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Market information needs of rural producers

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Section I Introduction

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1 Scope of the study

The aim of this paper is to assess the importance of market information and the scope for improving information systems for small scale producers, especially the poor, in sub-Saharan Africa. The paper is one of four that examine key marketing issues – the others being an assessment of market linkages by Rupert Best, the role of producer organisations by Denis Sautier, and the significance of marketing standards by David Walker.

The paper begins by briefly reviewing the factors that cause or exacerbate poor market information. This review enables a more effective identification of the means to tackle such constraints and also shows that there is no simple or uniform solution – problems and solutions will often differ and may be complex. Information is also only part of a package of requirements that are needed to improve marketing – producers often need additional components in order to take advantage of the information on offer. The institutional context of producers – market linkages, producer bodies etc may also be important parts of the package.

The study covers both agricultural and non-farm livelihoods and markets. However, the ongoing importance of agriculture in sub-Saharan livelihoods, and the strength of interaction between non farm and agricultural activities, means that agriculture remains a key sector of concern. It is estimated (Delgado 1997), that 80% of cultivated area in Africa is either remote or of low potential, and the focus of the paper is therefore especially upon the poor and upon areas of poor access. The inherent uncertainty of agricultural production (especially for rain fed systems) also emphasises the need for information and understanding (including market information), that can reduce, but not eliminate, such uncertainties.

2. The importance of market information

The importance of market information and access to such information on the part of small scale producers and the poor has long been recognised. Poor information is linked to a number of critical problems in marketing including low or inequitable producer incomes, weak or uneven supply responses to price signals, low market efficiency etc. Whilst the focus has often been upon output markets, those for inputs for small scale producers are also frequently negatively affected by lack of information, and often equally critical to their livelihoods.

Sound market information can enable producers to make effective production decisions, take advantage of new market opportunities, improve spatial distribution etc (Shepherd 1997 quoted in Goodland and Kleih1999). The importance of such information relates in

part to its value in reducing (but not removing) risk e.g. to avoid selling at a time of market over supply. It can also inform alternative locations of sales (or purchases) further along market chains (although these may be offset by costs, including labour/marketing time, and additional risks). Negotiation with traders can be facilitated e.g. at farm gate level though knowledge prices in destination markets. Information also enables more effective decisions on storage (where perishability is not an over-riding issue) e.g. in respect to relative costs and risks against seasonal price variation. It can also inform similar decisions with respect to off season production (Coote and Wandschneider 2001)

3. What is needed and by whom - Producers (and traders) priorities

A market information system can be defined as having the following characteristics: to collect, process, and analyse market data systematically and continuously and to ensure delivery of information on a timely basis to all market participants (Poon 1994 quoted in CTA 2001). To this could be added the need for systems to be driven by and ultimately operated by stakeholders, notably small scale producers (CTA 2001) and that it needs to be affordable. Whilst a lot of emphasis is placed upon the need for timeliness in market data, this only relates to a portion of information needs, notably pricing, whilst other areas such as quality requirements etc, are less time sensitive. The degree of perishability of produce is also a key factor impacting upon the need for timelines.

Producers (and traders) priorities will vary depending upon circumstances but whilst market constraints are often stated as the first priority by small scale producers, it is important to recognise that market information as such is not necessarily the first concern. Studies by NRI (Kleih 1999, and Kleih et al 1999-2 and 1999-4) indicate information as the second priority in Uganda and only the fourth in Malawi. In both cases the road network and transport access are of equal or higher concern (although this may be partly because the areas under study were remote regions).

Whilst market information needs have often been a pre-occupation of development agencies it is also important to understand the views and needs of producers themselves – both with respect to the relative importance of information constraints as a whole, and their priorities with respect to specific needs which should be addressed. One of the problems with past initiatives has been the failure to fully identify such needs (Robbins 1998), let alone to engage producers in the design of appropriate information systems.

Producers own priorities for specific information are illuminating – a case study in Mali (Kleih et al 1999-3) provides an example:

- Coverage of food as well as (grain) cash crops
- Information on supply and demand as well as prices
- Information on inputs (including transport, equipment and fertiliser), prices, availability and quality
- Availability and conditions for credit

• Demand for processed products

In this example, the diversity of needs (including food crops and input market data), goes well beyond the information provided by many existing information systems.

