

Final Technical Report

Natural Resources International Limited Contract Number: ZB0123

Project Title

Improving Smallholder Access to Maize Marketing Opportunities in Sub-Saharan Africa

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Organisation: Wye College, Wye, Ashford, Kent, TN25 5AH

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Executive Summary

The project aimed to identify institutional interventions that would improve market access for poor maize producers in remote areas of Sub-Saharan Africa, who had been adversely affected by the transition from state-controlled to liberalised marketing systems. It aimed to make it viable for farmers to participate more fully in national maize markets by raising prices and reducing uncertainty through improved sales opportunities, whilst also making it easier for traders to do business in the areas concerned. The findings of the project are, however, that the competitiveness of maize in three out of four study areas has fallen too far for market-based interventions alone to achieve these aims. A more appropriate strategy might be to look for higher value crops upon which local agricultural development efforts can be based. In the light of DFID's focus on "sustainable livelihoods", the concentration of the project on one particular crop now seems somewhat inappropriate.

Unless there are real breakthroughs in the production of new, high value crops, greater farmer organisation in agricultural marketing is likely to be necessary in order for smallholders in remote areas to significantly raise their incomes from sales of agricultural produce. However, the farmer groups observed in two of the case study areas are still quite weak (and relatively few in number), suggesting that external support will be required for some time. A strategy of seeking closer coordination with private traders might be less demanding of managerial capacity and financial resources than seeking to market produce independently, but returns would only be moderate unless traders could significantly increase their volumes of operation as a result. For this strategy to work, the mutual mistrust that exists between farmers and traders in many areas will have to be broken down.

In one of the case study areas, a private initiative to process local maize production and market it in both urban centres and external markets provides an interesting alternative response to problems of remoteness. The project has assisted in forming links with a London-based importer supplying the West African market in the UK. However, there are doubts about the extent to which this example can be replicated in other remote producing areas.

The implementation of the project's activities has been plagued by delays and, at the time of writing, not all outputs promised to CPHP have yet been submitted. The project is continuing to follow up the initial presentation of its findings in the case study areas (using money saved from the original budget), which should increase the impact of its work.

Background

The liberalisation of maize marketing systems in Sub-Saharan Africa has on balance benefitted farmers in the most favourable locations, but disadvantaged poorer farmers in more remote regions and villages (e.g. Coulter and Golob 1992). In the worst affected areas, farmers have retreated into subsistence production, as private marketing services are either too unpredictable or offer prices too low to justify production for the market. The developmental problem to be addressed by the project, therefore, was how to enable poorer producers in more remote regions and villages to benefit from participation in liberalised grain marketing systems. This would both enable them to generate increased cash income and, thereby, enhance their livelihoods, and also contribute to increasing national production of important staple foods.

Underlying this approach was:

- 1) a recognition that remote regions and villages in a variety of Sub-Saharan African countries had been major suppliers of maize onto their respective national markets under pre-liberalisation marketing arrangements;
- 2) an assumption that there were relatively few attractive alternative income-generating options available to producers in these areas;
- 3) a sense that poor information flows and the weakness of the private trading sector following liberalisation may have led to an “overswing of the pendulum” away from remote areas in the early years of liberalisation, which could be partially redressed by interventions to improve the integration of remoter producing areas into new, private marketing systems.

Points 1) and 2) combined also suggested that efforts to reinvigorate maize marketing could be important for the wider local economy of the remote areas concerned.

Coulter and Golob suggested that farmer groups in remote areas might assemble their marketed surpluses to reduce the search costs facing traders venturing outside the main buying villages. Insights from new institutional economics suggest that there could be further benefits from strengthening coordination between traders and such groups, leading to ongoing supply relationships that would help to assure the demand faced by producers.

It was also thought that periodic markets, already in existence in many parts of West Africa, could help to assure the demand faced by producers in other areas.

Thirdly, work on the efficiency of transport utilisation by Hine and others (and summarised in Platteau 1996) has suggested that there is considerable scope to reduce freight transport costs in Sub-Saharan Africa. The project intended to investigate this in the case study areas, as reduction in transport costs would be of considerable benefit to remote areas, where transport costs loom largest in marketing margins.

