# **Executive Summary**

The Government of Norway has decided to increase its support to agricultural development in Malawi to contribute to the reduction—and ultimately elimination—of poverty. As part of this process, the present report has been commissioned by the Royal Norwegian Embassy, Lilongwe, Malawi, to outline opportunities for Norwegian assistance to the people of Malawi. The facts and proposals presented are the results of discussions with a multitude of knowledgeable persons in Lilongwe and a thorough review of recent literature.

#### Status of agriculture

Agriculture in Malawi consists largely of rainfed, single season and low input/low output cultivation and is vulnerable to shifting weather and policy conditions. Small farms, low yields and unpredictable policies result in widespread poverty and chronic food shortages. Nationally, about 40 % of the rural households produce less food than they need.

There has been a general decline in food production per capita in Malawi after 1975. Lowland area per family tends to encourage farmers to produce mainly maize to satisfy their calorie needs. As soil fertility declines, fertiliser becomes more expensive and drought spells appear more frequent, farmers' shift towards cassava. Land degradation is continuing in Malawi, and the efficiency of fertiliser is generally decreasing. Climate change models suggest a slight general drying in Malawi and more frequent droughts and floods in the future.

While there are technically sound solutions to many of the problems faced by smallholders, all too often they are practically or financially unsound. Access to fertiliser has been the cause of innumerable discussions on improving smallholder productivity in Malawi. Use of fertiliser obviously requires that some crop surplus is sold to cover the investment. Under good crop management conditions, investment in fertiliser has been shown to be profitable for smallholders. In the case of severe drought, however, farmers may lose most of their investment in fertiliser.

### **Options for growth**

Given its natural resources, Malawi could feed its people. Presently, low crop production per unit area requires that large parts of the landscape must be cultivated. Much of the food is produced on land that is not suitable for cultivation. Ideally, the best cropland could yield more than ten times the present average production per unit area. Assuming two cropping seasons on the best croplands based on irrigation, 80-90 % of the present hill slopes could be converted from eroding cropland to permanent vegetation without reduction in the total national food production.

Long-term planning should keep in mind that extensive land use changes will be necessary to stabilize the landscape while maintaining food production. Significant land use changes will not be possible without major investments in a science-based, productive agriculture located in the most suitable areas where the rate of erosion is low and water is available for dual cropping seasons. Investments will be needed to combine productivity with sustainability.

Within a more immediate planning horizon, Malawi agriculture holds a potential for creating broad-based poverty-reducing growth for a number of reasons:

- Its initial size and importance
- Large potential for productivity gains

- Increased productivity will bring down the cost of food for the poor and thereby improve food security
- Large local multiplier effect from increased agricultural incomes

Increasing the productivity of farming by adopting science-based agriculture requires a set of conducive conditions: stable and low inflation and interest rates, minimally distortive tax system, secure property rights, rule of law and peace. Developing agriculture also requires that a set of public goods is provided, as each smallholder is too small to provide for these by him/herself. Such public goods include:

- Research for developing more productive technologies suitable for the various agro-ecological and socio-economic conditions
- Dissemination of the technologies
- Provision of rural infrastructure, particularly roads and railways for reducing the cost of accessing input and output markets
- Organizing joint (group) activities, e.g. larger irrigation initiatives
- Defining and maintaining grades and standards
- Insurance against covariate risk

Macroeconomic management is very difficult in an economy so dependent on rain-fed agriculture and on variable donor support, as is the Malawian economy. Presently, the macroeconomic environment in Malawi is not conducive to agricultural growth. The primary constraints have been very high interest rates and high inflation. Huge fiscal deficits have been financed with domestic borrowing, resulting in real interest rates of up to 45 % on Treasury Bills. Government consumption and investment has absorbed more or less all-available credit in the country, crowding out private investment. The current government has brought down the interest rate to about 25 % and inflation to about 14 %. Both rates are too high.

Education is necessary to stimulate agricultural value creation. There is a need to educate entrepreneur, extension officers, farmers, government officers, etc. Just to fill vacant extension positions, 350 graduates must be produced annually for the next three years. Graduates from Bunda College are very attractive employees, but the Ministry of Agriculture is not able to retain those they hire. There is also a need for new enterprises to produce and trade goods as well as provide services. However, the human capacity to develop the private sector is still weak. Training is needed.

