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AGRICULTURAL ADMINISTRATION (RESEARCH AND EXTENSION) NETWORK

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INTER-AGENCY COLLABORATION IN THE DEVELOPMENT OF AGRICULTURAL TECHNOLOGIES AT NATIONAL AND DISTRICT LEVEL IN KENYA

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ACRONYMS

AEP Agroforestry Extension Project

AFRENA Agroforestry Research Networks for Africa
AMREF African Medical Research Foundation

CARE International in Kenya

CDDS Catholic Diocesan Development Service

CPK Church Province of Kenya

DDC District Development Committee
DDO District Development Office
DEO District Environment Office
DoF Department of Forestry

FGCSP Farmer Group and Community Support Project

FTC Farmer Training Centre
GBM Green Belt Movement
GoK Government of Kenya
GROs Grassroots Organisations
ICA Institute of Cultural Affairs

ICRAF International Council for Research in Agroforestry

KARI Kenya Agricultural Research Institute KEFRI Kenya Forestry Research Institute

KENGO Kenya Energy Non-Government Organisation
KFFHC Kenya Freedom From Hunger Campaign
KIOF Kenya Institute of Organic Farming
KNCSS Kenya National Council for Social Services
KWAHO Kenya Water and Health Organisations

LBDA Lake Basin Development Authority

MENR Ministry of Environment and Natural Resources
MIDP Machakos Integrated Development Programme

MoA Ministry of Agriculture
MoC Ministry of Cooperatives

MOCSS Ministry of Culture and Social Services

MOLPMinistry of Livestock ProductionMOWDMinistry of Water DevelopmentNGONon-Governmental Organisation

SALU Semi-Arid Land Use

WIG Women's Income Generating Projects

EDITORIAL INTRODUCTION

Kate Wellard Research and Extension Network ODI

The three papers in this volume illustrate different aspects of the role of NGOs in agricultural development in Kenya, and the nature of collaboration between Government and NGOs both at national level and in two Districts.

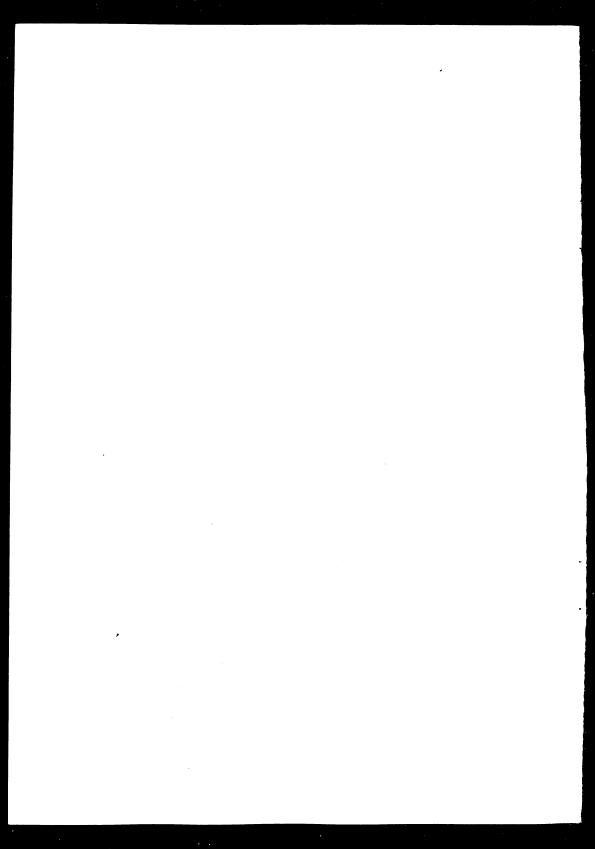
The first paper, by John Musyoka, shows the development of Government thinking towards NGOs through the experience of The Ministry of Agriculture (MoA). MoA collaboration with NGOs has so far been limited mainly to training and demonstration and extension activities. NGOs have not yet had a significant input into MoA's research. In contrast to the newly emergent fields of agroforestry and social forestry, crop and livestock research has been carried out in Kenya by both the public and private sector since before Independence and a strong, though poorly resourced, agricultural research structure is well in place. Whilst a Farming Systems Unit has been established in the Ministry and the Kenyan Agricultural Research Institute (KARI) has a number of on-farm trials underway, research is still heavily commodity and on-station biased.

NGOs have a strong field presence particularly in Kenya's arid and semi-arid lands (ASAL), which have generally received less attention from public sector researchers. Several also have sizeable research programmes outside "mainstream agriculture", including organic farming and indigenous fruits and vegetables. Whilst the case for increased collaboration in these areas therefore seems strong, a number of difficulties stemming mainly from differences between public sector and NGO management styles, reward systems, funding arrangements as well as approaches to research, remain.

The two District studies examine the nature and scope of agricultural and environmental activities and of the institutions which carry them out. Both Siaya and Machakos Districts have had considerable outside intervention by Government and international agencies and NGOs. NGO activities are shown to cover a broad range of research, development, extension and training functions. In Siaya, a medium-potential District but with pockets of low rainfall, projects are centred on agroforestry, small-scale irrigation and

small-stock. In Machakos, an ASAL District, NGOs are mainly involved in soil and water conservation and afforestation. Building on traditional work group structures, a number of NGOs in Machakos are using highly participatory methods of introducing new technologies.

Linkages between NGOs and Government organisations appear mainly functional and were established to facilitate project implementation. There is only one instance of a joint venture: between CARE and Kenya Forestry Research Institute (KEFRI). This programme draws on CARE's network of contacts with farmer innovators and its ability to monitor experiments and facilitate communication between researchers and farmers. In Machakos District several NGOs are promoting interaction between Government research and extension staff and their target groups, encouraging groups of farmers to draw on the specialist services available from all sources in the District. The weakest links appear to be between the NGOs themselves, partly because of the time costs in making individual contacts and the absence of a forum for collaboration. It is proposed that the NGO forum established around the District Forest Office in South Nyanza might serve as a useful model for other Districts.



THE MINISTRY of AGRICULTURE'S EXPERIENCE of COLLABORATION with NGOs and FARMERS' ORGANISATIONS

John Musyoka Ministry of Agriculture, Kenya

INTRODUCTION

Policy Towards NGOs¹ in Agriculture

Policy towards NGOs in Kenya has, according to the various statements and policy documents issued by the Government, undergone considerable change over the last decade. The District Focus for Rural Development Strategy², initiated in July 1982, was intended to bring about increased participation of rural people in the planning and implementation of development projects. Whilst at that stage little mention was made of NGOs, by 1988 their role was being acknowledged:

'Since NGOs have become increasingly involved in developmental activities, these efforts will be strengthened by the District Focus for Rural Development Strategy through which NGOs in collaboration with District Development Committee (DDCs), community groups and local authorities will enhance the process of local participation in the design, implementation, monitoring and evaluation of projects'. (Government of Kenya, 1988, p. 260.)

