1. Women and natural resource management: an introduction

about section 1

This introductory section presents a brief rationale for the manual, lists its specific objectives, identifies the target group of users for whom the manual has been developed, and provides guidelines for its use.

It provides a broad overview of those parts of the Asia region to which this manual relates.

This section also presents the profile of the region in the context of natural resources: their status, usage and management.

It highlights the major issues of environmental degradation in the region and identifies the way forward for addressing the issues relating to women and natural resource management in the Asia region.

Why women in natural resource management?

The rapid degradation and depletion of natural resources and the overwhelming dependence of large sections of the population on these resources for survival, underlines the need to focus on effective management of natural resource in the Asia region.

Experience from many parts of the world demonstrates that the most effective and sustainable strategies for resource management are those based on community participation. This means working closely with local communities in order to assess the resource base and ascertain the needs, priorities and constraints that must be considered in the planning, development and implementation of resource management programmes.

A community usually comprises several groups with distinct roles, priorities and constraints. In order to ensure effective community participation and to address the needs of each group within the local community, it is necessary to understand these distinct roles and limitations. When a programme attempts to involve an entire community, without a focus on any one group, the socially and/or economically disadvantaged groups are frequently marginalised from the participation process. In such a situation, these groups gain little, if anything, from such programmes.

Women especially, faced by a range of social, cultural and economic constraints, are often marginalised from formal programmes of natural resource management. Their acceptance as equal partners in community development has been severely affected by continuing barriers to their full participation in the development process. The absence of a conscious and specific focus on women has prevented their needs from being recognised and integrated into the programmes being developed.

It is now accepted that if women are to fully participate in the development process, important adjustments are required in order to increase their access to education, training, resources and decision-making.

Women's marginalisation occurs not on account of their biological differences from men but because of the socially defined differences (in roles and responsibilities) between the two. Such inequalities exist not only between women and men but also between women of different socio-economic and cultural backgrounds.

Programmes intending to reach all sections of the community need to address these socially defined differences that form the basis of gender sterotyping. A gender-sensitive approach would therefore examine the impact of policies and programmes on the status, needs and priorities of both men *and* women within the local community. Hence, any meaningful involvement of women in a resource management activity entails an understanding of gender dynamics in the local community.

Where do women come into the picture?

- women comprise more than half of the world population
- 55 per cent of the world's women live in Asia. Asia and Africa combined account for 85 per cent of the world's rural women

- approximately 14 per cent of Asian households are headed by women, although in some countries this figure is as high as 30 per cent. A disproportionate number of female-headed households live in poverty, as the delivery of the majority of services has failed to acknowledge the large number of female-headed households
- the subsistence sector, the mainstay for a large proportion of rural communities, is largely dominated by women
- women have traditionally provided the majority of agricultural labour in most Asian countries; between 50 to 60 per cent of economically active women in Asia are in agriculture (although sharp contrasts exist between different Asian countries)
- women are the main gatherers of forest products and, in many parts of Asia, have a significantly higher involvement than men in shifting agriculture. Household needs of food, fuel and water and often cash, are usually fulfilled by women
- women are increasingly left solely responsible for the family and farm, as environmental degradation results in large-scale male migration to towns for work
- a salient feature of the Asia region comprises a rapid growth of urban centres, coupled with squatter settlements and high unemployment. Women in such situations are the people most affected by the lack of basic services such as water, sanitation and shelter.

Disadvantages faced by most rural and poor urban women:

- government extension services, training and credit facilities often reach only men as the traditional heads of households. This is largely a consequence of the failure to recognise the full extent and nature of the contribution made by women
- social constraints limit women's access to services, resources and decision making processes at all levels. This prevents them from taking part in the processes that manage the resources with which they work so closely
- in some Asian countries, women are marginalised from most social and economic structures such as access to education, health care, nutrition and employment
- women have heavy workloads, including farmwork, marketing, household chores, casual labouring and working in small-scale home industries for cash income (especially so with increasing male-migration for urban employment)
- women have limited access to technology and tools that would ease their workload. Technological innovations have invariably been made in the activities typically performed by men whereas human labour and traditional techniques continue to be used in most day-to-day activities performed by women, both inside and outside the home
- women have limited access to land and credit facilities.

