4. MARKET INSTITUTIONS FOR MAIZE IN NORTHERN NIGERIA

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Introduction
Maize is produced by both small and large-scale farmers in the northern guinea savanna of Nigeria, where it is widely consumed as a staple food by poor rural and urban households. Green fresh maize is cooked or roasted and hawked by women and children, providing a livelihood for many urban poor households. Maize is also processed industrially for flour, animal feeds, biscuits, beverages and beer and in these forms is consumed widely across Nigeria. The ban on importation of cereals by the Federal Government of Nigeria since 1986 has greatly expanded these latter uses and thus overall demand for maize.

This report examines the maize commodity chain and the market institutions that regulate its operation, based on observations in two bulking centres. Attention is paid to gender and ethnicity, credit, security and safety, access to information and transport infrastructure.

Study location and focus of research
The studies focus on two major bulking markets in northern Nigeria’s main maize production zone, Giwa and Jengre. Giwa market is located at about 30 km from Zaria on the main Zaria- Sokoto high way, within the Moslem Hausa heartland. It is one of Nigeria’s four main bulking centres for maize and the study consequently focuses particularly on transport issues. Jengre, about 30kms from Jos along the main Jos- Zaria road, is located within Plateau state in a region peopled by diverse Plateau groups such as the Lere, Lemoro and Amo. This market also plays an important bulking role, but on a rather smaller scale than Giwa. Here the focus of research was more on credit relations and security. Both markets deal in both yellow and white maize.

Methods
Both researchers used qualitative approaches with an emphasis on observation and individual and group interviews (using checklists). The researcher in Jengre found it particular advantageous being a woman, since it was easy for her to sit among the women retailers and conduct interviews. The nature of the activities going on in the market did not allow group interviews, though a few took place after closure of market activities especially with the wholesalers.

The researchers interviewed diverse market actors (traders, transporters, loaders etc.) and key informants such as the Sarkin Kasuwa (market administrator) and the chairman of the dillalai (commission agents) during repeat visits to the markets on market days in December 2004 and January 2005. The emphasis in each case was principally upon maize traders and transporters, rather than on consumers. To achieve consistency and validity of information gathered, triangulation was used to cross check and confirm responses from 2-3 respondents, sometimes at separate visits.
One limitation to the Giwa study, which focussed on transport, was that it was not possible to reach actors like transport owners because they were not in the market. Such vehicles are bought and given to drivers to drive without the owner accompanying them.

Results from qualitative research in these markets were compared with material from other studies of northern Nigerian maize marketing.

**The maize marketing chain**

There are many actors who play active roles at different times in the maize marketing chain. Understanding the role of each actor in the market is necessary because they determine how rural producers and consumers have access to the market and also how the maize gets to urban consumers and industrial users. The actors in our two study markets vary slightly in their local names and roles since Giwa is located in a Moslem Hausa region, whereas Jengre is dominated by Plateau ethnic groups. In Jengre the September 2001 crisis in Jos has indirectly affected the trust and interaction between the Christian and the Moslem traders. Thus roles that were exclusively played by Moslem traders are gradually being invaded and succeeded by the indigene Christians. This can be seen from the significant role now being played there by the indigenes as dillalai. In both markets, women play a very limited role, though in Jengre women are more strongly in evidence in the retail sector.
Figure 1: Marketing channel for Maize in Northern Nigeria.

Maize Marketing Channel

- Very important channel
- Important channel
- Less important channel
Maize retailers (mai auna)

In Giwa market the retailers are generally male, because this is a Moslem Hausa/Fulani market. The maize retailers usually deal in more than one grain at a time. The maize traded is obtained in two ways; first, the farmer/rural assembler brings the maize into the market in smaller measures (usually less than a bag) and gives it to a known or familiar retailer or if a first timer seller, to a retailer that must have been recommended by a relative or known person. The farmer/rural assembler will leave the maize with the retailer to sell for him/her. He or she may or may not disclose the quantity brought to the retailer at the initial stage until the sale has been made. The farmer/rural assembler might stay with the retailer while the sale is being made or might go into the market for other transactions but will return later to collect the money from the sale. When the farmer/producer returns, the retailer will ask for the quantity brought (number of measures) if that has not been disclosed earlier to him and on confirmation by the retailer, he pays the exact amount to the owner of the maize. The retailer is not paid for the services rendered to the producer/rural assembler but may receive a gift. If however, after measuring the quantity brought there is a fraction of a measure left, that fraction is forfeited to the retailer. The retailer gathers such fractions from all the customers and sells that for himself as his gain from the services provided to his customers.

The second way by which the retailers obtain the maize sold is by buying from farmers/rural assembler that brings maize to them. In this case, the retailer knowing the likely prevailing price for the maize in the market for that day, will buy it from the farmer/rural assembler at slightly lower price and pay him/her on the spot. The retailer then waits to sell the maize at the prevailing market price or he keeps it till the next market if the prevailing market price of maize that day was not good enough for him to make profit.

Customers patronizing a retailer mostly come from the same village as the retailer. The customer-retailer relationship is built on mutual trust, particularly if such customer always tells the truth on quantity brought for sale and if the retailers always pay correctly for quantity brought without dispute on price of sale. In the case of Hausa Giwa market, the trust as basis of transactions in the market is not just due to familiarity but also religion. In most cases, the people involved know each other over some time, but the fact that they are all Muslims who believe in the supremacy and judgment of Allah, should anybody cheat the other, is an additional advantage.

