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**INSTITUTIONAL PERSPECTIVES OF  
ENHANCING SMALLHOLDER MARKET  
ACCESS IN SOUTH AFRICA**

**by**

**Litha L. Magingxa and Abdul B. Kamara**

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# INSTITUTIONAL PERSPECTIVES OF ENHANCING SMALLHOLDER MARKET ACCESS IN SOUTH AFRICA.

Litha L. Magingxa<sup>1</sup> & Abdul B. Kamara<sup>2</sup>

## ***Abstract***

*There is growing evidence that many smallholder farmers can benefit from market-oriented agriculture. However, smallholders often face a number of barriers to accessing the markets. Smallholder market access is much cited as a factor that exacerbates the smallholder situation but little researched. This issue cannot be addressed completely without taking a holistic perspective that also takes into account the global trends in economic transformation that have a direct bearing on the current smallholder market access situation. A growing number of scholars advocate the need for an institutional analysis in trying to understand these issues.*

## **1. INTRODUCTION**

In response to global trends in economic reforms, South Africa has embarked on a process of review of its policies regarding food production and marketing. The past years of economic reforms in South Africa have increasingly acknowledged a need for improving the access of resource-poor farmers to land, water and institutional support systems as a means of combating rural poverty. Policies of the old system created a scope for the agricultural sector to be dominated by large commercial farms that are owned by a relatively small number of individuals.

The South African situation has a potential for more complexity because small-scale agriculture has a history of dependency. Farmers (especially those based in the huge former homeland irrigation schemes) had become accustomed to the profound support provided by the parastatal organizations which managed most of the irrigation schemes in the country. These parastatals used to finance all the activities of the farmers and would market their produce, leaving the plot holders in a role no more than that of labourers. However, they were also expected to carry the risk in case anything happened to the crop.

There is a high potential for smallholders to derive livelihoods from market-oriented agriculture. However, smallholders often face a number of barriers to accessing the markets. Poor households are often ill-equipped to respond to rapidly changing market conditions and, in some cases, have seen old production strategies undermined by new competition without being able to take advantage of the new opportunities provided by liberalisation policies (Killick *et al.*, 2000) e.g. the smallholder revitalisation process in South Africa. The response of smallholder agricultural production to marketing liberalisation has thus so far been mixed.

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<sup>1</sup> PhD student, Department of Agricultural Economics, University of the Free State and PhD Research Fellow, International Water Management Institute, Africa Regional Programme, Pretoria, South Africa.

<sup>2</sup> International Water Management Institute, Africa Regional Programme, Pretoria, South Africa.

## **2. GLOBAL MARKET REFORMS AND THE DEVELOPING WORLD**

The last 50 years of development economics have seen hopes for global development raised high and dashed time and again. While there has been positive, sometimes even impressive, growth in many countries, in most of the world experience has not matched expectations. The accumulations of physical capital and human capital, liberalization and privatisation have all been proposed as elixirs of growth. While all these arguments have some merit, by themselves, they are incomplete solutions to the problem of development. The essential ingredient that might catalyse the ingredients mentioned above into a thriving economy is good governance (Azfar, 2002). It should be recognized that poor rural households may be affected by these trends in a variety of capacities: as consumers, agricultural producers, suppliers of labour and producers of non-tradable goods and services (including some agricultural products) demanded by surplus-producing agricultural households.

Two decades ago, major markets in many developing countries were controlled by governments. Monopolistic parastatal marketing agencies were typically responsible for both the delivery of agri-inputs and the marketing of agricultural produce, through a network of distribution outlets and marketing depots, and at prices (usually pan-territorial) that were determined in advance. Marketing of agricultural products in south Africa was also done through the so-called Marketing Boards e.g. Maize Board, Wheat Board etc.

The so-called Berg report published by the World Bank in 1981, which called for a move away from state intervention in economic activity and a freeing of markets, had a major role in influencing the path for economic development. This is in conformity with the findings of Dorward *et al* (1998), IFAD (2003), Jayne *et al* (2002), Kherallah and Kirsten (2002) and Killick *et al* (2000). Its aim was to unleash the creative forces of private entrepreneurship, in particular within smallholder agriculture and indigenous trading systems. With respect to agricultural marketing systems, the Berg report argued that state marketing organizations should be reformed, so as to operate on a sounder commercial basis, and that the private sector should be permitted to enter marketing systems to provide competition and encourage efficiency (Dorward *et al*, 1998).

