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# 302 Urbanization and Local Community Planning and Development Community Facilities

## VILLAGE MARKETS IN GHANA

A Study on the Planning of Village Markets and Stalls

For the use of United States A. I. D. Missions

Housing and Home Finance Agency Office of International Housing Washington, D. C. 20410

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#### **FOREWORD**

The planning of villages involves more than the provision of rural-type housing. Community facilities are essential for the line of the rural family. Village markets have often provided the focal point around which the life of the community develops—spiritually as well as physically. Planners, architects and housing technicians generally will therefore be interested in this study made by William Mann, Jr., Engineer with U.S. Agency for International Development in Ghana. The photographs, figures 14-23, are a good supplement to the text and drawings and show actual markets as they were developed in various locations in Ghana. They even show what to do and what not to do. Housing advisors and their confreres in other parts of Africa—although customs may differ—can profit from the experiences of Mr. Mann in Ghana. Some of the suggestions made in this study may even be of value in countries outside Africa. Comments in this regard are invited.

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#### INTRODUCTION

Village markets are focal points in a remarkable system which disperses considerable quantities of foodstuffs over broad areas, and supplies a great variety of necessities and luxury items to a majority of Ghana's population.

These magnificently colorful markets presently survive and thrive because they meet the needs and fit the lives of a rural population, and because they serve fairly effectively today's requirements of the economy in one aspect. Notwithstanding, as the element of commerce closest to the people, as a deep-rooted social instrument and as a segment of village planning, studied consideration should be given to improving these markets to meet the requirements of a rapidly advancing new nation.

It is extremely important that the priceless traditional spirit of village markets be preserved, their physical make-up improved so as to better serve their intended and subsidiary purposes, and that they be made more pleasant and healthful as human surroundings. This, in brief, is the interest of this publication.

Essentially the market is a place where people gather for the sale and purchase of provisions, livestock, clothing and various other items. This is its raison d'etre. But, being a complex of several stresses related to human existence and involving in various ways great numbers of people, the market extends to other purposes by virtue of its own kinetic energy. Some of these subsidiary functions are: social intercourse, diffusion of culture, and mass communication.

Traditional commercial frameworks were altered by colonialism. There had been a single commercial order propelled by long established forces. Although these forces varied slightly they were tied to military might, affluence and the system of chieftaincy. Some previously prosperous markets such as Gambaga and Yendi declined when tribal powers were broken, sea routes opened and the slave trade begun. Flow of trade was reversed from northward toward the Sahara to southward to the sea.

With the construction of railroads and motor roads, new towns and trading centres (Asesewa, Kade, Nkawkaw, Hohoe, and Bolgatanga, for example) sprang up at the terminals of communications.

European manufactured goods were introduced and, later on, export crops established. New items of exchange came, including money; new commercial channels were created. Individual merchants arrived on the scene followed by big trading firms.

Through new additions to such sweeping consequences and despite several changes to the commercial framework, the traditional market has persisted as one of the most important elements of commerce. These traditional markets are vigorous, lusty, close to the people and show no signs of retreating in the face of modern super-markets and the like. In the big towns, several such markets are held daily. In the smaller rural settlements, markets are held every fourth day or once, twice or three times a week, depending on the importance of the centre. At crossroads, construction sites and byways, women can be found selling a few articles. Women do most of the selling in traditional markets.

The Ghanaian commercial structure is now composed of three orders: the big trading firms, the medium sized traders (Syrian, Lebanese, Indian, Kwahu) and the traditional markets - village, town and city.

## HISTORICAL BACKGROUND

Before the advent of the Europeans in its midst, West Africa could boast several cities of broad commercial fame. These cities were centres of great empires. Among them were Koumbi in Ghana (about 300-1240 A.D.), Timbuktu in Mali (about 1000-1230 A.D.), Gao in Songhai (about 690-1591 A.D.) and Benin of the Benin Kingdom founded about 1200 A.D. Trade flourished in these cities. Great camel trains travelled across the Sahara and from points east to them. The Moors, Romans, Berbers and even Phoenicians were regular traders at these cities over a span of centuries. Religion and learning passed back and forth over the same routes as trade.

Markets of these early cities were much the same as those in the Ghana of today. The following description 1/ by Pieter de Mares of a

<sup>1/</sup> Pieter de Mares: "A Description and Historical Declaration of the Golden Kingdom of Guinea otherwise called the Golden Coast of Myna" (1602). Taken from Freda Wolfson: "Pagent of Ghana", Page 56, London University Press, 1958.

West African market in 1602 depicts a process and atmosphere quite similar to that to which Queen Elizabeth was exposed when she called at an Accra market during her 1961 visit: "....then the women come to the market with their wares, who bring oranges, lemons, bananas, backovens, potatoes, indianias, millia, maize, rice, manigette, hens, eggs, bread and such like necessaries, which those that dwell on the sea-side have need of, and are sold both unto the inhabitants, and to the Netherlanders in the ships, which come thither to buy it."

Jenne as a centre of commerce, learning and religion was a contemporary of Timbuktu at its height of importance. Though smaller, Jenne outlasted Timbuktu. In its later phases of priminence much of the prosperity of Jenne was founded on trade in gold from the Ashanti. Here is a description 2/ of the Jenne market reported by Felix Du Bois:

"Rows of shops border three of its sides, and the fourth opens upon the Mosque, as if in reminder that honesty and good faith should preside over all its transactions. Sitting surrounded by baskets and potteries, the women sell vegetables, milk, fish, animal butter (salt or fresh), karita, spices, soap and faggots of wood. There are three erections formed by square posts in the centre of the marketplace, with a shop between every two posts, in which men sell the choice goods - native and European textiles, principally, with salt, kola-nuts, slippers, boxes of matches, mirrors, pearls, knives, etc."

## And this colorful mosaic 3/:

"... Next in number to the dealers in beads are those who sell the cloths or dresses - the itinerant drapers, in fact: these are vendors, too, of gaudy-coloured kerchiefs for the head. These three articles - beads, cotton clothes, and coloured handkerchiefs, - complete the list of articles required for attire of ornament, male or female, in Africa."

Markets visited and reported on by these early travellers were key centres in a gigantic wave of commerce which extended over several centuries, moving thousands upon thousands of men and animals back and forth across the Sahara. Consider that the Arab historian, Ibu Khaldum, 4/ wrote that by the year 1400 the annual trans-Sahara caravans required no fewer than 12,000 camels on the Hogar route alone.

<sup>2/</sup> Felix Du Bois: "Timbuktu the Mysterious", translated from the French by Diana White. London, 1897, William Heinemann, page 187.

<sup>3/</sup> Henty, G.A. "The March to Coomassie", London, 1874. Taken from Freda Wolfson, Op. cit., page 164.

<sup>4/</sup> Davidson, Basil - "The Negroes of Guinea", West African Review, July, 1962

Today's traditional markets, rooted in the famous centers of trade and learning, and in countless lesser markets of many ages, are firmly a part of the lives of the people and are pivotal to numerous of their activities. These markets, founded as they are upon an economic base which has adapted itself to various drastic upheavals, are in position to serve importantly in the growth of a new Ghanaian economy.

#### DEVELOPMENT OF COUNCILS

The background of chieftaincy stood Ghana in excellent stead as the framework for indirect rule and as preparation for later steps in self-government. This strong and stable institution of chieftaincy made possible effective discharge of many governmental functions.