This reorientation towards NGOs involved in grassroots development was partly a response to the rapid growth in the number of NGOs in Kenya (Alan Fowler (1990) reports a 150% and 260% growth of registered local and foreign NGOs respectively for the period 1978-1988) and the accompanying resource inflows. There has also been a measure of genuine appreciation by Government of the contribution of NGOs to improvement of economic and social welfare of poor people in Kenya. Collaboration between NGOs and official development bodies is also seen as an important part of policy. Each ministry carries responsibility for the coordination of development activities within its mandated sector.

One precondition of NGO operations is that they should be carried out within the policy framework of the ministry concerned. For the Ministry of Agriculture (MoA) this policy framework currently is: to achieve domestic food self-sufficiency; to maintain adequate levels of strategic reserves; and to generate additional supplies for export within the overall national objectives of employment, income generation, foreign exchange earnings, rural-urban balance, food security and economic growth.

AREAS OF COLLABORATION

There has been considerable interaction between the Ministry of Agriculture and NGOs in Kenya over the past ten years:

Collaboration can be divided into five broad areas:

i) Joint Seminars and Workshops

In organising and running rural development seminars and workshops, and any training courses for farmers and extension workers, staff from MoA and relevant NGOs, such as, Kenya Energy Non-Government Organisation (KENGO), CARE (Kenya), and ActionAid Kenya (AAK) act as resource personnel, share ideas and exchange views. This has been very useful and helpful at both local and national level, particularly in the areas of soil and water conservation, agroforestry and the development of locally available and affordable domestic energy saving devices, such as cooking stoves. It is significant that in the areas of agroforestry and the development of improved stoves, both of which are relatively new in Kenya, NGOs' experience of working at the grassroots has been very valuable.

ii) Farm Demonstrations

Many NGOs hold on-farm demonstrations for their target farmers and farmers' groups on a range of activities including roofwater harvesting, cookery, kitchen gardening and rearing of small ruminants. MoA field staff are normally invited to share ideas and technical information with NGO staff and farmers. NGOs have also taken the lead in the promotion of indigenous vegetables in the farming systems and diets of the local people and share their experiences with Government research and extension staff. Such farm demonstrations have been particularly useful in incorporating the

indigenous knowledge of local communities into the body of information available to farmers and extension workers. Examples are water harvesting and conservation techniques, use of indigenous tree species in agroforestry and alley cropping systems.

The extent of these NGO activities is now very considerable. Between 1974 and 1989, ActionAid Kenya, for example, reached 700 contact farmers and 300 4-K clubs with demonstrations of various kinds in its working areas.

iii) Consultation with MoA on Policy Interpretation

NGOs and farmer organisations consult with the Ministry from time to time on the interpretation of agricultural and rural development policy. Generally these consultations are confined to technical questions concerning eg. the areas earmarked for certain animals or crops, or issues related to onfarm pesticide use. This helps to ensure that farmers are receiving technically sound and consistent messages from NGOs and Government.

iv) Mobilizing Resources

In some situations, where Government has experienced severe limitations on resources, NGOs have assisted in enabling Government workers to deliver timely services to the communities in which they both work. Examples include the provision of transport for a veterinary surgeon to attend to a farmer's sick animal, or a crop specialist to inspect disease problems in crops. This is particularly important where the people have been conscientised to demand the services to which they are entitled from Government but where insufficient resources are available to meet these needs. Indeed NGOs are capable of developing strong user-constituencies at the local level which make hard claims on resources and help in pulling down services to the people. This may make Government hard-pressed to satisfy local needs for services and therefore this pooling of resources between NGO and Government should be encouraged, at least in the short-run.

v) Assisting Farmers' Organisations towards more Efficient Management

Government organises management courses for staff of farmers' cooperatives and farmers' associations, such as coffee factory committee

members. It also offers supervisory and guidance services wherever and whenever requested to do so. However, there has been little training to date of NGO staff in rural planning or technical issues. This may partly be because many NGO staff originally worked for Government and have already received MoA training, or alternatively because the training offered is not deemed relevant to NGO needs.

STRENGTHS AND/OR WEAKNESSES OF COLLABORATION

Since, in their rhetoric, both Government and NGOs aim to promote the social and economic development of their constituents, both MoA and NGOs involved in agriculture could be expected to promote similar activities (such as education, training and support to the farmer). However, in practice, the methods by which Government and NGOs set their goals and priorities often differ significantly.

Government wishes to be seen to govern as comprehensively as possible: it is responsible for political and economic management in the public interest. National interests may differ significantly from local interests resulting in divergent strategies by the Government and NGOs to achieve given objectives. For example, methods of eliciting and evaluating popular participation can differ widely. Government might view as "participation" the willingness of a community to provide labour for an already planned project. By contrast, most NGOs would view participation as a continuing process involving all stages of the project from identification and implementation to evaluation and its eventual hand-over to the community.

Another example relates to many NGOs' preoccupation with small agricultural projects, covering a location or two at a time. Small programmes, they argue, are better able to meet the needs of people with specific cultures, markets and microclimates. The development of local leadership and indigenous forms of organisation can also be assisted. The Government, on the other hand, must address the problems of the country as a whole. However, this does not imply an indifference to local needs. MoA is currently in the process of implementing a Farming Systems approach to Research and Extension, aimed at making these services more responsive to local needs. Government also tends to favour the achievement of long term objectives, whilst many NGOs have a shorter time horizon and prefer to address short-term grassroots objectives.

These are some of the factors which have important implications for the type of collaboration which can develop between a Ministry and the various NGOs. In particular they have led to differences in:

i) Their respective views on Peoples' Participation in Development

NGOs tend to be more flexible and can avoid the kinds of institutionalised participation which merely create bureaucracy and red tape. This enables local people to have more opportunities for involvement through participatory management styles and modes of operation. Government, on the other hand, may find it necessary to exert control and authority which limits the extent to which local aspirations and interests can influence the direction and magnitude of development.

ii) Reward Systems employed

The systems of rewards employed to motivate people and provide incentives to involve themselves fully in the development process appears to differ significantly between the different types of organisation. Many grassroots and some professional support NGOs appear able to identify themselves with the people at local level. They tend to give field staff more say in the management of projects and motivate them to accomplish set goals. Furthermore, NGOs' philosophy tends to put a high value on field activities and thus their field level employees often receive more material benefits than their Government counterparts at a similar level.

Several NGOs have also been known to provide farmers with free inputs and farming implements and to pay farmers an allowance to attend courses. The ensuing difficulties faced by Government and other NGO field workers who work with the same farmers again later are now being recognised and the incidence of these unsustainable practices seems to be decreasing.

iii) Justification for Funding

The Ministry's performance is closely tied to the national budget which, despite official aid, is severely limited and allows only a thin spread of resources across all Government Departments and Districts in the country. This, of course, reduces impact at the local level.

