6. OPPORTUNITIES FOR ACTION AND SUPPORT

6.1. CROSS-CUTTING ISSUES

Agricultural development

The planned Norwegian support to Malawi is classified as a 'pilot programme for agricultural growth.' The term implies that the programme should be coherent and focused, yet covering a certain range of interlinked elements. An actively involved, professional management will be needed to ensure relevance, implementation and impact.

A programme proposal needs to be tailored to the work of other donors already active in supporting Malawi agriculture. The programme should complement efforts of other donors—not duplicate. Proposals must also take into account the capacity of organisations available for implementation. Upscaling planned or ongoing programmes may be more cost-effective than starting up new ones. Regional cooperation is encouraged. Our suggestions are, therefore, based on an assessment of national priorities, other donors' activities as well as institutional capacities and constraints.

The proposed activities for support are all based on a growth strategy where the public sector, donors and government, provide supportive public goods, whereas the private sector, including small-scale farmers, are expected to invest in the new opportunities for profit that are opened up in farming and related activities.

Modernisation and increased productivity require the use of modern tools for planning, managing and operating agricultural activities in production, processing and marketing. This has to be achieved while lowering the unit cost of operations. The challenge is to support the necessary shift from the current low level of inputs coupled with very low output, to operations that are science-based with high levels of output both in terms of quantity and quality. A further challenge is to provide knowledge and technologies that promote the improvement of the productivity and conservation of land, water and biodiversity.

While the majority of Malawian farmers will remain at a subsistence level in the near future, poverty reduction will only be achieved by breaking out of the subsistence cycle. This requires the development of strategies to catalyse the change from subsistence to profit through the identification and development of new and viable options that empower smallholder farmers to:

- change from subsistence to commercially profitable agriculture;
- shift focus from commodity production to marketing-oriented, processed and value-added products;
- move towards increasing participation in food markets; and,
- obtain access to local, national and international markets.

Achieving better profitability and sustainability in agriculture requires the improved management of agricultural resources, combined with increased efficiencies in managing inputs and outputs at all stages of the production chain, the adoption of new technologies, and the extension of the use of existing technologies, such as reduced tillage, mechanization, water harvesting and irrigation, range management, crop protection and animal health, and crop storage. The essence of the strategy recommended here is to enable, through appropriate interventions, the speedy and efficient implementation on a wide scale of these new practices. Investments are focused on provid-

ing direct support to agriculture, rather than on the administrative processes of the agricultural ministries and other public institutions[18].

Sustainable growth will essentially have to come from efficiency gains in production, marketing and processing. There will not be one sole source of growth (i.e. no "quick fix"). Improved analysis of problems and potential interventions, increased transaction efficiencies, the mobilisation of private investment, raising the value-added of agricultural output and many other factors, will all have a role to play. Much can be achieved, at no additional cost by establishing an "implementation culture" where priority is given to problem solving and by inspiring ways of making the best use of limited resources.

Improved client orientation is fundamental to all service provision to smallholders. The strategy has a clear focus on building a 'smallholder-friendly' product/marketing chain, intended to link primary producers of crops and livestock commodities, to post-harvest operators, traders and consumers. At the same time, the strategy supports the empowerment of smallholders through innovative mechanisms such as increased training, communication and information flow, participatory problem identification and research to enable them to demand new and improved services effectively.

Product chain approach: for smallholders to become commercially competitive, they need to participate in product chains that are determined by markets and consumer needs.

Shift toward value added and market considerations: programmes to support smallholder development need to change their orientation quickly and effectively from the traditional focus on production-side research and its typical linear, top down technology dissemination. Holistic problem solving is extended to problems throughout the product chain, with an emphasis on improving the efficiency of input use.

Ensuring the availability of 'foundation' technologies: research teams need to work with other partners to ensure that, not only are their research products closely tailored to their farmer/clients' needs, but also that the necessary links in the market chain are in place. The introduction of a new variety will be coordinated with the development of suitable partners to help bulk up the necessary seed for purchase. The private sector and other agencies have to work alongside researchers so that they are prepared and able to provide new inputs and other requirements for the new technology and market options developed.

Reaching and serving the poor: poverty alleviation is central to the objectives of this strategy. There is a focus throughout on dealing with issues of importance to resource poor farmers, women and youth.

Mainstreaming gender issues

Most organisations include gender mainstreaming as a strategy in their agricultural programmes, projects and services. In addition, most policy documents include gender mainstreaming as a crosscutting strategy. However, gender disparities continue to exist in these organisations and activities, which means the strategies being implemented are not enhancing the important role of women in agriculture as they should. This calls for reflection, strategising, commitment and ac-

[18] A judicious balance is required between the needs of the institutions to provide effective delivery of public services to farmers, and the use of public funds to stimulate production.

tion by all stakeholders in order to strengthen the gender mainstreaming strategy. A number of activities are proposed below.

