

SOCIAL FACILITIES PROVISION AND RURAL DEVELOPMENT RELATIONSHIPS ON THE JOS PLATEAU-NIGERIA

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ABSTRACT

The study has measured the levels of social facilities provision in the rural areas of the Jos Plateau Region of Nigeria. Over 60 dependent and independent variables were employed in determining the rural development index (RUDEVI). Social sectors covered include health care, educational, water supply, rural roads, places of worship and other general welfare infrastructure and services. The various levels of rural development indices of the 86 communities studied were subjected to analysis of variances (ANOVA), correlation and regression using population size as the focal variable. It was found that population is not a major factor used in the sitting of social facilities in the rural areas of Jos Plateau, which is not supposed to be the case.

Key words: social facilities, rural development index, Jos Plateau - Nigeria

INTRODUCTION

In the present day Nigeria it is very common for politicians, governmental agencies, development partners and donors to equate the presence and/or absence of social facilities in a given community to 'development'. The general perception is to associate 'development' to the presence of certain social facilities. Any government of the day finds it easy to equate what they have achieved, or their performance to the number of infrastructure they have been able to provide to the citizenry.

The Jos Plateau stands out as a unique geographical entity in Nigeria (See Fig.1): The region is famous for its tin mining activities that started more than 100 years ago. Tin mining activities in the area generated a lot of 'development' in terms of bringing in a lot of people from all walks of life into the area; the mining companies built modern houses for its workers; they provided electricity and other social infrastructures.

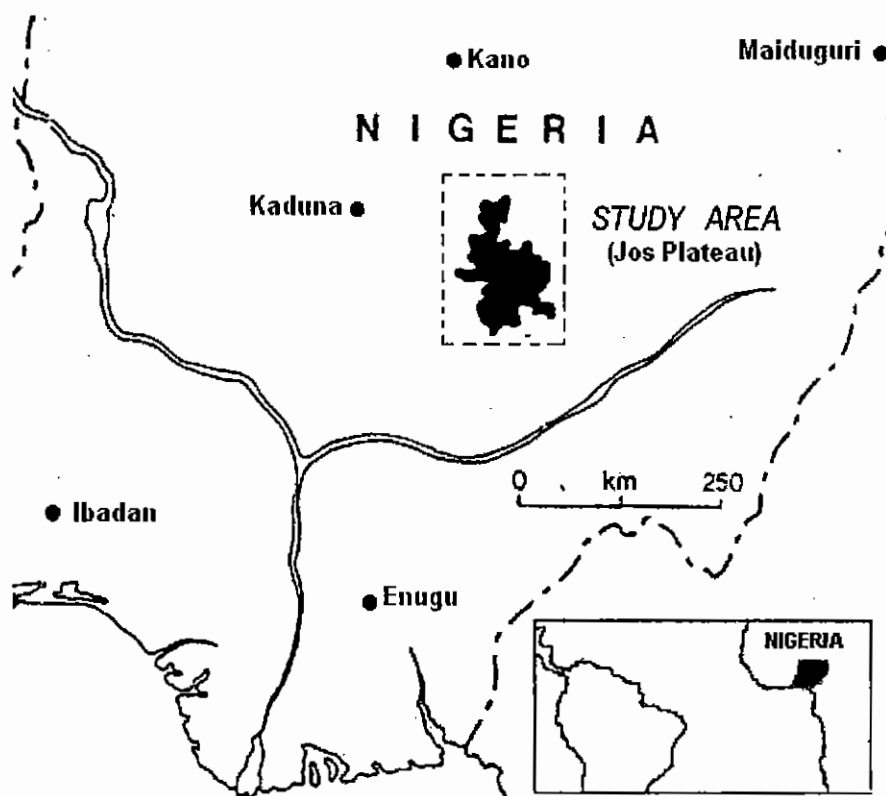


Figure 1. The location of study area

The devastating effects of tin mining activities in the region too can not be overlooked. Huge expanse of land meant for agricultural purpose destroyed; the vegetation too was not spared. The ecology of the area has indeed, been distorted by tin mining activities. Efforts have been made to reclaim back the land. The tin mining industries in the region also provided a number of social facilities in the region that still in use today. For example, a bulk of electricity on the Jos Plateau is presently supplied by the National Electricity Supply Company (NESCO) which is a subsidiary of one of the major tin mining companies in the country. The dwindling fortune of tin mining companies according to *Dogo* [2001] has led to the total collapse of some social facilities once provided by tin mining companies on the Jos Plateau.

Of course, the provision of social facilities in the rural areas can not be overemphasized. But before such vital social facilities are provided it is important to more or less make an inventory of what is available taking into account the threshold population they are expected to serve. It was on this basis that this study was carried out among other reasons to investigate the nature and characteristics of social facilities in the rural areas of the Jos Plateau and at the same time

systematically find out the kind of rural development relationships existing (if any) between the provision of such facilities and population size.

THE METHODS

The Jos Plateau region was carved out from the topographical maps of Naraguta Sheet 168; Lere Sheet 147; Toro Sheet 148; Pankshin Sheet 90; Kurra Sheet 189 and Maijuju Sheet 169 on scale 1:100,000. The region was then divided into 20 by 20 Km sq grids. At least a settlement or community was selected from each grid for detail investigation into the nature and characteristics of social facilities available there. Scores made from the provision of social facilities were recorded using both Lotus and Excel Spreadsheets. Map on Fig. 2 is showing the 86 communities were studied. Either through using Focus Group Discussion or semi-structured interviews 924 persons were interviewed for this investigation. SPSS was used for statistical analyses.