For those with the most limited exposure to markets, information on relevant prices for the main crops in major markets may be an effective starting point. However many producers will have needs that extend beyond this. Whilst most are concerned with domestic markets, there are differing requirements e.g. between local and urban, perishable and non perishable products. A minority may also supply external markets, e.g. regional formal (and informal) trade and international markets – the latter being particularly demanding. Producers may be interested in information on traders themselves, notably their trustworthiness (Robbins 1998), and in the dynamics of markets e.g. in changes taking place in terms of products and market location etc (Lynch and Ashimogo undated). Finally, gender may be an important factor, since both men and women may have similar information needs, but perhaps more often these will differ (Janowski et al 2003), e.g. because women may cultivate and/or sell different crops/products and women are often (much) more constrained in access to information and information sources.

Given this diversity of interests, those promoting information systems have begun to emphasise a growing package of information components. This may include location of buyers (or suppliers for input markets); buyers requirements (variety, quality, packaging, delivery, timing); availability and cost of alternative transport to and from differing rural and urban assembly, wholesale and retail markets; potential for product loss (or input deterioration), current prices in alternative markets per variety or input, quality and volume; and seasonality and evolution of real price over time. (Coote and Wandschneider 2001).

Development practitioners are also increasingly emphasising the importance of business skills and the capacity to analyse markets as much as market information itself. These ideas are often linked to associated organisational and institutional development, notably promotion of producer organisations (see section II 2 below).

Although the focus of this paper is on producers, traders may also have needs for information, and supplying these may in fact be mutually beneficial to both producers and traders. Smaller scale traders in particular may have more limited access, and confront relatively high market risks, hence they may share a degree of common interest with producers (Robbins 1998). Traders may be interested in particular in information that informs spatial and arbitrage decisions and also in new market opportunities (Wye College undated).

4. Factors impacting on producers access to information

Post liberalisation policy and the macro environment

The post liberalisation environment in developing countries which has been characterised by a withdrawal of the public sector from market support and intervention has highlighted information access needs. The decline or collapse of public sector extension services, especially in Africa, has also emphasised the need for alternative systems of information provision, especially for the poor and in more remote locations. In many areas the private sector (including those components that might provide embedded information services), has developed to only a limited degree raising issues of the level of competitiveness in markets and with consequent implications on information needs and information flows. Overall transactions in marketing can entail a variety of costs, and it is now recognised that an understanding of this institutional context is critical in the development of effective market interventions (for a discussion of the key components of the New Institutional Economics see, for example, Poole in CTA 2001).

Economic and locational characteristics of producers

The level of poverty of many small scale producers is of fundamental importance both because in a variety of ways it limits access to information and also the capacity to use information even where it is available. The poor often lack the resources (and capabilities) to cover the search costs for information other than in their immediate locality (Poole Ed. Undated). Limited access to information arises in the context of lack of market contacts and the tendency of smallholders to sell at farm gate or in local markets, poor literacy levels and lack of access to modern media, as well as absence of effective information services.

The needs of the poor may be magnified by geographical/locational factors since they may live in remote areas, or areas with limited access to infrastructure, especially roads and transport. Such remoteness limits their access to traders, diminishes access to information and hence their capacity to bargain. Such limitations may be exacerbated due to credit links and ties between producers and traders.

Social characteristics

Social characteristics interact with and may re-enforce limitations imposed by economic circumstances. Ethnicity or the effects of social and political disruption may have wider negative impacts on marketing (Marter and Wandschneider 2002), and access to market information. Gender is of particular importance coupled with intra-household relationships more generally. There may be conflicting interests between men and women in households such that, for example, women choose to sell without the knowledge of men who are likely to expropriate the income from such sales. In these circumstances information access (for both men and women) is constrained (Lynch and Ashimogo op cit). Female headed households may face particular constraints in their capacity to access both markets and market information.

In more general terms there are issues of awareness and confidence amongst disadvantaged groups (the poor, women, youth etc) and associated needs for

empowerment to be coupled to market interventions, including information provision. Such awareness may be partly a function of levels of education, where women are again often disadvantaged (CTA 2004).