1. **Improve access to, and control and management of production resources such as land, capital and knowledge.** Specific activities for each production resource are required.
   a. **Land**. The land policy and land reform programme have stipulated the need for gender equality in land matters. The debate on these issues is in progress and stakeholders in agriculture and gender should join hands to lobby authorities to ensure that the good intentions of the land policy are implemented.
   b. **Capital**. A number of organisations provide loans to farmers in cash or kind in the rural areas. However, access to these loans is a major problem even amongst male farmers. But the issue for women is to understand the amount and form in which they need it in view of their lack of assets. The amounts women take are usually smaller than what men take. CARE International promotes savings schemes that suit the needs and constraints of women and such practices need up scaling. Concern Universal Micro-finance Operation (CUMO) model aims at reducing barriers to access of rural communities to financial services by using groups, savings schemes as well as credit that caters for farm and off-farm needs. The CUMO model has assisted women to expand their off-farm enterprises, businesses that women control and manage, thereby empowering them.
   c. **Knowledge**. Provide extension and training service to women alongside men by making deliberate efforts to include women. Establishing separate groups for men and women also facilitates participation of women particularly in communities where culture does not support mixed groups.
2. **Increase the participation of women in various agricultural programmes, projects and activities.** To increase participation, we need to deliberately provide opportunities for women to participate through affirmative action and quota systems, such as is done in NASFAM.
3. **Advocacy for gender equality.** Considering the Malawian culture of males having power over women, and women being submissive, the issue of gender is a sensitive one and often threatens both men and women. Resistance is therefore not uncommon, particularly among men. As such, addressing gender issues (at community or institutional level) should be strategic and sensitive to the local situation that varies from region to region.

Mainstreaming HIV/AIDS issues

Stakeholders in agriculture should accept HIV/AIDS pandemic as real and promote change in people's attitudes and behaviour as part of their responsibility because the disease is affecting staff as well as clients. Success of their programme activities will therefore partly depend on the stakeholders' success to prevent and mitigate the disease. Some of the activities included in mainstreaming activities are the following:

1. **Promote HIV/AIDS awareness among staff and farmers.** Staff and farmers must understand the disease and what it entails before they can help others.
2. **Build capacity of field workers to educate and work with the communities on HIV/AIDS.** This involves training activities in prevention, care and rehabilitation. The

plight of women in this pandemic and how they can claim and defend their rights should be highlighted.

3. **Promote livelihood of the affected and infected people.** This requires some investment for field workers to address livelihood challenges of the poor by promoting a variety of focused interventions aimed at improving the health and nutrition situation of the affected and infected. The interventions should consider the food security status (food secure, food insecure and food crisis) of the households and their coping strategies. Typical activities include an extension programme promoting food production (crops and livestock), nutrition, soil and water conservation and safety nets for the infected and affected households.
4. **Develop HIV/AIDS mainstreaming policy guidelines.** The agricultural sector policy and strategy paper for HIV/AIDS is available in the Ministry of Agriculture and can assist other stakeholders to develop their own.
5. **Develop HIV/AIDS support fund for advocating and promoting access to care and prevention.** Concern Universal and CARE International have set aside funds for assisting their staff and families to meet the challenge of living positively with HIV/AIDS while respecting their privacy. The challenge is to open this service to their clients.
6. **Conduct research on HIV/AIDS.** Research activities should inform the development of HIV/AIDS prevention and mitigation strategies. This should be a continuous process and in partnership with other stakeholders. Both quantitative and qualitative research is necessary to understand the situation better and to deal with specific issues. Wide dissemination of results is encouraged.

General risks

The major risk to all interventions is the 'non-implementation syndrome' that afflicts so much of Malawi's development assistance. It is not the absence of good ideas and policies that binds Malawi to poverty; it is failure to deliver on the promise. The World Bank, in its Agricultural Services Programme, found that less than 20 percent of funds intended for smallholder development actually reached anywhere near the beneficiaries. We have noted the breakdown in discipline within the Malawi public sector that, under the new democratic dispensation, makes a major culture change within the public services difficult to achieve. The functional analysis under MASIP appears terminally stalled and there is little momentum behind the national decentralization effort.

Furthermore, there are serious gaps appearing at critical levels in the public sector. Funds for training young development specialists have dried up over the last decade. Death and emigration, as well as retirement, have reduced the ranks of experienced individuals at all levels in government service.

