# **SECTION 1:**

# Introduction

#### **OBJECTIVES OF THE TRAINING PROGRAMME**

In 1990 the Women & Development Programme of the Commonwealth Secretariat initiated a three-year project to develop training programmes for women in natural resource conservation. Its main aims are:

- \* to assist rural and urban-fringe women to develop sustainable farming practices and to conserve local natural and living resources, to enable women to build upon and exchange their indigenous knowledge and to enable them to benefit directly from sustainable resource management;
- \* to develop the skills of trainers in the Commonwealth;
- \* to sensitise government policy-makers and planners to the vital importance of involving women in global, national and local efforts to conserve the environment and living resources.

#### AIMS OF THIS MANUAL FOR AFRICA

In this context, this training manual focuses on the first of these objectives. It is aimed at those working with rural women in the fields of sustainable agriculture and natural resource conservation. It is designed to provide some ideas on how to learn from and with rural women (and men!) and how to work together with them for better management of the environment.

#### USERS AND USES OF THE MANUAL

The manual has been designed with two groups of users in mind. Firstly, those working with women's organizations, or mixed gender organizations, or with individual women, at the local level. These workers may be extension or development field staff of non-governmental organisations or government bodies. They may be female or male.

The second user group is those responsible for training these local level extension or development field staff. The aim of the manual is thus to help these trainers pass some of the following points to local-level workers:

- \* the need to consider gender and environmental issues in the planning, implementation, monitoring and evaluation of any development activity;
- \* the value of communicating with and learning from rural women and men to better understand the ways in which resources are being used at present and to better plan with them any improvements in resource use;
- \* some approaches and techniques to facilitate effective communication with rural women and men for sustainable management of natural resources;

- \* lessons which can be learnt from looking at examples of successful conservation activities by groups of rural women (some involving men also), as well as the lessons from less successful group activities in conservation;
- \* an introduction to a variety of conservation techniques, their value and limitations, and pointers to sources of further information on these practical techniques.

With this aim in mind, the manual has been written in four sections.

#### 1. Introduction

An introduction to the interlinking issues of women, conservation and agriculture. A review of the problems of environmental degradation in Africa and a general discussion on appropriate approaches for working with rural women in conservation and agricultural development activities.

# 2. Learning from Rural Women

A set of guidelines on communication, learning and analysis techniques for use in investigating local natural resource issues with rural women. Some examples of where and how these techniques have been applied.

# 3. Women's organisations for conservation

Case studies of local level women's organisations and mixed gender organisations for conservation. Discussion of the benefits which the women have received, and the key reasons for the success, or failure, of their efforts. Suggestions on ways to try and replicate some of the successes and avoid some of the worst mistakes.

# 4. Conservation techniques

A source book which brings together a selection of practical field techniques for conservation, ranging from soil and water conservation, organic farming, agroforestry, and conservation of indigenous living natural resources. Brief descriptions of each technique and references for further information.

Equipped with these guidelines, case studies and practical techniques, the users of the manual can experiment with those approaches and methods which seem most appropriate to the situation in which they work. Indeed it should be stressed that the examples provided in the different parts of the manual are largely for illustrative purposes; please note that:

\* not all methods of communicating with and learning from rural women are equally appropriate in different cultural settings and organizational structures. Practical problems can restrict their usefulness to only certain situations, such as where there is enough time to develop a good relationship between the rural women and the investigators, to allow the more sensitive issues to be discussed openly.

- \* not all successful women's organizations conservation activities are replicable. The majority have a number of very specific conditions which contribute to their success; it is unlikely that the same combination of these contributing factors will be available everywhere.
- \* not all conservation techniques are equally applicable in different conditions. Here the physical differences, in soils, landscape, land use, and availability of other resources will determine which techniques will be useful. Other factors, such as the cost involved in using the technique and the existing land ownership patterns will also come into play.

# HOW TO USE THE MANUAL

Because of the many different situations in which users of the manual are working, this one book can not provide all the answers. It is not meant to be a cookbook to be followed exactly. Rather it is up to those using the manual to take from the pages those ideas which are useful to them, and to select the techniques most relevant to their work.

The two user groups may want to use the manual in different ways. Local extension or development workers may use it as a reference book, to dip into for new ideas in planning, undertaking and assessing their conservation work with the women themselves. They may wish to ignore the practical exercises or use them as a basis for discussion when they meet together with their colleagues.

Trainers, on the other hand, may want to use the manual as a workbook in their training programmes. Here, the exercises may be more appropriate but will still need to be adapted to the particular groups with which they are working. For some ideas on how trainers might use the manual, see the chapter "Notes for Trainers" at the end of each of the four sections.