The categories of social facilities covered in this study include:

- (1) Health care facilities and services (THI);
- (2) Educational services and infrastructure (TEI);
- (3) Distribution of places of worship (TWP);
- (4) Types and nature of houses in the rural areas (TCH);
- (5) Domestic water supply;
- (6) Types and quality of rural roads (TRR), and
- (7) Other general welfare infrastructure and services (TGF);
- (8) All of the above when summed up gave the rural development index = RUDEVI.

Specifically, under each category of social sectors the following types of information were sought for and collected. Scoring was made to assess the performance of each sector. The same scoring scale (prism) was used in the 86 communities studied. The information are:

- (1) Health sector contains of:
 - a) The number and types of health institutions in the various communities;
 - b) The range of services offered by the health facilities in the rural areas of the Jos Plateau;
 - c) Categories and number of medical personnel available in the health institutions in the region;
 - d) Degree of the availability of other health care related facilities in the locality like ambulances;
 - e) Pharmaceutical services, chemists and drug store; and
 - f) Distances of the various communities to specialised health institutions.

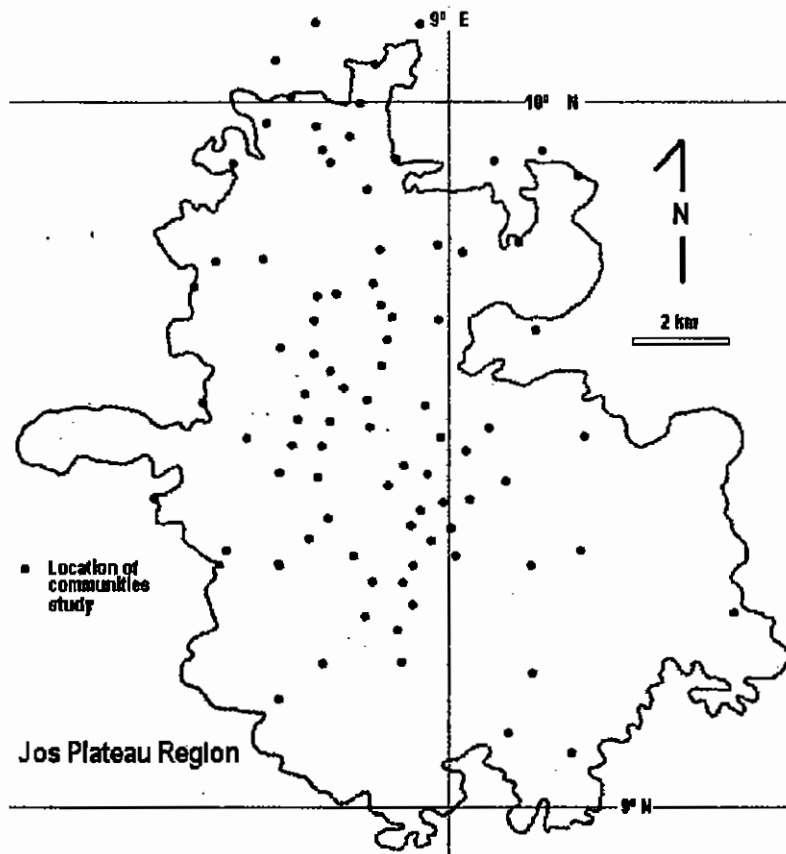


Figure 2. Location of the communities studied in Jos Plateau - Nigeria

- (2) Education sector, consists of a) The number and categories of educational institutions in the communities; b) Distances covered by students to reach educational institutions; c) Physical quality of the educational infrastructure like the building, and; d) Availability of furniture like chairs, desks for the pupils and staff.
- (3) Shelter and Rural Housing sectors, consist of the number, types and physical qualities of houses in the 86 communities studied.
- (4) Places of worship consist of the number and distribution of churches and mosques in the communities.
- (5) Potable water supply, consist of: a) The types, quantity and the dominant mode of drinking water supply in the communities; b) Number of public well and/or boreholes and taps in a given community.
- (6) Types, length and quality of rural roads, consist of: a) The various types and length of physical accessibility (roads) leading to the area; b) The physical quality of major roads leading to the various communities studied.

- (7) Other general welfare facilities and services include of electricity supply, police station, market, post office/postal agency, recreational facilities (e.g. football field), court, telephone, and other unclassified social facilities.

A cursory look at the existing literature will reveal that there are a number of definitions/description of certain terms like social facilities, amenities, infrastructures, social services, etc. nevertheless, it appears that these concepts have many things in common. Hence, most often the terms are used interchangeably. *Byrne and Padfield* [1990] said that:

“A service is ‘social’ if its aim is the enhancement of the individual or the community’s welfare, either through personal action or by collective effort”.

Most often, the term social services is used inter-changeably with, essential services, welfare services and human services; and in some instances with social infrastructure. These are programmes and activities designed to enhance people’s development and well-being. They are organised to promote the social welfare of the people; and particularly the less privileged or the incapacitated ones in the society like the sick ones, destitute, the aged, the unemployed and generally, disadvantaged groups in the society [*Gove, 1981; Barker, 1991*]. Some of the rural dwellers of the Jos Plateau region are seen as incapacitated groups or communities in this study. And the social services include housing, educational and general social infrastructural amenities are considered as social services. *Ihimodu* [1986] is of the opinion that a strong relationship does exist between basic needs, provision of rural infrastructure and quality of life in Nigeria.

