LAND TENURE AND SABALA FARMING SYSTEM IN THE ANLO AREA OF GHANA

A CASE STUDY

by G. Benneh*

The Anlo who numbered about 240,000 in 1960 form one of the better known sub-groups of the Ewe people of West Africa. They occupy part of the dry coastal plains which extend from Ghana into Dahomey. The mean annual rainfall on the coast is about 30 inches but it increases to 40-50 in the interior. Rainfall is not only scanty but irregular. About 1/6th of the Anlo territory of 883 square miles is covered with lagoons. The district is one of the most densely settled in Ghana. Land hunger has become an acute problem particularly in the coastal areas where the average density is over 500 persons per square mile. Every available land, including cemeteries, is therefore put under cultivation.

In the face of the unfavourable physical conditions and the scarcity of agricultural land the Anlo have developed a very intensive farming system which involves irrigation, manuring, and rotation of crops in the narrow drainage ditches which run almost parallel to the coastline from the east of Attiteti through Dzita, Whuti, Anloga, Aveme to as far as Tegbi (Fig. 1). The main crop which is cultivated under this system of farming is shallots, sabala, introduced into the area about the eighteenth century.

In this paper an attempt will be made to describe how this complex farming system functions. The paper is based on the results of a case study of a shallot producing family, in the village of Dornorgbor near the town of Anloga between August 1967 and January 1968. A map showing the ownership of shallot beds was prepared with a chain and prismatic compass and members of the family who were present in the village at the time of the survey as well as tenants cultivating part of the family land were interviewed. A research assistant was employed to keep records on the amount of money spent on labour,

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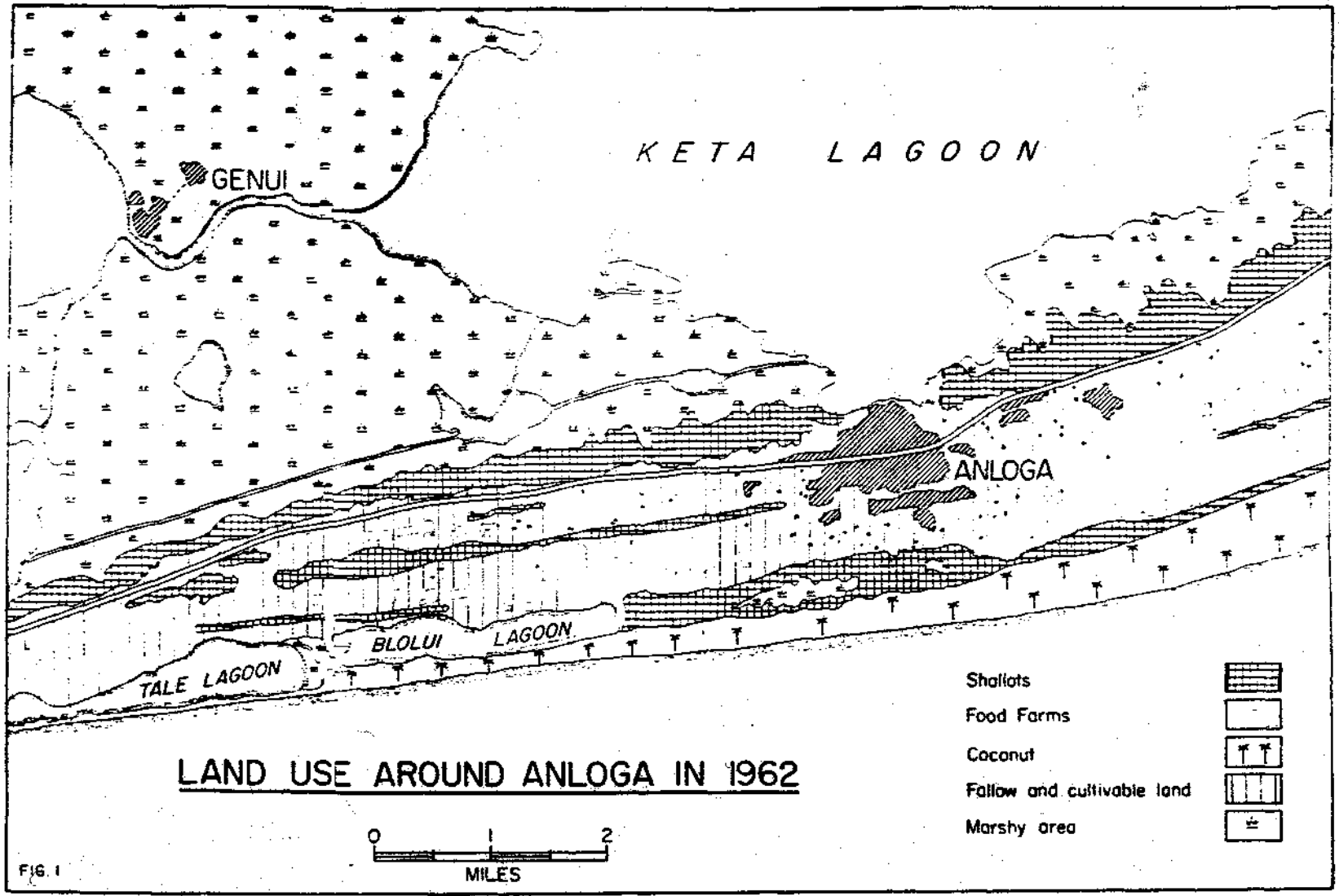


LAND USE AROUND ANLOGA IN 1962

FIG. 1

Based on Air Photographs

fertilizers and manure by farmers at the time of the survey.

The family land surveyed, forms part of the farm lands of the Lafe Clan which has over the years been divided up into lineage lands through the operation of the rules of inheritance and gifts. Fig. 2 shows the extent of the fragmentation of part of the Lafe land in the village.

