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Managing Africa's Soils No. 17

Stakeholder participation in policy processes in Ethiopia

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July 2000

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1 Introduction

Agriculture is the backbone of the Ethiopian economy, providing food, industrial raw materials and 90% of foreign exchange earnings, while accounting for about half the country's GDP (Croppenstedt and Muller, 2000). The agricultural sector is also the main source of employment and income for most of the rural population (Ibid, Shiferaw 1994). The current development strategy in Ethiopia, known as Agricultural Development Led Industrialisation, is largely based on expanding agricultural production. However, it has to operate within a variety of natural, economic and social constraints, including soil erosion, land degradation, deforestation, overgrazing, and recurrent droughts (Kebede, 1993).

Small-scale farmers in Ethiopia use a number of soil fertility management strategies to improve production (Eyasu, 1998; Data, 1998; Eyasu and Daniel, 2000). Although the success or failure of these practices is often closely related to government policy, most policies are developed by a small group of politicians and civil servants, with little room for public debate. However, attempts are under way to involve more stakeholders in policymaking, and it is hoped that by including farmers in the process it will be possible to identify and tackle their problems more effectively.

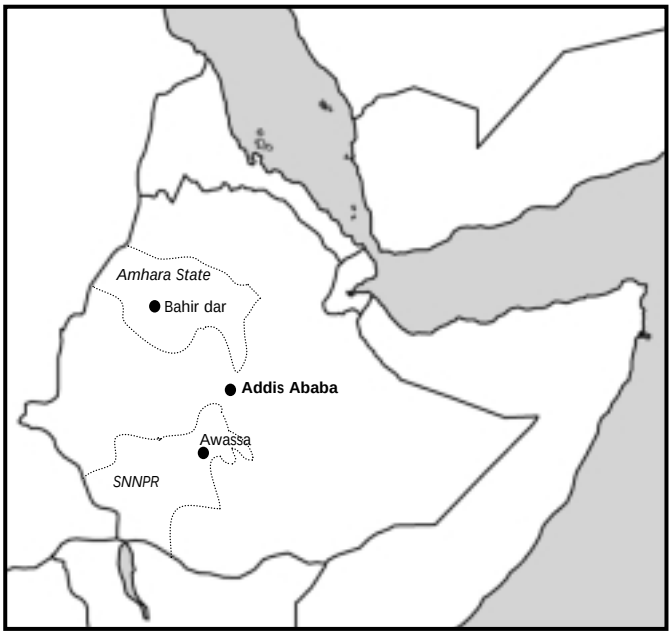
The main objective of this study has been to create a better understanding of the policy making process in Ethiopia, in order to become more effective when presenting policy makers with research findings on the soil fertility management practices used by farmers. We examine the way in which environmental and extension policies – which are particularly relevant to soil fertility management – are formulated and implemented.

This paper is divided into five sections, the first of which introduces the two study areas and describes the methodology and tools used in our research. Section two presents findings on the perceptions held by stakeholders of soil fertility in Ethiopia, and outlines key policies identified by participants in the study. Section three focuses on the process of developing environmental policy, while section four discusses the national strategy for extension. The final section draws a number of conclusions about our findings.

The study areas

To enable us to make regional comparisons, the study was conducted in two areas: the Southern Nations, Nationalities and Peoples Region (SNNPR) and the Amhara National Regional State (ANRS). An administrative unit equivalent to a district, known as a woreda, was selected in each region for in-depth and local level study. The study sites were the Kindo Koisha woreda of North Omo zone in SNNPR, and the Meket woreda in the North Wollo zone of Amhara State (see map). Kindo Koisha is located about 450 km south of Addis Ababa, in the enset/root crops belt, while Meket woreda lies about 600 km north of Addis Ababa, in a low-potential area with cereal-based farming systems. These two woredas are located in mountainous areas characterised by land fragmentation, soil degradation and food insecurity. Livestock plays an important role in the farming systems of both sites. Manure is commonly used for fuel in Meket, but not in Kindo Koisha.

Map of Ethiopia



Methodology

This study sets out to examine the perceptions held by different people, institutions and agencies of the problems faced by farmers in Ethiopia and complements previous work in these sites on the dynamics of soil fertility management (Eyasu, 2000; Eyasu and Daniel, 2000). The objectives are to:

- Identify which policies influence agriculture and soil fertility management;
- Analyse how policies are formulated and implemented;
- Analyse the perceptions held by different stakeholders of soil fertility and the policy making process;
- Assess the implications of this study for identifying and designing policies and interventions.

Using their previous experience and informal discussions with resource people in each region, the research team identified a number of key stakeholders, from heads of government bureaux and departments, and universities and research institutes, to representatives of NGOs. These stakeholders were invited to one-day meetings in Awassa and Bahir Dar to identify key policies relating to soil fertility management. Both groups suggested that policies on agricultural development and the environment should be analysed.

Two different checklists were drawn up for the interviews with stakeholders: one for policy makers, technicians and extension agents, and the other for farmers. A total of sixteen farmers and thirty-nine policy makers, professionals and extension agents were interviewed across the two woredas. The research team also gathered information by participant observation, and from group discussions with farmers and extension workers.

After completing interviews in the SNNPR, a draft report was prepared and presented at a feedback meeting attended by farmers, extension workers, researchers and policy makers. Time constraints meant that it was not possible to hold a feedback meeting in Amhara State.