### **2.1 Market Failures**

Early arguments for greater involvement of the private sector in agricultural marketing centred largely on the inefficiencies of past state provision and the difficulties of improving the quality of services provided by the state sector. In the agricultural sector these programs were designed to eliminate price controls on agricultural commodities, disband or privatise state farms and state-owned enterprises, reduce the heavy taxation of agricultural exports, phase out subsidies on fertiliser and other inputs, and allow greater competition in agricultural markets (Kherallah *et al*, 2002). Kherallah goes further to say that the pace and extent of reforms have varied widely across countries, and the reforms have often not been implemented fully.

There was a very high expectation on the potential of the private sector to provide the services previously provided by state organs. In practice, and in retrospect not surprisingly, the emergence of private-sector market intermediaries (ranging from small-scale informal traders to large, often foreign owned, agro-processors) to fill the vacuum left by the withdrawal of the state has generally been less smooth and less rapid than expected. In this rapidly evolving context, the policy and institutional frameworks established by governments of developing countries have not been consistently supportive of private-sector-led market development (Ibid). Market failures occur when costs and benefits that guide individuals/private sector differ from those that are economically optimal for society as a whole. This can result, for instance, from: private investors being unable to obtain benefit from certain investment because they cannot stop 'free-riders'; individuals/companies having incentive to impose costs of pollution to others; and information not being equally available to buyers and sellers of particular goods or an over-concentrated market.

The effects of market failures may include, among others: under-investment in essential goods and services by the private sector, presence of sub-standard seed and agro-chemicals to buyers as well as environmental damage, especially in situation of lack of clear property rights definition. In such cases of market failure, Government may intervene in several ways including: investing in rural infrastructure; regulating to counter pollution of water-courses or other environmentally damaging practices; assisting with funding research into untraded or non-hybrid crops or into farming systems or resource conservation where private sector organisations find it difficult to realise a return; reducing anti-competitive behaviour; regulating to reduce risk in food safety; funding services and regulation to minimise threats of epidemics among animals. The Government will also seek to strengthen the efficiency of service provision by targeting those most in need of support, principally the resource-poor and emerging farmers.

## **2.2 Market Reforms and Smallholders**

Although most of the changes in agricultural and food markets are taking place in the developed countries, they have far-reaching implications for agricultural development efforts in developing countries (Kirsten and Sartorius, 2002). It should also be noted that the majority of the rural poor are smallholder farmers. According to Kherralah *et al* (2002), the evidence on the impact of agricultural market reforms on poverty is mixed.

There is evidence that such liberalization, privatisation and tax reforms in fact created serious instability, inequity and inefficiency, because they were carried out without the regulatory and legal frameworks, and government rules and structures, that make banking systems, corporate governance, and tax collection work effectively in advanced industrial countries (Azfar, 2002). The combined effects of liberalization of agricultural markets and globalization have generally increased economic differentiation among communities and households. By virtue of their location, asset base and levels of organization, some communities – and some households within communities – have succeeded in responding to new market opportunities, and have been able to increase their incomes, in some cases

substantially (IFAD, 2003). With the withdrawal of the state from agricultural marketing, a new – and highly uncertain environment has been created, in which prices, whether for selling produce or purchasing inputs, are now largely negotiated. New commercial relations must be struck with a myriad of suppliers and buyers. For some farmers, this has created major new opportunities; for others, it has created major problems. Smallholder farmers are ill equipped to benefit from the new market environment. They face enormous constraints in physically accessing markets. They also lack information about markets, business and negotiating experience, and a collective organisation to give them the power they need to interact on equal terms with other – generally larger, stronger market intermediaries. The result is poor terms of exchange and little influence over what they are offered (Heinemann, 2002).

Peasant producers have veered away from production of traditional export crops and commercial staple foods in rural areas remote from roads and urban markets. Non-agricultural income diversification has been substituted in the search for much-needed cash earnings (Bryceson, 2002). In other words, as IFAD (2003) put it, smallholder producers find themselves in a world entirely unlike the one they faced two decades ago.