The importance of the developmental problem addressed by the project had become apparent to Mr. Colin Poulton during prior visits to the case study areas. The plight of remote regions and villages that had been major suppliers of maize under pre-liberalisation marketing arrangements, but which had subsequently seen official support for their maize activities removed, had been a feature of early literature on grain market liberalisation. However, with the exception of a few writers (e.g. Bryceson, Seppala et al. 1997), attention had then switched elsewhere. Nevertheless, it was clear from discussions with officials and farmers in the case study areas and from national press cuttings (e.g. *Guardian*, 7/1/98) that the issue was still unresolved. That said, demand for the project was only weakly articulated at the time

of submission of the project memorandum form. The best contacts in the case study areas were made with NGOs - at the time of the initial project visit.

Project Purpose

The project aimed to identify institutional interventions that would improve market access for poor maize producers in remote areas by raising prices and reducing uncertainty through improved sales opportunities. Interventions that the project set out to explore included coordination between farmer groups and traders, new market arrangements and measures to improve transport efficiency.

Whilst the most “obvious” intervention to assist remote areas is the upgrading of access roads, this is expensive - often prohibitively so. Therefore, the project aimed to identify measures that could be taken more cheaply (and perhaps quickly) and to compare the costs and benefits of such measures with those of a roads project. An iterative process of survey work and focus group discussions was to be used to identify viable interventions, with the participation of stakeholders in the process intended to encourage adoption of any interventions eventually recommended.

Research Activities

The **literature review** (Risopoulos, Al-Hassan et al. 1998) brought together insights from literature and experience:

- at Wye and elsewhere in the UK;
- at CIMMYT (Mexico) and Michigan State University;
- acquired during the initial country visits made by Colin Poulton in June-July 1998.

It placed observations on market access into a theoretical framework that drew both on economics and social development thinking. Central to its approach was the belief that producers in remote areas need to achieve competitiveness in wider markets, and that this requires that they identify and develop their (potential) competitive strengths whilst seeking to address areas of weakness.

One objective of the **initial country visits** was to identify the specific areas in which field work was to be conducted. In each country it was decided to work in two case study areas:

- Afram Plains (E.Region) and Damango (N.Region) in Ghana;
- Ludewa District (Iringa Region) and Rukwa Region in Tanzania.

The decision increased the experiences that the project could draw on (a point particularly appreciated by in-country research partners) and gave more scope for comparison. However, with hindsight, it is arguable that the timescale of the project and the resources available for field work did not really permit detailed study in two areas of each country. As the chosen areas were genuinely remote (from both a transport and a communications point of view), organising and carrying out activities in each place took more effort than would have been the case for more accessible areas.

Additional consequences of the decision to work in two case study areas in each country were that:

- The formation of in-country **steering committees** to guide the work, as foreseen in the project memorandum form, would have become extremely complicated¹. Therefore, local

¹ To generate local ownership over the work, so as to facilitate uptake of findings, required a local committee in each area. It was not possible to identify committee members during the initial visit (as planned), so formation of the committees would have required additional trips (of several days each)

accountability was instead sought through close collaboration with other agencies working in the selected areas. In Ghana, a good working relationship was developed with World Vision, through their Kumasi-based coordinator, Dr.Kwesi Opoku-Debrah, and their Tease (Afram Plains)-based facilitator, Ms.Paulina Sackey. However, no similar relationship was developed in Damongo. Initial promising links with private traders did not develop as far as was hoped. Similarly, in Tanzania, a good working relationship was developed during the Ludewa work with Irish Foundation for Cooperative Development (IFCD), through their Iringa regional coordinator, Mr.R.Msangi, and their field staff member, Yessaya Mwakyalanda. However, no similar relationship was developed in Rukwa.

- Field work focused on one area, then the other, with attempts made to conduct as much of the work as possible in one (or a few) concentrated visit(s). This was particularly the case in Tanzania, where logistical difficulties were most acute. Thus, the pattern of initial information gathering and analysis, followed by return visits for **focus group** discussions of preliminary findings and recommendations, did not happen. Instead, some focus group discussions occurred in parallel with other data collection, whilst fuller discussion of the work awaited the “final” workshops in May (1999).

The **brainstorming** week in Wye, scheduled for October 1998, was disrupted when a student strike at Sokoine University prevented Dr.Kashuliza from travelling to UK. However, Dr.Al-Hassan did come for planning and discussion of the field work in Ghana. The main conclusions of the discussions were relayed to Dr.Kashuliza by e-mail, so as to ensure as much comparability as possible across country studies.

