Market institutions and urban food supply in West and Southern Africa: a review

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Abstract
As the urban share of Africa’s population increases, the importance of understanding how food supply is shaped by market institutions has grown. However, this topic has received little attention from policy makers and researchers despite the implications of market institutions and regulatory systems for livelihoods and poverty. This paper reviews the existing literature on market intermediaries, access to selling spaces, finance for traders and sources of information on prices and supplies. The gaps in research are identified and a set of key research issues in this crucial, yet under-researched, area are articulated.

Introduction
Despite rapid urbanisation and increasing levels of urban poverty, urban food systems are rarely adequately considered in recent African urban development studies. As Ellis and Sumberg (1998) stress, the analytical and policy importance of rural-urban interactions for urban food supply cannot be underestimated: there is a dangerous tendency to downplay or to neglect these interactions in determining access to food and welfare by the urban poor. Moreover, as Dorward et al. (2003) point out, recent work on livelihoods and poverty reduction has generally failed to generate studies on the critical role of urban food market institutions, although work abounds with analysis of the impact on urban livelihoods of increases in the cost of basic foods under structural adjustment. The lack of attention to markets is even more surprising in the context of the rapid liberalisation of markets in sub-Saharan Africa over the last 20 years. The exception has been the detailed analysis and debates about maize markets in southern African countries.

Our focus in this paper is on the mechanics of urban food supply systems, with particular reference to West and southern Africa. We draw on a diverse range of recent studies from the past 15 years and situate these in the context of earlier work on market institutions in Africa. While there has been a growing interest in financial and labour markets, there has been less attention given to produce markets. We explore the roles of intermediaries linking producers with urban consumers, paying particular attention to the functioning of formal and informal market institutions within countries, and to small and medium-scale actors in urban food trade There is a wide range of highly complex formal and informal institutions that shape Africa's food marketing systems: different types of associations and self-imposed rules, in addition to national legal systems that affect how trade is done. We need to know more about how these formal and informal regulatory systems operate, if we are to improve access to markets and thus enhance urban food supplies, and also secure income and livelihoods. Our aim in the paper is to pick out some of the key questions which have yet to be addressed by researchers in this crucial, yet under-researched, area.

This review of literature draws on material coming from a diverse range of theoretical perspectives including anthropology (on how culture, social structures and social networks shape organisational forms), economic sociology and economics (on economic institutions, transaction costs and how economic activity is embedded in social relations). Most of the
material on market institutions included in the review shares a common emphasis on situating the analysis of urban food supply in a social and cultural context as well as its economic setting. The neglect of research into produce market institutions is symptomatic of the emphasis on overly economistic views of development, such as prioritising liberalisation. Such approaches have been underpinned by assumptions that economic institutions will automatically appear and market economies will be structured along the lines of European or North American capitalism.

More nuanced perspectives have come from New Institutional Economics with their attention to formal and informal market institutions including the ‘rules of the game’ defining the incentives and sanctions affecting people’s behaviour and transaction costs (North, 1990; Dorward et al., 2003:323; Dorward et al. 2005). These can be formal organisations of regulations or less formal institutions, such as networks of trust, norms of reciprocity etc.

However, the attention to institutions has not led to greater understanding of how poor people build livelihoods, but rather institutions are used as an explanation of why the forms of liberalisation promoted by multilateral agencies and donors have failed (Chang, 2005). Furthermore, within these approaches there are also assumptions that institutions will automatically appear to reduce transaction costs (Granovetter, 1994). In this paper we review material that shows how institutions are deeply embedded in social and political practices, and may continue due to path dependency even when they appear inefficient and other forms of introduced institutions do not develop, as they fail to build on the existing social and cultural context (Hodgson, 1988; Granovetter, 1985).

Following a preliminary review of power relations along commodity chains and attitudes to traders in Africa, we consider trader access to selling spaces in markets, to credit and to information on prices and supplies. We explore the factors that allow access, the factors that exclude access, and the implications of these for urban poverty, the security of urban livelihoods, and the security of urban food supply. Our focus here is principally on market intermediaries, rather than the role of government in market regulation, although this is discussed in relation to southern Africa due to its continued significance in the crucial maize market. There is insufficient space to examine the role of transporters, porters, security agents and others who make a livelihood from the marketing system: these will be the subject of separate papers. As our review illustrates, although there is certainly evidence of trader profiteering from a range of countries, traders can be key players in improving the marketing systems that supply urban consumers and can create new markets for rural producers.

Our regional and country focus
Although we aim to provide a broad overview of the current state of knowledge, we draw in particular from literature covering three diverse countries, Nigeria, Ghana and Zambia, where we have recent field experience. Among these countries Nigeria, which has the largest urban population in Africa, has an especially rich historical marketing literature up to the 1980s, but has been less well-served since. This older material provides useful pertinent background to understanding current broad conditions (for example Anthonio, 1968; Jones, 1968; Thodey, 1968, Olayemi, 1974; Mortimore, 1979; Delgado, 1986), including gender and ethnic components to marketing, commodity chains and trader-state relations and past experience with market interventions. More recent material on Nigeria comes mainly from studies of urban and peri-urban horticulture in Enugu (Onah et al., 1998) and Kano (Olofin et al., 1998), which include very brief reviews of marketing. Subsequently, Ghana became the focus of
much donor-supported research in West Africa and consequently is the subject of a substantial proportion of recent literature for the region, as discussed below.