According to Kherallah *et al* (2002), if agricultural reforms in Africa are to fulfill the high expectations of their proponents, improvement will have to be made in four areas. First, the task of liberalizing agricultural markets must be completed. Secondly, complementary policies in other sectors are needed to enhance the benefits of the reforms and alleviate the negative effects. Thirdly, the withdrawal of the state from commercial activities should not be interpreted as withdrawal from its essential role in providing public goods. Finally, the government can play a role in promoting nongovernmental institutions in the agricultural sector.

### **2.3 Agricultural Market Reforms in South Africa**

The process of deregulation in South Africa began some time before the first democratic election in the country in 1994. While the changes were not as dramatic as those in other parts of the world, they were felt by the entire population. Agriculture is integrally tied to everyone because changes in agriculture can result in quantity and price fluctuations in the food supply. It could be seen as a major paradigm shift whereby the responsibility for marketing of agricultural products shifted from marketing control boards to producers. The control boards used to control the marketing of a particular commodity in a prescribed manner. A total of 23 Control Boards were established, a framework which was then systematically dissolved. Much of the process was managed through a National Agricultural Marketing Council (NAMC), which was created under the Marketing of Agricultural Products Act of 1996. The 1996 Act states its objectives explicitly in Section 2, where it spells out the conditions under which any statutory measures are to be allowed. These include: increased market access for all market participants; the promotion of efficiency in the marketing of agricultural products; optimisation of export earnings from agricultural products; enhancing the viability of the agricultural sector. The main objective of the NAMC was to investigate market access for disadvantaged market participants and to make recommendations to integrate them into commercial

agriculture. It lists participants in the disadvantaged groups into four categories as: subsistence farmers, newly emergent participants, those in transition / semi-commercial and commercial farmers. While the NAMC states its main focus as being set on groups 2 and 3, to lead them into a commercial efficient agricultural system, it stresses that particular attention will be given to subsistence farmers because of the possible impact envisaged on their food security (Groenewald, 1999).

Vink and Kirsten (2000), found ample empirical evidence that deregulation of agricultural marketing in South Africa, brought net welfare gains for commercial agriculture and therefore for the entire nation. Food prices declined, investment in agriculture increased, higher production per hectare was achieved, and farmers began producing higher value crops. However, they caution that this does not necessarily mean that smallholders have enjoyed these gains because of a number of constraints that inhibit smallholder access to agricultural markets in South Africa. Hypothesized problems usually include infrastructure, market access, credit, organizational structures, suitability of technology and managerial capacity of the farmers.

### **3. OPPORTUNITIES AND CONSTRAINTS FOR SOUTH AFRICAN SMALLHOLDERS**

#### **3.1 The Value of Market Access for Smallholders**

In most of sub-Saharan Africa, there appears little immediate prospect of rural industrialization or other non-farm engines of growth, so smallholder agriculture is likely to remain the major source of rural growth and livelihood improvement for some time (Dorward *et al*, 1998). Within this situation, cash crops have a key role to play. Development of smallholder cash crop production has the potential to bring direct benefits to a large number of farm households within a given district or region. Even households that do not benefit directly may reap indirect benefits through increased demand for hired labour (often a valuable source of income for the poorest).

Rural people in Africa, especially the poor, often say that one reason they cannot improve their living standards is that they face difficulties of accessing markets where they can obtain agricultural inputs and consumer goods and sell the produce that they grow (Heinemann, 2002). A major reason why even those farmers who can produce a surplus remain trapped in the poverty cycle is lack of access to profitable markets. All too often farmers are forced to sell to the buyer of convenience at whatever price that buyer dictates (IITA, 2001).

According to the IFAD (2003), the issue of market access can be considered according to three dimensions: physical access to markets (distances, costs etc.); structure of the markets (asymmetry of relations between farmers, market intermediaries and consumers); and producers' lack of skills, information and organisation (understanding of the market, prices, bargaining etc.) From this perspective, the integration process of the emerging farmers should not be viewed in a narrow context of only allocating land and water, but in a broader perspective that embeds the access to these resources in an overall economic framework that include access to markets, credit, extension, etc.



