

FEDERAL UNIVERSITY OF TECHNOLOGY
MINNA

**THE EFFECT OF AGRICULTURE ON
THE SOCIO-ECONOMIC
DEVELOPMENT OF WUSHISHI
L.G.A. OF NIGER STATE**


BY

Ahmed Umar Utare

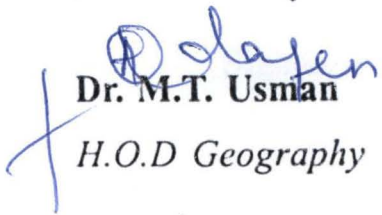
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CERTIFICATION

This is to certify that, this project is a research work undertaken by AHMED UMAR UTARE PGD/GEO/2000/2001/179, and prepared in accordance with the regulations governing the preparation & presentation of project in the post graduate of School, Federal University of Technology, Minna.

 20/03/02
Dr. H.A. Shaba

Project Supervisor

 20-03-02
Dr. M.T. Usman
H.O.D Geography


External Examiner

Prof J.A. Abalaka
Dean

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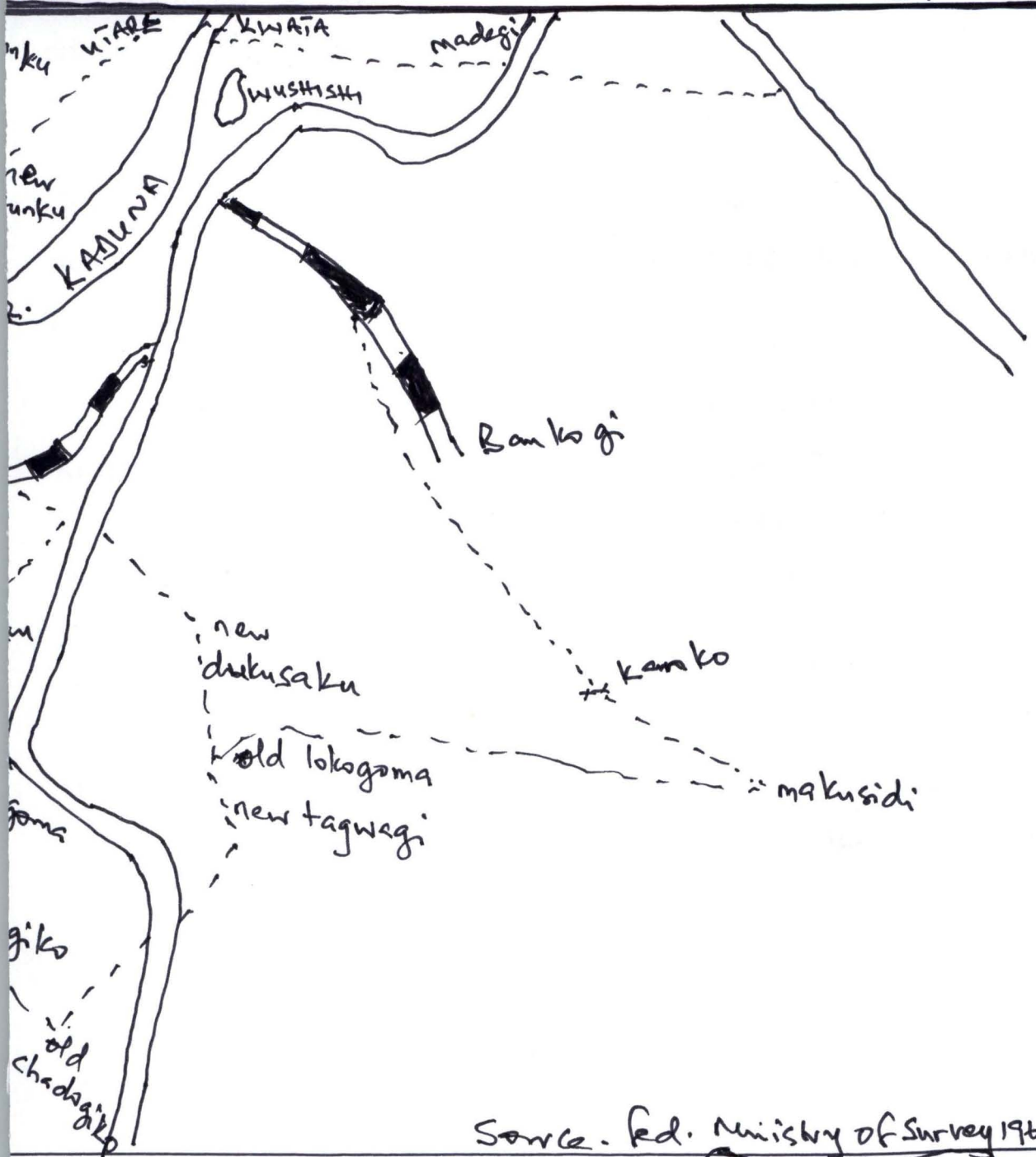
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WUSHISHI RURAL SETTLEMENT STUDY AREA.