Our research approach was intended to build a constituency of interests around the issue of soil fertility. Stakeholders were involved at three stages: firstly, in the identification of key policies relating to soil fertility management; secondly, they were interviewed and asked to reflect on the way that these policies are formulated and implemented; and thirdly, they were invited to feedback workshops to discuss the results of the study and their implications for supporting local and national policy processes in the future. The positive outcome of the feedback meeting in SNNPR confirmed the relevance of the research method chosen for this study, which explicitly involved stakeholders in the design, and made a point of sharing the research findings with them.

2 Perceptions of soil fertility and key policies for improvement

Perceptions of soil degradation

Although there was general agreement that declining soil fertility is a cause for serious concern, stakeholders had different ways of framing and analysing environmental problems and assessing their relationship to soil fertility management.

Participants from the government and NGOs agreed that soil degradation is a serious problem in Ethiopia but have different opinions regarding its cause. A first group took a broad view, and also discussed the role of forest, water, and wildlife resources in the management of soil fertility, while a second group of people mainly focussed on farming practices when analysing causes of degradation, as exemplified by a technician from the Bureau of Agriculture (BoA) in Amhara State: *"Soil fertility management requires long and continuous attention. As land holdings have decreased over time, traditional methods of improving soil fertility have declined. There are no alternative sources of fuel, so we have to use manure, and then there is less available for fertilisation. Moreover, the existing soil and water conservation practices focus on conserving soil rather than improving its fertility. It seems difficult to talk about improvement while we are not even able to maintain what we have".*

One member of a zonal BoA in SNNPR noted that: *"One of the important issues is land husbandry. This concept should be better understood by professionals, and by the farmers as well. Land is a scarce natural resource that can be wasted and finished if not properly managed, and we need a land use policy to help farmers and other investors use it properly. It should provide guidelines for classifying land according to capability, so it can be decided which land is for farming and which is for grazing".*

Most of the stakeholders in Amhara State thought that the environmental problems related to soil degradation have been aggravated by population pressure and compounded by the lack of relevant policies and regulations; while land tenure policies, land fragmentation and poverty were also widely seen as major causes of soil degradation. Members of the Bureau of Planning and Economic Development (BoPED) explained: *"The major problem is poverty. Soil fertility management should thus consider how to alleviate poverty. Population pressure is another problem that needs attention when dealing with soil fertility management. Population growth aggravates demand for resources, and a population policy needs to integrate environmental issues.*

The dilemma between the immediate food and fuel needs of the farmer and long-term benefits of conservation practices is the problem that BoA workers are facing on the ground. The only sources of fuel are crop residues and cow dung, and because smallholders can only buy a little mineral fertiliser, soil fertility management in the region is getting worse.

Land tenure policy is a limiting factor, there is a need for a clear statement on land ownership and who exactly decides on how a given piece of land is used. Otherwise, it will prohibit long-term soil fertility investment by farmers. Sometimes, the government can take land from farmers for building infrastructure. But there must be a policy that clearly states how to compensate farmers for their prior investments".

While all the stakeholders agreed on the need for land use and land tenure policies, some felt that soil fertility management could best be improved by promoting improved technologies and changing traditional practices, while others believed that it would be more helpful to change policies in order to improve the economic context of farming. Another group thought that priority should be given to learning about soil types and taxonomy, and to studying the chemical and physical characteristics of soils so that they could be classified. They argued that it is difficult to talk about policies on soil fertility management without such basic information.

Identifying key policies

A number of issues related to policies were raised during the workshops, such as the manner in which they are formulated, formalised and implemented, and the interrelationships between different policies. When asked to give a definition of a policy, most participants in the SNNPR described them as tools that are used by governments to implement their political and economic programmes. The time spent identifying relevant policies was most instructive, and highlighted the following points:

- There was some discussion as to what actually constitutes a policy, as some argued that they only exist if they are formally documented or outlined in a statement or proclamation, while others claimed that they do not always need to be stated explicitly, as they are sometimes included in broader strategies;

- Some people said that strategies and programmes should not be included in policy studies, arguing that only officially documented government statements constitute policies. Others claimed that they are an integral part of policy, and should therefore be studied in order to understand the implications of pursuing a particular course of action;

- It is not always clear whether a particular line taken by the government has been formalised into official policy. For example, some participants from the BoA claimed that there was no land tenure policy, while others from the BoPED argued that the policy initiated by the Derg has been left unchanged by the current government;

- Some members from the BoA argued that while there is no explicit policy on soil conservation, the strategy for soil and water conservation was always woven into the overall agricultural development programme. However, this view was challenged by those who claimed that it has only recently been included in the broad spectrum of the federal environmental policy;

- Most policies seem to have some bearing on soil fertility management – almost all the policies related to development and social services were mentioned during the brainstorming session. Opinions varied as to whether particular policies were relevant to soil fertility management: some saw education and disaster prevention and preparedness as very important, while others felt that they were less significant;

- There was a heated debate over participation. Some members from the BoA in Amhara State said that if local people were interviewed and involved in participatory research they could be said to have participated in the process of policy formulation. However, one researcher commented that community consultation does not constitute participation: "*One can dare to say that the community has participated in policy formulation only when it has initiated the policy process, or when its ideas and suggestions are sensibly incorporated in the policy*". An expert from BoPED identified three types of participation: forced participation, participation in community initiatives and participation through representatives. He suggested that the last two types should be used to formulate and implement policies;

- Most people knew nothing about the processes involved in formulating policies; only those who had participated in the process as committee members or by attending workshops seemed to have an idea of what was involved.

Participants were then asked to list the policies that they considered most relevant to soil fertility management. In Awassa, they identified four main policies: extension strategy, environmental policy, land tenure policy and policy on agricultural research. At the workshop in Bahir Dar, fifteen policies were listed, with the following five identified as the most relevant: agricultural development policy/extension strategy, regional conservation strategy, land use policy, soil and water conservation policy, and agricultural research policy. The research team decided to concentrate on environmental policy and extension strategy in both areas to ensure comparability.