These disadvantages make women's tasks of producers, home managers and community organisers all the more arduous and time-consuming. Women also face further problems when their environment is degraded. For instance, as forests recede, women must spend more time walking long distances in search of fuel wood and plants for food. The physical effort is greater, there is less time to do the other essential household chores, and they end up working longer hours. Little or no time is available for other activities such as attending health clinics and literacy programmes, forming local organisations, or simply for personal leisure time. This affects their political participation and their level of empowerment. Thus, not only do the women themselves risk ill-health and miss opportunities, but their family, especially children, suffer too.

One reason for focusing on women therefore relates to the impact on women's lives of involving women in resource management. The other equally important reason is the impact on the resources

themselves. As a result of performing tasks based on natural resources, for many generations, a large store of indigenous knowledge and skills in sustainable use of resources has been developed which is invariably passed on from women of one generation to the next. If fully utilised, their knowledge and skills can effectively contribute to sustainable resource management practices. Thus:

- a focus on women would not only address their need for increased income and a reduction in drudgery, but would also give them control over the resources they work with. This would, in turn, build upon their confidence and socio/political status
- the process of women's involvement and a reduction in their workload, as a result of specific interventions, would facilitate women's empowerment through the process of organisation, awareness creation, income generation, education and control over resources, their labour and knowledge.

This manual therefore focuses on rural and urban fringe women, and attempts to address the training needs of the Commonwealth countries in Asia. It nevertheless places special emphasis on the low and middle-income countries of the region, primarily due to the overwhelming numbers of rural and urban fringe women in these areas.

It must also be stressed that women are by no means a homogeneous group. Their roles and work tasks and the environment (social, cultural, economic and ecological) in which these are carried out, define their orientation and their priorities. This manual concerns itself with women as a sub-group of the rural and urban poor, that is, a particularly vulnerable section of the population. Even within this group, there will be many differences in the position of women, in the conditions they face, and in the opportunities available to them.

Aims of this Manual

In the context outlined above, this training manual aims to develop sensitivity on the issues of gender and natural resource management, with the following specific objectives:

- to impart skills of communicating with and learning from women
- to facilitate planning and working with women in natural resource management
- to provide basic information to trainers on techniques of natural resource management.

It should be bourne in mind that working with women does not imply isolating women in a community. It usually entails working with both men and women in a community, but with a specific focus on women to ensure that their meaningful and effective participation is achieved.

This is based on the premise that:

- establishing the links between gender roles and resource use and control is a key prerequisite for developing resource management programmes
- there is a need to learn from rural women and men on how local resources are presently used, in order to jointly plan development programmes relevant to both genders.

Target groups and users

The manual has been designed with two groups of users in mind:

- those working with individual women, women's organisations, or organisations for both men and women, at a local level. These workers may be extension or development field staff of non-governmental organisations or government bodies. They may be female or male
- those responsible for the training of extension or development field staff.

The field level workers should use the manual as a reference guide for adopting a gender-sensitive approach in their work with local communities on natural resource management.

The trainers or advisers should use the manual to sensitise field level workers on gender issues in environment and development activities and to introduce techniques on communication and conservation.

Expected outcomes

Based on the aims and objectives of this manual, it is anticipated that the manual will:

- enhance capability at grassroots level to mainstream women in natural resource management
- lead to the preparation of country-specific manuals on working with women around natural resource management tasks. Each manual would be tailor-made for the needs of an area, so that variations across countries of the Asia region, and even within countries, are addressed.

How to use the manual

The ideas and techniques described in this manual must not be assumed to be applicable to every situation in Asia. They should instead be treated as a basic collection to be built on, modified and supplemented by each manual user as necessary. As all rural workers know, subtle and not so subtle differences exist from one community to the next. This requires that the approach of development agents remains flexible.

Apart from ecological differences, other social, economic and cultural differences exist between various areas that necessitate different approaches to a similar problem. Thus:

- not all methods of communicating with and learning from rural women are equally appropriate in different settings
- not all successful women's organisations' activities are replicable. There exist specific conditions that contribute to the success of an activity and any project activity has therefore to be adapted to the local conditions
- not all conservation techniques are applicable in different conditions. The physical characteristics or ecology of a place will determine which techniques are going to be useful. Other economic and social aspects such as cost of using a particular technique, resource ownership and usage pattern and inter-community dynamics, will also play a role.

