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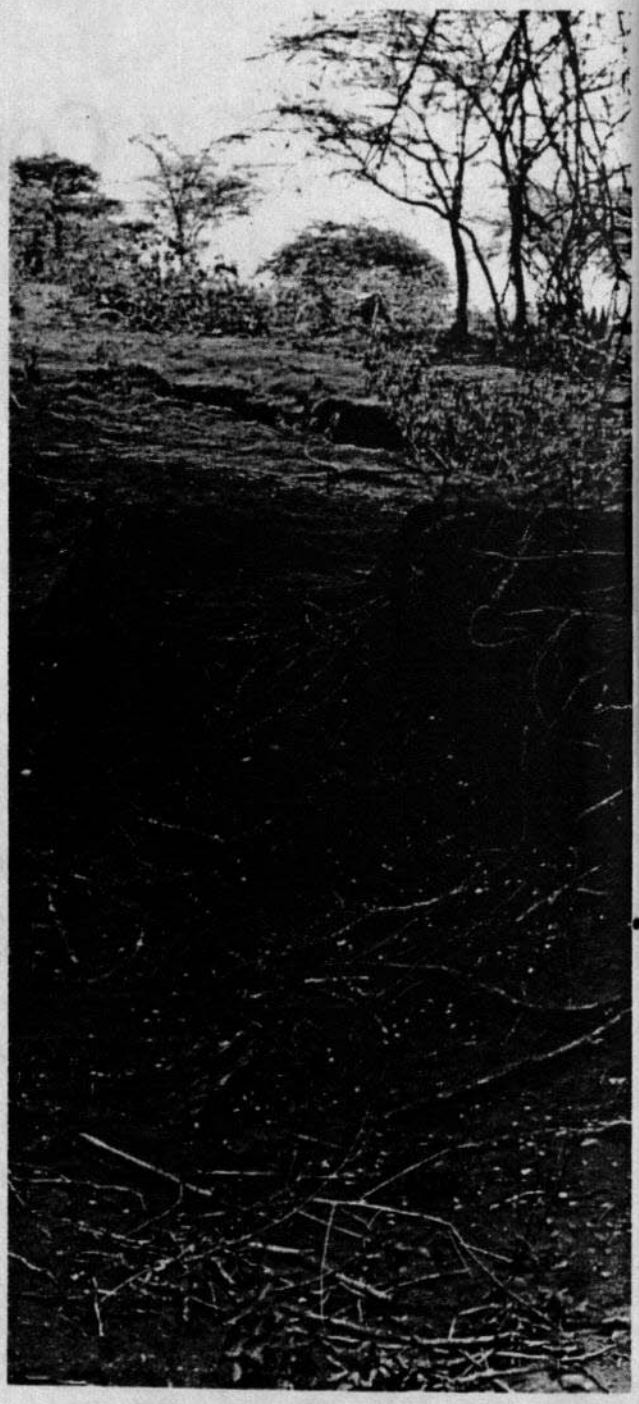
RAMBLINGS ON SOIL CONSERVATION

An essay from Kenya.

Wilhelm Östberg

Roots exposed on an eroded slope. Gullies are developing. Photo Ann Eriksson/SIDA's photo archives.



Preface

This is a book of rambling reflections on the cultural and social contexts of soil conservation work in Kenya.

In 1984 I had participated in a socio-economic study of soil conservation in Kenya. We found the soil conservation programme working quite well in some areas, less so in others. Suggestions for improvements were made. Reports were produced and are available. This little book, however is, of a different nature. This time I will let what some farmers said mingle with my own experiences from ethnographic research and participation in rural life in Kenya.

Research findings are incorporated into the text, but so is also what I have just happened to witness. Readers looking for a cost/benefit analysis of soil conservation or the exact percentage of farmers planting fodder trees, will not find much here. But those who want to listen to what farmers say about soil conservation, and the changing life in rural Kenya, or to contemplate the question of whether feasting or conserving soil is more important, may hopefully find something.

The outline of the book is as follows:

Plans for soil conservation campaigns, however well thought out, mingle locally with various social processes and economic facts. Things often do not turn out the way they were planned — thank goodness! The introduction sets the tone for this theme. A prayer meeting in a local church is described.

a 4K Club. And so on. The promoters of soil conservation do not so much have to convince "conservative" farmers, as compete with other well-wishers all preaching equally worthy causes. The mother and child care nurses, the rural youth coordinators, the missionaries, field staff of various aid organizations, they all represent phenomena that both prevent and encourage farmers to conserve their fields. If farmers were to follow all the advice they are subjected to, rural Kenya would be paralysed.

Soil conservation certainly is important — but so are many other things. Some farmers will choose to use their time and money on something other than soil conservation. This may hurt conservationists, but that is the way things are.

Agricultural staff promoting soil conservation are drawn into things that were never on the syllabus at college. I was talking to an agricultural officer in a Rift Valley district. He comes from Central Province, and was a relative newcomer to the area. He found people lousy farmers and generally an unreliable bunch of idlers. He suggested, however, a soil conservation campaign directly after harvest, when there is nothing much to do. He was not particularly hopeful as to what would come out of the campaign. "People here seem to be mostly interested in drinking..."

This agricultural officer is far from unique in his opinions on the virtues of the people in this district. On the very same morning, prayers had been said in a local church for the following categories of fellow-creatures, who were painstakingly noted on a black-board:

"1) Men who sin
2) Women telling lies
3) Drunkards
4) Ladies who cheat
5) Sick people
6) Travellers
7) People generally, etc."

The catechist leading the morning prayers thus had some ideas in common with the agricultural officer, but I am sure he would not have supported a soil conservation campaign directly after harvest. This time of the year is too hot for hard maual labour. But more important, it is the feasting season in this part of the country.[1] Christians and sinners, model

[1] For ethnographic information on the importance of this particular time of the year for a Kalenjin people in Rift Valley see Moore (1985:56).

farmers and drunkards, all look forward to December as a time to relax. Circumcision ceremonies are held, marriages are contracted. The Christmas receptions succeed each other, and there is much visiting. How many Swedes would cherish the idea of spending Midsummer filling in their tax-return forms? Kalenjin farmers would be no more enthusiastic to deny themselves the long days and nights of ceremonies and feasting during this period to dig *fanya-juu* terraces.

Because of the many different good projects that farmers may join to improve their lives, and the many nice things they also wish to find time for, there will never exist a linear relationship between soil conservation funds available and number of terraces constructed. (There will, however, always be a need for social scientists explaining these mysteries and suggesting ways of overcoming them!)

But before approaching the problems, let us enjoy the success of the soil conservation programme by visiting Kitui district in Eastern province.

Chapter 2

Kitui - the success story of soil conservation

Kitui district is dry and hot. In the long dry season, the ground is bare and whirlwinds sweep through the area, carrying with them loose sandy soils. In some years the rains fail altogether.

In the highland parts of Kitui, tens of thousands of farms have been conserved during the last ten years. Vast areas are, however, range lands with only thorn bushes and a few scattered trees.

People practise a mixed smallholder rain-fed agriculture. They intercrop maize or millet or sorghum with pulses. Castor, fruits, cassava and cotton are widely grown. Yields are low, about three bags of grain to the acre. Sisal is planted to mark boundaries, and to some extent, to check soil erosion. For many households it is also a source of cash. Livestock is important, particularly in the lowlands.

In all urban areas, at army barracks, at large-scale farms, at building sites, in hotels and restaurants — everywhere one finds people from Kitui. The difficult conditions for agriculture, and population pressure in the highland parts of the district, forces them away from their home area. "Reliance on wage employment for at least some period in a man's career has become universal" (O'Leary 1984:78). Decade after decade, this remains the same. In most parts of the district, more than half of the households have at least one male member permanently away working

somewhere else. Their remittances home keep the families going.[1] The money is often used to hire labour to dig *fanya-juu* terraces, but also to educate the children, establish a shop, or whatever else may make the household less dependent of the area's climatic vagaries.

Women are responsible for most of the agricultural work. They are increasingly involved in marketing agricultural produce and in informal sector activities. They produce sisal baskets for sale. They draw water, they herd cattle for others. They prepare food and beer for sale. There is no end to their efforts to find money — for food, to pay school fees, to hire casual labour to help with the farm work, to pay development contributions, and to buy paraffin, tea, sugar...

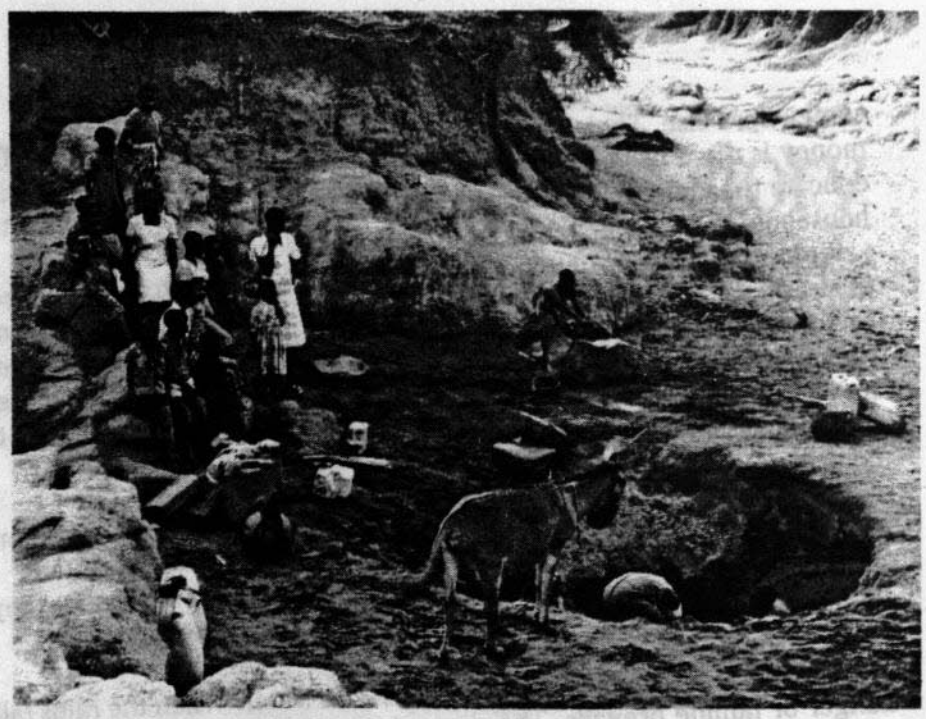
Virtually all households sell some of the crops they produce. For many of them, this is an indication of their precarious situation more than anything else. Later in the year when their stores become empty they will be forced to buy grain. But now the price will have increased.

The desperate problem everywhere in Kitui is water. When the rains fail, hunger or famine prevails. The rivers dry up soon after the rains have stopped. People dig deep into the dry river beds for water. Families may use anything between two and ten hours a day only to collect household water, and still be very short of it. There are areas where, during the dry season, one member of the family is constantly engaged in fetching water. She will leave before dawn, reaching the place where water can be found many hours later. A few hours' rest, and then the long journey back.[2] One may even occasionally see men driving the donkeys loaded with jerry-cans of water. The problem is so serious that the traditional division of labour has become blurred.

Despite the gravity of the situation, a pleasant serenity prevails at the water-hole in the evening. A young girl stands in the bottom of the hole, collecting the brownish water in a half gourd, passing it on to another girl, who pours the water into a plastic jerry-can. The donkey waits in the shade of a fig tree for the water cans to be carried home. Water is being poured into containers, there is small-talk, children play making furrows

[1] There are, however, also observations of lowered yields on the fields belonging to migrant workers (O'Leary 1984:77, 102). O'Keefe (1983:304) has drawn attention to how labour migration produces severe constraints on agricultural production — and increases the risk of soil erosion.

[2] Akong'a (1981:13f.) provide details of the hardships women of Kanziko location have to endure during the dry season to draw water. He describes how in the past different wells were used during alternative dry seasons to allow wells not in use to replenish their original water table. "This was a mechanism by which indiscriminate exploitation or harvest of underground water was avoided." This principle of communal cooperation over a scarce resource can no longer be applied.



A pleasant serenity prevails as women and children gather at the water-hole in the evening. A donkey waits to be loaded as the jerry-cans are filled with water.

in the dry river beds for the water that was carelessly poured. The heat of the day has passed, and people rest before returning home.

A rope around the jerry-can, then across the forehead, and twenty litres are carried home on one's back.

At home, the men sit by their houses, watching the evening drawing in, waiting for the evening meal.

It is the young women, the daughters-in-law, who cook. The workload of women is only relieved by other women, by daughters-in-law. They take responsibility for seeing that the family gets food, the cows are milked, water and firewood is fetched, and that the land is ready for planting when the rains arrive. And children help by fetching water, looking after their young siblings, splitting sisal, grinding flour, running to the Center for salt and other small items.

It is dark as the evening meal is served. A child holds out a basin for us to wash our hands, and carefully pours out a glass of water from the river.

Farming under uncertain conditions, desperate water problems, reliance on some sort of income from outside to make things go round — this is the Kitui situation. The rest of this chapter deals with the district's experiences of soil conservation in this precarious environment.

We commence with a brief historical sketch. Some local opinions on different conservation methods are hinted at before the self-help groups are introduced. These are responsible for most of the conservation work carried out in the district. Two individual farmers, who have put rather exceptional efforts into conserving their lands, are portrayed. We ask a chairperson of a self-help group why some people do nothing at all, despite the success for soil conservation in Kitui. The concluding pages of the chapter explain how soil conservation was introduced to the area, and provide an analysis of why the programme has been so well received.