Source - Fed. Ministry of Survey 1967

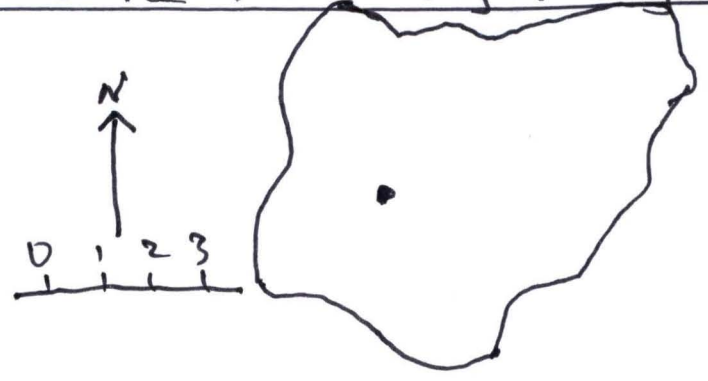
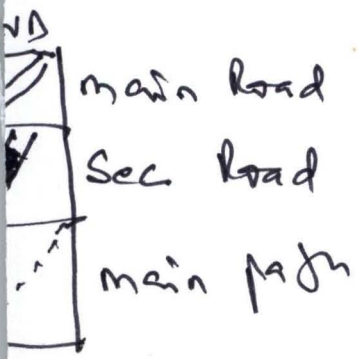


FIG 1-1

Von proceeded to examine the data in which he collected for 5 years from his Estate on the cost of production and the yield obtain. The cost of transportation and them the ruling prices of the products on thus bases, he calculated the economic rent according to the type of land use and at different distances from the main central market of the town.

Based on this model, von tendency was to arranged land use pattern on rings around settlements. In present communities landuse zonation are based on land use journey, which are mostly done by foot, bicycles or by donkeys just applicable to Wushishi rural community farmers. Also agricultural implements, seed and manure are mostly been carried to the field from where settlements are nucleated to large distances.

Another good example applicable to Wushishi rural landuse, is the study of Soba village by (Prothero in 1957) provide a good example of land use zonation. It can be regarded as nucleated settlement. So he identified four major land zonation. The zones are approximately concentric subjected to limitations imposed by soil factors such as, occurrence of indurated laterite which is totally absent in Wushishi district area but having valleys of steams which are not cultivated.

Also Kano closed settled zone has great intensification of land use in respond to land shortage. This intensification of agriculture in Kano takes the same measure with that of Wushishi district farmers. This is by substitution of animal manure fertilizer. Also inter-cropping is another character of farming practised and the greatest intensification and commercialisation of agriculture within the district is apparent in the fadama where irrigation on from River Kaduna using shadulf enable market garden crops to be grown throughout the dry season.

there are 700 villages and hamlets which was due to two main reasons. Firstly, to search for agricultural land to produce primarily for consumption and commercialisation which is directly related to Wushishi district while secondly, so seek freedom from the families, all the norms and values are abandoned.

Also finding of many hamlets and villages (Aba) located near the farm lands, Oko Negan) This is by moving to a far distance area. So settlements are formed to reduce time and cost to a given farm land. For example (Ojo 1973) in other to reduce travel costs to farm, farmers in Idare area have adopted the practices of establishing "satellite" farm villages.