There is rather less food marketing material available for much of southern Africa, beyond the attention to the broad, economic functioning of maize markets, as noted earlier. In Zambia attention to this topic is increasing, perhaps in part because urban poverty has become so severe that deurbanization has been a feature for the last two decades, possibly uniquely in sub-Saharan Africa (Potts, 2005). An important reason for neglect of food marketing in southern Africa lies in the difference in the colonial experience between that region and western Africa, with important ramifications through to the present day. African marketing in southern African countries like Zambia was actively, and institutionally, undermined in order to protect large-scale European farmers from competition. West African countries like Nigeria and Ghana, by contrast, retained vigorous traditional periodic market systems which interlinked vast regions: these are well documented and remain crucial to current patterns of urban food supply.

Much marketing material available for southern and eastern Africa has a specifically rural focus (for example, Ponte's Tanzanian study, 2002) or is restricted to issues such as smallholder outgrowing schemes (e.g. Stringfellow, 1996, for Zambia, Govereh et al., 1999 on eastern and southern Africa). Fafchamps and Minten (1999), however, provide interesting studies on relationships and traders in Madagascar and work on the supply of urban markets in Dar as Salaam by Bryceson (1987, 1992, 1993), Briggs (1991), and on Harare by Mosley (1987), Horn (1994), Drakakis-Smith and Kivell (1990) and Smith (1989) is also notable.

As with Nigeria, a body of work exists on urban agriculture in southern African cities and this frequently contains consideration of the extent to which crops are marketed within the city (e.g. Chimbowu and Gumbo (1993), Mbiba (1995, 2000), Mlozi (1996), Drescher (1997), Rakodi (1985) and Sanyal (1985)). However, while the role of urban agriculture in providing food for urban people has increased very significantly in the 1980s and 1990s although exact figures on the contribution in individual African cities are hard to find, the main thrust of the research is either on its contribution to urban household's livelihoods in terms of self-provisioning and the generation of some possible sales income, or on its impact on the urban physical environment (eg see Bowyer-Bower and Smith 1997). The exact nature of trading and marketing arrangements are rarely the main consideration.

In line with the focus within its region, most of the recent literature on agricultural marketing in Zambia concentrates on maize, the main food crop (e.g. Chizuni, 1994; Mwanaumo et al., 1997; Seshamani, 1998; Pletcher, 2000; Mwinga et al., 2002; Nijhoff et al., 2002; Nijhoff et al., 2003, Oygard et al., 2003), though Moll and Dietvorst’s (1999) work on cattle marketing in Western Province over 30 years provides a rare perspective on private trading activities and highlights the ‘continuous search for the demarcation of the roles of government and private sector in society’ (p. 201). These themes are also present in a recent study by Macmillan (2005) of the role of the Susman Brothers in various commercial activities in Zambia, including the provision of beef to urban markets. An important theme in the maize market literature is food security. Some of the work ignores the urban component, while some considers it solely in terms of the distortions in market pricing of maize brought about by government interventions, One reason is that, prior to neo-liberal interventions, these were usually seen as being in the unwarranted interests of the urban population. Although private traders operate in urban food supply systems in Zambia, their detailed activities appear to be almost wholly unrecorded, because of the preoccupation with government
interventions (and the marginalisation of private traders which has been partly their cause and partly their consequence). Consequently there is a major knowledge gap to be filled.

**Power relations along commodity chains and within urban food markets**

An understanding of the activities and power relations exercised by traders and others along the market chain and within urban food markets is important for a full appreciation of the complexity of African marketing systems and is essential before detailed policy recommendations can be made which might cause adjustments within commodity chains. A notable contribution to this field comes from Guyer (1997) on Ibadan's food supply hinterland, and research on crop 'filieres', i.e. sequences of relationships/channels along which food moves through urban provisioning systems (e.g. Bernstein, 1996, for South African maize; Mather and Greenberg, 2003, for citrus fruit in South Africa; Love, 2001, for Ethiopia's coffee). These studies incorporate detailed attention to the activities of urban (as well as rural) traders and the power relationships which shape the marketing system. However, Smith (1998) argues that such food systems studies tend to focus on globalisation and to underplay the specific role of urbanisation within both global and local trends.

Research on vegetable production on the Jos Plateau, Nigeria demonstrates the complexity of networks among producers and different kinds of traders, with chain and associated credit systems extending through Jos to the major urban markets of southern Nigeria, supported by landlord relationships which are built over long periods (Porter et al., 2003). The entrenched but flexible and evolving nature of the landlord system is evident from the extensive historical literature on this topic in West Africa but the way it is being adapted to current circumstances needs examination.

Jackson et al. (2003) suggest that commodity chains are subject to a proliferation of diverse and inconsistent definitions, and note the importance of historical depth to commodity chain analysis and the need for improved handling of regulation issues. Use of the term *network* is preferred by some authors because it more explicitly captures ‘the complexity of actors and multi-stranded exchange relationships’ (Hughes, 2000; Hughes, 2001:391). Hughes’ study of the Kenyan cut flower industry (2001) provides a useful example of the way the concept can be utilised to examine regulatory roles and impacts on labour conditions and other practices.