3 Environmental policy

Historical context

Although there had been some concern about land use and deforestation before the mid-1970s, environmental policy was then very limited. Table 1 provides an overview of the environmental concerns and policies in SNNPR since the 19th century.

Table 1. Conservation and environmental concerns in SNNPR

Period	*Concern*
Time of Menilik (from 1890s)	• Deforestation due to urbanisation. • Protection of wildlife, especially elephants.
1940–1970	• Emphasis in legislation on protecting wildlife and forests. • Development projects aimed at agricultural intensification.
Time of Derg 1974–1990	• Revolution, land reform, and creation of Peasant Associations. • Afforestation and soil conservation as part of Food for Work Programmes. • Sectoral approach to conservation activities. • Work starts on formulation of National Conservation Strategy.
1991 – to present	• Cross-sectoral environmental policy formulated, but not implemented. • Development of regional conservation strategy. • Less government involvement in soil conservation activities, which have largely been taken over by NGOs.

In 1974 the Derg government came to power after a revolution ended the imperial regime of Hailie Selassie. Land reform was introduced in 1975 and peasant associations (PAs) were set up. A drought in the same year attracted the attention of international agencies, and also alerted the government to the gravity of environmental degradation across the country. With conservation now a priority, PAs were used to mobilise rural labour through food for work (FFW) activities, which were financed by the World Food Programme. The FFW programme used soil conservation methods to tackle the problems caused by the degradation of natural resources, and soil and stone bunds were built on hundreds of thousands of hectares of cultivated land in the central and

northern highlands. This highly labour intensive work was centrally planned, and as local communities were not consulted about the installation of these conservation structures, they felt no sense of responsibility for them. As these measures were also generally incompatible with existing practices, they consequently neither lasted nor achieved much in terms of improving degraded land (Wood, 1990; Campbell, 1991; Kruger et al, 1996).

In the 1980s, the forestry administration was strengthened by the establishment of the Forestry and Wildlife Conservation and Development Authority (FaWCDA), which focused on afforestation and the protection of degraded hillsides, while conservation measures on croplands were largely confined to bunding (Constable, 1985). Another great drought in 1984 resulted in widespread famine and attracted further attention from international organisations. They laid much of the blame for this disaster on the advanced degradation of natural resources, and stressed the need for more conservation activities in the country.

Formulating policies at federal level

In 1989, as a result of increased pressure from international agencies, and a growing awareness within government circles of the impact of environmental degradation on sustainable development, it was decided to develop a National Conservation Strategy (NCS) at federal level, which was finally approved in 1997.

In 1990, the Office of the National Committee for Central Planning and the International Union for Conservation of Nature and Natural Resources (IUCN) organised a conference in Addis Ababa to plan the national conservation strategy. The policy recommendations made during the conference were presented to the Council of Ministers, but no immediate action was taken because of the worsening civil war, which subsequently resulted in a change of government. In 1992, IUCN and the Transitional Government of Ethiopia (TGE) signed an agreement for the provision of assistance to formulate the NCS. Work was done on formulating a policy and institutional framework for the NCS. This process has also involved specialist consultants and cross-sectoral task forces at zonal level, who were responsible for local level consultations and assessing natural resources (Environment and Development, 1997).

The second NCS conference took place in May 1994, and was attended by participants from ten regional governments, the ministries involved in natural resource management, academic institutions, NGOs and representatives from the donor community. Some 250 participants discussed the different natural resource sectors, a proposed policy and institutional framework for the NCS, the action plan and an investment programme. Five volumes of NCS documents were then reviewed by an inter-ministerial committee and submitted to the Prime Minister's Office.

The third phase of the NCS began in July 1995, by which time the TGE had been succeeded by the government of the Federal Democratic Republic of Ethiopia (FDRE), and a number of institutional changes effected at ministerial and regional levels. At federal level, a secretariat for the NCS had been established in the new Environmental Protection Authority (EPA), which was jointly responsible with the Environmental Planning Unit of the Ministry of Economic Development and Cooperation (MEDaC) for implementing the NCS. The environmental policy of the FDRE was officially adopted in April 1997 (see Box 1), and is currently used by regional governments as the basis for their environmental policies.

Box 1. Federal Environmental Policy

The overall goal of the federal environmental policy is (EPA and MEDaC, 1997:3):
"To improve and enhance the health and quality of life of all Ethiopians and promote sustainable social and economic development through the sound management and use of natural, human-made and cultural resources and the environment as a whole, so as to meet the needs of the present generation without compromising the ability of future generations to meet their own needs."

Specific objectives include:
- Ensuring that renewable natural resources are used in such a way that their regenerative and productive capacities are maintained and, where possible, enhanced. Where this capability is already impaired, the aim is to restore capacity through appropriate interventions;
- Incorporating environmental considerations in the planning and implementation of policies, programmes and projects;
- Ensuring the empowerment and participation of people and their organisations at all levels of environmental management activities;
- Raising public awareness and promoting understanding of the essential linkages between the environment and development.

The development of regional environmental policies

During its period of office the Transitional Government of Ethiopia (TGE) promoted regionalisation, giving each region the opportunity to develop their own conservation strategies through the Ministry of Natural Resources and Environmental Protection. The TGE and the United Nations Sudano Sahelian Office (UNSO) signed an agreement covering the provision of assistance to the enlarged regional strategy development programme, which was to be completed in April 1994 (ANRS, 1997).