### 3.2 Market Access Barriers and Smallholders Activities

In their dealings with the market, smallholder farmers find themselves at a major disadvantage. Many do not well understand the market, how it works and why prices fluctuate; they have little or no information on market conditions and prices; they are not organized collectively; and they have no experience of market negotiation (IITA, 2001 also cf. Freeman and Silim (2001) as well as Heinemann (2002). Smallholder farmers in Sub-Saharan Africa face a range of marketing and exchange problems, among which informational constraints are high on the list. Producers experience a weak bargaining position vis-à-vis traders because often they do not have timely access to salient and accurate information on prices, locations of effective demand, preferred quality characteristics of horticultural produce, nor on alternative marketing channels. In addition, most of the literature related to smallholder agricultural marketing e.g. Dorward *et al* (1998), Freeman and Silim (2001), IFAD (2003), Jayne *et al* (2002), Kherallah and Kirsten (2002) and Killick *et al* (2000), reiterates that the problem of market access is linked to the following constraints: price risk and uncertainty, difficulties of contract enforcement, insufficient numbers of middlemen, cost of putting small dispersed quantities of produce together, inability to meet standards. Other compounding problems relate to physical market access like physical infrastructure – roads, market facilities, power and electricity.

Barriers to market access and information flows may be structural and behavioral. Structural barriers of a horizontal nature may be gender, family, educational levels, ethnicity and other social factors. Information that is available to rural communities may not be equally distributed, and smaller scale producers and those distanced further from the market are more disadvantaged. Vertical characteristics include personalized repeat dealing (clientisation), exclusivity, trust and reputation effects. The current significance of personalised relations in developing economies is receiving new research interest. Analysis of imperfect market coordination in developing economies, and the solutions proposed to the problems and imperfections identified, must take account of these fundamental structural features of markets and behavioral characteristics of individuals and firms. (Wye, 2003)

To overcome these problems, farming communities have formed cooperatives, collective marketing associations, and other mutual alliances to increase their buying and selling power in the market place. Larger commercial players have also been active, forming mutually beneficial alliances with farmers supplying marketable products at agreed prices. Clearly, it is only by such means that most developing country farmers can move from a poverty cycle to an income cycle, and begin to make a real contribution to overall economic development (IITA, 2001). Other options explored in literature include warehouse receipt systems e.g. Coulter and Onumah (2001); contract farming e.g. Kirsten and Sartorius (2002); rural assembling point system e.g. Freeman and Silim (2001). Other firms embark on a process specifically termed: vertical integration, where specific arrangements with different players at all stages of a product processing are made,

resulting in a value adding chain. The South African situation is much the same because the private sector is striving to fill the gap left by parastatal organisations.

#### **4. THE NEW INSTITUTIONAL APPROACH**

##### **4.1 The Need for Institutional Analysis**

While reforms in the land and water laws are currently high on the agenda as a means of redressing imbalances of the past, there is a growing concern about access of resource-poor farmers to institutional support services such as credits, extension, and especially the entrance of these small farmers to agricultural markets (input and output markets) from which they have been eliminated for too long. The potential for market orientation by small-scale irrigators on a sustainable basis cannot be ruled out. It remains critical on a number of issues, of which the creation of marketing opportunities and institutional support systems that facilitate integration of small farmers into national economic system are important. There is a need for improving access to institutions so as to remove current distortions in the agricultural markets, facilitate the flow of information and functional markets mechanisms that allow competition and market entrance by emerging farmers, so as to enable them to get a share of market generated efficiency gains. Much current policy advice focuses on the effects of policy distortions, but inadequate attention is given to the serious, embedded institutional deficiencies that limit many smallholder areas from taking advantage of market opportunities e.g. lack of information, adequate contract systems etc. These institutional deficiencies require intensive, and long term, attention if globalisation is to offer opportunities for smallholder development (Kydd, 2002).