At the risk of over-simplification, social facilities/amenities could therefore be seen as those things which aid, ease or make life bearable; those which improve promote and enhance total well-being of the people to improve and aid development.

Infrastructure, according to *Johnstone* [1989] are the underlying structure of services and amenities needed to facilities industrial, agricultural and other economic developments. Infrastructure therefore includes the provision of transport, communications, power supplies, water etc. Infrastructure could be seen as a system which supports the operation of a community, state or nation as a whole to function properly. There is a considerable argument as to whether infrastructure investment is a sufficient (or even a necessary) precondition for economic development. There is also the point as to whether the provision of social facilities should be solely the responsibility of the government, and the extent to which the people should pay for such infrastructures since the primary goal here is ‘social’ as opposed to ‘economic’ benefits. We shall, however, discover that there is an overlap in the description/definition of such concepts.

Crump [1991:131] described infrastructure as goods and service which, while in themselves are not normally directly productive, are essential to the functioning of a sound economy. The term encompasses such things as power generation, transport, roads, housing, education, health and other social services. The infrastructure in developing nations generally needs either to be installed or improved upon; but loans to develop or improve infrastructure in the Third World often impose a massive financial burden on the recipient country because funds are not given with long term view. The New Nigeria (9-7-1996: pp1 & 2) reported that Nigeria needs \$17.4 Billion yearly for the development of urban infrastructures. This is apart from the rural areas where there is the dire need for more of such infrastructures.

A survey of existing literature has revealed that a lot of studies have been conducted on social facilities and services in Nigeria. For example, *Adejuyigbe* [1974] investigated the provision of health centres in the rural areas of the former Western State of Nigeria. *Ayeni* [1985], used a number of complex statistical techniques like a Principal Component Analysis, to classify and analyse the efficiency of the location of secondary school educational facilities in parts of Ogun State. Several studies too have been carried out in other parts of the world concerning social facilities and services. Some of them include those of *Barnett* [1984] on equity, access and resource allocation of planning hospital services in New Zealand. *Chawla* [1983] has investigated and reported existence of positive relationship between infrastructures and rural industrialization in Punjab. *Samkaranarayana* [1963] has investigated the nature of community facilities in certain parts of India.

Ayoade [1982] investigated the provision of health facilities in both the rural and urban areas of the then Plateau state. He subjected the location of the hospitals in the then Plateau state to policy analysis using the criteria of distributive equity and optimum location. He investigated the bed-patient ratio; hospital personnel patient ratio; doctor patient ratio; nurse patient ratio and observed that there is a high concentration of public and private hospitals in Jos, the state capital. *Dotong* [1988] investigated the provision of effective rural health care services in Panksin LGA of Plateau State [*Daloeng*, 1992].

The literature cited above pointed out that health facilities needed substantial rehabilitation so that they could effectively offer the required services. They also noted that a lot needed to be done so as to meet the required standards like the ratio of Medical Doctors to a given population in order to adequately cater for the health needs of the rural people.

As earlier pointed out, *Idachaba* [1985] has attempted to provide the first comprehensive inventory of rural Infrastructure in Nigeria. *Igbozurike* [1983] and *Onokerhoraye* [1984] have also made a bold attempt to examine the availability and status of social services in Nigeria. Other scholars from Ibadan, namely *Ogbuzobe* [1991], *Okafor* [1989] and *Ikporukpo* [1987], have written very extensively on social facilities provision in the country and propounded several

theories to account for their pattern of distribution. *Nwagwu* [1985] has related the concept of population distribution to infrastructural services. The World Bank too in 1996 produced a document on restoring urban infrastructure and services in Nigeria.

Other studies carried out on social facilities and services include *Gould and Leinbach* [1996] investigated and documented what is seen as an approach to the geographic assignment of hospital services. *Hodge and Lee* [1976] have identified the spatial constraints on the location of urban public facilities. *Maos* [1983] analysed and compared the efficiency of services in dispersed and concentrated types of settlement. *Massam* [1979] systematically explained the relationship existing between political geography and the provision of public services. *Revelle* [1970] and *Sawas* [1978] wrote very extensively on central facilities location and the equity issues involved. The researchers asserted that the location of facilities should normally, respect some sort of centrality law bearing in mind social justice and equity [Also see *Rich*, 1979; *Smart and Wright*, 1983; *Write*, 1979].

RESULTS AND DISCUSSION

Performance of the Rural Communities

Table 1 is the summary of the levels of social facilities provision in each social sector in each of the 86 settlements. In addition, it has the final computed index of social facilities' development level for each of the settlement studied. According to Table 1, Vom has the highest social facilities development index (RUDEVI) of 90. In descending order of magnitude this is followed by Miango (84), Naraguta Village (80) Gindiri (75), Panyam (73), Jengre (73), Rayfield (68), Zawan (67), Gyel (66), Mista Ali (65), Lamingo, Laminga and Zarazon area (60), Daffo (58), Kwall (57), Mangu Halle (55), Kurra Falls (55), Heipang (55), Gurum (54) Delimi (54), Forom (52), Babale (51), Dorowa Babuje (50) and New Fobur (50). Then Kuru Jenta (49), Rim Makafo (48), Gindin Akwali (47), Du (47), Tenti (47), Bangan (45), Bischi (45), Gana Ropp (45), Binchin (44), Lobiring (44), Sabon Gida Kanar (44), Ganawuri (44), Federe (44), Jebu Miango (44), Maikatako (44), Gada (43), Gana Daji (43), Fuskan Mata (42), Kuba (42), Kassa (42), Mangun (41), Maijuju (41), Katako Amo (41) and Kunnet (41). Figure 3 is showing the distribution RUDEVI's value of the Jos Plateau.