A brief note at this point about women traders’ roles in commodity chains is appropriate. Despite women’s seeming lack of power in many African contexts, the central role of women in food trade, as the foundation of urbanization in West Africa, has to be acknowledged. This is widely recognised in the academic literature (e.g. Onyemelukwe, 1970; Sudarkasa, 1973; Trager, 1981a, 1981b; Clark, 1994; Dennis and Peprah, 1995; House-Midamba and Ekechi (eds), 1995; Grieco, 1996; Sheldon (ed.), 1996; Levin et al., 1999; Wan, 2001; Izugbara, 2004; Nigerian Marketing Network 2005). The role of food trade, in women's livelihoods in southern Africa is much less culturally and historically rooted. Nonetheless, much of the work relating to urban food supplies and marketing in southern and eastern Africa (e.g. Bryceson's Tanzanian studies; Jose Smith's (1989) and Nancy Horn's (1994) work on Harare) specifically considers women's important roles in food trade. Other studies on women's increasing involvement in informal economic activities in southern and eastern Africa are quite common (e.g. on Chawama, one of Lusaka's low-income settlements, see Moser 1997; on Harare, Brand 1986, Osirim 1994, Mupedziswa and Gumbo 1998; on Kinshasa, Iyenda 2003; on Nairobi, Nelson 1997; on South Africa, Preston-Whyte and Rogerson 1991). However, these studies do not look at food traders specifically, although the significance of raw and cooked food trading and vending for women is always an element in these works.
Overall, it is clear that the significance of women in food trading in cities is well established in southern as well as West Africa, although details on their roles within that sector are less documented. However, in both regions it must be noted that women, albeit crucial to urban food supply, mostly occupy the least lucrative niches.

**Traders, cartels and market manipulation**

Traders are often accused by politicians and the media of operating cartels, but anecdotal evidence and our own field experience in West Africa (Lyon, 1999, 2000, 2001; Porter, 1990, 1994, 1995, 2001) suggests that, although monopolistic control can be exerted, it tends to be confined to specific parts of the marketing chain. Traders obviously provide a crucial service and they are often investing their capital in a high-risk environment where, arguably, returns should be commensurate with the risks involved. This is, of course, even more true of farmers themselves, and evidently a balance needs to be struck between the conflicting interests of the producer and the trader which allows both to profit if food marketing is to develop and be improved.

The positive contribution of traders in providing an essential service to urban consumers has not been adequately analysed as there has been long-standing antipathy among many policy makers in post-independence Africa to small-scale trading, in particular, as evidenced by the innumerable cases of harassment reported in the African press and by the derogatory terms often used to describe traders and their trading activities. The antagonisms experienced by petty traders in Zimbabwe’s cities in mid-2005 were by no means unique (although their informality, rather than their pricing practices, was the primary cause of this particular attack). Dennis (1987) in Nigeria and Clark (1994) in Ghana also refer to numerous incidents in the 1980s when soldiers went into markets and beat women traders to force them to sell their goods at lower prices. In these cases the government attacks were focussed mainly on traders who were selling to the public, rather than those buying from producers, so the issues (as perceived by the governments involved) were related to trading at the end of the commodity chain but there is plenty of suspicion and harassment of traders at every point along such chains in many African countries.

In part this antipathy can be explained by the disorganised nature of informal trade and the difficulties this presents for regulators in areas such as hoarding, unfair pricing and even city traffic flow. Yet, given the constraints so often described in studies of marketing (Smith and Luttrel, 1994; Porter, 1994; Lyon, 2001), the ability of Nigerian traders to move produce from millions of disparate farms to millions of consumers in Nigeria and internationally is astonishing, even if it is not working optimally for livelihoods of the poor or wider economic growth (Guyer and Hansen, 2001: 199). Within these difficult conditions traders have built up the skills and capital necessary to perform these services.

The contribution of traders is more specifically recognised by policy makers when government involvement in food and other crop trading has been 'rolled back' and it has been found that private traders have not filled the ensuing vacuum in a geographically equitable fashion, even when this was entirely predictable according to the logic of the market in countries with very poor transport infrastructure. This has been a major issue in Zambia since the food trade was finally properly liberalised in the 1990s (Republic of Zambia, 2001; Seshamani, 1998). Similar problems have arisen in Malawi (Harrigan, 1991, 2003; Dorward and Kydd 2004). Harrigan (2003:860) concludes that despite market liberalization, “product and factor markets remain fragmented and unreliable...Private traders face transport, credit, storage, and information constraints with scale-related barriers, meaning that trade is
dominated by petty traders”. Dorward and Kydd (2004) emphasise that the marked growth in petty trade in Malawi in recent years is mainly a response to declining traditional sources of income, rather than the result of growing local consumer markets. This point is also stressed by Peters (2005:341), who observes that after 15 years of operation, private traders remain ‘overwhelmingly small-scale and opportunistic’. In the current context of uncertainty and risk, they can hardly operate otherwise. The complex arguments in the literature about maize markets and food security in southern Africa are usefully and succinctly summarised in SARPN/ODI/FNRPAN (2006).