The examples and case studies provided in the manual are just that: examples. Trainers would do better to find their own, local material to replace those given here. The format of the manual is most suited to small group discussions and group exercises, in which the training participants are all involved - the manual is designed to initiate discussion and debate, rather than to be used in lectures!

There are a number of blank pages at the end of each of the four sections of the manual. Readers can use these pages to note their own responses to the exercises or to record the points raised during group discussions using the manual. Trainers themselves may want to stick photocopies of their own case studies, photographs, exercises etc. on these blank pages, to customise the manual.

# A PLEA FOR CRITICAL COMMENTS

This manual is still very much a draft. It needs to be reviewed by those who are familiar with the problems and opportunities of working at the local level with rural women. The authors

would therefore welcome comments, criticisms and suggestions, from those who have used the manual in their work. By sharing experiences from different African Commonwealth countries we can better understand the extent to which the approaches and techniques dealt with here are location-specific. Readers and users of the manual are also encouraged to send short accounts of their experiences of successful, and equally important, unsucessful activities in this area of work. Learning from others' experiences is vital if we are to be effective in our work with rural women in sustainable development. Please send your comments to:

Gender and Youth Affairs Division, Commonwealth Secretariat, Marlborough House, Pall Mall, London SW1Y 5HX, United Kingdom

# SUSTAINABLE AGRICULTURE AND RESOURCE CONSERVATION: WHAT ARE WE TALKING ABOUT?

The terms we will be using in the manual mean different things to different people. Indeed the definitions are often topics of much discussion among those concerned with sustainable development:

- \* What is sustainable development?
  - \* What do we mean by sustainable agriculture and resource conservation?
  - \* What is environmental degradation?

The definitions used here are:

**Sustainable Development**: development without destruction. In the words of the World Commission on Environment and Development<sup>1</sup> sustainable development is "development which meets the needs of the present without compromising the ability of future generations to meet their own needs". This means development which is economically, ecologically and socially sustainable.

Sustainable Agriculture: agricultural production which contributes to sustainable development. That is, agricultural production which does not damage the resource base on which it depends.

**Resource Conservation**: the preservation or, more commonly, the careful use of natural resources to ensure that the existing resources are not depleted beyond their ability to recover.

**Resource Management**: the way in which natural resources are used, for example the way in which a forest area is used by a local community to provide wood for construction, fuel, and tool making, as well as wild foods and medicines.

**Environmental Degradation**: a reduction in the usefulness of a natural resource to humankind. The degradation can be caused by natural processes and/or human interference. For instance, land degradation caused by natural soil erosion and inappropriate farming practices may reduce crop yields and finally lead to the land being unsuitable for its present agricultural use.

**Desertification**: usually refers to degradation of arid and semi-arid lands, but can also threaten humid and sub-humid regions. It can be caused by human activities, drought conditions, or a combination of the two. It often results in a reduction in the amount and the variety of plant and animal species, a reduction in available water and soil fertility, and an increase in soil erosion.

**Deforestation**: the loss of forest cover by either death of trees or the removal of trees by humans. Tree felling is the result not only of industrial logging activities but also land clearance by farmers for agricultural expansion, or shifting cultivation. Overuse of forest resources for fuelwood, construction wood, fodder etc. can also lead to deforestation.

**Salinization**: the contamination of soils by excessive quantities of dissolved salts. It is a common problem in coastal regions and where much irrigation is used. Salts are brought to the surface of the soil. A hard crust of salt on the ground is one sign of very saline land.

Shifting Cultivation (slash & burn agriculture): farming different plots of land in rotation. A patch of ground is cultivated until either the soil becomes exhausted or it is covered by weeds. The land is then left to recover naturally while cultivation is carried on elsewhere. New sites are usually cleared by burning the natural vegetation.

#### WHERE DO WOMEN COME INTO THE PICTURE?

- \* Women comprise more than half of the world's population.
- \* About a third of rural African households are headed by women.
- \* In many countries it is the women who carry out the majority of farm work.
- \* Women play a vital role in meeting the food and energy needs of households. In some African countries, women contribute as much as 75% of household food production<sup>2</sup>.
- \* In some areas women are now playing an even larger role in agriculture as more and more men migrate to towns for work.
- \* Agricultural credit and extension services are rarely designed for women. Women are often seen as gardeners rather than farmers.
- \* In general and in comparison to men, women have more limited access to resources such as land, capital and skills.