## **Present Policies, Programmes and Actors**

Malawi, with its desperate poverty, is a target country for many relief agencies. When severe food shortages became apparent in Malawi in late 2001 and intensified at the beginning of 2002, the NGOs worked together and with government agencies to develop coordinated programmes. Their success shows that where there is political will and commitment from all stakeholders, programmes can be implemented successfully. It was a remarkable achievement that has laid the foundation for more effective collaboration between all partners to address problems of national and household level food insecurity in future.

The main technology development and dissemination effort of the World Bank in the late 1980s and through the decade of the 1990s was the Agricultural Services Project (ASP). Under this project, farming systems methodologies were introduced and the extension service developed on

regional lines through semi-autonomous agricultural development divisions (ADDs). The hierarchical nature of technology development and extension that existed in Malawi made it very difficult to create the change in approach needed to create a farmer responsive system. As a result, collaboration between the World Bank, the international agricultural research centres (IARCs), and the Rockefeller Foundation worked to catalyse improvement of maize-based cropping systems to address rural poverty.

CIMMYT's Soil Fertility Network or SoilFertNet has focused on improving the productivity of maize-based cropping systems through the development and promotion of farmer-use of improved soil fertility technologies, combined with economics and policy support to help farmers access the technologies.

The improved maize varieties available in the 1970s and 1980s did not suit the circumstances of the majority of smallholders in Malawi. In 1990, CIMMYT provided two improved maize hybrids (MH17 and MH18) with good storage and household processing characteristics. The SADC/ICRISAT Groundnut Improvement Project spearheaded the development of improved grain legume varieties in Malawi.

The Maize Productivity Task Force (MPTF), consisting of concerned scientists, economists and policy makers in Malawi, was formed in 1996. It was a broad-based Malawian led effort to develop a national consensus on policy to address national food security. It developed a comprehensive programme, only a subset of which (the Starter Pack) was implemented. The programme was intended to be developed and modified over time as a way to encourage the introduction of new and more diverse cropping systems as proven options become available. While the programme has continued (as a 'targeted input programme' or TIP) in various forms, unfortunately its focus shifted to a safety net, and the development components have been entirely lost.

The Agricultural Services Project (ASP) lacked focus. The collaboration with the Rockefeller Foundation and the international agricultural research centres worked more effectively. The focus on a critical farming system (maize) provided opportunities for new thinking and new methodologies to emerge from within Malawi's research service – and the IARCs were critical in providing leadership and direction. Widespread verification trials served to engage every extension worker in the land and to start the much-needed dialogue on economically viable farmer recommendations.

To produce sufficient food, smallholders need to increase productivity through using fertilizer and improved seeds. They need access to inputs at low cost and access to markets for their produce. Low transport costs are crucial in this regard. Efforts are underway to improve harbour capacity in Nacala and improve the capacity of rail and road transport through the Nacala corridor. Within the country there are efforts to improve rural infrastructure through the Malawi Social Action Fund (MASAF) and other donor funded initiatives. NASFAM, IDEAA and IFDC are developing institutions and skills needed for efficient markets.

Under donor pressure, the government has attempted to restructure the public service, reducing its size and improving the wages of those who remain. However, dynamic and effective implementation of the principles of these reforms is muted, and donor follow-through has been weak and poorly monitored. Lack of capacity, weak institutions, leaders' self-interest, a weak civil society, and repeated donor bail-outs have permitted even the best policies and programmes to be ignored, subverted or delayed to the point of their being ineffective. An important entry point, therefore, has to be to help civil society to hold government accountable. A focus on supporting

the mechanisms that will lead to effective decentralisation is an essential component of such a move. Within the agriculture sector, well-planned collaborations between IARCs, local NGOs, and other agencies have produced results. This strategy needs to be developed and reinforced.

The Government of Malawi is currently considering fertiliser subsidies as a replacement for the Targeted Inputs Programme. There are problems with such a subsidy:

- It will create new uncertainties in the fertiliser market and increased risk to commercial traders
- Relatively rich farmers will most likely obtain most of the fertilisers and thereby most of the subsidy
- It will be very expensive and tend to increase the budget deficit

## **Opportunities for Norwegian support**

As a 'pilot programme for agricultural growth,' the new intervention should be professionally managed, coherent and focused, yet covering a certain range of interlinked elements. It needs to be complementary to the work of the many other donors already active in supporting Malawi agriculture. A programme must take into account the capacity of the implementing organisations. Our suggestions are, therefore, based on social and technical opportunities, assessment of other donors' activities as well as institutional capacities and constraints. They are adapted to the general modalities and policies of Norwegian development assistance. Upscaling planned or ongoing programmes may be more cost-effective than starting up new ones. Regional cooperation is encouraged.

