

## PROMOTING VOLUNTARY COMPLIANCE: ENVIRONMENTAL AUDITING, OUTREACH AND INCENTIVE PROGRAMME

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### SUMMARY

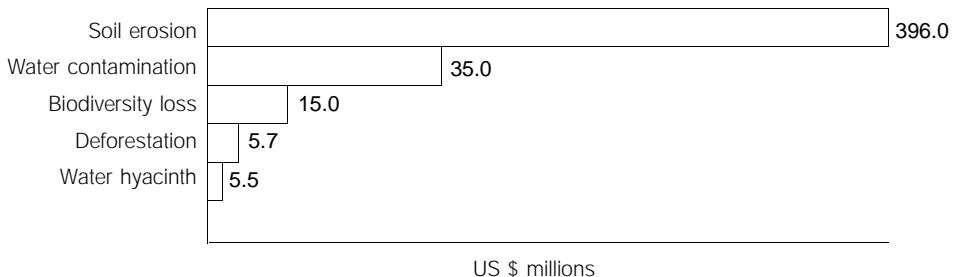
Although Uganda is at present, classified as one of the poorest countries in the world, it nonetheless has a favourable climate and a rich endowment of natural resources. Until the mismanagement of Uganda's economy in the 1970s and early 1980s, the country fared much better than many developing countries.

Uganda's natural resource base contributes the bulk of its gross domestic product (GDP), export earnings, and employment opportunities on the 202,000 km<sup>2</sup> of area supporting close to 17 million largely rural people. The production of most of the natural resource derived commodities are largely subsistence (in agriculture) and artisanal (fisheries). Natural resource based activities also support the country's small manufacturing sector although one can argue that the linkage between the two needs further strengthening. For example, the manufacture of cigarettes, cement, sugar, textiles and furniture are based on local resources.

### 1 INTRODUCTION

From the foregoing it is clear that Uganda's environmental and natural resources provide products and services that support economic growth and quality of life. At the same time unfortunately, environmental stresses including problems of deforestation, land degradation, over-fishing, lack of proper sanitation, and industrial pollution are real in present day Uganda and threaten to undermine the status of the country's natural resource base and quality of life of its people. For example, it has been estimated that the combined annual cost of environmental degradation in terms of biodiversity loss, deforestation, soil erosion, water hyacinth pollution, and water contamination is about US\$457 million (Figure 1).

**Figure 1: Estimated Annual Cost of Environmental Degradation in Uganda (1991)**



In general, it is thought that the annual cost of environmental degradation represents something in the order of 4 - 12% of GDP. However, many have argued that costs associated with environmental degradation are in fact much higher. They argue that current cost estimates exclude a number of items such as the drainage of wetlands and the management of wastes.

From a policy point of view then, the dynamics of adjustment involving the amelioration or complete removal of the processes of environmental degradation and enhancement of the environment, are of crucial importance. Whether the objective is to maximize the net benefits arising

from resource extraction or simply that of survival in fragile ecosystems (such as arid areas), in Uganda's context, the behaviour of both the population and natural systems, the impact of management actions and the distribution of benefits and costs over time have to be carefully studied. The behaviour of the environmental system (including natural resources) must first be analyzed in *physical and economic terms*; benefits and costs of alternative management actions and responses should be estimated, and strategies then evaluated on the basis of the present value of benefits generated.

Uganda is completing its National Environmental Action Plan (NEAP) Process after a period of two years. The lessons learnt, among others, are that every resource user can contribute to sustainable economic development provided his/her economic, social, cultural, and attitudinal values to the resources themselves and how these influence the use and management of the resources are well understood. This paper gives the regulatory and command perspectives which in Uganda had been taken as best methods to instill compliance in environmental management. The limitations of this approach and the reason to promote voluntary compliance through other complementary methods like incentive and outreach programmes are the subjects of this paper. The extent, application and basis for environmental audits in relation to these complementary methods in particular and to the general management of the environment will also be discussed with particular reference to the Ugandan experience.

