innovations is most likely in areas of rapid economic expansion which possess the appropriate resources and entrepreneurial attitudes and where change is socially acceptable. Thus, successfully growing areas attract even more economic activity directly or indirectly by means of the enhancement of further invention and innovation possibilities. Growing areas thus maintain their initial advantage. The process is circular and cumulative. The process involves a multiplier effect because a new or expanding economic activity in an area creates extra employment and raises the total purchasing power of the population. The extra population and greater purchasing power increase the demand for houses, schools, consumer goods and services, thus creating even more employment. The new industries introduced into the area will generate demands for local goods and services. It may also attract related industries which use its products or supply it with materials. As expected, these will be reflected in further increases in employment and expansion in services public utilities and construction. The resulting larger labor pool, expanded market and improved infrastructure and services are bound to attract more economic activities which need this increase in city-scale to make production profitable. They therefore benefit from the agglomeration economies that the larger city allows. Consequently, the process of growth is cumulative and becomes self-sustaining (Bradford and Kent, 1977).

IV. Methods

Primary data were sourced through sets of questionnaires administered to collect data from the five local government councils. This is in the area of road networks and their lengths, number of schools and related educational institutions, houses connected to the national grid, number of health facilities, water supply systems and distribution and public facilities in the region.

There are two hundred (200) identified settlements in the area. The population of the region as revealed by the 2006 National population census was 682, 026 people. This figure was projected to 2014 which is now 1, 007,663. This study found it convenient to cover 10% of the 200 identified settlements. This implied that 20 settlements out of the 200 identified settlements were interviewed.

Sampling techniques applied in this study are cluster and systematic sampling techniques. The 200 settlements in the region are the clusters. 10% of 200 are 20 settlements which were selected systematically in the ratio of 1:10 and these was divided into five (5) so that from each local government area four (4) settlements are selected. In this case, every 10th settlement were selected in the five local government areas of the region. Fifteen (15) questionnaires were administered in each of the 20 settlements Data collected were analyzed using tables and percentages. Each item on the questionnaire is tabulated and percentages taken which were used in drawing up inferences for each identified issues

V. RESULTS AND DISCUSSION

(i). Existing Industries by types and location

The industries in the study area as at research time are of two categories traditional and Non-traditional industries. The details of the traditional industries are given in Table 2 and these are found in both the rural and urban settlements of the region.

Here in this chapter, the existing traditional and non-traditional industries in Mubi region were investigated and their distribution in units in the five local government areas that constitute this region is displayed. The traditional industries include pottery, basket, zana mat, and rope making in the rural areas. Others include hide and skin processing or local leather works, local clothes and hat weaving (Hula) and blacksmithing as the source of local farm implements in the rural areas.

Non-traditional group of industries in the region include block industries, sachet or pure water factories, carpentry works, bakeries and fabrication/wielding works. These groups of industries are usually found in the local government headquarters which are more populated than the villages in the area. These industries also serve as major sources of employment to the teaming youth in the area since they require unskilled labor (especially sachet water and block industries). They are located mostly in Mubi, Madagali, Michika and Gulak

Towns. Table 1 shows details of the traditional industries according to local government Areas. Mubi North, Michika and Madadgali have 65, 55 and 45 traditional industries respectively.

Non-traditional industries common in Mubi region include Block industries, sachet water factories and bakeries. Each local government area in this region is endowed with one or two of these industries the distribution of which is given in details in Table 2.

Tables 1 showed number of traditional industries per local government area and indicated that both traditional and non-traditional industries in Mubi region are concentrated in three local government areas of Mubi North, Madagali and Michika with Mubi North having the highest number of both traditional and Non-traditional industries (sixty- five traditional and seventy Non-traditional industries).

Table 1: Showing Existing Traditional Industries in Mubi Region.