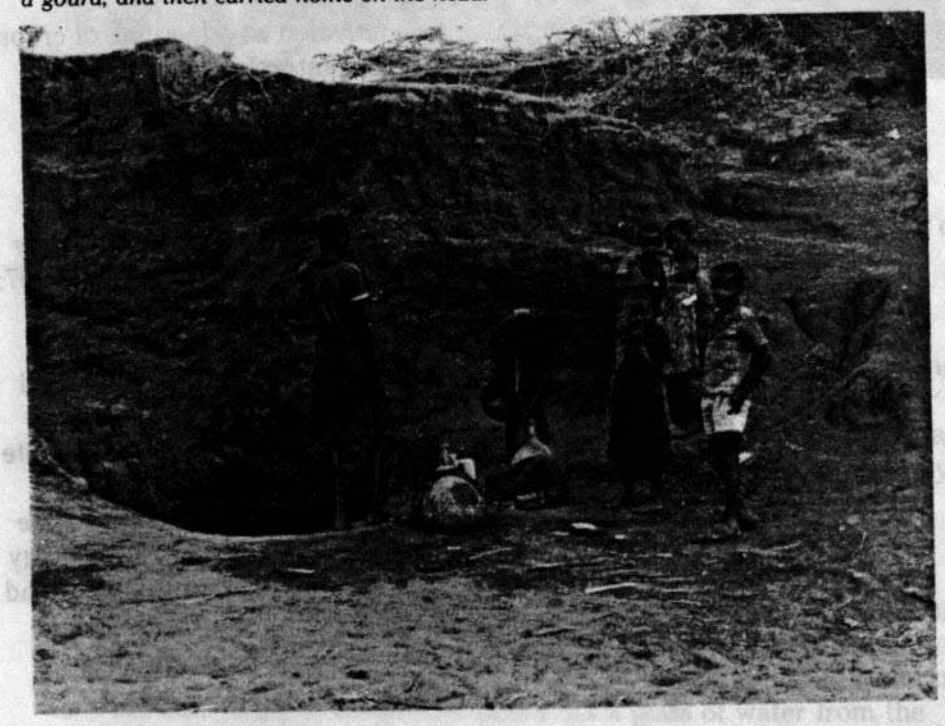
In the 19th Century, the Kitui Akamba cultivated a wide range of crops. Hillsides were cultivated and different crops interplanted (Dundas 1913:499). Lindblom observed in 1911—12 that cultivated fields were periodically fallowed. Fields along the banks of rivers were irrigated (1920:501—3). Cattle and goats were, in the words of the first British commissioner to take up residence in Ukambani, "abundant". He considered the central parts of the district "as being somewhat thickly populated" and a large area was under cultivation (Ainsworth 1896:407; cf. also O'Leary 1984:33). But the greater part of the district was uninhabited and overgrown with thorn bush (Dundas op.cit. p. 480).

The Kenya Land Commission in 1932 documented considerable soil erosion and by the end of World War II, competition over land in the highland parts of the district was a definite fact. The emerging rural elite began to press their poorer clansmen out to the drier areas (Mutiso 1977a:11f.). The administration embarked on an improvement scheme aimed at creating sustainable agriculture in the highlands. The strategy rested on conserving the soil and preserving water supplies. Homestead land was to be enclosed by sisal hedges and the farmers told to plant napier grass to prevent run-off. Terracing of maize fields without machinery is said to have been quite succesful (Huxley 1960:177;

Kimambo 1970:93). By 1950 rotational grazing was introduced all over the district (O'Leary 1984:45). Enforced communal work was however required for dam building, bunding, and for forestation of hill tops. Forced labour was of course resented. In fact resentment became so strong that it was one of the reasons why migrant workers left the district in large numbers after the war. Young men preferred to sell their labour rather than be forced to contribute it free (O'Leary 1984:43). Despite mounting political pressure local conservation projects were, however, sometimes successful. In Migwani a dam holding 25 million gallons of water was constructed by the local women organized by one elderly woman. She provided a visiting writer with the following epitome:

> "There was the Migwani Youth League; they were defying the Government. They were disobeying the chiefs. Even our chief here, Kasina, who is wise and strong. So I called upon the women to build the dam, and they came, and we built it. And now everyone is glad" (Huxley 1960:278).

The brownish, but precious water from deep down the water-hole is carefully poured into a gourd, and then carried home on the head.



In neighbouring Machakos district, the pressu
pronounced, soil erosion rampant but also the c
In 1938 a few thousand Kamba had marched on
subsequently camped for six weeks in Nairobi t
compulsory destocking (Rosberg & Nottingham
1975:232f.; Tignor 1976:348f.). Again in 1946, M
said to have thrown themselves in the path of th
land (Huxley 1960:189; Baker 1983:19). But her
were eventually terraced by local self-help grou
healed. Streams appeared in valleys where they
long time (Huxley 1960:191).

But as Independence approached, the opposi
restrictions about cultivation on the hill tops we
Kitui the administration had to register "increasi
the steep hillsides in the Central Division, Muto
(O'Leary 1984:48). Conservation work stood still
Progressive farmers who found conservation w
themselves were the exception.

When the current soil conservation programm
in the mid 70's, it was thus operating in an area
techniques had been tried out for quite some ti
business people were now particularly quick to
usually hired labour to do the work (O'Leary 1

According to statistics, Kitui district is sparsely
growing pressure on land in the villages. It is dif
the livestock. People who do not own cattle no
the crop residues after harvest to cattle-owners
stalks until later in the season, when it is even
animals, and their waste will then earn them mo
traditional precaution against erosion, that the
standing in the fields, has been abandoned.

The soil conservation project tries to introdu
grass as livestock feed and to stabilize the terrac
splendid idea, but few bulking plots have as ye
Meanwhile the farmers plant root crops in the
edges, where they do well. But the embankme
harvest, and there is a risk that they never bec

This is one of the issues where the agricultur
farmers disagree. The farmers want to cultivate

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position more militant.
Government House and
protest against
1966:164—174; Munro
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84:107).

populated. But there is a
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Some farmers save the
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been established.
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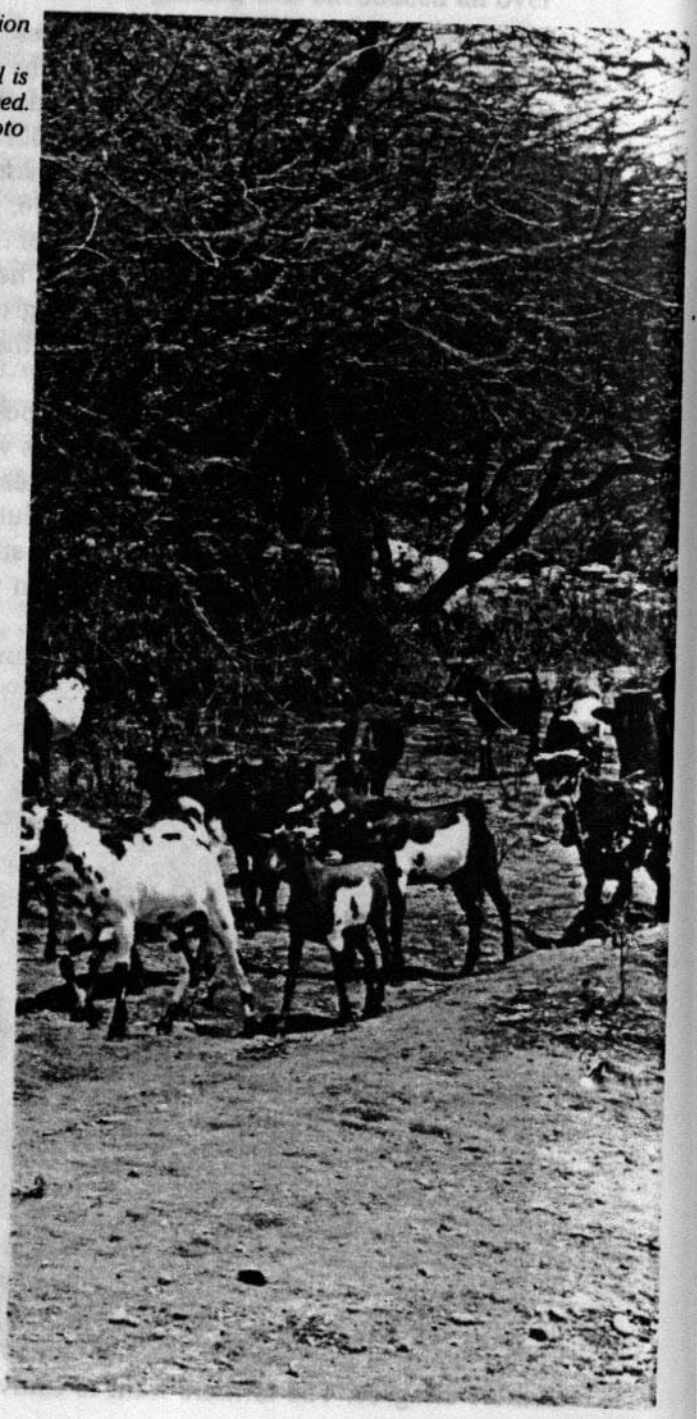
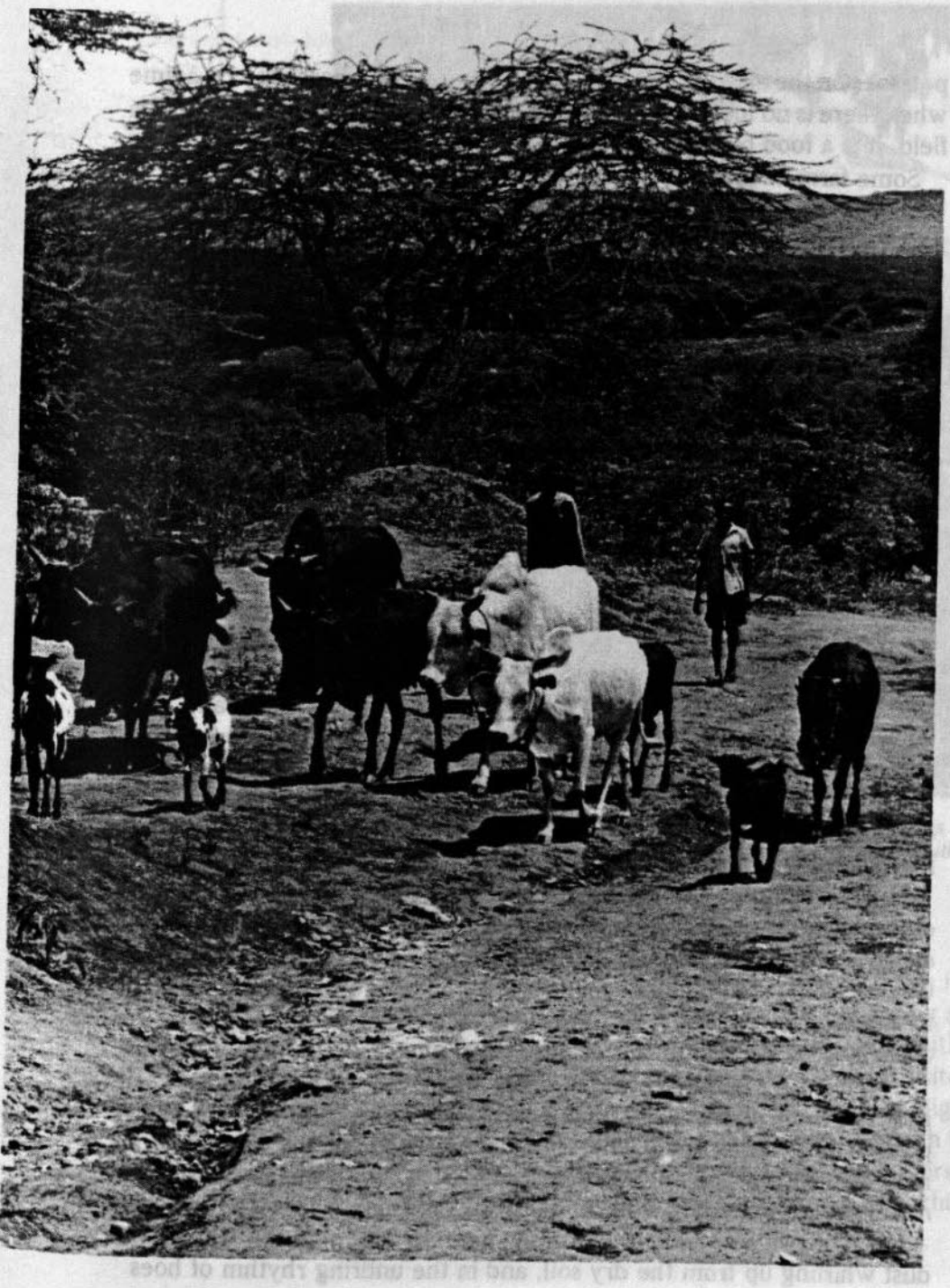
l staff and many Kitui
cassava and sweet

After the dry season no vegetation remains on the ground. As the rains arrive the unprotected soil is washed away at frightening speed. Photo Ann Eriksson/SIDA's photo archives.





potatoes on the embankments. "This is dry country. There may be a time when there is no food, and then it is good to have cassava standing in the field. It is a food bank."

Some farmers also feared that grass planted on the terraces would harbour both rats and snakes. This apart, I did not in Kitui come across much criticism of the recommended conservation practices. But conservation tended to be understood as only terraces and cutoff drains. This is common in other parts of the country too. Many farmers throughout the country find terracing much too demanding, and say that the constructions take up too much land. They further complain that tree planting encourages graminivorous birds, and that long grass fallows encourage ticks carrying cattle diseases. These observations are based on how the farmers make use of their environment, and are as valid as the conservationists' cause. Farmers growing bulrush millet, for instance, will not be happy with abundant vegetation which attracts quelea quelea birds.