Kherallah and Kirsten (2002) argue that the frequent occurrence of market failure and incomplete markets (because of higher transaction costs and information asymmetries) in developing countries cannot be explained by conventional neo-classical economics and requires an institutional analysis. In addition to the many applications of the NIE framework to input market failure it can also now be argued that the rapid changes in the food and agricultural sector in developing countries in the aftermath of market liberalization and government devolution provides an additional and probably much more fertile terrain for the application of the NIE framework (Ibid).

##### **4.2 The NIE Analysis**

New Institutional Economics (NIE) is concerned fundamentally with problems of market coordination, and the incentives for economic agents to devise institutional responses to problems of market imperfections (Dorward *et al*, 1998). NIE encompasses a number of disciplines like law, sociology and history which is increasingly recognized as a formidable tool for analysing different issues of development interest. NIE analysis begins from a distinction between the physical *transformation* activities by which people use assets (or asset combinations) to produce goods or services, and the human *transaction* activities by which people hold and exchange assets, goods and services and combine them to allow desired physical transformations (Morrison *et al*, 2000). Key concepts are uncertainty, the transaction costs of contracting through market exchange,

the role of institutions in reducing costs, and their influence on the organisation and development of economic activity.

North argues that in a close traditional village community, transaction costs between villagers are low: people know about each others' activities and reliability while social relations and structures both encourage people to keep agreements and also provide mechanisms for enforcing agreements and resolving disputes. For development to proceed, however, people need to trade between communities and with the wider national and international economies. This requires institutional environments and institutional arrangements that are effective in reducing the transaction costs and risks of increasingly complex and distant forms of trade and property rights (Morrison *et al*, 2000). That is because traders will have to rely on informal trading networks to provide information and to defend each other if cheated or threatened by non-members. The transaction cost economics is especially relevant for agricultural market analysis in developing countries and the changes in the agricultural sector in general. As the agricultural sector becomes a more globalised and deregulated industry, the transaction becomes the unit of analysis. This implies that transaction cost economics can potentially offer useful insights to agricultural policy research in these countries (Kherallah and Kirsten, 2002).

## **5. SMALLHOLDER MARKET ACCESS IN SOUTH AFRICA**

The marketing situation in South Africa's small-scale irrigation sub-sector, exhibits a number of diverging issues. For most of the smallholders in South Africa, access to a good physical infrastructure might not be the main problem as the roads are relatively well developed. However other barriers related to institutional factors may be responsible for the apparent lack of access to markets. Understanding these issues requires a methodology that will facilitate inclusion of all the different situations or types of situations. This is more important because there is evidence that marketing constraints differ across schemes. As can be observed, the smallholder farmers in South Africa employ diverging tactics in trying to access markets. The following categories are formulated according to common trends that are characteristic of the different situations and should be thought of in relation to those observed in literature. These can be categorized as:

1. *Semi-active marketing* as a result of hypothesized constraints that include lack of transport, long distance from markets, amongst others e.g. Arabie Irrigation Scheme.
2. *Farm gate sales* where buyers are attracted to the farming area. Buyers range from reselling small and medium entrepreneurs from the village and surrounding areas, as well as individuals buying for household consumption e.g. Boschkloof Irrigation Scheme.
3. *Organised transportation and active sales* where farmers actively organize marketing of their produce, not only in selling but also transporting the produce to the potential buyers e.g. Sepitsi Scheme.
4. *Contracted growers* who have pre-arranged markets and prices before the produce is harvested. They are sometimes even contracted to other large-scale producers with assured markets e.g. sugar cane growers in Komati/Lomati basin.

## 6. SUMMARY AND CONCLUSIONS

South Africa's development policy focuses on economic growth, reducing income inequalities and eliminating poverty. The challenge is to make sure that agriculture in South Africa contributes to these policy objectives.

However, to determine policy priorities to address poverty and food insecurity, and to assess the role that agriculture can play in South Africa's effort, it is necessary to understand how people in rural areas create livelihoods. Literature related to smallholder agricultural production shows that increasing production is one approach to improving farm incomes and food availability, but an additional strategy with considerable promise is that of making better use of what is already produced. Improving post-harvest handling, marketing, and storage has not received the attention warranted. Some losses are inevitable, but reducing loss will translate to an increase in farmer incomes and total food availability without using additional natural resources.