NGOs' funding is dependent on their effectiveness at the local level. In addition, they must prove they are better than Government in accelerating positive social change, especially in reaching the poorest of the poor. This involves a long process of encouraging people to recognise and develop their own potential and decide their own values and priorities, which can only be done on a localised, smallscale basis.

iv) The Relationship with disadvantaged groups in the society

NGOs, be they indigenous or international, try to identify with the disadvantaged in society. Their success is therefore often assessed on the basis of their impact on the more marginalised members of society and the degree to which their interests are represented in the project. In addition, many NGOs choose geographical areas where Government development workers have little previous experience. Differences in attitudes and experience can mean that bringing the two together in a collaborative way causes difficulties in the way they relate to each other and the way the community relates to each of them.

v) Availability of Appropriate Technologies

A number of NGOs work in the arid and semi-arid districts of Kenya, where agriculture is typically complex, diverse and risk-prone and where there are very few effective proven technologies. Government staff have very little experience in these areas and inadequate training. Biases in the posting of staff mean that the best trained and equipped staff are generally not sent to these areas. In addition, the Government does not usually compensate staff adequately for working in these areas in the way NGOs do. This becomes an area of incompatibility and strain when it comes to collaboration and integration.

RECOMMENDATIONS AND CONCLUSIONS

Both the Government and NGOs are now being seen as agents of agricultural development. NGOs, in particular, are seen to be having some success in promoting participation and focusing on the poorest in society. However, efforts towards GO-NGO collaboration will only pay dividends if

organisational structures and management styles are constructed to fit with the national approach, since NGO development projects will eventually feed into the national development matrix. The Government, for its part, has recently strengthened the Kenya National Council for Social Services (KNCSS) to coordinate the activities of NGOs with those of Government and the local authorities. It has also pledged to respect the independence of NGOs as autonomous entities.

A number of useful steps could be taken by NGOs and the Ministry of Agriculture to boost collaboration. These include:

- i) Undertaking joint ventures in planning and implementing research and extension strategies aimed particularly at poor people in difficult areas.
- ii) International NGOs could increase their assistance in training GROs in management skills and community mobilisation. This will help relieve the constraint on rural development of weak small farmer organisations which cannot mobilise the support of their members.
- iii) NGOs could usefully contribute to agricultural policy by lobbying Government to give support to subsistence farmers who take on additional risk by investing in new technologies through the provision of credit support, guaranteed prices etc.
- iv) NGOs could also help the Government in the creation of small-scale viable projects that have the potential for rural people to combine new technologies with traditional values, for example, in the informal or "jua kali" sector or in running community-based credit systems for small farmers and women's groups. CARE, for example, reports a 94% loan repayment rate in women's income-generating projects in Baringo and Siaya Districts. Such repayment rates are very rare or non-existent in Government-run farmer credit systems. The Ministry has much to learn from NGOs in this area particularly under the District Focus Strategy.

Finally, two notes of caution should be sounded from the Kenya experience of NGO-Government of collaboration:

a) If NGOs duplicate what the Government is doing in development they risk losing their independent identity, and

b) If NGOs expand too rapidly they will create bureaucratic structures similar to that of Government which will reduce their effectiveness, efficiency, and capacity to respond in a timely way to the needs of local communities.

ENDNOTES

- 1. In this paper the term NGOs will be taken to mean those organisations, that are:
 - i. Autonomous from Government in the way they get funding, organise themselves and set their objectives;
 - ii. Non-profit making organisations involved in social welfare and community development activities and/or services; and
 - iii. Voluntary organisations operating through programmes and projects in the country.

The above defined organisations comprise both international NGOs like CARE (Kenya), ActionAid Kenya (AAK), and KENGO, and local grassroots organisations (GROs) such as the "Mwethya" and "Mabatti" women groups of Eastern and Central Provinces of Kenya respectively, or any other village/locational "Harambee" social welfare groups/societies so popular in Kenya. Farmers' Associations and Cooperatives which are independent of the Government as defined above are also considered to be NGOs.

2. The Structure of the District Development Committees (DDCs).

The DDCs are the main agencies of decentralised development planning. Such committees existed even before independence, though it was through the District Focus for Rural Development Strategy (July 1983), that they were strengthened.

The membership of DDCs is made up of:

District Commissioner (DC) - The Chairman,
District Development Officer (DDO) - The Secretary,
Departmental Heads of Ministries represented in the District,
Local Members of Parliament (MPs),
Local Party Officials,
Chairmen of Local Authorities,
Clerks to Local Authorities,
Chairmen of Divisional Development Committees,
Representatives of development related parastatals,
Invited representatives of NGOs and Self-Help Groups,
Women's organisations in the district, and Clergymen.

The Functions of the DDC are to: review and endorse all project proposals of local authorities, parastatals, regional development authorities, and NGOs operating in the districts; monitor the progress of on-going projects and establish priorities for future projects in the five year District Development Plan.

The overall performance of the DDC, depends greatly on the District Commissioner. If he has a strong background in drafting of project proposals, and is very committed and active in motivating the members of DDC, the DDC can be effective in decentralising development planning.

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A CASE STUDY of ENVIRONMENTAL ACTIVITIES by GOVERNMENT and NGOs in SIAYA DISTRICT, KENYA

Rosemary Charles

INTRODUCTION

This case study is based on the findings of an in-depth survey of agricultural and environmental research and extension work being undertaken by Government agencies, NGOs and donor-funded projects in Siaya District in Kenya. The survey aimed to show where the activities of each organisation are located in the District and thus to reveal gaps and overlaps in their areas of operation. It also sought to identify instances of linkage and collaboration between different organisations.

Siaya District is located in western Kenya, bordering Lake Victoria. Its land area of 2500 km sq and population of over 100,000 (increasing at a rate of over 3% per annum) make it a very densely populated area. Most of the District receives sufficient, though unpredictable rainfall, but the area around the lake shore receives only 800mm annually. Natural vegetation has been heavily affected by dense settlement, widespread cultivation and the felling of trees for fuel, house construction and charcoal-making.

The District has five administrative divisions - Bondo, Rarieda, Yala, Boro and Ukwala - which are sub-divided into locations and sub-locations (see map). These administrative units play a key role in the district planning process with development committees, comprising key local Government, ministerial and NGO representatives, at these three levels continuously involved in project identification, selection and formulation.

THE SURVEY

Twenty-six different institutions were identified, with the help of the District Development Office (DDO) and of the Directory of NGOs in Kenya (Lekyo

seven had been heard of in the District but could not be located and two appeared in the Directory of NGOs as operating in Siaya District but were not in evidence on the ground.