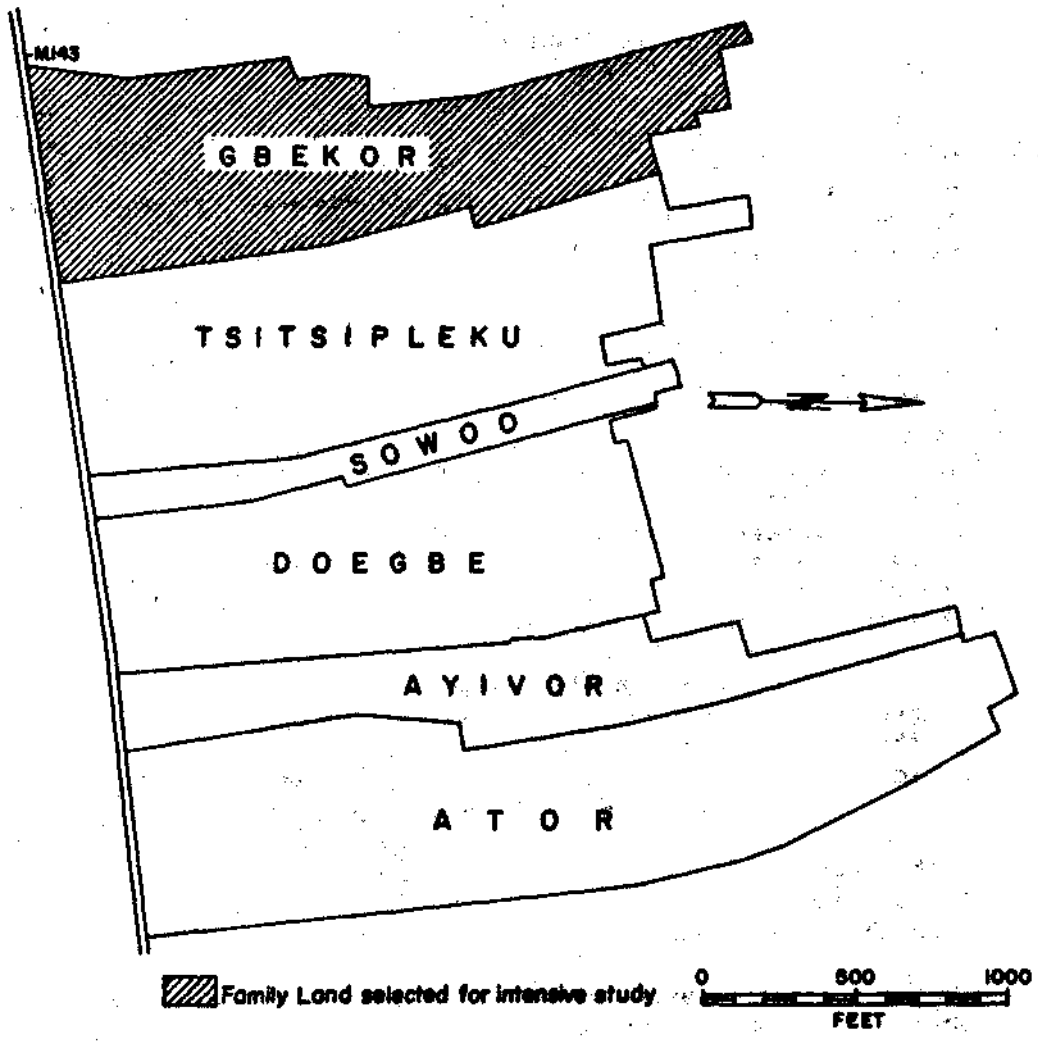
THE SCHEME OF INTERESTS IN LAND

Although individual members of the clan have acquired parcels of the clan land and they exercise full control in the use of such lands, the interest of the corporate body is maintained by the insistence that it is the Wotato, the clan head, or his assistant, tsami, who should give permission for the felling of any economic trees which are growing on any part of the clan land. The head is also responsible for settling all land disputes within the clan and represents the group in any negotiations involving land with people outside the clan. As an intermediary between the lineage members and their ancestors, he is the first to be consulted on any religious ceremonies connected with land. The clan is made up of lineages and the head of each lineage, is responsible for sharing the land of the deceased father amongst his survivors.

Opinion appears to be divided on whether the Anlo Ewe practise patrilineal or the matrilineal inheritance system. According to Manoukin,[1] "In other Ewe subtribes for example, Anlo and Glidyi, individual property is transmitted matrilineally, a man's heir being his sister's son". Kludze[2] rejects this assertion because according to him cases which have come before the courts from that area have always been decided on the basis that succession is patrilineal and the Paramount Chief's Tribunal has emphasized this in its opinion to the courts. The results of the present study show that although the principal inheritors to the land of the deceased were his surviving seven sons A, B, C, D, E, F, G in Fig. 3, there were ten people who had inherited through females. It is significant to note that the seven sons inherited 482 beds out of a total of 588 in the surveyed area whilst the ten people inherited only 78 beds. The people

FIG. 2

PART OF THE FAMILY LANDS OF LAFE CLAN



Surveyed August - Sept. 1967

who had inherited through females had done so through deceased mothers and not through maternal uncles. Under the inheritance system of the Anlo, daughters are entitled to receive part of the self acquired land of the deceased father. Their share is however usually smaller than that acquired by their brothers. Thus the sisters of the grandfather of A, acquired only small plots of land which have now been passed on to their grandsons H, I, and J. In this respect, the inheritance system of the Anlo is different from that of the Krobo of the Eastern Region of Ghana who do not allow married daughters of a deceased father to inherit his land. This departure from a truly patrilineal system which precludes women from inheriting property of a deceased father may have given rise to the divergent opinions on the system of inheritance of the Anlo, since it is possible to trace the acquisition of land both through males and females. It must however be emphasized that at the head of each geneological table is a male.