L.G.A	Settlement	Industry	Units
(1) Mubi North	Mubi Town	Blacksmithing/weaving	25
	Mayo Bani	Blacksmithing/Rope	10
	Muchala	Pottery/Rope/calabash	10
	Mijilu	Zana mat/calabash/pottery	15
	Vimtim	Pots/calabash making	5
(2) Mubi South	Dirbishi	Blacksmithing/Pottery/Rope	5
	Yewa	Blacksmithing/Pottery	5
	Mugulbu	Ropes/Blacksmithing	5
	Gella	Clothes weaving(gwado)	5
(3) Maiha	Sorau	Calabash/Blacksmithing	10
	Mayo Nguli	Blacksmithing	5
	Pakka	Clothes weaving/Mats	5

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	Belel	Clothes weaving	5
(4) Madagali	Duhu	Cap/clothes weaving/pottery	20
	Kirchinga	Blacksmithing/pottery	10
	Gulak	Pottery/Blacksmithing	15
(5Michika	Watu	Blacksmithing/Ropes/calabash/Pottery	20
	Michika Town	Blacksmithing/calabash/Pottery/Ropes	20
	Bazza	Pottery/Blacksmithing/Ropes	15

Source: Field Survey, 2014.

Table 2: Showing Existing Non-Traditional Industries in Mubi Region

L.G.A	Settlement	Industry	Units
Mubi North	Mubi Town	Block industry	10
		Sachet/pure water	10
		Carpentry/wielding	40
		Bakeries	10
Mubi South	Gella	Carpentry/wielding	20
		Sachet/pure water	2
		Block industry	4
Maiha	Mayo Nguli	Carpentry/wieldng	10
		Sachet/Pure water	1
		Bakery	1
Madagali	Gulak	Carpentry/wielding	12
		Sachet/pure water	3
		Bakery	5
	Madagali Town	Bakery/carpentry	20
		Sachet/pure water	3
Michika		Bakeries	15
		Carpentry/wielding	20

Source: Field Survey, 2014

It is followed by Madagali in terms of Non-traditional industries (forty-three non-traditional industries). Michika has the least number of non-traditional industries according to this study (Thirty-five non-traditional and fifty-five traditional industries).

(ii) Existing raw materials in Mubi region

Mubi region is blessed with both agricultural and non-agricultural resources. Non-agricultural raw materials common in the area include clay and sand details of these raw materials as at research period are given in Table 3.81 % of respondents have clay as available raw materials in their communities. This means that clay is among the resources common to the region in question. The people in this area also engaged in agricultural practices in which they grow different types of food crops as details of these agricultural raw materials is given in Table 4 of this study.

51 % of total number families interviewed grow between 6-10 bags of food/cash crops.

According to the survey conducted, the raw materials found in the region include agricultural and non-agricultural resources. The agricultural products are both cash and food crops. Cash crops include sugar cane, cotton, groundnut and soya beans while food crops common in the area are beans, maize, millet, Bambara nut, Guinea corn, Rice, Irish/sweet potatoes, and tomatoes.

The Tables 3, 4 and 5 showed that the region is endowed with abundant resources that range from agricultural and non-Agricultural products. The resources are found in all the five local government areas in the region. Clay, Beans, Guinea corn, Ground nut, Maize, and rice are cultivated in all the villages in this region. Sugar cane and Cotton are cultivated in Mubi North/Mubi South and Michika local government areas in commercial quantity so also Bambara nut and millet.

The region also is blessed with abundant land for pasture which enabled the people to rear different ruminant animals as given in Table 6.

Table 7: indicated that 33% of the respondent acknowledged that they rear sheep and each family owned at least two herds, 30% reared Goats, 21% reared cows and 10% reared pigs. The areas in the region where cows, sheep and goats are domesticated are Mubi North, Mubi South and Maiha local government councils with Mubi North and Maiha carrying the largest number because of

the Fulani population in Digil, Mayo Nguli, Konkol and Belel in Maiha and Mubi North local governments. For the purpose of this research 200 settlements were identified in the region the names and the local areas that these settlements are found is given in Table 7.

Table 3: Showing Existing Raw Materials in Mubi Region.

S/no	Type of raw material	Respondent	Percentage (%)
1	Clay	240	81
2	Sugar cane	26	9
3	Cotton	18	6
4	Sand	12	4
Total		296	100

Source: Field survey (2014).