Giwa retailers were asked if there has been disagreement between them and their customers in the past and how such conflicts were resolved. They agreed that there could be disagreement between them and their customers. An instance was given in which the maize brought to one of the retailers by a farmer/rural assembler turned out to be stolen. Cases of stolen grains being brought to the retailers for buying are said to be common in the market and
therefore the retailers said they are often careful when buying from those who bring grains to them. According to them, those who bring stolen grain are in a hurry to dispose of it, so they sell at much lower than the prevailing prices and they often leave behind the container in which the grain was brought. If somebody lost his/her grains and complains to Sarkin Kasuwa of the theft, the Sarkin would send his officials/assistants to see if it could be found with anybody. The tracking team would first visit the retailing section of the market to see if it could be found through the recognition of the container of the grain or the grain itself. If it is found with any retailer, the case will be reported to their leader (Sarkin mai auna). If the person who stole the maize has been paid and can not be found, the retailer on whom the stolen maize was found would be asked to pay for the stolen maize. Where the amount involved is more than the retailer’s immediate capacity, members of his association may be asked by their leader to contribute money to help him out to quickly offset the bill of the stolen maize. The contribution to bail out a member from a problem is not compulsory nor fixed but effective as members do this as insurance against the day they too might enter into a problem. The experience from a past episode is described in the box below.

A thief stole 2 bags of cowpea in the market and sold it to a retailer in the market. Later that day, the owner identified the thief and he was caught and taken to the Sarkin Kasuwa. The Sarkin Kasuwa asked the thief to lead them to the buyer, which he did but unfortunately, the thief pointed to a wrong retailer as the buyer. Since the real buyer could not be ascertained the pointed retailer was asked by the Sarkin kasuwa to pay the money for the 2 bags and the money was given to the owner of the maize. The thief could not pay because he had spent it.

Because of the danger of receiving/buying stolen grains in the market, the retailers are very cautious with their customers, particularly if they are first timers: they watch the price the seller is willing to accept (would sell cheap); find out the number of measures contained in the container (may not know if it is stolen); note whether the seller is going back with the container with which the grain was brought for sale.

In Jengre, by contrast with Giwa, maize retailing is dominated by women. They purchase maize from the dillailai in bags or from the Uwarmudu (dillaliya) in measures (mudus) The retailer does not have direct access to the producer in the market area, by contrast with the situation in Giwa, but may purchase maize from the producer either from the farm or from the house. In other respects their mode of dealing seems similar.

b. Rural maize assembler/traders (mai mudu)
The mai mudu collect maize from producers in small quantities (not in bags) and retail in mudus (measures) to consumers and retailers who also buy in relatively small quantities. The smaller rural assemblers brings about 2 – 3
bags to the market but the bigger ones can bring up to 20 bags depending on their capital base and the season. The rural assemblers cover a distance of up to 30km and use vehicles to transport the maize to the market.

Most in Jengre are women (uwar mudu), but in Giwa most are men, although young females of 11 -15 years may be involved (i.e. prior to marriage). The role does not necessarily require a large capital base, since they do not purchase maize in cash. Mai mudu are usually paid from the remains of the grains after measurement. This makes them measure with special skill in order to get left over after measurement as their remuneration. They also provide credit in cash and in kind to most of their patrons while they themselves receive credit from the farmers and sometimes from the bulk purchasers.

In Giwa market, the mai mudu have to sell through a dillali and pay ₦20 per bag sold to the dillali as commission. They bear the transport cost which ranges from ₦40 – ₦50/bag from near by villages and about ₦100/bag for distant places. If they sell at the retailing section, there will be no payment for commission but will have to pay dandoko (head load carriers) or maibaro (wheel-barrow carriers) to transport them from motor pack to the section at a fee of ₦10 per bag. But because the retailer buys a very few bags at a time and may not pay until after sale, the rural assembler prefers to sell at the wholesale section through the dillali and get his full money. The dillali canvases for buyers, negotiates prices based on quality of the maize and consults with the rural assembler on the offered prices before the maize is finally sold, to ensure that that price is acceptable to him.

The rural assembler’s benefits from going through the dillali are that he does not have to stay there to negotiate sale prices with the buyer which is a saving on time and energy in negotiation and he also gets his money in full once the sale has been made. The maize is given to a male dillali for sale but the actual buyer could be a male or a female.

c. **The maize bulkers (yan jabali)**

A group of traders called *yan jabali* were identified in Giwa market. These are few in number and unorganized as they operate without an association. They go round the retailers to buy maize in measures at retail prices and bulk them into bags (40 tiyas = 1 bag) and then resell wholesale in bag. However, because the bag is not weighed before sale, they turned the maize into a smaller bag that contains less number of tiyas, usually 2 – 5 tiya less and sell it as if it is a normal bag of 40 tiyas. Sometimes, they use the same bag from which they have taken some tiyas out but which has been sew neatly so that unless you are highly experienced in the trade, you may not know. By the time they buy 2-4 bags on a market day, they would have obtained 8 - 20 tiyas extra which they now sell at retail price as their profit. Those who have money
to buy more could get an extra bag to sell at wholesale price, which is often less than retail prices. The retail price was ₦ 95 per tiya while the wholesale price was ₦ 92.5 per tiya. The retailers may reduce ₦ 1-2 for known customers depending on the quality of maize on sale. The yan jabali are regarded as ‘cheaters’ because they play on the intelligence of those who do not know the market well in terms of sizes of measures used since sale is not by weight.

