

Natural Resource Perspectives 119

November 2008

Community Area Based Development Approach (CABDA) Programme: An alternative way to address the current African food crisis?

Chris Wardle

uch of African smallholder farming faces weak service delivery and input supply, and a diminishing resource base, particularly in terms of soil and water conditions. Conventional interventions, whether through the state or markets, have had little success in improving these conditions. This paper describes an NGO programme – the Community Area-Based Approach (CABDA) – initiated 15 years ago and piloted in Ethiopia, Uganda and Malawi, which offers an alternative approach.

Policy conclusions

- With appropriate support, small farmers can make their households and region food secure. However food security is directly affected by population growth.
- Technology which is high cost (including hybrid seed and artificial fertiliser) often cannot be afforded by small farmers. Instead, important gains in food production can be made by a combination of improved early maturing composite varieties of the staple crops; diversified crop production; introduction of drought resistant crops; new methods of growing crops (such as agroforestry); and better utilisation of water through low cost, manageable technologies.
- Involvement of the whole community, including women, in increasing food production is essential.
- Soil and water management at the microwatershed scale can reduce erosion and degradation of land. However, the benefits are not immediate, and the scale of problem is vast.
- Farmers and communities need to be involved in identifying problems, suggesting solutions and implementing interventions. This stimulates 'ownership' and promotes sustainability.
- Farmers and communities must drive their own development through farmer and communityowned and -run institutions to provide inputs, improved seed, market support etc. Capacity building is not only about technology, but also about ways of organising.
- Working with partners in government or in the private sector helps to increase the project effectiveness, overcome bottlenecks (e.g. providing improved seed for multiplication and distribution), and can help to build partners' own capacity.
- Contextual factors influence outcomes, and include the lack of access to improved early maturing composite varieties of staple crops in countries like Malawi, and the general lack of business training and support for farmer-managed organisations.

The current food crisis in Africa

Food shortages have been reported across Africa, with rapid increases in the price of staple foods in the past six months (www.fao.org/ worldfoodsituation), and food riots in several countries including Egypt, Cameroon and Niger. These shortages have also been felt globally. The causes have been discussed in a recent paper in this series (NRP 115) and include both short-term (harvest failure in grain exporters such as Australia; run-down of global food stocks) and long-term (population growth, increased demand in rapidly growing economies, climate change) factors.



This series is published by ODI, an independent non-profit policy research institute, with financial support from the Swedish International Development Cooperation Agency, Sida. Opinions expressed do not necessarily reflect the views of either ODI or Sida.

Overseas Development Institute

ODI is the UK's leading independent think tank on international development and humanitarian issues. Of additional concern in Africa are conflict and political instability, lack of investment in the agriculture sector, and periodic droughts.

Against a background of largely unsuccessful attempts to address these problems in Africa, this paper examines a Community Area-Based Development Approach (CABDA) to agricultural development. This has been piloted in Africa by Self Help Development International, an NGO, over the past 15 years in Ethiopia, Uganda and Malawi.

Learning the lessons from past strategies

Integrated Regional Rural Development Programmes, led by the World Bank in the mid 1970s to late 1980s, included: provision of seed, fertiliser and credit, support to extension and development of market infrastructure, including feeder roads. Reasons for the limited success of these include:

- lack of participation by intended beneficiaries in programme design, resulting in inappropriate interventions;
- high reliance on inputs (such as agrochemicals) which, postproject, could not be supplied in a reliable or affordable way;
- a tendency to create parallel implementation systems which were not sustainable; and
- limited attention to underlying problems such as the monocropping of maize and depletion of soils.

Proposals to tackle the current food crisis in Africa

A series of proposals have been put forward to tackle the food crisis in Africa. These come from a range of organisations and institutes, including FAO and The Alliance for a Green Revolution in Africa (AGRA: www.agra-alliance.org). Some, such as the Millennium Villages Project (MVP – www.earthinstitute.colombia.edu/mvp) pre-date the current crisis. These call for increased investment in agriculture in Africa and include ideas and initiatives from within Africa itself. However, they have weaknesses including:

- continued emphasis on 'technical fixes' and, in cases such as the MVP, on a 'blueprint approach' (Cabral et al., 2006);
- continued reliance on increasingly unaffordable inputs (e.g. artificial fertiliser – www.fao.org/worldfoodsituation);
- implicit reliance on African governments to provide increased services to the agricultural sector (extension etc) when in reality they are not in a position to do so; and
- widespread 'handouts', reinforcing a mentality of dependence.