Ordinary people held this established hierarchy of authority in great respect. It gave today's leaders of Ghana heredity of experience in ordering affairs of the people.

The approach of British indirect rule was to stabilize this traditional system, propagated over hundreds of years, and control of its rulers to the extent necessary for protecting British interests and accomplishing British purposes. 5/ Nevertheless, some of the foundations for self-government were laid by indirect rule. It gave rise to the system of native authority through which the first steps were taken to order local affairs along the lines of modern systems. 6/

<sup>5/</sup> Similar comment could be made as to roads, which were constructed vertically down to sea ports through which agricultural products, minerals and timbers were sent to Europe. This precluded extensive communication with neighboring territories and effected the character of village markets, the volume and extend of cultural diffusion and several other factors which must be faced by West African Governments today.

<sup>6/</sup> A reference to the nature and significance of this process may be clarifying: ".....from the beginning the grafting was not direct and did not cause either system to lose completely its identity. Indirect rule, rather, preserved both systems as a logical means of transition from the ancient to the modern. If the concern was, as in African sculpture, with creating an image in which a spirit could live, success can be claimed. For Ghana has kept some of the respect for authority learned under the Chiefs and has added enough modern administration to graduate from native authority to local government." William Mann, Jr., "Ghana's Technical Advice Centres for Construction Work in Rural Areas", Community Development Review, Volume 4, Number 4, AID, Washington, D.C.

It was not until 1951 that a true system of local government was established. As Wraith 7/ has pointed out the term itself - local government implies self-respect, self-reliance and self-government. Under the Local Government Ordinance of 1951, the Minister of Local Government set up district, local and urban councils. These councils were charged with the responsibility for catering for the needs of considerable segments of population, including the provision of basic services, one council responsibility being the administration of markets.

More recently, the Local Government Act of 1962 has been passed "to consolidate and amend the law relating to local government." This Act assigns to a council the duty of maintaining order and good government within the area of its authority. Specifically as to markets, the Act gives councils the right:

- (a) "To build, equip, open, close and maintain markets, prohibit the erection of stalls in places other than markets, and prevent the sale and purchase of goods or stock near established markets.
- (b) To regulate and control markets, including the fixing of and collection of stallages, rents and tolls.
- (c) To fix days and hours during each day on which a market may be held and prevent the sale and purchase of goods in markets on any day or at any hour except those fixed."

Clearly, the councils are given the power to control and manage markets. How is this power applied?

#### ADMINISTRATION

The Local Government Act of 1962 allows equal authority to all councils in Ghana over markets under their control. The same Act provides for each council to make its own by-laws. Through the instrument of by-laws, each council sets forth stipulations which govern the control and management of its markets and meet requirements of itself, the people and conditions peculiar to the area under its authority.

Thus, although the pattern of administration is generally similar, there is no rigid standard for the administrative machinery.

<sup>7/</sup> Ronald E. Wraith, "Local Government", Penguin Books, London.

In his position as chief executive officer and administrative head, the Clerk of Council has general supervision of the markets. Under the Clerk of Council, the Sanitary Overseer is responsible for general cleanliness, waste and rubbish disposal, the sanitary display and handling of foods, the control of flies, rats and other pests, and overall sanitation in the markets. He may have a small staff of Sanitary Inspectors.

There might be a Senior Market Clerk in charge of market collectors who also reports to the Clerk of Council. This unit sells tickets to casual traders who enter the market, collects monthly rent from those who occupy stalls or stores, and collects fees from vehicles using the lorry park. Through these two units - the sanitary and the clerical - a council conducts the day-to-day administration of markets. But, market management is subject to another more fascinating hierarchy: the organization of traders themselves.

### **VENDORS ASSOCIATIONS**

Vendors of each category of commodity - e.g. dried fish, cloth, meat, yams, pottery, vegetables, hardward, palm oil, drugs, - are organized into an association, the structure of which is rooted directly in the system of chieftaincy. The social forces 8/ which operate to ballast the organization and pressure individual behaviour within set bounds are tied to the extended family system and the intimate interdependence of village life. These associations are of benefit to traders, and, as will be seen, of advantage to market authorities in collecting rates.

Each commodity group elects a "chief" whose term of office is for life. The "chief" may be "destooled" for failing to serve the interest of the association and its members; but he or she must be given opportunity to face the accusers and answer charges. Decision must be taken by the entire available membership of the associations and, as is usual in Ghana, must be unanimous.

<sup>8/</sup> It is common for a person experiencing misfortune to go into the streets and vent his woe openly and loudly to the community, even moving from house to house. If wronged by a neighbor, he may expose the deed in this same manner. Families may meet to settle the differences, or may take the case before a chief or District Commissioner. Often in remote villages, school teachers are called upon to settle differences. Judgment is usually accepted as final by both parties and the community as well.

A "chief" settles disputes between association members connected with business, helps make funeral arrangements for deceased members negotiates with local government authorities on behalf of vendors and generally manages association affairs. A "chief" may not receive pay. However, the position carries great honor and prestige value. It was found that the Chief Butcher at Koforidua is given skins from all animals slaughtered on Fridays. He, incidentally, is responsible for the fencing of corrals and control of livestock awaiting slaughtering.

Without doubt the concept and process of government applied in vendors associations stems from the background of chieftaincy. However, these associations must not be taken as more than roughly comparable. Chieftaincy was a system of government with a closely structured hierarchy based on military command. As the chief was also a symbolic link between the living and the dead, chieftaincy is in a sense sacred.

Closer comparison would be the benevolent societies, e.g., "susu" or credit societies formed for some mutual benefit of men.bers.

For further insight into the organization and workings of vendors associations, that of the Koforidua Women Cloth sellers may be taken as typical. The chief cloth seller is elected by all women in this commodity group. There are sub-chiefs, one for each tribal division (Kwahu, Krobo, Adangbe, Ga, Ewe and Ashanti) who are also elected. These all consult their members and pass on opinions and wishes to the chief cloth seller. One important function of the association is the setting of prices. For vegetables, prices are agreed upon at the start each day. For cloth, 9/ the setting of prices is done every week or two. The association may discipline or fine a member for selling too high, or too low. If dishonesty is involved (e.g. receiving of stolen goods), the police may be brought in. In any case, the offender may be subjected to some degree of social rejection which, under the prevailing intimate community life, is most punishing.

It will be interesting, at this point to look briefly at an extraordinary method of price control being used with effectiveness in the Anlo District of Ghana's Volta Region. 10/

<sup>9/</sup> Morton-Williams found similar practices by associations in studying the area surrounding Ikaro, Nigeria. His unpublished "Survey of Distributive Trade and Markets" states that although prices are agreed upon at the start of each market day, some discretion in selling cheaper is allowed toward the end of the day.

<sup>10/</sup> Reported by R. E. Cobb, US AID Agricultural extension advisor at USAID Food and Agriculture conference, June, 1962.

Principal money crop of the Anlo District is shallots introduced by Germans about 100 years ago. Over this period the growing of shallots has been developed by the farmers into a precise science. Discussion of methods used is outside the scope of this publication. However, the efficiency of those methods has operated to establish the Anlo District as the main supplier of shallots to all markets in Ghana as well as to some markets across its borders. This same efficiency was responsible for producing surpluses at certain times. In reverse cases the Ouagadugu council sends out agents to encourage farmers to plant more of scarce products.