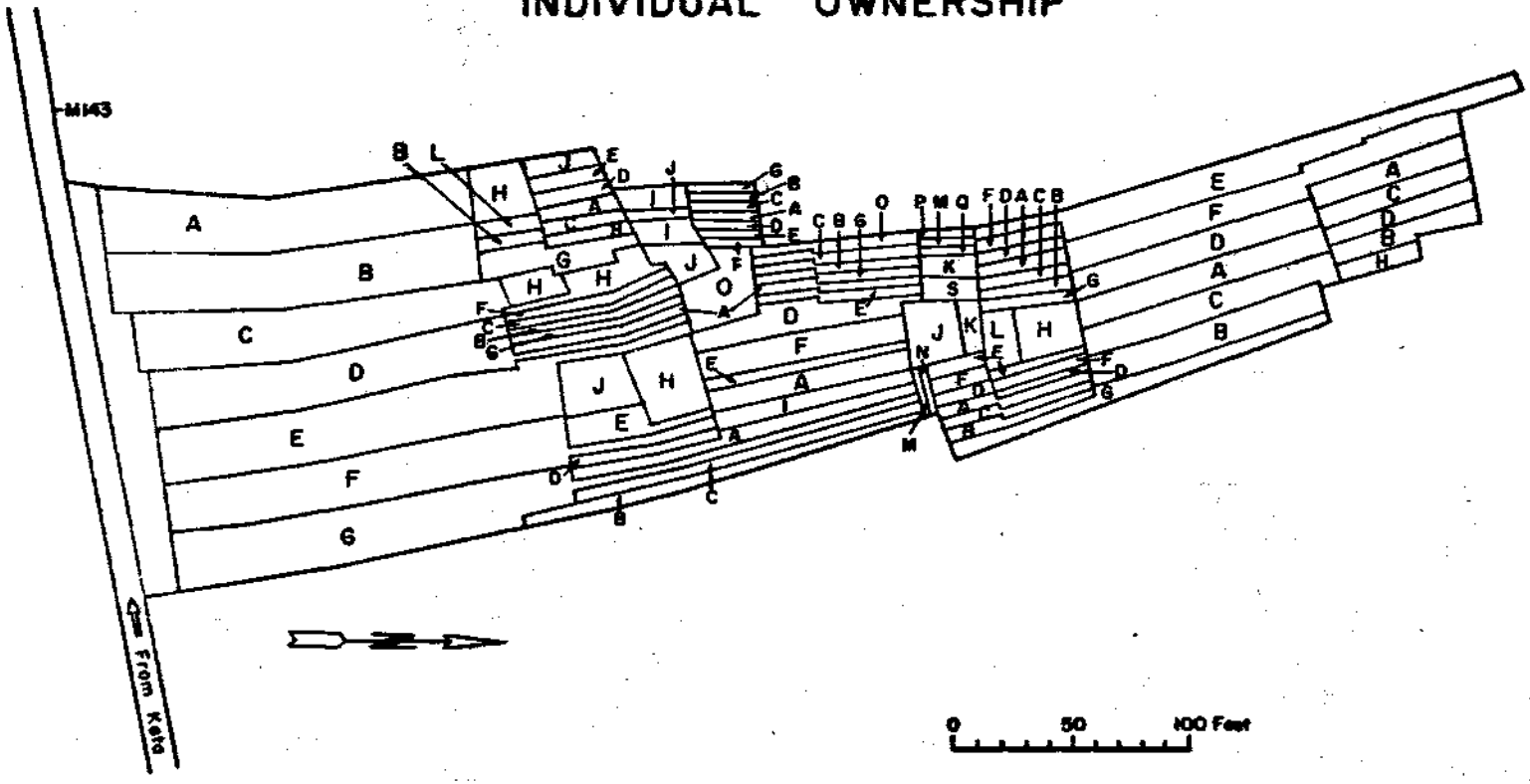
According to some informants land of a deceased father is not shared amongst individual sons and daughters but amongst wives who had issues with the deceased. Each of the women takes a share for her children. Thus a wife who had no issues with the deceased person gets nothing. This practice also obtains amongst the Krobo. In the Anlo area it appears that inheritance by individual children occurs side by side with that by wives on behalf of their children.

Shallot beds can also be acquired through gifts from father to children and from husbands to wives. In the case of the former it is referred to as Efiaboe. A father may give a bed or two to a son who has been helping him on his farm as a gift. Such a bed becomes the property of the child and is subject to the rules of inheritance upon his death. Thus each of the seven brothers obtained shallot plots from their father when the latter was alive.(Fig. 4). Beds obtained through Efiaboe cannot be pledged when the father is alive.

A prospective farmer who has seeds but no land can obtain land for cultivation under the share cropping systems known as dame and fame. Under the dame system,unprepared beds are given to a relative or a reliable friend by the owner,who through either absence or sickness is unable to cultivate them. The tenant cultivates the plots with his own seeds and the

FIG. 3

INDIVIDUAL OWNERSHIP



Surveyed August – Sept. 1967

proceeds are shared equally between the owner and the tenant after defraying the cost of production. If in any farming season a farmer has not sufficient seeds to sow all his beds, he can invite some one with seeds to cultivate his remaining beds under the fame system. Until about 1960, the tenant sold a portion of the seeds to defray his overhead costs and shared equally the rest with the landowner. In recent years, due to shortage of seeds as a result of flood damage, the seed owners take two-thirds of the money realised from the sale of the crop after the cost of production has been deducted. The plot owner is given the remaining one-third. This is often not enough for him to buy seeds for cultivation in the next season and he is forced to enter into fresh arrangements with the seed owner or to mortgage some of his beds for money. At the time of the survey, one of the brothers, F, had pledged 23 beds for a loan (Fig. 5). Under the system of pledging known as woba, the beds are cultivated by the pledgee until such time that the pledger is able to settle the debt.