Community Area Based Development Approach (CABDA)

Background

Against this background, the CABDA Programme was started in Ethiopia the early 1990s, and has since spread to Malawi, Uganda, Eritrea and Kenya. Its overall aim is to work with the farmers and community to make themselves and their region more food secure. Each of its projects covers a population of 50,000-100,000 inhabitants. Projects last 5 years, which is the period needed to bring about sustainable change in agricultural practices.

Key principles and features

The Programme has the following basic principles:

- 1. Development is a process requiring farmers and community members to identify the needs and priorities of their area, suggest possible solutions and implement activities.
- 2. Women must be closely involved in planning and managing change, and programme managers and staff should be nationals of the country concerned.

- 3. Interventions must be affordable and manageable by farmers and the wider community, tackling the underlying causes of food insecurity: especially soil degradation and erosion, through natural resource management.
- 4. Joint investment, where farmers and community make a contribution to all initiatives and interventions, is essential.

Main elements of the programme

The programme and its projects have six main areas of intervention (discussed below). Before a project starts, a needs assessment is done with farmers and community and a baseline Study conducted.

Improving food production and food security

The overall aim is to increase food production and food security for individual households and for the area as a whole. This is done through a range of interventions, the main ones being:

- a) Distribution of the seeds of early-maturing staple crops: These mature in 90 instead of 120 days, so that farmers are more likely to get a harvest, even as rainfall becomes increasingly scarce and erratic. The varieties are higher yielding than those currently used by farmers, and are composites, not hybrids, allowing farmers to save their own seed.
- *b) Diversifying crop production:* Farmers are encouraged to spread risk by diversifying into crops such as beans, onions and garlic. Beans have high nutritional value, with by-products useable as fodder, and improve the soil by fixing nitrogen.
- *c) Introduction of drought resistant crops:* These include (in Ethiopia) enset (also known as false banana), which has been grown for many years in some highland areas, but is virtually unknown in the lowlands.
- d) New methods of food production: These include agro-forestry in which the plants complement each other and the 'no till' approach helps to protect the fragile soils. The larger trees (fruit trees such as mango, avocado and timber trees) provide shade for the coffee and for nitrogen fixing bushes planted beneath them. This minimises evaporation of soil moisture and provides the household with food for consumption and sale.

Improving management and conservation of natural resources

Projects work with farmers and community to improve the utilisation of water sources and also harvest and store runoff which can then be used to irrigate high value crops such as vegetables. Methods are low cost and manageable by the farmer, and include: construction of small multi-purpose dams; introduction of simple, low cost water lifting devices, such as locally-manufactured rope and washer pumps; small motorised pumps for higher-lift irrigation, shared among groups of farmers; and the construction of small, shared cement-lined ponds (60-70 cubic metres) for rainwater harvesting.

Management and improvement of soil

Deforestation is addressed in two main ways, through the production and planting of seedlings for fruit, fodder, construction and firewood. Farmers have been trained in propagation and most seedlings are now produced in small farmer or community run nurseries. Second, enclosures are created to keep livestock out of eroded areas to allow natural regeneration and some replanting.

Soil erosion is tackled by three related activities: ditches to divert excess rainfall; terracing and bunding to maximizes infiltration of water into the soil, and planting in gullies to stabilise them.

Loss of soil fertility is tackled by crop rotation with legumes, and by increased composting of animal waste.

A watershed management approach has allowed communities to tackle water and soil management more systematically, by applying combinations of the above measures to a micro-watershed of around 100 hectares with communal work on the commons in upper slopes and by individual farmers on private land lower down.

Involving women/Mainstreaming gender

In the early years, the CABDA Programme did not directly target activities at women. However, in the mid 1990s, a group credit and savings component together with training was introduced. The credit financed small income-generating activities. The most popular of these were petty trading (mainly buying crops at harvest, storing and then selling later in the year when prices rose), fattening livestock (sheep and goats) or keeping a dairy cow.