d. The yan wazai

Yan wazai operate in many Plateau markets, including Jengre. They are a set of traders who are neither dillalai nor retailers, but operate both as wholesalers and retailers. Like the yan jabali they have a poor reputation. They purchase maize from the farms or houses of producers and sell to retailers or consumers in the market or give to the dillalai to sell to wholesalers. They may also provide credit in form of cash, fertilizer and seedlings to the producers since they have direct access to them. However, in Jengre market some respondents complained that their bags were usually not full according to the kilograms (kg) specified on the bags. In Jengre market efforts are reportedly being made by the market authority and the dillalai association to stop the activities of the yan wazai in the market.

e. The company agents/merchants (yan kamassio)

Company agents are common in Giwa market. There are three types: firstly, those who come from the companies during the glut periods to buy maize direct from the market and store them until the maize could be evacuated. When they get to the market, they make use of the yan kamassio to buy the maize for which they pay ₦ 20 commission for every bag bought. The second type of company agents are those who are contractors to companies and who get the local purchase order (LPO) to supply certain quantities of maize to the company. They are usually wholesalers of grains who also buy from the market through the yan kamassio in the same manner as company agents or sometimes, they may supply from their own production as most of them are also producers of maize. The third type is that the yan kamassio may also act as company agents as they are approached directly by companies to make purchases for them as if they are wholesalers. In this case, they are given LPO like the wholesalers to supply the maize at an agreed price.

The company purchases are usually made between November and December each year. At this period, they send out their agents to go round markets in the production zones to get information on supplies and prices from traders and farmers. When the LPO is given the unit price is Naira per tonne even though, the purchase is made in bags that have not been weighed at purchase in the market. The supplier therefore has to be careful of the type of maize purchased and the size of bags as not to run short when it is weighed in the company at delivery. There is no specification in terms of colour and variety for the maize supplied to companies but the hybrid variety, which is denser and the yellow coloured maize are more preferred.
The yan kamassio who are general grain dealers are resident in the market and facilitate grains buying for large buyers for a commission. They operate in four ways: (1) they buy maize for wholesalers or contractors who have LPOs to supply maize to companies, (2) they buy for company agents that come to the market to make direct purchases, (3) they help individuals and wholesalers who want to make large purchases to carry away or for temporary storage in the market for sale later, or (4) they get LPOs from companies to supply maize.

In the first and second cases, the yan kammasio would be approached to help buy some specified quantity of maize for the wholesaler or contractor. The buyer may or may not be physically present in the market during purchase. The buyer if present will pay the full cost of the grain plus the cost of transportation to the destination. If the owner is not physically present, he would deposit 50% of the transport money and pay the balance on delivery. The arrangement for the conveyance of the maize is done by the yan komassio if the buyer did not come with his own vehicle. The risk of given load to an unknown vehicle is given below in the box.

After this incident, the yan komassio no longer use vehicles where they don’t know the owner or driver or they have to send an escort to follow the driver to the destination.

The yan kamassio receive ₦20/bag of maize purchased. In the 3rd case where the buyer is on the ground and the maize is to be conveyed away, the same process for the 1st and 2nd cases are followed. If however, the maize is to be bought and stored in the market, the yan komassio will buy the maize based on the amount brought, rent a store in the market and store them until the buyer wants to sell or carry them away. If the sale is to be done in the market, the yan komassio will do the selling either in the presence or absence of the owner and his money is returned to him. The yan komassio will take N20 per bag of maize sold again. In the fourth case, the yan komassio will buy and supply the company as required in the LPO and get his pay on delivery.

f. The commission agents (Dillalai)
Whereas the yan kamassio act for buyers, dillali act for sellers. In many markets across northern Nigeria, farmers are not allowed to sell maize in

An Igala man paid for 5 trailer loads of cowpea to be delivered in Lagos. He paid the advance of 50% of the transport cost to the yan komassio but only 4 of the trailers reached destination as one driven by a Ghanaian disappeared with the transport deposit and the cowpea. The yan kommasio was made to pay for the cowpea diverted and the transport fee to the owner when the case was reported back at Giwa market through the association.
quantity directly but must deliver the produce to a dillali who is mandated to sell the produce to traders and consumers. New producers or suppliers to the market who don’t have a dillali are quickly identified and attached to a dillali by the Chairman of the dillalai. This relationship continues as long as the producer brings his produce to the market. A producer can choose to change the dillali, through the chairman of the association, if he encounters problems.

The dillali- seller relationship is built over time on mutual trust. Usually it start from a maize seller being personally known to the dillalai (family relations, in-laws or friends) or he was introduced to the new customer by an old customer who has previously sold through him. As the trade interactions continues over time (possibly after 2-3 transactions), the trust is built a round themselves to the extent that the seller can freely bring his maize for sell and don’t have to be present when it is being sold and the dellali can hand over the sale money to the owner without any argument or doubt from the seller. The length of interactions between a new customer (seller) and the dillali is a function of the extent of this trust because when doubts and arguments over quantity brought and the amount remitted to owner start arising, then the trust has broken down and the seller would look for a new dillali for his future transactions.