Typically, market "mammies" engaged in wholesale buying exploited supply fluctuations with skill, playing farmer against farmer and using every stress to their advantage. Price of a bundle of forty bunches ranged from only 6/6d to 15/-.

To prevent overcrowding the market with shallots and to control prices at a reasonable level, the growing area was divided into three sections and each section assigned a definite period of time to send shallots to market, in its turn. The farmers send inspectors to market to control this. Violators are fined and socially ostracized.

Planting time was also allotted section by section so as to match harvesting time with marketing time. The regulations are strict: even if another crop is on the land and not yet matured, it must be cut down so that the planting of shallots can begin on the set day. Result of this system as worked out by a committee of farmers is that the price range of shallots has been boosted from 6/6d to 15/- to 60/-.

#### DISTRIBUTIVE FUNCTIONS

Very likely the government will soon step in to overhaul and control to some extent the distribution of farm produce and such farm products as palm oil in the village market system. This is necessary because what might be called the indigenous system is in its present form deficient in many ways:

- a) It does not insure that all foodstuffs available for the market actually reach the market.
- b) It is wasteful in that it allows needed products to deteriorate in quality or spoil before reaching the market.
- c) It cannot act to adjust surpluses or shortages.
- d) It is not capable of reporting accurate information.

It must be observed that the indigenous system of distribution, although wasteful and inadequate for purposes of the diversified

economy of a modern state still operates to allow the Ghanaian population to be better fed than that of most developing countries. As was said earlier, the system disperses considerable quantities of foodstuffs over broad areas. In view of this and other considerations it would be of advantage for any new system to make use of whatever features from the indigenous system that will benefit immediate or future objectives. A brief look at the indigenous system will be sufficient as background for thinking about appropriate market facilities.

In general, village markets are joined by trade into an interlocking network which embraces a broad territory, influences the schedule of daily living, and feeds beyond that network into one or more major centers. Farm produce is transported into these markets by "mammy" lorry. Most of this produce had to be carried part of the distance by headload. Much of it travelled the complete distance from farm to market by headload, in some cases as much as two days' walk. This problem of strategically located, well maintained feeder roads is probably the greatest, and one which must be dealt with as a matter of urgency in an effective way. Transport by headload instead of lorryload limits income of farmers and limits sharply the quantity of produce which reaches the market.

Lack of credit facilities is another problem which contributes to deficiencies outlined above and should be remedied. This problem affects particularly the wholesalers and the middle men called "jobbers" who sell imported goods to retailers. Both are given and grant some limited credit for periods seldom exceeding one month. The projected investment loan bank should be of help to this particular problem:

Clearly, deficiencies indicated are not inherent faults of the indigenous system but are tied to key targets of overall development.

In a village market, most of the retailers of farm produce are womer who bring items directly from their own farms. Also there are those trading women who tour farms, buy from farmers and transport produce in quantity. The wholesalers who regularly operate between principal village markets and the main centers deal in the sale of lorry loads of produce, like plantations, onions, yams, oranges, cocoyams, palm-nuts, palm-oil or tomatoes. These "mammies" who have influence over supplies and prices, use systems of their own. A woman in, say, Kumasi may send a lorry load of yams to Asesewa where it will be delivered to another woman who returns a load of palm-oil. Prices may be communicated through code by sending with the lorry drivers a certain number of palm-nuts or grains of corn tied in a cloth. Such wholesalers will meet about once a month to settle accounts which often run into thousands of pounds. 11/ As a group these "mammies" are

<sup>11/</sup> One Ghana pound = \$2.80.

meticulously honest but clever traders. Their survival under the prevailing system depends on these two qualities.

Market days differ so that traders can set up circuits and each town have a chance at available trade. See figure 1. This also allows meetings of governmental, political or private organizations to be scheduled at markets in a way to cover the maximum number of people.

A look at figure 1 will give some picture of the machinery of which the markets are components. There is the village market like Agogo, Sekesua, Have or Onyimso. These feed such town markets as Somanya, Asesewa, Tafo, Agogo Junction of Mandesem. The town markets then feed regional markets such as Koforidua, Ho, Tamale or Cape Coast. Markets in cities such as Accra, Kumasi and Dekondi-Takoradi are fed by regional markets, but are also fed directly by the village and town markets. In fact, the order just outlined is not rigid: goods or produce may skip any step, or the order may be reversed here and there. However, the basic framework is as given.

#### DESIGN AND CONSTRUCTION

Having seen something of the background of the traditional markets, the primary and some of subsidiary functions, it is now in order to consider the planning and construction of markets as a whole as well as various physical facilities of markets. Essential aim must be to plan and build so that the market serves all of its functions efficiently and meets the needs of the people. It should also be durable and require a minimum of maintenance. The other consideration is that of beauty.

The outstanding market places in Ghana - and in the world - have a charm apart from the exquisite functional excellence which inspired my father to speak of his Chinese laundryman as beautiful. Invariably they show a fascinating collection of tribes or nationalities or races. In fact, this panorama of humanity, not only of types but of activities, is one of the compelling features of markets. Admittedly, this is not a feature within the influence of the planner. A feature common to many great markets and within the influence of the planner is variety. The experience of moving through numerous walkways, from closed space to open space past structures which differ in type and arrangement, gives surprise after surprise and delight after delight. Such experience can be found in the Kumasi market, Macy's of New York or Istanbul's Grand Bazaar.

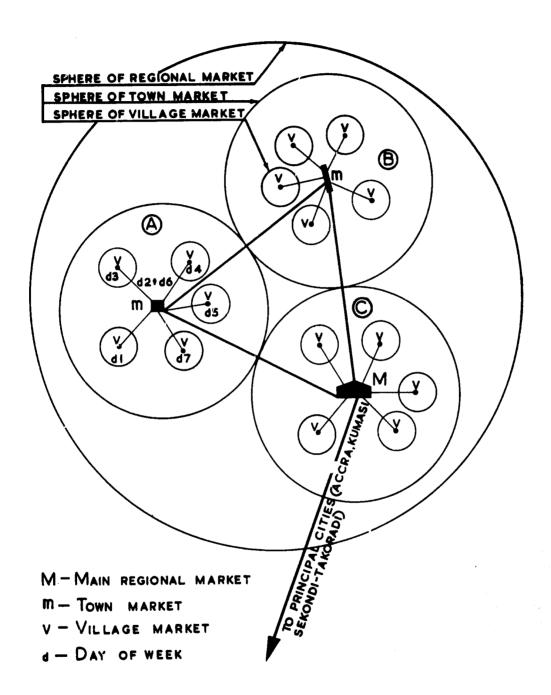


Figure 1. Trade links and general pattern of connections, village, town and regional markets.

#### OVERALL PLANNING

The major function of a market is commerce and its form should follow that function. Smooth operation as a market place should be planned and built-in. Provision must be made for all necessities, such as circulation, material handling, transportation, disposal and sanitation. Provision must also be made for exercise of the various techniques of wholesale and retail selling.

As a total scheme, a market should be coordinated and cohesive. Traffic should feed from the road, into the lorry park and on to the market. See figure 2. The market area should be zoned so that each trade and type of goods has its own known area. It should be laid out so that the clean and odorless goods are on the side nearest the prevailing breeze. Dusty and smelly goods should be placed so that windborne nuisance from them will not disturb the market. Heavy goods should be placed near the lorry park so they will not have to be carried far. Such zoning will also save time for buyers, may assist market income and make marketing more a pleasure.