This manual therefore provides a range of ideas and techniques from which the user may select what she/he feels is appropriate for any given situation.

Section 1 of the manual provides a general understanding of why women need to be involved in formal resource management and Section 2 discusses how this can be achieved. The issues highlighted by the case studies in Section 3 relate directly to the issues discussed in Sections 1 and

2. In Section 4, a range of conservation techniques relevant to the Asia region are discussed. Section 5 provides a directory for obtaining further information.

The manual is designed for use in small group discussions, and exercises requiring group participation have been included in each section.

Given the diversity of the Asian region in terms of its physical environment, the natural resources and the cultures of its inhabitants, it is obvious that any example or study of the complex interaction of all three of these cannot be applicable to each country. Furthermore, overlying the physical and cultural diversity is a range of political and economic situations which compound this diversity and often influence patterns of development. The examples and case studies given in this manual have been chosen only to illustrate basic principles. They may well be replaced by other examples and studies that users find more appropriate.

The Asia region

The overwhelming diversity of countries in the Asia region, in terms of the economy, the level of industrialisation, income levels, the ecological situation and the social environment, highlight the difficulty of producing a manual that is relevant across the entire region.

On the one hand are the low-income countries, usually with large agricultural sectors, and on the other are the high-income, industrialised countries. In between the two lie the newly industrialised, middle-income nations. Clearly, the dominant issues in one country may be quite different from those in another. For example, whereas for the predominantly rural population of the low-income countries, agriculture and forestry are of prime importance, for the urban population of high-income countries subsistence agriculture (or even commercial agriculture, for that matter) is non-existent. Instead, urban environmental issues are likely to be of greater importance in these more advanced countries.

Based on the nature of the resources, environment and economy, the region's population can very broadly be categorised into four communities:

- agriculture based
- forest dwellers and tribals
- coastal and sea based
- urban.

This classification does not relate to countries as a whole, but to the population of the region covered by this manual. Therefore, any single country is most likely to have more than one of the above communities.

Agriculture based communities: other than exceptions such as Singapore and Brunei, where agricultural activities are minimal, the majority of the population live in rural areas and depend extensively on agriculture. Over the past few decades, there has been a tremendous change in the agricultural sectors of many countries with a shifting focus on high technology and commercial agriculture. This has had a profound impact on social, economic and ecological relationships.

Forest dwellers have for centuries practiced sustainable lifestyles of farming, hunting and gathering in harmony with their environment. Deforestation and the loss of land, forests and other resources, have threatened their survival and upset the traditionally maintained balance between the people and their surrounding resources.

Coastal and sea based communities rely almost entirely on the sea for sustenance and a source of income. In several parts of Asia, people obtain about 55 per cent of their animal protein from fish and other marine resources. A significant proportion of the total catch is contributed by traditional fisheries, which are under increasing threat from falling fish stocks.

Urban communities: some countries, such as Singapore, only have urban areas, while the urbanisation of several other countries in the region has grown at unprecedented rates. The rapid industrialisation and the creation of jobs in towns and cities, and the depletion of resources and the erosion of sustainable livelihoods in rural areas, has resulted in extensive rural-urban migration. This has put immense pressure on urban services and created a large number of slum dwellers without adequate sanitation, water and waste management. At the same time, there has been widespread air and water pollution.

Country profiles

The following presents a brief country-wise profile in terms of the status of natural resources in the countries addressed by this manual.

Bangladesh	**Total land area (km^2)144, 000**
Percentage:	
Arable land	69.3%
Permanent cropland	2.1%
Pasture land	4.6%
Forest & woodland	15.0 %
Other land	9.0%

With an area of about 144,000km^2, Bangladesh is one of the most densely populated countries in the world. Its land is mostly alluvial, very fertile, and flat, except in some mountainous areas.

With water as its' most abundant resource, fishing is important both within Bangladesh's boundaries and in its territorial waters. Ponds and waterways cover more than 10 per cent of the total area. The country has 14.26 million hectares of agricultural land with rice constituting the main crop. Apart from land and water, livestock constitutes the most important resource. It is estimated that more than 90 per cent of rural households rear livestock.