Information was collected by a combination of visits to the local office and field visits and discussions with project staff and beneficiaries. A questionnaire was used to guide the interviews and to ensure that similar sets of information were collected. The information collected covered the organisation's structure and programmes, its broad philosophy and objectives, details of its agriculture and environment programmes (location, dates, technologies employed and measured outputs), the role of the clients or target group in the programme, and details of collaboration with other institutions in the District. Although efforts were made to enlist the cooperation of the responding organisations by taking care to explain the objectives of the study and to arrange convenient times for the interviews, a number of problems were encountered, some of which reemerge as constraints in the wider context of inter-institutional collaboration.

Tracing some of the NGOs proved difficult, with several failing to register themselves with the DDO. Gaining access to a number of NGO and Governmental institutions took time, in some cases due to the high level of bureaucracy existing even at District level and, in others, because of a reluctance to give out information (sometimes even published reports). Whilst many respondents welcomed attempts to improve information availability and sharing, many were unwilling to take the first step in what appears to be a fairly secretive environment. Finally, record-keeping was frequently found to be inadequate and incomplete and sometimes did not seem to agree with findings on the ground. This was true of both Government organisations, who generally had good records of physical outputs, for example, seedling production but not of survival rates, and NGOs who, with important exceptions, consider record-keeping to be expensive in terms of time and resources and do not at present accord it a high priority.

SURVEY FINDINGS

Activities and approach

All the organisations have similar overall objectives such as the alleviation of poverty and improvement of the socio-economic status of rural people

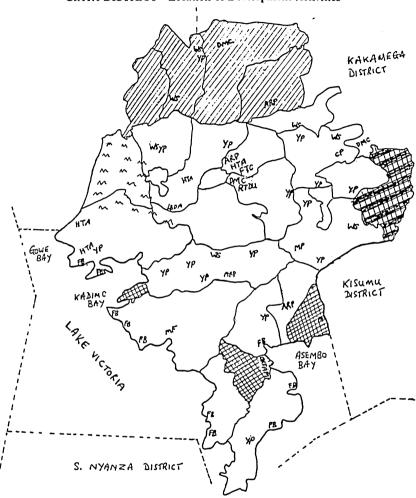
and particularly small-scale farmers. However a broad range of approaches are taken to tackle what different agencies perceive as the binding constraints to development: from broad integrated rural development programmes attempting to focus and coordinate activities by different organisations in one area, to promotion of collective participation through the mobilisation of farmers. Organisations working within agriculture and the environment can be grouped broadly as those trying to develop or extend appropriate technologies; those seeking to train farmers or field staff in improved practices, and those seeking to promote coordination in various ways. A number of agencies are, of course, involved in more than one kind of activity.

Another was of grouping organisations is by status vis-à-vis Government and whether nationally or internationally based. This classification for organisations studied is shown in Appendix I.

Location

Projects are located throughout the District (see map). It is apparent that high potential areas have the largest concentration of projects. Many of these are public sector research projects such as Kenya Forestry Research Institute (KEFRI) and Agroforestry Research Networks for Africa (AFRENA), but many of the NGOs, including Kenya Freedom From Hunger Campaign (KFFHC) and CARE concentrate their horticultural and agroforestry activities respectively in the higher potential areas of the District. Given the very high population growth and the predictions of severe shortfalls of woodfuel for the high potential areas (O'Keefe et al., 1984), this emphasis is not inappropriate per se. However, the locations bordering the lake suffer seasonal water shortages, have only one cropping season per year and are shown to be relatively disadvantaged on other socio-economic indicators (Kipkorir and Ssennyonga, n.d.) and have fewer projects, Government or otherwise. However, several projects have recently been initiated along the shoreline. Kenya Freedom From Hunger Campaign (KFFHC) is promoting horticulture with bucket and furrow irrigation, and OXFAM is embarking on an agriculture and food utilisation (including fish) project.

SIAYA DISTRICT - Location of Development Activities



ARP THE RESEARCE PLOT

FB - FISH BENCH

MP - MINERAL PRESPECTING

FTC - SLAYA FTC

HTA - HILL TOP AFFORESTATION

LBDA - LBDH FARM

DMC - DAIRY MILL COOLER OF M - MARSHY AREA

CP - COFFEE PROCESSION

OXFAM - AREA OF OPERATION - HORT, FISHING

YP - YOUTH POLY TECHNICS

WS - MAIN WATER SUPPLIES (PIRED)

RIDU - RURAL TECHNICAL DEVELOPMENT UNIT

- AFRENA AREAS OF OPERATION

- KFFHC AREAS OF OPERATION

1111 - KENFINCO AREAS OF OPERATION

Time period of projects

Development activities date back over 25 years to independence, with a mushrooming of activities, both NGO and donor-assisted Government programmes, in the 1980s. Increased interest from official donors has occurred throughout Kenya, particularly since the initiation by the Government of structural adjustment reforms in the late 1980s and with the interest by NGOs in development rather than the mainly relief operations of the 1970s and early 1980s (in the drier parts of Kenya).

Resources

In terms of staff resources, the Ministries are the strongest institutions in the District, with the Ministry of Agriculture and Ministry of Livestock having an extension officer in most of the 155 sub-locations. The Ministries of Cooperatives and of Culture and Social Welfare have 11 and 30 staff respectively trained in various aspects of social organisation. However, CARE alone has a complement of 40 technical staff (of whom one-third are women) on environmental programmes compared with the Forest Department's 7 foresters and 31 technicians. Other NGOs also employ technical staff, for example, CPK have 5 agricultural and water technicians and KFFHC, 9 community organisers and 8 technicians in the district. All the NGO technical staff hold professional qualifications from Government agriculture colleges etc. and receive additional in-service training.

Looking at physical resources, there appears to be a higher concentration of an easily identifiable resource such as transport equipment amongst NGOs compared to Government departments. Thus, the ratios of vehicles/motorcycles and bicycles per technical field staff are 1:8 and 1:2 respectively for the Ministry of Livestock Production. The Forest Department, with only 3 vehicles and 10 bicycles has similar ratios. For the NGOs, KFFHC has a ratio of 1:4 vehicles per field worker, CPK has 1:2.5 and CARE 1:4. All CARE extension workers have bicycles.

Technologies

The types of activity with which organisations are commonly involved include: improved production through conservation of resources and wasteland reclamation; increased intensity of resource use, and the creation

of awareness about sustainable development (for example through soil and water conservation).

Some of the main Government and NGO programmes are considered in detail below.

AGRICULTURAL AND ENVIRONMENTAL PROGRAMMES IN THE DISTRICT

Ministry of Agriculture (MoA)

The MoA has a mandate for all agricultural development activities, but its primary aim is to improve crop production through the promotion of more intensive (on-farm) resource use by small farmers. The mainstay of the Ministry is the extension programme, which trains farmers through contact or demonstration farmers and field days in improved husbandry, in technologies such as on-farm grain storage using local materials and, where relevant, in irrigation technologies. It also assists farmers groups through the Rural Development Fund (operated by the DDC). For example, women's groups located on the lakeshore have been helped to set up bucket irrigation. MoA also helps farmers acquire credit facilities.