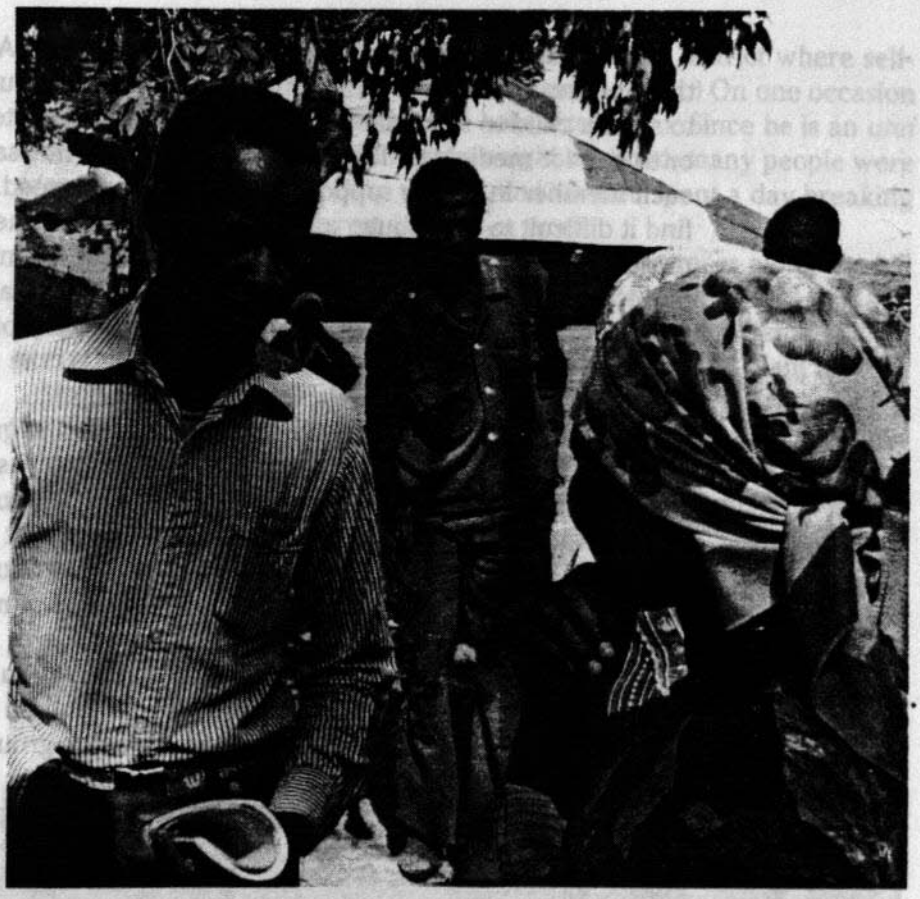
Self-help groups proliferate in Kanyaa village, Mwingi division. One of the groups is a co-operative for producing and marketing sisal baskets, another is a Catholic church group. But the six other groups of the village are the typical Kamba self-help groups, *mwethya*. They clear land, dig latrines, build schools, raise money, make bricks, but first and foremost they dig *fanya-juu* terraces.

Kanyaa village and neighbouring Ngongoni both have a resident conservation assistant, employed by the Arid and Semi-Arid Lands Development Programme.

Kanyaa villagers and their assistant chief, show remarkable enthusiasm for conservation work. The figures for meters of terraces constructed are impressive. But what struck me was the fact that I, on two occasions during one season, saw farmers uprooting standing crops to have self-help groups dig terraces in their fields. In Kanyaa soil conservation seemed to run counter to all normal planning.

Digging terraces and cut off drains is a type of work well suited to self-help groups. The members line up with their hoes, each with his or her portion of the ditch to dig, and as the work gets going, the efforts of your neighbour urges you on. It is heavy work, but also a social occasion. A *mwethya* group singing while in full swing digging terraces is a fun event.

Once or twice a week, the morning hours are spent in this way, in the dust whirling up from the dry soil, and in the untiring rhythm of hoes striking the ground.



After a meeting where a self-help group has been discussing plans for the near future, Conservation Assistant Stephen Muvengei makes arrangements with a member to come and allign terraces in her fields.

Then the group members, mostly women, sit down in the shade to rest, deciding where to meet next time. While working along on the half-ready sisal baskets which the women always carry with them, one inquires about absent members. Does Mbithi have visitors at home? Did Roda have to take a sick child to the dispensary in Migwani?

Members are expected to pay five shillings for each time they fail to attend, or come another day to make up for the meters of terraces they failed to do. If someone stays away from the group, this is immediately noticed.

The absent member accumulates another debt too. As one rests after the morning's work, it is common that money is contributed. This may be to send a child to secondary school, to buy roofing material for a house, or to pay for medicines. The group acts as an informal saving club where each member in turn is supported for a particular need. Some members find it difficult to contribute, and fail to turn up at the meetings more and more often. The debt increases. "It is particularly the men who do not find the contributions to the group particularly important", the chairperson Veronica Kavana tells us. The male secretary of the group nods approval. "They need money for beer as well." At the drinking place noone inquires about the debt to the mwethya-group.

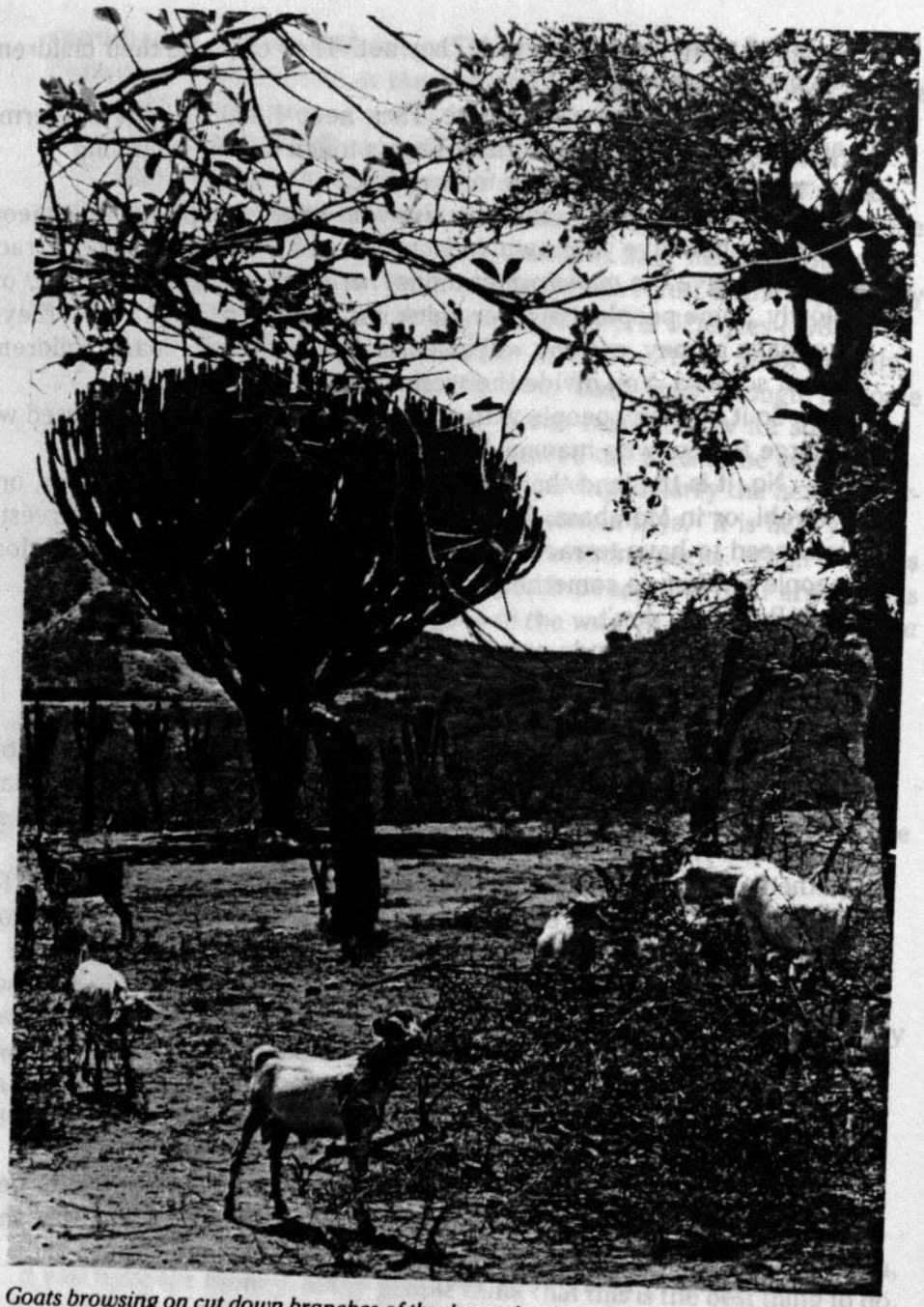
In the mid-day heat, as the work is completed, the group decides where to meet next. It is now, before the members rush home to meet the children coming from school, and to check if someone has taken the livestock to the river to be watered, that development planning in Kanyaa village actually takes place. Someone is told to inform Stephen Muvengei, the conservation assistant, where they will meet next, so that he can peg out the contour lines in good time.

It is that simple: the self-help groups, a conservation assistant who does not live far away in a center somewhere, and an interested and dedicated sub-chief who encourages the *mwethya*-groups — this is what is behind the impressive figures for meters of terraces constructed that Stephen Muvengei is able to report regularly to his supervisors. Eventually the figures reach the soil conservation office in the Ministry of Agriculture and Livestock Development in Nairobi, where they will form the basis for the many favourable comments that have been written on the Kenyan soil conservation programme.[1]

It is, then, the self-help groups who are behind the widespread success of soil conservation in Kanyaa. There are also individual farmers who have embarked on large-scale private conservation projects.

Sailu Kathulio is a man in his 60's who in about four years has transformed a very badly eroded and rocky hillside into what is becoming a profitable farm. It started in 1980 when the Ministry of Agriculture constructed a cutoff drain across the slope. (This was when soil conservation funds were still used in Kitui district to dig drains on individual farms — as is the normal practice in some other parts of the

[1] While Kitui district remains a success for soil conservation, it also includes areas where the project has had no impact at all (cf. Mutiso 1977:18, 22).



Goats browsing on cut down branches of the desert date tree (Balanites Aegyptiaca). *In the background an euphorbia tree.*

The processes of erosion in Kanyaa are well understood by the farmers.[1] They link land degradation in their area to two particular, and fairly recent events. Population increase forced people to clear forests which had previously acted as windbreaks and helped both to conserve moisture and prevent flooding. The introduction of the plough increased the cultivated areas further, and as ploughed fields are often cultivated flat, the land is left open to rills which in the loose soils of Kanyaa easily develop into gullying.

Traditionally people used trash lines in the fields. The trash lines in combination with long fallows gave rise to a system of sustained production. This is at least the opinion of people in Kanyaa. They also add that manure was not used in the fields, as it is today. Manure was not needed, they claim, since new fields could be cleared when fertility decreased. Instead the manure was saved for the tobacco which was cultivated in abandoned cattle enclosures. Another local conservation practise was to dig pits in areas where erosion occurs. The pits were subsequently filled up by moving soil. Waste material was thrown into the pits and bananas or fruit trees planted in the mulch/soil-mix.

The first notable erosion problems, that people in Kanyaa have a distinct memory of, date back to the late 1940's. A long drought hit the country, all vegetation died off and the ground was left barren. "This was the time you could hear people say 'I am dying with money', because there was nothing to buy. Everything was finished."[2] Many people left the area, some died. When the rains finally came, soil was carried away from the barren fields.

This made the government initiate a soil conservation campaign. Some of the work was pushed by demanding enforced village labour, which of course led to resentment. Grazing restrictions were equally unpopular. But many farmers also just wanted to stay away from government programmes, regardless of whether they were good or bad. "People those days wanted to manage their own affairs", an old man pointed out — maybe also with an address to the recent effusive enthusiasm in Kitui district for self-help groups.

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[1] Thom reports similar findings from a socio-economic survey carried out in both Kitui and Machakos districts (1978:79—80). A survey in six locations of Machakos district by Mbithi and Kayongo-Male contains an interesting difference between the observations of the causes of soil erosion made by the researches and the interviewed farmers, who stated that "ploughing down slope" was a cause of erosion, yet this is not practised in the area. The researchers assume that the response echoes extension advise rather than actual observation (1978:104—105).

[2] This fate apparently again came to people's minds in the 1980—81 famine in Kitui district. Akong'a reports how it was named *nikwangete*, I die when I possess (money), "because of the extreme pain people experienced in looking for food to buy" (1982:27).

In the mid-50's an agriculturalist was posted to the area, who apparently got on quite well with many farmers. He made some he way with conservation work. One still comes across occasional gra bunds from this period when walking through the area. Sisal was a planted widely. Now the sisal poles stand out against the horizon everywhere in Kanyaa.

Some families have terraces that were dug in the 1970's, and the have been improved in the recent upsurge of conservation work. T channels have been desilted and made deeper. In fact they often a small dams where water accumulates and infiltrates. Bananas and trees are planted in these basins, and livestock can be watered the

The present drive is the result of two events: land adjudication an government soil conservation campaign.

In Kanyaa land registration commenced in August 1980. Some far had made a conscious effort to have terraces made and trees plant fields they hoped to be allocated when the surveyors arrived. Soil conservation was presented as a proof of occupancy. As the adjudic process in the village is now closing, many farmers invest in conservation work. With title deeds to their plots they feel the wor pays.

In the aftermath of adjudication, land is presently being bought u somewhat better-off farmers, and by people with urban incomes. As increse their holdings the land is developed. From a soil conservati point of view this is an advantage, but it does also increase the alre pronounced social differentiation in Kanyaa. About 20 families own only about half an acre of land, and had to rent fields to survive. B contrast there were families owning 20 acres, or more. This polaris is characteristic of changes taking place in other parts of highland too. (Mutiso 1977b:8ff.; O'Leary 1984:91, 121f.)

Erosion is sharply visible in Kanyaa. When the rains hit down on unprotected ground, soil is washed away at a frightening speed. An can see this. It is in striking contrast to some other parts of the cou where soil erosion is such a gradual process that a motivated and attentive observer may be needed. In Kanyaa everyone knows of t problem, and understands its basic processes. Here terracing is a dire productive agricultural technique.