## **2 SUCCESSES AND LIMITATIONS OF REGULATORY FRAMEWORK IN UGANDA**

In Uganda there are more than 60 Statutes, decrees and by-laws addressing specific environmental and natural resource issues. Some of these are duplications of laws from either our colonial masters (Britain) or other countries. Very few of them have been revised to reflect the desired approaches in environmental management e.g. land registration, wildlife registration and forest registration. Many of them have remained archaic and therefore less responsive and anticipatory to new challenges of environmental management. For example, the assumption that the government was supposed to be the key actor has been found during the NEAP process to be a wrong premise. Also the laws paid very little attention to holistic approach in the natural resource management. Consequently, it has been typical to find two or three outreach programmes targeted to the same resource user within a specific eco-system. To make matters worse the regulatory framework did not cover certain aspects like wetlands, Environmental Impact Assessment, Environmental Audit and bio-diversity conservation outside the protected areas. Additionally, there are inadequate clauses within the laws to compel institutions to make budget allocations for disaster preparedness. Penalties and fines provided for in the existing regulatory framework are so low that they do not compensate society for the damage done to the resource or the environment. Because all laws were imposed on resource users from the above, resource users/managers did not develop the stake-holding in those resources.

In some cases, government officials charged with responsibility to oversee compliance have been culprits in malpractices of poaching, pit-sawing and authorising human settlement in protected areas. The appreciation of people's values of the environment in relation to their culture was not well recognised, understood yet you cannot impact environmental consciousness and enforce cultural change through command and regulation. For example, among the Karimojong and Bahima there is cultural prestige attached to the number of cattle one owns as opposed to their quality. In areas occupied by these groups of pastoralists, rangeland degradation is a significant environmental problem.

As mentioned earlier, the economic mismanagement of the economy during the political turmoil of 1970s and early 1980s, staff morale, financial resources and institutions that were used to enforce compliance were eroded down. Despite modest recovery in the economy, particularly after 1986, there is still some time to go to marshal these resources adequately. Besides, Uganda's number

of protected areas has doubled since 1985. These limitations and new developments have clearly brought into question the viability of command and regulation.

Despite these short-comings of command and regulation, Uganda can still boast of having protected its rich bio-diversity particularly within the protected areas using command and regulation. Secondly different people have always had point of reference in resolving some of the malpractices. During the NEAP process the laws and decrees were used as baseline information in formulating a better legal and policy framework. Agreement has been reached that owing to the limitations mentioned above and good experiences gained, its high time to supplement command and regulation with voluntary compliance through among others outreach and incentive and disincentive programmes.

### **3 THE EXPERIENCE OF INCENTIVE/DISINCENTIVE PROGRAMME IN UGANDA**

An incentive is that which incites or motivates desired behaviour from local communities, government, NGOs and international organisations to sustainably manage the environment and natural resource base. On the other hand, a disincentive acts to rectify an already observed negative behaviour or attitude. Incentives/disincentives can take on different forms including but not restricted to being economic, financial, social and cultural. Whatever is put in place will be meaningful or desirable as long as the benefits from the use of the resource due to that intervention is equal or greater to the costs of restoring that resource once its degraded. Corollary to that perverse incentive will act in the reverse, that's to say it will influence that type of behaviour which causes society to loose more from the resource than it gains from it.

From the above, there is logical cause to continually monitor and ensure that incentives/disincentives do not turn perverse. And it is, at this level that environmental audits can be used to offer signals.

Even though outreach and incentive programmes have strongly been recommended under the proposed environmental law and policy, suffice to mention the experiences gained prior to the formulation and the way forward for more utilization of these methods. Incentives in Uganda have been of two kinds. Direct ones (linked to specific rewards for achieving specific objectives) and indirect ones (which do not call for direct financial appropriation but which can come through application of fiscal, service, social and other similar policies). Both these type of incentives can be applied or are provided to the local communities, by the government. Some can have regional and international origin.

In Uganda Bwindi Impenetrable and Mughahinga Trust Fund worth \$4 million is an example of an incentive from the international community for use in a conservation of rich bio-diversity in these parts. The local communities are to benefit in the ratio of 3:2:2 in support of local community micro projects, support to local administrative structure and grants for research. This incentive is to be applied in an area where there is the highest population density which has been responsible for land degradation. It is by no surprise that the same area is benefitting from another form of incentive (Agroforestry Technology) under a project entitled Development Through Conservation (DTC).

Other forms of incentives have been quantitative in nature e.g. allowing communities to own woodlots in the buffer zones of Mt. Elgon under Mt. Elgon Conservation Project. Likewise, in different towns of Uganda the private sector has been allowed to own woodlots on government land under peri-urban plantation project. To-date under Peri-urban Forest Plantation Project, 630 ha have been planted by individuals and community organizations, and 1,200 ha planted by the Uganda Forest Department as woodlots for the supply of fuelwood, poles and posts.