If stores or shops are planned for, their location should be related to existing establishments of similar classification as well as to the overall market scheme.

In the humid tropics, sunshine must be planned against and breeze planned for. Undue heat and glare of the sun must be excluded from the human body while exposure to moving air is decisive to comfort.

If possible, buildings should be oriented along an East-West axis. Orientation of any given development usually results from compromise of several factors including contours, prevailing breeze, approach and drainage. But sunshine can best be handled by building short sides of buildings to the east and west, protecting long walls from higher sun with overhanging eaves.

The use of suitable trees is an inexpensive but delightful way of providing protection from the sunshine, filtering dust, screening off undesirable views and sweetening the air. Shrubs, flowers and grass as well as trees can reduce glare. These plants also add significant natural beauty.

Direction of prevailing breeze in all of southern Ghana is from the southwest. This can often be reconciled with sunshine control. It might be remembered that perforated walls, low walls or no walls at all permit freer air movement.

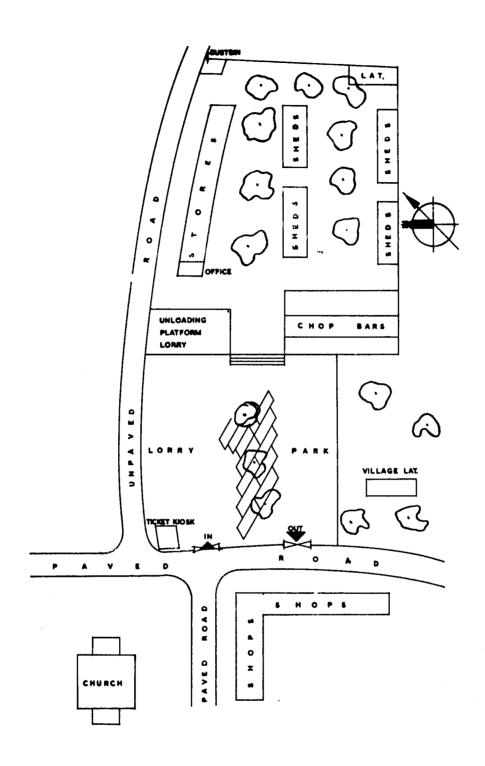


Figure 2. Market site plan.

The market is many things to African people: from it not only come daily bread, but it may also fetch a husband or wife; or it may bring vibrant political doctrine. Shady trees and spaces must be planned for these social and civic functions. Benches are welcome.

#### THE SITE

Trouble can plague a market for years, cause heavy expenses and even affect commercial success if it is built on a poor site. Time and effort spent on site selection, survey and planning should, therefore, not be skimped.

A new village market should be located near the main road and on the same side from which most traffic enters that village. This will reduce the problem of handling the large influx of vehicles on market days, help minimize safety hazards and give easiest market access to most vehicles. All of the market should be located on one side of the main village road to avoid the dangers crossing from one side to the other (figure 2). As a matter of special consideration, the market should be related harmoniously with other functional segments of the village (figure 3). The convenience of shoppers in reaching the market by foot must be taken into account.

If at all possible, a new market should be near or convenient to the existing commercial areas so that business as a whole can get the advantage of cross-stimulation from the market day influx of trade. This will also allow buyers convenient access to goods and services not available in the market: doctors, pharmacists, carpenters, letter writers, repairers, etc.

Other factors permitting, a market should be located on that side of the road to which the wind blows least dust. This is to protect food and goods being sold, reduce dust nuisance and further sanitation.

A market should not be located in a residential area or near a school where noise and odors can disturb, nor heavy traffic threaten the lives of children.

Make sure that the site is large enough for the market to grow and expand.

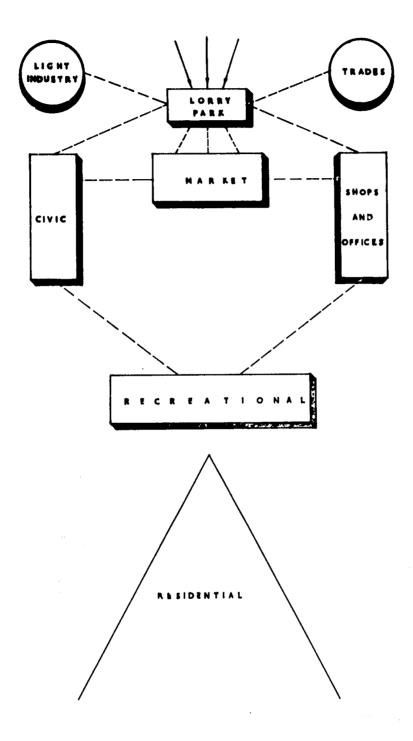


Figure 3. Relationship of market to other community activities.

#### LORRY PARK

A lorry park is simply the area assigned for lorries to enter, unload, load and park. Its relationship to the rest of the market has already been mentioned: it must be directly adjacent to the market. It should be well drained, surfaced and shaded. Space should be given to an unloading bay if unloading platforms are not built. A filling station is often in order.

The question of circulation and parking of vehicles should be carefully studied. Separate roads for entrance and exit, with a ticket kiosk at the entrance, make for good circulation. The parking pattern should be clearly marked out in some way. This is easy on pavement; in unpaved lorry parks, timber or pipe posts may be used.

#### UNLOADING PLATFORMS

As has been mentioned, in present practice lorries bearing goods and produce to market usually group into a lorry park where everything is unloaded and then carried to market stores and stalls. Quantity purchases of agricultural produce by the wholesaling "mammies" must be carried from the market and to the lorry park for loading and transporting.

The inconvenience suffered, time lost and manpower wasted through this process operate to the serious disadvantage of the marketing system. This cannot be afforded under prevailing objectives. The day must be prepared for the fork-lift replacing the Kaya-kaya.

One improvement is to plan the market with unloading platforms located so as to make for the handling of all items with smooth dispatch.

These platforms should be placed near the area where items sold in quantity (shallots, plantain, yams, tomatoes) or heavy items (palm oil in drums, bagged corn) are handled. Location of these platforms will also be influenced by terrain and access roads. Wherever possible, advantage should be taken of slopes in order to minimize earthwork, wall and platform construction.

The working surface of platforms should be of a good quality concrete and of a finish which is easy to keep clean, but which does not make for slippery footing. Retaining walls at the ramp may be of concrete, stone or sandcrete block. They should be protected from damage by impact of lorries. A ramp up to the platform is safer than steps

and is very useful in the handling of drums. Slope of such a ramp should not exceed one in ten.

Care should be taken to give adequate parking space, access and egress and turning radius for lorries at platforms. In some cases, scales for weighing lorries complete with loads will expedite handling.

#### DRAINAGE

Good drainage is a factor which should be kept strongly in mind throughout all thinking and talking about a new market site. A flat site will allow water to stand, hinder good sanitation and create a real problem underfoot. A steep slope will make for damaging erosion and cause costly expenditure in terracing, drains and other control measures. An ideal site, from point of view of good drainage, is one which slopes gently away from the road. Over such a site, rain water will flow gently; no leveling is needed; costly foundation work for buildings is not necessary, and drainage is easy to manage. Gently sloping sites can be easily terraced as necessary or, if not terraced, buildings can follow contours.

If a site which slopes badly must be used and funds are severely limited so that a market must be built in phases, it is better in the long run to first spend money on grading, terracing, drains, culverts and what ever else is necessary for controlling water. Construction in the humid tropics demands prime consideration to torrential rains and their forces.