A similar process was followed in both of the regions covered by our study. In 1992, the NCS office mobilised the regional planning offices, which sent out lots of people to help collect the information needed to develop conservation strategies. Regional task forces

composed of governmental organisations were established, and the regional conservation strategy (RCS) was developed on the basis of draft reports presented at regional conferences. The document produced at the workshop was submitted to the MEDaC, and later also used to develop the federal environmental policy.

However, alterations in policy and the changes brought about by the introduction of a new regional structure meant that work on the RCS was suspended until the third NCS conference in 1995. It has also been suggested that this delay was due to a desire to wait until the federal environmental policy was finalised.

The process in the SNNPR

In 1995, the director of the Conservation Strategy of Ethiopia (CSE) and a consultant from IUCN went to Awassa to help the regional council reactivate work on the regional environmental policy. After a one-day meeting attended by the heads of various bureaux, it was decided to establish a regional conservation strategy task force, composed of seventeen professionals from different government structures, and chaired by the vice president of the regional state. Its secretariat was based at BoPED, and the bureau head became secretary of the steering committee. Eighteen different areas of concern were identified, and a questionnaire was designed to collect regional-specific data on these issues. A four-volume RCS was then prepared, with volume I covering the resource base and problems, volume II focusing on conservation policy and strategy, volume III dealing with the institutional framework and operational arrangements, and volume IV outlining the action plan and investment programme.

Unfortunately there were a number of problems with the task force, which was severely hampered by lack of commitment from its members. A summary report on 'The status of the regional conservation strategy in the SNNPRS' remarked on: *"the lack of emphasis given to the work by the member bureaux, because it was regarded as extra work outside their action plans. To motivate the task force, T-shirts sent by the CSE were distributed to members"*.

In 1997, a three-day conference was called to discuss the draft RCS. Chaired by the president of the regional government, the conference was attended by about 120 people from various organisations, such as regional and zonal councils, representatives from the federal government, farmer representatives from various zones, heads and experts from regional and zonal sectoral offices, representatives from institutes of higher education, NGOs and religious leaders. Participants were given the opportunity to comment on the RCS in working groups and plenary sessions. Although documents had been sent some fifteen days before the workshop, some stakeholders reported that they had only had four days to read them and were therefore not in a position to comment fully on the proposals. Nonetheless, a number of issues were discussed, such as the need to establish a regional Environmental Protection Office, accountable to the regional council, to facilitate implementation. Consultants in the IUCN/CSE also

reviewed the document, and all comments were to be incorporated into the final version before its submission to the regional council for final approval. This process was still under way in March 2000.

Perceptions of the policy process in the SNNPR

The federal conservation policy is widely seen as the product of a top-down process, which is generally regarded as the direct result of Ethiopia having signed the UNCED conventions in 1992. Many actors at regional level think that it will be difficult to implement this federal environmental policy, and that a number of potential problems could have been avoided by involving local people in its formulation. They say "*we should not limit ourselves to policing regulations and rules*", but should also aim to educate and raise awareness by setting up village level environmental protection committees. The lack of any legal framework, and the fact that the mechanisms for implementing policy are weak and liable to be hijacked for political ends, are additional reasons why many stakeholders believe that it is essential to set up a regional agency to oversee the implementation of what is supposed to be a holistic, cross-sectoral policy.

Government officials, however, have high expectations of the regional conservation strategy, which will consist of a group of sectoral and cross-sectoral policies for the management of a wide range of natural resources. Covering both rural and urban areas, they are intended to provide a general framework for the future development of more specific environmental policies. Although each sectoral bureau is responsible for its own environmental activities, and for drawing up regulations or policies specific to its area, it has been recommended that a regional office be established to co-ordinate their efforts and facilitate work on cross-sectoral issues.

The process in Amhara State

In May 1994 a regional conservation taskforce of experts from twenty-eight different institutions in the region officially started work on developing the RCS. As responsibility for co-ordination shifted from the BoPED regional planning office to the regional BoA, the taskforce evolved into the Regional Environmental Co-ordinating Committee (RECC), composed of the heads of thirteen bureaux and chaired by the vice-president of the regional state. The RECC collected information from different zones and selected woredas, and presented its findings to its editorial board, which was chaired by the BoA. Using the NCS and the Ethiopian Forestry Action Programme (EFAP) documents as references, the board reviewed the various strategy documents and prepared a draft RCS.

The draft RCS, was reviewed during a regional EFAP workshop attended by a number of stakeholders, including farmer representatives. The draft RCS was then sent to experts for comment, and in November 1996 was further reviewed at a three-day workshop in Bahir Dar, where participants included professionals from regional and zonal sector offices, administrative councils, religious organisations, elders, and the NCS office and

ministries. The BoA secretariat incorporated the input from the workshop, and in July 1997 produced a final draft containing thirteen sectoral and twelve cross-sectoral policies and strategies. This was submitted to the regional council office for approval, which has been considerably delayed by the requirement for a clear separation between policy guidelines and strategies. The EPA is now helping to revise the document, which should be ready for implementation by June 2000. The plan is to establish a special office that will be responsible for implementation.

Perceptions of the policy process in Amhara State

Most of the informants from the BoPED felt that the environmental protection unit of MEDaC was largely responsible for instigating work on the RCS. The regional BoA was assigned responsibility for co-ordinating policy development, possibly because of the lack of interest shown by the head of BoPED at the time. Although high-ranking staff at BoPED believe that their bureau should have co-ordinated the process, their participation was limited to involvement in the taskforce, commenting on the draft document and attending the review workshop.