Organisational and institutional issues

In "institutional" terms (i.e. in the wider sense of the rules of the game), relationships between producers and traders may have a key impact on the scope for interchange of market information. These issues revolve around, for example, the levels of repeat dealing, exclusivity, trust and reputation (Poole Ed op cit and Poole in CTA op cit). In terms of organisations, the existence e.g. of producer bodies can have major implications for both the capacity of small scale producers to access and to use market information (see Sautier op cit). The number and capabilities of NGOs may be of importance given their scope to interact with producer bodies either alone or in combination with the private sector (Marter and Wandschneider 2002). The public sector may also offer some scope for interaction depending upon the overall policy environment and levels of public sector institutional presence (e.g. via decentralised bodies).

Differing marketing systems

Differing categories of market may require differing levels of information and analysis. On domestic markets those supplying perishable products will be in particular need of up to date information (Poole op cit, CTA op cit), whilst relatively sophisticated urban markets may require more comprehensive data, e.g. because of market regulations, more complex and demanding specification of products etc. Export market requirements, especially those in developed countries, are generally even more demanding, and there are a variety of differing categories, each with differing information needs, e.g. the larger commodity markets (including semi processed items, specific needs for perishable exports (notably seafood and horticultural produce), and niche options such as organics and ethically traded items. Requirements in major commodity markets may be exacting, but those for perishables and niche markets may be even more so. As a result, unless there are very sound market intermediaries (i.e. bodies that can access and interpret market needs and translate these into activities and procedures that can be managed by small scale producers), many of these markets are beyond the means of the poor both in terms of information, specifications, regulation and requirements. Regional markets (for formal trade) are often not much catered for even where regional bodies exist (Robbins op cit), still less where trade is largely informal in nature (Coote et al 2000).

Donor activity and the literature on market information has focussed upon markets for outputs – but it is often the case that there are similar needs for information on inputs, with inputs taken to include pre-harvest practices and technologies which are linked to subsequent marketing strategies (Coote and Wandschneider 2001).

Section II Information systems – needs and opportunities

1 Who currently provides

Farmers/producers

Other farmers, neighbours, family, friends and "contact farmers" are often the main source of information for small scale producers, (Poole et al undated 1), especially for the poor (Bagnall Oakeley and Ocilaje 2002 quoted in Janowski op cit), and/or in remote areas. Similarly local public meetings and/or group meetings can be an important information source, especially for women (CTA 2004). Middle income and more wealthy farmers are more likely find other sources more important e.g. via agricultural extension, agribusiness, NGOs and local government.

However this type of interpersonal source has many limitations – the better informed farmer may not share all information, and the information itself may be partial, inaccurate or out of date. Social relationships, notably those based upon age and gender and within the household may act to constrain information available to women in particular (Lynch and Ashimogo op cit). The value of such information also depends upon how it is used, e.g. if farmers are "active", keeping records and hence able to discern trends etc (Wye College op cit)

Traders – the local private sector

Traders may also represent a source of information, although this is less common because of mistrust between producers and traders that is prevalent in many areas (Poole et al op cit). The latter is especially the case where few traders operate or there is generally limited competition. However, where there is common interest traders may play a significant role, e.g. where there are opportunities to expand sales, where new opportunities arise, and where market specifications including quality is important (Coote and Wandschneider op cit).

As with farmer based information however, that derived from traders may not always be accurate, timely or complete. This is partly because traders themselves, especially small scale trader, often have only limited access to information. It is also the case that better off or relatively wealthy farmers can benefit from such information whilst the poor are much more confined to local small scale traders/the village environment. The gender bias against women also arises with this source since it is often men who are the most active/have the most access to trader in pursuing market information (Lynch and Ashimogo op cit)

Government

The collection and distribution of market information has often been retained as a function of government even where liberalisation policies have been pursued with vigour.

Part of the reason for this is that information can often be regarded as a public good – since the market will not provide dispersed small scale producers on an equitable or regular basis. However it can be argued that information is also a private good e.g. in the context of traders informal networks where information has both a cost and value, and hence may not willingly be shared (Poole in CTA op cit).

The expense of gathering such information has often contributed to the decline or collapse of public sector systems (Kleih op cit). Additional problems include a focus on price data alone, where even this is seldom adequate due to delays or failure to collect prices of most relevance to producers. Depending upon the specific market, price data may in any case be very variable, especially for perishable items, with large changes occurring over the day, or even hour. Further problems include weakness in analytical capabilities and lack of appreciation of commercial needs.