It is however, important to mention that even though the proposed environmental policy and law are not yet approved, the public awareness and concern for sustainable natural resource management is influenced by the introduction of these incentives. In the very recent past other incentives have been proposed e.g. those in respect of entry fees into National Parks (Ugandans are required to pay less than their counterpart foreign tourists).

#### **4 THE ROLE OF OUTREACH PROGRAMME IN ENFORCING ENVIRONMENTAL COMPLIANCE**

The outreach programme too can be a key intervention in enforcing voluntary compliance. Its success however, depends on how relevant the approach used is compatible with the resource users on one hand and on the attributes of the resource itself on the other. In Uganda, most resource users are rural, and about 50% are illiterate. The majority of them are poor, and in striving to reduce poverty, they incur high opportunity costs to be called to attend outreach programmes, particularly if they become monotonous. In Uganda, government encourages the outreach programmes as inputs into the enforcement of voluntary compliance. This is mainly so because these programmes offer four interrelated inputs into sustainable natural resource use and environmental management. These are positive attitudes towards conservation, knowledge and skills about sustainable use and information about options available to resource users - ranging from the likely future values of the resources themselves to the quality and type of technology that can be used to sustainably use the resources.

Whereas government itself participates in the outreach programme through various extension agencies, it also recognises great contribution from the non-governmental organisations, community based groups and even environmentally conscious individuals. Good and bad lessons alike have been learnt as far as their contribution to enforcing voluntary compliance is concerned. First, they are not well coordinated both at national, local and grassroot level to the extent that occasionally some element of competition to offer outreach services is observed by those meant to benefit from it. Collaboration of effort can, I believe, produce better results. Secondly, sustainable outreach programmes must be matched with local customs and traditions as a basis for introducing further change. Previously, the tendency was to look at local methods of resource use and conservation as either "backward" or "unsustainable" without looking into the historical perspective of the resource users and why according to their own judgement, the method used is thought to be superior.

From the above two examples, it would appear that the type of outreach programme that enforces voluntary compliance must be innovative. It must be innovative in a sense that it must be sensitive to the quality of audience being addressed (i.e. literacy, age, gender, status, etc) and also sensitive to socio-economic variables (i.e. time, audience that can act as change agent, and freedom to implement what is taught). Above all, the outreach programme must be sensitive to the attribute of the resource itself. Resources in threat of extinction may require more effort and financial cost to implement than those resources still in abundance but still requiring more sustainable use. In such extreme cases, the very reasons why one resource is more threatened than the other throws a big challenge to the design, timing, and implementation of the incentive and outreach programmes and carrying out of environmental audit. Thus, each situation must be handled according to its own merit.

#### **5 LESSONS TO LEARN FROM THE INCENTIVE AND OUTREACH PROGRAMME**

A number of mistakes have been committed and these are being looked at from the positive point of view of avoiding future errors. Only few examples will be given:

- Case(s) have arisen when the local communities have been given part of their share of benefits from the use of a resource by a concessioner prior to the community being consulted and informed. This resulted in delayed utilisation of the money as well as also in struggling to have accessibility to it.
- Going by the examples of similar communities as above in buffer zones, the biggest question that arises is to define the "proximity" of the resource user before you define as to who should share in the benefits or be compensated. It has appeared that the issue of who to be targeted by "outreach programme" or "incentive programme" may have no relation to nearness to a resource - On the contrary it could be the reverse. This has a great bearing in the enforcement of voluntary compliance.

- The third mistake related as to who should be the right extensionist in the outreach programme - should it be someone who is well qualified or should it be someone who shares the same social and economic values (particularly in relation to the natural resource) within the same community? This issue is critical because quite often once a certain "foreign" extensionist leaves the area, the outreach programme sometimes ceases.
- The government has farm institutes which it supports in their outreach programmes. Some of them have commendable demonstration plots. Experience has shown however that few farmers get access to see these demonstration schemes.

## 6 ENVIRONMENTAL AUDIT

By definition, environmental auditing is "a management comprising of a systematic, documented, periodic and objective evaluation of how well environmental organisation, management and equipment are performing with the aim of helping to safeguard the environment by: (i) facilitating management concerns of environmental practices, and (ii) assessing compliance with company policies, which should include meeting regulatory requirement" [UNEP/IEO (1990) Environmental Auditing UNEP].