Table 4: Showing Existing Food Crops in Mubi Region

S/no	Type of crop in the region	Respondents	Percentage
1	Beans	40	14
2	Guinea Corn	40	14
3	Maize	40	14
4	Cotton	10	3
5	Ground Nut	40	14
6	Bambara Nut	16	5
7	Tomatoes	15	5
8	Rice	40	14
9	Millet	30	10
10	Irish/sweet potatoes	25	7
Total		296	100

Source: Field survey (2014).

Table 5: Showing Quantity of Crops produced per family in Mubi Region.

Type of crops	Quantity in bags per family	Respondents	Percentage
Beans	0-5	19	6

	Animal type	**Herds per family**	**Respondent**	**Percentages**
1	Cows	1	63	21
2	Sheep	2	97	33
3	Goats	3	90	30
4	Pigs	4	29	10
5	Poultry	5	17	6
Total			296	100
G/corn	6-10	150	51	
ize	11-15	45	15	
Cotton	16-20	50	17	
G/nut	21-25	10	3	
Bambara nut	26-30	4	1	
Tomatoes	31-35	14	5	
Rice	36-40	2	1	
Millet	41-45	2	1	
Total		296	100	

 Source: Field survey (2014).

Table 6: Showing types of Animals reared/number of herds per family
Source: Field survey 2014/
Table 7: Showing Settlement Distributions in Mubi Region.

S/no	**Madagali**	**Michika**	**Maiha**	**Mubi North**	**Mubi South**
1	Duhu	Bazza	Maiha Gari	Mubi Town	Gyella
2	Kirchnga	Watu	Belel	Muchala	Mugulbu
3	Gulak	Vi	Mayo Nguli	Mijilu	Sebore
4	Bitku Central	Michika Town	Sorau	Mayo Bani	Ngavahi
5	Bajilu	Zah	Mbila	Didif	Kubur
6	Gadadamai	Dibiki	Pakka	Muva	Girji
7	Kuda	Futu	Konkol	Vimtim	Mawa

8	Jiddel	Garta	Konkol 1	Jarengol	Mbuluma
9	Dar	Mayo Vamde	Konkol 2	Zang	Dirbishi
10	Kaya	Dzurok	Boloko	Kotirde	Ba anwa
11	Gwaba	Kwaliya	Kasamgila	Kamvda	Mahuda
12	Duvala	Kubi	Bungel	Jambula	Gandira
13	Kopa central	Dirgimi	Jamtari	Gmablam	Beta
14	Shuwa	Pambula	Tambajam Kolwa	Chambal	Kwaja
15	Kolbadi	Murva	Wuro Boka	Ngorguwal	Giriburum
16	Turjakiva	Kuburdade	Wuro Mallum	Tapare	Sahuda
17	W. Gas A	Waranki	Sabon Gari	Digil	Kinga
18	W. Gas B	Moda	Wuro Ladde	Yaza	Shallawa
19	Kojiti	Ghumchi	Mabengechi	Wuro Barka	Kagi
20	Sukur	Mbororo	Kowagol	Sabon Pegi	Ayuwa
21	Toghum waziri	Wuro Bokki	Jaba	Wuro Harde	Mawa
22	Wagga	Sina Kwande	Karewa	Wuro Gude	Nasarawo
23	Kushiri	Kamalgu	Maksha	Nasarawo	Duvu
24	Muduvu	Nyiburu	Furemane	Ngoga	Muchala
25	Mildu	Kankala	Malko	Lokuwa	Mujara
26	Wakara	Tilli	Bwade	Shuware	Nduku
27	Kusere	Khour kasa	Domayo	Wuro Patuji	Viya
28	Chakawa	Bokko shike	Bokken	Sebore	Yewa
29	Mandaka	Zah Biliza	Kwashari	Wuro Bulede	
30	Nulang	Sina Gali	Gashga	Wuro Usman	
31	Sabon Gari	Whate	Lugdira	Madanya	
32	Sabon layi	Kalu	Kilange	Gaza	