Field work in both countries, involving surveys of farmers and traders² and discussions with key informants on farmers’ access to maize markets, was somewhat delayed in both cases. Work concentrated on assessing the impact of structural adjustment and marketing liberalisation on maize producers in the four areas, plus compilation of indicative budgets for maize production and trading activities. Less progress was made on assessing the efficiency with which freight transportation services are provided in the study areas, on comparing problems of off-road and roadside villages within remote districts/regions or (in Tanzania) on investigating social dimensions to market access.

Further delays in report writing meant that findings presented at the **in-country workshops** in May 1999 were of a more preliminary nature than originally planned. Nevertheless, all workshops (one per case study area) brought together a good mix of farmer, trader, local government and NGO participants, and stimulated lively and frank discussion on the problems of the areas concerned. A theme that emerged from all bar the Afram Plains workshop was the need for alternative cash crops to maize, given its dismal profitability for all but a few (often larger) producers. In Rukwa, where the case was made most eloquently for farmers shifting out of maize for all except subsistence requirements, the debate was reported in at least one national newspaper.

by local partners, repeated each time the committee was convened. The remoteness of the selected areas contributed significantly to making this impractical.

² The following table summarises some of the main survey activities in each of the four case study areas:

Number and Type of Interviews Conducted During Fieldwork

Case Study	Questionnaire Interviews		Focus Group Discussions (No. of Participants)
	Farmers	Traders	
Afram Plains (Ghana)	54	50	50+
Damongo (Ghana)	61	48	n/a
Ludewa (Tanzania)	not yet available	not yet available	not yet available
Rukwa (Tanzania)	not yet available	not yet available	not yet available

As the project had not managed to keep up with its ambitious schedule in two case study areas per country, provisions had to be made at the time of the workshops for **follow-up** activities. A sum of money has been left with each research partner (out of money saved on workshop or other expenses) to conduct follow-up meetings with NGO or local government representatives in each case study area. These are intended to encourage uptake of the main recommendations arising out of the research. It is proposed that additional reports be submitted to CPHP in January 2000, showing how this money has been used and what success has been achieved in catalysing follow-up activity.

Meanwhile, the **UK workshop**, held in Wye in early July 1999, attracted a high-quality, international participant list. It provided a forum not just for Project ZB0123 to present its findings, but also for two related CPHP-funded projects to present their work, so stimulating broader discussion on problems of remote areas and market access. Whilst the strong emphasis within Project ZB0123 on achieving competitiveness received approval, workshop participants emphasised that a single crop focus is not the most helpful starting point if a project wishes to examine ways of improving the livelihoods of poor households in particular geographical areas.

One unforeseen activity related to the project has been the investigation of possible **UK markets** for processed maize products sourced from the Afram Plains case study area. A range of products has been developed by Dr. Opoku-Debrah and his wife (initially using own capital, but soon to receive support from World Vision). The farmer groups with which World Vision work have been offered shares in the processing enterprise, currently packaging products under the name Rosafrik, whilst Dr. Opoku-Debrah has managed to negotiate supply contracts with supermarkets in Kumasi and Accra and an initial consignment to be sent to the US. It is hoped that the establishment of such market linkages for these new maize (and cassava) products will overcome some of the problems of uncertain demand and fluctuating prices experienced by maize farmers in the Afram Plains area and also increase competition for their surplus maize. Project ZB0123 has paid some of the costs of bringing an initial consignment of Rosafrik products to UK for market testing amongst West African consumers and distributors in London and elsewhere. This has been organised in collaboration with Mr. Seth Otoo, an independent importer of tropical produce. The feedback from individual consumers, retailers and kenkey makers has been sufficiently positive for a small initial consignment of selected products to be sent to UK on a commercial basis. A separate report summarising the findings of the market survey conducted by Mr. Otoo in conjunction with Project ZB0123 has been prepared for CPHP.

Outputs

The main findings of Project ZB0123 are that:

- As claimed at the outset of the research, remote areas are often still struggling to find their way in more competitive, liberalised markets. In three of the four case study areas (the exception being Afram Plains), many producers are having to look for new crops and activities to provide incomes to replace those previously generated by sales of maize in secure, state-supported markets. This **adjustment** process is hindered by lack of information, lack of resources and unfamiliarity with pro-active marketing approaches. It appears that better-off, more enterprising producers are adjusting more readily than poorer households, although data that would permit a more specific assessment of winners and losers has not been collected.
- Market-based, transaction-cost-reducing interventions appear to offer only **restricted benefits** to maize producers in the case study areas. The short-run (static) benefits from

better coordination in maize marketing between farmers and traders, based on plausible increases in efficiency of freight transport operation or even from improved roads, are unlikely to return maize to the status of profitable cash crop for the majority of farmers in these areas³. The longer-term (dynamic) benefits from strengthened farmer group activity in agricultural marketing (a precondition for better coordination between farmers and traders) or from improved roads could be more substantial - albeit costly to achieve. However, these benefits need not be restricted to maize. Indeed, marketing activity by farmer groups is perhaps more likely to develop in connection with high-value crops than with maize (assuming suitable high-value crops can be identified).