Whether use is made of incentive or outreach programmes, there is need to carry out environmental audits on these programmes and on the environment in general. Since outreach and incentive programmes are some of the management approaches to environmental management, environmental audits apply to them.

In Uganda, environmental auditing has not been strongly and directly emphasised. It has tended to be narrow in scope in the sense that few environmental aspects are subjected to inspection by specific departments e.g. the Department of Occupational Health and Hygiene being in charge of safety of workers in industrial establishments; Mining Inspectorate being in charge of miners; and Public Health being in charge of health related pollution.

When it comes to carrying out of financial audits, by accounting/audit firms on government parastatals, and private sector, environmental issues have not been of prominence. This is partly because environmental policies are not well defined in most memorandum and articles of association of most organisations nor are the audit firms well equipped to handle such responsibilities.

Despite the above weaknesses, environmental auditing of the environment in general and specific aspects like outreach and incentive programmes is going to be compulsory. This therefore requires that Uganda puts in place a mechanism to make best use of these environmental audits. The preparation will include among others, the following:

- Baseline data on the state of the environment against which the impact of outreach and incentive programmes are to be monitored and judged. The state of the environment has to be monitored regularly. It is a pleasure to mention that Uganda has just completed its first State of the Environment Report to be published soon. This will be published bi-annually. In addition, funds permitting the exercise will be extended to cover the compilation of district environmental reports(profiles) - a step that will enable the impact of outreach and incentive programmes in enforcing voluntary compliance at local level (rather than national level) to be made.
- In order to give "a true and fair" opinion as to whether resource users are complying, it is mandatory that objectively verifiable indicators of the desired actions or improvement made in environmental management be put in place. Uganda is committed to gradually developing these, too, for different aspects of environmental management. As a support intervention, the institutional capacity building in environmental information collection, analysis and interpretation for

various users will be an integral component of developing objectively variable indicators of environmental auditing.

- The existing departments (e.g. Occupational Health and Hygiene, Mines Inspectorate and Public Health) must be strengthened to help either in establishing the necessary standards/or carrying out environmental audits. Accounting audit firms and the Department of the Auditor General must re-orient their roles so as to play a part in environmental audits, particularly in the organisations they audit.

Further, new and more specialised agencies must come up to play the role of environmental audit. It is hoped in the case of Uganda, that the proposed National Environment Management Authority will play a key role in this area as one of its main functions. The emphasis in these environmental audits will however not only be the desired end result per se, rather they will have also to look at, among others, the procedures, policies and rules used in enforcing voluntary compliance. It is from these measures that resource users can learn from experiences of others, if they so wish to replicate the methodology (outreach or incentive programme) rather than the end result per se.

- For the results of "environmental audit" to be meaningful, there must be some mechanism to "reward" those voluntarily complying and to "penalise" those failing to meet the set standards. Failure to do that implies that environmental audits will be abused, and will fail to support the legal and policy framework that has been proposed under NEAP.

Indeed, all the above, are well intentioned measures and interventions for environmental management. While that be the case, it is anticipated that the use of environmental audits may not be effective unless the public generally is well informed or motivated through outreach and incentive programmes to play a complementary part with the government.

Coming first on the list of likely problematic areas is the informal sector. It is strong, widespread and very powerful. Because of its poor relation with formal, legal and bureaucratic institutions, it needs its own approach - particularly as far as applying environmental auditing to it is concerned. The second problem area that will certainly arise is that whereas standards against which to measure the application of economic incentives may be institutionalised, the case may be more complicated in case where social incentives override. The value perspective point of view of the resource users - if this has to bear in systematic design of methodologies to enforce voluntary compliance - will be an area where the applicability of uniform environmental standards for compliance may not be an easy exercise to implement.

## 7 THE WAY FORWARD

From the foregoing sections, it is obvious that regulation and enforcement of laws is inadequate and at times inappropriate or counter-productive in ensuring a sound environment for Ugandans. Instead, Uganda is opting for the introduction of suitable incentives and disincentives to foster voluntary compliance with principles of sound environmental management. The *raison d'être* for opting for measures that emphasize incentives and disincentives is to ensure that individuals, groups, businesses and other economic entities have appropriate mechanisms to promote sustainable resource use and environmental protection. Examples of proposed incentives and disincentives are shown in Table 1. The new approach, therefore, places great emphasis on macro-economic measures which the Government can use to encourage voluntary compliance. These measures are of two categories: direct government expenditures, and measures to influence private behaviour.