Thirdly, likewise in Nupeland is characterized largely by nucleated settlements called ezhi (villages and towns) and Tunga (Hamlet). They have large villages and towns which in returned having many daughter settlements than the village proper (Nadel 19512. It is important to note, however that in the more densely settled parts of Nupeland, Tunga settlements have increasing effect occupation of farmlands. The mobility of Tunga settlement is more characterized of the sparsely populated western section of Nupeland.

CHAPTER 3

(FARMING IN WUSHISHI)

3-1 AGRICULTURAL SYSTEMS:-

The basic agricultural system practiced in Wushishi is the traditional system. It is characterized by farm family, the village Labor and the use of little fertilizer. The main characteristic of Wushishi traditional agriculture could be described as follows. Firstly. There is predominantly small scale farming, with a small land holding, Due to small land holding farmers practices shifting cultivation and bush fallowing. Most production is for home consumption. But - during period of good harvest surphous are sold in nearest market.

Secondly, small capital is invested in farming, even though some of the farmers get agricultural loan from Niger - state Government, but they don't invest it on agricultural purposes, but use them for some socio-economic needs such as increàsing number of wives, trading, buying net and canoes for fishing, buying motor cycles etc. Also there is limited use of modern inputs like, fertilizer, chemicals and improved seed etc which results in low out put.

There are two main agricultural system practiced in Wushishi rural areas. Firstly shifting cultivation. This is by moving from one settlement area or moving from one farm land area to another after the exansion of the soil fertility. It could be seen that in most rural areas in Wushishi, small piece of land area about 5-6 acres is Burt to clear shrubs and undergrowth, this is to enable them to cultivate it, which also act as fertilizer. This could be seen mostly along Kutunku farmlands, Tunga and Kwakwagi rural areas in Wushishi district.(see figure 3-1)

Secondly, crops are inter-change, where by fara-nuna, this are crops which require short growing period, which are inter-changed within the local farmers of the area, this is in order to increase their productivity.

Some of the reasons that led to be development of commercial agriculture by a few individuals in Wushishi include:-