Accessing selling spaces in markets: the role of market associations

Market associations are found throughout Africa and play a key role in the control of key market spaces in urban areas. While they are well established and powerful in West Africa, within southern African countries such as Zambia, food trader associations currently play a small role (le Clus and Mwale, 2004). These organisational forms are used to regulate markets and settle disputes but their power can also be used to control prices and supplies from rural areas when they are able to act as cartels. While this has been found in some West African markets, its occurrence is not widespread (Smith and Luttrel, 1994; Lyon, 2000a). However, there is likely to be considerable difference between markets and within markets depending on the commodity.

In Nigerian urban markets, Anyanwu and Jukes (1991) observe the way small traders may themselves choose relegation to sites outside the main market in order to avoid payment of market dues. Similar practices were found in Lusaka in the main Soweto market, although this could also occur because the traders felt that they gained better access to passing customers in this way. Okali et al. (2001:46-7), however, also record rural producers in south-eastern Nigeria experiencing difficulties in accessing urban markets: “rural respondents complained that the market unions in the city do not allow the rural farmer to sell his products directly to consumers.... even if the rural farmer transports his farm produce to the urban centre, he is forced to sell to the foodstuff unions in the urban market or else members of the union will frustrate the rural farmer’s efforts to sell his produce. Understandably, this results in a substantial loss in potential income for the farmer who is forced to sell to the urban market unions at a much lower than the retail price”.

Unfortunately, their study is a general examination of urban-rural linkages and delves little further into marketing issues beyond this broad accusation: the rural perception recorded needs further exploration and analysis. Adubi (1996: vi, 23), like Okali, takes a conventionally negative view of the associations in his work on Lagos’s food marketing system. He suggests that their role is ‘domineering’ (p.23) because buying and selling cannot be carried out in wholesale or retail markets there without being a registered member of a market association.

A few studies conducted elsewhere are more positive. Ayodele Ariyo et al. (2001) in their study of rural and urban grain traders in the Kano region observe that all 30 urban traders they interviewed belonged to two traders’ associations, one of which served as a link between traders and government, and existed principally to negotiate taxes, market infrastructure and security, whereas the other was a commodity-based association aimed at promoting cooperation between local and stranger traders. These latter associations facilitated dissemination of information on supply, demand and prices and also aided business transactions and grain deliveries. The grain traders’ association was said to provide benefits of market information, security of stores, links with traders and ‘a peaceful atmosphere in which to conduct their business’ (p.23). Similar conclusions were reached by Lyon (2003b)
with regard to vegetable traders in Ghana and in a series of studies undertaken by the Nigerian Marketing Network (2005). Onah et al (1998) provide a rare example of two vegetable producer/trader associations (in a peri-urban area of Enugu) collaborating to avoid glut in local markets by selling vegetables on alternate days (a similar practice occurs in the Anloga region of southern Ghana.) The extent to which such collaboration through producer/trader associations occurs in practice across sub-Saharan Africa is unclear.

In cases examined in detail in Ghana, the accusations of widespread excessive control by trader associations have not been supported by detailed studies (Amanoo, 1975; Lyon, 2003b). There is only evidence of control of certain commodities, in a small number of markets at particular times of the year. This control is reported by Brocklesby and Ega (2001) and Ejembi et al. (2000) to be based on the support of local governments, as associations make tax-raising easier and create opportunities for corruption. Data are required on the margins being received by traders on a daily basis. As prices vary from day to day, margins also vary considerably, especially for perishable crops. Traders therefore make their (usually modest) profits on the ‘windfall days’ (Alexander and Alexander, 1991; Lyon, 2003b). Measuring margins requires detailed analysis of daily price data. It can provide important perspectives on the working of urban markets.

Similar work on trader associations in southern Africa, rather than individual traders or sectors, is much rarer. A recent study in Bulawayo, Zimbabwe, discussed the emergence of a new informal traders' association in that city in the mid-1990s and its attempts to liaise with the local city authorities to improve the traders' situation. The provision of shelter and an end to police harassment were their main objectives (Clark, 2000). Although their success was relatively limited at the time of the study, the institution was very new so this was not surprising. Significant work has been done by Tripp in Tanzania on the gradual formalization of parts of the informal sector in Dar es Salaam since economic liberalization and the political interaction there between sectors of informal workers and the government (Tripp, 1997). However, while these studies include food traders, they do not specifically focus on that sector.

Control of market space is a key issue. We need to know more about the current extent to which access to market space is controlled in Africa, and how it is done. What are the consequences for individual trader and producer-trader types? Who is currently excluded and with what consequences? We also know remarkably little about regulation and the role of the state. To what extent does central and local government currently regulate access to market space across Africa, and with what consequences?

Access to information on prices and supplies
Producers and traders require a range of different types of marketing information (Shepherd, 1997). In addition to prices and supplies, information is required on alternative channels, quality, means of payment and financing. Due to their location and lack of networks, farmers may have less access to such information. As Galtier and Egg (1998) point out, in a Malian context, farmers need information on such matters as wholesalers demand, storage techniques for grain and forecasts of price levels.