This last, however, represents an opportunity as well as a risk. With a strong focus on helping build capacity at all levels within the country (which is consistent with the objectives of both Bunda College and NASFAM support), there is a real chance to create significant change. Young, enthusiastic individuals can be given the opportunities to work in a system that rewards enterprise and results. The international agricultural research centers and others have shown that they can provide the technical backup and support for new approaches to development initiatives. Norway has the particular advantage that it is starting a programme with relatively modest 'baggage' from the past. The World Bank has indicated unequivocally, that it wishes to work in close collaboration with Norway. This opens the potential for pooling the strengths of the two agencies (and probably other major donors also) into a strong decentralised, development initiative

where the economic clout of the Bank can be coordinated with a more nimble and focused Norwegian programme.

6.2. COMPONENTS OF A PROPOSED PROGRAMME

Recommended elements of a support programme are presented below in a *non-prioritised* sequence as five thematic areas with sub-components. A development program may consist of all or selected componenets.

1) *Budget support to Government of Malawi and policy dialogue*
2) *Agricultural education and enterprise promotion*
    a. Continued support to Bunda College of Agriculture
    b. A new innovative programme to revitalise the Natural Resources College including an enterprise promotion programme
    c. Support to agricultural vocational schools starting with Mikolongwe Vocational School in Chiradzulu
3) *Agricultural research and development*
    a. The Agricultural Research and Development Fund (ARDEF) managed by Bunda College
    b. Support to the expansion of the NGO-consortium I-LIFE
4) *Farmer organisation and market development*
    a. Support to NASFAM
5) *Agricultural infrastructure and productivity investments*
    a. Improvement of rural roads
    b. Investment in water management
    c. Investment in soil fertility

6.2.1. Budget support to Government of Malawi and policy dialogue

Norway is currently providing budget support to Malawi. Continued budget support would be the main way of supporting continued public spending in MoA and other ministries – while reducing the fiscal deficit. Budget support would need to be followed up with monitoring and by policy dialogue with the GoM, e.g., via the donors' coordination group on agriculture and food security, or through other channels. As mentioned in the report, several policy issues are of particular interest to agricultural development, e.g.:

- Further reduce the fiscal deficit to bring down interest rate (and inflation) and make capital available for investment in the private sector
- Reduce market uncertainty caused by government intervention:
    - Ensure predictability in government procurement and sales of maize and fertiliser
- Review the role of ADMARC and other parastatals with the view of reducing their fiscal burden.
- Accelerate the reorganisation of MoA to make it leaner and more effective
- Continue decentralization
- Improve and expand (rural) transport infrastructure, as well as road, rail and harbours linking Malawi with the world market, especially the Nacala corridor.

The policy dialogue should be based on the strengthened agricultural and rural development policy research that should be an important component of the proposed ARDEF (see below).

6.2.2. Agricultural education and enterprise promotion

Education is essential for development. Lack of a cadre of highly competent entrepreneurs, researchers, extensionists, technocrats, and managers is identified as a major constraint in Malawi. Support to tertiary educational institutions in the sector is intended to address this need. Norway has taken on a role as lead donor in agricultural tertiary education. It is proposed that this is continued and expanded.

Three components are recommended:

a) Continued support to Bunda College of Agriculture
b) A new innovative programme to revitalise the Natural Resources College including an enterprise promotion programme
c) Support to agricultural vocational schools starting with Mikolongwe Vocational School in Chiradzulu

1. Support to Bunda College

Norwegian support to Bunda College has been appreciated and has had obvious impact. Bunda College needs to be developed and enhanced to provide the kind of indigenous leadership for change that the Maize Productivity Task Force and JEFAP provided in earlier crises. Norwegian support and encouragement – through UMB and the IARCs and NGOs - in a coherent manner can play an important role in creating a 'self help' approach to change. Continued attention should be given to support the Centre for Agricultural Research and Development (CARD) at Bunda as an important contribution to the national agricultural policy debate and development.

Since the support program is already well established and on track, the mode of operation is not discussed further in this report.

2. Establish an 'African EARTH College' and a 'Business Development Programme'

Background

The commercial sector in Malawi is weak. Reductions in certain government services have not been taken up by the private sector as anticipated. Small-scale producers will benefit from entrepreneurs starting new commercial production in their region either by obtaining part-time jobs or by easier access to markets. A new generation of actors in the private sector is needed to move from a subsistence economy to a market economy. An African EARTH college might be an excellent contributor to this transition.