Failed harvests are common in Kitui district. When crops dry up everywhere else conserved lands may at least produce something! Moisture is conserved in the terraces and the crops stand a chance

A carefully terraced field on almost level ground. The soils of Kitui are erosive and investments in land improvements pay. In the dry climate it is important that moisture is retained in the fields, and terraces help the water to infiltrate.
Photo Ann Eriksson/SIDA's photo archives.

Planting maize in terraces at Kanyaa village. When the rains fail and crops dry u conserved lands may still produce something. Terraces offer some security.

surviving. People notice this, and in an area where you often have to staple food, you will do a lot to cut these expenses. This is an impo reason why conservation is readily accepted in Kitui district.

The fact that the previous year's crops may not last until the new harvest is secured, is particularly painfully felt by the women. When crops fail the families depend in the first instance on what the women able to make from selling sisal fibres or the baskets they make from or baobab fibres. (In Kanyaa many women earned between 40 and

shillings a week during the dry season in this way.) Husbands working in urban areas send home what they can afford. Livestock, or land may have to be sold. After that the possibilities of finding money to buy food are in most cases exhausted.

Farming is becoming more and more intensive in the Kitui highlands — i.e., if the farmers are to be able to live from their lands. To produce a decent crop, manure is required. Some farmers prepare composts, a few use fertilizers. Farmers who drag manure and compost soil to their fields on wooden sledges, are ready to dig the terraces to make sure that the manure stays put, rather than being washed away in floods.

I asked a farmer who had made a terrace on almost flat ground, if terracing was really needed on this particular piece of land. "Yes", she answered with a glint in her eye, "water moves downwards even on a slight slope". True, the soils *are* erosive here. Many farmers confirmed that terracing paid even on very insignificant slopes.

Terraces paid — this is what matters. Kanyaa can provide one more example to illustrate this. Along the river, people farm with less concern for conservation. Here moisture was naturally retained. The farmers could almost always count on being able to produce a harvest in the river fields. This led them to put in less effort. The farms are approaching the river banks and in the long run there is a definite risk that parts of the fields will collapse into the river. For this reason it may be as important to have protective structures here as on the slopes.

This reasoning did not impress the farmers. Terracing may result in the river fields becoming waterlogged, and then the yields will decrease instead of improving, I was told. The farmers were not thinking in terms of saving land, as conservationists do, but were considering how conservation affects soil fertility.[1]

Farming in Kitui district is a much more risky undertaking than in many other parts of the country. The farmers who struggle to produce a harvest here, year after year, do not find the work required to dig *fanya juu*-terraces too demanding. This is the simple reason why the soil conservation programme has been well received. In a very precarious situation it offers some security.

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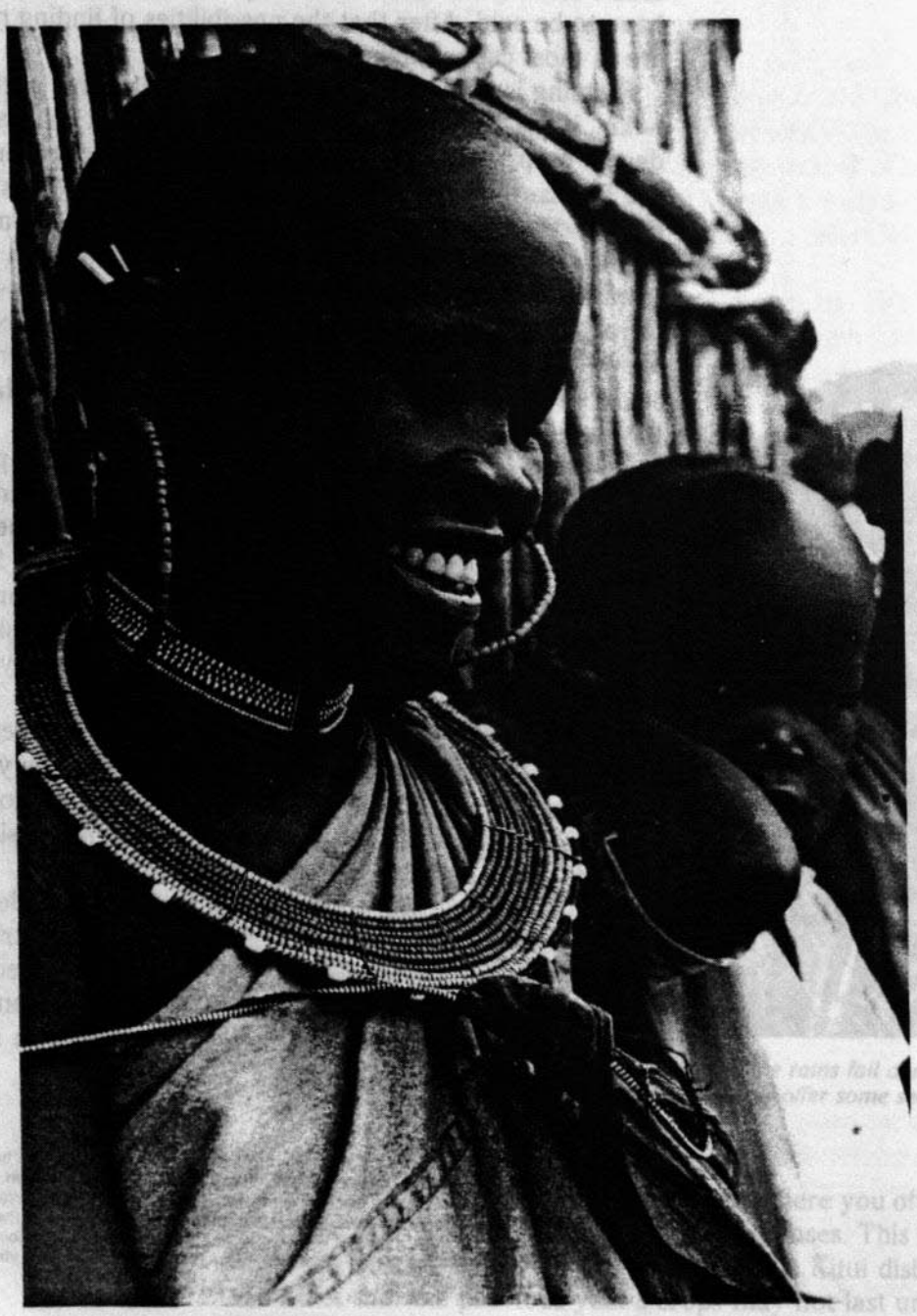
[1] It is easy to find examples showing that soil conservation paid in particular cases, but difficult to prove it generally. Very little quantitative data is available on the relations between erosion, yields, and financial returns (Shaxson 1986:669). Two internal attempts to appraise the economic benefits to farmers of soil conservation have been made within the Kenyan soil conservation programme. According to these, the farmers' investments are repaid by the value of increased yields as early as the first year (Hedfors, 1981; Holmberg 1985). The first study, was based on farmers' estimated yields. In the second study attempts to measure yields were thwarted by abnormal weather conditions.



Rift Valley. For young mothers, tied down with farm work and household obligations, a meeting with the women group may provide a welcome break in the daily routine.

Chapter 3

Informal groups in soil conservation

— In Kenya women do most of the farm work.
— Kenya has become internationally known for her successful women groups.
— Soil conservation work is well suited to be carried out by work groups.

The reasoning appears obvious. To conserve Kenya the soil conversation programme should court the women groups. There is a lot of truth in this, but it is also an over-simplification.

First complication: under the label "women groups" are found modest sewing-circles, successful commercial enterprises, and experienced (though not exclusively female) soil conservation groups. We shall give examples of how different the roles of women groups are in three different areas of Kenya. Then we shall attempt a few statements on the interrelations between informal groups and the planners. We shall consider to what extent these groups are useful vehicles for carrying the soil conservation message.

Many of the women groups in RIFT VALLEY's Kalenjin areas had a modest start. In some cases they later developed into well-organized small enterprises or savings clubs. They started with supposedly typical "women activities" like sewing, farming, or nutrition classes. They produced decorated gourds, table cloths, children's clothes, baskets etc. These were sold locally, often to members of the group, and at agricultural shows in a nearby town. Only rarely did their products reach the national market.

The women usually meet once a week for a couple of hours. Members who fail to attend, without a valid reason, are fined five shillings to the common purse. During the meetings the women are busy with their various handicrafts. They often also practise traditional dances. It is rather common that they compose songs praising development and the President. Succesful groups entertain at national celebrations in their districts, or when a politician or other prominent person visits[1]. The church groups practise hymns. They may listen to a lecture by the local health staff on child care or on the necessity of having pit latrines. They may also visit someone's home to look at improvements, because "we like to see people coming up. The host can be given something (seeds or tea and sugar would be a typical "something") because she has come up".

The groups often cultivate small fields of their own. The harvest is sold to raise funds for the group. They may also undertake to do farm work together to earn money for their group.

If an elderly woman belongs to the group, and has difficulty in managing her fields, the group may help. The members will meet at her home with their hoes, or they will use the group's money to hire someone. Group members in temporary need of assistance can count on support from the group — as they can from neighbours generally. Old and new types of mutual assistance blend with each other.

The members hope to receive something from their group. It may be improvements like a water tank, or improved housing, but also contributions to school fees for their children, or certified seeds, or just sugar, flour or oil. As a group develops, it is common that the economic motive grows stronger. They will ask for support from the government and also try to organize a fund-raising meeting. Their aim is then invariably to try to start a profit generating enterprise. They often hope to start a shop, but may aim at purchasing a pick-up van, a tractor, or even a large-scale farm (cf. Komma 1984:153.).

[1] This is a source of pride to the groups but also of some resentment. While enjoying the opportunity to show off their talents and skills, they are often critical of the way the administration treats them, taking their services for granted.

Most of the groups had 30—40 members, which compared to the number of women in their respective areas was small. There is no doubt that many men discourage their wives from participating. They do not want them to "waste time". When listening to how a (male) Community Development Assistant — whose work largely consists of coordinating the women groups of his area — describes their work, one cannot immediately understand why men find women groups threatening. According to this CDA, what the women learn is:

" — to keep their homes clean, and their gardens well tended.

— to welcome visitors, and to be social.

— to speak in a good manner to their husbands, and not say bitter words.

— to keep hens."

Apart from this, the group may also be useful to its members in providing them with soap and salt, the CDA adds. He had thought of a way to reduce opposition. The free hand tools for soil conservation work could be distributed among the members of women groups at a public meeting, "so that all may see that there is a profit to joining the women groups. Men who have refused their wives to participate will then regret it, when these return home from the meeting empty-handed."

This is a far cry from the work of the more efficient women groups who take initiatives to have a local dispensary constructed, or start a poultry cooperative, or run a maize mill or a village shop.

Though several of the more than a dozen women groups in Rift Valley that we came to know about, did run their own *shamba*, none of them had become involved in soil conservation.[1] There is no apparent reason why they shouldn't. The farm they often cultivate together would present an ideal demonstration plot, as well as small-scale nursery. Agricultural staff in many other parts of the country have indeed made women groups into 'contact farmers' in the Ministry's 'training and visit'-system, but this was not the case here.

If we, however, consider this alternative from the point of view of the members of the groups, it may look less attractive. To mobilize agricultural labour in this part of the country is normally no major problem. There are traditional arrangements for how neighbours help one another. It is something else that the members hope to get from their women group. (We shall shortly elaborate on this point.)

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[1] The same experience was documented more systematically during a survey conducted among agricultural field staff in Northern division, Keiyo-Marakwet district (Östberg 1984b:27).

In CENTRAL PROVINCE as many as one third of all adult women participate in group activities (Maina Ahlberg 1983:12). The member mostly middle-aged or older women, and the group sizes vary betw 15 and 150, with 30 to 40 members being very common. And here encounters all the achievements that have made Kenya's women gr famous. Here are groups involved in farm development and poultr projects, running shops and small restaurants, owning lorries and ho Savings clubs provide their members with water tanks, money for childrens' school fees, or urban-type furniture. Welfare societies sup single mothers, destitute widows or evicted tenants. And there are church groups, green belts, culture groups, water societies, charcoa groups etc. Some of these groups have considerable capital at their disposal, others are modest neighbourhood groups. This all reflects conditions prevailing in Central province, where most households produce for the market and have at least one member engaged in farm activities. The profits are greater, but again, nowhere is the g of landless people as big as here. The women groups both exhibit t entrepreneurial drive of the area and mitigate the forlornness also encountered.

The women groups are not normally engaged in soil conservatio activities. Individual farmers manage this themselves. Many women cultivate plots that are too small to require the support of a work gr Soil conservation is often done with the help of hired labour. There generally, not much exchange of free farm labour in this part of th country. Now and then, however, the administration will initiate communal conservation activities (gully reclamation, afforestation e and self-help groups are then required to contribute.

We have already mentioned the *mwethya* groups of Kitui district in EASTERN PROVINCE. We shall now provide a more systematic pic

They are different from the informal neighbourhood help groups one finds in most parts of rural Kenya. They have a fixed members You either are, or are not, a member.

With *mwethya* you register and (ideally) pay a regular fee to the gr The group has its rules and its office-holders. The rules reflect the difficulties encountered when institutionalising neighbourhood help There are rules for penalizing members who do not pay their fees, or not turn up at meetings.

The government wants the groups to be registered, their office-bearers screened and listed in official records, and their funds audited

Photo Ann Eriksson/SIDA's photo archives.

under the pretext of safeguarding the farmers from being cheated. The effect is to further formalize the activities of the *mwethya* groups. There is at present a close link between the administration and the groups. They wish themselves to be seen as part of the "modern" Kenya, while at the same time of course hoping to extract benefits from the development network. The groups and the administration define each other as agents of development.