Women have an integral role to play in combating degradation, in conserving natural resources and in ensuring that agricultural production and development are sustainable. The word **integral** is important. The part which women play must be integrated into the whole development process. This issue of Women in Development must not be left as a side issue. Given the fact that women have often been a neglected and sometimes exploited group in rural development there needs to be a **special emphasis** on their position. This emphasis must be made within the context of other development priorities.

This manual aims to show that women must be kept in the picture. If not, the picture produced is not only incomplete but is likely to lead to agricultural development policies and practices which are unsuccessful in the long term and which are potentially damaging to the natural resource base. It must be stressed that women are by no means a homogeneous group. This manual concerns itself with women as a sub-group of the rural poor, i.e. a particularly vulnerable section of the rural population. Even within this group, there will be many differences in the position of the women, in the conditions they face, and in the opportunities open to them.

#### MAJOR PROBLEMS OF ENVIRONMENTAL DEGRADATION

#### How bad is it?

Environmental degradation is often difficult to measure. Estimates are based on many assumptions so the figures must be treated with caution. Predictions of future trends are even less reliable, as unexpected events and responses can change present trends dramatically.

However, it is worth quoting a few figures to give a rough idea of the scale of the problem in Africa, and globally. The degradation is usually measured in terms of either the costs involved or the amount of physical resources lost.

- \* In 1980, the United Nations estimated an annual loss (excluding indirect costs) of US \$26 billion in agricultural productivity worldwide from desertification<sup>3</sup>.
- \* Making degraded land fit for use can be expensive. Between 1985 and 1987 the United Nations Food and Agriculture Organisation (FAO) spent US \$289 million on degraded African agricultural lands<sup>4</sup>.
- \* At least 25 million metric tonnes of topsoil are lost per year, worldwide, according to the United Nations Environment Programme (UNEP). Overall, UNEP predicts a net loss of about 55 million hectares of agricultural land by the year 2000, mainly due to erosion and desertification<sup>5</sup>.
- \* The annual rate of soil erosion in Africa and South America is about 7 tonnes per hectare, compared with only 0.8 tonnes per hectare in Europe.
- \* UNEP estimates that 4 million hectares of forests are lost annually, in Africa, of the 12 million which are lost worldwide. One figure often quoted is the reduction of

forest cover in Ethiopia from 40% 100 years ago to only 3% now. However, figures are difficult to obtain and it may be that these are underestimates.

- \* Alongside this reduction in quality and quantity of the world's resource base, the global population is increasing at about 1.7% per year. Africa is projected to increase its population six times before it stabilizes. The school age population in sub-Saharan Africa is set to double in the next fifteen years and triple or quadruple in the next forty<sup>6</sup>.
- \* "New" problems such as global warming and ozone depletion are also emerging partly due to the greater impact of human activities on the environment and partly to our increased ability to observe these problems. For example, the release of carbon dioxide and other gases (methane, nitrous oxide and CFCs) into the atmosphere has risen sharply with the intensified burning of fossil fuels. Because of these increased concentrations, global temperatures are predicted to be between 20°C and 50°C higher by the year 2100 compared to pre-industrial times<sup>7</sup>.
- \* The last twenty-five years have seen a decline in agricultural production per capita of about 1% per year in Africa, whilst there have been very significant increases in Asia and Latin America<sup>8</sup>.

Overall we can say that our ability to reduce adverse environmental impacts and to avoid these impacts in the first place has increased. But not fast enough. Policies and practices for sustainable agriculture and resource conservation are still largely in the experimental phase and technologies for environmental rehabilitation are still far behind technologies for production increases.

# What are the roots of the problems?

Environmental degradation is not a new phenomenon. Thirteen hundred years ago irrigation in dryland Mesopotamia resulted in salinization of large areas of land. But in the past, degradation was not always considered a problem. Population densities were relatively low and productive lands were sufficiently abundant to allow the degraded lands to be abandoned until the fertility was restored.

Today the causes of environmental degradation are usually very complex. There are social, ecological, economic and political reasons for non-sustainable agricultural practices and for environmental mismanagement. Past policies, development trends and traditional beliefs may be partly responsible for present-day problems. Some of these changes may be irreversible, while others can be altered or reversed. The causes also stem from different levels - from global and national, to individual farms and households.

To illustrate how a number of different factors can combine to cause environmental problems, a scenario is presented here, describing a situation which is hypothetical and very simplified but which can be seen, to some degree, in many Commonwealth African countries.

#### Box 1

# A Scenario of Land Degradation in an African Village.

Historically, the local forest and pasture lands were owned and managed communally by the rural people living in the village while the cropland was individually used. Everyone had some access to the benefits of the forest and the grazing on the pasture and so everyone living there was interested in maintaining those resources in cooperation with everyone else. Because there seemed no risk of their communal or private land being taken away from them, the people invested much efforts in the land. In the forest they cut down only mature trees, leaving the young trees. They also planted trees on their farm land and maintained the soil fertility in the same way as their forefathers and mothers had done.