Traders may be in a better position than farmers to get price information and studies in Benue State, Nigeria, found that prices in markets were reasonably integrated (NRI, 1995, quoted in Brocklesby and Ega, 2001). However, Gabre-Madhin (2001) estimated that the opportunity cost of labour time spent searching for a trading partner, and the opportunity cost of holding
capital fixed during that search, represented one-fifth of all marketing costs for Ethiopian grain traders.

Of key importance are traders’ personal networks that are used to obtain marketing information and access to credit from other traders. Access to information is likely to be different for different types of producers depending on the size of production, distance from markets and their own networks. Ayodele Ariyo et al. (2001) found in their study of urban- and rural-based grain traders in the Kano region (all Hausa men) that the 30 rural traders relied more on farmers than any other information source, whereas their urban sample (30 traders again) also obtained information from other traders. Radio and government bulletins were information sources for very few of the traders they interviewed, though reasons why these are not utilised are not indicated in the study.

The importance of personalised links has been observed in several studies, most notably the detailed studies of Trager (1981a), and are reported throughout West Africa (Holtzman et al., 1988; Lyon, 2000). A useful broad review of the literature on social networks and personal networks in African informal economies is provided by Meagher (2005). From a livelihoods approach it is important to note who is included or excluded from networks, and how inclusion is shaped by factors such as gender, ethnicity, wealth and age. Thus, even where price information is available, the poorest group of traders may still sell in a less profitable but more accessible market, due to poor transport availability. Cultural constraints on mobility may also limit women's ability to take advantage of information about more profitable markets (Porter, 1995, re north-east Nigeria). We have little comparable information for southern African conditions but hypothesise that many of the features of West African urban market systems will be evident to some degree there.

Traders’ associations are also a potential forum for sharing market information and their role in this respect has been observed in some detail in West Africa (Smith and Luttrel, 1994 in Nigeria; Lyon, 2003 in Ghana; the Nigerian Marketing Network 2005). Specialist brokers of information on other parties are reported amongst grain traders in Ethiopia and these individuals significantly increase the total economic welfare by enabling a more efficient allocation of search effort by traders (Gabre-Madhin, 2001). In Zambia, such food trader associations are lacking (Le Clus and Mwale, 2004).

There is a strong argument for governments to be involved in supplying information, since the private sector rarely finds it cost effective to do so. Galtier and Egg (1998) found that attempts to provide market information services in Mali have not been successful. A subsequent review by Dembele et al. (2000) is more positive about the successes of the Malian Cereal Market Information System (created in 1989) and suggests that marketing margins have been reduced along major trading routes as a result of improved access to market information and increased competition, though price volatility remained a ‘serious challenge’ (p.2). USAID-financed solar powered radio-modems have contributed to the success achieved by allowing provision of up-to-date market information to remote areas, particularly to local radio stations. The system of data generation and diffusion is now decentralised, and linked to the Malian Chambers of Agriculture, which has cut costs substantially.

In Zambia, there is an Agricultural Marketing Information Centre, which was established by MAFF in 1993 (Mwanaumo, 1999) and set up a weekly Market Bulletin and then a monthly Provincial Market Bulletin to report wholesale and retail prices of staple grains, tubers,
vegetables and agricultural inputs. However, as both Mwanaumo (1999) and Nijhoff et al. (2003) note, existing commitment to the centre is weak and production of data is sporadic. Ministry staff assigned to the centre are frequently transferred elsewhere after training and thus extra donor resources are required to keep the centre functioning. Chomba et al. (2002) report that very few localised (i.e. non-mobile) traders felt that MACO had anything to offer them; and most traders knew little about the service it did provide. In Malawi, Dorward and Kydd (2004) similarly emphasise the inadequacy of market information systems with particular reference to maize, the dominant staple food, while also suggesting that over-dependence on maize resulted in a failure to develop marketing and information systems for other crops such as roots and millet. Poor and costly information services, they argue, lead to high risks of transaction failure for buyers and sellers and the consequent need for high risk premiums and margins to make market trading profitable.

A review by Shepherd (1997) of marketing information systems from 53 other countries have found that there were major limitations of public sector managed marketing information systems. Difficulties in ensuring quality come about because prices move rapidly from day to day and within the day (especially for perishable crops), producers may not understand the differences between urban and farm gate prices, and prices vary according to the grades of produce (Galtier and Egg, 1998; Lyon et al., 1998; Poole et al., 1999; Shepherd, 1997). Low quality information can be a greater threat to farmers’ livelihoods than no information as it may encourage people to enter unprofitable trading activities and exacerbate poverty.

Further constraints to public sector marketing information systems include the difficulty of actually collecting prices from traders. Difficulties arise because of lack of resources and motivation, the time of day the price collectors are willing to work, the suspicion of traders and the need to find the price by bargaining. The process of bargaining can be complicated and involve negotiating not only over the price and quality but also the amount given as gifts to customers (Lyon et al., 1998).