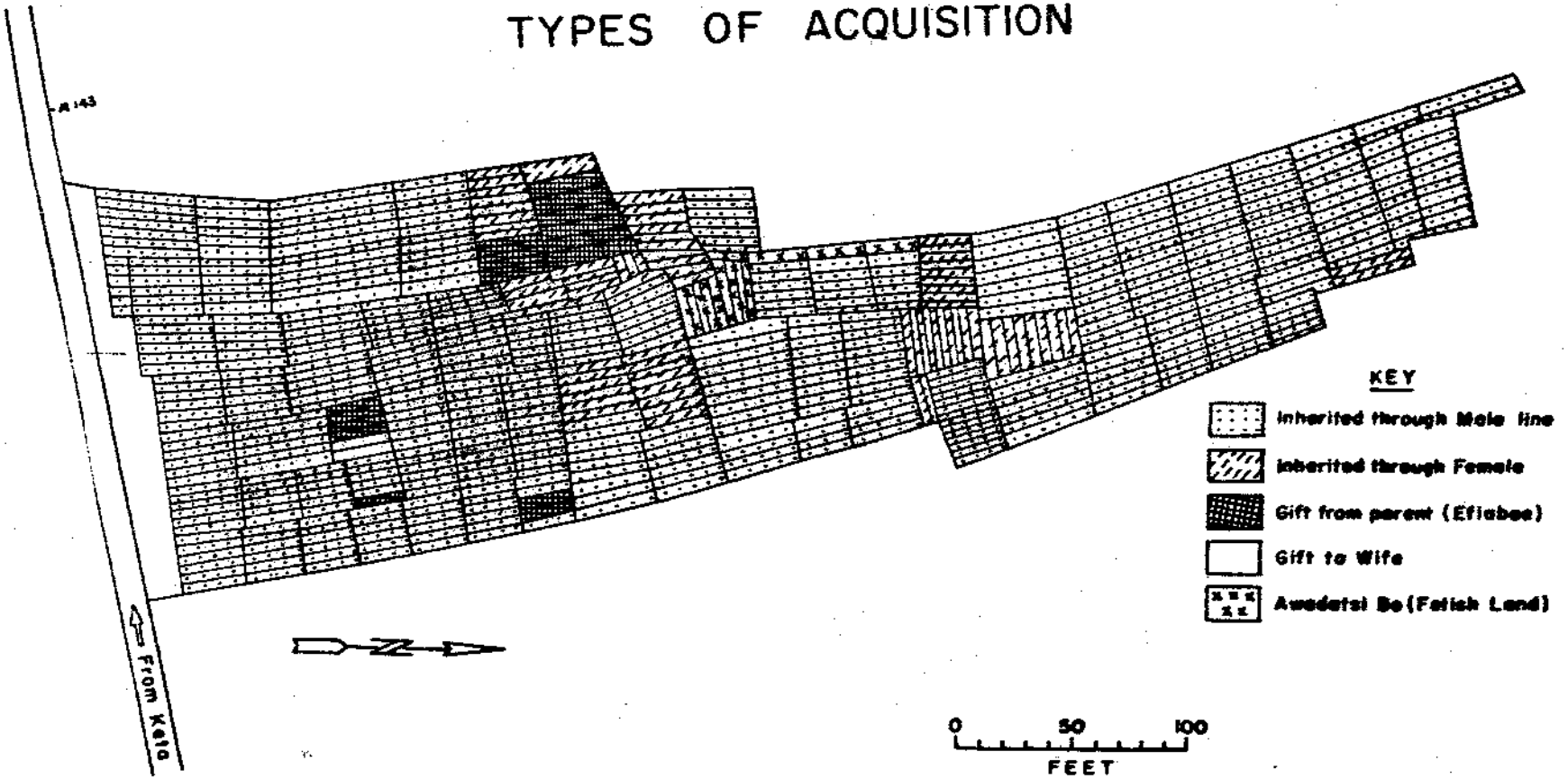
Thirteen beds had been put aside for the maintenance of the family god, Awadatsi (Table I). The man cultivating the beds paid N¢4.00 to the coffers of the deity at the end of every shallot season.

Although the sale of land is not a common practice it does occur and there are recognised procedures which differentiate a sale from a gift and other forms of alienation. According to Nukunya[3] there is a custom involving the offer of spirits by the vendee, its acceptance by the vendor and the participation of both as well as witnesses in drinking. This is known as ahatutu - anyigbadzi. Other requirements include a formal demarcation of boundaries in the presence of neighbours and the planting of boundary trees known as anyati at the corners. Boundary pillars with the name or initials of the vendee inscribed on them are now preferable. The head of the lineage and the elders must always approve of the sale of land.

These tenurial arrangements ensure that a farmer with the capital to buy seeds for cultivation will normally obtain land during a farming season. The woba system can however deprive the landowner of the use of his land for a long time and the operation of the rules of inheritance leads to excessive fragmentation of holdings. This makes it impossible for the small farmers to reap much from the land even though it gives

FIG. 4

TYPES OF ACQUISITION



Surveyed August - Sept. 1967

some security to all the members of the lineage.