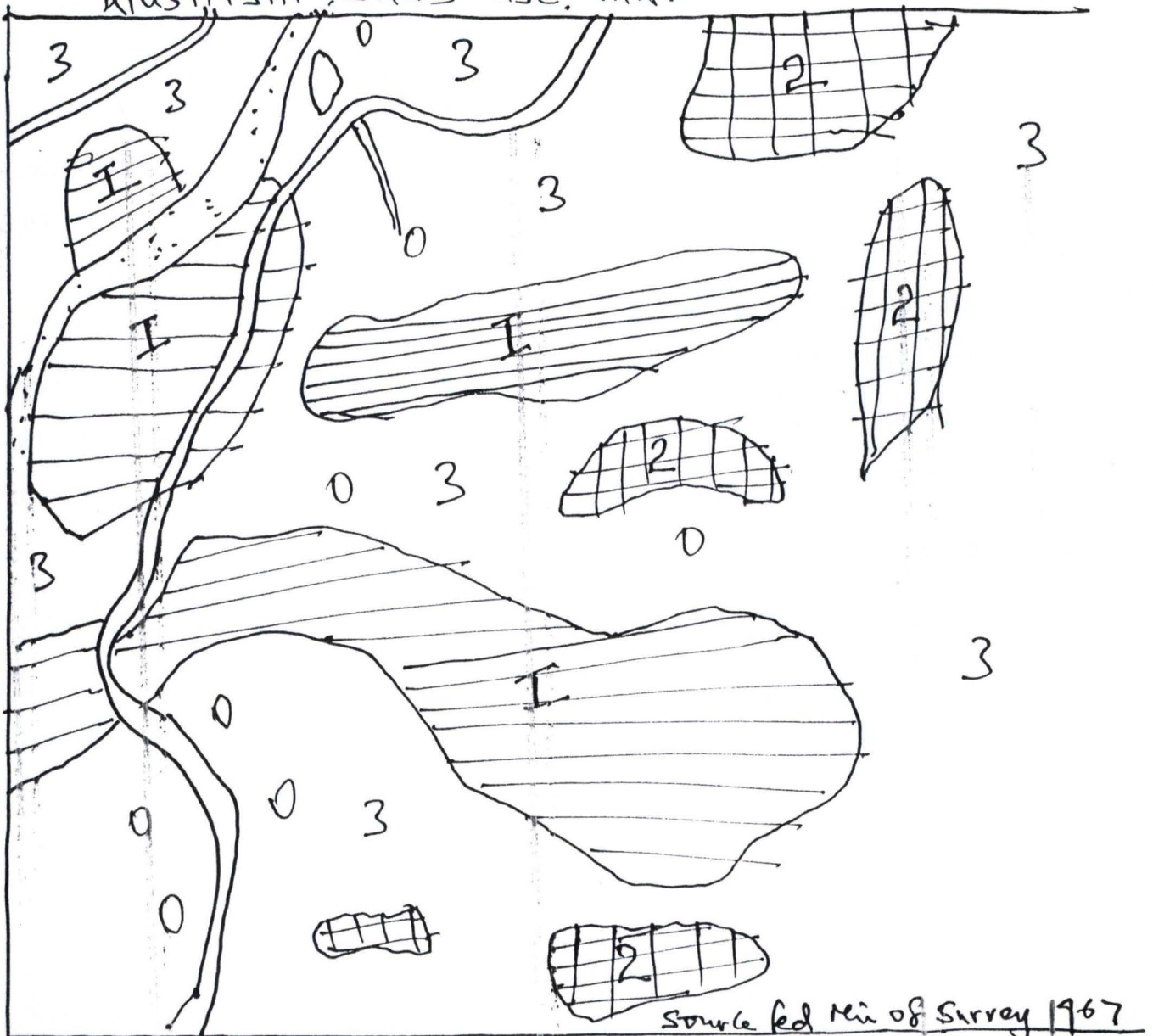
Firstly, some areas have fertile soil and adequate rainfall for the production of certain commercial crops. This could be seen in Kanko in Wushishi district where traditional farms are now been converted to mechanized farming by the federal government under the scheme of Niger-river basin development authority Kanko and Tungan kawo. See figure 3-1.

Secondly, the value of crops like rice, groundnut, cassava and Guinea corn have increased by about thirty percent in 1983 and this provide the incentive for the specialized production of such crops.

Thirdly, the rapid urbanisation and the rising income of the urban populations in Minna, Kontagora, and Bida which are closer to Wushishi, which resulted to an increased demand for food stuff. It could be seen that there is high demand for cassava to make Gari by local Women. So presently most of the rural areas produce rice and cassava for sale, while Guinea corn for home consumption.

Lastly, with the development of transport network in Wushishi area, the local women abandoned taking load by head but instead use truck. In addition laborers are conveyed to work on time, due to cheap transportation fares. This increase agricultural productivity of the area.

KUSHISHI LAND USE MAP



Source Fed Min of Survey 1967

LEGEND

I	Fadama Cultivation
2	Bush Grazingland
3	Farm land park
0 0 v 0	Settlements
—	Road
—	River bed