Such information systems and services may be linked to (agricultural) extension as conduits of information and complementary advice (e.g. on production and, less frequently, on marketing). Activity under NAADS as part of the PMA in Uganda provides an example of attempts to link information services and more effective extension. Other dissemination media for information via government programmes include radio services, but in all cases coverage is often patchy. Extension services may not have (adequate) access to information in distant markets, they may in any event lack resources to cover their designated rural areas, and also lack both appropriate training and motivation. (Coote and Wandschnieder op cit)

NGOs and donors

A number of international NGOs (e.g. CLUSA, Technoserve and CARE) plus some local NGOs have engaged in the development of marketing and information services, sometimes working in collaboration with government agencies, but often in the absence of the latter. The depth of information provided and coverage of such systems has been variable, and sustainability (especially because of costs) has often been problematic. Many NGOs, especially in the past, were not focussed upon marketing as such and lacked expertise, since their main concern was, and sometimes is, upon development and production activities (Marter and Wandschneider op cit). However, NGOs can be effective, especially where they have generated sound working links within communities, including the promotion of local self help or producer groups.

CBOs - producer bodies

Many of the cooperative bodies that were prevalent prior to liberalisation have collapsed or substantially diminished in scale (e.g. because of competition with the private sector). However some cooperatives remain, especially in export crop sectors, and recently there has been a revival of interest in the potential role of producer bodies in a variety of production and marketing functions including information systems. Promotion or support for producer bodies, and systems such as outgrowers, is quite widespread, but their coverage and capacity remains open to question (cross ref to Sautier paper). Capabilities of such bodies specifically with respect to market information systems have not been assessed to a great extent, although there are indications that they can be effective, especially where linked to international NGOs (De Vletter and Hills 2004).

Agencies concerned with international trade

The more demanding nature of information requirements in international markets (e.g. in terms of specification, quality, delivery, packaging, contractual arrangements, foreign exchange and finance, certification and documentation etc.), and consequent need for intermediary bodies was noted in section I. These agencies include producer bodies, local exporters/traders, or outgrower schemes, some of which may be operated by importers or their agents. In addition (local) government, sometimes with donor assistance, separate donor funded agencies and selected NGOs may also play a part.

Public sector export agencies have often been relatively ineffectual since they often lack marketing and commercial skills. NGO activity is often geared to specific export market niches e.g. ethical trade outlets and organics, both of which may be quite demanding. NGOs also quite frequently lack the marketing and commercial capabilities to effectively advise small scale producers on realistic market potential and requirements (Marter and Wandschneider op cit). Private sector agencies may be more effective but there can be concerns over their strength in terms of bargaining power over (client) producers.

All these bodies (public, private and NGO), may draw upon international agencies concerned with market information, the best know being the Market News Service operated by ITC (Robbins 1998). Media used in international market information systems are often more diverse and sophisticated than those for domestic markets and include dedicated agencies, publications, broadcasts, phone services and internet sites.

2 Options to improve systems

Residual roles for central government

The model where public sector agencies gather and distribute market information may still be effective where services remain well resourced and extensionists are well trained and motivated (e.g. as in was found to be the case in Zimbabwe – Poulton et al 1999). However in many African states services are now in a poor condition (e.g. Ghana and Tanzania, Poole et al undated 1, and Wye College op cit). Innovations to improve public sector provision of information focus broadly upon two areas – more appropriate and efficient data collection (and analysis), and the development of more effective data distribution.

On the data gathering side the focus has been upon ensuring the collection of more relevant, regular and timely information and upon securing effective funding. Information needs normally extend beyond price data to include market alternatives, channels and specifications, and there is also a need for more consistent data sets from main wholesale markets and for historical price analysis (Wye College op cit). One option could be the development of collaborative links to provide more effective systems e.g. with donors. Involvement of the private sector is also possible, but may be more feasible at micro level working with producer bodies where there is local mutual interest (see producer bodies below). Notionally some of the funding needs for information collection could be derived from small scale producers, but in practice it would be costly to collect payment and in any case likely to be ineffectual through unwillingness to pay (NB the public good issues discussed earlier, Poole op cit).

Proposals for data distribution include strengthening of extension resourcing, capability and motivation, but more particularly the pursuit of options either through local/decentralised government, or the private sector, NGOs, or community level organisations. These ideas are also often linked to use of alternative media, especially radio. Greater emphasis on analysis as part of information services has also led to proposals for private sector participation in this area. Options for alternative institutions working alone or in collaboration, and the use of alternative media, are examined in the following sections.