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33	Turmachacha	Khaziwa	Kilange	Kwa
34	Danzang	Wadawoli	Lubum	Lira
35	Wassa central	Kwatala	Wuro kuratu	Hurda
36	Vizik	Karazah	Pette	Maduva
37	Gada Mahdil	Shaffa	Lainde Masagala	Kasuwan gada
38	Humsa	Whobazi	Tukultare	Muvur
39	Kwamburo	Tsukumu	Wuro Kurori	Munduva
40	Wuro sara	Sina Mala	Pegin	Kirya
41	Fugudum	Kopali	Wuro Alhaji	
42	Puva	Lduba	Kindagirma	
43	W. Ngayadi	Kandza	Mayo Tiyel	
44	Hyambula	Kwa'apali	Mayo Vamde	
45		Vwakaghe	Kwa'aboon	
46		Kammale	Hunbutudi	
47		Kali	Skmari hudu	
48		Dlechim		
49		Karapka		

Source: Field survey, 2016

(iii).   Existing Markets in Mubi region

The buying and selling of both agricultural and non-agricultural produce in the region are carried out using the markets in the region. According to Gaurav Akrani, 2012 markets can be classified into three based on their geographical location. These three classes include international, regional and local markets. An international market is that type of market whose demand and supply of commodities go beyond national borders and so also the buyers and sellers. A regional market is one in which buyers and sellers are found within a region. They are markets that served only a local government or group of local government within a region. Local markets serve only few communities within a locality. The types of markets found in Mubi region and their location in the five local government areas are given in Table 8 as investigated by this research. The international, regional and local markets in Mubi region are grouped further into local governments and the details are shown in Table 9. 76% of the markets

(32 of total number of markets) in Mubi region are local markets. These are markets in which buyers and sellers are found within the local government areas where the markets are located. They serve only the demands of the villages or communities.

(iv). Existing Infrastructure in the region

Data obtained from Respondents on infrastructure in the region are detailed in Tables 11 and 12. The study area main sources of water for domestic and industrial uses are given as seen in Table 10. The major sources of water in Mubi region are Rivers, Hand-dug Wells, Boreholes and some few piped sources.

Table 11 showed that 33% of the respondents acknowledged that they have primary schools in their communities, 30% have secondary schools, and 15%, 13% and 9% have college, polytechnic and university in their communities. Large proportion of the respondents acknowledged that roads conditions are bad in the region as indicated in Table 12. This situation applies to both urban and rural settlements.

Table 8: Showing Existing Markets and their locations in Mubi Region

S/No	Markets	Location	Catchment area	Days
1	Shuwa	Madagali	Local	Sunday
2	Vwakaghe	Michika	Local	Sunday
3	Mubi town	Mubi North	International	Tuesday
4	Gulak	Madagali	Regional	Wednesday
5	Sorau	Maiha	Regional	Sunday
6	Belel	Maiha	Regional	Monday
7	Bazza	Michika	Local	Tuesday
8	Mjchika Town	Michika	Regional	Saturday
9	Kasuwan Gada	Mubh North	Local	Sunday
10	Kwaja	Mubi South	Local	Sunday
11	Gella	Mubi South	Local	Thursday
12	Mujara	Mubi South	Local	Friday
13	Sina	Michika	Local	Saturday
14	Kwa	Mubi North	Local	Thursday
15	Vimtim	Mubi North	Local	Saturday
16	Maduva	Mubi North	Local	Saturday

17	Duvu	Mubi South	Local	Friday
18	Nduku	Mubi South	Local	Saturday
19	Maiha Town	Maiha	Regional	Friday
20	Wuro Ladde	Maiha	Regional	Tuesday
21	Dirbishi	Mubi South	Local	Wednesday
22	Muva	Mubi North	Local	Sunday
23	Digil	Mubi North	Local	Sunday
24	Muchala	Mubi North	Local	Monday
25	Kirchinga	Madagali	Regional	Thursday
26	Mildu	Madagali	Local	Tuesday
27	Moda	Michika	Local	Sunday
28	Sahuda	Maiha	Local	Monday
29	Hyambula	Madagali	Local	Sunday
30	Lira	Mubi North	Local	Friday
31	Konkol	Maiha	Local	Wednesday
32	Madagali Town	Madagali	Regional	Friday
33	Mubi Main Market	Mubi North	Regional	Wednesday
34	Garta	Michika	Local	Monday
35	Kammale	Michika	Local	Monday
36	Mbororo	Michika	Local	Monday
37	Vi	Michika	Local	Monday
38	Pakka	Maiha	Local	Thursday
39	Kubi	Michika	Local	Saturday
40	Hurda	Mubi North	Local	Saturday
41	Bahuli	Mubi North	Local	Wednesday
42	Yewa	Mubi South	Local	Sunday

Source: Field survey 2014.