The *mwethya* groups are far from the only type of voluntary neighbourhood association found in rural Ukambani (cf. Mbithi et. al. 1977; O'Leary 1984:104), but they have come to dominate more and more. This is mainly because the administration and other organisations involved in rural development think they can "mobilize people". The soil conversation project has contributed. By giving out hand tools, wheelbarrows and seedlings in return for soil conversation work, it has pushed many of the *mwethya* groups in the direction of digging terraces rather than latrines or roads. The project is also contributing indirectly towards strengthening the formal structure of the groups, making them acceptable receivers of government aid. Both accounts and monthly reports are now often asked for.

Since many of the groups are well run, it is easy to get at least a superficial idea of how they work. One just asks for permission to read the notebooks where they record their activities. We thus find, for instance, that in one year the Kitulani *mwethya* had dug 76.5 *kikingi*. i.e. 573.75 meters of terraces. They also make bricks, plant cotton, clear paths and so on. Their most impressive achievement so far was when with the other *mwethya* groups of their area they helped construct a rock catchment dam, which now serves a large area with water. This was in 1983.

This *mwethya* group meets once a week, and in a year, about a dozen meetings will be used for soil conservation work.

The group was headed by a woman in her late 30's. The rest of the board consisted of three women and two men, all middle-aged with the exception of the male secretary who is in his 20's.

Between two-thirds and three-quarters of the members are women, most of them middle-aged. It has proved difficult to interest young men in the unpaid work in the self-help groups. "The gate is open for them, but they fear the work", sighs a member of the board of one of the groups. She felt that the strength of young men would be needed for some of the heavy work carried out by her group. But they were not interested. Besides, many young men in Ukambani have left the villages to look for jobs in town.

Mwethya is a traditional institution in Ukambani, but it has undergone change. The leadership is now elected, whereas in the old days an old man emerged as the spokesman of the group. An old woman would organize the work of the women. The groups were less formalized and usually had only three tasks to perform: clearing land for farming, harvesting millet, and building houses.

Mwethya certainly means work, but not only work. The activities of a group provide many occasions for celebration. If, for instance, the group is awarded tools by the Ministry of Agriculture and Livestock Development for its conservation work, this may be celebrated by feasting on goats's meat, chapati and rice. There will be druming, singing and dancing. A house erected, or a visit by the local Member of Parliament, would be equally valid reasons to slaughter.

The wide-spread notion of Kenya's successful women groups are shaped by spectacular achievements. The group that rehabilitated a big gully, the group that bought an estate and divided the land among its members, the group that went to Rome to sing for the Pope. The successes are there certainly but, some women groups are less genuine. They have been started by politicians or entrepreneurs, male as well as female, with the aim of milking the ample funds now available to support the activities of women groups (c.f. also Udvardy 1986:17—25). This may be one way for a village to add to the building fund of a local dispensary, or to get a new engine for a maize mill. Good as this may be, such "women groups" will probably not be of much use when it comes to digging diversion ditches.

Home economics officers and rural youth coordinators, who are to encourage soil conservation work carried out by voluntary groups, often find it difficult to keep "their" groups alive. They complain that they need to attend every meeting if any regular activities are to develop. The group members rarely take any initiative. Since soil conservation work according to official policy should be carried out by the farmers themselves, the officers have few attractions to offer the groups. Their colleagues in the Social Service department are better off, having some funds (though not for conservation purposes) to distribute among local groups. They are consequently able to list more groups in their annual reports.

Despite the many terraces constructed by Kitui's *mwethya*-groups, soil conservation is not actually on the agenda for many of Kenya's self-help groups. They have other objectives, one being to generate income for

the members. The women wish to start small enterprises (a maize mill, a shop, a petrol pump) which can be run by employees. The members themselves usually do not have the time. The groups are not coming into existence to carry out physical work as much as to earn profits. This keen interest in starting businesses may seem surprising to an outsider. The local markets are small, the allegations of misappropriation of funds very common (cf. for instance Holmqvist 1984:78), and many members wish to immediately share any profits generated, rather than consolidating the business (cf. Mwaniki 1986:221). The "income generating activities", which so strongly impress foreign donors, on closer scrutinity may actually be risky, and lead to disappointment. Women certainly need money — to pay school fees for their children, to buy medicines, clothes,

Laying the foundation for the social hall in Cheptongei village, Keiyo-Marakwet district. The local women group runs the project. At the far left is the manson hired by the group. The young man is employed in Nairobi and on leave in his home area. The third woman from the left is the group's chairperson, Mrs. Susana Kanda. The man to the right is Josaphat Chepkurui, chairman of the local farmers' association and also of the local catholic parish, and a strong supporter of the women group.

fertilizers, sugar, to pay contributions to the women group, to buy shoes, paraffin, tea. They are often involved in development activities (building a mother and child care clinic, new teachers' houses at the local school, a water pump for the village nursery, etc.) All these projects require contributions. Women also try to hire labour to help in the fields — not least when it comes to extra efforts like soil conservation.

Another reason why many women groups start business or building welfare institutions rather than working with mutual assistance activities like soil conservation, is that their leaders are often recruited from the "new elite". These 'new elite' may own shops, be teachers or politicians, or be married to men in this category. They can afford to hire farm labour for soil conservation work and will consequently not find this a particularly urgent task for their groups. Organizing a big fund-raising event for a new social hall will earn them more prestige and political influence.[1)]

Young mothers have little time for extra activities. Producing food for a growing family, caring for young children, helping the parents-in-law, and generally running the household, leaves little spare time. They may attend a meeting only to rush away after one or two hours to see to things at home. Terraces cannot be constructed in two hours! But a meeting will still provide a well-earned break: it offers companionship, inspiration and comfort. This is indeed an important reason why many women join the groups. They wish to do something different for a few hours.

Women who face difficulties at home are reassured and supported by the members of the group, who may also intervene on their behalf. Women groups also introduce members to new knowledge and experience, to the world outside their own village. Members may attend an adult literacy class, or learn how a bank account works or how to apply for permission to organize a public meeting. They may be invited to courses and conferences in other parts of the country. The women groups open a window to "modern" society. Not surprisingly, their members do not always give first priority to soil conservation. For some members this will be exactly what they do *not* want to become involved

[1)] Contrasting information comes from Mbeere (Eastern province). Here only seven out of 25 studied groups were led by middle-class women. But as some of the groups were gaining momentum and their successes became known, more middle-class women were attracted. There was call for increased membership fees — which would of course exclude poor women (Mwaniki 1986:213f.). The Mbeere groups were particularly important during peak agricultural periods. Labour was mobilized enabling members to increase the size of their fields, and to plant and weed at optimal times (ibid. p. 219).

in. They want to dress up in urban-type clothes for the meetings, and learn embroidery techniques rather than how to construct check-dams in gullies.

Women groups may be useful for many different things.

They have several features in common with the way neighbours traditionally help each other in rural Kenya. We shall now look at how the Kalenjin, the majority of Rift Valley's population, help each other and ask how useful this form of labour recruitment may be for soil conservation work.

The system is easily described. Someone who needs help with land preparation, weeding etc. will prepare food and/or beer and invite neighbours to come and help. In turn he or she will have to provide neighbourly help on other similar occasions, although it is not a matter of a strict one-to-one reciprocity. I have asked a good number of farmers in areas where this system of labour recruitment is common, if it could not be used for soil conservation work. The suggestion was met by disbelief, or surprise.[1)]

One can only speculate about why. My own belief is that conservation work here is not yet regarded as part of the normal upkeep of the family, towards which neighbours and relatives are prepared to lend a hand. That soil conservation funds have been used in Rift Valley for terracing of private farms also undermines people's interest in doing the work themselves.

One way to bridge the gap between routine agricultural tasks and soil conservation is to invite small groups of farmers to visit successful soil conservation areas. They will meet colleagues who have improved their yields. This is more convincing that listening to an agricultural instructor preaching soil conservation.

In the Kalenjin tradition there is surprisingly little that the community or kin group can do to influence someone cultivating a steep slope without conservation precautions. Normally people do not comment on their neighbours' work. "If you do not like me to cultivate here, please give me

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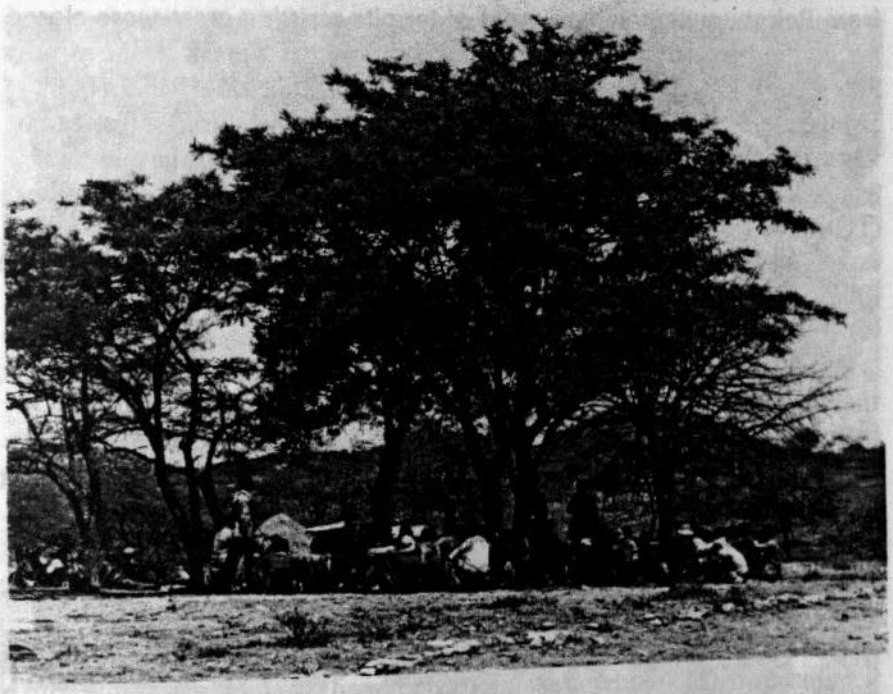
[1)] An interesting case is offered by the parts of the Kerio Valley where terracing is the normal agricultural practise (cf. Östberg 1984:10). Here men cooperate in informal work groups to arrange stone terraces. When the cultivation season starts, there is some competition to have *sogom* (as the work parties are called) early, to be prepared for the rains when they arrive.



In West Pokot district villagers meet to discuss tree planting activities.

a better piece of land." A farmer may abandon a steep field after a landslide, but on his own initiative rather than because of intervention from his neighbours.

When land is allocated to a young man about to marry, the local kin group will meet to discuss where the couple may settle. They consider the quality of the land. But neighbours do not meet to criticize faulty cultivation methods. Other behaviour which threatens the local community (theft, adultery, fights, border disputes, etc) results in neighbourhood meetings, but not poor management of land. In Kalenjin society one does not interfere with other people's affairs. If your neighbours are cultivating land above your own fields in such a manner that excess water floods your own land, you may point this out to them. You may persuade them to do something about it, but you can rarely

force them.[1] In adjudicated areas the land owner's independence is even more pronounced.

Communal planning of grazing areas during the dry season is reported from Pokot country, where areas of termite-resisting grass were closed for grazing except during droughts and in the dry season of the year. Fines were imposed for those who trespassed (Schneider 1959:155). Similarily, whole groups among the Bantu-speaking Kuria of Tanzania were expelled from their home area on the pretext that they had accumulated livestock without concern for environmental protection (Tobisson 1986:214). The concern to conserve grazing did not seem to have consequences for soil conservation in the Pokot case however. The Pokot were "unmoved by arguments that they should protect the land for posterity" (Schneider 1959:156).

If someone's cows break into a neighbour's fields destroying the crops, there will be claims for compensation. If someone diverts water away from one of the furrows in the Kerio Valley, so that it does not reach crops waiting to be irrigated, there is likely to be a case. Why then is it more difficult to demand compensation if someone cultivates in a manner which causes difficulties for his neighbours? I believe, because there is no precedent. There has always been sufficient land for all to be able to support their families.

From time to time difficulties were certainly encountered. Seeds were washed away in floods or seedlings damaged by soil movements. But seeds may be re-planted, and when a field became unsuitable for cultivation, a new piece of land was cleared. This was the normal practise. If established crops were stolen or damaged, they had to be replaced lest the family should starve, and compensation was consequently demanded. Now that land is becoming scarce, mismanagement of land may well become an issue in neighbourhood

[1] Cosnow reports very similar attitudes from a settlement scheme among the Kipsigis (the numerically largest of the Kalenjin groups). The veterinary regulations stipulated that young bulls be castrated. While many plot-holders accepted this and took their bulls to be castrated, others avoided the veterinary staff thereby causing the value of the calves to fall. The plot-holders felt they could not do much about this. Likewize people who did not dip their cattle (another condition) went unreported, although they endangered their neighbours' stock (1968:70, 74). The ethnographic literature on the Kalenjin attest to these attitudes. Orchardson, who spent several decades in Kipsigis country, observed that a Kipsigis does not like being directed by others, and has no wish to direct others himself. "They are constitutionally loathe to interfere in any way... in another man's business" (1961:40). The Nandi are described by a sympathetic observer as "impatient of direction and reluctant to act in co-operation with their fellows" in mundane matters (Matson 1972:11). The last two authors earned their experiences while participating in a colonial set up, which may have influenced their observations. Similar attitudes are however also attested to by experienced anthropologists. Goldschmidt, analysing the socialization pattern among the Sebei, finds that it "reinforced a sense of independence and individuation". They were reluctant to accept group loyalty, recognition of responsible leadership, and subordination to authority (1976:354). The Pokot "do not show much deference to anyone" (Schneider 1959:146). Etc.

Planning for land rehabilitation. A school shamba is t
assistant chief of the area, the chairman of the local
forestry expert meet with the parents to discuss the

meetings. I know of no such cases so far. T
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neighbourhood help) a vehicle for conservation work. Indeed, if conservation in the form advocated by the project shall be practised by a majority of Kalenjin farmers, then *sogom* will have to be in the picture. This practise is known by different terms among the various Kalenjin peoples, but is of crucial importance everywhere. Among the Sebei for instance we are told that "no institution is so central to modern Sebei life as the *moyket*, the work party for which the payment is beer" (Goldschmidt 1976:156).