Then, the country was colonized and ruled by a foreign power who was keen to see economic development. Health services were increased and even in the rural areas people began to see the benefits. Adults lived longer, fewer children died, and so populations increased. More and more men moved from the rural areas into the towns, where more jobs were now available to support the development projects and the local bureaucracy.

But with these benefits came costs. The colonial policy of agricultural development emphasised the need for increased production, to achieve self-sufficiency and supply export goods to the colonizing nation. To feed the ever-increasing population, forest land was lost as agriculture expanded. The local people began to lose control over their land and its production. The agricultural extension agents brought recommendations from the administration in the capital city. These recommendations were sometimes forcibly imposed. For example, new soil conservation techniques were made compulsory - everyone had to obey. Cash crops were planted on a large scale, sometimes by confiscating privately-held land and turning it into state-owned land. People began to feel insecure about their property rights and so no longer made long-term investments, such as leaving fallow periods in the cropping cycle or planting trees around the cropland. Agricultural services were given primarily for the cash crops, and the government bought at least some of the harvest at a fixed price. It made economic sense for a farming household to plant a large part of their land under the cash crop, even though it made them dependent on the government for services, inputs and marketing. It also meant that the people had to buy food items and other goods from the market which they had previously grown themselves. As well as the pressures on the crop land from this intensified agricultural production there were increased pressures on the grazing land, as cattle numbers increased with the growing human population and with improved veterinary services.

continued ...

#### **Box 1 continued**

With the increasing pressures on the limited resource base, the traditional systems of cooperation and sharing began to break down. People were forced to try and make short-term economic gains at the expense of long-term social, ecological and economic losses. For example, in order to earn some extra cash, more and more households turned to cutting down trees to sell as fuelwood in the local market. The forest around the village became more and more depleted.

After the country gained its independence, the problems remained and new ones emerged. With the expatriates gone there was a severe lack of trained personnel to fill the posts in the new government. The bureaucratic machine was more or less intact, the top-down administration was still in place, but without the human resources to manage it effectively. Pressure to maintain foreign exchange reserves put further pressure on the government to increase agricultural productivity, especially of export crops and sometimes without due concern for long-term sustainability. Heavy-handed policies on landuse and land rights were still operating, and the environment and the rural poor - especially women - suffered at the hands of short-run economic goals, the elite and the powerful.

Now, these problems are still evident. Recent droughts have made matters worse. The ways in which people previously managed their production to withstand droughts and prevent them developing into disasters are now threatened. Some of the present agricultural practices are partly responsible for the ongoing degradation of the environment. The land is being "mined" by over-intensive cropping and overgrazing. Pesticides are causing pest-resistance and pollution problems. Crop expansion on the steeper slopes is causing soil erosion there and siltation problems in downstream areas. In turn the degradation itself is badly affecting the production of the land and increasing pest problems.

This rather gloomy scenario misses out many other causes of environmental problems. It also makes no mention of the many initiatives being taken to alleviate the problems. These responses at both the local and national levels will be outlined later in this manual. Meanwhile, let us consider some of the common myths about environmental degradation. In an attempt to get to the root of the problems, undeserved blame has been put on some groups of people and processes. As the above scenario illustrates, there are many and interlocking causes of damage to the environment. If we place the blame on one group or one factor, we are ignoring this complexity and giving a wrong impression of simplicity. Trying to address one factor while not dealing with other causes will not help the problem.

So, where has the blame been misplaced?

# 1. Low incomes

"A lack of cash makes people destroy their environment. Giving them more money will solve the problem."

Like all myths, there is some truth in this. If a household is badly in debt, the members may be forced to overcrop, or omit fallow periods in order to provide enough food for themselves. Or they may have to take casual employment in a nearby town, leaving little time for mulching, maintaining the terraces, or other conservation measures. But the myth is misleading. A lack of money is rarely the major reason why a household can not manage its resources in a sustainable way. More often, the management problems they face are political rather than financial. Their land may be taken over by wealthier farmers, or the State, and the poor may be forced onto poorer quality, more fragile land which is more vulnerable to degradation and more likely to be exploited beyond its capacity. Poor farmers often do not own land but are tenants on the land which they farm and often have only short-term leases. Living in difficult areas with poor production, they are likely to be bypassed in the government development plans for investments in, and services for, agricultural development. These are the more common reasons why they choose not to invest in environmental improvement measures, rather than simply a lack of money.