EARTH University of Costa Rica is an independent, undergraduate university. The institution grew out from a cry for peace, equity, sustainability and development in Central America. EARTH University was founded by people with a strong commitment to contribute to regional peace and prosperity. Throughout the four years of study, students are trained in entrepreneurship, leadership, community service, environmental awareness, sustainability, communication, teamwork, cultural appreciation and social concern. Most graduates find employment in private businesses or establish their own enterprises. The original ambition of the university still permeates all activities. Its mission is evident in student uptake, teaching, student/staff interaction as well as student life. Proof of success can be read from the enthusiastic eyes of staff, students and graduates alike.

EARTH offers a unique student-centered learning environment with a focus on the student as an active participant and the professor as a facilitator of learning. EARTH emphasizes experiential learning, development of leadership and entrepreneurial capabilities, teamwork and group problem solving. In addition to classroom learning, students receive hands-on training on EARTH's academic and commercial farms and work in rural communities. Each student must embark on an entrepreneurial project throughout the four years and demonstrate planning, decision-making and application of skills he/she learns in the classroom. After four years, the successful student leaves EARTH as an "agent of change".

The EARTH model is reminiscent of the Scandinavian 'Folk High School' and vocational farming schools. What makes EARTH successful, however, is the high dedication of staff and the motivation of students to leave the university as "agents of change". Everyone, staff and students alike, seem extremely proud of being part of EARTH.

Can EARTH be copied and implemented elsewhere? Yes, perhaps on a smaller scale and with a lower budget. A fundamental prerequisite, however, is the need for the institution to be autonomous. Most universities in Africa are owned by governments and tend to have a bureaucratic structure and limited freedom. EARTH-type graduates are clearly needed in Malawi and an "EARTH University" may serve as a regional center for entrepreneur education and potentially lead to impacts in other SADC countries.

Establishment of new enterprises is very difficult in Malawi—even for people with "the perfect" education. A 'Business Development Programme' will be desirable in conjunction with the university to support graduates in establishing small businesses for production, trade and services. The proposed university may contain an outreach section with the duty to assist private enterprises with problems pertaining to production, credit, marketing and other economic and legal issues. Alternatively, the college can cooperate with professional credit and business service institutions.

Expanding NRC in the direction of an "EARTH" college should not reduce NRC's role in educating extension workers and irrigation engineers. In fact, extension graduates would benefit from a more entrepreneurial learning environment. The Ministry of Agriculture admits to lacking business mindedness among its staff. Entrepreneur graduates are also needed in the line agencies of government to develop a society that is conducive for growth of the private sector.

Relevance and feasibility for Norwegian support
The programme would benefit from existing Norwegian support to EARTH (Costa Rica) as well as investments made to promote the idea of EARTH in Africa. The relevance and feasibility of implementation in Africa is well documented in several reports from the EARTH-Salzburg Seminar Series (see http://www.changetropics.org/project.html). Three staff members at Bunda College have visited EARTH as part of the project.

Institutional channels
The Natural Resources College near Lilongwe has excellent facilities, is presently underutilized and appears as a very strong candidate for developing the first 'African EARTH College'.

Opportunities for a business development programme potentially linked to a new EARTH college would need careful assessment. As an alternative to building up new functions at the college, services may be provided by existing institutions.

For credit service, collaboration with Norfund may be possible. Presently, low-cost micro-finance facilities for both agricultural and non-agricultural activities are available mainly through non-governmental institutions and special government safety net programmes. The following NGOs provide credit facilities to their members or target groups with low or no collateral: the Foundation for International Community Assistance (FINCA), the Malawi Union of Savings and Credit Co-operatives (MUSCCO), Village Enterprise Zones Associations (VEZA), the National Association of Small and Medium Entrepreneurs (NASME), the National Association of Business Women (NABW), and the Women's World Banking (WWB).

Other micro-finance institutions exist, but none of them provide specialized and low cost services to agriculture. These include the Small Enterprise Development Organization of Malawi (SEDOM) the Development of Malawi Traders (DEMAT) and the Investment and Development Fund (INDEFUND). DEMAT also provides business and technical advisory and marketing services to micro, small and medium enterprises in the manufacturing, service and trading sectors for the purpose of alleviating poverty and creating employment.

Possible risks and constraints
The college is presently a semi-independent trust (Appendix 2). The government may, however, take over and change its mandate.

A college operating in a true 'EARTH' spirit will depend on exceptionally motivated management and teaching staff. A credit fund for student business development may be difficult to maintain.

Risks and constraints for implementation in Africa is well documented in reports from the seminar series

Developing NRC into an African version of EARTH would be a demanding task both financially and administratively. Success would probably require additional funding partners and committed institutional links.