Agriculture is the mainstay of a large proportion of the population and most families depend on a diverse array of products and income from horticulture, livestock, forestry, fisheries, crop production and off-farm employment.

Environmental degradation in Bangladesh is evident in terms of declining soil fertility, low water tables, degradation of natural forests and wetland coastal environments, and depleted fish stocks.

India	
Total land area (km^2)	3288, 000
Percentage:	
Arable land	55.6
Permanent cropland	1.2
Pasture land	4.0
Forest & woodland	22.4
Other land	16.8

With 16 per cent of the world's population but only 2.4 per cent of its land area, India faces tremendous pressure on its natural resources. Although food production has, by and large, kept abreast of the country's population growth, agricultural growth has all too often been achieved at great cost to the environment, with increased loss of nutrients from the land, high soil salinity, and an increase in chemical inputs. A little less than 60 per cent of the country's agricultural land suffers from varying degrees of soil degradation.

India's forests have been shrinking at a rapid rate due to pressures of agriculture, commercial and industrial use and urbanisation. With 406 million head of livestock, India has the world's largest cattle population, which it supports on less than 4 per cent of its land, much of which is over-grazed.

Eighty per cent or more of India's rain falls during four months in the year. Community wastes, industrial effluents and excessive use of chemical fertilisers and pesticides cause excessive pollution to surface and ground water.

Malaysia	
Total land area (km^2)	330, 000
Percentage:	
Arable land	3.2
Permanent cropland	11.7
Pasture land	0.1
Forest & woodland	58.1
Other land	26.9

With an area of around 330,000km^2 and a population of 18.6 million, Malaysia comprises a diverse mosaic of people, economic structures and ecology. One of Malaysia's largest resources is natural forests. With a little less than 60 per cent of the country's area under forest cover, it is one of the

few remaining countries in the world with a large expanse of natural tropical forest. A further 12.8 per cent of land is made up of plantation tree crops.

Malaysia's forest areas, such as those in the state of Sarawak, are home to many communities of indigenous people. Although the total forest area is extensive, Malaysia has actively developed a timber industry which has led to problems of soil erosion, water supply and availability of food for some of these indigenous communities.

Essentially an agricultural country, Malaysia's economy has recently undergone significant diversification and its status is now that of a newly industrialised country. The agricultural sector has seen a heavy focus on commercial production in the plantation sector with large external inputs. The extensive use of agricultural chemicals is common and gives cause for concern.

Maldives	
Total land area (km^2)	300
Percentage:	
Arable land	10.0
Permanent cropland	0.0
Pasture land	3.3
Forest & woodland	3.3
Other land	83.4

With a total land area of just $300km^2$, Maldives is an archipelago of an estimated 1, 200 small islands. Most of its islands are low lying and very few are suitable for agriculture.

Being a country with more territorial sea than dry land, Maldives depends almost entirely on resources from the sea. Fishing and tourism are the country's two main industries, both of which depend on healthy reefs for their existence. The coral reefs, one of Maldives prime resources, rank amongst the most productive ecosystems in the world. These reefs however, have been seriously damaged through activities such as coral mining and boat anchoring.

Pakistan	
Total land area (km^2)	796, 000
Percentage:	
Arable land	26.3
Permanent cropland	0.6
Pasture land	6.5
Forest & woodland	4.5
Other land	62.1

Pakistan is the tenth most populated country in the world. A predominantly arid or semi-arid country, its topography consists of mountains, deserts, and some fertile plains.

Even though urbanisation has been widespread, Pakistan is predominantly a rural and agricultural economy. However, less than 20 per cent of the land has the potential for intensive agricultural use. Soil-erosion, caused by over-grazing and cutting of forest lands, cultivation on marginal lands, the absence of protective soil and poor water management practices have emerged as major environmental issues in the country. More than 40, 000 hectares of agricultural land are lost each year to agricultural production due to waterlogging and salinity.

Agricultural productivity is also limited by water availability, since 90 per cent of food and fibre production is dependent on irrigation. Surface water from rivers is the primary source of water in the countryside. Livestock is an important sub-sector in agriculture and contributes an important source of energy for several agricultural operations.