THE RESOURCES FOR THE FARMING SYSTEM

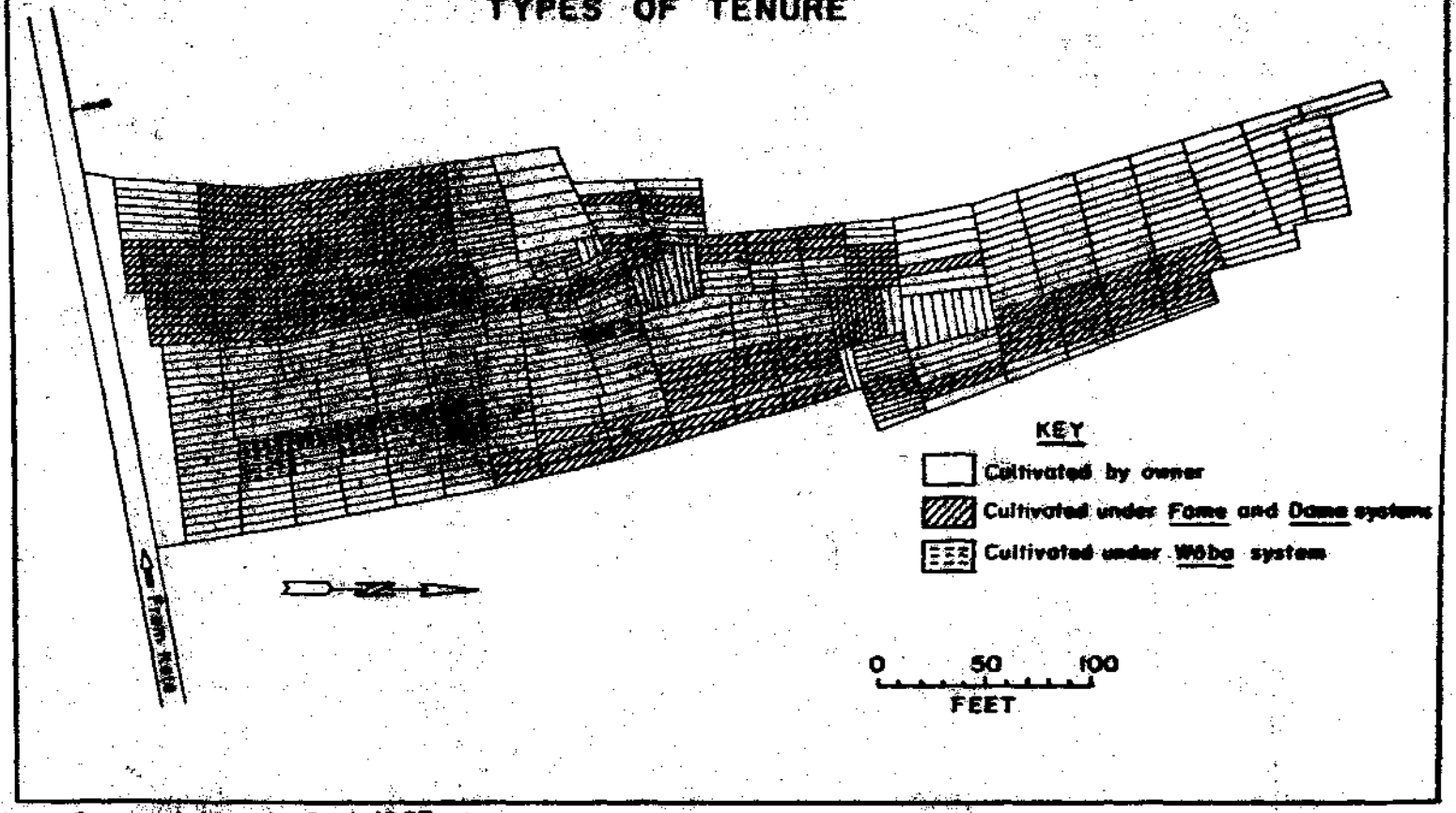
The resources within any farm can be divided into land, human and capital resources. The human resources include the operator or decision maker and labourers. The land resources consist of soil, water and climate and the capital resources include tools and equipment, inputs such as fertilizers, manure, insecticides and working capital.

As has already been pointed out, sabala farming is practised within the elongated depressions which run parallel to the Keta-Anloga road. The soil is sandy with little organic matter. The scanty rainfall in the area is offset by a high water table which makes it easy for farmers to practise irrigation through the construction of shallow wells on the farm. The distribution of wells is shown in Fig. 6. The area near to the lagoon dzefi has no wells. According to informants, the underground water in the area becomes salty in the dry season and it is therefore unsuitable for irrigation. The depth of a well is 4-5 feet and it costs N¢3.70 to N¢4.75 to construct one.

The main physical problem facing shallot farmers is the frequent floods which prevent farmers from cultivating all their beds. Although floods in the area are associated with years of exceptionally heavy rainfall their occurrence is mainly due to the relief and drainage of the area. The shallot producing area is generally low lying. The lowest portion is at the town of Keta where in the vicinity of the Roman Catholic Church the land is about three feet below sea level. The district is studded on the south with both fresh and salt water lagoons; the largest of these are the Keta, the Avu and the Angaw lagoons (Fig. 1). The Keta lagoon is between 120-140 square miles. The water level of the Keta lagoon rises very rapidly since there is no regulated discharge into the ocean and the bottom of the lagoon is being raised through silting. Thus whenever the water level in the lagoon increases through heavy rainfall, flooding occurs. The farmers have no technique of solving this problem. Shallot beds which are

FIG. 5

TYPES OF TENURE



Surveyed August – Sept. 1967

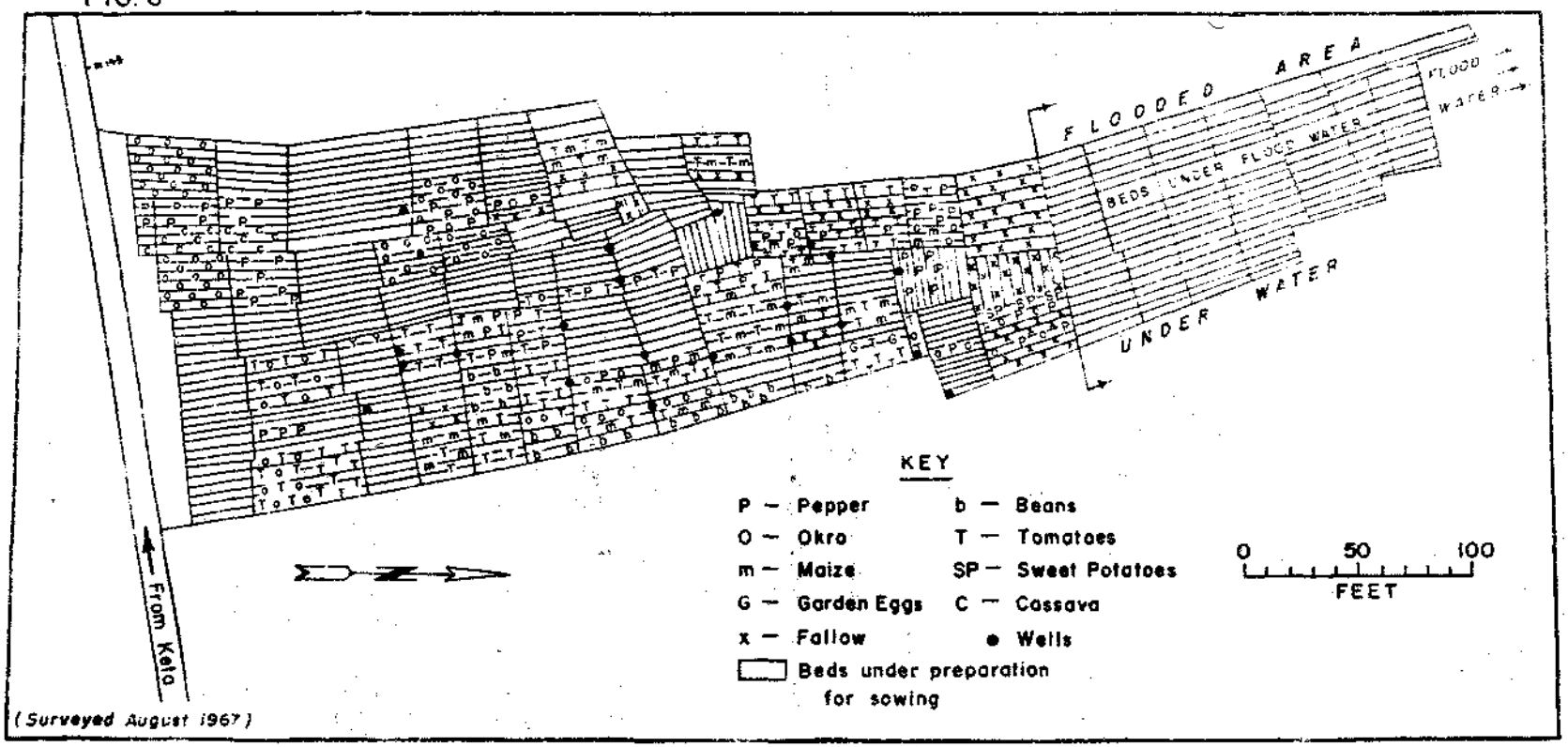
covered by flood waters are left uncultivated. At the time of the survey, about half of the total acreage of the family land was under water. In years of heavy floods, such as occurred in 1963, it is impossible to raise three crops of shallots. This leads to heavy losses by farmers.