Supportive policies to lower the transaction costs implicit in smallholder crop production will require significant institutional innovation. In Africa's changing political and fiscal environment, many of these institutions will involve decentralization and privatization of functions once thought to be more appropriate to parastatal activity. In part, they will involve grass-roots producer organization, in part trader associations. Such institutions will need to be able to function within market principles, yet also to deal with the public-goods-nature of some of the issues. They will need to facilitate the integration of the production, marketing, and retailing functions of the marketing chains.

## 7. REFERENCES

- Azfar, O., 2002. The NIE Approach to Economic Development: An Analytic Primer. USAID Forum Series, Washington D.C.
- Backeberg, G.R. Bembridge, T.J., Bennie, A.T.P., Groenewald, J.A., Hammes, P.S., Pullen, R.A. and Thompson, H. (1996). Policy proposal for irrigated agriculture in South Africa. Discussion Paper. July 1996. W.R.C. Report No. KV96/96. Beria Printers: Pretoria.
- Bembridge, T.J., 2000. Guidelines for rehabilitation of small-scale farmer irrigation schemes in South Africa. WRC Report No. 891/1/00. WRC, Pretoria.
- Brinkerhoff, D.W. and Goldsmith, A.A., 1992. Promoting the Sustainability of Development Institutions: A Framework for Strategy. World Development, Vol. 20, No. 3, pp369-383. Elsevier, U.K.
- Bryceson, D.F., 2002. The Scramble in Africa: Reorienting Rural Livelihoods. World Development, Vol. 30, No. 5, pp725-739.
- Christy, R.D. 2001. Evaluating the Economic Performance of Alternative Market institutions: Implications for the Smallholder Sector in Southern Africa. Agrekon, Vol. 40, No. 4. Pretoria, South Africa.
- Clague, C. The New Institutional Economics and Economic Development. In: Clague, C. (ed.) Institutions and Economic Development - growth and governance in less-developed and post-socialist countries. Baltimore, John Hopkins University Press.
- Colman, D. and Young, T. 1989. Principles of Agricultural Economics: Markets and Prices in Less Developed Countries. Cambridge University Press.
- Coulter, J and Onumah, G. 2001. Enhancing Rural Livelihoods Through improved Agricultural