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 that are opened up in farming and related activities.

Gender disparities continue to exist in most organisations and activities. This calls for reflection, commitment and action by stakeholders. Involved partners must accept the HIV/AIDS pandemic as a reality and promote change in attitudes and behaviour. Success of programme activities will partly depend on the success in preventing and mitigating the disease.

#### Components of a proposed programme

Recommended components of a support programme are presented under five thematic areas listed below in a *non-prioritised* sequence. A development program may consist of all or selected components:

#### 1. Budget support to Government of Malawi and policy dialogue

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.

#### 2. Agricultural education and enterprise promotion

Education is essential for development. The need for new, qualified staff is strongly expressed by government agencies, civil society and private sector. Support to tertiary educational institutions in the sector is intended to address this need.

Two components are recommended:

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

Bunda College needs to be supported to provide national leadership in the development of Malawian agriculture. Norwegian support and encouragement – through UMB, IARCs and NGOs – in a coherent manner can play an important role in creating a self-help approach to change.

A new generation of entrepreneurs with a social and environmental conscience is needed. Support to the Natural Resources College to adopt the learning philosophy of the EARTH University (Costa Rica) is worth considering. NRC has excellent facilities, is presently under-utilised, and appears as a very strong candidate for developing the first 'African EARTH College'. The NRC possesses the required formal autonomy to succeed. Support would constitute a continuation of Norwegian efforts to bring the EARTH concept to Africa. A new NRC should focus more on teaching technical skills than academic knowledge (which is the realm of Bunda). Support to entrepreneurial education should be linked to a *programme for enterprise development* in terms of credit, technical and legal issues as well as business linkages.

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. 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.

#### 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' research 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

Proposed support to research by Bunda College should be 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 research centres, NGOs, etc. The ARDEF should address essential issues such as soil fertility, crop productivity, livestock development, commercial production units, agricultural policy research, etc.

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. This has developed into what is now called the Improving Livelihoods through Increasing Food Security (I-LIFE) Programme. The coordinated effort has its own Programme Management Unit, which enables all participating NGOs to (1) coordinate their development efforts, (2) work jointly in partnership with government agencies, (3) implement government policies in a coherent manner, and (4) operate under a common funding mechanism. 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 consortium may serve as an effective channel for Norwegian NGOs.

### 4. Farmer organisation and market development

In this thematic area we only propose one component at this stage: support to NASFAM. However, the idea of testing out alternative economic production units along the lines suggested by Professor Moses Kwapata should be pursued if possible.

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. 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. There is obviously a need to expand the number of farmers in direct contact with a formalised market mechanism.

#### 5. Agricultural infrastructure and productivity investments

The thematic area consist of three components:

- a) Improvement of rural roads
- b) Investment in water management
- c) Investment in soil fertility (notably nitrogen)

Traders will be reluctant to operate in many parts of rural Malawi due to poor or lacking roads. Improved infrastructure is important for several reasons: Lowered transport costs imply higher profitability; better access to input supply; better market access for surplus production; and improved access to consumer goods.

Drought and flood are major causes of recurrent food crises in Malawi. Climate change may worsen the situation in the future. In the long run, a substantial increase in food production based on irrigation will be necessary to reduce the extent of unsustainable farming on the hill slopes. In an African context, Malawi is in a fortunate situation: there is plenty of water.

What Malawi needs more than anything else to reduce hunger is to restore its soil health, particularly nitrogen fertility. The cycle of famine will continue unless this issue is effectively tackled and at scale (P. Sanchez, pers. com.). The best way of investing in soil fertility is, however, hotly debated. Further analysis is needed to design a suitable programme. Conversion to crops tolerant to low soil fertility, is not a long-term solution.

# **Short-term hunger alleviation**

The suggested programme areas constitute a development strategy. They 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 well-being in the short run, 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.