Table 1. The summary of social facilities provision in each social sector

| No | Name C | Ds | LGA | SR | TC | P | THI | TEI | TWP | TCH | TDW | TRR | TGF | RUDEVI |
|----|------------|----|-----|----|----|---|-----|-----|-----|-----|-----|-----|-----|--------|
| 1 | Jengre | 1 | 1 | 3 | 7 | 5 | 31 | 7 | 9 | 5 | 3 | 6 | 12 | 73 |
| 2 | Fuska-mat | 1 | 1 | 2 | 7 | 4 | 15 | 4 | 8 | 3 | 2 | 5 | 5 | 42 |
| 3 | Bakin kogi | 1 | 1 | 2 | 7 | 3 | 11 | 3 | 3 | 4 | 1 | 3 | 4 | 29 |
| 4 | Binchin | 2 | 1 | 2 | 7 | 4 | 21 | 2 | 3 | 4 | 3 | 4 | 7 | 44 |
| 5 | Kissi | 2 | 1 | 2 | 7 | 2 | 19 | 1 | 2 | 3 | 1 | 3 | 2 | 31 |
| 6 | Kwali | 3 | 1 | 1 | 4 | 5 | 25 | 5 | 5 | 5 | 4 | 4 | 9 | 57 |
| 7 | Jebu-Mian | 4 | 1 | 1 | 4 | 4 | 24 | 2 | 4 | 4 | 1 | 4 | 5 | 44 |

Continue ...