**Table 1.** Examples of Proposed Incentives and Disincentives in Uganda

Sector	Proposed Incentives or Disincentives
Agriculture	Wherever appropriate and practicable offer land users tax incentives for soil and water conservation and good husbandry practices.
Forest Conservation and Management	<ol style="list-style-type: none"> <li>1. Local community involvement in the planning and management of protected areas and in the sharing of benefits derived from these areas is crucial for the conservation of forest resources.</li> <li>2. Private forestry should be encouraged by appropriate incentives, extension services, marketing assistance and increased security of land and tree tenure.</li> <li>3. Prices paid for forest products should reflect their true value</li> </ol>
Wildlife Conservation and Management	<ol style="list-style-type: none"> <li>1. Promote collective responsibility in management, revenue sharing and local community participation in wildlife protected areas.</li> <li>2. Provide more direct benefits to local communities from wildlife protected area activities including the return of a percentage of revenue to them.</li> <li>3. Establish concessions, management contracts, joint ventures, and production sharing agreements to develop tourism where appropriate, and charge fees commensurate with the value of the resource.</li> <li>4. Promote the sustainable use of wildlife resources through private sector activities such as game ranching, crocodile farming, etc.</li> </ol>
Livestock and Rangelands Management	<ol style="list-style-type: none"> <li>1. Where feasible, use tax incentive for ranchers to respect appropriate stocking rates.</li> <li>2. Improve marketing outlets to control livestock stocking rates, especially in pastoral areas.</li> <li>3. Educate farmers about the value of keeping fewer but more productive animals instead of large unproductive herds.</li> <li>4. Study the potential for wildlife ranching as a supplement for livestock ranching in semi-arid regions of Uganda.</li> </ol>
ENERGY	<ol style="list-style-type: none"> <li>1. Improve local capacity to manage woodlands by encouraging peoples' participation in forest planning and management.</li> <li>2. Encourage the private sector to generate and distribute hydro-electricity by removing the monopoly in generating and distributing electricity by Uganda Electricity Board (UEB)</li> <li>3. When feasible, provide economic incentives for private and institutional fuelwood plantations</li> </ol>

Source: National Environmental Action Program (NEAP), 1993.

## 7.1 Direct government expenditures

Direct Government expenditures are justified on the grounds that individuals are unable to secure a reasonable return from undertaking such action; or where it is not feasible or economic to delegate responsibility to individuals or communities. In this context, the provision of information and the undertaking of public works projects by government are justified on the premise that these are direct strategies that generate observable action and explicit products. An example is the restoration of environmentally degraded areas (e.g. tree planting on bare communally grazed hills); and pertinent research, extension and education.

## 7.2 Influencing private behaviour

As much as possible, direct government expenditures are to be limited to where they are absolutely necessary. Otherwise the majority of macroeconomic measures that are to be introduced would be those that influence private behaviour, such as: moral suasion, economic regulation and enforcement, economic incentives, and market measures.

### 7.2.1 Moral suasion

Moral suasion relies on a local community's sense of social responsibility whereby they attach the labels "bad" or "good" to resource management. The basis for moral suasion may be found in sound traditional agricultural, range, livestock, wildlife and woodland management practices based on time-tested indigenous knowledge. The role of the Government in increasing the effectiveness of moral suasion is that of providing appropriate expenditures on facilities and information. By educating the population, the Government will also increase the effectiveness of moral suasion.

### 7.2.2 Economic regulation and enforcement

This approach involves the introduction of a number of disincentives encompassing direct controls on inputs, productive processes, or on outputs. Government measures of regulation and enforcement in a macro-economic context include: enforcing particular crop rotation cycles, periodic exclusion of livestock in fragile rangeland areas, or penalties for producing soil loss up and above an acceptable minimum in a particular area. The "polluter pays" principle is central in guiding the formulation of a range of disincentives aimed at promoting environmental protection.

### 7.2.3 Economic incentives

Economic incentives encompass a range of policy instruments distinguished by their reliance not on moral pressure, nor on the threat of legal sanctions, but on tangible economic rewards or penalties accruing to the land user, fishmonger or manufacturer directly and automatically as consequences of particular management decisions. These incentives may be in the form of cash or in-kind.