In general, the poor are more vulnerable, powerless and isolated. Without security, power and contact with other farmers and other areas, they are in a much more difficult position to manage their scarce resources. Women-headed households and poor female farmers suffer the same constraints, often to a greater degree than their male counterparts. The particular problems for female farmers is dealt with later in this section.

On the other hand, poor farmers sometimes are known to value tree-planting as good economic investment, provided they have clear rights to the land and the trees. Likewise, smallholders are often particularly innovative in developing their own soil and water conservation technologies and maximizing nutrient recycling on their plots. Environmental protection should not be thought of as a luxury, which is neither affordable to nor a priority of the poor.

# 2. Hunger

"There are too many people to feed with the limited resources available. Reducing the population will solve the problem."

The increasing pressures on the environment with increasing population densities have already been mentioned. Our impact on the land's resources does depend on how many of us there are. But the idea that there is a global food scarcity problem because of growing populations, and that we can only satisfy our increasing demands by sacrificing the environment, is incorrect. The amount of food produced per person in the Third World has risen by 7% since the mid-1960s. Overall there is enough food to feed everyone. In

Africa, however, food production per person has been following a downward trend. Yet the problem of hunger, seen in many African countries today, is not caused simply by too many people nor is the struggle for enough food the main cause of the damage to Africa's environment.

Instead, hunger and environmental degradation are linked by certain common causes, in a similar way that poverty and environmental damage are linked. Unequal access to food and other resources such as health, education and land means that hunger can exist even in a relatively prosperous country. Some people starve while others have plenty. In addition, international politics may play a role. If the government of a country is concerned about increasing export production to earn foreign exchange, high levels of crop production may exist alongside hunger and may also be unsustainable in the long run.

In addition, it is important to realise that vulnerable people need large families. For instance, a group of rural women and men in Ethiopia were asked why people were having large families, given the economic hardships they face. They replied that it was good to have a number of children, especially boys so that one could go to school, one could go to the army, one could look after the cows, and one could work on the land. Not only do children add to the labour force of the household, but they are also a valuable source of support when their parents become older. Only when the prospects for the household are more secure can a smaller number of children be a viable option.

So, keeping the population levels and densities in check will not solve the problems of hunger and environmental degradation. Rather, these will only be tackled effectively by ensuring that the distribution of resources is more equitable. This includes ensuring that rights to land, education, employment etc. are provided to women as well as men.

And in turn, the same policies, ensuring a more equitable distribution of resources and enhancing the power of the poorest members of society, are some of the most effective means of reducing fertility. Women who have better education and employment opportunities, and whose status does not only depend on the number of children they bear, can choose to plan their family size, and the overall result is generally a reduction in population growth.

# 3. <u>Colonial powers</u>

"The environmental problems facing African countries today are the result of what happened when they were colonies. Independence has been good for the environment."

The notion that all today's environmental problems can be blamed on past colonial times is neither helpful nor justified. Certainly there were clear environmental costs associated with some policies of the colonial administrations. The emphasis on the production of a few export commodity crops lead to large-scale monocultures, sometimes with little regard to the suitability of those crops for the types of land used. Mining operations also

brought their own pollution problems. However, the colonial systems also brought advantages, such as the introduction of environmental conservation policies. Many of today's national parks were established by the colonial administrations. As part of the explorations of the colonised country's potential, thorough surveys were undertaken of their natural resources. Some of these surveys are still very useful today in planning more appropriate land use.

Independence brought other pressures to bear on the environment. Export commodities were still a priority, this time to earn foreign exchange rather than to supply the colonizing country. With decreasing prices for these commodities, the pressures have worsened. Meanwhile the old bureaucratic systems have largely remained with their top-down approaches and adverse impacts on the local management of resources. To relieve these pressures and problems, the national economies must be stabilized, the export bases must be diversified and the priorities of the governments must better reflect the needs of all their populations - including the rural poor and the rural women, and not just the urban elite and powerful groups.

#### How are rural women affected by environmental problems?

As a group, rural women are at particular risk from the effects of deteriorating environmental conditions. Their livelihoods and responsibilities make them more dependent than men on the local natural resources. The constraints and pressures which they face leave them more vulnerable to lack of water, declining crop yields etc. Yet they are still neglected by many outsiders, including government development planners, who tend to regard rural women as an irrelevant group. As an integral part of both the problems and the challenges of environmental degradation, women must be treated as a central group, not left out of the action.