Radio broadcasts of prices have often not had the expected impact in Ghana (Lyon, 2000b), as farmers do not trust the quality of the information and it is out of date by the time it is broadcast. Furthermore, even if prices are correct at time of broadcast, by the time remote farmers have reached market they are likely to have changed. Moreover, there are likely to be gendered patterns of access to radio information (Chapman et al., 2003). Asante et al. (1997) noted that (mostly male) farmers in central Ghana do use radio price reports but in a study in coastal Ghana few women farmer-traders were found to have access to a working radio (Porter, 1999). The lack of trust in government bodies is a major obstacle. This can be overcome through encouraging local independent community radio, although this may require changes in existing legislation (Chapman et al., 2003). In Zambia, the recent marketing information survey makes clear that both small scale farmers and traders believe that radio is a very efficient way of disseminating information, but they are keen that the programmes should be in the evening when they have time to listen (Chomba et al., 2002).

The use of telephones can benefit all parts of the marketing chain although the difficulty of having land lines to rural areas has been prohibitive to date. However, mobile telephones have already massively changed the landscape of communication for the middle classes in many African cities and in countries like Bangladesh are now also a vital means of communication for many rural dwellers (James, 2000). By 2002 the Village Phones programme had 9,400 phones across Bangladesh (mostly one per village) (Hawkey, 2002).
The phoneshop and telecentre concepts could well be set to transform market information systems in Africa over the next decade (Rathgeber and Adera, 2000). One review of the Nigerian economy suggests that ‘the biggest change has been the private-sector revolution in GSM mobile telephones’ (Financial Times, Nigeria survey, June 10, 2003, p. 1). It had reached 1 million subscribers by February 2003 (ibid. p. 3). The challenge will be to ensure that such systems are able to provide benefits to the urban and rural poor, not simply the middle classes. The fact that the GSM network in Nigeria is already serving roadside mobile booths looks very positive. More recently, a Senegalese company has started collecting data from 10 markets per day and is getting this information on line within seconds. Another project at Makuleke, South Africa, is testing cell phone technology that gives small farmers access to national market information: farmers can reportedly access the information on a web-based trading platform via Internet-enabled phones or can request prices and trade via SMS or text message. Nonetheless, whether such projects will be sustainable when farmers’ free air time runs out, remains to be seen (Mobile Africa 2005). There may also be gender implications which need consideration in policy formulation since evidence to date suggests women often have more difficulty gaining access to telecommunication benefits (Graham, 1998; Schreiner, 1999).

We need to know much more about the role of personal networks versus government networks for information gathering in Africa. There are a number of donor-supported programmes now focussing on market information provision which appear to expect marketers and trading intermediaries to utilise their services. These seem to underestimation the crucial importance of quality and timeliness of information. By contrast, in this era of mobile phones one-to-one personal relations based on trust appear to have critical significance for disseminating accurate, up-to-date information with detailed reference to product quality etc. We need to know to what extent mobile telephones are used already along different components of the food marketing chain in Africa. What are the barriers? What is the future potential?

**Traders’ access to finance**

The problem of access to credit and high cost of credit for farmers and small-scale traders has been widely reported across West Africa for many decades (Vigo, 1965). There is research in Nigeria which suggests that, in a marketing context, many potential borrowers fall between two stools: too large for informal lenders and too small for the formal lenders (Nissanke and Aryeetey, 1998). This is a common problem among small and medium enterprises which needs further investigation in a marketing context. A USAID study (2001:13) notes that Nigerian banks have not developed the marketing, appraisal or supervision capacity that would allow them to lend to small clients: this is probably a common deficiency across Africa. Moreover, the problem with small business lending is not physical absence of collateral, but its official invisibility (i.e. legal absence) associated with lack of property registration (itself caused by the complexity and high cost of registration procedures). Interest charged in the informal credit market for SMEs reportedly reaches 100% or even more, but has the advantages of greater flexibility in loan terms, needs little if any documentation, and has low transaction costs for the entrepreneur.

Micro-credit programmes are growing in number across sub-Saharan Africa, but food traders, many of whom are women, are often considered too risky by such programmes. NGO micro-finance projects have been promoted as a way forward but there appears to be growing scepticism about their capacity and there have been recent calls for the formal financial sector
(banks, credit unions and finance companies) to play a greater role in providing financial services to the rural poor (Havers, 2001; Gamser, 2001).

In Ghana, where rural banks were set up specifically to aid farmers in the mid-1970s, there have been some positive examples of assistance to small traders. Nikoi (1996) provides an interesting case of a scheme which helped women traders with transport. Yet most banks have unfortunately increasingly focussed on the safer option of lending to salaried workers (Nikoi, 1996; Porter, 2002). USAID (2001:22) reports several Nigerian credit unions developing relationships with private women’s savings clubs which collect from their members on a daily basis and see the credit unions as a safe repository for the savings. These arrangements may allow women to establish a successful repayment history through participating in solidarity loans from the credit union. The USAID report (ibid: 23) suggests that if the credit unions could be strengthened through consolidation and economic integration, they could become more efficient and thus more profitable than most are currently. They are reported to need updated accounting systems, and stronger controls, policies and procedures.

The difficulties for women in obtaining formal credit are particularly pertinent in the trading sector in West Africa. These difficulties are linked to their low social status and lack of collateral. Grieco et al. (1996:33) note that lack of access to capital among women traders in Ghana has consequences for the size of load generally transported and the frequency of trips made (a point not commonly recognised in the marketing and transport literature).