The commission agents in Giwa market were all Hausa men and they dominated the market in numbers (up to 60% of all participants/actors). They get a commission of ₦20 per bag of maize sold or 0.55% of the producer price. The commission is deducted from the money paid by the buyer. The commission received is more or less fixed by the Dillalai association in the market but usually, it is the same amount for all the markets in the zone at that time. There could be increase in the commission if the general prices of grains increased. Sometimes however, the seller may give some token amount of money to the dillali over and above the commission received from the buyer as a show of appreciation.

Even though the activities of the dillalai are conceived as excessive and seem to exclude the farmer from having direct access to consumers, the associations have in many instances provided mediation. They arguably protect the farmer from being cheated by buyers and also allow the farmer to transact other business in the market while the dillali does the selling. In Jengre market, only the dillali association members are allowed to collect the commodities from the farmers and sell. Therefore, the fear of farmers losing substantial income is minimized especially considering the fact that the dillalai as well as the farmers are indigenes.

**ACCESS TO CREDIT**

Credit arrangements permeate the maize chain. Many small farmers, for example, depend on financial assistance or assistance in kind based on their personal relationships with the dillalai. The dillalai organize and collect fertilizers for them and they pay with their produce after the harvest. Retailers also depend on the dillali for credit assistance, in this case the dillali giving
them 1-2 bags of maize to sell and pay directly after the sales (in Jengre market with extra cost/interest (riba) of N50 per bag per day). The retailers consider the charges of the dillalai high as complained by Rhoda Tanko – a 23 year old woman who has been retailing for the past four years. She exclaimed that even though the charges are high “we don't have a choice since we cannot afford to pay cash for the bags; we have to depend on them and pay their charges until the day we are able to afford it”.

Retailers may also provide credit to their consumers, usually base on trust, since most of them are familiar with each other. Access to credit is a major constraint to the retailing business, which limits and sometimes cripples their activities. These difficulties are linked to retailers’ low social status and lack of collateral. Thus, in Jengre, the only solution has been to rely on the dillalai to collect produce on credit or through informal savings (weekly adashe) and credit associations where they exist to obtain business finance. The adashe is usually collected weekly on market days by the organizer (uwaradashe).

In Giwa market sale of maize to consumers and other buyers on credit by retailers was not common because of past experiences. One of the retailers told the story of how he sold maize worth N350 to a co-retailer who lives near the Giwa market to sell and return the money to him in the next market day but has not been paid two years after the credit was given. The man has changed business from grain trade to selling water in the market. When the retailer was asked why he didn't take action on him, he said that having persistently asked him to pay and he has refused to pay, he has left him to God since he no longer belonged to their association where report could have been made and perhaps sort the intervention of their leader and members. To him that debt has been written off as bad debt. Forcing somebody to pay debt especially small one like this is not common in the community, as everything are often left to God by virtue of their religion. One of the retailers however said that he sells on credit to other retailers in the market but such person will have to return the money plus any unsold grain at the end of the market that day. This usually happens when a retailer runs short of a particular grain type and his customers are looking for it to buy. Those retailers who have more sell through those who do not by giving the sellers some discount on the bag. One of the trader said that his credit sale is about 10% of his total sale on any market day.

The provision of assistance establishes and strengthens relationships among traders due to the interdependence on each other. This in turn sustains and encourages market operations and networks. Table 1 illustrates the credit relationship between the market actors.

Table 1: Credit relationship among the maize market actors

<table>
<thead>
<tr>
<th>Credit receiver</th>
<th>Credit provider</th>
</tr>
</thead>
</table>

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<table>
<thead>
<tr>
<th>Role</th>
<th>Roles</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dillali</td>
<td>Producer, wholesaler</td>
</tr>
<tr>
<td>Producer</td>
<td>Dillali, Transporter, Yan Wazai</td>
</tr>
<tr>
<td>Wholesalers</td>
<td>Dillali, Transporters</td>
</tr>
<tr>
<td>Retailer</td>
<td>Dillali, Transporter, Yan Wazai</td>
</tr>
<tr>
<td>Yan Wazai</td>
<td>Producer, Transporter</td>
</tr>
</tbody>
</table>


The table above shows that the dillali plays a dominant role in the provision of credit to almost all the actors in the maize chain. This suggests some form of confidence and trust placed on him by the producers and other traders. Other sources of credit included personal savings, relatives, friends, personal relationships and associations. Only one actor (wholesaler) had ever received formal credit for reasons given on table 2.
Table 2: Reasons adduced by market actors for not obtaining loan from the formal credit institutions (banks)

<table>
<thead>
<tr>
<th>Reasons for not obtaining loan</th>
<th>No. of respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lack of awareness/ignorance</td>
<td>18</td>
</tr>
<tr>
<td>Lack of collateral/security</td>
<td>15</td>
</tr>
<tr>
<td>High interest rate</td>
<td>14</td>
</tr>
<tr>
<td>Cumbersome bank processes</td>
<td>10</td>
</tr>
<tr>
<td>Fear of default</td>
<td>5</td>
</tr>
<tr>
<td>Corruption of bank officials</td>
<td>3</td>
</tr>
</tbody>
</table>