After good drainage is provided, temporary shelters can be used until more funds are forthcoming.

#### SANITATION

On market days the influx of great numbers of people brings with it tons of waste. Those who come must be provided with the essentials of human sanitation. Often the regular facilities of a community are inadequate to handle the market-day load which may multiply the village population many times. For these reasons, facilities for sanitation must be given high priority in market planning and construction.

<u>Water</u>—Usually the availability of a minimum water supply is one reason why a market is established and survives at a given location. But it is not uncommon to find that most in attendance at a market

undergo hardships as regards water; usually water must be brought for considerable distance and at inconvenience.

One of the paradoxes of the tropics, where rains are extremely heavy, is that the problem of water supply in the dry season is so acute. By all means, rain water should be taken from the market roof area and stored against rainless periods.

The butterfly roof allows rainwater to be collected from the entire roof area into a central gutter from where it can be conducted into a storage tank with minimum down piping. Consumption may be controlled by market officials or by vendors associations. This supply will be of great value but is unlikely to be adequate.

Where a dependable stream is available, it should be piped to the market-town and distributed through standpipes. Where there is no such stream, the question of wells should be explored. In general, well water is likely to require less purification.

Latrines—For a very small market, use may be made of existing village latrines but this is not ideal. In some other cases, latrines may be built at the lorry park to serve both it and the market. However, for a large and busy market, latrines must be built both in it and at the lorry park. In all cases, latrines should be screened with an attractive planting of trees and shrubs, allowing clear access for use and service.

Of the several types of public latrines usually built in villages and towns, it is the septic tank type which meets most requirements. It can be permanently located and will not have to be moved as is the case with pit and bore hole latrines. It does require the hiring of someone for daily attention as does a pan latrine but does not expose those who service it to constant public disgust.

Through anaerobic action, sewage in a septic tank is turned into liquid which may be allowed to soak away into the ground. Sludge settles in the tank and must be removed every few months through a pipe constructed for the purpose or scooped out with a bucket.

It is important to maintain sufficient water in the septic tank for proper action.

Rubbish bins—The huge slug of rubbish, organic and inorganic, which is rolled or walked into a market must be accumulated at convenient locations, taken away and disposed of. Vultures so far still play a role in this process, but should be eliminated when general conditions of cleanliness improve.

Waste should be classified so that paper and similar matter which can be burned is separated from garbage which may be fed to certain animals and that which must be buried. For this latter type, galvanized receptacles with lids may be used.

The bulk of rubbish may be placed into bins. These are usually built of masonry, floored with concrete and have receiving openings inside the market and a removal hatch on the outside accessible to a lorry. They should be sufficient in number.

#### TERRACING

Because of the severity of rains and types of soils present, erosion in Ghana can be fantastic. Losses suffered are directly proportional. It is, therefore, in order to consider some details of terraces and drains.

Terraces should follow contour lines. This will allow them to be about level from one end to the other and will make it possible for rainwater to be conducted into drains built in excavated ground.

For purposes of market function and economy, a terrace should be wide enough to allow for construction of two rows of stalls, or a row of stores backed by stalls and still have sufficient walk width for pedestrians. This means that terraces should not be narrower than thirty feet.

Retaining walls should in general have a thickness of not less than one third their height. Where slopes are gentle and soil sufficiently stable (laterite, for example) stone pitching may be used. (See figures 4 and 5.)

#### **FENCING**

The economic importance of markets to local government bodies makes the control of sellers and collection of fees vital. The monthly gross income from markets in 1961 was more than L1,000 for the Manya Krobo Council and about the same for the New Juaben Council. It is this purpose for which fences are mainly required. Fences also keep out dust and animals, provide shade and control market buildings within an authorized area.

Often markets are enclosed at least partly by buildings, usually closed stores. Additional convenience and economy may result from this arrangement in some cases.

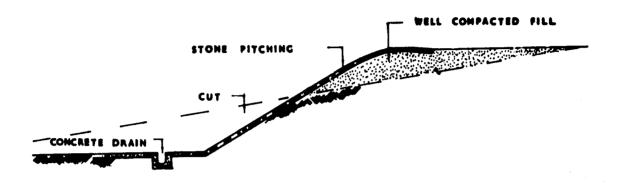


Figure 4. Terracing held by stone pitching.

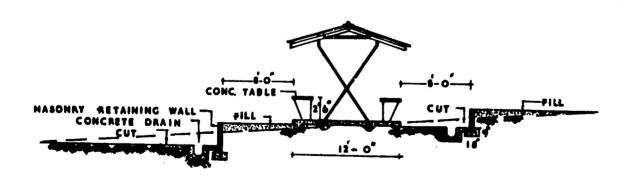


Figure 5. Terracing for market stalls.

Fencing may be of several types. One of the most popular is that built of masonry blocks  $\frac{12}{}$  - "sandcrete or landcrete" in honey comb pattern and plastered. The open spaces in this type wall allow for the circulation of air, so vital to comfort in the humid tropics. At the same time shade is provided for casual traders near the wall.

There are several other types of fencing used. One of the most common is barbed wire fastened to treated wood or concrete posts. Whereas this fencing serves purposes of security and control fairly well, it does not obstruct dust or provide shade. Furthermore, barbed wire in such a crowded situation may injure children. It also is poor from an aesthetic point of view.

Satisfactory fencing can be made with a solid masonry wall about four feet high topped with another three or four feet of expanded metal, iron bars, or precast concrete blocks or panels in any of several designs. (See figure 6.) Types using exposed metal are not suitable for coastal areas because of costly maintenance required to prevent corrosion.

Blocks commonly called "sandcrete" in Ghans are made by mixing cement with sand in proportion of about 1 to 6 and molding this mixture into blocks, either with hand molds or on machines manufactured for this purpose. The machines consolidate materials by vibration and produce the higher quality block.

<sup>&</sup>quot;Landcrete" is stabilized soil. It is made by mixing cement and laterite in proportions ranging from 1 - 10 to 1 - 18, depending on the nature of the laterite. Simplest method of making "landcrete" blocks is by tamping the mixture into boxes of proper dimensions. Better blocks can be made with the several makes of hand-operated machines on the market. Power-operated machines are also available.

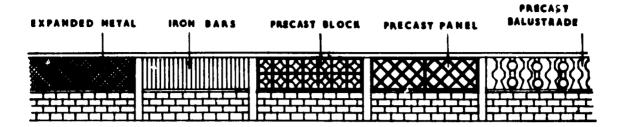


Figure 6. Market fencing types.

Gates may be either of wood or metal. Wood where used should be treated with preservative, preferably creosote. Gates through which lorries may pass should not be less than 10 feet wide and gates for pedestrians should be at least three feet wide.

#### WALKWAYS

All movement inside the market is on foot. Foodstuff and everything else is head-loaded to stores or stalls from the lorry park or from an unloading station at the market. Circulation of all buyers is by foot over walkways. These walkways must, therefore, be serviceable.

Walkways should be well drained. Wherever possible they should be paved. The paving material may be of concrete, tarmac, stone, sandcrete block or any impervious material available in the area. Well-compacted gravel over a good camber is of value.

Market "mammies", who are extremely sensitive to anything which might affect business, do not generally prefer walkways between stores to be more than eight feet wide. Walkways wider than this do not cause pedestrians to pass close enough to wares on display. The wishes of these tenants must be reconciled with the volume of pedestrian traffic and planning for shade trees in walkways.

