

LOOKING BEYOND THE METHODS AND APPROACHES OF VETIVER PROMOTION

Joshua Amwai Machinga

Environmental Action Team

Kitale, Kenya

Abstract

Losses of topsoil in the past have brought down whole civilizations. The Mayans of Central America are an example, and North Africa used to be the granary of the Roman Empire. Soil erosion is a global problem and the need for reversing the trend has become critical in many countries.

A lot of efforts have been put in overcoming erosion but little has been accomplished when viewed from a global perspective. Yet there is a solution which is cheap, appealing, long lived and suitable for easy adoption by communities: vetiver grass technology.

The problems beset the extension methodologies used in the training and promotion of vetiver technology and other erosion control methods. The first step in working with a community is to establish the interface between an external agent and the community and to build up trust. Is an external facilitator needed in this process? The paper discusses the problem – posting strategy and use of codes, hands-on, participatory rural implementation, role-playing, among other approaches that create an involvement important to future commitment.

The paper is accompanied by photos and slides and shared lessons from the files of successes and limitations in the promotion of vetiver.

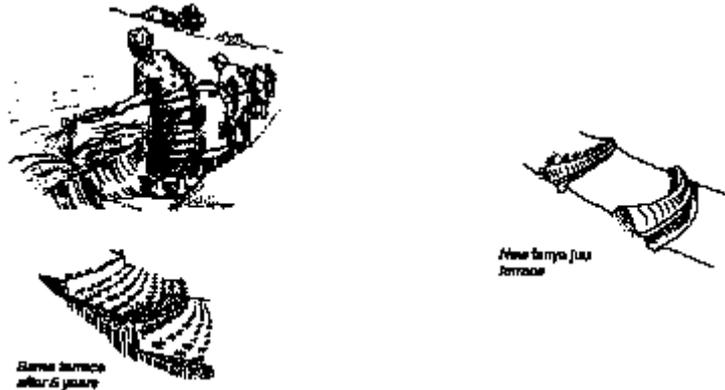
Introduction

Natural resource conservation is not only about seeds and soil, water, forests and animals, but also about people who manage and use them. In this way natural resource conservation is intrinsically a cultural activity. Each tiller, whether he or she tills half an acre or thousands, is guided by the norms of his or her culture.

People's participation has evolved over the past twenty years as one solution to the basic fault in the early approaches in which people were rarely consulted in planning or given a role in erosion control or other development activities. In some cases, communities were forced to carry out some erosion control measures.

Erosion control projects should be formulated at the grassroots level, in the communities with erosion problems. This will enable the communities to be involved in the planning and implementation process, for they know what is best and what to and not to achieve, and have the responsibility of protecting the young vetiver plants. But, incredibly, no money is available at the conception stage of most of these projects. Feasibility studies are not just for private industry – especially at a time when aid budgets are increasingly restricted. By spending a small amount of money upfront, donors and project implementers would avoid wasting much greater sums on ill-conceived projects whose only chance of succeeding is on paper.

An example from Kenya demonstrates the value of such an approach. In the 1960s, the Ministry of Agriculture forced the communities to adopt erosion control measures (*fanya juu* and *chini* terraces) without consulting the local residents, who resisted them so strenuously that the project fell far short of its objectives.



In 1973 the ministry changed its approach on soil and water conservation in the country. The planners were determined to succeed with a similar project in the same area. They decided to carry out a survey on the introduction of vetiver grass and other erosion control measures. The local people's attitudes and needs were solicited. A communication was put in place and people began to articulate more clearly the realities of their situation, their priorities and what they felt capable of achieving. As a result of this project, the application of vetiver grass technology has taken root and other erosion measures have been put in place by farmer themselves after seeing the good results. Now when asked who has done the work, they answer, "We have done it ourselves".

Communication played a decisive role at all stages of the project. Planning increased people's participation, training and evaluation.

Extension Approaches

While many of the previous approaches (outsider to insider) to the grassroots are now being acknowledged to have failed, there is growing evidence that some achievements are possible in what appears a rather unpromising physical environment. A number of projects carried out by non-governmental organizations have shown that much can be done by building on local people's knowledge and skills to develop appropriate technologies for controlling erosion. There is now a wide range of literature covering such stories.

Each compilation of such stories has highlighted certain key elements, such as adopting a flexible, learning process approach, improving security rights and gains for the local people, putting the local people's priorities first and ensuring high staff calibre, commitment and continuity. The remarkable similarities between these elements of extension and promotion provide a rare example of successful institutional learning, whereby the present models should be based on the lessons of the past approaches and policies.