- Commodity Marketing in Africa: Role of Warehouse Receipt Systems. 74<sup>th</sup> EAAE Seminar on Livelihoods and Rural Poverty: Technology Policy and Institutions; Wye, 12-15 September.
- De Lange, M. 1994. Small Scale Irrigation in South Africa. WRC Report no. 578/1/94. Water Research Commission, Pretoria, South Africa.
- Delgado, C., Hopkins, J., Kelly, V., Hazell, P., Alfano, A., Hoijati, B., Gruhn, P. and Sil, J. 1994 Agricultural Growth Linkages in Sub-Saharan Africa. A Report to the USAID Africa Bureau, May 1994.
- Dorward, A., Kydd, J. and Poulton, C. (eds.) 1998. Smallholder Cash Crop Production under Market Liberalisation: a New Institutional economics Perspective. CAB International.
- Du Plessis, F.J., Van Averbek, W. and Van der Stoep, I. 2002. Micro-Irrigation for Smallholders: Guidelines for Funders, Planners, Designers and Support Staff in South Africa. WRC Report No. TT 164/01. Pretoria, South Africa
- Elliot, J.A. 1999. Sustainable I Rural Livelihoods (Chapter 4) In: An Introduction to Sustainable Livelihoods revised upd. 2nd ed. London [etc.]: Routledge.
- Ellis, F. 2000. Rural livelihoods and Diversity in Developing Countries. New York: Oxford University press
- Freeman, H.A. and Silim, S.S. 2001. Commercialisation of Smallholder Irrigation: The Case of Horticultural crops in Semi-arid Areas of Eastern Kenya. in H. Sally and C.L. Abernethy (eds.) Private Irrigation in Sub-Saharan Africa: Proceedings of Regional Seminar on Private Sector Participation an Irrigation Expansion in sub-Saharan Africa, 22-26 October, Accra, Ghana. IWMI, FAO and CTA.
- Groenewald, J.A. 1999: NAMC report into Marketing Access. NAMC
- Harriss, B. 1982. Agricultural Marketing in the Semi-arid Tropics of West Africa. East Anglia Development Studies Paper.
- Hau, A.M. and von Oppen, M. 2002. Market Access and Agricultural Productivity in Doi Inthanon Villages. International Symposium: Sustaining Food Security and Managing Natural Resources in South East Asia – Challenges for the 21<sup>st</sup> Century. 8-11 January, Chiang Mai, Thailand.
- Heinemann, E., 2002. The Role and Limitations of Producer Associations. European Forum for Rural Development Cooperation. 4 September, Montpellier.
- Huang, Q., Rozelle, S., Huang, J. and Wang, J. 2002. Irrigation, Agricultural Performance and Poverty Reduction in China. Draft Working Paper, Chinese Academy of Sciences.
- IFAD. 2003. Promoting Market Access for the Rural Poor in Order to Achieve the Millennium Development Goals. Discussion Paper. IFAD.
- IITA. 2001. Linking Farmers to Markets – Overview from ACIAR. P.H. News No. 4 May. IITA.
- Jayne, T.S., Govereh, J., Mwanaumo, A., Nyoro, J.K. and Chapoto, A. 2002. False Promise or False Premise? The Experience of Food and Input Market Reform in Eastern and Southern Africa. World Development, Vol. 30, No. 11, pp1967-1985. Elsevier, U.K.
- Kamara, A.B., van Koppen, B. and Magingxa, L., 2002. Economic Viability of Small Scale Irrigation Systems in the Context of State Withdrawal: The Arabie Scheme in the Northern Province of South Africa. Physics and Chemistry of the Earth 27, pp815-823.
- Kherallah, M. and Kirsten, J.F. 2002. The New Institutional Economics: Applications for Agricultural Policy Research in Developing Countries. Agrekon, Vol. 41, No. 2, pp111-134.
- Kherrallah, M., Delgado, C., Gabre-Madhin, E., Minot, N. and Johnson, M. 2002. Reforming Agricultural Markets in Africa. IFPRI Food Policy Statement No.38. IFPRI, Washington D.C.
- Killick, T., Kydd, J. and Poulton, C. 2000. Agricultural Liberalisation, Commercialisation and