Stakeholders in Amhara State reported that while they do not feel involved in the development of the federal environmental policy, they do think that they have participated in formulating the RCS. They are of the opinion that the RCS was developed in a participatory manner, and that although it was initiated at federal level, using the NCS as a framework, the involvement of stakeholders from various levels has resulted in a policy that is well adapted to conditions in the region. The workshops for reviewing the RCS were generally seen as helpful and transparent, and although participants had different professional backgrounds, educational status and experience, they felt able to express their opinions freely. However, despite a common understanding of the environmental problems, suggestions for future actions revealed competition for scarce natural resources. If tree cutting is to be limited and manure used to maintain and improve soil fertility, what are people to use for fuel? The RCS will have to strike a balance between poverty alleviation and environmental protection.

Like their counterparts in SNNPR, stakeholders in Amhara State worry about how the RCS will be implemented and cross-sectoral issues addressed. In order to be effective, the RCS needs to be backed up by a set of related policies on land tenure, land use and population, and laws, rules and regulations that enhance the appropriate use and management of natural resources. As it stands, the regional councils are expected to set other relevant policies, allocate human resources, plan budgets and provide a framework for popularisation. BoPED favours a single agency that would be responsible for executing the RCS and managing the budget and human resources.

4 Extension strategy

Historical context

The current National Extension Intervention Programme has evolved out of the community development approach used in the 1950s, and the focus since the 1960s on modernising agriculture and increasing food production through a package approach. The timeline shown in Table 2 traces some of the interventions that have taken place over the last fifty years. The 'comprehensive package' approach was introduced in 1967 by projects such as Chillalo Agricultural Development Unit (CADU) and Wolaita Agricultural Development Unit (WADU), which were funded by the World Bank. This approach focused on high potential areas and relied on external inputs to improve agricultural productivity. It was succeeded by the minimum package programme approach (MPP) and the Peasant Agricultural Development Extension Project (PADEP), which used the Training & Visit (T&V) method of extension.

Table 2. History of interventions in agricultural extension in Ethiopia

1951	*1957-1961*	*1962-1967*	*1968-1975*
American Technical Mission "Point four" and FAO started projects in several sectors, including crops, livestock and forestry	*First five-year development Plan* -Community Development approach -Alemaya Agricultural College (AAC) in charge of agricultural research and extension	*Second five-year development plan* -MoA took over responsibility for extension from AAC -Institute of Agricultural Research established fertiliser trials with FAO	*Third five-year development plan* -First comprehensive package programme -CADU 1967-1975 -WADU 1970-1982

1975-1978	*1981*	*1985-1993*	*1993*	*Since 1994*
-First Minimum Package Programme (MPP I) -Extension and Project Implementation Department (EPID) -Model farmer approach and pre-cooperative groups	MPP II Peasant associations & service cooperatives	-Peasant Agricultural Development Extension Project (PADEP) -Contact-follow farmer approach -Modified T&V system	Start SG 2000 – Extension Management and Training (EMT) plots, using a package approach	National Extension Intervention Programme (NEIP) adopting T&V and SG 2000 approaches; PADETS, and on-farm trials

Current extension strategy is determined by the National Extension Intervention Programme (NEIP), which aims to ensure food self-sufficiency, while the present approach, known as the Participatory Demonstration and Extension Training System (PADETS), combines elements of the previous T & V system with the Sasakawa Global 2000 approach[1].

National Extension Intervention Programme

According to Habtemariam (1997), the National Extension Intervention Programme was an emergency strategy of the government, developed on the basis of the experience of SG 2000 in Ethiopia, which had attracted the attention of policy makers through a well-organised publicity campaign. National research and extension institutions were involved in SG 2000 activities, which started in 1993 with an assessment of the technologies available in the country. Technology packages for maize and wheat were then developed and tested with 160 farmers in woredas in Oromia and the Southern regions, in demonstrations by agricultural officers and farmers working with material and technical support from SG 2000. In 1994, the field programme broadened to include sorghum and teff, and the number of farmers involved rose to 1600. The good weather in 1995 produced impressive yields, persuading the government that self-sufficiency in food could be achieved with the SG 2000 approach, which was adopted that year as the foundation for NEIP. The intention was for NEIP to cover 35,000 farmers, while SG 2000 continued to work with 3500 producers.

In 1996 the government organised a national workshop in Jimma, which was to become known as the 'Jimma Conference'. Chaired by the Prime Minister, and attended by many people from council offices, the bureau of agriculture, SG 2000 officials and others, the main theme of the workshop was how to expand the SG 2000 experience within the regular regional extension programmes. It was decided that they should be scaled up, with a tenfold increase in demonstrations over the next year, targeting 350,000 farmers who would start an NEIP demonstration plot. It was subsequently decided that the regions would have to expand their agricultural extension demonstration programmes to include other packages, such as livestock, high value crops and post harvest packages.

According to an extension expert in the regional Bureau of Agriculture, the main strength of the NEIP or PADETS approach is that *"it considers three basic elements of an extension system, namely a package of technologies, credit and communication".* These three elements involve many actors, such as the input co-ordination unit, the co-operative office, state council offices, credit institutions and private sector suppliers of inputs such as fertilisers, seeds and agro-chemicals. One observer, however, commented that PADETS is an excellent extension system in principle, but that it has been distorted by the manner in which it has been implemented.

[1] The SG 2000 programme is a collaboration between the Sasakawa Africa Association and the Carter Centre's Global 2000. Operative in over ten African countries, this programme aims to bring 'science-based crop production methods to the small farms of sub-Saharan Africa' by disseminating proven technologies. SG 2000 emphasises the primary role of mineral fertilisers in improving soil fertility and agricultural production.