Table 9: Showing periodic Markets by Local Government in Mubi Region.

S/No	L.G.A	International	Regional	Local
1	Mubi North	1	1	10
2	Madagali	-	3	3
3	Michika	-	1	9
4	Mubi South	-	-	7

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5	Maiha	-	4	3
Total		1	9	32

Source: Field survey (2014).

Table 10: Sources of Water for Domestic and Industrial Use in Mubi Region.

S/No	Source of water	Respondent	Percentage (%)
1	Well	115	39
2	Bore hole	80	27
3	Piped Water	1	3
4	River	100	34
	Total	296	100

Source: Field survey (2014**).**

Table 11: Showing Educational Infrastructure in Mubi Region.

S/No	Type of Institution	Respondent	Percentage
1	Primary School	97	33
2	Secondary School	90	30
3	College	45	15
4	Polytechnic	39	13
5	University	25	9
Total		296	100

Source: Field survey (2014).

Table12: Showing condition of Roads in the Region.

Road type	Respondent	Percentage
Tarred	110	37
Not tarred	186	63
Total	296	100

Source: Field survey (2014).

Table 12 indicated that 37% of respondents acknowledged that the roads in their villages/towns/communities have tarred roads while 63% of respondents

acknowledged that the roads in their villages/towns/communities have tarred roads**.** Health facilities that include Health Clinics, Primary Health Centers, Maternities, Dispensaries and General Hospitals are found in the area but these facilities are over-stretched due to population growth with only two General Hospitals in Mubi/Michika and two cottage Hospitals in Gulak and Mayo Nguli. Details of these facilities are given in Table 13.

The five local government areas are connected to the GSM services but this is restricted to only urban areas as acknowledged by the respondents Table 14. Electricity supply in the study area is poor in that only Local Government Headquarters are connected to the National Grid. However, to revamp the situation and improve the living conditions of the people in Mubi Region and as a result of this research work, a number of industries were proposed and these include Dairy products, Oil Mills, Rice Mills, Animal Feeds and Meat Processing.

SUMMARY OF MAJOR FINDINGS

(a) Traditional Industries

These set of industries are found in all the local government Areas with each ethnic group specializing in one, two or more types of products. The industries in this category include calabash making, traditional zana making industries for fencing, weaving industry for local or traditional attires (Gwado/Rigan tsaki), and hat weaving (Hula-zanna and Damanga) which is normally used during festivities in the region. Others include Wood carving, Blacksmithing, Hide and skin processing, Rope making, Pottery and local food processing from agricultural products.

Agricultural products processed as food include Millet, Guinea corn, Maize, and Rice for making Waina- a local cake.

Ground nut is used for making groundnut cake (Kulikuli), Beans for making beans cake or Kosai in the native language. Corn stalks are used for making local potash (Dalam), locust-bean tree is used for making Daddawa- a local food seasoning material and flavor. Shea butter, Beni-seed, and soya beans are used as cooking oil. Others common among the Fulanis and Fali communities are Fura and Burkutu- a local gin both are gotten from Guinea corn, millet and maize.

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Table 13: Health Facilities in Mubi Region.

S/No	Type of facility	Respondent	Percentage
1	Health Clinic	64	22
2	Primary Healthcare	42	14
3	Maternity	70	23
4	Dispensary	12	4
5	General Hospital	64	22
6	Absence of facility	44	15
Total		296	100

Source: Field survey (2014).

Table 14: Telecommunication Network in Mubi Region.

Gsm network	Respondent	Sector	Percentage
Yes	178	261°	60
No	118	144°	40
Total	296	360°	100

Source: Field survey (2014).

Table 15: Showing Communities connected to National Grid (electricity).