Table 1. The summary

| No | Name_C | Ds | LGA | SR | TC | P | THI | TEI | TWP | TCH | TDW | TRR | TGF | RUDEVI |
|----|------------|----|-----|----|----|---|-----|-----|-----|-----|-----|-----|-----|--------|
| 8 | Miango | 4 | 1 | 1 | 4 | 5 | 37 | 13 | 10 | 5 | 2 | 5 | 12 | 84 |
| 9 | Tiga | 5 | 1 | 1 | 2 | 1 | 12 | 0 | 0 | 1 | 1 | 1 | 1 | 16 |
| 10 | Sabo-Tariy | 5 | 1 | 1 | 4 | 3 | 14 | 2 | 4 | 4 | 3 | 3 | 2 | 32 |
| 11 | Runfan-G | 5 | 1 | 2 | 7 | 3 | 9 | 3 | 3 | 3 | 2 | 6 | 6 | 32 |
| 12 | Gurum | 5 | 1 | 1 | 3 | 4 | 26 | 3 | 6 | 4 | 3 | 4 | 8 | 54 |
| 13 | Mista-Ali | 5 | 1 | 1 | 4 | 5 | 29 | 5 | 7 | 5 | 3 | 6 | 10 | 65 |
| 14 | Majeja | 6 | 1 | 2 | 7 | 3 | 4 | 2 | 3 | 4 | 1 | 1 | 3 | 18 |
| 15 | Katako-Am | 6 | 1 | 3 | 7 | 4 | 18 | 4 | 3 | 5 | 2 | 4 | 5 | 41 |
| 16 | Naraguta- | 7 | 2 | 1 | 6 | 5 | 39 | 6 | 7 | 6 | 4 | 5 | 13 | 80 |
| 17 | Babale | 7 | 2 | 3 | 2 | 4 | 23 | 3 | 4 | 4 | 3 | 6 | 8 | 51 |
| 18 | Mai-Gemu | 8 | 2 | 3 | 7 | 4 | 11 | 1 | 4 | 4 | 3 | 3 | 3 | 29 |
| 19 | Rondon-VI | 8 | 2 | 3 | 7 | 1 | 4 | 0 | 1 | 4 | 1 | 1 | 2 | 13 |
| 20 | Gada | 8 | 2 | 3 | 7 | 4 | 26 | 1 | 4 | 3 | 1 | 4 | 4 | 43 |
| 21 | Federe | 9 | 2 | 2 | 7 | 4 | 17 | 3 | 6 | 3 | 3 | 2 | 10 | 44 |
| 22 | New-Fobu | 10 | 2 | 2 | 7 | 5 | 18 | 5 | 7 | 5 | 3 | 4 | 8 | 50 |
| 23 | Lamingo-(a | 10 | 2 | 1 | 4 | 5 | 27 | 2 | 6 | 7 | 4 | 4 | 10 | 60 |
| 24 | Fusa | 11 | 2 | 2 | 7 | 3 | 10 | 1 | 2 | 3 | 1 | 5 | 2 | 24 |
| 25 | Maijuju | 11 | 2 | 3 | 7 | 5 | 21 | 3 | 2 | 4 | 1 | 3 | 7 | 41 |
| 26 | S/Gida-ka | 12 | 2 | 1 | 1 | 5 | 18 | 3 | 5 | 4 | 2 | 4 | 8 | 44 |
| 27 | Sot | 12 | 2 | 1 | 4 | 3 | 17 | 1 | 2 | 4 | 3 | 3 | 3 | 33 |
| 28 | Gyel | 12 | 2 | 1 | 4 | 4 | 30 | 4 | 7 | 6 | 4 | 6 | 9 | 66 |
| 29 | Delimi | 13 | 2 | 1 | 1 | 5 | 27 | 2 | 8 | 4 | 1 | 4 | 8 | 54 |
| 30 | Rayfield | 13 | 2 | 1 | 2 | 4 | 31 | 7 | 4 | 6 | 3 | 6 | 11 | 68 |
| 31 | Zawan | 13 | 2 | 1 | 2 | 5 | 33 | 8 | 2 | 7 | 2 | 5 | 10 | 67 |
| 32 | Du | 13 | 2 | 1 | 4 | 4 | 24 | 4 | 2 | 5 | 3 | 5 | 4 | 47 |
| 33 | Pasakai | 14 | 2 | 1 | 2 | 1 | 6 | 0 | 1 | 3 | 1 | 5 | 3 | 19 |
| 34 | Kuru-Jenta | 15 | 2 | 1 | 1 | 5 | 23 | 1 | 5 | 4 | 3 | 4 | 9 | 49 |
| 35 | Vom | 15 | 2 | 1 | 5 | 5 | 35 | 17 | 10 | 6 | 4 | 4 | 14 | 90 |
| 36 | Kuru-Babb | 16 | 2 | 1 | 2 | 1 | 14 | 1 | 2 | 2 | 1 | 6 | 3 | 29 |
| 37 | Ganawuri | 17 | 3 | 2 | 7 | 4 | 16 | 4 | 8 | 4 | 3 | 2 | 7 | 44 |
| 38 | Assop-Fall | 17 | 3 | 2 | 7 | 3 | 11 | 1 | 1 | 4 | 1 | 6 | 7 | 31 |
| 39 | Bangan | 17 | 3 | 1 | 1 | 4 | 20 | 4 | 3 | 4 | 3 | 4 | 7 | 45 |
| 40 | Sharubutu | 17 | 3 | 1 | 4 | 4 | 15 | 5 | 3 | 4 | 3 | 1 | 5 | 36 |
| 41 | Kassa | 17 | 3 | 1 | 4 | 4 | 15 | 1 | 4 | 6 | 1 | 6 | 9 | 42 |
| 42 | Rim-Makaf | 18 | 3 | 1 | 1 | 5 | 20 | 5 | 5 | 3 | 3 | 4 | 8 | 48 |
| 43 | Jol | 18 | 3 | 1 | 4 | 3 | 15 | 2 | 2 | 5 | 1 | 2 | 6 | 33 |
| 44 | Werreng-B. | 18 | 3 | 1 | 4 | 4 | 19 | 1 | 6 | 4 | 2 | 2 | 4 | 38 |
| 45 | Werreng-C | 18 | 3 | 1 | 2 | 4 | 15 | 2 | 4 | 2 | 1 | 2 | 7 | 33 |
| 46 | Sho | 18 | 3 | 1 | 4 | 4 | 16 | 3 | 1 | 4 | 3 | 2 | 2 | 31 |
| 47 | Sho-Kamp | 18 | 3 | 1 | 3 | 1 | 4 | 0 | 1 | 1 | 4 | 1 | 2 | 13 |
| 48 | Heipang | 19 | 3 | 1 | 5 | 4 | 19 | 5 | 8 | 5 | 3 | 6 | 9 | 55 |
| 49 | Forum | 20 | 3 | 1 | 4 | 5 | 25 | 4 | 2 | 6 | 3 | 5 | 7 | 52 |
| 50 | Bisichi | 20 | 3 | 1 | 1 | 5 | 21 | 1 | 5 | 4 | 2 | 2 | 10 | 45 |
| 51 | Nafan-Drej | 21 | 3 | 1 | 2 | 3 | 7 | 1 | 3 | 5 | 2 | 2 | 6 | 26 |
| 52 | Rafan | 21 | 3 | 1 | 5 | 4 | 21 | 2 | 1 | 5 | 1 | 4 | 4 | 38 |
| 53 | Dorowa-Ts | 21 | 3 | 1 | 5 | 4 | 21 | 1 | 4 | 4 | 1 | 3 | 6 | 40 |
| 54 | Gindin-Ak | 22 | 3 | 1 | 1 | 5 | 18 | 4 | 4 | 4 | 3 | 4 | 10 | 47 |
| 55 | Yelwa-Exla | 22 | 3 | 1 | 2 | 3 | 6 | 2 | 2 | 3 | 1 | 2 | 7 | 23 |
| 56 | Kura-Falls | 22 | 3 | 1 | 6 | 5 | 17 | 4 | 5 | 6 | 4 | 6 | 13 | 55 |
| 57 | Nding | 23 | 3 | 1 | 2 | 1 | 8 | 0 | 2 | 2 | 1 | 1 | 4 | 18 |
| 58 | Lobiring-R | 23 | 3 | 1 | 4 | 4 | 19 | 3 | 2 | 6 | 2 | 5 | 7 | 44 |