Care should be taken to see that walkways are laid out and buildings located so that pedestrian circulation is free. There should be no bottlenecks; any stalls or stores away from the lines of traffic will bring lower revenue to the council. At Asesewa there were such

isplated stores which market "mammies" refused to rent until the pattern of circulation was changed to route more traffic past them.

The planting of shade trees along walkways should be given much more encouragement.

#### BUILDINGS

The three classifications of trade carried on in village and town markets can be identified as wholesale, retail, and service industry. Roughly speaking, two types of buildings are used to serve these three classifications: stalls and stores.

A great volume of the retail trade is carried on by petty traders. But, due to the fantastically large proportion 13/of these traders to population (in Accra one for every 2.5 families) their margin of profit is small. Petty traders therefore cannot afford to pay more than a small rent for business space. Then, construction costs of stalls must be kept low. The same applies to stores but to a somewhat lesser extent.

As education advances so that women are prepared for other work, as industry makes new jobs available and as family incomes increase, natural social and economic factors will reduce the number of women engaged in trading. This will improve the retail trade picture and make higher quality facilities more possible.

Stalls—A cheap to build, well-ventilated, clean, well-lighted shelter from sun and rain is the object. Each vendor should be afforded adequate space, about 8' x 10'. (See figure 7.)

It will be found that customs  $\frac{14}{}$  and preferences vary from place to place making necessary minor variations. But, as a rule stalls regularly arranged in rows with walkways between these rows are quite suitable. Economy and good ventilation can be realized by building sheds two stalls wide, see figure 8; but, much bigger sheds are likewise satisfactory, especially for wholesaling.

<sup>13/ 1958</sup> Census

In some places wholesale buyers circulate freely through stalls; dividing rails are, therefore, not wanted.

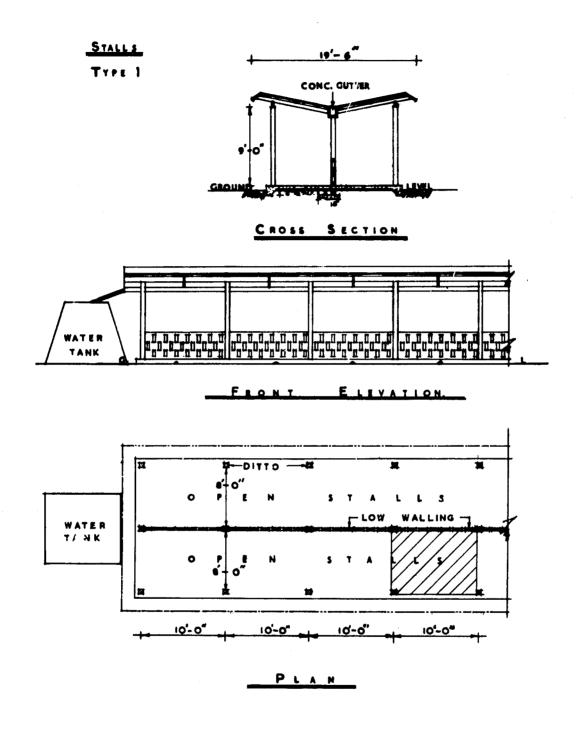
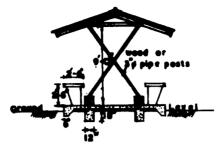
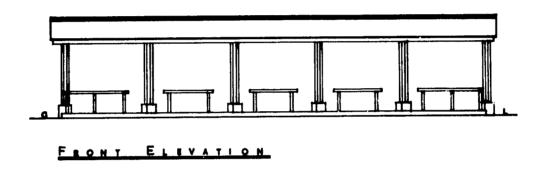


Figure 7. Open stalls. The butterfly roof allows rainwater to be collected from the entire roof area into a central gutter from where it can be conducted into a storage tank.



CROSS SECTION



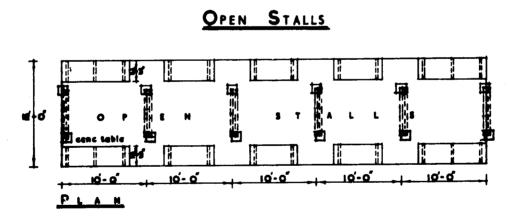


Figure 8. Open stalls. A platform with an impervious table and permanent umbrella is ideal for the display and sale of fruits and vegetables. Open stalls of this type are economical to build.

Doxiadis Associates 15/ points out the following with respect to economy in roofing market stalls:

"The prevailing tendency is to eliminate the trusses supporting the sheets. This is done by curving the (roofing) sheets so as to increase their strength and using them to roof small spans without any support. The conclusions reached in this respect are as follows: For a span of 11'-6" it is possible to use the usual type of sheeting, SMG. 20 with 1' corrugations. These sheets can withstand the load of a man and, by being installed at the proper slope, the suction force of the wind". (See figure 9.)

Flexibility and ease of expansion should be provided for in stalls and all other market buildings. Being essentially concrete platforms with permanent posts and no bearing walls, open sheds are freely flexible. Expansion is simply a matter of adding on at the ends, except for those ends where water tanks are located.

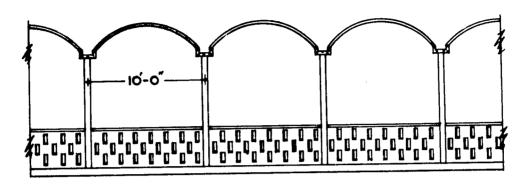
Stores—The lock-up type of commercial compartment found in West African markets is not identical to a "store" in the Western sense. It traces back to the trader who came to the "Coast" to make money, but not to settle. He sold wholesale and retail from his store and often slept there as well.

In certain ways this. West African store applies some of the most modern techniques of merchandising: It has no display window but opens up its entire interior-full of goods to inspection of the public; self-service is used, cutting sales people to a minimum; a sliding price scale having set top and bottom limits, operates with a skill that would interest an American discount houser. In fact, these techniques are used throughout West African markets.

Economy must be a principal objective in stores also. (See figure 10.) Margin of profit for proprietors handling hardware, cosmetics, toilet articles, drugs and other such products which are not perishable and not easy to move back and forth from home to store also operate on a marginal profit.

Stores should also be oriented to exclude sunshine and accept breeze. It has been found very important to front the larger stores with a verandah, not only as protection from sunshine and rain but to

Doxiadis Associates, document Dox-Gha 41 (4-20-62), Commercial Centres, Preliminary Report, Page 20.



FRONT ELEVATION

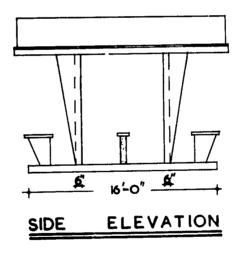
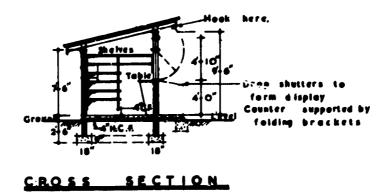


Figure 9. Open stalls with curved roof.