Due to the poverty of the sandy soil, capital resources are important in the sabala farming system. The most important of these are the inputs which improve upon the fertility of the soil. These are drumi, bat droppings, nyimi, cow dung, lavi fish manure and Yevu-du, chemical fertilizers. Drumi is obtained from the ceilings of houses. The main centres of production are Aflfe, Avernor, Kpenor, Abor, Dekpor and Lome. It is sold in bags by middlemen at Anloga. At the time of the survey a bag was selling at N¢5.00 and this would be used on about eight shallot beds. Nyimi, cow dung, is obtained mainly from Ada, Sogakopfe, Dabala, Atlavi, Galo and Lave (Fig. 7). According to the farmers interviewed a bag of nyimi cost 20NP at these centres but it was selling at Anloga at 65NP because of high cost of transportation. A bag of nyimi is applied on one shallot bed. Lavi, fish manure, is derived from various kinds of fish such as Abobi, Deyi, Hawui Aboludzibe (small lobsters). These are supplied by fishermen in the coastal villages and towns such as Woe, Tegbi, Keta, Kedzi, Denu and Blekusu. Farmers buy them from the Keta market. The price per bag varies from season to season. At the time of the survey (fishing season) a bag was selling at N¢2.50. According to farmers this rises to N¢6 during the off season. A bag of lavi is applied on 10 to 15 shallot beds. Chemical fertilizers have been introduced into the area in the last few years. In addition to the agricultural extension officer of the Ministry of Agriculture there is an FAO field lay officer who advises farmers on the proper use of chemical fertilizers. The types of fertilizers which are recommended for shallots are sulphate of ammonia, tripple super phosphate, and sulphate of potash. A bag of any of these types was selling at N¢3.80 at the time of the survey.

The sabala system is a labour intensive system of farming. Although family labour is used, for some of the arduous and time consuming activities, farmers depend on hired labour. The high population density in the district ensures a ready labour supply for the farm operations.

LAND USE

FIG. 6



THE SABALA FARMING SEASONS AND THE CYCLE OF FARMING ACTIVITIES

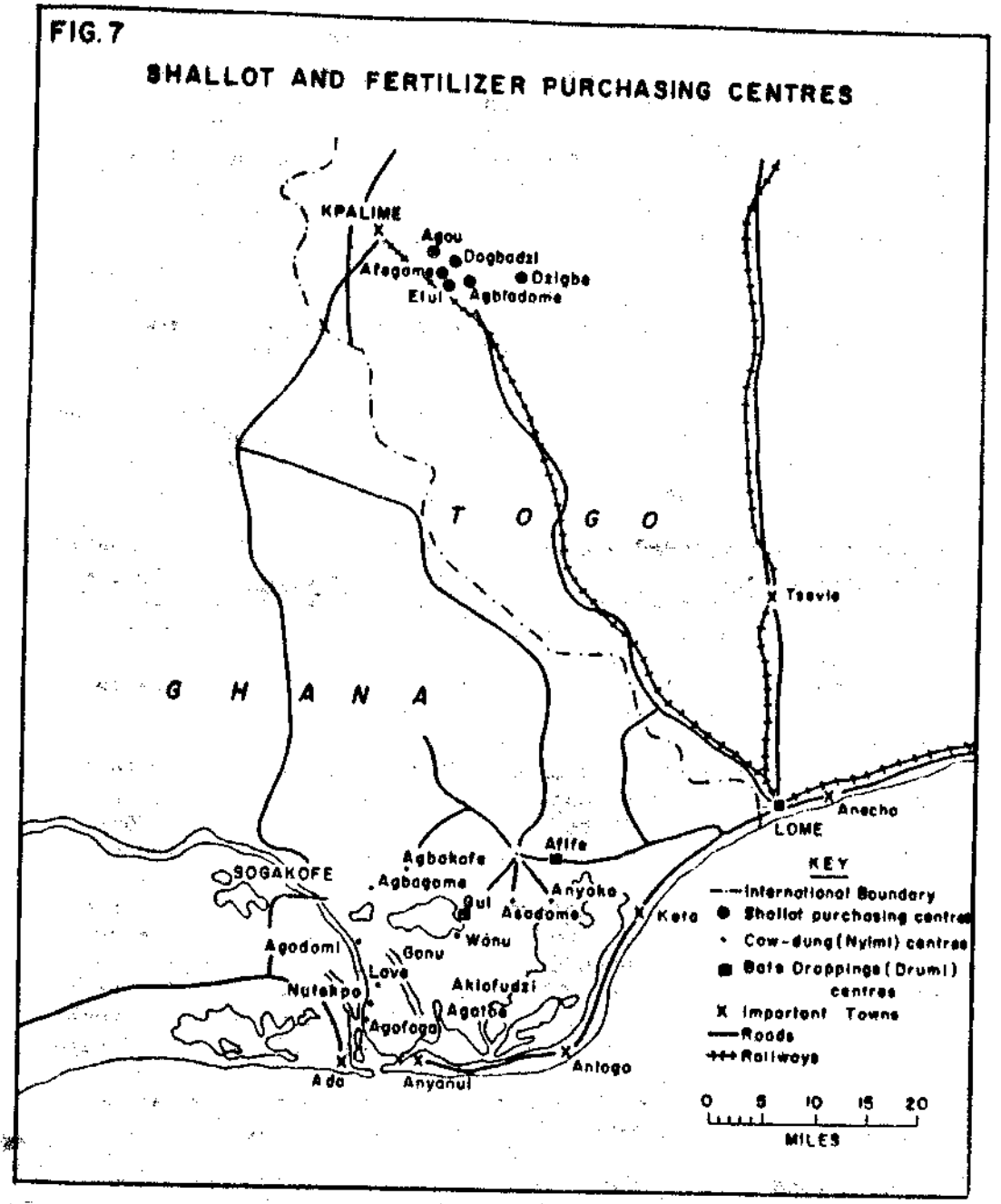
Unlike some other systems of farming in Ghana which operate within the limitations imposed by the physical environment, the sabala system is free from the major environmental controls except floods. Since the shallot farmer irrigates his land, the rhythm of rainfall distribution does not exercise any influence on his farming calendar. He is able to cultivate the same piece of land for a long time because he does not depend on the innate fertility of the soil but builds up a capital of nutrients in the sandy soils. The number of inputs required has made the farmer dependent on a number of services some emanating from outside his immediate environment for carrying out his work efficiently. He depends on fisherman for fish, Fulani kraals for manure, agricultural extension officers for his fertilizers and farmers in Togo for seeds for planting. In this network of relationships, the primary concern of the shallot farmer is how to ensure that he can sell his produce at a sufficiently high price in order to remain in the farming business. His farming calendar is thus greatly influenced by the behaviour of the market for his produce.