MoA is one of six agencies participating in the Farmer Group and Community Support Project (FGCSP), coordinated by IFAD under the District Executive committee. The overall objectives of FGCSP are to identify the major constraints to the social and economic development of farmers, to develop appropriate technology to alleviate these constraints and to transfer the technologies through farmer's groups so as to make development self-sustaining by the end of the project life. Initially, IFAD disbursed loans for agricultural inputs directly, but this approach failed as farmers formed themselves into groups merely to qualify for the loan. Farmers' groups are now assisted directly through the line ministries who follow-up their requests and assist them in designing appropriate technical solutions, making a loan application to IFAD and implementing the project. The Social Services Department is responsible for organising the farmers into groups and ensuring that they are registered. It also acts as a channel of communication between the implementing ministries and the farmers. Steady disbursements (around KSh2.5 million in 1988) under the project have not been matched by good repayment rates due to crop failures through unfavourable weather conditions, failure of the project to deliver

(eg. poultry houses built but the birds never supplied), insufficient education of the farmers and weak groups.

Collaboration by MoA with other organisations on the ground is an essential component of its extension activities. Thus in addition to the FGCSP and other ministries, MoA collaborates with CARE, CPK, KFFHC and other NGOs working in the District, mainly in the provision of training and technical back-up.

Amongst the difficulties reported by the MoA staff were the complexity of problems, such as lack of water in some areas, which require an integrated approach not easily adopted by an individual ministry.

<u>Department of Forestry (Ministry of Environment and Natural Resources)</u>

The Department of Forestry (DoF)'s first extension officer was posted to the District in 1971 and there are now foresters in each of the six divisions as well as technicians at local level. The Forestry Extension Services Division (FESD) offers technical advice to farmers and women's groups engaged in tree planting and supplies planting material for propagation. In some cases it also provides nursery materials such as watering cans and polythene tubes, and training to farmers through seminars and workshops. However, the DoF has primarily been involved in operating its own nurseries and raising seedlings both for gazetted forests and for distribution to farmers and has provided training and support to farmers groups only when approached¹. The Department is currently undergoing a transformation in its approach (documented in Mung'ala and Arum, 1991).

The Department has benefitted from the research of KEFRI, International Commission for Research on Agroforestry (ICRAF), Kenya Agricultural Research Institute², and from the experiences of agroforestry projects, particularly those of CARE, with whom DoF works closely. Farmers' adoption of improved agroforestry practices within the District has been highly visible to the credit of all institutions involved. The DoF has contributed significantly to these efforts but reports difficulties of monitoring its programmes due to lack of transport (CARE sometimes assists DoF with transport) and the shortage of personnel and resources available to provide its extension staff with appropriate training.

CARE International in Kenya³

CARE operates 3 programmes in Siaya District: Agroforestry, Women's Income Generating Projects (WIG) and Health and Sanitation (SHEWAS). The Agroforestry Extension Project (AEP) started in 1984 with the aim of developing and promoting intensified land use methods through agroforestry.

Farmer participation is central to AEP: after an initial problem identification (diagnosis) an experiment is drawn up which is acceptable to both the project and the farmer. The trial is carried out by the farmer and monitoring and evaluation are done jointly, with results fed back to CARE extensionists. The main problems identified have been soil fertility and declining production; a fuelwood shortage (expected to become acute by the year 2000); and nutritional problems that could be alleviated by increased fruit intake. Interventions under the AEP have included alley cropping, border planting, woodlots, windbreaks, fodder banks, live fences and ornamental and shade trees. Initially many of these technologies were identified through contact with institutions such as ICRAF, whilst others were developed or modified through the project's own research. However there has been an increasing reliance on the farmers' own knowledge and modification of traditional agroforestry practices.

In its extension work, CARE works with groups, individual farmers and schools. Under the AEP, farmers are provided with technical advice and, occasionally, inputs such as polythene bags and tubes for their seedlings. CARE used to provide a comprehensive package of nursery and husbandry inputs, even paying watchmen and nursery clerks. However the project has now adopted a more sustainable approach emphasising training clients through seminars and workshops. The WIG project reinforces this by training groups in management, administration of revolving funds and marketing.

CARE has been collaborating with a range of institutions under the AEP. The Beyer Institute, ICRAF, Mazingira Institute, Kenya Renewable Energy Development Programme, African Wildlife Foundation, MENR, MoA (particularly the soil conservation unit), Ministry of Culture and Social Services and Ministry of Energy were all consulted at the start of the project and their different approaches and experiences have shaped the development of the CARE project. ICRAF's Diagnosis and Design (D & D), although a well thought-out approach to agroforestry has primarily been used by researchers and has not given enough attention to farmer solutions

to agroforestry problems. The AEP (like other projects) has continuously adjusted the D & D methodology to be more implementation-orientated and farmer-friendly (Vonk, 1986).

CARE has been collaborating with KEFRI in joint research on agroforestry plots since 1985 under a Memorandum of Understanding which has now been revised and extended up to 1993. KEFRI provides a full-time research officer who is responsible for the supervision and data collection on the plots. It also carries out soil sampling and analysis and data analysis, the results of which are shared with CARE. CARE provides research assistance, casual labour, material inputs and transport for the project. Management of the research is determined by CARE and KEFRI jointly, although day-to-day management is the responsibility of the research officer. Although some problems arose initially, for example with a shortage of research assistants to monitor the plots, much useful material has been generated by the project.

CARE has also been involved in the ICRAF-KEFRI-KARI Agroforestry Research Networks for Africa (AFRENA) programme being run from the Maseno Agroforestry Research Station, Siaya. AFRENA's objectives are to develop appropriate agroforestry technologies for land use systems within a specific agroecological zone, and to develop institutional capacity to plan, formulate and implement agroforestry research. CARE is participating in the AFRENA on-farm adaptive research programme's economic evaluation of farmers' alley cropping plots which aims at providing baseline data to be fed into economic models to evaluate the economics of on-farm alley cropping. Labour and other inputs and outputs are being monitored in cooperation with CARE's AEP. Ten farmers are currently participating in the exercise which started in 1990. It is hoped that some of the problems recorded by the AFRENA project, including poor communication networks and the difficulties of establishing informal contacts in the District, will be relieved by working through an NGO with a good outreach.

CARE also collaborates with other NGOs such as Greenbelt in the field, providing training to their groups in nursery management. It is a member of the District Development and Executive Committees (DDC and DEC).

A number of changes have taken place in CARE'S operations, particularly since a major review in 1986 (Fowler et al., 1986). There has been increased emphasis on participation in community development efforts, working with women's groups and the Department of Social Welfare; greater integration

of CARE projects and coordination of staff working in the same area; and finally, a realisation that collaboration with other agencies in the same geographical and programming area needs to be more thoroughly addressed and better organised.