FIG 3-1

THE TECHNIQUES OF SOIL CONSERVATION IN WUSHISHI DISTRICT

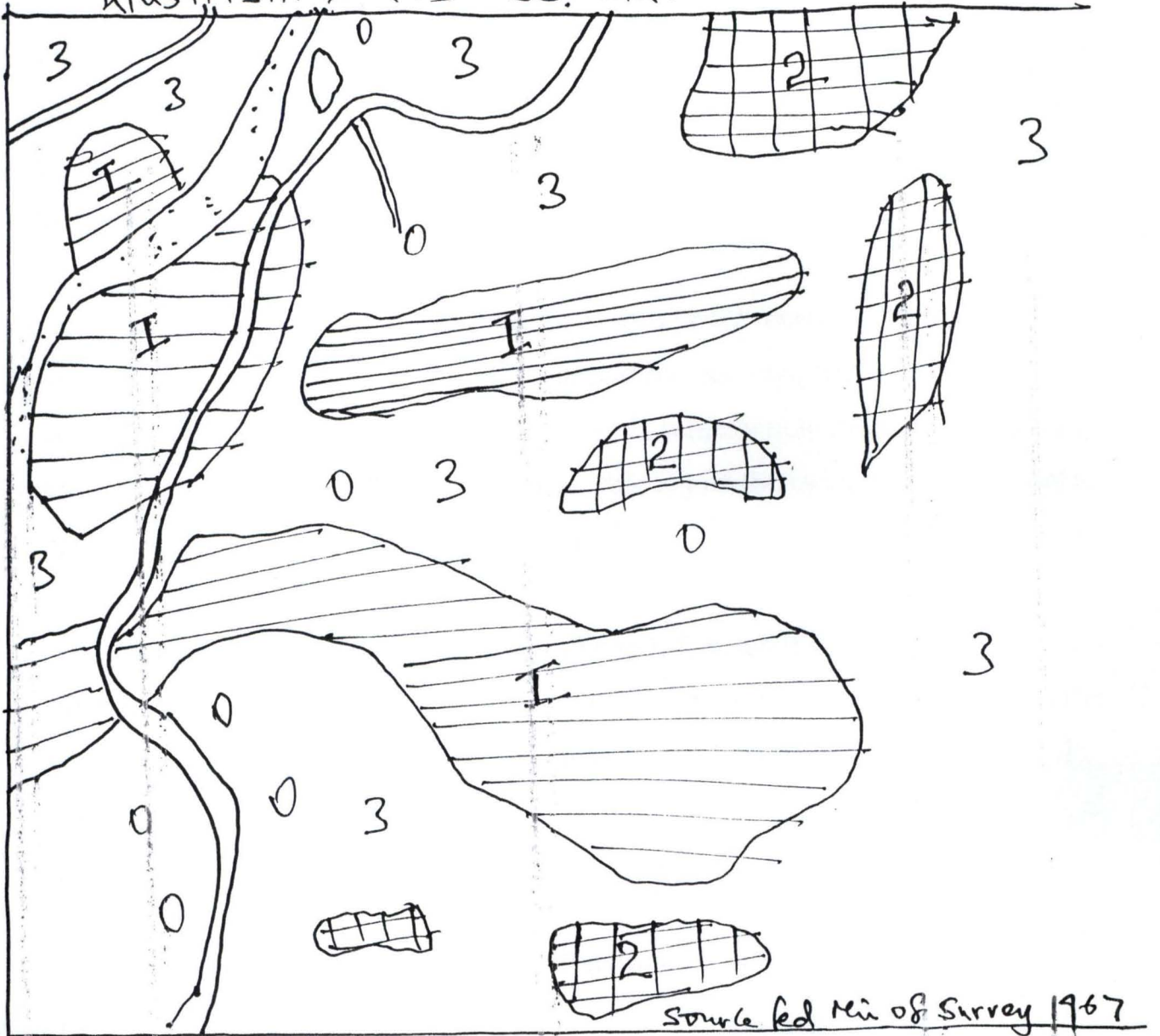
The nature and composition of Wushishi and its environment necessitates the conservation of soil through various techniques in various rural settlements in the district. This is because, the nature of Wushishi topography varies, whereby different crops are best produced in a given topography. It could be seen that rice are best cultivated in marshy areas along Kaduna river, and various places like Bankogi, Pakara, Makusidi, Kwakeagi etc while millet and Guinea corn are cultivated mostly in fairly flat areas i.e. Tunga kawo, Kutunku, madegi etc.

Ridging may be adopted to varying topographic conditions and the differing needs of food crops. Mostly in tasha around Tunga, utare and between Zugeru and loko-goma, the ridges in this area are continuous and at regular spaced gaps, in some areas ditches flow are lower than the depression between the parallel ridges so that it does not stand, thus could be seen in areas like Kwakwagi, Madegi and other small affected areas like Geku, Kalakala and Pakara. They produce mostly, Millet and Cassava. The drainage ditches are spaced closely enough together so that no single one will carry a large volume of water and thus deepen its channel.