- the Market Access Problem in The Rural Poor and the Wider Economy: The Problem of Market Access. IFAD
- Kirsten, J. and Sartorius, K. 2002. Linking Agribusiness and Small-scale Farmers in Developing Countries: Is There A New Role for Contract Farming?
- Kydd, J. 2002. Agriculture and Rural Livelihoods: Is Globalisation Opening or Blocking Paths Out of Rural Poverty? Agricultural Research and Extension Network Paper No. 121. ODI
- Lahiff, E. 1999: Land Tenure on the Arabie-Olifants irrigation scheme. *South Africa working Paper no.2*. IWMI, Colombo.
- Lyne, M.C. 1996. Transforming Developing Agriculture: Establishing a Basis for Growth. *Agrekon*, 35 (4): 188-192.
- Magingxa, L. 2001: Livelihood Strategies and Irrigation: The case of Boschklouf Irrigation Scheme in the Northern Province of South Africa; (unpublished M.Sc. thesis).
- Morrison, J., Dorward, A., Kydd, J., Poulton, C. and Smith, L. 2000. Sustainable Livelihoods and New Institutional Economics. DFID Sustainable Livelihoods Programme: Policies, Institutions and Processes. Wye College.
- Mphahlele, R.E., Malakalaka, T. and Hedden-Dunkhorst, B. 2000: Characteristics of smallholder irrigation farming in South Africa. *South Africa working Paper no.3*. IWMI, Colombo.
- National Agricultural Marketing Council (NAMC) Strategic Plan (2001-2004). Pretoria, South Africa.
- National Department of Agriculture (NDA). 2000. Agricultural Marketing – A Discussion Document. Pretoria, South Africa.
- North, D. C. 1995. The New Institutional Economics and Third World Development. In J. Harriss, J. Hunter and C. M. Lewis (eds.) 1995. The New Institutional Economics and Third World Development. Routledge, London and New York.
- Ortmann, G.F. 2001. Industrialisation of Agriculture and The Role of Supply Chains in Promoting Competitiveness. *Agrekon*, Vol. 40, No. 4. Pretoria, South Africa.
- Pardeller, L. *et al.* 1999: Rural Women's Association: An assessment of the success factors and sustainability. *South Africa working Paper no.1*. IWMI, Colombo
- Poulton, C., Dorward, A., Kydd, J., Poole, N. and Smith, L. 1998. A New Institutional Economics Perspective on Current Policy Debates. In Dorward, A., Kydd, J. and Poulton, C. (eds.) 1998. Smallholder Cash Crop Production under Market Liberalisation: a New Institutional economics Perspective. CAB International.
- Shah, T., van Koppen, B., Merrey, D., De Lange M., and Samad, M. 2000. Institutional Alternatives in African Smallholder Agriculture: Lessons from International Experience with Irrigation Management Transfer. IWMI Research Report 60. Colombo, Sri Lanka.
- Small, H.S., Stimie, C.M. 2000: An Investigation into water use at the Arabie-olifants Irrigation Scheme. *South Africa working Paper no.4*. IWMI, Colombo.
- Stimie, C. *et al.* 2001. Hydro-Institutional Mapping in the Steelpoort River Basin, South Africa. *South Africa working Paper no.6* IWMI, Colombo.
- Stringfellow, R., Coulter, J., Lucey, T., McKone, C. and Hussain, A. 1997. Improving the Access of Smallholders to Agricultural Services in Sub-Saharan Africa: farmer Cooperation and the Role of the Donor Community. ODI Natural Resource Perspectives No. 20. ODI
- Timmer, C. P., W.P. Falcon, and S.R. Pearson. 1983. *Food Policy Analysis*. Baltimore, Maryland: Johns Hopkins University Press.
- Toye, J. 1995. The New Institutional economics and its Implications for Development Theory. In J. Harriss, J. Hunter and C. M. Lewis (eds.) 1995. The New Institutional Economics and Third World Development. Routledge, London and New York.
- Van Averbek, W. *et al.* 1998. An investigation into food plot production at irrigation schemes in

- Central Eastern Cape. *WRC report no. 719/1/98*. Pretoria : Water Research Commission
- Van Koppen, B. 2000. From Bucket to Basin: Managing River Basins to Alleviate Water Deprivation. IWMI, Colombo.
- Van Zyl, J., Fenyes, T.I. & Vink, N. 1992. Effects of the farmer support programme and changes in marketing policies on maize production in South Africa. Journal of Agricultural Economics, 43(3): 466-476.
- Van Zyl, J. 1996: Farm size efficiency, food security and market assisted rural land reform in South Africa, Presidential Address, 1994 Annual Conference of AEASA, Pretoria.
- Vink and Kirsten (2000) Deregulation of agricultural marketing in South Africa: Lessons learned. The Free Market Foundation Monograph No. 25. Sandton, South Africa.
- Wang, N. 2003. Measuring Transaction Costs: An Incomplete Survey. Conference on Transaction Costs. 21-23 February, Chicago, Illinois, USA.
- Winter-Nelson, A. and Temu, A. 2002. Institutional adjustment and Transaction Costs: Product and Inputs markets in the Tanzanian Coffee System. World Development Vol. 30 No. 4, pp 561-574. Elsevier, UK.
- [www.wye.ic.ac.uk/AgEcon/R7151](http://www.wye.ic.ac.uk/AgEcon/R7151) (2003)

**Information about authors:**

Abdul B. Kamara

International Water Management Institute (IWMI)- Africa Regional Program

Litha L. Magingxa (Corresponding Author)

PhD Student, Department of Agricultural Economics, University of the Free State and

PhD Research Fellow International Water Management Institute (IWMI)- Africa  
Regional Program

Contact details:

Postal address: P/B X813  
0127 Silverton  
Pretoria, South Africa

Delivery address: 141 Cresswell Street  
Silverton 0184  
Pretoria

Tel: +27 (0)12-845-9100 Fax: +27 (0)12-845-9110

Cell: +27 (0)82-796-3364

e-mail: [l.magingxa@cgiar.org](mailto:l.magingxa@cgiar.org)