Other problems experienced include the difficulty of promoting new and relatively untested technologies; the rather top-down attitudes of researchers towards the extension staff; and the shortage of qualified staff and basic resources in the Ministries of Agriculture, Water and Environment, making the eventual successful handover of CARE projects to them very uncertain.

Visible impacts of the agroforestry programme are the increased awareness of environmental issues and management in the District and the adoption of sound land use strategies based on agroforestry. The project has also strengthened groups and thereby increased people's participation in development at a very practical level. In the long run CARE aims to make the project self-sustaining and is therefore promoting the independence of its beneficiaries, mainly through groups.

Church Province of Kenya (CPK)

CPK is typical of the NGOs operating education and development programmes in the District. It was established in Kenya in 1905 and the Diocese of Maseno West was formed in 1985. The Diocesan development wing operates under the Christian Community Service, and its philosophy is that physical development, food and self-reliance should go hand in hand with spiritual development.

The Church runs integrated water, agriculture and livestock health care programmes and the field officer is expected to cover all of these as well as pastoral work. The water programme (started in 1985) is developing a water supply network for both home use and small-scale crop irrigation (bucket irrigation). Health care concentrates mainly on nutrition, child health and family planning. The agricultural activities are horticultural, mainly small-scale irrigation and double-dug beds technologies for kitchen gardens; and small stock, namely rabbits, goats, beekeeping and aquaculture (fishponds). A zero-grazing programme has recently been initiated.

The Church works with individuals, institutions and (existing) groups. Deanery development assistants help the extensionists (two agriculturalists,

two livestock extensionists and one water technician) to locate target groups and identify with them their problems and formulate viable solutions and designs. Whilst the Church draws on various sources of ideas, it emphasises the importance of building on traditional practices in the design of appropriate new technologies. CPK also tries out and modifies technologies disseminated by the research and extension agencies, specifically: cattle cross-breeding, confining free-range birds for improved feeding, and the use of local herbs for pest and disease control in livestock, eg. aloe vera, pepper, sisal leaves, azandaracta indica.

The technologies are tested and implemented by the farmers. Feedback from farmers and the whole community is taken seriously as CPK aims at high adoption rates. So far it has been fairly successful. In addition to technological know-how, CPK provides resources, such as seeds, and is about to initiate a revolving-fund system for purchasing inputs from a cow to pumps.

Visible impacts are improved health and nutritional standards and adoption of kitchen gardens and livestock. One drawback is the dependence of the community, on especially the water programme where everything has been provided by the Church. There have also been problems of traditional beliefs and resistance to new technologies, as well as local and political pressure attempting to influence the location of a particular project.

CPK has found that technology initiation requires collaboration with the various agencies working in the area, both Government and non-government. At the field level, the extension workers link up with other extensionists from the Ministries of Agriculture, Fisheries, Cooperatives, Water and Livestock, as well as the Social Services Department and the Lake Basin Development Authority and with NGOs such as CARE.

CONCLUSIONS ON COLLABORATION IN SIAYA

The general picture emerging from this preliminary survey is of a complex set of interactions between different institutions, starting with the DDC in its role as the Government coordinating body at District level. Once in the field, all the NGOs studied made links with Government agricultural and forestry extension workers and other projects operating in the area. Many of the NGO-initiated projects are supported by the Ministries through technical assistance in setting up nurseries, small-scale irrigation systems etc.

CARE, with 40 technical staff in the District, has used its in-depth geographical coverage and levels of expertise in collaborative research and extension projects. The agroforestry research programme draws on CARE's network of contacts with farmer innovators and its ability to monitor experiments and facilitate communication between researchers and farmers. In extension, CARE provides training to Government foresters and extension workers and groups of farmers.

Whilst many of the agriculturalists interviewed supported the principles of collaboration and even coordination in principle, in practice there is no formal mechanism for doing this: links between organisations are usually made informally and may be based on personal contacts. In neighbouring South Nyanza District, environmental activities are coordinated around the District Forest Officer⁴. The District Environmental Officer might be the most appropriate coordinator of a similar group in Siaya.

APPENDIX I: INSTITUTIONS INVOLVED in ENVIRONMENTAL and AGRICULTURAL ACTIVITIES in SIAYA DISTRICT

Institution	Interviewed	Classification
CARE		I
ICRAF	✓	ĪR
ICFFHC	1	L
MFM	1	L
CATHOLIC DIOCESE	✓	L
CPK	✓	L
BAT	✓	С
AFRICA NOW		L
KEFRI	✓	R
KARI	✓	R
FTC	✓	G
LBDA	✓	P
MoA	✓	G
MOCSS	✓	G
MENR	✓	G
MOWD	✓	G
MOPND	✓	G
DEO	✓	G
KENFINCO	✓	CP
AFRICA 2000	. 🗸	I
OXFAM	✓	I
	District Toler	

Source: Survey of Siaya District Environmental Activities by R. Charles

KEY: I - International NGO

IR - International Research Institute

L - Local NGO

C - Commercial EnterpriseR - Research Institute

G - Government Organisation

P - Parastatal

CP - Collaborative Government of Kenya/Finland Project

ENDNOTES

- 1 The Department is currently undergoing a transformation in its approach (documented in Mung'ala and Arum, 1991).
- 2 ICRAF, KEFRI and KARI are collaborating in an Agroforestry Research Networks for Africa (AFRENA) project based at Maseno, Siaya District, which is currently operating 3 programmes: management research, multipurpose germplasm improvement and onfarm adaptive research. On-farm research is conducted with individual farmers rather than groups. However, staff members at the research station have developed close links with the local community, NGOs and officials who visit the station, thereby promoting interaction between the AFRENA programme and its potential endusers.
- This section draws on a paper by Pascal Otieno presented at the workshop on "Inter-institutional collaboration in Environmental Research and Extension in Kenya" held at Masinga 12-14 May 1991. The institutional development of agroforestry in Kenya is written up in detail in Buck (forthcoming).
- 4. The NGO Forum operating in South Nyanza District was started in response to a problem raised by CARE with the District Forest Officer. It is seen to be contributing significantly to improved collaboration (Pascal Otieno, CARE South Nyanza Coordinator, in a paper delivered at the "Workshop on Interagency Collaboration in Agricultural and Environmental Technologies", held at Masinga Tourist Resort, Kenya, May 12-14, 1991.

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NGOs and ENVIRONMENTAL ACTIVITIES in MACHAKOS DISTRICT

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INTRODUCTION

Machakos District lies within Kenya's Eastern Province, south-east of Nairobi, most of the district falling in the semi-arid agro-climatic zones (ivvi). Average annual rainfall ranges from around 1000mm in some of the highlands to below 500mm in the low-lying south and south-east parts of the District. Whilst soils on the hill masses are fairly fertile, soil erosion is a major threat. The District is peopled by the Akamba tribe. In 1988 the population was estimated at 1.5 million with a density of 1.2 persons per square kilometre, reaching over 300/km² in the high population areas. The population growth-rate is very high at around 3.9 percent per annum (Government of Kenya, 1989). The majority of people in the District still earn most of their income from agriculture and livestock keeping.