It is important that these neighbourhood gatherings should not be made into associations with officers, a charter, membership fees, and with external support. Small incentives like presents of tools may be alright, but if a benevolent administration or a foreign donor goes beyond that the Kalenjin concept of informal work groups may collapse. This fact also concurs with a general experience from reserch on self-help movements. Too much or too early assistance easily smothers local efforts (cf. Barkan 1984:122).

The Kalenjin work parties are efficient because they are *not* planned, but spontaneous and personal. People agree to work together as needs arise, and because of mutual responsibilities, not because this has been voted on in Parliament or agreed upon in annual negotiations between the Ministry of Agriculture and Livestock Development and a foreign aid agency.

We return to the question posed on the first page of this chapter. How useful may the self-help groups be to the soil conservation programme. We can conclude that this will depend on the circumstances. If one finds this a rather empty answer, I must object. This is at the heart of all developement efforts. Success in rural development lies in the understanding of the specific nature of local institutions such as *mwethya* and *sogom*. It is unbelievably common that the big agencies invest millions of shillings without first securing reliable information on a project's local setting.

Government staff usually find self-help groups marvellous — without reflection. "Groups" prove that the people of the area are co-operative. Group activities can be reported to superiors, showing that the agricultural instructors are efficient and in rapport with the people. Terraces dug by groups under the supervision of technical staff are easy to measure and to report, much easier than what is being done by individual farmers scattered in remote hills. Groups can be mobilized for the different campaigns suddenly demanded by Headquarters. Groups may also be used to put pressure on farmers who do not cooperate. (The

Soil Conservation Committees now formally established throughout the country take on this role — where they are actually operative.)

Foreign donors love groups. They feel much happier when supporting small groups of cooperating farmers planting trees together, than when politicians ask them to pay for conservation on large-scale private farms. Hence, the more groups reported, the better the chance that more external funds are awarded to the district, where they may be desperately needed to keep Agricultural Office vehicles on the road, to pay nursery staff — or whatever.

Groups may be fine for soil conservation, but in the eyes of the administration they are ideal for several other purposes too.

Overplanning may cause problems anywhere, not only in Kalenjin areas, as the following episode from Central Province is intended to illustrate. It may appear too sweet. To my own taste it is not, and as we eventually reach the last page of this publication, it will carry the weight of being the final argument.

A primary school headmaster in Kiambu district recalls how as a child he was told by his missionary teacher to bring water every day for a tree he had been instructed to plant when enrolled in the school. "I filled a small *mkebe* (a used tin) every morning as I passed a stream on my way to school, and then watered the tree at school. It grew up with me during all the years I spent at school, and I can still go there and meet my tree. Our teacher pointed out to us how we were maturing, as also our trees grew bigger. He awakened in us a respect for things growing. At the same time we got a nicely shaded school compound."[1]

To establish small nurseries and tree plantations at local schools is not so much a matter of providing wheel barrows and water tanks, as relying on the awareness and interest of teachers and their pupils. This attitude can be encouraged by soil conservation training, whereas funds and equipment may kill a school nursery. Water pipes get lost, the delivery of plastic tubes for the seedlings is delayed, and funds evaporate in the heat of campaigns for offices in the committee controlling the money from the Ministry.

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[1] Incidentally not only shaded school compounds. One day I am sitting with a half gourd of honey wine in an informal drinking place in a Kitui village. I remark to the elderly woman who runs the place that we are most comfortable in the shade of nice trees. These are a few *cassia siamea*, a tree typically used in soil conservation work, and I want to make use of the opportunity to find out how she came to plant them. "So you find them good", she answers. "they were planted several years ago, when my last-born was still at school. He was given the seedlings at school. He was very anxious about these trees. I do not know if they are any good, or not. He found them important, but I do not know." Myself, I certainly appreciated the shade. A school nursery may well have a contribution to make to the informal economy in rural Kenya.

Chapter 4

The Impact of the administration

When discussing self-help groups in soil conservation we touched on what development funds can do, and cannot do. This chapter will provide variations along that theme. But first of all an example showing that the Kenya Government means business with soil conservation.

On annual soil conservation days, President Daniel arap Moi leads enthusiastic local crowds in constructing check dams in spectacular gullies. Pictures from these events are distributed throughout the country so any conscientious, or ambitious, local adminstrators will know how important it is that conservation initiatives are reported from their areas. They hunt for extra funds to speed up the conservation work. They feel this to be the safest way to get things done. The visiting student of erosion problems and rehabilitation work is under pressure to direct outside support to their particular areas "so that we can help the President in his work to combat erosion".

The administration needs to be able to show results. I happened to be present in an area on the day of the visit of a member of the Permanent Presidential Commission on Soil Conservation and Afforestation. Publically, in front of local dignitaires, he did not hesitate to rebuke the District Commissioner for the poor results. (The DC is the highest ranking officer in the area, with some access to the power centers of the country,

and who may thus be in a position to retaliate). He compared the well conserved farm belonging to a local chief with the neighbouring land where maize was growing on a steep slope without the slightest precaution being taken to prevent land slides. He pointed out how he had not been met by an agricultural instructor in charge of a nursery he had visited. What had annoyed him even more was that he had not been able to discover any trace of competent management. "What very important duties is it, that the senior staff of this district has, which prevent them from making sure that there are enough agricultural experts present in an area which is so severly threatened by land degradation as this one is? What sort of priorities are made in the District Commissioner's office?"

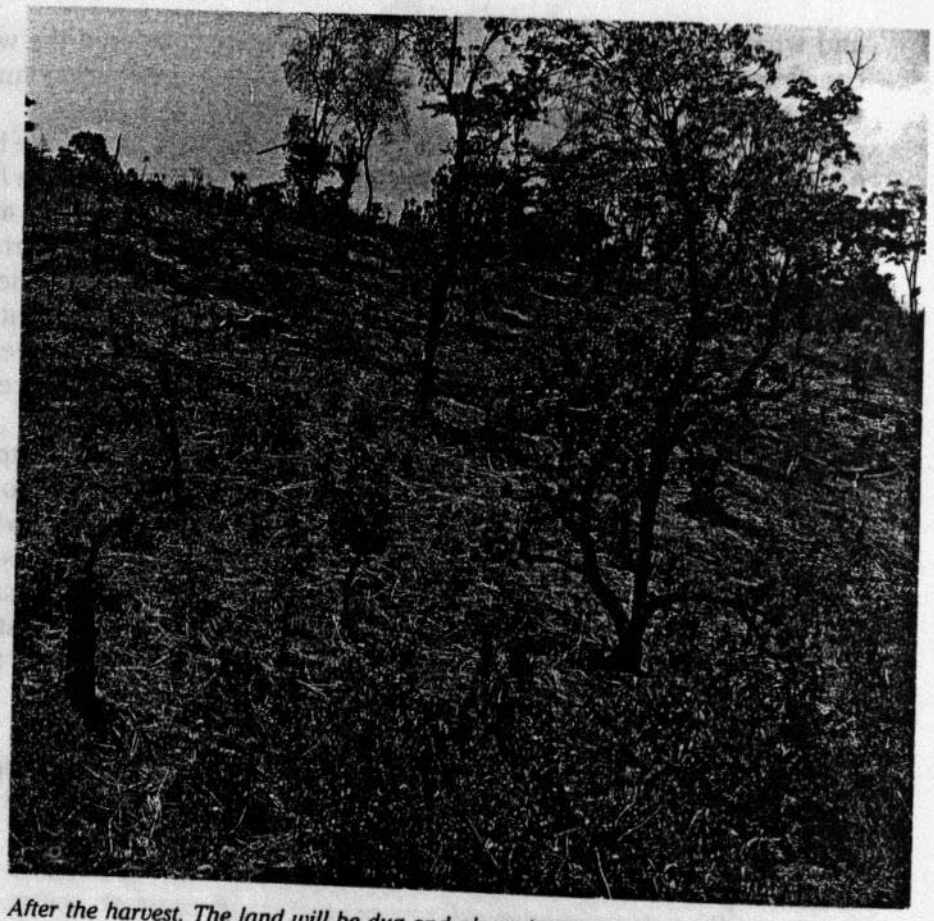
Soil conservation is no laughing matter.

The descent of the Presidential Commission on the area caused a total change of climate. What the important visitor — till then totally unknown in the area but now suddenly known to all and sundry by name — what he had said was quoted and discussed. People noticed that he had been shocked by the erosion threat. They sat up and took notice. He had made it clear that his criticism had been directed against the district administration and not its inhabitants. The respective merits and weaknesses of the agricultural staff were now all at once a topic to be debated. Soil conservation was the talk of the day at the market tea-houses.

The impact of this particular visit by a Nairobi official was amazing. The message that soil conservation is important has certainly reached far and wide in Kenya.

The enthusiasm of planners and extension staff may cause them to run too fast. This was evident in Koibarak and Sambirir in the Keiyo-Marakwet district.

Here the agricultural staff advised farmers to grow napier grass. This in areas where the demand for fodder grass is not yet felt. Here livestock can normally find pasture even during the dry season, and if napier grass is not cut regularly, as is likely here, it invades the cultivations posing more problems than it solves. The agricultural assistants also advocated terracing, which certainly is justified, but which farmers think requires too much labour. Although there is a need for conservation measures to safe-guard the future productivity of the area, most farmers had not experienced a drop in soil fertility serious enough to force them to embark on large-scale terracing. Consequently the project had made no real headway (Östberg 1984a:14f.). But trash lines and grass strips



After the harvest. The land will be dug and planted again — but not terraced. When the rains arrive soil is carried down the slope. Trees and bushes left standing in the field to some extent help to prevent erosion.

proved to do well.[1] Less labour-demanding measures may be more attractive to the farmers, and a better start for the soil conservation work. People may be fairly content with their mode of farming. If the agricultural advisors insist on new, labour-demanding measures, the

[1] Grass strips have experimentally been shown to perform as efficiently as graded terraces on a 10 per cent slope of deep well-drained clay nitisols (Tefara 1983:67). They offer many advantages. They are easy to install, require no labour input, eliminate the need for waterways, and they provide animal fodder. Narrow grass strips have been observed to form banks on 44% slopes in Narok and 55% slopes in Nandi districts (ibid. p. 95). Grass strips on steep slopes are also found in many other parts of the country.

etc. in their small demonstration plots is not enough. "Now that you have been given this piece of land for your work, you must also provide the seeds for it. This is now your land to work with", a contact farmer told her agricultural instructor in an uncompromising tone. "Where is my *zawadi* (reward)?"

The extension staff may face the same difficulty when trying to introduce conservation work. Some farmers readily hand over all managment responsibility. "This slope is for you now, *kabisa* (altogether), so that you can show how the work can be done". The implication is not that the farmer gives up ownership to that particular piece of land, but that the agricultural instructor is invited to show what an able person he or she is. "So that you will be remembered in the area."

Farmers enter into cooperation with the administration to extract benefits. Locally powerful people will moreover try to use their influence so that demonstrations and investments are directed towards their land. Less ambitious agricultural instructors, will choose the contact farmers among their personal associates, alienating those who do not wish to "waste time". In either case the result will tend to be the same, that resources concentrate on a few farms and that farmers draw two conclusions: 1) to get terraces it is good to make friends in offices, 2) conservation work is the responsibility of the Government rather than of the farmers themselves.

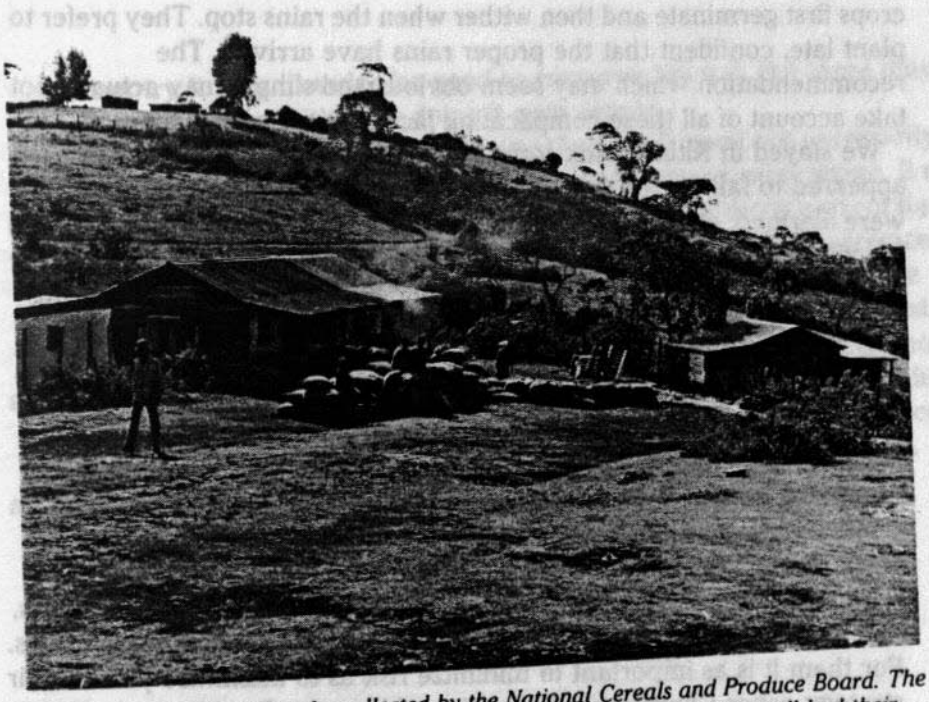
Farmers living in areas where shifting cultivation is still practised, or was until recently, tend to interpret reduced soil fertility not primarily as an indication of a dangerous erosion process, but as a normal feature of the cultivation process. Inherent in this thinking is that as one takes up new land, bumper harvests will again be the rule. Vacant land is, however, not now as easily found. Farmers in the densely populated parts of the country, where shifting cultivation was abandoned several generations ago, are aware of this. But in Rift Valley, where the land problem is not particularly acute, it is common to hear farmers arguing that the government will "show" them where they can cultivate when their present land is exhausted.