Pakistan is highly deficient in forest resources, with less than 5 per cent of the total area of the country under forest cover. This necessitates the importing of wood to meet part of the country's needs. Deforestation is currently one of the prime environmental issues in Pakistan. Clearing of forests for agricultural use, land salinisation, soil erosion and development pressures on coastal areas are all hotly debated environmental issues in Pakistan.

Sri Lanka	
Total land area (km^2)	66, 000
Percentage:	
Arable land	14.3
Permanent cropland	15.1
Pasture land	6.8
Forest & woodland	27.0
Other land	36.8

Sri Lanka encompasses a number of diverse ecosystems with varying morphology, climate, flora and fauna and distribution of mineral resources.

A predominantly rural economy, with almost 80 per cent of the population living in rural areas. Its major occupations include agriculture, forestry, and fishing, with over 90 per cent of the rural population depending directly or indirectly on agriculture.

Dependence on forests for energy is widespread in Sri Lanka. Ninety-four per cent of the households use biomass as cooking energy, which accounts for 70 per cent of the country's energy consumption. However, population and development pressures have contributed to extensive deforestation through the conversion of forest lands into settlements and croplands.

The country is rich in coastal resources, with a coastline of about 1, 600kms. Estuaries, peninsulas, beaches and offshore islands support 90 per cent of the fishing industry.

Major issues of environmental degradation in the Asia region

The range and extent of environmental degradation in the Asia region is vast and often difficult to measure. However, the following trends give a broad picture of the environmental issues in the region:

- widespread shifts to commercial agriculture have entailed:
  - falling groundwater tables with over-exploitation of groundwater for cash crops
  - large-scale irrigation schemes without proper watershed management and drainage, causing extensive downstream siltation, waterlogging and soil salinisation
  - indiscriminate use of agro-chemicals and lack of good practice during their application. This creates severe health hazards to workers and the general population through residues in food and contamination of drinking water
- extensive logging of hardwood timber for export as a foreign exchange earner
- drying up of rivers as a result of deforestation and overcultivation of water catchment areas
- loss of more than 60 per cent of the highly productive tropical wetland habitats in Asia through pollution, urbanisation, and conversion of irrigation schemes
- pollution of coastal waters, which yield 90 per cent of the total marine catch, due to:
  - agricultural run-off containing chemicals
  - domestic and industrial sewage from municipal drainage systems
  - toxic industrial wastes
  - oil seepage from refineries
- phenomenal urban growth in the region. It is predicted that Asia will have five of the world's ten largest cities by the year 2000. Its urban population is expected to rise from 700 million to 1.2 billion.
- emergence of problems such as global warming and ozone depletion due to the greater impact of human activities on the environment. The release of carbon dioxide and other gases into the atmosphere has risen sharply with the intensified burning of fossil fuels. As a result it is predicted that global temperatures will be between 2°C and 4°C higher by the year 2100 compared to pre-industrial times. There is however much uncertainty surrounding these figures.
- a rise in sea levels, an increase in severity of storms and changes in fish location and abundance due to climate change. It is estimated that the sea level will rise between 24cm and 38cm by the year 2050. This rise would inundate large areas of land with water and severely affect the world's densely populated delta areas like Bangladesh. The very existence of low-lying island nations such as the Maldives would be threatened
- removal of protective mangrove forests from coastal areas and tidal rivers.

Women and natural resource management: the way forward

The central role played by women in the maintenance and conservation of natural resources in developing countries is often little understood by planners and government agencies. Development planners often focus mainly on the size and growth of the population and economy without recognising and acknowledging the profound and sometimes adverse effects of development choices on a country's social and the ecological balance.

The challenges of addressing the problems of rural and poor urban women in the Asia region and those of environmental degradation therefore require:

- **an integrated approach.** To achieve sustainable development, the plight of rural poor 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 it, can this really be called development and will it be sustainable? Likewise, the state of the environment is another critical factor that must be considered in development strategies. The effects of development on both the rural environment as a whole and on rural women as a group must be considered
- **positive action.** There is an urgent need to reduce existing damage to the environment and to develop awareness and technologies that use resources in ways that are in harmony with the environment, and therefore sustainable. There is a parallel need to take action to improve the position of rural and poorer women. This means maximising cooperation between men and women. When women's access to information, assets and services improve and when they are given a central role in sustainable development, both women and men will benefit greatly.