These activities allow many women to have their own source of income for the first time. Apart from increased capacity to spend on the family, this also increases their confidence and begins to influence their position and role within the household.

In the early 2000s, gender was mainstreamed in the CABDA Programme and in all aspects of each project. Women are now specifically targeted to participate and be involved in the crop and food production activities of projects.

Building individual and community capacity

Capacity building in the CABDA Programme is done in a variety of ways which reinforce each other, a central principle being that people learn best from their peers. These include:

- cross-visits to other projects;
- demonstrations of new practices (e.g. enset corn propagation);
- competitions and open days;
- training in technical, business and group management skills;
- follow-up and support by Contact Farmers (better farmers chosen by the community) supported by Project and government extension staff; and
- encouraging reflection amongst groups, co-operatives and project staff on their performance, including via annual reviews and periodic external evaluations.

Promoting farmer and community-managed organisations

Once formed, common interest groups can evolve into farmer- and women-owned and managed organisations that provide services to members. The main ones are *Input Shops* providing farmers tools and inputs; *Marketing Co-operatives* for the sale of vegetables to urban markets and for export, *Seed Multiplication Co-operatives* and *Credit and Savings Co-operatives*.

These institutions help ensure sustainability by giving farmers control over provision of inputs and marketing. They no longer have to rely on third parties (such as government), but can directly influence and drive forward their own development

Working with partners

CABDA's relationship with regional and local government, agricultural research stations, universities and colleges, and the private sector strongly influences the performance of individual projects and the programme as a whole.

Projects work with local government in planning and reviewing activities annually, and where possible, in implementation and capacity building. In Ethiopia, the programme works closely with research stations which provide improved seed, oversee farmer multiplication of this seed, and give technical advice. There is a similar relationship with agricultural universities and colleges in Ethiopia and Malawi. CABDA also works with private companies including one in Addis Ababa producing inexpensive rope and washer pumps.

Relationships can be slow to establish initially, but gather pace once partners see benefits such as (for local government) increased investment, and (for research stations) increased planting of their varieties, and (for colleges) field experience for their students.

Results and Impact

Farmers report that the introduction of improved, early maturing varieties has increased the yield of maize and wheat by 50-95%. Improvement of agricultural practices (planting in rows etc), greater use of irrigation, introduction of 'new' drought-resistant crops and of agroforestry have further increased crop production.

In a 2007 evaluation, families involved in the Sodo Project, (130km south of Addis Ababa), said the 6-month hungry season had virtually been eliminated and that they were eating 3 meals/day compared to 1 previously. The use of improved practices is high (85%), and diversification allows production both for consumption and for the market, which then helps to create capacity to reinvest (e.g. in a rainwater harvesting pond, or a rope and washer pump).

Improved natural resource management activities include 49 rainwater harvesting ponds in Sodo, 550 agroforestry plots and a watershed management project protecting almost 600ha of crops. Here, as elsewhere, the scene from vantage points is one of clumps of green dotting the otherwise brown landscape. At Sodo, 10 individual and community nurseries are producing and selling around 400,000 fruit, coffee and other tree seedlings annually.

Women are gradually becoming more involved in growing their own crops and other activities. At Sodo, 15% of recipients of improved maize and wheat seed are women, while women received 13% of the inputs for vegetable production. Other projects aim to increase this to at least 25%.

Groups of women now have their own source of income, mainly generated by credit and savings activities. Commercial banks are being linked to such groups, and many women report increased involvement in decision making both within the household and within the community.

In terms of capacity development, several of the co-operatives and groups have started to collaborate with each other, giving them increased capacity to leverage resources (external finance, better deals on inputs etc). Research stations have become more willing to work with seed multiplication co-operatives, and local government departments often continue to promote new and improved agricultural practices beyond end-of-project.

Issues and constraints

CABDA faces several constraints. The first is lack of resources and variable levels of motivation in some local government departments. Projects can provide some logistical support, but if necessary, they can be independent of dysfunctional services by maintaining their own advisory services.

Despite some success, traditional attitudes e.g. towards the role of women are slow to change.