Three crops of shallots can be raised in a year in the shallot belt. In order to ensure that the produce from Anloga district will find ready markets, the dates on which sowing of seeds begins have been fixed by the shallot farmers in the area. The dates were selected after studying the times when shallots from the other Anlo villages are ready for the market. The beginning of the sowing period which lasts for about four weeks is announced by the beating of 'gong gong'. It is an offence for any shallot farmer to sow seeds after the period. This is done to ensure that all the shallot seedlings in the district will mature about the same time and thus prevent the spread of the pests known as yoe on the farms from the maturing seeds to the germinating ones.

The first shallot season known locally as Fenu starts from 15th April and ends by the end of July. The season, Kele begins on 1st September and ends in November. This is followed by the third season Fedomi which starts from the 1st of January.

FIG. 7

SHALLOT AND FERTILIZER PURCHASING CENTRES



The cycle of farming activities during the Kele season begins with the cutting of special types of grass such as gbekle (paspalum vaginatum) and azinye. This activity is known as gbekoke. The grasses are dried and used sometimes in combination with corn stalks for supporting the sides of the shallot beds gbedoboto to prevent the beds from being eroded. Hired labour is often used for cutting the grass. During the kele season of 1967, none of the farmers in the area found it necessary to employ labour for this activity since they required small quantities of grass to repair the damaged sides of the beds which they had constructed during the Fenu season.

The next major activity is the preparation of the beds for sowing. Since in between the shallot seasons farmers grow beans, vegetables, and maize on their shallot beds (Fig. 6) the first task is to clear the crops some of which might not have matured and weeds from the beds. This is done with family labour. The crops and weeds are ploughed into the soil with a big hoe and allowed to rot in order to increase the nutrient status of the soil. Clearing of cultivated plants and weeds is followed by the raising of the level of the beds by adding sand. This is done because of the high water table after the rains which may result in water logging. It is a labour intensive activity and it is done at least once in every shallot season. Women are normally hired to carry the sand. Only two farmers found it necessary to raise the level of some of their shallot beds at the time of the survey. One spent NG4.80 and the other sixty new pesewas on hired labour. Each woman was paid 60 new pesewas for a working day of five hours. After 'sanding', katsotso, the beds are carefully made. Different sizes of beds were represented in the area surveyed. The smallest beds measured 5ft. by 12ft. and the largest were 5ft. by 60ft. There does not appear to be a standard size of a shallot bed in the district although farmers regard a measurement of 5 or 6 feet by 30 or 35 feet as the smallest economically viable unit to operate. The following reasons were given for the differences in the sizes of shallot beds. The narrow beds may have formed parts of larger beds which have been split up and given to the children of the deceased owner. In order to save land which would otherwise be taken up by irrigation channels, large beds are constructed. Near the lagoon where the land is not very much above the sea level, the beds are

narrower because of the need to construct a denser network of channels to allow water to flow into the lagoon after the rains and thus prevent water logging. The average width of a ditch or irrigation channel is one foot. As part of the preparation of the beds during the kele season, farmers straightened and deepened the old ditches between their shallot beds to facilitate the movement of water to the lagoon side from the other end of the land. The sides of each bed as it has been pointed out were strengthened by providing a structural framework which consisted of grasses and corn stalks.

About a week or two before sowing, cow dung is spread on the beds. This is preferred to chemical fertilizers during the kele season because according to farmers, the application of yevudu, chemical fertilizers at this time of the year leads to poor harvests since they give out excessive heat. Chemical fertilizers are recommended for the Fenu season, the season of heavy rainfall. A second hoeing, nutoto, follows after a few days with a light hoe and when the beds become too dry before the date of sowing, water is sprinkled on them and a third hoeing is undertaken.