Decentralisation – opportunities and limitations

Decentralisation of government has been implemented in an increasing number of African states with the aim of improving accountability and the quality of services to local communities. In practice the process has had distinctly patchy success, depending upon the degree of real authority that is delegated, the resources allocated to local bodies (and their capacity to raise revenue), the capabilities and motivation of local administrative staff, and political participants in the process (James et al 2001).

In terms of information systems, local authorities are seen as a potential partner in the distribution of information gathered (and perhaps analysed) by central authorities. Such activity could also be supplemented by collection and distribution of local market data. The latter could be much more demand driven if linked to needs assessments conducted amongst producers/farmers themselves, whilst local extension services could act as the intermediary between producers and the district administration (Kleih op cit). An alternative to extension services where these are weak could be involvement of NGOs or even the private sector. It is also suggested that further institutional components are required e.g. involving local chambers of commerce and/or farmers associations (Kleih op cit) In terms of media, in addition to extension, radio is generally identified as the most appropriate, operating either through commercial FM or community channels (Goodland and Kleih 1999, see also "alternative media" below).

Overall the success of such initiatives will depend firstly on the capacities of local administrations (and extension services), which may be partly an issue of funding resources. Much will also depend upon the location of markets and telecommunications capacity. It could also be argued that more could be done to integrate such initiatives with those developed at community level; especially producer bodies and even local traders. (see below "the significance of producers organisations")

Development of human capital - training

Education and/or training are seen as means of enabling producers both to develop their own record keeping where feasible, and to be able to use information from external sources more effectively. Primary education and basic literacy can play an important if long term role (Kleih op cit), and may be particularly important in relation to gender. Female access to education and levels of literacy is often more limited, and particularly so with respect to modern technology. Their economic roles and hence information needs are often not fully understood or taken into account in development of appropriate training. Support to raise confidence may be important given men's attitudes towards women's participation in marketing.

Whilst education has underlying importance, most of the emphasis by development agencies is upon training of producers themselves, which can generate more immediate results. Some agencies such as CLUSA focus upon functional literacy as an essential precursor to more specific activities and enterprise development, including production, marketing or market information initiatives (De Vletter and Hills 2004). It is reported that such functional literacy can be supplied at relatively low cost (although requiring a fairly long time period for implementation), and can be "spun off" to local agencies once established. Farmer to farmer extension is an option that has been found to be low cost, and effective for production related activity (e.g. by ITDG in Peru), but it remains to be seen if this can also be applied to market activity and market information. (Hellin et al 2004 and Cuello et al 2004)

Training can cover both the acquisition of information and development of record keeping. This can be extended to the development of analytical skills with respect to calculation of production and marketing costs, the development of historical price charts as means of assessing the relative returns between differing production opportunities, and a deeper understanding of the marketing process more generally. (Wye College op cit, Coote and Wandschnieder op cit). Increasingly it is recommended that producers (even the poorest) are charged for such services since it is generally found that subsequent use of training skills is significantly greater. (Wye College op cit)

Visits and exchanges in various forms can be means of developing required understanding and skills, e.g. visits to successful producers who have penetrated specific markets, as well as visits to markets themselves. Additionally it may be feasible to encourage traders and/or processors to visit producers. Farmer/producer forums have been found to be an effective means of information exchange for production related topics (Matsaert 2002), whether the same applies for marketing and market information remains less clear. NGOs as well as public sector bodies are often seen as having a major role in such training and visits, together with farmer organisations (at community level). Training has also been given on group marketing and producer group formation (Kleih et al 2004). This initiative is linked to the use of FM radio for both market information and promotion of group marketing which are discussed in the following section.

Alternative media –modern technologies and radio

There are a very wide (and growing) number of media that can be used for market information systems, but a considerably smaller number that are accessible to the majority of poor small scale producers. Media such as mobile phones and internet access remain out of the reach of the majority because of expense and limited coverage. Mobile networks are still largely confined to main urban centres and transport routes. Mobiles themselves are costly e.g. around US\$100 in Tanzania and US\$270 in Kenya, and expensive to run e.g. around 20c to 40c per minute (Jensen 2002). Unsurprisingly therefore ownership of mobiles is generally very small, e.g. between 0% and 6% in rural areas of Uganda (Janowski et al op cit), with more generally ownership in sub Saharan Africa estimated at around 3% (Jensen 2002). Internet access remains even more constrained e.g. with around one person in 250-400 having access, compared for example with 1 in 30 in Latin America. Internet connection is generally quite costly, with the exception of francophone west African states (Jensen 2002). Overall, users of modern media to date have mainly been traders (especially larger scale traders), and more wealthy producers.