Potential contributions to the Millennium Development Goals
Contributions to the MDG would be indirect through providing educated, young people who could help promote economic growth in Malawi by starting production businesses, trading companies, serve as extension agents and contribute to a better understanding of the private sector in the capacity of government employees. Scholarships to female students would promote gender equality. Activity would contribute towards "develop a global partnership for development."

Potential impacts on the development indicators
Possible positive impacts on (1) GDP per capita, (2) investment share of GDP, and (3) ratio of average female wage to male wage.

3. Support to agricultural vocational schools; Mikolongwe Vocational School in Chiradzulu

Background
More than half of the population in Malawi is under the age of 21. Education at all levels is—and will continue to be—a major challenge in the economic development of Malawi. Only 25,000 new jobs are available for the 150,000 young people who enter the work force each year. Education must focus both on job creation and self-employment. The elimination of diploma

courses by University of Malawi leaves a gap to be filled. The capacity of the vocational education in agriculture does not meet the present needs.

Relevance and feasibility for Norwegian support
Support to vocational agricultural training would constitute an important link between Bunda College, Natural Resources College and farmers.

Institutional channels
Ministry of Labour and Manpower Development.

Possible risks and constraints
Projects channelled through the government system run the risk of 'non-implementation.' However, close cooperation and formal monitoring can eliminate the problem.

Potential contributions to the Millennium Development Goals
Contributions to the MDG would be indirect through providing educated, young people who could help promote economic growth in Malawi by improving farming.

Potential impacts on the development indicators
Possible positive impacts on (1) GDP per capita.

6.2.3. Agricultural research and development

There is a need to strengthen research in cooperation with implementing agencies and farmers. A new concept of 'dialogue-driven' reseach and outreach is suggested where researchers, managers, NGO staff, extensionists and farmers develop a coherent research and outreach programme through a formalised forum for dialogue.

The thematic area consists of two components:

a) The Agricultural Research and Development Fund (ARDEF) managed by Bunda College
b) Support to the expansion of the NGO-consortium I-LIFE

1. The Agricultural Research and Development Fund (ARDEF)

There are currently many donors to agricultural research in Malawi. But most projects are relatively small and often poorly coordinated. It is suggested that current support to research by Bunda is reorganized and considerably strengthened to serve as an open programme for funding research, outreach and development work for any organizations that may contribute to compete for funding on merit: IARCs, Ministry of Agriculture research centers, NGOs, etc. Projects should address the main concerns of developing Malawi agriculture, e.g., soil fertility improvement, crop productivity, livestock development, commercial production units, agricultural policy research, etc. Projects should also be cooperative, including researchers from different institutions as well as extensionists and development workers. In line with this ambition, the programme should have decision-making bodies that are not controlled by any one institution, although secretariat should be situated at Bunda College. Linking Bunda so closely with the mainstream development work in Malawi will most likely become a great asset for the college.

As a programme proposal is currently being negotiated, the team will not go into detail on this issue, except by noting that the ARDEF should be given a volume sufficient to reinvigorate agricultural research in Malawi.

2. Support to the expansion of the NGO-consortium I-LIFE

As has been shown vividly throughout this report, Malawi faces an unenviable complex of problems with tiny resources of human skills, capital, and income generating potential. In the 2002 and 2003 growing seasons, Malawi suffered two very poor food production years. In 2003, the situation was so bad that it was not a food crisis but a famine. Yet Malawians at all levels pulled together to create a response to the famine that was remarkably effective. They showed that, even with tiny resources and under considerable pressure, sensible, productive, and equitable policies can be developed and implemented with flair and success.

The programme developed for the food crisis was massive and comprehensive. It dealt, not only with the immediate problems of alleviating a humanitarian disaster, but also with the wider issues of protecting the vulnerable and recovering from the famine. It involved close and effective collaboration between government, donors, the private sector, civil society, and a range of interest groups. It required that all involved develop new ways of working and of doing business. The proposal here is to harness these same skills, which were engaged for a massive **relief programme**, for a focused and broad-based **development effort**.