Credit

There was considerable debate over the best way to set up a credit system for the programme. Farmers cannot borrow directly from banks because they have no conventional form of collateral, so it was decided that the regional council offices would secure credit from the banks and channel it into the co-operatives at zonal and woreda council offices. Farmers involved in the extension programme would then receive credit in kind (seeds, mineral fertilisers or other agro-chemicals) from the agricultural offices through these or co-operatives and repay the loan after the harvest. However, there are various problems with this system: the agricultural offices and co-operatives are pressed for timely repayments by the regional and zonal offices, which use their yearly budgets as collateral for the bank loans, while farmers are pushing to have their debts waived after bad harvests so that they do not have to sell livestock to pay off their loans. Development agents and extension workers also complain that being responsible for collecting repayments compromises their role as extension educators, as farmers are unwilling to take their advice after they have been pressured to repay their loans.

The councils and PAs act as intermediaries between input suppliers and credit institutions on the one hand, and woreda agricultural offices and farmers on the other, laying down regulations and offering services to borrowers, suppliers and lenders.

The process in the SNNPR

The SG 2000 project started in the SNNPR in 1994/1995, when senior SG 2000 staff came to Awassa to discuss a programme of demonstrations with the Bureau of Agriculture. A co-ordinator was assigned to run demonstrations in three zones, and selected 'hard working' farmers were provided with a package of mineral fertilisers and improved maize seed, for which they were expected to pay 75% of the cost.

The expanded extension programme was implemented in other areas after the decision to scale NEIP up to national level, and the first results were highly promising, with maize production increasing so dramatically in 1997 that it created marketing problems. The range of packages has increased since 1997, and now includes crops such as coffee, pulses, oil crops and vegetables; livestock improvement initiatives such as fattening programmes and raising small ruminants and poultry; and soil and water conservation and agro-forestry.

Perceptions of the policy process

Extension policy was widely seen as very important, in that it has enabled a large number of farmers to increase their productivity and achieve a measure of food security. While most respondents saw the extension strategy as a federal policy that filtered down to regional level, some did feel that their contributions to national and regional workshops and training fora had had an impact, resulting in a more participatory approach to policy implementation.

However, there was some debate over the fact that the present extension strategy promotes the intensive use of mineral fertilisers and improved seed as the only means of achieving food self-sufficiency. While some agreed with this line, others within the BoA, BoPED and NGOs argued that agricultural development can only be sustained by combining organic and inorganic fertilisers. They claimed that the present extension approach is very similar to the WADU programme of the 1970s, which also emphasised the use of external inputs, and pointed out that the technologies it promoted were not sustained for long.

A number of staff at zonal level thought that the extension package put too much emphasis on improving crop production, while ignoring animal husbandry, forestry and soil and water conservation. They suggested that the immediate objective of achieving food self-sufficiency should not compete with long-term sustainable development, but that the two should be mutually supportive. However, the majority of respondents felt that although most packages were initially developed for crop production, more attention is now being paid to livestock, and the poultry improvement package has become very popular in many places.

Participants were also divided over the extension methodology used to implement PADETS. While some supported the combination of input supply and on-farm training as the only way of achieving national food self-sufficiency, others highlighted the problems caused by crop failure and the difficulties subsequently experienced by farmers unable to repay their loans.

Opinions also differed on the implementation of the extension strategy. While some officials at regional level saw the increase in the number of farmers involved in the extension package as a positive development, others at zonal level, especially the development agents, viewed it as a burden imposed on them in the form of a quota to fulfil. One development agent in Kindo Koisha woreda said *"it is not the number of farmers which brings increased production and thereby food self-sufficiency in the country, but …the efficiency of the system which would contribute to that end."*

The preliminary research findings were presented at a meeting attended by policy makers, experts, extension workers, researchers, instructors and farmers, sparking a heated debate about the implementation of the extension strategy. While extension experts at regional level focused on the number of farmers involved, the packages that have been developed and the increased productivity they have effected, farmers complained vociferously about the coercive measures used to disseminate the packages, and their problems with the credit system. Farmers were also unhappy about having to buy the full package, even when they do not need the seed.

Participants eventually concluded that there is an information gap between regional extension experts and extension workers at woreda and zonal levels, which could be

addressed by establishing a better feedback system. It was also proposed that agricultural offices at all levels should establish an efficient participatory monitoring and evaluation system, and that regional experts should carry out an impact assessment of PADETS.

The process in Amhara State

When SG 2000 started carrying out field demonstrations in 1994, the only other extension system in Amhara State was a modified version of the T&V approach. By 1995 there were 8000 demonstration sites in the region, and the federal government started implementing the SG 2000 approach the following year, when PADETS was adopted as the principal extension system. In 1996, the regional government started demonstration plots with 8000 new farmers, and the following year it took up the challenge of attaining the tenfold increase in the number of demonstration plots that had been agreed at the Jimma conference.

While stakeholders in ANRS were aware that the extension strategy was initially developed at national level, they believed it was adopted so enthusiastically by the regional government because it was expected to increase food production. Extension experts in the regional BoA reported that the strategy had been adapted to include packages and various approaches that made it more appropriate to local conditions. There are currently about seventy-five packages in Amhara State, of which the most popular and successful among both farmers and extension agents is the bee-keeping package in Meket woreda.