Thus whilst modern technology will undoubtedly play a growing role for more wealthy producers and producer groups, using e.g. satellite phones, wider use is likely to remain constrained. Such access might be improved by public sector interventions e.g. to assure better coverage, promotion of community acquisition or support to the poorest. Other options include further investment in communications infrastructure and differential phone charges (e.g. to subsidise remote areas). (Wye College op cit). Recent developments in East Africa (Ferris and Robbins 2004) also indicate potential for satellite based systems to provide coverage in (rural) areas where internet access is not available, working with producer groups and the private sector. These initiatives include an array of technologies including use of short message services (SMS) linked to mobile phones. However actual access to the latter in rural areas to date appears limited because of limited ownership of mobiles (Kleih et al 2004 op cit)

In terms of access to "modern" technology there are particular limitations arising for women. These include the effects of women's activities which limit access time, difficulties in using public access community facilities, and limited income to pay for access. There is also a tendency for men to hijack IT overall. Some exceptions do arise e.g. via the Academy of Environmental Development (AED) Ghana and the use of telecentres in Uganda designed for illiterate women (CTA 2004), but these are the exception rather than the rule.

Other media involving the printed word can be constrained by limited literacy that persists amongst adults in many areas, language issues, and limited coverage of, for

example newspapers in rural areas. Even where the latter are produced, circulation may be slow, especially in remote areas which need up to date information is greatest (Janowski et al op cit). In rural Uganda it was also found that readership amongst women is especially constrained partly because of lower functional literacy (with e.g. 25% of men but only 3% of women reading newspapers).

Overall radio is therefore generally rated as the most accessible media currently available, partly because ownership and /or access is often widespread, e.g. with over 80% of rural households owning radios and most others having some kind of access in rural Uganda (Janowski et al op cit). However, listenership has been found to vary on a gender basis, which arises where men control ownership and/or access (e.g. in Uganda) Much current interest is focussed upon commercial FM radio and on community radio, but FM radio operated on commercial lines may be expensive (e.g. in terms of programme slots covering market information). One option is to promote sponsorship, e.g. through banks, credit agencies and input suppliers (Poole Ed op cit and Poole et al 1), but difficulties may arise because sponsors interest predominate rather than those of listeners (Bagnall Oakeley and Ocilaje op cit).

An alternative to FM radio is the development of community stations – these in fact may be the only option in remoter or poorer areas where there is insufficient return to support FM radio. Community stations are often sponsored and supported by donors or NGOs, but as a result may confront problems in terms of long term sustainability. The level of professionalism on offer may also be limited, and participation in programme making difficult to sustain over time.

As is the case for some other sources, information based programmes put out by radio sometimes lack up to date or reliable content. Part of the solution lies in close consultation with listeners in terms of type of programme, language, specific information content, number/repeats, and timing of programmes – the latter being especially important. Consultation with listeners in Uganda indicated the importance of these points and also raised suggestions, e.g. for greater participation by listeners, advertising of timing of programmes, and focus upon analysis of market issues, storage and transport.

Listeners have been found to have positive views towards educational/ information programmes. Radio may act as a tool for both market information and also to promote group activity, especially where it is combined with local training inputs. Assessment of existing services in Uganda shows that radio (especially combined with training, e.g. via Foodnet and other local agencies), can lead to more effective marketing activity, e.g. in terms of negotiation with traders, accessing alternative markets and adopting storage strategies to sell at times of better prices (Kleih et al 2004 op cit).

Formalisation of market linkages - contractual aspects

To a degree producers already obtain market information via traders, but this is often constrained by lack of mutual trust (see Best, op cit). A measure that could generate or improve mutual trust between producers and traders is via the development of standard contracts. This could also be done in the context of other measures to improve relationships – e.g. encouragement of private sector inter-action with producer bodies by intermediaries such as donors and NGOs. One example of this approach is provided by CLUSA where farmer's organisations are linked via apex bodies to "reliable" traders.