Electricity	Respondent	Sector	Percentage
Yes	96	115.2°	32
No	200	244°	68
Total	296	360°	100

Source: Field survey (2014)**.**

Blacksmithing is common to all the urban and rural communities in the region. It is one of the most important traditional industries in the region after food processing of agricultural products. This industry is important because it is the source of local farming implements in the area. Products from Blacksmithing include Knives, Cutlasses, and Axes, Weeding hoes, big hoes, local Ploughs, Arrows, Rings and Hand bangles. These items are very important especially in subsistence farming common amongst the tribes and communities in the region. Traditional weaving industries in the region are those for making local clothes from cotton produced in this area. The products include shirts, Gowns (Babban

Riga) and trousers for traditional festivities. Other products from these industries also include Zana from elephant grasses, Mats and Baskets. Products from wood carving include Mortars/Pestles (Turmi/Tabarya), Knife handles, Hoes/Axe Handles, Stools, Food stirring sticks (Burgali) and wooden chairs. Products from Hides and skin are local Bags (Burgame/Boro), Wallets, Knife sheaths and skin mats common in the Muslim communities in the area.

(b). Non-traditional industries

Major Non- traditional industries in this region include Block/Sachet water, Carpentry and Auto- mobile or Roadside Mechanics. They constitute major source of employment for the teaming youth in this region. Raw materials for these industries are locally obtained from the abundant Ground/Surface water sources from the Yetzaram River and the sand around its banks and tributaries. Major Regional and International markets in the region include those of Michika, Madagali, Gulak, Mayo Nguli and Mubi grain and Tike markets. The catchment areas for these markets are all the local governments and neighbouring Cameroun, Chad and Bangui in the Central African Republic. Major items sold are grains and cattle.

INFRASTRUCTURE

Major road network in the region is the Yola-Gombi-Mubi-Michika road which passed through Hong local government. This road is not fully tarred and it is Trunk A road. Another Trunk A road in the region is Mubi-Maiha-Sorau road which is also in bad condition. All roads connecting most of the villages are not motor able especially during rainy season.

Major sources of water in the region are Rivers and Hand-dug Wells in all the five local governments. There is no town or community that is served by piped water supply system only bore holes are available in some few towns and communities.

Highest level of referral for healthcare delivery service in the region is the general hospital. There are two general hospitals located in Mubi and Michika towns serving the whole region with a projected population of 1,007,663. There are two cottage hospitals or primary health Centers in Gulak and Mayo Nguli in Madagali and Maiha local government areas.

The five local government areas in the region are served by 359 public primary schools, 39 post-primary schools and three (3) tertiary institutions. Only three

out of the five local government headquarters are connected to the National Grid and the supply system is generally poor in the urban areas. Most of the villages are not connected to the National Grid.

All the five local government headquarters have the Global System of Mobile Communication (GSM) services of the different Telecommunication Companies. The common ones include MTN, Airtel, Globacom, and Etisalat. In terms of services, Mubi region is not served by any radio or television stations. The state radio and television services Adamawa broadcasting Corporation (ABC) and Adamawa Television (ATV) donot serve the area because it is out of their 100 kilometer service radius and so also the FRCN. There are only six post offices in the region and these are located in Madagali, Mubi, Gulak, Maiha, Bazza, and Michika Towns.

Major Banks in Mubi region include Union Bank, United Bank for Africa (U. B. A), Diamond Bank, Main Street Bank, Guarantee Trust Bank, Unity Bank, Zenith Bank and First Bank of Nigeria. These financial institutions are only operational in Mubi Town. Other local government headquarters have only one or two branches and are even closed due to the security challenges in the North-eastern part of Nigeria as a result of Boko Haram insurgency

(c). Planning Proposals

A total of fourteen (13) industries were proposed in the study area and these set of industries include Meat processing, animal feed, Rice and Oil Mills. The details of the proposals for siting of the proposed industries are given in Table 20 and figure 6.