#### 7.2.3a In-kind incentives

In-kind incentives may be in the form of inputs to production processes. For example the "free" distribution of seeds or planting materials of high yielding crop varieties falls into this category. In-kind incentives may also be used to influence the final consumption values of the population. Such incentives may include the provision of food, fuel, or improved access to health care as "rewards" for participation in an environmental program. The "food for work" or "food for school" in Kotido and Moroto districts of Uganda are ready examples. However, experience suggests that in providing these consumption-related incentives, care must be taken to ensure that the population does not develop

an extreme case of dependency and total disregard for own-initiative. Once the prospect of dependency is removed, In-kind incentives are likely to be far more effective than fiscal measures in Uganda where the population consists of largely rural subsistence dwellers. The Government can avoid encouraging dependency by providing more of the input-rather than the consumption-related In-kind incentives.

#### 7.2.3b Financial incentives

Macroeconomic fiscal measures can also be used to encourage voluntary compliance in environmental management. These measures are largely in form of cash or credit incentives. It is also important to note that the fiscal incentives can have significant impact on government revenue or expenditure. For example, taxes, selected tariffs on particular types of farm inputs or machinery and equipment, or user charges for water translate into increased government revenue, some of which can be used in turn to effect public expenditures in environmental management and protection. Other measures such as grants for special purposes or investments in environmentally sound technologies, subsidies to farmers in fragile ecosystems (such as arid and semi-arid areas) to purchase drought resistant crop varieties, and the Treasury foregoing revenue which it might otherwise collect (taxation concessions) for good environmental practices all involve additional Government Expenditure.

#### 7.2.4 Market measures

The overall goal of market measures is to establish conditions where individuals face cost and revenue incentives to change their land use patterns and promote sound environmental management, among others. One way of doing this is, for example, to create new markets (e.g. for products of game ranching and ostrich farming as alternative income generating activities in dry land areas, encourage the establishment of prices for previously unpriced goods (e.g. fuelwood) or services, alter the number of participants in a market; change the ruling entry and exist conditions in resource extraction; or alter the parameters of existing livestock markets to eliminate overgrazing in pastoral areas.

## **8 CONCLUSION**

In advocating for measures that encourage the promotion of voluntary compliance with respect to environmental auditing, outreach and incentive program, macroeconomic measures are favoured. However, in formulating macroeconomic measures through direct government expenditure or influencing private behaviours, Government has to keep in mind that for any of the incentives to be effective, it must be dependable and have permanency of output; adaptable to economic growth; equitable both vertically and horizontally; flexible enough to ensure that local people retain some freedom in determining their response to a particular policy or program; and cost-effective to society. (Table 2 provides a list of proposed outreach programs for sustainable environmental management.)

**Table 2.** Proposed Outreach Programs for Sustainable Environmental Management

Sector	Proposed Outreach Programs
Environmental Information	Document, evaluate, store, disseminate and utilize existing indigenous knowledge and practices with regard to environment and natural resource management
Biodiversity	Foster public support for intended biodiversity actions and encourage private investment in tree planting and wildlife conservation by placing greater emphasis on increasing public awareness on biodiversity values.
Water Resources	Increase the level of community awareness on the importance of water, particularly with regard to hygiene.
Climate	Improve awareness among potential users and decision makers of climatic and atmospheric information including establishing demonstration projects in selected areas.
Population, Health and Human Settlements	<ol style="list-style-type: none"> <li data-bbox="490 702 1156 794">1. Increase access to family planning and maternal and child care programs, targeting both men and women, in order to balance the population growth rate with available resources and social services.</li> <li data-bbox="490 813 1156 883">2. Facilitate women's participation in population and environment decision making, resource ownership and management, as well as improve their access to inputs including better access to credit.</li> </ol>
Gender Integration	<ol style="list-style-type: none"> <li data-bbox="490 916 1115 1009">1. Facilitate participation of both men and women in formal and informal education, training, public awareness campaigns and decision making in environmental and natural resource management.</li> </ol>
Environmental Education	<ol style="list-style-type: none"> <li data-bbox="490 1042 1156 1090">1. Train trainers in the use of environmental educational materials, for example, teacher trainers.</li> <li data-bbox="490 1108 1156 1151">2. Develop environmental teaching materials initially for primary schools and eventually for all training institutions.</li> </ol>