An official of National Agricultural Credit and Rural Development Bank (NACRDB) confirmed that, until recently (about 5 years ago), credit was only available for large scale purchasers/traders and even the present government’s policy on providing credit to rural producers/traders is not known to the small scale traders due to lack of information. Some of the traders complained that they applied for loan for more than a year now (since 2004) and they have not received any information on that. This probably explains why the traders rely on the informal credit providers which are easily and readily available. Most of the small traders, especially the uneducated seem to have a phobia for formal credit. This can be observed from the response of Madam Alisabatu Ishaku given below:

“What do I have and who knows me that I will go to the bank to look for money”

Trust was discovered to be the key condition attached to credit provision and repayment. This trust is established through long time transactions between the actors.

Similarly, in Giwa, none of the market intermediaries used formal loans to pursue their business. The reliance on credit from family members and friends by traders is traced to the difficulties associated with getting formal credit and with repayments when there is a problem that cause default. With informal credit, there are no repeated visits and filling of forms; where there is default there may be no seizure of property but re-scheduled. Furthermore, the credit may be a seed capital to purchase grains for the merchant relation at an agreed price and whatever the person can save from it becomes his own capital. This is very common among grain merchants who have boys or agents in the field. They go to the bush markets to buy at cheaper prices and from the difference in prices can make substantial money over time to start their own business. In Giwa, as in Jengre, the rural assembler’s sources of trading capital were personal savings and borrowing from family member.

Trader associations
Membership in market associations can play a crucial role in marketing. Each category of middlemen has a structure built around it – an association with a
chosen leader to whom all members respect and goes for arbitration in time of conflict. The various association members rally round one another in times of needs which may be social or financial that may or may not be related to the actual businesses. For instance, in the social circle, when a member is marrying or having naming ceremony or is bereaved, members will be present on such occasion and would likely present gifts which may be in kind or cash. As a business security, members rally financial resources to members who are in financial distress or run into business trouble. Thus, there is some kind of social insurance for members whom the formal insurance system does not provide for, particularly as the market intermediaries have in most cases no formal education and may not be rich enough to afford formal insurance.

Most dillali in Giwa market belong to an association and have membership cards for the association which they carry. The role of the association is to help solve conflict whenever it arises either between members or between members and customers. The registration fee is ₦1000 per member and the payment is once and at registration. However, some dillali operate without being a member of the association. The un-registered dillali are said to be dangerous to deal with by the public as they may be thieves and dupes. The dillalai do not force sellers to bring the maize to them but it is an accepted norm among the Hausa people so everyone complies. A seller who wants to sell by himself might face frustration from the members of the association by ensuring that customers are lured away.

There is no regulatory body controlling the activities of the retailers in Giwa market as such, although there is an association of the retailers whose membership is very loose as there is no membership register. The association has a leader that is appointed by members and such leader in most cases has a bigger share of the market and share the interest of the people under him. The association binds the retailers together in fighting for their common interest, providing space for new entrants in the market and for helping one another in times of need or problem. When a member is in financial problems, members may rally cash assistance in form of loans or give grains at slightly lower prices to the person to sell so that after the sale, he can make some profit while returning the agreed amount and still remain in business. They also help settle disputes among members whenever they arise.

Although there is, in theory, free access to membership of the associations, screening occurs. This involves putting prospective members on probation to study their character before full acceptance and, essentially, being a moslem. Leadership is built round the associations and the local authority that owns the market and which is represented by the market chief (Sarki Kasuwa).

By contrast with Giwa market, in Jengre maize market about 70% of those interviewed disclosed that they do not belong to commodity associations except the National Union of Traders and Marketing Association (NUTMA), which is the general association for the traders. This is a great departure from Giwa and other markets.
In Jengre, only the dillali/transporters belonged to the commodity association while that of the transporters was based in another town. This suggests that the control by some of the associations such as retailers, producers and ‘Yan wazai’ and wholesalers in this market are not as strong as it is in some other markets in the region. Some retailers suggested this enables them to participate freely in buying and selling even though they may not benefit from privileges enjoyed by associations members else where. The traders explained that to belong to any association, it is mandatory to register financially. For the dillalai, they pay ₦300.00 for initial registration while the labourers (that is, loaders, off-loaders) pay ₦500.00. This may be a key constraint to other traders participating in such associations.

Space allocation is made by the local government in Jengre market and this is a major issue. This means that access to space is on first come first served basis, especially for the retailers whose wares are small. This has encouraged disputes and quarrels among traders since permanent spaces are not allocated to individuals. Storage facilities were also not available in the whole market. Traders (wholesalers, dillallai, retailers) therefore store their maize in private stores outside the market. They therefore pay extra money to secure and store their goods.

**Security**

The maize market in Giwa is segmented into a retailing section, which is in the main market and a bulk buying section, which is separated and walled round for security. The Giwa market authority has hired guards (*maigadi*) for the market and any unsold maize can be left in the market till the next one at a fee of ₦20/bag. Although the market is generally safe under the maigadi, there may be theft on market days. An example of what happened during the last Ramadan fasting (September 2004) was given. A bag of cowpea was stolen from a Dillali in the market. The *Dillali* was asked to pay 66% (2/3) of the cost of the stolen cowpea to the owner while the owner bears 34% (1/3) loss. It was said that if the theft was done while the maize was at custody of the *maigadi*, the *maigadi* will have to pay the full cost to the owner.