Natural resource problems can be overcome only slowly, but to address them requires labour when farmers' immediate priority is food production. The projects address this by waiting until farmers €di

Overseas Development Institute

111 Westminster Bridge Road, London SE1 7JD Tel: +44 (0)20 7922 0300

Fax: +44 (0)20 7922 0399 Email: nrp@odi.org.uk

Natural Resource

Perspectives present accessible information on current development issues. Readers are encouraged to quote from them or duplicate them, but as copyright holder, ODI requests due acknowledgement. The Editor welcomes manuscripts for this series.

www.odi.org.uk/nrp

Series Editor: John Farrington

Administrative Editor: Jojoh Faal

© Overseas Development Institute 2007 ISSN 1356-9228 have started to improve their food situation through crop activities before introducing natural resource activities. Also, biological methods of erosion control introduced by the projects generally require much less labour than physical methods.

It takes considerable time to build the capacity of farmer groups and co-operatives to the point where they are organisationally and commercially viable. Cooperativism does not automatically guarantee success, and the necessary business support is difficult to find.

CABDA's resources are limited: over 50% of the average \$1 million five year budget of each project goes towards joint investment with community and government in social infrastructure (schools, heath centres, water points) – along with food, people have identified education and health as top priorities for their community. This limits the amount available for other activities e.g. incomegenerating activities.

The privatisation of agricultural services under Economic Reform Programmes means that, for instance, in Malawi, seed production is largely controlled by commercial companies who produce hybrids for large-scale farmers, but to the potential disadvantage of smallholders, since seed from hybrids cannot be retained for the following season.

A model for the future?

NGO initiatives are often criticised for being too small-scale and not capable of being scaled up (cf NRP 17). CABDA has partially addressed this in three ways: firstly each project covers a sizeable area and can involve farmers in up to 100 villages. Second, it has adopted a 'cluster' strategy which allows it to expand the programme and increase the number of projects reasonably quickly. Initially selected project areas serve as a 'hub' for subsequent projects, facilitating farmer groups in learning from and collaborating with each other. Thirdly, a new capacity building strategy allows the lessons from CABDA to be shared more widely, including with provincial government. Several of its lessons and practices are being adopted by two Regional government offices in southern Ethiopia.

NGO programmes and projects are also often criticised for creating parallel structures which can lead to duplication and tend to disappear once the Project ends. Wherever possible, CABDA works through local structures and institutions (local government, research stations, colleges and university). Local government is involved in the planning and implementation of all projects.

Sustainability is a key priority of CABDA. Its strategy consists of several reinforcing principles. The first is to involve the farmers in planning and implementation of the project so as to create a sense of ownership. The second is to introduce only the types of technology that they can afford and can manage. The third is to build capacity at individual and group levels, fostering collaboration among groups, and the fourth is to assist in building relationships with other institutions that can provide them with support once the project ends.

Accountability and Transparency

NGOs channel funds through their own structures, thus minimising 'leakage' caused by corruption. The move towards decentralising government in many African countries may help improve accountability and transparency. Lessons from CADBA that may help in reducing corruption include:

- Joint investment in projects by community, government and donors can increase accountability: if the community has contributed, (either in money, materials or time) it will want to see that its money is properly spent
- Joint management of funds: Certain funds set up by the CADBA Programme (revolving drug funds for the health centres and animal health posts) are jointly managed by the relevant government department and community representatives. Mismanagement has not been a major issue as community representatives act as a check.

Conclusions

CADBA's experience over the last 15 years puts into application the 'good practice' principles that many others only talk about. It has achieved many successes, but much remains to be done. While CABDA has taken some initial steps to scale up its activities, questions remain over how and how far the approach can be implemented on a large scale. Some of lessons learnt by CABDA could be drawn upon when considering how best to tackle the current food crisis in Africa. However, CADBA achievements – along with the achievements of practically all other programmes – are likely to be undermined unless rates of population growth also start to decline.

Whether and how funds can be obtained for sustaining and scaling up NGO efforts is a moot point. Government resources are inevitably limited, which places a premium on low-cost approaches in which para-professionals can play a role. To rely on donor funding is a tempting option, but unless these are carefully integrated into a medium-term government expenditure framework, may undermine sustainability. There are no 'silver bullets' in scaling up those local initiatives that have a good record in poverty reduction. Trade-offs are pervasive, and hard choices have to be made.

Chris Wardle is a is an independent consultant and organic farmer, with long experience in rural development in Africa. *Email: chriswardle@compuserve.com*