Sowing of shallot seeds begins on the 1st of September. This is done with both family and hired labour. Special attention is paid to the spacing of the seeds. According to farmers the spacing adopted depends on how big the bulbs of the seeds are and whether the seeds are new in the sense that they have been acquired from the producing areas in Togo or Dahomey. Bigger bulbs are normally sown at wider intervals than smaller ones and the spacing between newer seeds is wide to allow them to mature properly. Sixteen farmers employed hired labour for this activity during the time of the survey. The amount of money spent by farmers on hired labour varied from 40 new pesewas to N¢12.50.

The beds are irrigated twice a day, in the morning and late afternoon until the seedlings mature. Between two to three weeks after sowing, the fish manure is first scattered on the beds and the farmer uses a stick to dibble the fish into the soil. The weeds are also cleared from the beds at about this time to prevent them both from smothering the shallot seedlings and from competing with them for the nutrients in the

soil. The shallot crop takes about eight weeks to mature. According to farmers when there are showers just before harvesting the shallots take on a rosy-brown appearance, an attractive colour to the buyers. The colour of the bulbs is greyish when there is a dry spell before the harvest. Farmers therefore water their crop daily about four days before the harvest to ensure that the bulbs acquire the attractive colour.

After harvesting, the shallots are left to dry on the farm beds for about two to three days. They are guarded during the nights against theft. The shallots are then headloaded by women to the homes of the farmers where they are dried for another week. During this time, the bigger bulbs are separated from the smaller ones. The larger bulbs are tied in bundles for sale on the market whilst the smaller ones are kept on a specially woven matted ceiling, agbake, to be used for sowing during the next season.

The average weight of a bundle is about 25-30 lbs. and six such bundles can be obtained from a shallot bed (5 feet by 60 feet). A farmer does not use weights to determine the size of a bundle. He has through experience learnt to arrange the bulbs into the correct sizes by the eye and by lifting them up with his hand. A proposal to introduce a system of weighing some years ago was opposed by farmers on the grounds that this would disregard the size of bulbs and their appearance in fixing prices. The average price of a bundle of the 1967 kele shallot crop was N₵8.00. The bundles are sold on the Anloga market which meets every four days.

Gross Returns from Shallot Production

A farmer's gross returns consist of the proceeds from the sale of shallot on the market, the market value of the produce consumed by the farmer and his family and the value of seed shallot produced. As it has already been pointed out vegetables and other crops are grown on shallot beds in between the shallot seasons. These may be harvested and thus make some direct contribution to total returns. The total shallot production for the Kele season of 1967 has been

calculated for each farmer using the average yield per shallot bed. According to the farmers interviewed, the average yield ranges between 4 to 6 bundles depending on the size of the bed. The author has used a yield of four bundles for the smaller beds (5 x 40ft) and six for the larger beds. Table II shows the returns for each farmer and the amount of money which would have been realised if the total produce were sold.

An attempt has been made to calculate the profits made by the farmers who furnished the research assistant with production costs. As it is evident from Table II, all the producers made positive net returns. These returns varied from N₵35.67 of the small farmers to as high as N₵1,755. Shallot production appears remunerative; this,no doubt, partly explains the willingness of shallot farmers to adopt innovations which increase output and the high value which they attach to their shallot plots.

Conclusion

Sabala farming is one of the most intensive systems of farming in Ghana. The high productivity which the system ensures has been achieved through the efforts of individual farmers who are illiterates. The system gives lie to the assertion,often made by experts of agricultural development in the Tropics,that the main obstacle to improvement in agriculture in the region is the illiterate peasant farmer who responds negatively to innovations because of his resistance to change in any form. The Anlo illiterate shallot farmers, faced with the problem of land hunger and difficult environment,have largely through their own efforts been able to develop a farming system based on capital inputs which ensures high profits.

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ACKNOWLEDGEMENTS

The fieldwork for this paper was carried out between August 1967 and January 1968 as part of the Institute of African Studies of the University of Ghana and the Northwestern University Summer Project in selected areas in Ghana. The author wishes to thank the organizers of the project for financing the survey. My thanks are also due to the members of the Gbekor family without whose willing co-operation this survey would not have been possible and my field assistants R.B. Bening, Frank Dunyoh and J.M. Dotse.

TABLE I

TYPES OF ACQUISITION

Code of Producer	Number of Shallot Beds				
	Inherited Through Male Line	Inherited Through Female	Eflaboe	Gift from husband	Fetish Land
A	66		1		
B	66		2		
C	65		1		
D	67		1		
E	73		1		
F	79		1		
G	66		6		
H		34			
I		11			
J		19			
K				2	
L		3			
M		2			
N		1			
O					13
P		1			
Q		1			
R		3			
S		3			

TABLE II

Code of Producer	No. of Beds Cultivated	Cost of Carting Sand N¢	Seeds N¢	Tillage and Weeding N¢	Sowing N¢	Cost of Manure and Fertilizers N¢	Yields in Bundles	Gross Returns N¢	Net Returns N¢
A	15	-	-	3.00	1.20	6.50	90	540	529.30
B	43	0.60	-	4.00	4.50	14.20	258	1,548	1,525.30
C	18	-	-	1.50	1.20	7.50	108	648	637.80
D	40	-	-	7.70	5.00	21.80	240	1,440	1,405.50
E	40	4.80	-	2.30	-	26.00	240	1,440	1,411.70
F	32	-	-	7.40	4.00	20.80	192	1,152	119.80
G	50	-	-	4.50	12.50	28.00	300	1,800	1,755.00
H	17	-	-	3.50	2.50	6.60	68	408	395.40
J	16	-	-	2.00	2.85	6.60	64	384	372.55
K	2	-	-	0.50	0.50	1.40	12	72	69.60
L*	26	-	-	3.00	5.00	13.20	156	936	914.80
T+	33	-	90.00	0.60	-	2.60	198	1,188	1,094.80
U+	6	-	-	0.50	0.90	4.70	36	216	209.90
V+	1	-	-	-	-	0.32½	6	36	35.67½
W+	1	-	-	-	-	0.32½	6	36	35.67½
X+	2	-	-	0.30	0.50	1.40	8	48	45.80
Y+	8	-	-	0.60	2.10	2.40	48	288	282.90

* Cultivated his own plots and others from friends under share-cropping.

\+ Plots not cultivated by owners.