The District has undergone major socio-economic and demographic changes over the last sixty years. Large and rapidly-growing human and cattle populations in the high potential areas led to early settlement policies and attempts to regulate agricultural practices in the interests of soil and water conservation. These subsequently spread to the lower potential areas as population density increased there also.

Hostile climatic conditions, coupled with the increasing need for food in the District, have made the environment very vulnerable to degradation. Machakos has a long history of interventions to try and halt this process, starting from the construction of terraces to guard against soil erosion in the 1920s, to a range of agricultural improvements including the breeding of a short-maturing composite, "Katumani maize".

A range of institutions have been active in the promotion of environmental technologies. Government Departments such as Agriculture, Forestry and

Water Development all have technicians and field staff in the District. The local county council is involved in tree-planting and community development. The Alcamba themselves have a tradition of self-help and "mwethza" groups perform many of the tasks of environmental conservation such as building terraces on each other's land. Finally, a number of non-governmental organisations (NGOs) are carrying out agricultural, water and environmental activities in the District¹. These form the focus of this study.

NGO activities really started in the District in the 1970s, mainly with the provision of drought relief. Now most are involved in development activities and many advocate full participation of their potential beneficiaries in all aspects of development in the District. By 1988, there were 16 NGOs registered as undertaking some type of agricultural, water or environmental activities in the District (Lekyo and Mirikau, 1988)².

ENVIRONMENTAL ACTIVITIES

Environmental activities carried out by NGOs in Machakos District include soil and water conservation done by most of the NGOs in the District, tree planting and agricultural activities.

Agricultural Technologies

One of the most innovative agricultural programmes is being carried out by the Kenya Institute of Organic Farming (KIOF). KIOF encourages the use of organic rather than inorganic fertilizers which are thought to adversely affect the environment. Use of insecticides are discouraged in favour of harmless agricultural practices such as crop rotation. Other NGOs involved in agriculture include Catholic Relief Services who operate an oilseeds project, Action Aid Kenya, UTOONI Self-Help Project which works mainly in horticulture, and Ukambani Integrated Development Project. Many of these projects are being implemented in the drier southern parts of the district and some are in the more remote areas which are difficult for other organisations to access. In addition to the environmental activities discussed later in the report, the Catholic Diocesan Development Service (CDDS) is very active in agriculture and livestock development in the district. Droughtresistant crops such as cassava, millet and sweet potatoes are being promoted, and members of their groups have received Gala goats and improved breeds of cattle and poultry.

Water technologies

Much of Machakos District suffers acute shortages of clean water and lack of sanitation, causing a high incidence of water-borne diseases. There is also a considerable loss of labour as women, the main agricultural producers, spend an average of three hours per day collecting water for their households. Whilst the Government is responsible for large scale technologies such as dams and deep boreholes, there have been numerous small-scale projects, both Government and NGO in the District. The main water technologies used are hand pumps, groundwater tanks and roof-water catchment tanks.

In the past many water supply systems have been built without much discussion with potential users, who were often unable to operate and maintain them. With diesel pumps, people have often lacked funds to keep them running. Lack of funds and spare parts has led to the abandonment of facilities. Thus, over 40% of the pumps constructed under the EEC-funder Machakos Integrated Development Programme (MIDP) were not functioning and seven of the 20 boreholes operated by the County Council were out of service in 1982 (ODI, 1982).

The projects which have been sponsored by NGOs seem to have a higher level of success since potential users are better involved by the funding agency. The main NGOs involved in improving water supply and sanitation in the district include the African Medical Research Foundation (AMREF), Machakos Catholic Diocese, the Institute of Cultural Affairs (ICA), ActionAid Kenya, Utoni Self-help Project, CPK Diocese of Machakos and Kenya Water and Health organisations (KWAHO).

The International Council for Research in Agroforestry (ICRAF) an international research organisation, the Semi-Arid Land Use (SALU) programme of the Diocesan Development Service of the Catholic Diocese of Machakos and the Green Belt Movement (GBM) and World Neighbors are all involved in soil conservation and forestry technologies in the District. The latter three NGOs will be discussed in detail in the paper.

The paper is based on findings from interviews with different NGO and Government workers in Machakos district as well as information found in NGO reports. The approach and strategy of the NGOs is discussed in their environmental activities and more widely, as well as their collaboration with Government and other NGOs.

CASE STUDIES

SALU Programme of the Catholic Diocese

Machakos Catholic Diocesan Development Service was formed in 1979 and is one of the most active NGOs in the District, with eleven programmes dealing with different aspects of community life including women, youth and children. SALU is an agricultural programme within CDDS which assists small farmers to improve farming methods through the dissemination (and some development and testing) of advice and technologies related to seeds, livestock and soil and water conservation.

The programme uses a community participatory approach, working with well organised groups, 80% of whose members are women. For a group to qualify to receive SALU aid, it has to have existed for at least six months. When a request reaches SALU office, arrangements are made for SALU officials to meet the committee members of the group. This gives the NGO a chance to assess the group's quality of leadership which has been found to be crucial to the success of projects.

A feasibility study of the proposed project is then carried out to determine the exact needs of the group and the amount of financial resources; and the types of skills available to it. The latter includes the skilled members of the group, skilled neighbours and available help from Government extension officers. Alternative solutions to the problem in hand are compared, costs estimated and the best alternative selected. The evaluation work is done by both the NGO and the organising committee of the group. Finally the contribution to be made by both SALU and the group, are worked out. It is usually the responsibility of group members to contribute unskilled labour and provide locally available materials.

As part of its promotion and education activities, SALU organises seminars in which representatives from different groups are trained in aspects of project implementation and management. Participants are shown the projects in operation and learn from the experiences of other groups.

Soil and water conservation is something the people of Machakos know from experience they cannot do without: all they need are resources to help them in the work. SALU provides working tools and technical advice to groups which need them. Group members work together to encourage and motivate and learn from each other.

SALU projects are evaluated from time to time to assess their effectiveness in terms of community organisation and impact of the technology. From Tables 1 and 2 it can be seen that SALU has had considerable success in environmental conservation since 1981. Almost 320 groups have been reached, thousands of trees planted and many farms terraced. The survival rate of forest trees was found to be 60% in 1987.

The success of SALU can be traced to its effective and efficient system (involving project beneficiaries at all stages) of planning, implementing and evaluating projects and maintaining good records of its activities. Since all the development work in the District has to be channelled through Government appointed decision-making and coordinating body, the District Development Committee, the NGO tries to ensure that it informs the provincial administration about its work in the district.