Informal savings and credit associations are thus often the only solution to obtaining business finance for many - particularly women. These include, notably, ROSCAs: rotational saving and credit associations where each participant takes a turn in receiving a lump sum (Ardener and Burman, 1995). However, there are often problems associated with defaulting collectors. In Ghana, Auyeetey and Auyeetey (1996) and Jones et al (1997) observe a lack of faith in informal group saving systems (susu), especially in rural periodic markets. As a consequence of defaults, susu associations now barely operate in some villages (Porter and Lyon, 2006).

Work by Ayodele Ariyo et al (2001) in the Kano metropolitan area of Nigeria suggests that, as might be expected, rural grain traders have less access to diverse sources of capital – notably institutional or formal loans from the government, banks and private companies - to expand their activities than their urban counterparts. According to a 1996 survey, urban and peri-urban horticulturalists round Kano in the 1990s could only obtain government-sponsored credit if they belonged to a farmers' association and this policy had excluded at least 90% of the farmers they surveyed (Orchard et al., 1998; Olofin et al., 1998). This has been a widespread reason for farmers forming groups in Ghana: they commonly exist only until the credit has been disbursed (Porter and Lyon, 2006.)

Informal financing systems such as credit from suppliers, money lenders or rotating credit systems, can be important but may be very expensive. Evidence of this was reported on the Jos Plateau where trader credit was particularly significant as a component of urban trader/farmer interactions though also evident, to a rather lesser extent, in rural trader/farmer interactions (Porter 2001). This is also reportedly the case in the Kano metropolitan region (Ayodele Ariyo et al., 2001), in Southern Nigeria (Trager 1981a), and in several studies in Ghana (Lyon, 2000a; Clark, 1994). This source of financing is vital to keep trade moving although it can be used exploitatively if individuals become tied into debt relations over many years (Watts 1987; Clough 1981, 1985; Bhaduri 1986). Fafchamps (2001) notes that in
Benin and Malawi advances by traders to farmers were of short duration, often only one to two weeks, and were given principally in order to secure future deliveries, not to exploit farmers' need for cash to finance agricultural production.

There appears to be much less published material specifically on the credit issue in southern Africa than in West Africa. In Zambia, government intervention in credit markets (as in other areas of the Zambian agriculture and food marketing sector) is strongly in evidence. Jayne et al. (2003) report government selection of local agents to receive donor programme fertilizer on credit ‘according to procedures that consistently lack transparency’ (p. 298) and focused on political patronage objectives. Agents were supposed to provide ‘resource poor’ farmers on credit and recover these loans at the end of the season through maize purchases. Apparently the so-called agents were ‘local elites or their proxies’ and the loan default rate was extremely high. The general agricultural policy literature for Zambia does make clear that fertiliser or other inputs were given on 'credit' pre-liberalization but that the political economy of this transfer was such that recipients did not expect to 'repay'. There is a slippage therefore between discussion of subsidies and credit in some of the literature.

A strong criticism of the Chiluba government in the later 1990s was a tendency to intervene in the fertiliser market, in particular, for some smallholders in a rather similar way, i.e. without cost recovery. There is a strong tension in the literature between the view that this prevented private traders operating properly in the fertiliser market (e.g. Farrington and Saasa, 2002; Jayne et al., 1999) and the view, based on empirical evidence of falling access to inputs and maize output across the country, that this was a necessary, if unfortunate, intervention to ameliorate smallholder food insecurity. According to Copestake (1998), the intervention made a significant transitory contribution to rural social security in the aftermath of severe drought. Without this continued government-sponsored credit, he argues, there would have been a sharp fall in availability of fertiliser among smallholder farmers after 1994, and maize production would have been significantly lower.

Official documentation on Zambia's Agricultural Commercialization Programme (ACP) notes that although localised micro-finance systems along the ROSCA model have occurred, no successful agricultural finance model has emerged yet to serve Zambian smallholders (Republic of Zambia 2001: 31). This clearly remains a major policy issue in that country. Farrington and Saasa (2002) note that fertiliser supply (for which one can also read 'credit') remains the most confusing issue in agricultural privatization in Zambia. The one exception is the provision of credit to out-grower schemes in products like tobacco, cotton and flowers, which have thrived along the line-of-rail in the 1990s, with 10,000 involved in horticultural schemes alone by 2002 (Farrington and Saasa 2002). However evidently these are not relevant to the domestic food market. In 2000, 82% of the 118,000 agricultural households who received formal loans did so through out-grower arrangements (CSO 2000, cited in Giovanucci 2001).

There are also clearly major problems with bringing the large banks into the rural credit picture in Zambia as there are in West Africa. One of three components of the six-year Economic Expansion in Outlying Areas (EEOA) programme was a Credit Guarantee Fund which hoped to facilitate this. However the completion report on the programme reported that, despite strenuous efforts on the part of EEOA officials, this initiative had to be abandoned. The main problems were that the banks were simply not interested in providing credit to small-scale entrepreneurs in rural areas and were not prepared to carry the risk involved, even though the programme would have carried a significant proportion of the risk.
In the end the EEOA shifted their focus to various small-scale rural savings schemes, along the ROSCA model, and a micro-finance initiative which, after a shaky start, appeared to be on a sounder footing by 2002 (RWA, 2003).