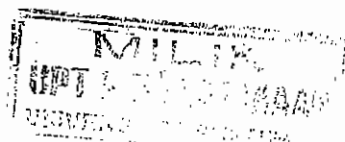
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Tabel 1. The summary

| No | Name_C | Ds | LGA | SR | TC | P | THI | TEI | TWP | TCH | TDW | TRR | TGF | RUDEVI |
|----|------------|----|-----|----|----|---|-----|-----|-----|-----|-----|-----|-----|--------|
| 59 | Dorowa-Ba | 23 | 3 | 1 | 2 | 5 | 18 | 3 | 6 | 4 | 2 | 6 | 11 | 50 |
| 60 | Gana-Rop | 23 | 3 | 1 | 1 | 4 | 16 | 2 | 6 | 6 | 2 | 3 | 10 | 45 |
| 61 | Gana-Daji | 23 | 3 | 1 | 3 | 4 | 15 | 4 | 6 | 2 | 3 | 3 | 10 | 43 |
| 62 | Buka-Bak | 23 | 3 | 1 | 2 | 2 | 6 | 0 | 3 | 4 | 1 | 1 | 2 | 17 |
| 63 | Manjo-Pot | 23 | 3 | 1 | 3 | 4 | 8 | 1 | 4 | 3 | 1 | 3 | 5 | 25 |
| 64 | Kantoma | 24 | 4 | 1 | 1 | 4 | 15 | 1 | 3 | 3 | 2 | 4 | 9 | 37 |
| 65 | Maĩtumbi | 24 | 4 | 1 | 3 | 3 | 6 | 1 | 1 | 1 | 1 | 1 | 2 | 13 |
| 66 | Mangu-Hal | 24 | 4 | 1 | 4 | 5 | 24 | 5 | 5 | 5 | 1 | 6 | 9 | 55 |
| 67 | Panyam | 25 | 4 | 2 | 7 | 5 | 32 | 8 | 6 | 6 | 2 | 6 | 13 | 73 |
| 68 | Gindiri | 26 | 4 | 2 | 7 | 5 | 31 | 10 | 5 | 6 | 4 | 5 | 14 | 75 |
| 69 | S-G-Roboi | 27 | 4 | 1 | 3 | 4 | 13 | 1 | 6 | 2 | 1 | 1 | 4 | 28 |
| 70 | Gamajigo | 27 | 4 | 1 | 3 | 4 | 7 | 1 | 2 | 2 | 2 | 1 | 4 | 19 |
| 71 | Kuba | 27 | 4 | 1 | 4 | 5 | 15 | 3 | 6 | 5 | 2 | 4 | 7 | 42 |
| 72 | Maĩyanga | 27 | 4 | 1 | 3 | 4 | 17 | 0 | 2 | 4 | 1 | 3 | 5 | 32 |
| 73 | Tenti | 27 | 4 | 1 | 1 | 5 | 19 | 1 | 7 | 5 | 3 | 3 | 9 | 47 |
| 74 | Maikatakol | 27 | 4 | 1 | 2 | 5 | 18 | 2 | 7 | 5 | 2 | 4 | 6 | 44 |
| 75 | Dan-Bukur | 27 | 4 | 1 | 1 | 3 | 6 | 1 | 2 | 5 | 2 | 4 | 5 | 25 |
| 76 | Kunnet | 27 | 4 | 1 | 4 | 4 | 17 | 4 | 3 | 5 | 1 | 3 | 8 | 41 |
| 77 | Butura-Ka | 27 | 4 | 1 | 3 | 4 | 7 | 2 | 4 | 4 | 1 | 3 | 6 | 27 |
| 78 | Mbar | 27 | 4 | 1 | 4 | 4 | 17 | 2 | 4 | 4 | 1 | 4 | 5 | 37 |
| 79 | Yelwa-Non | 27 | 4 | 1 | 3 | 3 | 4 | 1 | 5 | 1 | 1 | 1 | 1 | 14 |
| 80 | Sha | 28 | 4 | 2 | 7 | 4 | 11 | 2 | 2 | 4 | 2 | 2 | 5 | 28 |
| 81 | Daffo | 29 | 4 | 1 | 4 | 5 | 27 | 5 | 7 | 4 | 2 | 3 | 10 | 58 |
| 82 | Chakferm | 30 | 4 | 2 | 7 | 4 | 12 | 2 | 2 | 4 | 1 | 2 | 5 | 28 |
| 83 | Mangun | 31 | 4 | 2 | 7 | 4 | 15 | 4 | 2 | 5 | 2 | 4 | 9 | 41 |
| 84 | Jipal | 32 | 4 | 2 | 7 | 4 | 4 | 2 | 3 | 4 | 1 | 2 | 4 | 20 |
| 85 | Kombun | 33 | 4 | 2 | 7 | 5 | 16 | 3 | 3 | 4 | 3 | 3 | 7 | 39 |
| 86 | Tukun | 34 | 5 | 1 | 6 | 3 | 10 | 3 | 3 | 6 | 2 | 2 | 7 | 33 |

Key to Table 1:

| | |
|--------|---|
| No | Serial Number of the community |
| Name_C | Name of the community/settlement |
| Ds | District |
| LGA | Local Government Area |
| SR | Sub-region |
| TC | Type of settlement/community |
| PZ | Population size (0: None; 1: < 500; 2: 500-1,000; 3: 1001-2000; 4: 2001-4,000; and 5: 4000 and above) |
| THI | Total scores made from health-care provisions and services |
| TEI | Total scores made from educational services provisions |
| TWP | Total scores from places of worship provision |
| TCH | Total scores from housing and shelter provision |
| TDW | Total scores from drinking water provision in the rural areas |
| TRR | Total scores from roads provision in the rural areas |
| TGF | Total scores from general welfare facilities and services |
| RUDEVI | Computed social facilities development index – (Sum. of THI-TGF) |