TABLE 1:	GROUPS REACHED and NUMBER of LEADERS TRAIN UNDER THE SALU PROGRAMME 1983-88					
Year	No. of new groups reached		Year		No. of SALU leaders trained	
Before	1982	60	Before	1983	60	
	1983	30		1984	29	
	1984	50		1985	31	
	1985	62		1986	38	
	1986	46	1	987/88	40	
	1987	22				
	1988	50		TOTA	AL 198	
TOTAL		320				

TABLE 2: SALU CONSERVATION and TREE PLANTING OUTPUTS 1981-89 YEAR Trees Terraces Check dams (Numbers) (Km) (Numbers) Fruit Forest Fodder 1981 171 714 1984 1985 1,075 1986 na 286,000 280,000 285 1987 2.000 16,000 48 1989 20,500 16,000 175,000 Source: Catholic Diocese of Machakos

The Green Belt Movement

One of the most active NGOs in tree planting is the Green Belt Movement which sponsors tree nurseries in 26 out of 42 districts in Kenya. Its objectives are to provide fuelwood, food and income from trees for rural people to prevent soil erosion, conserve water and genetic resources, and to address the underlying causes of poverty and population growth. The movement has a strong element of community mobilisation, working successfully with many Women's Groups, school children and churches.

Their approach involves first, a promotion stage during which the local population is alerted about the importance of trees in stopping environmental degradation and people are made to recognise their role in reversing harmful environmental practices. Using dissemination media such as radio, television and newspapers, environmental concerns are translated into a language the people can understand. Word of mouth and drama in

schools are also used. The Green Belt trains promoters to communicate with community members effectively and equips them with sufficient knowledge to plan tree planting activities and establish nurseries. During the promotion stage people interested in starting a tree nursery are formed into groups. Tree nurseries are established on plots that are accessible to every member of the group. Nurseries are usually set up with the help of a Government forest or agricultural officer or by a Green Belt agent.

Once a group starts a nursery, it is important for it to be in communication with the movement's headquarters so that if necessary the group can be given assistance. Thus, after a nursery is established the number and type of trees at the nursery and how many seedlings are ready to be issued to the public are systematically reported. Tree planting exercises have also to be advertised. The community is sensitised to the role of trees in providing firewood, building materials and conserving soil and water. After trees are planted another report is sent to the headquarters so that follow-up of planted seedlings can be made by Green Belt employees attached to the particular location. Around 20 young people are employed in Machakos District as advisers and nursery attendants.

The last step in the Green Belt Movement strategy is to pay groups money for 2-year-old seedlings as an incentive to plant trees and care for them. However, this incentive has sometimes been a disadvantage in the sense that the people have refused to work when the movement has been unable to pay. It still remains difficult to convince people to plant trees unless they can see the immediate benefits of the exercise.

Despite the fairly high cost of the programme, the Green Belt Movement can be commended for encouraging the growing and conservation of many trees in the district, particularly, indigenous trees which are often the most appropriate for soil and water conservation. In 1989 it had almost 200 tree nurseries in Machakos, each with at least 1000 seedlings.

The Green Belt Movement works closely with the Department of Forestry whose personnel provide expert advise to Green Belt groups. This is helpful to Green Belt which lacks the highly skilled work force available within the Ministry. Whilst at national level the participation and empowerment objectives of the movement have, at times, brought it into conflict with the Government, cooperation between the organisation and the District authorities has been fruitful.

INSTITUTIONAL COLLABORATION

Participating Government organisations in environmental activities include the Ministries of Culture and Social Services, Agriculture, and Environment and Natural Resources. The Ministry of Culture and Social Services is responsible for registering groups and NGOs. Any organisation wanting to work with either groups or NGOs can obtain the advice from them, or from the County Council Community Development officer.

The Ministry of Agriculture and the Forest Department of the Ministry of Environment and Natural Resources are responsible for providing advice on agricultural and tree planting activities respectively. Each has unique advantages. For instance some methods of soil and water conservation come under the jurisdiction of the Ministry of Agriculture, whilst for tree planting the best advice would come from the Forest Department. Since the Ministry of Agriculture has more extension officers than the Forest Department, collaboration between the two ministries, and others in the provincial administration which is at present on an ad hoc basis, would increase working efficiency and provide an improved service for people engaged in any environmental conservation activities.

Most NGOs have some form of collaboration with the Ministries. Government Ministries usually have a larger work force, both numerically and with a wider range of technical skills, that can assist in the work of NGOs. However, since Government Ministries often lack transport to the field, Government extension officers can work more effectively when they have access to the means of transport of an NGO they are collaborating with in the same area. Without Government officials, NGOs cannot meet their groups especially for promotion purposes. In many cases the Chief is more effective in communicating with the people than an NGO worker. NGO to Government collaboration enhances a free exchange of knowledge and expertise between the public sector and NGOs. This improves the working efficiency of all.

NGO to NGO collaboration in environmental work in the District does not appear to be widespread. However, one funding agency, World Neighbors, has facilitated collaboration between NGOs through its role as a donor. World Neighbors does not implement projects itself in Machakos District but has worked with the SALU program, UTOONI self-help project and Ukambani Integrated Development Project in their soil and water conservation work. Groups seeking assistance from World Neighbors are

required to make use of all help available from Government extension services before they can get technical assistance from the NGO. To demonstrate their commitment to the project, the communities are also required to contribute 50% of the project cost, including labour and local materials, with World Neighbors providing hardware and technical advice.

CONCLUSIONS

The success of community projects sponsored by NGOs could be attributed to the effective discussions that take place between the potential beneficiaries and the funding agency, before the work starts. Ensuring active participation of beneficiaries also helps the latter to feel that they are carrying out their own project, and so are unlikely to neglect the work later.

Environmental conservation through tree planting and soil conservation has been practised for many years and is acceptable in Machakos. This makes the work of NGOs easier since they can build on people's existing knowledge and experience.

Collaboration between NGOs and Government Ministries has been found to occur in the field and mutual benefits have accrued. Less evidence has been found of NGO-NGO collaboration. Apart from the District Development Committee, which has a large number of responsibilities, there is no forum for exchange of information between organisations involved in similar projects. Given the pressing need to address environmental issues in Machakos District and the large number of organisations involved, it is suggested that one institution could be mandated with the responsibility for coordinating environmental conservation activities, or if necessary, a new body formed.

ENDNOTES

- Mary Tiffen and Michael Mortimore at ODI are conducting a major study entitled "Characteristics of Interventions that have improved welfare and conserved Environmental Resources: The case of Machakos District, Kenya, 1930-1989". Findings are to be published initially in the ODI Working Paper Series in 1991/92. Further details are available from Dr Mary Tiffen at ODI.
- This information was compiled from a survey conducted for the Kenya National Council of Social Service. It was not entirely comprehensive as not all NGOs, particularly small indigenous ones, are registered with the Council. A survey carried out for the Machakos District Development Committee mentions several more NGOs in the District.

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