A start has already been made. In recognition of the success of collaboration over the 2002 and 2003 food crises, the NGO community resolved to work together to address the long-term food security problems in Malawi in a development rather than a relief context. The NGOs developed a five-year Development Assistance Program (DAP) to reduce food insecurity among vulnerable households and communities in rural Malawi. Funding to implement this programme was obtained from USAID – which has the unfortunate outcome that only US-based NGOs can participate. A consortium of eight NGOs -Africare, American Red Cross (ARC), CARE, Catholic Relief Services (CRS), Emmanuel International (EI), Save the Children US (SCUS), The Salvation Army (TSA) and World Vision (WV) – revised the DAP into what is now called the Improving Livelihoods through Increasing Food Security (I-LIFE) Programme. The coordinated effort has its own Programme Management Unit that enables all participating NGOs to operate under a common funding operation. It is a five year activity to support broad-based agricultural and agribusiness growth in conjunction with improving health and district capacity to sustain development. Primary emphasis is on the most vulnerable communities and female and child headed households, as well as those affected by the chronically ill.

The I-LIFE programme has three interconnected strategic objectives:

- **Livelihood capacities of vulnerable groups are protected and enhanced.** I-LIFE will improve food availability and access by increasing agricultural production and incomes and improving infrastructure through a strategic process of improved agricultural practice, reinforced linkages between production and marketing, and strengthened farmer organizational capacity. The program will improve access to promising technologies already existing in Malawi. I-LIFE will also promote Food for Work (FFW) to improve rural infrastructure.

- **Nutritional status of vulnerable groups is protected and enhanced.** To improve food utilisation, I-LIFE will increase household adoption of improved nutrition and complementary health behaviors and improve food utilisation of malnourished children and chronically ill-affected households. Project activities will promote better nutrition practices, community health awareness campaigns, community and home vegetable garden-

ing, and improved capacity of community health workers to deliver sustainable quality health services within their communities.

- **Community and district capacity to protect and enhance food security is improved.** The Consortium will promote increased community and district level accountability, transparency, and effectiveness of district government structures and national civil society capacity to sustain development activities, while promoting coalition building, community organisation and workable applications of decentralisation within targeted districts and villages.

The development focus is to move farming families out of subsistence (or, more typically, from below subsistence) into surplus market agricultural production. Specific attention is paid to improving household nutritional and health practices. Actual activities carried out under the programme include:

- **Increasing agriculture production:** Farmer field schools for improved production practices, linking production to marketing, improved access to seeds and fertilisers for crop diversification (seed fairs), increasing agricultural assets, small scale irrigation and water catchment systems, developing village savings and loans

- **Improving nutrition and health:** using healthy families as the example in poor communities, rehabilitating malnourished children, providing safety nets for chronically ill-affected households, improving community capacity on the delivery of health services, introducing home gardens to increase nutrition

- **Increasing district capacity:** helping districts and CBOs provide leadership and services in the agricultural and health components of the programme, working to integrate key interventions into District Development Plans, and building capacity to sustain development

Participating NGOs build programmes with these components in their focus districts. Dedza is managed by Save the Children (US), Lilongwe by CARE, Mangochi by Emmanuel International, Mchinji by CRS, Ntcheu by Africare, Ntchisi by American Red Cross, Phalombe by the Salvation Army, and Thyolo by World Vision.

Under current funding, is limited to US based NGOs. This limits scaling up prospects and does not provide a coherent basis for a decentralised and coordinated food security and technology dissemination effort. Norwegian support would widen NGO participation and would provide a powerful mechanism for bringing to scale the other initiatives in technology development and market access funded through the Bunda and NASFAM operations. In addition, ARDEF funding for policy analysis, combined with the advocacy skills of the NGO movement, will enable a much more focused and coherent approach to policy formulation to emerge.

I-LIFE has its own Programme Management Unit to manage funding provided. This unit would need to be modified and made more inclusive under Norwegian support. The basic activities that are carried out already with I-LIFE are entirely compatible with the overall aims of the proposed Norwegian programme for Malawi. Approval of specific programmes by Norwegian supported NGOs could easily be incorporated into the regular work of the ARDEF committees and this would facilitate additional coordination across all three aspects of the programme.

We do, however, fear that channeling support for I-LIFE activities via ARDEF would be to overload the capacity of ARDEF for decision making and monitoring. Before the ARDEF management set-up has been tried and tested and proved viable and competent it would be too risky to use it also for support to I-LIFE. Our suggestion is therefore that possible support to I-LIFE should be developed as a separate project directly between the Embassy and the I-LIFE members and project management unit. Coordination with ARDEF could be maintained through representation by NGOs in ARDEF decision-making bodies. Provision should also be made for transferring possible extended support to I-LIFE to ARDEF or District assemblies after a first project period, of e.g. 5 years.

6.2.4. Farmer organisation and market development

In this thematic area, only one component is proposed at this stage: support to NASFAM.