Each trader pays ₦30 per stand/stall as revenue for the LGA per market and from this, the LGA supplement the salary of the *maigadi*.

In less organized Jengre market, absence of security is a major concern to all the actors in the market. This result in constant breaches of security in terms of fighting, disputes, theft cases (recorded every market day). Therefore the safety of goods is not guaranteed in the market. As a result, the market does not function beyond 6pm due to fear of uncertainty, attack by robbers and the safety of trade. Only 4 night watchmen (Maigadi) are engaged in providing security, and even then it is not officially arranged as individuals have the responsibility to make arrangements for the safety of their goods at their own risk with the informal security providers in the market. Four of these informal security men were engaged in Jengre market. They watch over and protect produce that are left in the market over night. They also make arrests of
thieves on market days and they are taken to Sarkin kasuwa who resolves the issue. Where the matter is beyond him, it is then reported to the Nigerian police outside the market. The maigadi explained that although theft cases are reported almost every market day, they are not able to arrest all the thieves because of their limited no which makes it impossible for them to cover the large market area. Three reported theft cases had been made since the beginning of 2005 and handed over to the police. They further explained that thieves are usually thoroughly beaten when caught before they are handed over to either Sarkin kasuwa or the police to serve as a deterrent. It was discovered that their services are privately arranged for by traders/producers whose produce are left in the market. The maigadi only work on market days and are only engaged when goods are brought into the market. Once they are evacuated, their services are over. This seems inappropriate for a large regional market such as this.

Weights and measures
In both markets, lack of standardisation of measures leads to occasional disputes. In Giwa market, the retailers use two types of measures for the grains in the market. They are tiya and mudu (½ tiya). These measures looked standard but the retailer said that each type has smaller and bigger sizes, which is only known to the retailers (difference not visible to ordinary buyers and sellers). The difference was demonstrated by the retailer who used his long finger to measure the surface diameter. The buyers (rural or urban) may not know this difference unless he/she is told. These measures were bought from open markets and were not regulated by anybody but are accepted by both buyers and sellers since weights are not used in the market for measuring grains. When asked if the retailer use the same measure for buying from farmer/rural assembler for selling to the urban and rural consumers, the answer was affirmative but they cautioned that if a retailer wants to cheat he would use the bigger measure to buy and will sell with the smaller measure. The implication of this practice is that the rural poor farmers and assemblers are cheated as they receive smaller prices while the rural and urban consumers are made to pay more prices for getting less quantity of maize. The Dillalai sells in those bags brought by the owners. According to the dillalai, even though the sizes of bags are different, it is the business of buyers to know which size is smaller or bigger and that is why buyers may need the services of the yan komassio for buying because they know what should be the big or small bag, have idea of what the price should be and arrange for the transportation.

In Jengre maize market, similar variations in price occur as a result of differences in the size of bags or mudu used. Again, sharp practices are observed in the use of different measures for buying and selling. For instance, while a bag (100kg) of maize sells for N3,350 at the dillalai (commission agents) while, a similar bag sells for N3,450 – N3,500 (less transport and commission charges) at the retailers in the same market. It was also noted that the measure (mudu) used by the retailers to buy maize differed from that used for selling. Such measures are manipulated and mutilated and,
additionally, the style of measurement is so fast and with skills such that the consumer goes home with less quantity of grains than was paid for. Due to the ineffective regulation, these practices are not checked and therefore not penalized by the authorities. This sometimes generates much debate and argument between buyers and sellers as they haggle over the price of the commodity and the mudu to be used.
Market information

Table 3: Sources of market information in Jengre market

<table>
<thead>
<tr>
<th>Source of information</th>
<th>Frequency of Users</th>
</tr>
</thead>
<tbody>
<tr>
<td>Face to face (trader-trader)</td>
<td>24</td>
</tr>
<tr>
<td>Market associations</td>
<td>15</td>
</tr>
<tr>
<td>GSM</td>
<td>3</td>
</tr>
</tbody>
</table>

Source: Field survey, January 2005

Personal networks are the major sources of information in Jengre market. All the traders interviewed have personal networks through direct contacts which they trust to provide information on prices, demand and supply from other markets as well as other information relevant to their businesses. Fifteen traders indicated that they also rely on information provided by their associations. Just three (out of all 24 interviewed) traders (wholesalers) indicated that they own and use GSM as a major source of information in their business (though they do not use it in Jengre market due to lack of service in the area). The cost of owning and maintaining GSM is beyond the reach of poor traders whose profit margins are minimal. This explains why many depend entirely on face to face (personal network) and their associations for information.

The use of radio/television and government bulletins were not common sources of information. They complained that the media/government were not interested in marketing activities and therefore are not in the position to know daily or weekly trends in the various markets. Consequently, they cannot be relied upon to provide information on price, demand, availability, quality, credit opportunities and general market behaviour.

In Giwa market, information on sources of supply, demand and prices is more freely discussed on phones. Cellular phones and line phones have become popular with traders, particularly dillalai, yan komassio and wholesalers.