# In rural Africa, women suffer from the disadvantages of:

- 1. Heavy workloads, including farm work, marketing, household chores and casual labouring. The economic responsibilities of rural women have increased, with more and more men migrating for urban employment outside the area.
- 2. Limited access to land. Women rarely own land. They thus have a lower financial status and more difficulty in securing loans.
- 3. Limited access to services and resources, including health, literacy, training, capital and food.
- 4. Limited access to appropriate technology and tools to ease their workload. For instance, for many rural women in Africa, food processing (such as pounding palm nuts or baking bread) is an important source of income. However, the development of the national food processing industry more often means setting up large-scale processing plants rather than helping these women by improving their access to tools, credit, raw materials and so on.

These disadvantages make rural women's tasks of farmer, mother and housewife all the more arduous and time-consuming. They face further problems when their surrounding environment is degraded. For instance as forests recede, women must spend more and more time walking to get wood for fuel and leaves for fodder. The physical effort is obviously greater, and there is less time in which to do the other essential household chores. They end up working even longer hours. Little or no time is available for other activities, such as attending health clinics, literacy programmes, or tending vegetable gardens. Thus, not only do the women themselves risk ill-health and miss opportunities, but their family, especially children, suffer too.

#### Women and environment in conflict?

Is it always possible to benefit both the local environment and the women who depend on the exploitation of this environment for their survival? Clearly there may be cases in which benefits to the environment may bring costs to the women, and vice versa. For instance, if an area of land, previously accessible to the local women and men, was made out-of-bounds, and guarded against intruders in order to give the soil and vegetation a chance to recover from the heavy exploitation in the past, this would clearly have benefits for the environment but, in the short term at least, would be seen as a problem by the women and men who would no longer be able to use this land to graze their livestock, collect fuel and fodder, or collect food and water etc. In the long term though they may benefit from the increased and sustained production of the land, after it has been rehabilitated.

In many instances difficult decisions will have to be taken, and compromises made, in order to avoid heavy damage to the environment or major problems for the rural women. Making such decisions is easier if the likely impacts of the activity have already been considered. If we are aware of how the environment and the local rural women will be affected by the planned activity we will be in a better position to help choose an option which causes least damage.

#### THE CHALLENGES

The great challenges of addressing the problems facing rural women and the problems of environmental degradation in Africa require a similar approach. The two linkages of women/development and environment/development have come to the fore relatively recently. It is becoming clear that to achieve sustainable development, the plight of rural women needs to be taken into account. If women do not benefit from a development activity, or if they suffer in some way because of the activity, can this really be called development and will it be sustainable? Likewise, the state of the environment is another critical factor to be integrated into development strategies. The likely impacts of development on both the rural environment as a whole and on rural women as an important group must be considered.

Furthermore, positive action must be taken. There is an urgent need to reduce existing damage to the environment and to develop awareness and technologies for using the land

in ways which are suitable for the environment, and therefore sustainable. There is a parallel need to take action to improve the position of rural women. When their access to assets and services is improved and when they are given the central role which they deserve in sustainable development, not only will the women benefit greatly but they will be in a much better position to care for their environment. It is clear that the position of women and the issues of environment and development are all linked. Developing agricultural policies and practices which benefit rural women and which are also in tune with the environment requires recognition of this link. The challenge therefore becomes:

How can women's role in environmental management be taken account of, and supported in order to improve the chances of sustainable development and increase women's share of the benefits?

#### What has been achieved so far?

Progress in raising gender awareness among the development community and in demonstrating the links between women, environment and development has been encouragingly fast in recent years. On paper at least, development agencies are concerned with the impact of their work on women and the need to take account of these impacts in the appraisal and design of their projects. At the local level, there are also encouraging signs, with many small-scale indigenous efforts by rural women, providing ample evidence that women want to and are able to improve their environment by joining together. In many environmental protection projects women have been found to be the ideal promoters and extentionists of conservation techniques. Their concern and commitment are obviously higher when the responsibilities for the work are handed over to them and when they are able to improve their status through their work.

Yet, alongside these successes there have been mistakes and misguided actions. There is considerable documentation of projects which have had adverse effects on the lives of local women, often as a result of failure to anticipate the negative effects on women alongside the positive development changes due to the project.

The three examples quoted in Box 2 are taken directly from Molnar & Schreiber<sup>9</sup>.

# Box 2

# 1. Unanticipated impact on women's workload

A Machakos-based agroforestry project in Kenya required women to collect and transport water for seedlings in the nurseries. When a water shortage forced the women to fetch the water from a river 2.5 km away they refused to go. Project planners had made no attempt to consider the impact of the project on women's work load<sup>10</sup>.