- The project's budgeting exercise suggests that producers will achieve their largest gains from better coordination with traders if they can negotiate a share in the profits obtained from increasing trading volumes, rather than if they merely assist traders to reduce turnaround times for their trading activities. (Increasing trading volumes will obviously also require that traders are able to access increased volumes of working capital). Even such coordination activities, whilst requiring less managerial capacity than a direct marketing function outside the district, are still beyond the capabilities of many **farmer groups** in their current state. They also require a recognition that farmers and traders, whilst having opposite interests in some aspects of marketing, share a common interest when it comes to securing the place of a particular remote area within competitive, national commodity markets. There was some evidence in Afram Plains of a willingness to work together to solve common problems (a testimony to the activities of World Vision in the area⁴), but as much evidence of hostility as of cooperation elsewhere.
- Despite the problems being encountered in the case study areas, the researchers are hesitant to recommend a return to **interventions by state organs** in support of maize marketing. Devising limited interventions that could be of benefit to poorer producers is not the problem. For example, the GFDC depot in Afram Plains could purchase and dry maize in the couple of months immediately after the "major" harvest, thus supporting local prices when they are at their weakest. Furthermore, the researchers were favourably impressed by the technical officers of both GFDC and SGR, whom they encountered during the course of their work. However, doubts remain about how efficiently funds provided for such interventions would be handled (at all levels of the organisations concerned), whilst local buying and selling activity almost inevitably becomes the focus of political lobbying. Whilst the process of administrative decentralisation may eventually open up new pathways for such direct forms of state intervention, it is not yet clear whether decentralisation will lead to more accountable and effective state apparatus or simply multiply the opportunities for local lobbying.
- Meanwhile, (in)appropriate **trade policies** can make a significant difference to the prospects for agricultural production in areas that are remote from national centres, but which are actually close to national borders. A ban on cross-border grain exports from

³ The methodological approach employed by the project to assess these benefits - an iterative adjustment to trader and farmer budgets - seems promising as a way of assessing the impact of a variety of marketing interventions. However, initial experience within Project ZB0123 suggests that indicative budgets need to be constructed from a fairly large sample of survey observations, given the wide degree of variability inherent within both production and trading activity.

⁴ However, the establishment of Rosafrik means that World Vision-supported farmer groups in Afram Plains will be able to access an alternative marketing channel to that provided by existing private traders, so there is little interest in the particular suggestion of encouraging closer sales/purchase coordination between farmers and traders. The Rosafrik "model" of processing to add value to maize is an excellent response to the problems of remoteness. However, it requires far greater managerial and marketing capacity than the interventions considered under Project ZB0123 - attributes that are only likely to be found in remote areas where there is a dynamic outside presence such as Dr. Opoku-Debrah.

Tanzania removed⁵ an important market outlet for producers in Rukwa region, compounding the difficulties caused by adjustments within national maize markets and further depressing prices.

As noted under Research Activities, less progress has been made than was originally hoped on assessing the efficiency with which freight transportation services are provided in the study areas, on comparing problems of off-road and roadside villages within remote districts/regions and (in Tanzania) on investigating social dimensions to market access. This is attributable partly to the decision to attempt two case studies per country and partly to difficulties in communication between Wye and in-country research partners.

Delivery of country reports by research partners has also been problematic. In the case of our Tanzania research partner, progress on work under Project ZB0123 has been hindered by a string of unpredictable events, including a time-consuming investigation of a break-in and theft related to another project, family illness and loss of computer hard disk containing much data analysis and report preparation. A summary of those reports delivered to CPHP and those still outstanding at the time of preparation of this report is contained in Appendix A.