Price determination

The price of maize in Giwa market is not fixed but determined by the forces of supply and demand in the market on that day. The reference price however, is determined by the price of maize in the last nearest market, which the itinerant traders and the dillalai always know. The prices also depend on whether it is morning, afternoon or evening on a market day. The afternoon prices tend to be higher while evening ones are generally lower. However, through bargaining, some few Naira may be reduced from the prevailing market price for a buyer depending on his/her bargaining ability.

Regarding the role of the associations in fixing the price of maize, Jengre respondents varied in their views. While 50% of the respondents explained that price was determined by the market forces of demand and supply, 25% argued that it was the dillalai that determine prices, and 12% said that it was
between the farmers and the dillali. However, for the transporters, the transport charges were determined by their association. Further investigations into the pricing issue confirmed that the dillalis were responsible for fixing pricing by observing the demand and supply of the produce, transport costs and charges which they said starts from Saturday evening when the goods are being brought into the market and when the buyers arrive. The more the quantity brought in, the lower the price and the more the buyers in the market, the higher the price.

Transport institutions

a. **Within-market transportation**

In Giwa market wheelbarrow transporting seems to be an occupation mainly for poor young boys, as elsewhere. Those interviewed were all between 13-15 years and in Koranic (Islamiya) schools. Their main role is to carry loads for those who need their services. They were found in both the wholesale and retail sections of the market. They carry loads into the market from one section to another, from and into Giwa town and to the motor park. The wheelbarrow can carry up to 4 bags of maize at a time, depending on the strength of the pusher. The charge is paid after the maize has been delivered at the destination. The wheelbarrow pushers have no association and indeed, most of the wheelbarrows being pushed are rented from people who themselves don’t push wheelbarrow but are engaged in other businesses. The wheel-barrows are hired at ₦50/day (market). The wheelbarrow pusher pays a market rate of ₦10 and could earn between ₦150 – ₦200 per market day while spending about ₦55 for feeding.

When the wheelbarrow pushers were asked who bear the loss if the maize got damaged or stolen in transit, the wheelbarrow pushers said they bear the loss - they are sometimes asked to pay for damaged grains where the bag burst in motion.

**Yandoko (Loaders/Off-Loaders, etc)** load and offload maize as well as packing/stalking maize in different vehicles for onward transportation. In Jengre each loader is usually attached to a driver (master) during each market day to carry out his function. Their income depends on the number of bags carried per market day. Carrying the bags within the market attracted ₦10 – ₦20 depending on the distance and quantity. The charges were usually paid by the maize owners while the drivers paid for the packing/stalking.

They belong to an association known as National Union of Labourers (yandoko) through which they gain access to employment. They however complained that they do not have a branch in Jengre. It was observed that the traders/drivers and the yandoko have a strong linkage which makes the transportation of their goods easy.

b. **Transport to and from market**
From the villages, pick-up vans and buses are the common means of transportation of grains to the market. From the remote villages, the maize is conveyed on motor cycles and cart or donkeys to a central point where the pick up vehicle is available. Sometimes, the driver could be invited home if the available quantity is enough to fill the truck. If there is a vehicle break down while carrying the maize, the driver arranges for another vehicle to complete the trip once it has been paid by owners. If however, there are damages like burst of a bag as a result of a bag falling off or an accident, or the maize is stolen in transit, the owner shares the cost of the loss with the driver. The proportion of share is often negotiated between the owner and the driver on the basis of who was careless in causing the loss. If the owner followed the vehicle and there is a missing bag, he bears the full loss as it is taking that it was his own carelessness.

For onward transit of maize from the markets, contact is made with drivers in the market or transport is pre arranged outside the market by the yan komassio (see trader section above) or owners of the grains to be carried. The yan kamassio deals with maize buyers from all parts of Nigeria. The vehicles patronize several markets. Some may go to 5 or more different markets in a week. The owners of the grains may or may not follow their load to its destination. In fact, instances were given where owners of the grains join a taxi to go ahead of or behind the lorry. To avoid the risk of diversion of the grains on the way, some owners only use the vehicle whose driver is known to them while others ask their agent/boy to follow the vehicle as escort. The escorts normally carry the way bill for the grain. The driver is responsible for any repair on his vehicle while the owner of the grain takes care of damages to his grain such as burst bags due to accident of the vehicle. Most of the actors like dellalai and yan komassio have little or no capital of their own, so a number of valuable the innovations that have been introduced to sustain the system. For the yan komassio, the introduction of waybills and escorts for hired vehicles to deliver the grains at destination has made it easier for delivery to be made anywhere in the country and even to other countries without the owner of the grains accompanying the vehicle.

Where a trader does not have enough maize to take a full lorry, he may be joined with one or more traders going the same direction and they will share the full cost based on the number of bags for each person in the lorry. This arrangement is made between the driver and load owners or their yan komassio.

In most cases, the driver does not own the motor he drives (all are male). The typical case of driver/ motor relationship is illustrated in the box below.
The owner of the lorry called me to take the lorry and drive and make money for him. From the money made, the driver should take care of the lorry fuelling and minor repairs, take care of himself and brings the balance to him. The balance account is given at the return from every trip and after checking on the expenses incurred and explanations provided he accepts the balance as the returns. If the owner believes the driver, he continues to drive the vehicle otherwise he seizes the motor and look for another driver.