The key elements in these approaches include:

Security Rights

People need more security and effectively enforced rights and other resources if they are to have an incentive to manage these resources properly and invest in erosion control. For example, throughout Africa, there is great diversity regarding rules of resource tenure, the persistence of customary controls and their relative effectiveness. In some places, customary management systems remain largely intact and can provide a very useful basis for future systems of management. For example, the *chefs de terre* (land chieftains) among the Mossi of Burkina Faso and the Bambara of Mali retain considerable moral and religious authority over the local people and the outsiders, and hence can get their decisions respected. In other places, such as areas of immigration, resettlement or conflict, customary systems may command little adherence from any party. In such cases before an erosion control project is situated, its promoters must first help support the evolution of a local decision-making body capable of

discussing the interests of different, possibly conflicting groups and arriving at decisions which will be supported by all resource users.

Popular Participation

Participation by the local people in the analysis of their problems, identification of priorities, design of activities and implementation should be a central element in the promotion of vetiver grass technology. Emphasis is placed on the people's participation for several reasons:

- It is now recognized that indigenous technical knowledge is far more complex and sophisticated than had been thought, and that it can provide a useful basis on which to build technical interventions.
- Many failures in previous projects can be attributed to their lack of attention to local people's needs, the design of activities and definition of objectives having been done by outsiders, who either thought they knew what the local people wanted or thought they knew better. It is now understood that projects will have a far greater chance of achieving their objectives if these are set in partnership with the local people.
- If vetiver grass technology projects are to have a long-term success, their activities must be designed to work in the interest of the local people.



Participation of Farmers

One way of involving the communities in erosion control is through participatory rural appraisal (PRA).

Participatory rural appraisal: There is a lot of hype about PRA in the south, though, and perhaps it is time for some critique. That is what this paper is calling for: so much in the world of non-governmental organizations depends on funding. So many organizations are donor driven and there is a lot of funding for PRA. Is everyone getting carried away with the subject for this reason? "What we need is PRI", the head of a community-based learning centre said recently. "I mean participatory rural implementation. Isn't PRA just for academics?"

There is some misunderstanding: if it is carried out as it should be, PRA is a very useful and empowering approach that really can help grassroots communities analyse and understand their own situation better.

PRA means responsibility: PRA is just one of the many tools or approaches that have been developed recently in order to help turn a theoretical and important awareness (the capacity of all people to take responsibility for their own lives) into reality. PRA has caught imaginations and stimulated a widespread willingness to provide funds. It may have grown out of proportion, not because it is the wonder some think it is, but because some big names have jumped on the wagon.

For PRA to achieve its full potential, it should be recognized for what it is. Its limitations should also be accepted. It should be seen within a larger context and be linked to other approaches that achieve what PRA alone cannot achieve. This seems to be a critical issue in development work today: linking together methods and experiences and creating a fuller process. Too often these "new" methods, useful as they are, remain trapped within themselves.

Build up trust: The first step in working with a community is to build up trust. Is an external facilitator needed in this process?

In most rural settings, people have been and are being oppressed both mentally and physically. They no longer believe in themselves or their own abilities. They feel very much at the bottom of a ladder where skills and knowledge continue to be unrecognized. An outside facilitator in such situations can be a catalyst and spark revitalization, setting in a motion to recognize the depth of their skills and knowledge.

Critical reflection needed: A comprehensive development process includes a continuous assessment of and critical reflection on the existing situation.

Training for transformation provides a way of supporting this process. It allows the issues that are of concern to communities to be explored and the forces affecting them to be examined. In general, these processes raise awareness by allowing us to distance ourselves from our reality, an important first step of empowering the community.

The problem posing and the use of codes and role playing in these approaches create an involvement important to future commitment.

The techniques offered by approaches such as PRA make more specific assessments possible.

Communities carry out exercises in which they start to look closely at their own situation and analyse it in detail. They map their resources; they look at how labour is distributed and at their history. They weigh up the different options by looking at various criteria in relation to these options. Cause and effect are drawn together and complexity is mapped. Above all, if done properly, there is a great deal of participation. It provides a firm basis allowing for an involvement and awareness that can feed into other challenges.

Base the future on a vision: The move forward requires an approach with a holistic goal. To keep on reacting to problems will lead to faulty decision making. Problem analysis is important but cannot be the basis for the future. The future should be based on a vision and decisions should be made towards this vision.

Some will urge that, when people are faced with pressing, immediate problems, it is pointless to talk about a vision of the future, and that this is especially true for poorer communities. Everybody has an idea of what they would like to achieve; every community has values that it considers important. The holistic management of resources will depend on having holistic goals. Often these goals need to be brought out and made explicit if they are to serve this purpose well.