According to Table 1, 46 or 53% of the studied settlements have a RUDEVI index equal to or above the mean which is 41.12, the remaining 40 settlement had RUDEVI indices below the mean. They include the following, Dorawa Tsofo (40), Kombun (39), Rafan (38), Werreng Birom (38), Kantoma (37), Mbar (37), Sharubutu (36), Jol (33), Sot (33), Werreng Camp (33), Tukun (33), Rumfan Gwaman (32), Sabo Tariya (32), Maiyanga (32), Assop Falls (31), Sho (31), Kissei (31), Mai Gemu (30), Bokin Kogi (29), Kuru Babba (29), Sabon Gida Roboi (28), Sha (28), Chakfem (28), Butura Kampani (27), Nafan Dreji (26), Dan Bujuru (25), Manjo Pota (25), Fusa (24), Yelwa Exland (23) and Jipal (20).

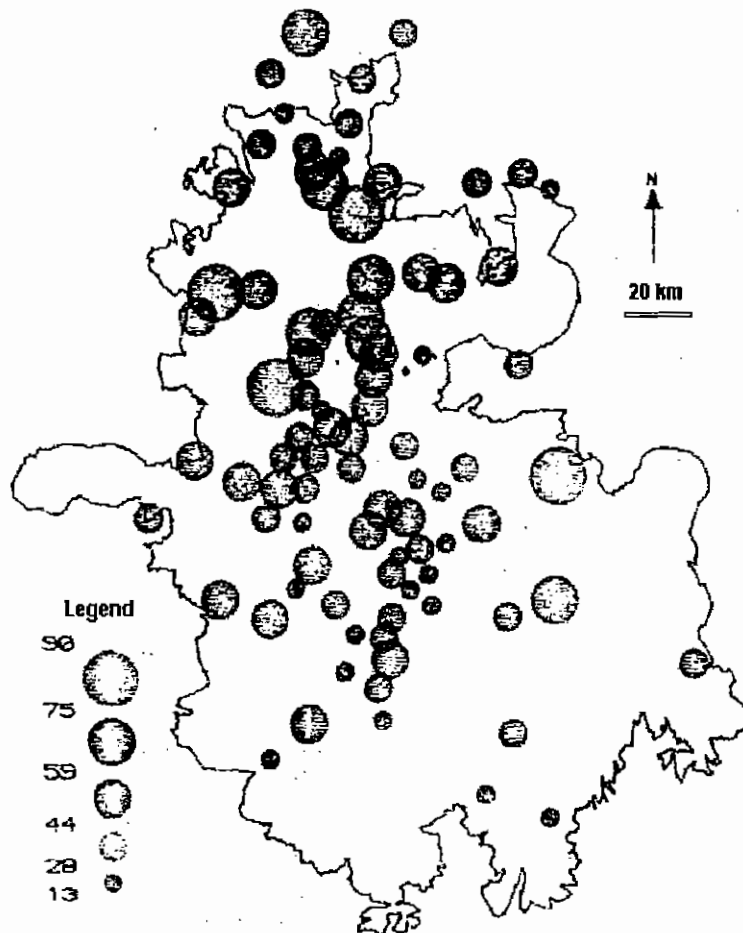


Figure 3. The distribution of RUDEVI's value of the Jos Plateau.

Ten (10) communities with a RUDEVI of less than 20 include Pasakai (19), Gamajigo (19), Majeja (18), Nding (18), Buka Bakwai (17), Tiga (16), Yelwa Nono (14), Maitumbi (13), Sho Kampai (13), and Rondon Village (13). Except for

Randon Village and Majeja (both of which are at the fringe of the Jos Plateau) all the communities with a RUDEVI below 20, are associated with mining activities.

Further data analyse revealed that the RUDEVI values ranged from 13 to 90 with a mean of 41.12. Only six out of the 86 studied communities had a RUDEVI 70 and above. They include Vom, Miango, Naraguta Village, Gindiri, Panyam and Jengre. The modal RUDEVI is between 30 and 44. The lower and upper quartiles of RUDEVI are nine and 50 respectively.

Correlation Matrix and Summary of Descriptive Statistics

The indices were further subjected to rigorous statistical analysis to find out the kind of relationship that exists between one another, including RUDEVI. The various regressions show the correlation matrix for PZ, THI, TEI, TPW, TCH, TDW, TRR, TGF and RUDEVI (see Table 2). The various means show a very strong and positive correlation of 0.940 between health care provision and social facilities development indexes (RUDEVI). This is followed by general welfare facilities and health care of (0.701), and educational services provision versus health care of (0.688). The next positive correlation of 0.469 is obtained between potable water and health care provisions. The least, though still positive correlation of 0.279 is obtained between rural roads and potable water provisions.

There is a positive correlation between population size (PZ) and RUDEVI of 0.717; population size and general welfare facilities of 0.701; and population size versus health care provisions of 0.644. However, it seems that there is a little rural roads provision (0.384).