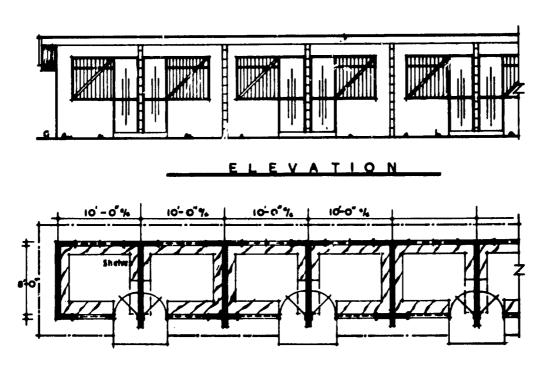


Figure 10. Small closed stores. Small stores, rented at low rates, fit the needs of some vendors of tinned goods, cosmetics, drugs, hardware, etc. Storage shelves are important and doors may be of the "Dutch" type so that half may be open for ventilation and half closed.

give more display space and make for convenient entrance and circulation. Burglar proofed vents should be made above 7' high in the front and rear. Often stores are built back-to-back with open stalls. (See figure 11.)

In practice, stores are usually constructed without shelving, counters or cabinets; each tenant building what best suits his pocket and the wares he sells. Since precise use of each store unit is not known at time of design and construction this is often the only practical approach. However, standard fittings could be designed for later selection and use. Improved utility and taste would no doubt result.

There is vast room for improvement in the design of stores. One feature due for attention is fenestration. Hinged doors and windows widely in use are not sightly and have the disadvantage when opened of taking either floor or verandah space. Where funds will permit higher quality, overhead roller doors can be used to advantage in several variations. The Marche du Plateau in Abidjan is one attractive example of this.

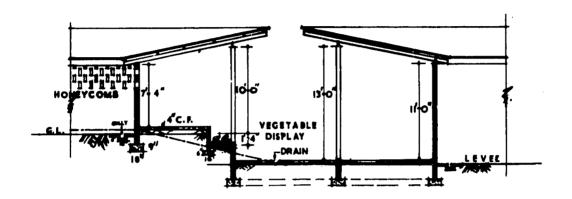
Shops—Western influence is causing increase in the popularity of the type unit we shall call shops. In any of Ghana's cities are to be seen department store-type establishments with super-markets, perfume counters, toys, ready-made clothing and all the rest so familiar in Europe and America. Councils are finding it prudent to consider shops for town markets. They would probably be used by tailors, seamstresses, pharmacists, grocers, the Lebanese and Indian type establishment, and for certain offices. The New Juaben Urban Council at Koforidua has discussed shop buildings to replace the blank market wall which now lines valuable footage of Koforidua's main street.

Flexibility is essential in shops. In the examples shown in figures 10 and 12, two, three or more single units can be combined by omitting partitions; stalls can be added to the rear if a council wishes; windows can be varied.

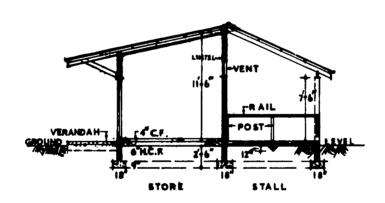
Window shoppers can stroll in the shaded arcade. This type pastime will likely take on a broader role as life in West Africa continues to change.

Meat stores—Meat is one of the main sources of disease in the tropics. This poignant fact alone drives home the importance of buildings in which meat and fish are sold.

This building should be insect-proofed. All entrances should be double fly-trapped. The floor as well as all tables should be of concrete and well-drained to take off water from frequent scrubbings.



# ARRANGEMENTS TO TAKE ADVANTAGE OF SLOPE



# COMBINTION OF STORES & STALLS

Figure 11. Open stalls.

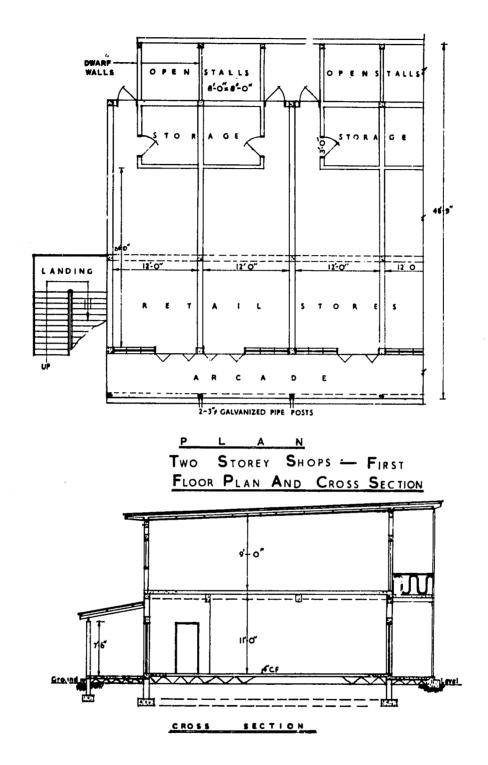


Figure 12. Two story shops—first floor plan and cross section.

All drains should go to properly constructed soak-aways which conduct water into the ground. Walls should be of a material which can withstand frequent scrubbing.

One arrangement is for butchers to sell from screened booths through a small window to buyers on the outside. This arrangement is used satisfactorily at the Ouagadugu market.

There must be plenty of water available in the meat store. It may have its own roof-water collection tank to which water may be hauled if necessary in dry season.

Burglar proofing at windows is necessary if meat and fish are to be left inside overnight.

In this modern day there is no excuse for these buildings not having cold storage. Even village markets can use kerosene refrigerators. Refrigerators could be bought by butchers on cooperative arrangement or supplied by Councils on rental. In towns having electricity, supply walk-in boxes having hangers and shelves, and compartment lockers could be built into meat stores.

Town markets require showers and locker rooms for butchers and staffs.

Chop bars—Two type establishments at markets go by the name of "bars". First is the chop bar which is really the local version of a restaurant. It has its counterpart in the public eating places of the semi-rural masses all over the world. The other is the palm wine bar; the pulque drinking places in Mexico come to mind as counterparts to it.

Main areas of the chop bar will be those for food preparation, food service, and dining.

The food preparation area should be screened as should all of this building. A paved compound or porch is very satisfactory as a place where fufu can be pounded. Storage space should be provided for the food preparation area. Floors should be concrete throughout. There should be good lighting, good ventilation and refrigeration.

Food service may take place across a counter dividing the kitchen and dining rooms. The dining room itself should be well-ventilated, well-lighted, floored with concrete and fly-proofed.

Palm wine bars—For the average Ghanaian farmer, his main regular outlet for public recreation and refreshment is the palm

wine bar. Often this is no more than an enclosure formed by bamboo, raffia or bush sticks. But sitting on a wooden bench inside that enclosure and sipping palm wine from a calabash, the farmer has a kind of relaxation and fellowship.

Floors of palm wine bars must be of concrete and well-drained.

Palm wine is usually stored and served in the same area. Partitions between the storage-serving and drinking areas need not be more than counter height. This will afford freer circulation of air.

Drinkers usually prefer to sit in circles or benches rather than at separate tables. Figure 13 shows a suggested design for a palm wine bar.

#### **OFFICES**

There is always some Council staff at markets to collect fees, enforce sanitation or control overall administration. The number of such staff depends on the size of the market as does work space required for them.

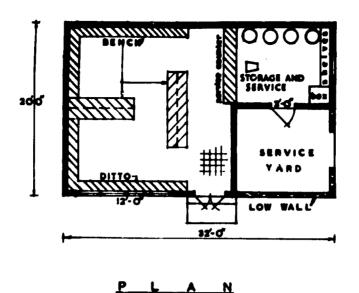
At the smaller markets what amounts to a kiosk serves adequately as a ticket selling booth, place to keep records and do the little routine writing, as well as a place out of the sunshine. Stores may be located so that a unit adjoining an entrance gate can serve as the office.