A holistic goal is not written in stone but will change along with our own situation. It provides guidance on what is important. It provides a guiding light to mark the way forward.

Don't forget to implement: Once there is a goal to provide direction, implementation becomes important. This is often forgotten. Comprehensive assessment is carried out and people get excited. However, there is no implementation. Of course, people go on living their lives. Therefore implementation and evaluation are very important in this process.

The Mirror Techniques

In an area where vetiver (*Vetiveria zizanioides*) grass is totally unknown to the communities, an introduction to vetiver grass using mirror techniques is necessary.

The mirror techniques are methods (role plays, drama, poems and songs, among others) that are used in forums for creating awareness (Wekunda, Adoyo and S. Momanyi 1993). The techniques will make the presentation of messages on vetiver grass as farmers' engineering tool more interesting and acceptable, especially if the techniques provide an environment in which the community will

recognize its own problems. The Environmental Action Team (EAT) of Kenya has used these methods in several forums:

- In a *baraza* (rally), where speeches are made by various officers and leaders. A message from different people is passed on to the community. In other rallies different messages from different people are passed on to the community. The variations in meaning of the different messages are confusing for their audience. The rally can be effective if it focuses on one subject, e.g. vetiver grass technology. This has worked well for EAT's field work. The mirrors that are used during the rally contain messages on the same subject. They may focus on problem and/or solutions.
- A field day on the other hand is meant to inform the community about the existence of technical innovation through hands-on demonstrations and explanation from promoters. Field days are very useful forums for creating awareness about innovative technologies such as vetiver grass technology. If the subject in discussion has some bearing on socio-cultural issues, role playing, a song or a poem can be used at the same time to create awareness on these issues. The combination of information on cultural and technical matters will make the activity a success.
- Radio programs. Experience shows that most listeners prefer drama to interviews. Therefore drama on the radio or television is more effective to pass on a message than an interview. Use of drama and songs that incorporate the socio-cultural issues in the messages on vetiver grass technology has not been carried out extensively.
- EAT has used drama and video film to create awareness of the benefits of vetiver grass technology. Both raised a lot of interest and provided opportunities for the communities to identify their own problems and find solutions to them.

The Use of Mirror Extension Techniques in a *Baraza*

A *baraza* is a rally which is organized through a local administrative cycle to inform the community on various issues related to both development activities and politics. A permit must be obtained for an apolitical rally; on the other hand, a development rally is held with a chief or district officer of the division or location. For the development *barazas*, chiefs may at times entertain the guest of honour with songs in his or her praise, or request for assistance may be made on a particular item. In such *barazas* the local people do not participate in deciding the date or the venue. More often than not, the chief is asked to call for the *barazas* on a pre-arranged day at a particular place and he may not be in a position to question the request since the promoter knows what he or she is doing.

EAT's experience shows that the administration should work hand in hand with development agencies to be able to achieve concrete results, that the rally be organized to address only one subject and that it should contain the following elements:

- a guest of honour
- the local leaders to organize for the *baraza* and implement it
- the use of mirror techniques

Guest of honor: The community regards the guest of honor as an important person with an important message or one who may give good advice on the development of the community. He could be a senior government official or an opinion leader in a position to give assistance. He is a person whom the community has faith in and whatever message he delivers will be taken seriously. EAT recognizes this vital role in all of its mandated areas of operations. In areas where the *barazas* are held, the chiefs are invited as the guests of honour. The guests of honour are guided by a speech prepared by EAT. The speech touches the causes of soil erosion problems and solutions with more emphasis on vetiver grass technology. Given the respect and trust that the guest has, his message on erosion control is taken seriously by the community addressed.

At times some guests of honour decide to participate in these projects and this challenges the community to work even harder.

The use of local leaders in organizing and running barazas: EAT requested the local leaders such as village elders to plan the *baraza*, when and where it should be held. The local leaders decided on the guest of honour and they published the event. Through this approach EAT assisted the leaders to organize two to three seminars in their own villages. The local leaders therefore had personal interest in the *baraza* and mobilized the community to turn up in large numbers. EAT prepared a local choir to dramatize and sing about soil erosion problems and solutions.

Before the arrival of the guest of honour the choir sang those songs prepared and as soon as the guest of honour arrived, they were given a chance to dramatize and sing the same songs. The guest of honour only commented on the messages introduced in the drama songs.

The mirror techniques were found to hold the interest of people before the guest of honour arrived and functioned as a forum for the community to examine itself. Hundreds of people turned up in the *barazas* and a similar number would come back for the demonstration of vetiver grass technology and planting material.