# 2. Unanticipated loss of resources

In Burkina Faso, an area of degraded shrubs was cleared for planting trees. The choice of tree species unintentionally meant that women lost a valuable source of fuelwood, shea nuts for cooking oil and medicinal plants<sup>11</sup>.

# 3. Conflicting interests of men and women

A tree project in Cameroon introduced fodder trees as an intercrop to stabilize soils on land previously under slash-and-burn cultivation. Men liked the new system: it increased maize yields and reduced the work for land management. Women did not like it: their groundnut production declined and they had to provide more labour for pruning the trees<sup>12</sup>.

Certain approaches to rural development have failed to bring benefits to rural women. These can provide useful lessons for future initiatives. They include:

- \* the tendency to focus on male household heads in rural research and development activities. Since women are often the people responsible for much of the agricultural production, by-passing them will mean losing a valuable source of indigenous knowledge and risking poor implementation of any attempted changes in management. This focus on male household heads is also based on the misguided assumption that the information and resources channelled to them will "trickle across" to other members of the household, including the women. This is often not the case<sup>13</sup>.
- \* the gender imbalance of extension work. The vast majority of agricultural and forestry extension workers are male. The average proportion of female extensionists in Africa is only 3 per cent. This represents a serious limitation in the extent to which female farmers are in contact with outside advice on agricultural technologies. Male extensionists tend to deal with male farmers rather than with all farmers. It also seems that female extensionists are provided with less training and

are found in lower ranking jobs compared with their male counterparts. Female workers are often directed into home economics extension rather than agricultural extension<sup>14</sup>.

- \* alongside the overall neglect of female farmers, the extension services which they do receive are often restrictively stereotyped. Women are often regarded as gardeners and are provided with extension services in small-scale poultry or vegetable production rather than staple crops or large livestock, even though they are often also responsible for the latter. In addition, cash crops are normally introduced to men, rather than women, which in turn tends to marginalize the women from the financial benefits of this production.
- \* the emphasis of agricultural research is also largely on cash crops, typically grown by men, as opposed to food crops, often grown by women.
- \* the mechanization of agricultural production also tends to marginalize rural women from the improved technologies, as men are usually the target group for such programmes. The mechanisation is often focussed on production tasks (such as land preparation) undertaken by men rather than women. In other cases, the mechanised technologies place additional heavy burdens on the workload of women, and cut the time they have available for their more traditional incomeearning activities. For example, in Burkina Faso intensified production on irrigated land increased women's workload, making it impossible for the women to spend time producing shea butter, sorghum beer, and snacks for their own cash benefit.

# Ways forward

If we consider the above challenges of how best to work with rural women towards the goal of sustainable development, what themes emerge as the ways to move forward? It is wrong to expect universal answers. One important step is to adapt any potential solution to fit the local conditions and resources. There are also some general pointers towards appropriate strategies which will both strengthen the position of rural women and help them to better conserve their resources. These include:

- \* making more use of women's knowledge, experience and traditional skills of natural resource management;
- \* recognizing the differences of interest and responsibility in different resource management activities, between different members of the rural household; anticipating and dealing with areas of conflict;
- \* raising public awareness at all levels about the role women play in natural resource management and agricultural production;
- \* using more participatory approaches in agricultural development involving both women and men in decision-making as well as implementation. Learning from them, listening to their priorities and deciding with them.

# **Keys for success**

The above list illustrates some general strategies required for working with women in sustainable development. We can also look at what has contributed to the practical effectiveness of real-life activities - to identify the common ingredients of success. Some case studies of successful actions are presented in later sections of this manual. Each shows how a locally appropriate approach has been adapted to suit the existing conditions and the available resources and skills. Within this diversity of approaches some common features are evident and here are ten general principles which seem to apply to successful initiatives:<sup>15</sup>

- 1. **Knowing where you are** starting with the current situation, asking, listening and observing before planning any new activities or changes.
- 2. **Having clear objectives** instituting a bottom-up approach in the decision-making structure. Giving women a say in the planning, monitoring and evaluating phases as well as the implementation of the work. Facilitating information flows between women and men at different levels of the decision-making hierarchy.
- 3. **Poverty focus** making a conscious link between poverty and gender priorities. Ensuring that the activities neither favour the wealthy rural women nor risk being taken over by the elite. Recognizing the need for action to eliminate disadvantages of, and prejudices against, the poor, the women, and the powerless. Seeking to provide equal opportunities and equal access to resources and services for all.
- 4. **Inclusiveness** adopting an approach which does not necessarily involve only women, but being aware of the tendency of men to dominate in mixed groups. Working for the involvement of men, households and communities rather than provoking confrontation between women and other groups. Avoiding the alienation of any one group men or women, rich or poor, powerful or powerless.
- 5. **Short and long-term strategies** combining and complementing short-term and local initiatives with longer-term and higher-level initiatives. Following up, supporting and monitoring the initiatives to ensure their effectiveness and sustainability, seeking to raise awareness of gender issues among governmental and non-governmental agencies and among the public.
- 6. **Locally appropriate** using local institutions and groups wherever possible.
- 7. **Leadership** developing and making use of strong leadership in the organisations involved. Encouraging local women in particular to take on leadership roles.
- 8. **Training** designing and providing training for women in skills which they wish to learn and which they feel will benefit them.