Malawi, like Zambia, now faces serious rural credit problems. However, pre-liberalization, the Smallholder Agricultural Credit Authority in Malawi “maintained for many years an outstanding repayment record on farmer lending” (Dorward and Kydd 2004: 352), in marked contrast to the loan defaults prevailing in Zambia in that period. An increasing tendency to top-down co-ordination, relying on state and party power, rather than giving positive incentives reportedly eventually helped undermine the system. Today borrower opportunism and default is widespread (ibid: 354).

Further work is required on current patterns of credit provision in the urban food supply chain and the potential for extending and improving that provision. Such research needs to be guided by an awareness of current debates, for Dorward et al. (2003:325) observe that there is an inherent contradiction in donors’ strong emphasis on competitive markets and simultaneous calls for support for bottom-up non-market organisations, including micro-finance groups, which are not part of a competitive market structure. They argue that there is a need for policy analysis to catch up with praxis and integrate these alternative institutional arrangements into an overall conceptual framework. This may be a particular imperative in the low density economic activity context of countries like Zambia and Malawi. We need to know what credit provision is available to key trader types along the urban food supply chain in different parts of sub-Saharan Africa. What proportion at each level comes from formal as opposed to informal sources? What interest rates are applied by the different sectors, with what implications? To what extent have microfinance schemes assisted in credit provision among the various trader groups? How can credit provision be improved? Can informal systems be improved to benefit the poor?

**Conclusion**

This paper has reviewed a range of literature and identified both the progress in understanding marketing institutions and the gaps in knowledge concerning marketing institutions for urban food supply. Through identifying a range of literature that has taken institutionalist approaches and examining the social, cultural and political context in which economic action takes place, a number of generalisations and common themes can be identified.

The issue of access to markets for the poor is a central part of the ‘pro-poor growth’ agenda (DFID, 2004). This review has shown there is a history of literature on access to markets, marketing chains and how this is related to networks and power relations. The literature on the social embeddedness and cultural context of institutions is particularly fruitful, especially with regard to understanding the gender relations and roles in marketing chains. Such research and understanding is much more commonly available for West, rather than southern African countries, however. In southern Africa, the focus is more usually on the economics and politics of staple grain production and marketing.

Traders, as we have emphasised, can do a remarkable job in supplying Africa’s cities, sometimes in a context of strong media and government hostility. Existing market institutions may appear to give preferential treatment to traders but it is these institutions that allow trade to occur in sub-optimal circumstances where the state cannot regulate or deliver. However, there is some uncertainty in the literature concerning the extent to which their
powers can be used to damage the livelihoods of rural producers and urban consumers. The evidence suggests that this may occur in a small number of places and at particular times requiring policies of more informed, well-targeted regulation.

Access to information on prices and supplies is a crucial issue with regard to allowing access to markets for different actors and this can have major transaction costs for those involved. Although there has been a history of attempts to introduce market information systems, a review of evaluations of these schemes shows that they have limited use as traders have often felt that the quality and timeliness of data provided are too poor to be of much use. Personalised relationships based on trust are reported by a wide number of studies to be the major source of information and the revolution in telecommunications is having rapid impact on the amount, sources and quality of information becoming available to some traders (although further excluding those without access to mobile phones). Similarly, personal relationships are found to underpin many of the financial markets used by traders as they are commonly unable to access loans from formal sources.

However, the strongest theme to emerge from this review is that of knowledge gaps, especially (but not only) in southern Africa. This disconcerting shortage of specific knowledge and understanding of formal and informal marketing institutions and their impact on today’s urban food systems suggests that policy makers are mostly working in a vacuum in which interventions can only be based on guess-work, prejudice or political goals. Mapping of current market interactions along individual commodity chains is needed, both through to urban areas, and within urban markets, taking into account the nature of power relationships which shape the system. This should include consideration of both ethnicity and gender. In particular, research needs to identify the relatively rare occurrences of cartel behaviour. Such work is essential to the accurate assessment of market institutions currently in place. Finally, Kydd et al. (2004) make an interesting suggestion regarding the need for action research into institutional innovation. Trying out innovative institutional arrangements such as trader information groups, then carefully monitoring their impact, could well prove a very effective means to achieving a deeper understanding of how institutional innovations work out in practice. A concerted research effort incorporating a range of innovative approaches of this kind will be essential if sounder policy formulation is to be achieved.

References

Adubi, A. (1996) Food marketing systems in Lagos FAO Programme “Food supply and distribution to cities” Food into Cities Collection EC/04-


Copestake, J. (1998) Business development, social security or patronage? Zambia's agricultural credit management programme. Centre for Development Studies,


Jones, W.O. (1968) The structure of staple food marketing in Nigeria as revealed by price analysis. Food Research Institute studies, 8, 95-123.


deficit, Policy Synthesis no. 6, Food Security Research Project - Zambia, MACO, ACF, MSU. [www.aec.msu.edu/agecon/fs2/zambia/index.htm]


Thodey, A.R. (1968) Marketing of staple food in Western Nigeria. Stanford Research Institute, Menlo Park, California. (3 vols)


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