1. Support to NASFAM

Markets for farm inputs and outputs are weakly developed in Malawi. NASFAM's support to its members in terms of marketing and extension services is of great value. The organisation has gained a reputation for doing good work. This includes initiatives in developing new markets, as well as training mambers in various organisational skills, literacy and numeracy. As a programme proposal is already being negotiated between the Embassy and NASFAM, the team will not go into detail beyond expressing support for a continuation and an expansion of the programme in line with the increased membership of NASFAM.

6.2.5. Agricultural infrastructure and productivity investments

The thematic area consist of two components:

a) Improvement of rural roads
b) Investment in water management
c) Investment in soil fertility

1. Improvement of rural roads

Relevance and feasibility for Norwegian support
Traders will be reluctant to operate in many parts of rural Malawi due to poor or lacking roads, although there are also other constraints, such as small surpluses being offered for sale. Improved infrastructure is important for several reasons:

- Lowered transport costs imply higher profitability (break even) for high productivity agriculture
- Better access to input supply
- Better market access for surplus production
- Improved access to consumer goods

If built with labour intensive methods, public works, such as roads, also have an important role in providing income for rural poor and thereby securing livelihoods in the short term. Emphasis should nevertheless be given to the infrastructure strengthening aspect of the programme and not only to the relief aspect.

Institutional channels

There are already several projects and activities in strengthening rural road infrastructure undertaken b y government, donors and NGOs. The team did not have opportunity to get a full overview on these, but nevertheless remains with a strong impression that there is still much undone in terms of assuring road access to rural areas.

Funds for this activity should preferably be channelled through the District assemblies, in accordance with the decentralisation policy. There are several possible channels: earmarked funds for districts or supplement to the Malawi Social Action Fund, and possibly others. This will need to be explored as a programme is developed. The approach may either be to give support to all districts, or to select t some districts where potential return in terms of agricultural growth is considered highest. Criteria for high return would be to identify areas with large production potential that currently have poor market access.

Possible risks and constraints

The main risk of this programme would be the capacity of district assemblies to plan and implement such activities. Coordination with other funding sources and arrangements may also be an area of concern.

Unless properly built, roads in sloping landscapes can lead to severe erosion (examples seen in northern Malawi). Easier transportation may also lead to increased deforestation and cultivation of lands that are unsuitable for cultivation (increased erosion hazard).

Potential contributions to the Millennium Development Goals

As argued above this may have large impact on poverty reduction, but will depend on implementation.

2. Investment in water management

Background

Drought is a major cause of recurrent food crises in Malawi. Drought takes the country repeatedly back from a path of development to that of emergency. Following drought, purchase and distribution of emergency food cost the international donor community large sums of money. In times of crises, WFP spends $5/person per month in food support. Climate change predictions suggest that we will see more of this in the future.

In the long run, a substantial increase in food production in the lowlands based on irrigation will be necessary to reduce the extent of unsustainable farming on the hill slopes. Long-term investments in large-scale water management structure appear necessary.

In an African context, Malawi is in a fortunate situation: There is plenty of water. Investments are needed to reduce people's vulnerability to the vagaries of nature. Both small-scale and large-scale impoundment and conveyance structures will be needed to benefit from existing water during times of drought. Use of water in lowland agriculture has the potential to provide alternatives to farming on steep slopes.

There are several opportunities for Norwegian support to ease the effects of drought. In the north, a feasibility study for water development in Songwe River basin has recently been finalised. A meeting between the Department of Water Development and donors will be arranged in

May/June 2005 to determine the next steps. Development opportunities include hydropower, flood control, erosion control, reforestation, agriculture, and poverty reduction. Preliminary economic estimations show promising prospects.

According to heads of Department of Crop Science and Department of Soil and Water Engineering, Bunda College, substantial opportunities for water-based crop production exists in the area of Chimaliro, Mzimba District, Northern Region, based on dam and gravity flow. At Chilumba, water can be pumped from Lake Malawi to a reservoir to supply an area of 250 km^2 between Viuthukutu, Uliwa and Hara. In both cases, water supply will facilitate two annual cropping seasons of which at least one could be rice. A dam in the Nyika River would facilitate irrigation of the Chitipa Plain.

About 750 small dams built in colonial times are scattered throughout the country. Many are out of commission due to damage or sedimentation. Ministry of Water Development is preparing an inventory of these old dams to assess the opportunities to rehabilitate some of them. The ministry will also assess opportunities for new small dams and options for constructing water harvesting reservoirs.

The World Bank has proposed an "Irrigation, Rural Livelihoods and Agricultural Development Project" (revised version 01/05/2005) that incorporates water provision into agricultural development. The project may serve as a vehicle for Norwegian support to drought protection and poverty reduction.