In this situation, when many farmers still have sizeable land holdings to distribute among their children, farmers will find many reasons to postpone conservation work. Conservation is all well and good, but it is not absolutely urgent. Who knows, next season the agricultural people wishing to be able to report results to impress their superiors may send hired labour to dig terraces.

A farmer demonstrates terraces that have developed naturally from simple trash lines reinforced by small fences made of local material.

That farmers have seen government funds being used for conservation demonstrations on private farms reinforce this attitude. Better to spend time and resources lobbying in offices for support than struggling with hoe and spade in the fields. Everyone knows of examples when terraces have been constructed on the farm of a "friend" of the local agricultural officer, rather than in a place where many people may learn about its use. With a bit of luck one may have a good number of fruit tree seedlings planted in one's farm as a "demonstration". Inevitably soil conservation funds are drawn into the network of personal obligations difficult for officers to disregard — if they wish to produce results.

In the parts of the country where the pressure on land is not particular acute and where it is still possible to get fair harvests despite mounting erosion problems, the agricultural staff fight an uphill battle. Farmers



Sacks of maize waiting to be collected by the National Cereals and Produce Board. The farmers were promptly paid one week after delivery. Consequently they all had their minds made up to take up as much land as possible to make more money. As all available labour went into clearing new land, there was no time for conservation. Economic success and erosion develop hand in hand.

agree that it is good to conserve the soil, but they expect the government to do it for them.

And there they are again, the farmers and the planners with their differing perspectives. The farmers inclined to wait and see, while project staff get enthusiastic about what can be done "with just something simple like, for instance, early planting". A surplus can be produced and sold. Farmers may be sceptical about the chances of being paid by the local cooperative for their products. For cattleowners, the simple early ploughing may be just impossible, since immediately before the rains is when the labour demand for herding is particularly high (cf. for instance Brandström 1985:27; Little 1985:249f.). The draught-animals are often too weak at the end of the dry season to break the hard, compacted soils. The farmers themselves may be affected and have to avoid heavy work. Many families fear the risk of loosing seeds if their

crops first germinate and then wither when the rains stop. They prefer to plant late, confident that the proper rains have arrived. The recommendation which may seem obvious and simple may actually not take account of all these complicating factors.[1]

We stayed in Kitui during some very difficult months. The rains appeared to fail for the third consecutive season. Administrative staff were alarmed, and made arrangements for securing famine relief. But in the villages not much was said about the drought. Many men left the area for the towns, or went to Central Province to try to find food to bring home, or just to support themselves through the harsh months. Those remaining prepared the fields for the rains should they appear. They prayed for rain, and waited. It was obvious that old people and children were affected. They became apathetic. Everyone suffered, and waited. Rains are late, and they fail. This is the way things are. It was just something to face. They sold livestock, they became more dependent on urban remittances, they withdrew their children from school, they cut down on rations, they waited.[2]

To some extent farmers all over East Africa share these experiences, and it colours their attitude towards suggested new agricultural methods. For them it is as important to minimize risk as to maximize yield. Their strategy echos Chayanov's description of how the Russian peasantry at the beginning of this century strived to obtain "utility" — a much wider undertaking than that of most development projects. African agriculture may be technologically simple, but when it comes to deciding on optimal combinations of crops, labour input and land utilization, it is complicated (Porter 1979:34f.; Schneider 1979:77). And "development" to the smallholder means improved social welfare, a local dispensary, a regular and cheap bus service to town, just as much as it means increased yields. Farmers and planners are thus often at variance on what is "economic". That the planners advice sometimes passes unnoticed does not necessarily mean that the peasants are conservative.

In Kitui, farmers conserved their farms because it paid, but they were more sceptical, and wanted to wait and see, when it came to some other improvements that the administration suggested. In other parts of the

[1] Hunt (1984:84ff.) discusses some, while critically examining also some other standard advice from the agricultural extension service. Cf. also O'Leary 1984:68.

[2] O'Leary (1980) provides an account of how the Kitui Akamba historically have responsed to drought. Cf. also Akong'a (1982).

country it may likewize be good to conserve the soil. But there may be nothing wrong with their doing it next season.

How farmers go about conserving their lands need not necessarily be seen as a "success" or a "failure" for the conservation programme. It may be neither. The large-scale land degradation seen in many parts of Kenya does require Government intervention. The many *fanya juu*-terraces that now line the hills of Machakos, Taita and Nyeri prove that the experts have something to offer. Farmers who do not sieze the first opportunity to have terraces aligned on their land may however not necessarily be conservative. They may be studying the results produced on conserved land, or waiting for somewhat simpler methods to become acceptable, or just be busy with something else for the time being.

Chapter 5

Training farmers, or forcing them?

Senior planners in the soil conservation programme were sceptical about involving local farmers in the design and execution of conservation work. They feared that more problems (i.e. faulty constructions) than benefits would accrue from actively involving people without formal agricultural training. Besides, if local initiatives mushroom, the Ministry will no longer be able to coordinate and supervise what is happening.

Both these objections must certainly be taken into account when planning for a stronger local thrust in the conservation project than was possible during its early years. It is the ordinary farmer, without access to the extra resources that extension staff can muster, who is the best "activist" for the conservation cause.[1] This is how some other succesful innovations were accepted. This is how hybrid maize was introduced, and how grade cows have become common in many areas. It did not come about as much as the result of government campaigns as by the example of farmers who profitted from these new practises.

[1] Suggestions for how the project can turn more local have been presented in a seperate publication, Östberg & Madsen 1984. The vast majority of farmers are not reached by formal agricultural advice or training. In Machakos, an area where soil conservation work is well established, research has shown that 36% of the interviewed farmers learned about soil conservation from friends and relatives, 12% from self-help groups, while 23% said they never learned from anyone. Neighbours and relatives are the ones who particularly influence conservation behaviour (Mbithi & Kayongo-Male 1978:117).

The improvements that stand the best chances of survival, even after external support has been withdrawn, tend to be small scale and anchored among local people. The innovation should generate a reliable return. If it can be both consumed at home and sold, this is an additional advantage. It will provide both subsistence and a cash income if a surplus is produced. This all applies to my own favourite project. It is a small livestock project, which has no other connection to soil conservation than that it encourages farmers to cultivate fodder grass. It is a genuine attempt to improve local living conditions. But even a technologically simple project, which does not require a constant inflow of capital, can run into difficulties, as we shall see.

The "Heifer Scheme" is run by the local Catholic parish. They asked for a modest grant from an overseas charity to buy grade heifers. The heifers were distributed among people who agreed to cultivate fodder grass and to spray the cattle (it is a condition of the project that dips must not be used!). They also bought bulls which now graze on the church ground, about one hundred meters from the district veterinary office. This may appear ironical, but the farmers did not trust the artificial insemination service, even when it was available at only a hundred meters' distance. The first heifer produced is returned to the project and in turn distributed to another family who is prepared to grow fodder grass — and so on.

This project requires a minimal input from outside, and it has provided lots of extra milk for the children of the area, as well as for a local hospital and a boarding school. All members of the scheme have been trained in livestock management. No recurrent grants are needed. Some few people are employed to run the bull station, but by and large, it is the members and the parish who are in charge.

When phase two of this scheme was to be launched — new overseas money for new heifers — the project had become so succesfully integrated into the official development network that the District Livestock Officer had been elected chairman of the steering committee. This added both to the formal professional competence of the project and eased bureaucratic procedures. The overseas charity wrote asking into what account they could transfer the funds and the chairman, who was shortly expecting promotion and a transfer, answered by giving the number of his own bank account.

What can the soil conservation programme learn from this episode? Farmers all over the country have seen projects come and go. They have experienced how some of their neighbours flourish as a result of them,

A District Development Officer introduces a visiting team from the United States to a local self-help group. The women work along on their sisal baskets as they listen to the officer explaining that the prominent visitors wish to donate spades and hoes in appreciation of the work the group has done to help conserve soil in their village.

while others do not. They have seen project buildings being erected and later deteriorate; young people leaving for training never to return. They have been chased away from free grazing areas as a project puts up barbed wire around its "experimental fields".

By contrast, the Heifer Scheme is firmly local. The project members are themselves in charge. The project is owned by the local parish, not the distant Diocese. The heifers, the milk, and the knowledge of livestock management remain in the area — and guarantee the reproduction of both new heifers and the project. The threat against the project came when the control of the steering committee was handed over to an outsider with no personal committment to the project or the area.

The soil conservation programme is largely an agricultural training programme. This is its great attraction, in my eyes, besides what good it brings about in increased output on farms and soil saved for future

generations. In some respects it resembles work done by voluntary associations. The more it does in this direction, the greater impact it will have, and the more long-lasting will its results prove to be.

In Kitui, where soil conservation has become a normal agricultural practise, the adminstration train local leaders to lay out terraces. This is the only possible way to meet the demand. This could also be done elsewhere.

While improving their own competence, the soil conservation farmers contribute towards the self-reliance of their communities. It is rare that Government programmes are able to do this — frequently they imply that the villages become more dependant on national institutions.

The project can have these effects if it allows local participation in the planning of conservation work. This means that more of the funds for training must be set aside for farmers. That a soil conservation programme should be training farmers may sound obvious, but technical staff, administrators, leaders etc. also need training. There is a conflict of interest, and a choice to be made. The project may instead, for instance, choose to increase the technical competence of the senior staff, or improve their means of transport, or whatever.

The conservation project also offers an unusual potential for human and social development. While improving their living standards, and helping to conserve resources for the future, the soil conservation farmers raise their awareness of how both natural and socio-economic processes may lead to environmental degradation.

Arranging training courses or study tours for farmers is said to be a difficult job. Farmers' Training Centers are usually either fully booked or closed down, their buses frequently out of order. But people may also travel to a course by *matatu*, and they can meet in a church or a school building during holidays, and the participants feed on bread, bananas and whatever can be prepared in a temporary outdoor kitchen. After all this is what happens at all celebrations in rural Kenya, and at activities organized by voluntary associations. No wedding or Christmas party has ever been called off for lack of cooking pots.

The alternative to allowing more local initiatives in the soil conservation programme, and to train local farmers to take over some of the duties that the agricultural instructors cannot find time for, is to push conservation work by legislation and force. The policy so far has been that the farmers should be encouraged, and to some extent also equipped, to conserve their farms voluntarily. Those who designed the

Constructing a dam in Kibwezi, Ukambani. The villagers take turns to dig the foundations, and to carry stones and water to the site. Photo Sv. Å. Lorenz Christensen/SIDA's photo archives.

present programme argued that it was essential to dissociate it from the enforced conservation measures that the colonial government had applied.

Now one hears frequent calls for a firmer stand against farmers who do not make any attempts at conserving their land. A political climate is developing in which neglectful farmers are imprisoned. In Central province I came across assistant chiefs who ordered people to do soil conservation, and who punished those who failed. This is said to occur in other parts of the country too.

This is a further development from the original division between the Ministry of Agriculture and Livestock Development providing technical advice, and the administration being responsible for cutoff drains being maintained by the farmers. "The chief must be the whip", as a District Agricultural Officer put it.

The increased pressure on the farmers to
coincides with a general tendency to increa
supervision of rural life. The *harambee* cont
voluntary support towards local developme
cases been transformed into an unauthorize
politician is to attend a fund raising meeting
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Holmquist 1984:84).

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examples are, for instance, that families wh
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that the ban against brewing beer at home

There may be good reasons behind these
should bear in mind that increased compuls
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Chapter 6

Some things Everybody knows - but what to say?

Here is an old associate of mine. On and off we have been cooperating for more than ten years. We are sitting in his modest office in Nairobi talking — among many other things — about improvements he has made to his small farm at home since we last met. He tells about new water facilities (Norwegian aid) that enabled him to establish a small orchard. "We are coming up very much now in the area." I am duly impressed and inquire how he raised the seedlings. That was easy, he tells me. They were provided by an acquaintance working in the district nursery. Remembering that this particular nursery is supported by soil conservation funds, I vaguely ask if there were no restrictions as to the number of grafted fruit tree seedlings he was offered. "Oh yes", my friend rejoins with a roaring laughter, "he told me he was only allowed to sell me five orange trees, but I corrupted him so that I could have all the seedlings I needed. That boy in the nursery and I have become very close now. He trusts me very much. He knows he can come any time to my *shamba* and pick bananas or sugar cane or whatever he needs."

While we had a good laugh together over his good fortune, different thoughts passed through my mind.

Seedlings are to be distributed fairly among small scale farmers practicing soil conservation.[1] My friend is a small scale farmer in an underprivileged part of the country. But that of course does not entitle him to monopolize the services of the nursery. Holding a permanent job in Nairobi, he is not exactly the type of farmer that tax payers in Sweden intended to support with government funds for international cooperation. But then again, he is not a rich person and he has a large family to support. And I have seen nurseries full of overgrown seedlings which the staff had failed to distribute. And how many seedlings in the nurseries are in any case lost because of poor management? His small fruit orchard will also inspire neighbours to make similar efforts.

I can go on finding arguments both to criticize my friend, and to smooth over the incident as no real proof of irregularities in the soil conservation programme.

What, however, most of all remains on my mind as I recall this episode, is my friend's good spirits as he told me "I corrupted him". Here was a winner. He had done something worth a good laugh. He felt enriched, not so much by the economic value of the seedlings as by the accomplishment. This was a feat. His zest for life triumphed, and infected even this righteous observer of the soil conservation project. Things work for him, and he enjoys it. There was no room for self-reproach about misappropriation of seedlings intended for his neighbour.

His enthusiasm was infectious. I too laughed in wonder at the way things are.