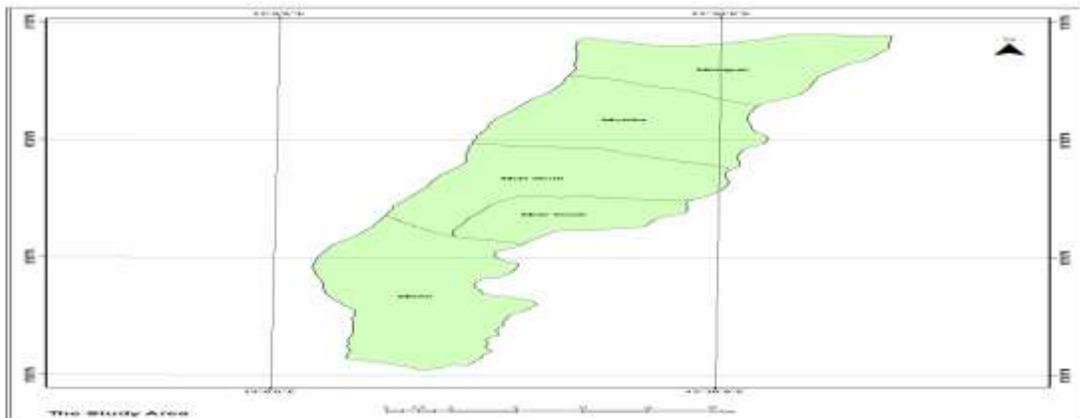**Table 16:** Showing proposed Industries in Mubi Region.

S/No	Proposed Industry	Number of Units	Area to be located
1	Dairy Products	3	Mubi/Maiha/Michika
2	Oil mill	2	Mubi/Michika
3	Rice Mill	2	Maiha/Madagali
4	Animal feed	4	Mubi/Maiha/Madagali/Michika
5	Meat Processing	2	Maiha/Mubi

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6	Mini-sugar company	1	Mubi Town

Source: Researcher (2014).

Figure 6: Map of Adamawa showing proposed industries (Source: Adamawa in Map).

SUMMARY

This research work is aimed at assessing the resource base of Mubi region an area made up of five local governments in Adamawa state of Nigeria. The region is blessed with vast natural and human resources. Agricultural produce in the area include cash and food crops. Food crops found in this area include Millet, Guinea Corn, Cassava, Rice, Sweet/Irish potatoes, Beans and Maize. Cash crops are Ground nut, Bambara nut, Sugar cane and Cotton. These produce are used as raw materials by the traditional industries in the region. Nontraditional industries found in this area common to this area include Block industries, sachet water factories, Carpentry, and fabrication/wielding. These groups of industries are found only in the major towns and the five local government headquarters that constitute the region.

However, apart from these potentials for development the area is faced with the following challenges:
- Inadequate infrastructure such as piped water, Health facilities, Electricity, postal services, Radio/Television services, Road networks and inadequate educational infrastructure.
- Poverty amongst the people

- And land degradation in the form of soil erosion and Vegetation depletion.

CONCLUSION

Rural industrialization as a vehicle for the generation of productive employment and income for the rural poor and as a means of absorbing the labour force of rural areas will definitely contribute to the reduction of rural poverty in Nigeria and in Mubi region in particular when the human and natural resource base of the region is fully harnessed. This however requires the joined efforts of Local, state, Federal Governments, and Private sector/communities to come together for a common goal of transforming the lives of rural populace.

RECOMMENDATIONS

For the proposals in this study to be implemented the following recommendations are herein proffered: Local government councils in Mubi region should embark on the rehabilitation and construction of feeder roads in the region so as to link villages with their local government headquarters.

- Planning Authorities in the region should organize a campaign programme in their various localities to create awareness about planning regulations and the effects of unsustainable agricultural practices on the environment.
- Adamawa state Hospital Management Board should establish more health centers in Mubi region to cover the villages in the area.
- Federal Government through the Federal Road Maintenance Agency (FERMA) should rehabilitate and construct the Gombi-Mubi-Michika Road/Maiha-Sorau Roads as these are the only federal roads in the area and the road that links Nigeria and the Republic of Cameroun.
- The Federal Government of Nigeria through the Federal Ministry of Health should establish a zonal branch of the Federal Medical Center (FMC) in Mubi region as the highest level of referral for the apart from the General Hospital in Mubi town.
- Adamawa state Broadcasting Corporation/Adamawa state Television Authority should extent their services to cover this region.

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