Table 2. Matrix correlation of the variables conducted in this studies

| | PZ | THI | TEI | TPW | TCH | TDW | TRR | TGF | RUDEVI |
|--------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| PZ | 1 | .644(**) | .519(**) | .596(**) | .531(**) | .401(**) | .384(**) | .701(**) | .717(**) |
| THI | .644(**) | 1 | .689(**) | .557(**) | .569(**) | .469(**) | .576(**) | .701(**) | .940(**) |
| TEI | .519(**) | .689(**) | 1 | .550(**) | .497(**) | .464(**) | .415(**) | .688(**) | .813(**) |
| TPW | .596(**) | .557(**) | .550(**) | 1 | .297(**) | .401(**) | .313(**) | .624(**) | .694(**) |
| TCH | .531(**) | .569(**) | .497(**) | .297(**) | 1 | .379(**) | .503(**) | .602(**) | .665(**) |
| TDW | .401(**) | .469(**) | .464(**) | .401(**) | .379(**) | 1 | .279(**) | .504(**) | .573(**) |
| TRR | .384(**) | .576(**) | .415(**) | .313(**) | .503(**) | .279(**) | 1 | .546(**) | .648(**) |
| TGF | .701(**) | .701(**) | .688(**) | .624(**) | .602(**) | .504(**) | .546(**) | 1 | .861(**) |
| RUDEVI | .717(**) | .940(**) | .813(**) | .694(**) | .665(**) | .573(**) | .648(**) | .861(**) | 1 |

** Correlation is significant at the 0.01 level (2-tailed).

Analysis of Variance of RUDEVI

Table 1 presents the RUDEVI of the 86 rural settlements or communities. The 86 villages were further subdivided into seven categories. Thus sub classification is meant mainly for the purpose of convenience and might not be

strictly taken to be the norm since there are several ways of classifying the settlements in the rural areas of the Jos Plateau.

The results of analysis of variance of the RUDEVI of the (seven) different categories of settlements are summarized in the descriptive statistics. There are 11 settlements in the first category of settlements with a mean RUDEVI of 44.18. The settlements in the first category are those referred to in this study as complete mining settlements where both the quarters of the senior management, the tin processing industries and the labour camps were all located in the same locality. The second category comprising 13 settlements have a mean RUDEVI of 35.46; they are referred to as partly mining settlements because one of the features identified in the first category is missing. The third category has 10 settlements with a mean RUDEVI of 26.80; these are mainly the labour camp of Baraki. The fourth category made up of 21 settlements has a mean RUDEVI of 47.48; these are purely indigenous communities which experienced tin mining to varying extent.

The fifth category of settlements has only four settlements with a mean RUDEVI of 55.75; while the sixth category of settlements consisting of only three settlements has a RUDEVI of 56.00. They include settlements which are very close to local government or state headquarters. The seventh category of 24 settlements had a mean RUDEVI of 39.88. These were settlements are located mainly at the fringe of the Jos Plateau.

The analyses of variance of the RUDEVI of the seven categories were subsequently undertaken, using University of Durham main frame computer and later on in 2005 using SPSSwin. An F-ratio of 3.74 was obtained. This shows that the variations of RUDEVIs among the seven different categories of the studied settlements were statistically significant at both 5% and 1% levels. Hence, the null hypothesis (H_0) that there is no significant variation in the level of social facilities development surfaces in the rural areas of the Jos Plateau is rejected; and the alternative hypothesis (H_1) that there is a significant variation in the level of social facilities provision, and hence rural development on the Jos Plateau is accepted.

The result from ANOVA indicates that other settlements (in category six) which were either LGA headquarters, or were located very close to Jos (the state capital) had the highest average of RUDEVI of (56.00); this was followed by the fifth class of settlements that were purely indigenous ones where mining did not take place. This is an indication that the location of a community (whether it was located close to LGA or Jos) or function (whether it was a LGA, district headquarter) significantly affected the level of social facilities' provision.

The communities with very low scores in the provision of social facilities were the mining/labour camps and/or ghettos. These were communities that once had a number of social facilities and services. But the decline in the tin mining industry has compelled such companies to fold up. Consequently, many of such social facilities had been withdrawn while the remaining ones had gone into disuse. There is the need to invigorate such facilities again.

The other communities that ranked very low in terms of social facilities provisions were those located at the fringes of the Jos Plateau. Access routes to such areas were poor; and they were not located close to either Jos or a LGA headquarters.

CONCLUSION

Based on the findings of this investigation the following are recommended:

1. Deliberate efforts should be made by government to change policies concerning the provision of social facilities on the Jos Plateau by ensuring an increase in the participation of the local communities right from the needs assessments stage, project identification/design, the implementation, monitoring and final evaluation. It is held that if this is done the social facilities so provided will have a sense of ownership by the local communities. They will see such projects as theirs; they will be willing to contribute in several ways and also maintain such facilities. More over, if the participation of the various communities is increased there is the tendency that such projects will address the felt needs of the people.
2. There is also a greater need for the involvement of the private sector in the provision of such facilities. There are many tourist attractions on the Jos Plateau. For example, the many beautiful landscapes, mind paddocks, the extinct volcanic plug near Panyam. The private sector can invest substantial capital harnessing the natural sceneries and developing them. To do this, there will be needed to put in places appropriate infrastructure on the ground like good roads leading to such place; better hotel accommodation for the guests and so on.
3. There is need also to encourage self-help efforts of the various voluntary, non-governmental organizations on the Jos Plateau in the area of healthcare provision, water and sanitation. There are also many international development agencies that have been working on the Jos Plateau. Now that Nigeria has a democratically elected government, it is expected that many of such international NGOs and development agencies will increase in not only the Jos Plateau, but the whole country at large. The opportunities which they offer should be harnessed for the improvement of the lot of the people on the Jos Plateau.

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