Contracts as such can perform a variety of functions (Poole Ed op cit, and Poole et al 2 1999) e.g. clarifying and formalising obligations and enabling a means to adjust these, plus rights of stakeholders involved where there are unavoidable contingencies. In theory they also provide a means of formal redress where there are problems, but in practice it may be more satisfactory to rely upon informal or traditional norms. Over time such contractual systems can therefore become a means for building institutional (in its widest sense) components founded upon trust, and hence contribute to the business enabling environment.

For the trader such contracts may provide greater assurance of supply especially for women traders, for example in Ghana (Poole et al 1 op cit). In more general terms benefits can arise via increased flows of market information, reductions in transaction costs and the interlinkage of information, input, credit and output markets (Wye College op cit). Improved/standard contractual arrangements can be applied as much to input as output markets and may be especially applicable where these are otherwise problematic e.g. as in Ghana and Tanzania (Poole et al 1 op cit, Lynch and Ashimogo op cit)

Systems for "sophisticated "(mainly export) markets

Intermediary bodies and institutions are of special importance in sophisticated/export markets, given the complexities of markets themselves and hence associated information needs. Measures to improve the performance and interaction between agencies and market participants are therefore a key area. For some, notably NGOs, the need is often to improve their own understanding of niche markets in order to develop realistic views of potential, and of support services including information provision, that may be needed. Although mainly focussed upon traders, systems using the internet, satellite links, SMS and mobile phones such as those being developed in East Africa (Ferris and Robbins op cit) can also offer opportunities to farmers groups given sufficient resources and capabilities. The systems developed in East Africa also cover formal and informal regional markets.

An additional component for many intermediary agencies is to improve access to and use of media, notably services offered by international agencies such as ITC. The USDA agricultural information service also covers some international markets (especially in Europe) as well as the US market and agencies such as COLEACP and the Commonwealth Secretariat can offer some assistance (Robbins 1998). It remains the case however that the greater part of information from such sources concerns more mainstream commodity and product export markets. It could be argued that the latter may represent more appropriate markets in any event for agencies with limited trading experience. A common option is to develop vertical linkages between developing country bodies and those in importing countries (Cross Ref to Best paper). In some markets importers or their agents will insist upon such linkages and provide comprehensive information and technical advice for production, handling, and marketing – especially for perishable items e.g. horticultural produce. These types of initiative include the development of outgrower schemes. For the latter there may be a need to assure safeguards to ensure fair treatment of producers including equal access to market information. (See Sautier op cit)

Government agencies may have a residual role and there are many examples including those operating with donor support. (e.g. the USAID funded Initiative for the Development of Export Agriculture – IDEA).

The significance of producer organisations

Producer bodies are the topic of a separate paper (see Sautier), but it is worth noting that these bodies can play significant roles with respect to market information, including their interaction with other options – e.g. new media systems and contracting.

Producer bodies are increasingly being supported and promoted, and in theory at least can provide a means both to share costs of information search and to promote more effective use of information. They may enable producers to share the costs of contacts e.g. with major wholesale markets and/or key traders in larger markets, hence improving information access, especially in poorer or remote areas. They may also provide scope for accessing more sophisticated /modern media e.g. mobile phones or even internet services.

As noted earlier there are also initiatives to deliberately link group development (e.g. via training inputs), with more accessible media, notably radio (see Kleih et al op cit and Ferris and Robbins op cit). The latter have experimented with FM (and community) radio linked to promotion of communal marketing as a deliberate package. Initial feedback from the approach has been positive and respondents have indicated that more interactive approaches between groups and those developing programmes would be productive.

Producer groups developed with significant international NGO assistance (e.g. those assisted by CLUSA), have been shown to be sustainable, for example in Mozambique (De Vletter and Hills op cit). Members of groups supported by both CARE and CLUSA have been found to have a wider range of market information sources than individuals, as well as deriving benefits from information supplied more directly via NGO assistance.

Section III Conclusions

1. Information – its significance in wider market development

Experience indicates the importance of taking account of differing needs of stakeholders in the design of information systems – e.g. producers concerns with input as well as output markets, with food crops as well as cash crops, and with information that can diminish risk in both production and associated marketing activities. Local markets are often of key concern. This implies at least some involvement of producers themselves in the identification of areas of information need and the design of means to meet such needs. Information generally is only of value if it can be effectively used, and it seems likely that a part of the information package needs to be the development of producers own analytical capability. This can be done on an individual basis (e.g. through training) or, perhaps more efficiently via producer groups where these exist. Similarly, another part of the package may be the development of confidence and negotiating skills which can both improve marketing capability and the degree of self sufficiency in information acquisition and analysis. The latter is likely to be particularly important for women and the poor.