The Use of Mirror Techniques on Field Days

During the field day the community is assembled in a particular place where practical explanations are provided for a product or use of a product. For instance, farmers could be assembled on a farm where soil conservation activities had been implemented in line with recommendations so that a practical explanation could be provided by a farmer and technical officers as to how the soil conservation structures could be put in place and maintained. The farmers first will get a first-hand explanation before assembling to listen to a final message from the guest of honour. In other field days, a choir to entertain with songs in praise of the guest of honour during the occasion will be invited or organized among the farmers themselves.

In April, EAT organized for five farmer field days and just as the *barazas*, the field days were found to be effective when addressing vetiver grass technology. The following elements were important:

- The guest of honor was chosen by the community.
- The community was used to organize and implement the field day.
- Mirror techniques were used.

The Use of Film in Extension

A film is a powerful tool for creating awareness of a particular innovation. The film has the advantage over other extension tools of addressing many people without distorting the information.

In West Pokot, EAT used a video cassette in addressing soil erosion problems and their causes and possible solutions in five communities where the film was shown. Nine hundred individuals were interviewed for a formal monitoring with the following results:

- a) Out of the 900 individuals, 838 (93%) heard about the film, exceeding the number that attended the film by 193 people.
- b) Of the 900 individuals, 645 (71.7%) attended the film. Of those 645 persons that attended the film 541 tried and succeeded to obtain vetiver planting material (83.9%).
- c) Of those who attended, 433 (67%) got vetiver planting material.
- d) Of those who received vetiver planting material, 430 (99%) either established vetiver nurseries or planted on contours of their farms. The remaining three persons had to attend a funeral; they kept their vetiver planting material and planted it later on their terraces.

In summary, the mirror techniques can play an important role:

- a) In providing good summary of all the messages on vetiver grass technology promotion and in handling sensitive issues without offending anyone.
- b) In holding the interest of the audience in any *baraza* or field day up to the end and yet emphasizing the messages on vetiver grass technology.
- c) In preparing the audience for the household discussions before decisions are made (triggering household discussions).

- d) In providing additional ways of passing on the messages to the community; in so doing, the messages will be well understood since there is no room for questions.
- Messages will come through demonstrations or explanations.
 - Messages will come through speeches.
 - Messages will be summarized clearly in the mirror techniques.

It should be noted, however, that the role plays, songs, drama, poems and films in general are not necessarily mirror techniques. They become mirror techniques when they are produced in such a way that the community can identify itself with the message conveyed.

Farmer Exchange Tours

A farmer tour is an excursion to a site where farmers can see a real-life example on an activity or a situation that concerns them. The participants wanting to practise a particular innovation are taken to other participants in a different locality who have been practising the same.

“Experience is the best teacher” and “seeing is believing” are some of the adages that hold as much water today as they did thousands of years ago. To get useful information to and from the people (most of whom are illiterate, lack access to the print and electronic media and depend on locally available natural resources for their livelihood), EAT organizes farmer exchange tours or visits as a communication channel for sharing information on vetiver grass technology.

The visiting participants get an opportunity to observe, question and critique whatever they see and they are likely to adopt the innovation much faster.

Experience from the previous visits has shown that farmers learn best from their fellow farmers. Farmers also carry out spontaneous research and extension methods on their farms, which are more effective but often disregarded by the modern researchers and extension workers.

Objectives

- To boost the working morale of laggards so that they can move at the same pace as the innovators.
- To enhance group work/cooperative activities by forming sub-working groups.
- To enhance experience sharing among farmers.
- To sensitize the farmers on various technologies as practised by other farmers in different areas in their bio-region.

Logistics of the Tour

- a) Familiarize yourself with the place where you want to take participants for a visit and let the proposed host know of your intentions.
- b) Invite the participant to participate in the visit. As a way of showing their commitment, participants should be encouraged to contribute in kind or cash. However, contributions should not be forced, and each case should be treated differently.
- c) Find out the farmers’ opinion on when to carry out the visit and inform the host of the date and time.
- d) Implement the visit. Ensure that the objectives of the visit are clear to all concerned, both the guests and the hosts. As far as possible, the implementing organization staff member or extension worker should keep in the background, allowing the host farmers or participants to describe their experience and the visitors to ask questions about results and problems.
- e) Immediately after the trip, get the feedback on the visit from the participants, on both the logistics and what was learnt. Together with the participants, identify ideas or techniques they can try out. Where necessary, suggest modifications to the techniques to suit the local conditions. Encourage the participants to discuss the technology with others to avoid misunderstandings when trying to

adopt it. For example, one farmer adopted bio-intensive gardening without consulting her husband. He uprooted the vegetables because he wanted to plant maize.