The height of the ridges depends largely on the deepness of the spot, and where a heavy volume of water is expected as in rice producing areas. Some ridges are short and built up until they become mounds as high up as two and half feet. There are mostly found in to marshy areas of Madegi, Pakara, Gekun, Kwakwagi and large portion of Kanko, Makusidi, Bankogi and Tunga kawo where the Niger River basin development occupy marshy lands for production of rice and constriction of a dam.

Also to the compost is the nature from the goat huts, and from other building, housing, sheep, cattle's or horses which graze outside the village during dry season.

KIUSHISHI LAND USE MAP



Source Fed Min of Survey 1967

LEGEND

I	Fadama Cultivation
2	Bush Grazingland
3	Farm land park
0 0 0 0	Settlements
	Road
	River Kaduna

FIG 3-1

farming. Most of the area is uncultivated hilly and rocky areas. As a result this made to previous settlement area less productive. They also face the problem of lacking drinking water and means of transport. See Figure 4-14

But the new settlement, it has available arable land for farming, more accessibly to drinking water and road as a means of transportation. It could be seen that rice is mostly produced in this area. This brought about commercialisation of agriculture where by abundant rice are transported either by road or rail to either Minna or any other area for sale.

From the above, we could see that, people in this area migrated from their previous settlement purely for agricultural reasons. They migrated to occupy land that are suitable for agriculture and have large areas of land.

TABLE: 4-5:- Show the difference between previous and present settlement areas.

Area	Degree of Freedom (df)	Calculated Value	Table-Value (T-Test)	Result
Maigora/ Arontagi	4	0.5	2.1	insignificance
Ami-woro	7	14.5	1.8	significance

Source:- Based on the information supplied by the farmers during interview.

From the above, we could observe that, the old settlement (Maigora / Arontagi) settlement areas were insignificance. This was due to lack of fertile land for farming. The whole area as been over cultivated They still face problem of lack of drinking water and means of transport.

ment along the main road. The execution of agricultural products to central markets are quicker with the aid of the main road.

So we could observe that the new settlement area is more prosperous in agriculture and more accessible compare to the previous settlement area.

TABLE 4-7: Showing the difference between source of migrates to present settlement Kwata.

Area	Degree of Freedom (df)	Calculated Value	Table Value (T-Test)	Result
Difference	4	1.0	2.1	insignificance
Kwata	7	62.4	1.8	significance

Source:- Information supplied during interview and personal knowledge of the area.

People came to the present settlement from different part of the state. There main occupation is fishing and farming. It could be observed empirically that this people in this settlement area engage in fishing and farming during rainy season. While during dry season, they focus their attention to fishing only. Fishing is one of their primary source of income. They transport fish and farm products to Minna for sell. They also use the Fadama areas around Kaduna river to cultivated and produce Rice. This people engage in commercialisation of Cassava, which are sold to women to produce Gari. This settlement is accessible both by canoes and road. This settlement area is one of the prosperous settlement areas in Wushishi district.

number of wives during dry season. The income gain during rainy season, it should be kept for kept for further agricultural development the following year.

Thirdly, there should be co-operation between farmers and cattle Fulani. Thus will solve the problem of overgrazing. Overgrazing brings waste of agricultural land by putting it out of use. This made the land wasterful. So with co-operation within local farmers and Fulani's this will reduce the problem of land waste which result to migration.

Lastly, having proper knowledge of planting and harvesting period. The decay in planting results low harvest. So with proper time of planting will result to proper harvest.

So if Wushishi rural settlement areas are provided with sufficient financial aid and agricultural facilities, it will solve the problem of migration, but farmers also have to work hard in other to improve their agricultural productivity, this is because of the present financial problem which the country is now facing presently. So the government financial condition cannot provide sufficient aid to the farmers but with the help of farmer the rural areas can achieve proper agricultural development within the rural areas.