A number of NGOs have worked to make the extension system genuinely participatory, particularly SOS Sahel, which piloted participatory extension planning (PEP) with the Meket Development Programme. PEP started in 1996, with a meeting between NGO and government officials, whose joint objective was to strengthen the PADETS initiative. Methodologically, PEP differs from PADETS in that it encourages farmers to participate more in decision-making and monitoring processes. Staff in the zonal and woreda agricultural offices now seem convinced that PEP has improved the PADETS approach, as it enables participants to learn from their experiences and involves the community in planning activities, selecting packages, and evaluating the process. Farmers welcome the way that PEP allows them to identify and prioritise their problems, plan actions and evaluate the process and outputs, making their own decisions while the technicians act as advisors and facilitators.

Perception of the policy process

The BoA feels that they have been influencing the implementation of the extension policy. This not only had the practical result of making it more effective, but also made people feel that they had some input into and control over the strategy. There were even claims that the SG 2000 programme uses the regional extension system that developed from the T&V approach, simply adding on practical tools such as

demonstrations. The criticism is that despite its name, the Participatory Demonstration and Training System (PADETS) initially ignored the importance of a group approach.

However, farmers and staff at the woreda agricultural office also recalled the immense pressure they were under in the early days of PADETS, when packages were rigidly imposed and farmers were obliged to take both fertiliser and improved seeds, regardless of whether they needed or could afford to pay for them. Farmers reported that although the package systems are improving, they still have problems repaying their loans in the event of crop failure or loss of livestock, and some of them also said that they are indirectly pressured to accept certain packages. Many farmers also complained that they were pushed to apply for additional credit, even though they were unable to pay off their initial loan because their crops had failed.

Meanwhile, agricultural staff was struggling to reach seemingly impossible demonstration targets: *"After the Jimma conference, we were told to increase tenfold the number of demonstrations. After trying our best we reported to the zonal office that we were unable to fulfil the 'quota'. But they said that was not a quota but an indicative plan, which relieved us from tension."*

The administrative councils in Amhara State organise the input supply by arranging credit for farmers with three major private suppliers of fertiliser, agro-chemicals and improved seeds. One extension expert in the BoA observed that the system is made more stressful by the fact that council offices at all levels are ultimately indebted to the bank, and that this colours the way that credit and repayments are organised. According to the results of one survey, the guarantee signed by regional governments (which entails 20% of the annual budget in Amhara State) has enabled service co-operatives to provide fertiliser on credit to peasant associations, but forcing private sector traders out of the market. It has been suggested that the regional authorities should wind down their involvement in the credit system, that the relationship between banks and traders should be strengthened, and that peasant associations and farmer groups could be made creditworthy using innovative approaches to collateral and mutual guarantees (UNDP and FAO, 1997).

5 Discussion and conclusions

In this section we will compare the way that the environmental policy and extension strategies were formulated and implemented, and analyse regional differences between the two.

Environmental policy

A wide range of national and international actors were involved in developing a federal environmental policy, working for over eight years to bring the National Conservation Strategy (NCS) to the point when, in 1997, it was ready for implementation. However, involvement of stakeholders in the formulation of the NCS has been restricted mainly to workshops. Local 'participation' took place at zonal and woreda level through Local Level Participatory Planning and Action (LLPPA), but this actually refers to farmers providing labour for soil and water conservation activities, rather than using their knowledge to make recommendations for future strategies.

Many more people and organisations have been involved in formulating regional conservation strategies. The general consensus among stakeholders seemed to be that the regional conservation policy has been formulated in a participatory manner, and that the involvement of people at various levels has produced a comprehensive strategy document appropriate to the resource base in the region. However, although many believed that the institutional aspects of the strategy are well conceived, there was widespread concern about how it will be implemented without a specific co-ordinating body and the human and financial resources associated with such an organisation. Considerable policy support will be required to implement an environmental policy that addresses a number of cross-sectoral issues. Formulation is behind schedule in both regions, although a little more progress has been made in Amhara State. Some stakeholders claimed that the delay is actually due to the fact that the regional government has marginalized the conservation policy.

Extension policy

The agricultural bureaux have primary responsibility for extension strategy, and have adopted an approach pioneered by the international NGO SG 2000, which was subsequently accepted by the government. Although this extension policy was planned

at federal level in a short space of time and without much consultation, it was quickly implemented and very well received by regional governments. However, while it has been successful in so far as it has involved a large number of farmers, there has been considerable controversy over the extent of their participation in the process, the technical packages, the approach to disseminating new technologies, the credit system and conditions of payment, and the annual targets for demonstration plots.

In the case examined here, neither farmers nor extension agents and other professionals at lower administrative levels were invited to participate in the formulation of the extension strategy. This may well have contributed to the unrealistic targets set for extension workers, the development of sometimes inappropriate technology packages, and problems with the credit system. Extension workers felt overstretched and unable to fulfil their 'quotas', which resulted in a rather aggressive and coercive implementation of the system. Farmers had to deal with repayment problems that created a climate of resentment and distrust between them and the extension agents that were supposedly there to support them. Most of the experts in the agricultural offices, especially at zonal and woreda levels, complained that the council offices have focused more on the number of farmers involved in the extension package programmes than on the quality of output. Nonetheless, most technicians conceded that the package system has improved as a result of several evaluation workshops involving farmers and other stakeholders. In order to be more effective and sustainable, PADETS should be monitored and evaluated at all levels, and continuously adapted to meet the real needs of farmers. As part of this process, the results of annual evaluation workshops should be used as the basis for planning activities for the following year.