- f) Provide information and support to farmers as they try out new techniques.
- g) After some time, evaluate the results to find out whether the techniques have been adopted. If yes, which one have they adopted? If not, why?

Dos

- a) Both successful and not-so-successful farmers should be visited. Each situation contributes differently in terms of learning.
- b) Ensure that those being visited are willing and ready to receive visitors and to explain what they are doing in their farms.
- c) Ensure that the timing of the visit suits both the hosts and the guests.

Don'ts

- a) Avoid organizing visits during busy agricultural seasons.
- b) Do not visit rich farmers. The guests may think that their success is a result of their wealth; this may discourage them from adopting the technology.

The Mode of Training Farmers in VGT

There are numerous modes of training used in extension; in this paper, each mode is discussed and criticized for its effectiveness. The mode of teaching is of paramount significance towards initiating training, promotion and sustainability of vetiver grass technology.

Some of the modes used in the training include:

- a) In-community training (teaching the group in their community or village).
- b) Residential training (teaching the whole group in a residential training centre).
- c) Contact-farmer approach (teaching the whole group through a contact person).
- d) Individual training approach (teaching a group through contact farmers on a one-by-one basis).

Positive attributes of teaching the whole group in the community or village:

- Many people are reached.
- Training is done at one time so everyone in the group gets the same message.
- Focus on all people of the community; both the rich and the poor are reached.
- Less preparation as farmers can do the work and get more involved.
- Other household chores can be done.
- Eradicates the trickle-down problem, not relying on one farmer to provide information.
- Increases the relationship among all members of the community.
- Less expensive.
- The plot is familiar.
- Areas used for demonstration will benefit local farmers.
- Encourages seriousness.
- Can address other needs and activities.

Negative attributes:

- Personal differences can affect and interfere with the teaching.
- Difficult to get all farmers in time because of different household chores and other commitments.
- Politics/tribal differences can affect the training.
- Some may not be keen on training.
- Cooking for visitors (trainers).
- Social factors such as funerals can interrupt the training.

Positive attributes of a residential center:

- Change of environment is exciting.
- Less interference.
- More time for teaching.
- Only keen farmers attend.
- Attendance guaranteed for the duration of the course.
- Helps develop a farmer-trainer network.

Negative attributes of a residential centre:

- Is expensive.
- Can be gender biased.
- The message can be unrelated to the need of the members.
- Attendance can discriminate against others.
- Participants do not see the results of the demonstration work.
- Many household activities.

Positive attributes of the contact-farmer approach:

- Larger audience is reached.
- Shorter time to pass on messages.
- Easy to follow and evaluate.
- Less expensive.

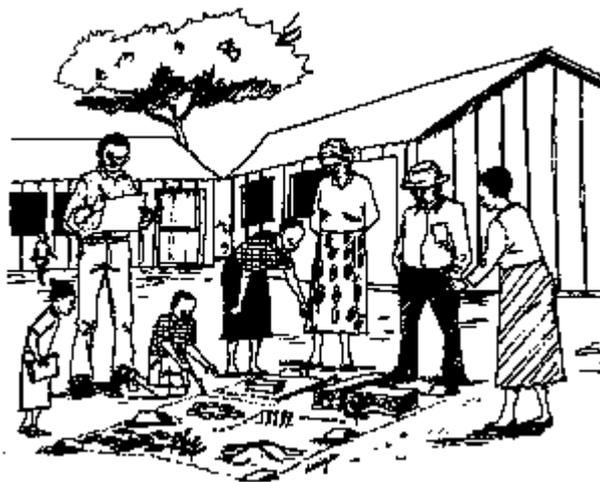
Negative attributes of the contact-farmer approach:

- Lack of time and no motivation to spread the message.
- Not all contact farmers are good teachers.
- The trickle-down method is not so effective.
- The message can be distorted and wrongly passed on.
- Politics/tribal differences can interfere.
- Can create animosity between the selected and those rejected.

Positive attributes of the individual training approach:

- The teacher has a personal touch but it is time consuming and the trickle-down effect is slow.
- It all depends on one messenger who may die before the message is fully conveyed or spread.

It should be noted that effectiveness of each mode of training communities on erosion problems will vary from one agency to another.



Community participation

Conclusion

While it is important that there be some specialization in these approaches so they can be improved, it is important that none of these approaches be given too much prominence.

For those working in erosion control, the agenda must be meaningful empowerment for millions of people. It is the responsibility of the agents involved in facilitating this to continuously look beyond what they are doing and so to see how their activities link with the people that they are working with.

EAT has and continues to use some of the above forms of communication to extend messages that could increase the adoption of vetiver grass technology.