Here is another situation. I am reading through the report book in a nursery in a different district. I find that the District Agricultural Officer has collected a large number of seedlings (for his private use? to sell?), and further, that a prominent local politician has done the same. When I later met with the DAO I am too cowardly to tell him that I believe he has misused his position. I only mention that I have seen that he has taken away many seedlings "presumably for the Farmers' Training Center or something like that?". Yes, he agrees, and finds it easy to fill in that also the hospital and a few schools were given trees. I knew that because these different lots had been entered separately in the register. I then mention the politician's name:

[1] It is, however, far from unique that some farmers try to by-pass this rule. In one nursery the smallest lot distributed was of 240 trees and the whole annual production, apart from what was used by public institutions, went to about ten farmers.

— Oh yes, but you know how big a farm he has.

— But large scale farms are not to be supported by soil conservation funds.

— Maybe, he retorts with a big smile, but then think of how many people live on his land.

There is an answer to everything. According to the book of law, squatters do not exist. But they are in fact common on large scale farms. The DAO repudiates one irregularity with another, while with his laugh making me understand that this is the way things work. And he can point to an unusually good soil conservation record for his district. Could this be because he lends a hand occasionally to a succesful politician, who in his turn will use his influence to propagate soil conservation? He is popular, drawing large crowds to public meetings, and people listen to what he says. How many seedlings is this promoter of soil conservation worth?

In Kericho district, an agricultural instructor is proudly showing how he has used soil conservation funds. He hired workers to dig a cutoff drain and three *fanya juu* terraces on a 130 acre farm producing more than 30 bags of maize per acre. Maize is growing on the terrace edges, which are about to collapse. The cutoff shows signs of silting up. Technical matters can be critized here. From a policy point of view, one may ask if this farmer, cultivating some of the most bountiful agricultural land in Kenya, really needs to be supported by public funds.

As the conversation with the agricultural instructor unfolds however, the case appears less clear-cut. All farms in this particular location are big. One hundred acres is not all that exceptional. Many farmers let parts of their farms and tenant farmers are not likely to invest in conservation structures. The agricultural instructor cannot provide convincing examples of how his "demonstration" terraces have inspired farmers to prepare their own soil conservation structures. Should he continue to use soil conservation funds to hire people to dig more "demonstrations", or give in to land slides and gullies, which undermine both his own efforts and the future productivity of the area?

In the evening, in the comfortable bar of the beautiful Kericho Tea Hotel, I tell a few professional agriculturalists that Kericho farmers are so well endowed by nature that it would be fair to save every cent of the development assistance for their less fortunate fellow-farmers struggling with difficult conditions in the drylands. I am immediately ridiculed: do you think this country can survive on what is produced in such areas? Would it be right to use your country's aid money to turn Kenya into a

nation of beggars? No, it is to places like Kericho that development assistance should go.

I do not agree. But for what reason exactly?

Because, I believe, that we feel greater moral obligation towards farmers desperately waiting for rains in Kitui, than towards my nimble-fingered friend who wants to grow oranges.

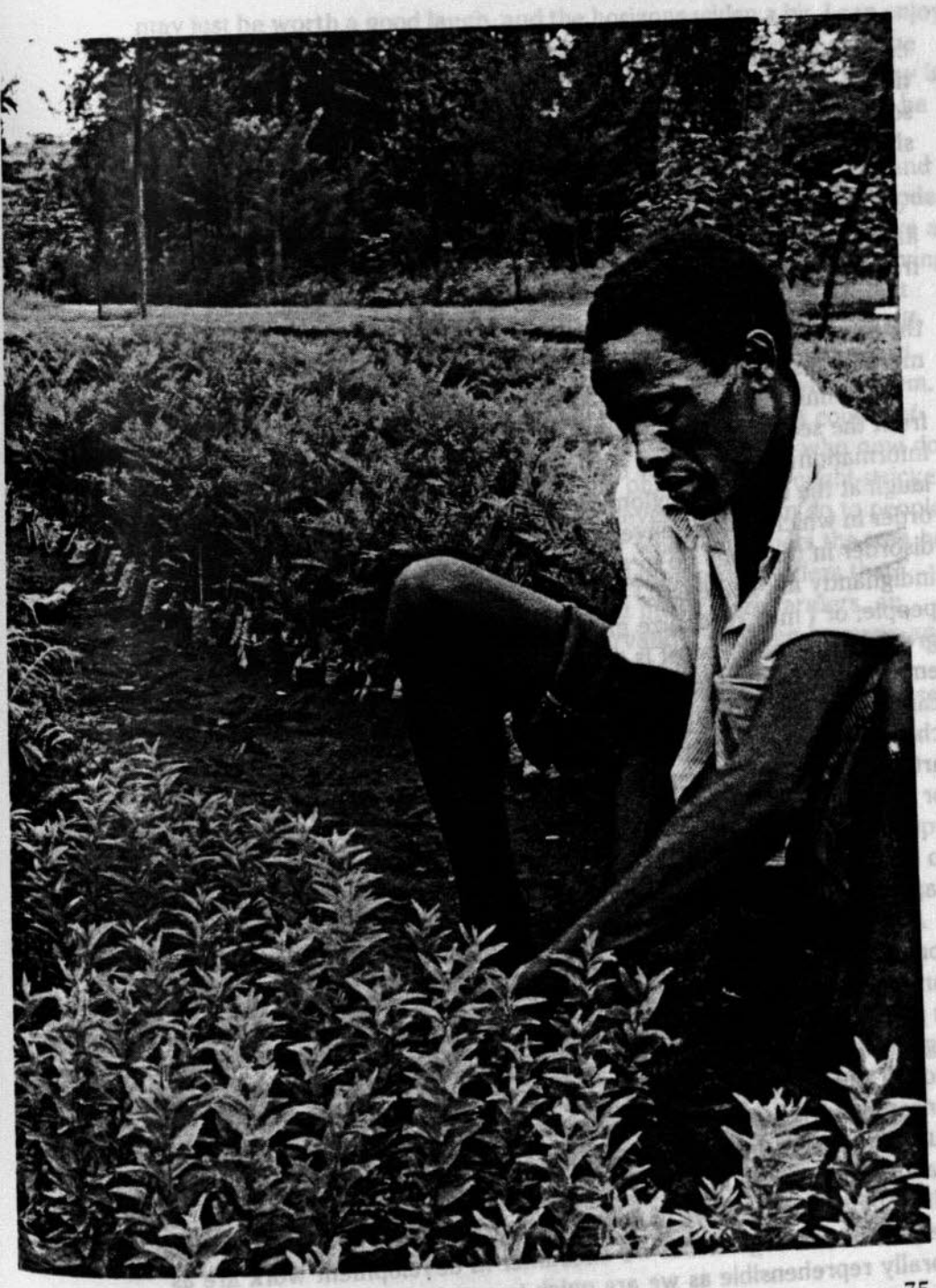
But do we then have a right to preach this to our Kenyan counterparts? If cooperation is to be honest, then I believe we do. And many Kenyan agriculturalists will agree, just as many Swedish development workers will line up with those advocating that the development funds should go into "profitable" undertakings.

The bewilderment that my friend first put me in with his oranges, is shared by everyone who works in the aid business. It is intended to cater for noble principles: water for all, education for all, freedom from oppression, human development. We work together with people who may well share these sentiments, but who are also struggling on their farms against erratic rainfall, and in their urban occupations at times against unpredictable political conditions. They try to establish something to rely on in the midst of uncertainty, a permanent roof for their house, a small business providing a regular income, education for their children or informal access to petrol or building materials when these things cannot be obtained officially. They try to make their families less vulnerable to drought, floods and political swings.

I am buying beautiful baskets made from the inner bark of the baobab tree for a museum. As I am selecting the best baskets, a woman tells me: Why can you not buy one basket from each of the women who are here now, so that everyone gets something for their children at home? The museum, at that moment, is not a National Institution where the Best Examples of a Unique Art should be Preserved, but a resource to be distributed equally between all the households of a village. Do not buy the best baskets but instead help people.

An aquaintance of mine has seen his brother travel overseas on a scholarship and he asks me if I cannot secure money for iron sheets for his house from the same fund. But the scholarship was to support your village and your part of the country which has very few educated people, I answer. But as I say this, I come to think that this is not an altogether logical answer. His brother will not return to the village as an agricultural instructor, veterinarian, or school teacher. In all likelihood he will end up as a well to do consultant in the capital, or even marry abroad and remain there. Does this particular scholarship in fact improve living

Caring for seedlings in a nursery run by the VI Tree Planting Project. Photo Jan Söderström/SIDA's photo archives.



conditions in their village any more than a permanent roof on a private house would do? My friend could at least not immediately see that the schoolarship had development qualities differentiating it from iron sheets for his roof.

And yet, there is a difference between scholarships and roofs, between "development" and private help. If we do not make this distinction we are lost as to what principles shall govern the distribution of seedlings from soil conservation nurseries.

We encounter malpracticies, and we feel indignant. No, not quite! In the examples mentioned, it is more true to say that I felt I should be more morally upset than I in fact was. Let me try to explain.

Assuming that the DAO did in fact, directly or indirectly, make a profit from the seedlings, I may either register this as interesting cultural information about the way things work in this particular society; or I may laugh at the bizarre conglomeration of at the same time the immaculate order in which all the deliveries are recorded, and on the other hand the disorder in that they go in other directions than they should. Or I may indignantly ask if the DAO has forgotten his duty to serve the Kenyan people; or I may recognize myself. In my own office I often operate in a grey zone between what is to my personal benefit and to that of my employer. I happen to work in a museum. Now and then I send catalogues, books and copies of a scientific journal we produce free of charge to different people, in the hope that the recipients may publish articles about our museum, and thereby increase the number of visitors, or generally become favourably disposed towards the museum. But equally often the material will reach collegues who are not in a position to direct benefits to the museum, but who may well send me a book or a paper now and then. Or who may just think well of me.

As I write this I do not expect Swedish tax payers to call my director complaining about malpracticies in her museum. My behaviour is at the same time both acceptable and irregular — as life is, and the way most of us probably run our business. In development work, however, we expect higher ideals to govern the trivialities of everyday activities. And so we should! But the DAO whom we entrust with funds to promote soil conservation is an ordinary civil servant, not too far from a mundane museum curator, interested in his job and trying to be useful, but not exactly a spearhead in the fight against world poverty.

It would probably serve us well, if we were not so perfectly sure that all the presumed irregularities we encounter in development work are as morally reprehensible as we are quick to conclude. Sometimes they

may just be worth a good laugh, and the horizons widen a bit. I can enjoy the feat of my friend who secured oranges for his garden, and as the seedlings grow into trees, and we are feasting on oranges one hot day in his God-forsaken village, I shall again laugh at the memory of how he cheated the soil conservation project of a few crates of seedlings.

Development is about people, we say. Somewhat unreflectively and vaguely we may take this to mean being good to people who live under miserable conditions. We provide them with the essentials to survive a drought or a locust invasion. In return we feel good ourselves for having done something noble. Sometimes Development indeed follows that formula. Much more often it means providing comparatively well off-farmers in Kericho with a service they strictly speaking could afford themselves, but which they prefer the government to deliver to them. And then sharing a beer in the evening with people who a couple of years back benefitted from international scholarships and who now do not wish to become too involved with the plight of the drought-stricken areas they once came from. This is what development can do to people.

But development is also the headmaster who remembers the tree he watered as a school-child. The soil conservation project offers that prospect, to give many more children, and many more farmers, an opportunity to become involved in conservation, securing harvests and saving soil and trees for future generations. Meanwhile a District Agricultural Officer may, or may not, have enriched himself. All these things occur simultaneously, and that is the way things are.

Word list

Akamba	See Kamba.
Cassia siamea	Fodder tree commonly used in semi-arid areas. Also known as ironwood.
CDA	Community Development Assistant, field officer in the Ministry of Social Services, promoting informal groups.
Chapati	flat bread, baked in a frying pan, commonly served in rural areas and small restaurants.
Cutoff drain	An open trench with an embankment on the lower side. Leads water away from cultivated areas. Also used in gully control. Disposes water into a waterway or onto grassland.
DAO	District Agricultural Officer, in charge of a district agricultural office.
Fanya juu-terrace	Bench terrace. Constructed by throwing the soil upwards (fanya juu) forming an embankment above the ditch. The terrace develops naturally with soil erosion on hillsides.
Grass strip	Used on slopes to prevent erosion. The width is usually about 0.5 m—1 m. Often created by simply leaving strips of unploughed land along the contour to check surface run-off.
Harambee	Self help.

Kalenjin	A cluster of peoples living in Rift Valley province. Linguistically they belong to the Highland Nilotes. The best known Kalenjin people are the Kipsigis, Nandi, Pokot and Tugen.
Kamba	Bantu-speaking people living in Kitui and Machakos districts. One of the major ethnic groups of Kenya, numbering well over a million people.
Kitui	District in Eastern Province. Large part of it is scrub-covered desert. Low population density. Great scarcity of water. Better potential for agriculture in the hilly central parts.
Machakos	One of the two districts inhabited by the Kamba. Fairly hilly and fertile towards west and north, but large parts of the district are also bushland with stony, sandy soils.
Maendeleo ya Wanawake	Women's development, a large national organization.
Makarikari grass	Panicum coloratum, a fodder grass recommended for terrace banks, particularly in semi-arid areas.
Matatu	Collective taxi, commonly used for transport between rural areas and a neighbouring town.
Mwethya	Work parties organized at neighbourhood level in Ukambani to assist in community projects.
Mwingi	Town in Kitui district.
Mzee	An elder. Respectful way of addressing people older or senior to oneself.
Napier grass	Pennisetum purpureum, a high-yielding fodder grass, commonly used on terrace edges, parcularly in high potential areas.

Shamba	Cultivated field, also used to denote an estate, or generally the country as opposed to town.
Trashline	A line of crop residues or tree cuttings laid out across agricultural fields to check run-off. Used as a first step to develop bench terraces. Commonly used in many areas.
Ugali	Stiff porridge.
Ukambani	The homeland of the Kamba people, corresponds to the present Kitui and Machakos districts, about twice as big as Holland.
Utui	A neighbourhood in Ukambani. Traditionally each utui had its own dancing ground, place of worship, and elders' council.

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