Our research indicated that extension staff in Amhara State feels more in control of policy implementation than those in SNNPR. Senior staff in the BoA in ANRS said that after modifying the T&V system, moving on to PADETS seemed a logical continuation of what they were already doing, and that they were able to use their experience to adapt PADETS to conditions in the region. Woreda and zonal extension agents were given further impetus by their active involvement in developing the Participatory Extension Planning methodology (PEP) for the Meket Development Programme in conjunction with SOS Sahel, which is currently responsible for implementing the PEP approach in the woreda.

Bottom-up policy initiatives

A number of initiatives at woreda level in the northern region of Amhara State had an influence on the development of regional policies. One case, relating to land user rights in Meket woreda, arose from work that SOS Sahel was doing with the Meket Development Programme in the area, using 'Participatory Land Use Planning and Implementation' (PLUPI) as a methodology for land resource management. Groups of farmers working with the programme agreed to manage certain degraded areas on

condition that user rights were prolonged, and a procedure was then developed in consultation with the agricultural and council offices. Many farmers started preparing to manage the degraded areas, applied for user rights, and began work as soon as licences from the woreda government were issued through the agricultural offices. After a workshop to discuss their experiences, agricultural office staff were trained so that they could start a pilot programme in two other woredas, and the three schemes were subsequently presented at a regional workshop. The regional government was so impressed by this initiative that it drew up guidelines for the allocation of mountainous lands to farmers willing to manage them, which have been adopted as regional policy.

Conclusions

This study focused on the processes used to formulate and implement environmental and extension policies in Ethiopia. Both were initiated at federal level and filtered down to regional, zonal and woreda levels (see Table 3). Although the Regional Conservation Strategy has not yet been finalised, it is expected by those involved to have a major impact on soil fertility management when it is implemented. The extension strategy, which was formulated very rapidly, has been implemented with considerable support from the State, and its emphasis on the use of mineral fertilisers and other external inputs has had a significant impact on soil fertility. However, it is also controversial as it is not popular with some farmers and may not be sustainable in the long term because of the cost of inputs and neglect of improving soil organic matter.

As Garret and Islam (1998) point out, policymaking can be facilitated by particular political conditions. The national extension strategy is a case in point, as the government's desire to achieve national food self-sufficiency, combined with their belief in the SG 2000 approach, fuelled the rapid formulation and prompt implementation of the programme. For its part, SG 2000 had benefited from good rains in the early years of the campaign, well-organised publicity, and the support of a wide range of key individuals and institutions at national and international level. The combination of all these factors resulted in the NGO not only being noticed, but also having its findings acknowledged and acted upon by decision makers.

Our research revealed that a number of policies are closely interlinked, and highlighted the need for an institutional framework that will enable policy makers to take full account of the issues and procedures related to the area in which they are working. Stakeholders frequently reported that appropriate land tenure, land use and population policies are major factors in the effective implementation of environmental policy and long-term improvements in the management of soil fertility. Land tenure policy is particularly pertinent to soil fertility management, as farmers are often unable or unwilling to invest in long-term improvements because the prevailing practice of land re-allocation by peasant associations leaves them with no security of tenure (Data 1998, Worku 1998).

Table 3. Comparison of the extension and environmental policies

Characteristic	*Environmental Policy*	*Extension Strategy*
Origin of policy	Federal level	Federal level
Links to national policy priorities	Moderate	Close
Support from Federal level	Moderate	Strong
Focus	Cross-sectoral	Mainly single sector, BoA
Time taken for policy formulation process	Very long	Very rapid
Involvement of stakeholders in formulation	Limited at federal level, more at regional level	Very limited
Degree of farmer participation	Involved as source of information and occasional comments	Not involved in formulation, sometimes subject to rather coercive implementation
Involvement of stakeholders in implementation	Not yet implemented	More involvement
Implementation requirements	Complex, not well understood	Relatively easy to handle and extend
Emphasis on monitoring	Not yet implemented	Heavy, with yearly evaluation workshops
Role of NGOs	Involved in taking the initiative, then tailing off	Initiative by one NGO, with good follow up
Role of private sector	Not yet known	Input supply

Stakeholders have been involved in formulating the national environmental policy and regional conservation strategies in a variety of ways. Their contributions ranged from information provision to direct involvement in framing policy statements. However, the most common fora for participation were workshops organised to publicise and gather comments on draft policy documents, meetings which were designed to provide information rather than improve capacity for participatory decision-making.

The policy formulation process has also failed to take proper account of the potential value of information generated by research. Little effort was made in either region to commission studies or seek out the opinions of researchers on the issues under

consideration by policy makers. We would also recommend that opportunities for stakeholders to participate in the process should be built into the framework of policy formulation. As Scoones and Toulmin (1999) pointed out, policy makers should regard farmers as allies, and actively seek out their knowledge, ideas and perceptions on more sustainable land use and development.

In Meket woreda, there have been very positive results from the collaboration between NGOs and local level officials and extension staff, from which has developed a methodology that enables farmers to participate in the decision making process. The emergence of bottom-up policy initiatives on rural development and natural resource management indicates that regional governments are willing to consider such measures, provided that they are constructive, and systematic efforts are now being made at other levels to foster such initiatives.

During the course of this study it became clear that although participatory policy approaches are regarded as beneficial, much still needs to be done before stakeholders will be able routinely to participate in the formulation and implementation of policies. Decision makers need to shake off their sense of political superiority and their tendency to ignore the broader context of their particular field, and to acknowledge that others are also capable of making a valuable contribution to the process. Policy makers and stakeholders alike need to change their perceptions of how policies are developed and implemented, and approach the process as a consensual and circular procedure that involves every agency, individual and social group with a stake in how the system evolves, rather than seeing it as a linear process over which government has exclusive control.

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ISSN 1560-3520