A feasibility study is also recently finished for Shire River Valley. The plan includes a control structure for the water level of Lake Malawi (upgrade of the 1965 barrage), an additional dam and a hydropower at Kol Kholombidzo as well as an integrated water resource development plan for the valley (including agriculture). Due to the enormous surface of Lake Malawi, a 10-cm lake level control would provide 3 billion m^3 of water for use in the dry season in Shire Valley.

All potential support to the construction of water management structures—small or large—should be designed as part of comprehensive agricultural development and rural livelihood programmes.

Relevance and feasibility for Norwegian support
Norway has a long history of support to the water sector and dryland management in several developing countries. The feasibility studies of Songwe River and Shire River have been funded by the Nordic Development Fund. A second phase of Nordic funding would seem appropriate.

Institutional channels
Further investigations into options for support should be directed through:

1. Ministry of Water Development
2. Ministry of Agriculture, Irrigation and Food Security
3. World Bank, Africa Regional Office, Country Department 3 Malawi, Rural, Environment and Social Development Unit

Possible risks and constraints
Risks and constraints are severe. Management of water structures will be a major challenge. Education of qualified graduates at Bunda College and the Natural Resources College will be essential to supply the necessary staff.

In the short run, self-financed operations may not be feasible. Provision of water should be seen as a service provided to farmers on similar terms as research results, roads, extension service, and subsidized seeds and fertilisers.

Potential contributions to the Millennium Development Goals
If successful, water management could have a major impact on:

1. Eradication of extreme poverty and hunger
2. Reduction of child mortality
3. Ensuring environmental sustainability

Potential impacts on the development indicators
Impacts will presumably be recordable in terms of equity (proportion living below poverty line; unemployment rate), health (nutrition, mortality, life expectancy under five; proportion with safe water), land (arable and crop land area; forest area; land affected by desertification), and economic structure (GDP per capita; investment share in GDP).

3. Investment in soil fertility

Background
According to estimates, farmers remove annually twice the amount of plant nutrient that they replace through fertiliser. In particular, the levels of nitrogen in Malawian soils are dramatically low and constitute an important reason for food insecurity. The UN Millennium Project's Hunger Task Force recommends strongly to invest in the front end of the food chain, i.e., fertilizers, agroforestry, equipment for small-scale water management, and improved seeds rather than at the tail end with food aid. However, these investments have to be at scale—something that will effectively restore soil fertility and restore healthy nutrient cycling and improve water holding capacity (P. Sanchez, pers. com.). The most cost-effective method of restoring soil fertility in Malawi is a hotly debated subject that needs to be investigated further. A strategy of adaptation to low soil fertility is definitely not a viable solution.

Relevance and feasibility for Norwegian support
Soil fertility is a core element of livelihood security among subsistence farmers. Norway should collaborate with other donors regarding this issue.

Institutional channels
The Norwegian support programme should limit its partners to a manageable number. Channels for investment in soil fertility should therefore be sought among the partners of the other programme elements, such as I-LIFE and participants in the ARDEF programme. Specifically, the ICRAF office at Chitedze would be an obvious and competent partner regarding the agroforestry element.

Possible risks and constraints
Adoption of soil fertility and conservation technologies have had a low rate of success in the part in different parts of the world despite great promises by project proposals. The main problem is that the various methods for soil conservation is too laborious for poor farmers and occupy valuable field space. Poor farmers have so many urgent concern, that they may not care for the soil. Implementation of soil fertility projects should always be part of a broader development effort and not be organised as stand-alone programmes.

Potential contributions to the Millennium Development Goals
If successful, soil fertility investments could have a major impact on:

4. Eradication of extreme poverty and hunger
5. Reduction of child mortality
6. Ensuring environmental sustainability

Potential impacts on the development indicators
Impacts will presumably be recordable in terms of equity (proportion living below poverty line; unemployment rate), health (nutrition, mortality, life expectancy under five; proportion with safe water), land (arable and crop land area; forest area; land affected by desertification), and economic structure (GDP per capita; investment share in GDP).

6.3. SHORT TERM HUNGER ALLEVIATION

The strategy we have outlined is a development strategy. It will do little to alleviate hunger during the coming year. Thus, it will be important that government and donors also support various measures to ensure survival and livelihood security in the short run. This would be interventions such as food for work, public works, school feeding programmes, or even handing out money to destitute people so they may buy food. It is important that such measures are implemented in such a way that they do not undermine efforts for longer-term growth.

Figure 17. Malawian farmers are eager to learn (photo: K. Esser)