Contribution of Outputs

As noted under Research Activities, slippage in the schedule of project activities means that the impact of Project ZB0123 has so far been limited. However, provisions have already been made, out of existing project funds, for follow-up activities in all four case study areas. Following on from the circulation of workshop reports (and eventually also case study reports), these additional activities are designed to ascertain from key players in the four areas (NGOs, local government, farmers' and traders' representatives) whether or not practical steps can be taken to strengthen local agricultural marketing activities. Administrative decentralisation has proceeded somewhat further in Ghana than in Tanzania and the prospects for locally-based follow-up activities to projects such as ZB0123 appear correspondingly brighter. Even in their current (under-resourced) state, local administrations could have a valuable role to play in setting out strategies, in conjunction with other local stakeholders, for encouraging agricultural (and other forms of) development in their districts.

Possible steps that may, therefore, be taken include as part of the follow-up work include:

- The preparation of locally-developed proposals for further research (e.g. on crop diversification) or for practical interventions (e.g. improved storage facilities at local markets), either to be funded by in-country sources or to be presented to CPHP.
- Working through with IFCD and World Vision how practical suggestions arising from the research can be implemented by farmers' groups and traders with whom they have contact.

Critically, the follow-up activities will test the strength of commitment of local stakeholders to organising and acting to strengthen agricultural marketing systems in their areas. The terms of reference for this work are attached to this report.

So far, no academic papers have been published relating to Project ZB0123. However, it is anticipated that up to six papers will be prepared once all the relevant information is assembled - one relating to each case study, one based on the literature review (in the light of comments received at the UK workshop) and one drawing together overall conclusions and implications for policy with respect to remote areas. It is worth noting that, with the sharpened focus on poverty reduction both in the UK and amongst international donor

⁵ It is unlikely that exports into Zambia ceased completely as a result of the ban, but it is plausible that volumes exported were reduced considerably, as headloading along unmonitored paths replaced truck transport through the formal border crossings.

agencies, there is evidence that the problems of remote areas are once again going to receive special attention⁶ (see, for example, Ellis 1998). The outputs of Project ZB0123 will contribute to this renewed interest.

Finally, it is worth mentioning the work with Rosafrik and Mr.Otoo. Although the development of Rosafrik's operations are chiefly attributable to the skills and energy of Dr.Opoku-Debrah, the presence of Project ZB0123 at an early stage in his marketing operations undoubtedly provided encouragement. The growth of Rosafrik has in turn prompted World Vision to rethink aspects of their programme strategy in Ghana and it is possible that we will have opportunity to contribute further to the ideas that they are now evolving.

References

Bryceson, D., P. Seppala, et al. (1997). The Welfare of Efficiency or the Efficiency of Welfare: Maize Marketing Policies in Tanzania. Symposium on Agricultural Marketing in Tropical Africa, Leiden.

Coulter, J. and P. Golob (1992). "Cereal market liberalization in Tanzania." Food Policy **17**(6): 421-430.

Ellis, F. (1998). Livelihood Diversification and Sustainable Rural Livelihoods. Sustainable Rural Livelihoods: Key Issues, Papers Presented at the DFID Natural Resources Advisors Conference. D. Carney. London, DFID.

Platteau, J.-P. (1996). "Physical infrastructure as a constraint on agricultural growth: the case of Sub-Saharan Africa." Oxford Development Studies **24**(3): 189-220.

Risopoulos, J., R. Al-Hassan, et al. (1998). Improving Smallholder Access to Maize Marketing Opportunities in Sub-Saharan Africa: A Literature Review. Wye, Wye College.

⁶ This is in contrast to the situation perceived at the start of the project.

Appendix A: Reports Submitted to CPHP Under Project ZB0123

Risopoulos J, Al-Hassan R, Clark S, Dorward A, Poulton C and Wilkin K (1998) *Improving Smallholder Access to Maize Marketing Opportunities in Sub-Saharan Africa: A Literature Review*.

Report on a Workshop on Maize Marketing Held at Afram Plains Development Organisation Offices, Tease, Ghana on Monday 3rd May 1999

Report on a Workshop on Maize Marketing Held at Damongo Secondary School, Damongo, Ghana on Wednesday 5th May 1999

Report of a Workshop on “Improving Smallholder Market Access in Remote Areas of Sub-Saharan Africa” (held at Wye College on 8th-9th July 1999)

Market Testing of Rosafrik Products in UK

Reports Still Outstanding

Ghana Case Study Reports

Tanzania Case Study Reports

Tanzania Workshop Report

Swahili Translation of Main Tanzania Findings

Briefing Document Outlining Major Findings and Recommendations for Policy Makers