At the outset of this paper it was noted that market(ing) information is only one of several concerns of small scale producers. Other priorities clearly will vary, but more obvious areas include access to "hard" infrastructure, especially roads/transport, as well as other elements of "soft" infrastructure, notably security, and financial institutions for both savings and credit. Small scale producers will generally require more than information alone, e.g. training in production, or processing; and/or improved access e.g. to inputs or to credit or savings promotion schemes etc. Hence whatever the information package adopted, it is evident that there is likely to be a need for a similarly tailored package of additional components. (See overview paper)

2. Sustainability of systems – coverage and cost-effectiveness

Regardless of quality of services, public sector and NGO sponsored information systems have frequently collapsed due to financial constraints. Financial sustainability may be inherently a problem given the (semi) public good nature of information for many stakeholders. Payment systems for information for small scale producers will in any case be difficult to operate due to the large numbers and their dispersed location (Kleih op cit). However it is apparent that information can also be a private good and that there may be scope to charge specific categories of stakeholder – e.g. larger producers, processors associations etc (CTA 2001). This may imply the need for a deliberate strategy to have multiple stakeholders in market information systems since small scale producers alone may be too dependent upon subsidised systems. Where subsidies are involved in information systems these need to be affordable, explicit, finite, and as limited as possible. Alternative funding options could also be feasible e.g. the scope for endowment funds which could be established initially with donor funding (CTA 2001).

Several further strategies/conclusions stem from problems with sustainability. First it is important to build systems which minimise the level of information gathering, analysis and distribution needed by focusing on key requirements of stakeholders. Second to use media that provide the best coverage and value for money- at present radio appears the best option in this respect, although experimentation with more sophisticated media, working with, for example, producer groups and group marketing may also have potential.

3. Integration with other marketing initiatives

Institutional development will remain a key component in information systems (CTA 2001) e.g. there may be scope to link information systems to group approaches and to the encouragements of capacity to analyse markets on the part of producers (bodies) themselves. Linkage between different agencies – especially producer bodies and local and international NGOs may add to such capacity. Hybrid bodies, notably companies limited by guarantee, may be able to play the part of "honest brokers" between producers and the private sector and be more attuned to commercial issues (Marter and Wandschneider 2002). Experience in Asia, (India, Bangladesh) indicates that such companies can also provide training to producers that includes development of producers analytical capacity. Producers capacity to cover fees for such training may be an issue indicating a possible role for initial NGO support, to be withdrawn as producers resources develop (e.g. via savings initiatives).

Producer bodies may also facilitate approaches that seek to promote market linkage. This can be at a general level by providing a forum for greater interaction with the private trading sector (perhaps assisted via companies limited by guarantee), in order to identify areas of common interest including information exchange. There is also scope for more specific interventions e.g. development of standard contracts (Poole op cit) that be effective both at the individual trader/producer level and help to improve the wider business and commercial environment.

The combination of a variety of approaches to improve both marketing and market information access and use has been illustrated by the use of training and FM radio coupled to producer group development and activity (Kleih et al op cit). The approach used has been based upon participatory techniques and local institutions (e.g. local radio and training via Foodnet and other local agencies). Future options might be to progressively build in private trading sector participation to such initiatives.

4. Some issues to be resolved

Whilst considerable progress has been made in the development of more effective market information systems, e.g. through greater involvement of producers, institutional innovations and the use of more cost effective media etc, there remain a range of issues to be resolved. Some of the questions arising from this paper include:

- How fundamental are producer bodies in enabling (poor) small scale producers both to afford market information access and to use it effectively?
- To what extent will modern media play a role in information systems relevant to (poor) small scale producers? and over what time frame?
- How important is human capital development as a precursor to effective use of market information, especially for women?
- Do media such as radio really require additional interventions (e.g. training, linkage to communal marketing or producer bodies) in order to be effective?
- Is remaining public sector support to market information systems best focussed at the national level or to decentralised or local systems?
- Given their resources can NGOs play anything more than a relatively marginal role in systems designed to meet the needs of the majority of small scale producers?
- What combinations of agencies and institutional relationships work best in the development of effective information services and how much private sector participation is desirable or feasible?

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