One of the drivers interviewed in Giwa market was going to Katsina, a distance of 250km away from the market. He has a Mercedes lorry that can carry 200 bags of maize at a time. A typical breakdown of a trip was illustrated as follows for the driver who carried 200 bags of maize from Giwa market to Katsina town.

Income = N150 per bag x 200 = N30000
Less expense:
- Union fee in the market = N200
- LGA produce loading revenue = N700
- Loading N10 x 200 = N2,000
- Way charges (unofficial) = N500
- Gas/Diesel = N16,000

Total expenses = N19,400
Net income = N10,600

The driver makes a return of N10600 less the money he spent on feeding and any repairs. Out of the balance returned, the owner of the vehicle sometimes takes ? and leaves ? for the driver but at times, the driver may not be given anything, particularly if he has not returned any money for a long time. The driver does not have to be a member of the union to load in the market but he must pay N200 for the union before he can load (or N150 in Jengre market). The driver is responsible for paying road charges (unofficial charges) which include, police check points, highway patrols, road safety, and vehicle inspection officers (VIOs) who mount many such checks and expect a fee along the way.

The National Union of road Transport Workers of Nigeria (NURTWN) fixes the transportation fee for the loads and passengers where the union exists. Otherwise this is done by the driver. The amount charged is supposed to be a function of the prevailing fuel prices (should increase with increase in petrol and diesel prices and vice versa) and the distance of travel. In most cases in Nigeria, once the transport charges goes up even if the fuel prices comes down, the transport charge remains on top and when the transport prices are increased due to increase in fuel prices, the proportionate increase in transport charges is often higher. Once the transport fee for the load and
passengers have been agreed and paid, any other charges on the road which usually are illegal is born by the driver of the vehicle.

The improvement on the availability of petroleum products following deregulation of the petroleum sector and agricultural produce marketing in Nigeria have contributed significantly to the sustenance of the maize marketing chain. There is not much scarcity of motor fuel now and prices are fairly stable, which makes load costing easier. This is good for consumers and producers.

Factors that influence transportation costs apart from fuel are the poor condition of the rural and urban roads particularly during the rainy season, various charges by associations, extortion by the policemen on the roads, loading and off loading charges etc. The extortions by the policemen, Road safety officials, Vehicle Inspection officials and Local Government officials are most resented by the traders and motorists. The final price of maize paid also depended on the number of checkpoints, distance and the amount of money given as tips in any single trip, which may range from N2000-N4000. This further increases food costs for the urban poor.

**Conclusion**

Studies in both Giwa and Jengre markets show the complex organisation of Nigeria’s maize market and the importance of services provided by a range of intermediaries, notably the dillali and other commission agents. The dillalai facilitate selling of grains for the owners using their familiar knowledge of the market in terms of ability to negotiate prices with customers and read market forces: they also provide an important source of credit to many small maize producers. The Yan kamassio’s role, in contrast is to facilitate buying, particularly for buyers not familiar with the market in terms of pricing mechanism, size of bags and quality of maize makes the marketing process more efficient and beneficial to buyers. The provision of security for maize in transit through provision of escorts for vehicles going to companies/buyers at distant places is another function for the yan komassio. In this study, the market margins have not been determined, but the dillali’s commission was estimated to be 0.55% of the producer prices in Giwa, market while the rural assembler’s profit was 6.2%. These figures suggest that the markets are fairly competitive.

The retailers and rural assemblers also play major roles in the maize marketing chain, because they are the direct link with the producers, the rural consumers and sometimes, urban retailers. Their conduct in efficiently determining the prices and using correct measures determines to some extent how much income is earned by the farmers and the access of both rural and urban consumers to the maize market. If the prices are fair at this stage, more rural poor and urban poor will be able to buy maize. From this perspective, the current diversity of measures in use needs better regulation and
standardisation, since this is a major source of disagreement among market participants.

There are certain restrictions of access to the maize market. Women are almost absent, especially in Moslem areas like Giwa, and restrictions based on membership of the relevant associations exist, again particularly in Giwa (as in other large markets of the Hausa heartland). Membership of an association confers considerable advantages to traders, ensuring safety of the business and confidence based on mutual trust. So long as there is inadequate access to formal credit assistance, inadequate security provision by the Nigeria police, and inadequate market infrastructure, the role of trader associations is likely to remain vital to successful operation of the major maize markets like Giwa. In Jengre, recent changes in trader composition (associated with the Plateau crisis) appear to have reduced the formal organisation of the market. Whether new forms of association emerge as the emerging market structure becomes more established, remains to be seen.

The transport sector plays a crucial role in the maize marketing chain. Diverse forms of transport are available to deliver maize across Nigeria and to neighbouring countries, accompanied or unaccompanied by the owners (although, it requires transparency and mutual trust to be able to do the latter successfully). However, numerous hazards make transport expensive: bad roads, unofficial charges by a diverse range of officials, lack of formal insurance etc. One positive recent feature is the deregulation of petroleum.

Poor people gain income from some elements of the maize marketing chain as it currently operates (notably as small-scale producers and in other areas such as porterage and petty retailing), but standardisation of measures, greater access of women to trading opportunities in bulking markets, and an overall reduction in rent seeking by officials (especially in the transport sector) would substantially improve their potential to benefit from the trade.