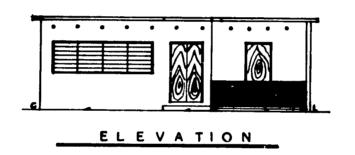
In the larger and busier markets it is necessary to plan in an integrated way a small office building along with the overall scheme. It should have a vantage point from which observation and control of the market will be easy. Offices at the Takoradi market are elevated a story up and are glassed on four sides so as almost to suggest a lighthouse.

Functions such as information services, safety and fire protection, public telephones, branch banks and offices of farmers' organizations could all be planned into the administration block of a large market.

#### COMMUNICATIONS

Already some of the markets are used as centers of communications. Posters are placed here and there where they might be seen, visits are sometime made to markets by Ghana Information Service sound vans and political rallies are often held on market days.





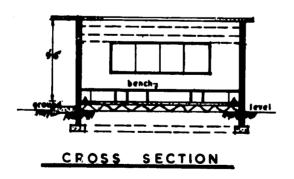


Figure 13. Palm wine bar.

Apart from these contrived applications of communications at markets there are several streams, having deep-rooted tradition and culture as their source, which flow through the teeming social intercourse of a market day.

There is gossip of several brands: family, tribal, political, personal scandal, etc. Over many generations, talk has been the main means of giving and receiving information for an illiterate people. Talk is freer and less inhibited than elsewhere. There is no hesitancy in asking one intimate details of his personal business. All at the market bring news of the place from which they come and tell everything they know. Drivers from broadly dispersed locations have snow-balled information all along the route to market and exchange it freely while waiting in the lorry park.

Leaders may sometimes gather together and sit in some prominent place under a tree or on a verandah where they are accessible to any who wish to report or discuss something.

More use could be made of markets as communications media, especially in educating the masses. For example, candid posters in vernacular languages could serve to rejuvenate in the minds and lives of the people various elements of their culture - e.g., meanings of adinkyira symbols, proverbs attached to linguist sticks, great men and events in their history. Mobile cinemas, designed for daylight projecting, could show training films on child care, sanitation, or any other chosen subject.

#### CONCLUSIONS

The traditional market in southern Ghana is remarkable in several respects. It bears a rich heritage of commercial vigor, social direction and cultural integrity which could be valuable to efforts of several quarters.

Greater order must be given to individual markets as well as to the entire system of which they are a part. There must be improvements in overall layout, in the calibre of various single structures and in the total environment. Markets must be organized and operated as elements of an interlocking regional system. They must be brought to better serve the people and the government.

The fact that the true center of a Ghanaian town is its market has far-reaching significance. Compare the town plaza of Mexico or the square of a mid-western American town with the teeming, colorful

African market. The first two provide relatively calm settings for general socializing, recreation, gossip, courtship, soap-box talks and serious discussions. All of these take place in the African market as several levels of human activity amid the over-lay of bustling commerce. There is the ability to function in any of various swinging spheres while accomplishing the principal objective of trade.

Deep vertical and horizontal study should be given to markets so that the task of designing for the swiftly advancing new Africa can be undertaken with vision rooted in solid knowledge. Physical development must be linked to social and economic behavior.

Very little of a scientific nature is known about the sociology and economy of these markets. Architects, planners and engineers cannot form markets to follow function until that function can be defined to them in all its aspects.

If nothing else this report has indexed some essential considerations and marked out some directions which serious study and constructive action could follow even now.

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Figure 14. Bustling trade at crowded Asesewa market. Shelters are badly needed to protect people and goods from the elements.

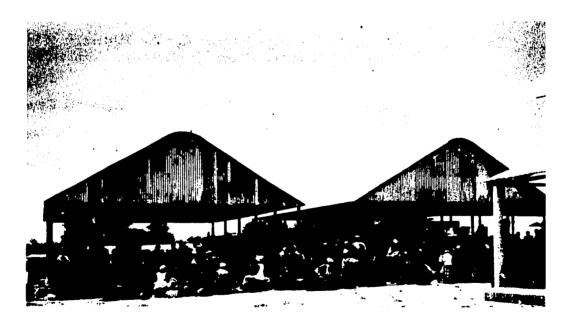


Figure 15. At Senchi, on the bank of the Volta River, large market sheds have been erected.



Figure 16. Smaller shelters in rows are being used at Asamankese.



Figure 17. A village market may often be divided into departments just as an American super-market is. This is the "yam department" under construction in the village of Suhum.



Figure 18. Today is not market day at this neat little arrangement in Anomabu. Note openness which allows free circulation of air so important in the humid tropics.

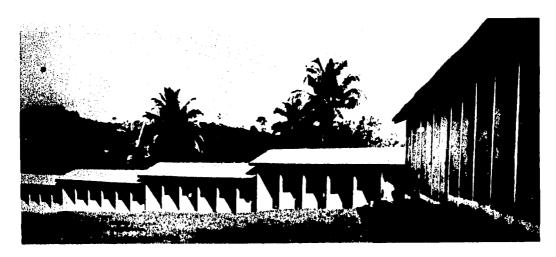


Figure 19. This market is a severe lesson in the necessity of consulting with the people. Because they did not like its location, market women refused to use this market at Nsawam despite its practical arrangement. The Local Council has since converted the buildings to classrooms.

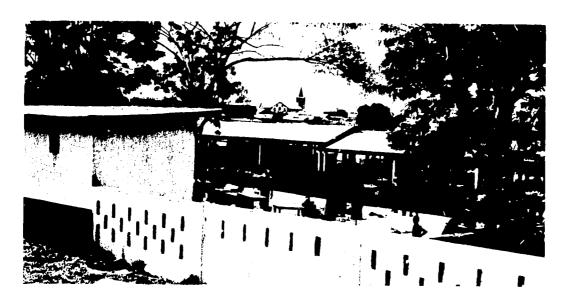


Figure 20. Trees make a big difference to beauty and comfort. This is a view of the Akropong market.

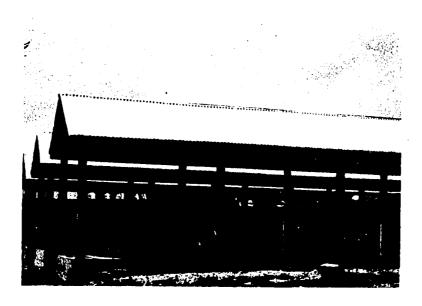


Figure 21. Here are newly constructed stalls at Kukurantumi. Stalls are divided with wooden rails and posts treated with creosote preservative.



Figure 22. Where land is limited expansion may have to be vertical as in the case of closed stores at the Takoradi market.

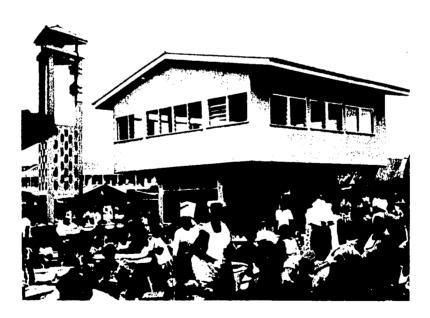


Figure 23. The Takoradi market is a large one. Office of the market administrator is elevated so that he can observe large areas.