- 9. **Starting small** taking account of the burden of work in women's traditional roles before initiating new activities and giving them additional responsibilities.
- 10. **Sharing information** encouraging an open exchange of information and knowledge between initiatives with similar goals. Highlighting failures as well as successes. Allowing women to share their experiences and keeping men informed about what is happening.

# SENSITIVITY TO CULTURE

It has already been stressed that the approaches chosen for working with rural women in conservation activities need to be adapted to local conditions, including the local cultural setting.

The status of women within the household and the community differs from area to area and country to country. Their activities and responsibilities also vary. These differences will affect how useful a particular approach can be. For instance a tree planting programme for rural women may be very difficult to establish if women in that area traditionally have no responsibility for planting trees. If this activity is usually done by men, it may be unpopular, perhaps a cause of conflict between the women and men, to attempt to change this custom. On the other hand, if tree planting can provide worthwhile benefits to the women, and if they are interested in such an activity, the reasons for maintaining the previous cultural restrictions on tree planting may need to be questioned.

Two examples quoted in Part III of this manual show how such restrictions may be dealt with. The case study from

Sudan, from a society with many restrictions on women's activities, shows how women can be involved in non-traditional activities while still keeping in line with the customary practice of their society. The women raised tree seedlings in their own homes, and their menfolk then took them out for transplanting or sale. Another example, from Kenya shows how a group of women were able to become involved in tree planting, by obtaining a small piece of land from the local chief, to establish their own tree nursery.

It would not be appropriate here to provide guidelines as to which cultural practices should be followed and which ones, for instance those unnecessarily restrictive to women, should be questioned. This is a very personal issue; individuals have individual opinions as to which cultures and traditions they feel they should support and work with and which they should try and change. It is essential that these opinions are aired and that within the work of women's organisations a clear policy evolves from an open debate on their role in the local cultural environment.

The thinking behind this manual is that women do play an important role in conservation and farming activities and anything which serves to improve their benefits from such

activities should be encouraged. Conversely anything which prevents these benefits from reaching the rural women should be considered as an opportunity for improvement rather than an inevitable and insurmountable problem.

#### NOTES FOR TRAINERS

Trainers may want to use some of the following exercises in their training workshops to generate discussion on the issues raised in this section:

- 1. Ask the group to define some or all of the terms listed in the chapter "What are we talking about?" List their suggestions on the board. Compare these definitions with those provided and discuss differences. Add examples of each from the local situation.
- 2. Compile a glossary with the trainees noting the meaning of key terms (e.g. participation, gender, environment, poverty, access, training, etc.). Developing this vocabulary will help the participants become familiar with the central issues.
- 3. Ask the participants to work in small groups, preparing flow diagrams of the interlinkages between women, environment, and agriculture. For instance, they might want to show how environmental problems affect women, how problems facing rural women hinder their work in agriculture and conservation activities, or how agricultural production might adversely affect the environment. Spend some time comparing and discussing the diagrams produced by each group.
- 4. Pose some discussion questions and ask the participants to form small groups to discuss these, and summarise their thoughts on flipchart paper. Then ask each group to present their results and discuss the different viewpoints. The questions should allow the participants to use their own experience and to think about the issues in the context of their own work. Examples could be:
  - \* For conservation programmes, what are the values and problems of working with women; what are the values and problems of working with men?
  - \* What are the major causes of environmental degradation in your area?
  - \* In what ways are rural women a particularly vulnerable group to problems of environmental degradation?
  - \* In your work, have you found some traditional practices or beliefs of rural women regarding agricultural production or conservation? Can you name them and what do you think about these items of traditional knowledge?

- 5. Ask the participants to design and perform a short role-play to illustrate the local cultural practices and how they make working with women both easier and more difficult, which cultural practices can be challenged or changed, which need to be handled carefully, etc.
- 6. Ask the participants to design and perform a role-play illustrating the different perspectives towards a particular proposed development activity, from the point of view of (a) the development workers; (b) the men in a rural community who will be involved in the activity; (c) the women of the same community.

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