In conclusion, as it could be seen, from the evaluation of different rural settlement areas, it would be observe that, the causes for the dispersal of rural settlement in Wushishi is caused by agriculture This is because, 'from the origin of this rural settlements they engage in nothing but depend on agriculture. But when later the natural fertility of the soil starts to decline and the demand for agricultural products starts to increase, most especially after the creation of Niger State in 1976, demand for agricultural products starts to increased, this was in other to feed the administrative, commercial and industrial sectors in the state. (See figure 5-2)

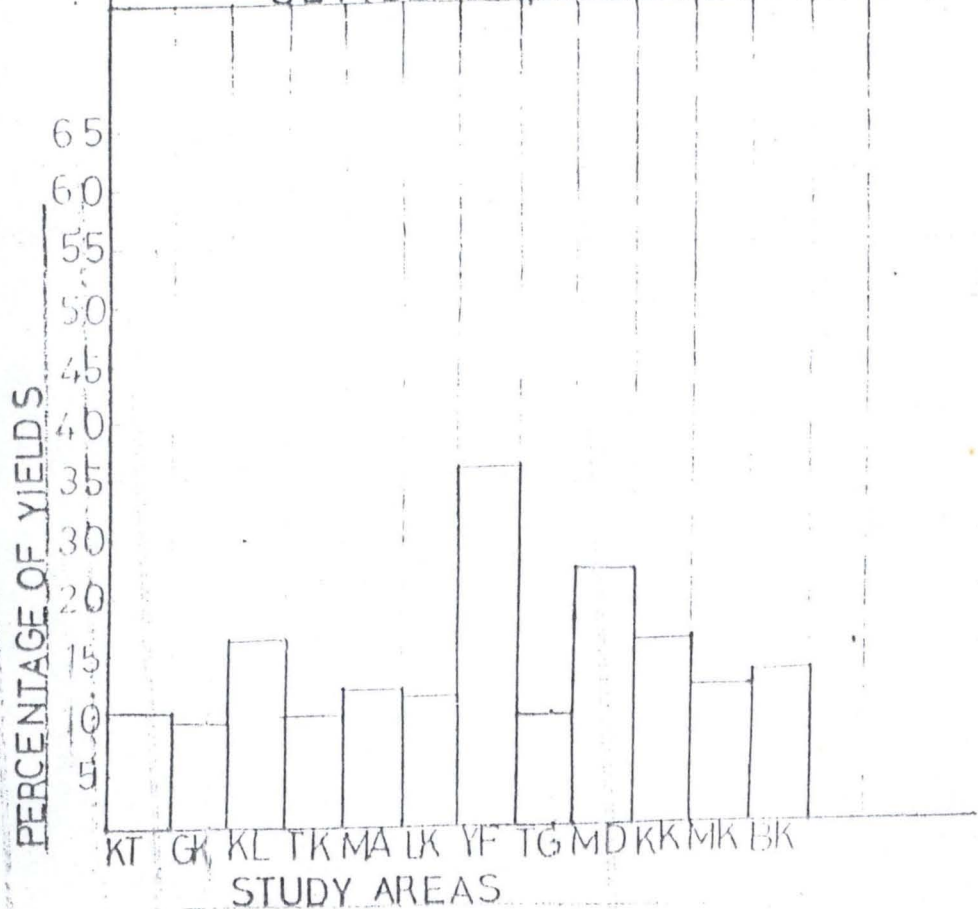
From the below table, we shall see, some of the rural settlement that migrated from their original settlements to the present settlement showing their agricultural potentials.

(Table 5-1)

Area (present)	(df)	Calculated Value	Table-Value (T-Test)	Result
New Gikun	3	0.9	2.3	insignificance
New Kutunku	3	70.9	2.3	significance
New Kalakalá	2	0.9	2.9	insignificance
New Tukunji	5	60.5	2.0	significance
Ami-woro	7	64.5	1.8	significance
New Loko-Goma	6	3.2	1.9	significance
Kwata	7	63.4	1.8	significance
New Tunga	4	4.3	2.1	significance
Kanko	8	112.6	1.86	significance
Bankogi	12	110.61	1.78	significance
Makusidi	8	115.3	12.6	significance

Source:- From the information supplied by the farmer, personal knowledge and observation.

FARM PRODUCTION IN PRESENT SETTLEMENTS FIG 4-15



SOURCE: FIELDWORK 1984

FIG 4:15