The position of women and the issues of environment and development are all linked. To develop policies and practices which best use our assets and benefit women and which are also in tune with the environment requires recognition of this link. The challenge therefore becomes:

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

Key strategies

Some general pointers towards strategies that will both strengthen the position of rural and poor urban women and help them to conserve their resources include:

- recognising the differences of interest and responsibility in different activities, between different members of the household – men, women and male/female children; anticipating and dealing with areas of conflict
- raising public awareness at all levels about the roles women play in natural resource management.
- using more participatory approaches that involve both women and men in making decisions as well as acting on them. Learning from women and men, listening to their points of view and priorities, and deciding with them
- making more use of women's knowledge, experience and their traditional skills of good resource management
- developing a comprehensive gender-balanced environmental curriculum for schools, appropriate to local environmental conditions and social customs
- establishing a broader base for environmental decision-making at all levels, one which takes into account the experience and needs of both women and men in environmental management.

Certain approaches to rural development have failed to benefit women. They can, however, provide useful lessons for the future. These include:

- **the tendency in rural research to assume that household heads are male.** Since women are often responsible for much of the agricultural production and other natural resource-related activities, by-passing them means losing a valuable source of local knowledge and risking poor

implementation of any attempted changes in management. This focus on male heads of household is also based on the misguided assumption that the information and resources given to them will 'trickle across' to other members of the household, including the women. This is often not the case

- **the gender imbalance in extension work.** The vast majority of agricultural and forestry extension workers are male. Because male extension agents tend to make contact only with male farmers, the amount of information women farmers are likely to receive regarding new technologies is therefore limited. The majority of female extension workers are generally found in lower ranking jobs than their male counterparts. They are often directed into home economics extension rather than agricultural extension work
- **the extension services that women receive are often restricted.** Women farmers are often regarded only as gardeners and are accordingly 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 isolate the women from the financial benefits of this production
- **the emphasis on research.** The emphasis of research is largely on commercial crops grown by men as opposed to the subsistence production carried out by women
- **marginalisation of rural women from improved technology.** The mechanisation of agricultural production also tends to limit rural women's access to improved technology, as it usually men who are targeted for such programmes. The mechanisation is often focused 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, reducing the time they have available for other activities.

Sensitivity to culture

The approaches chosen for working with rural women need to be adapted to local conditions, including the local culture.

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, or social and cultural norms do not allow them to engage in such activities outside their home compounds. If this is usually done by men, an attempt to change this custom may be unpopular and perhaps cause conflict between women and men. If, on the other hand, tree planting can be shown to bring worthwhile benefits to the women, and if they are interested in it, the reasons for maintaining the previous cultural restrictions may need to be questioned.

It would not be appropriate here to give guidelines as to which cultural practices should be followed and which (for instance those restrictive to women) should be questioned.

The thinking behind this manual is that women do play an important role in conservation activities, and the use of natural resources. Anything that serves to improve their benefits from such activities should be encouraged. Factors that prevent these benefits from reaching rural women should be seen as an opportunity for improvement rather than an insurmountable problem.

EXERCISES

A note on the training exercises

In panels like these, you will find exercises for trainers to use with extension workers. Each exercise is intended to help a group think through the issues raised in the preceding section. The exercises are broad suggestions only, and the best way to use them is to think of any local examples you can find to illustrate the points made in each section. They are written for groups of four or more people, since many exercises involve splitting into smaller groups of twos or threes. Again, you should adapt them for smaller or larger numbers. Members of the group should have read or heard relevant sections before beginning an exercise.

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

EXERCISE 1

The link between women and the environment

Ask the participants to work in small groups, preparing flow diagrams showing the link between women, environment, and the use of natural resources. 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 or fisheries development might adversely affect the environment. Spend some time comparing and discussing the diagrams produced by each group.

EXERCISE 2

Attitudes towards women, the environment and development

Pose some questions and then ask the participants to form small groups of two or three. Ask each group to discuss the questions, and to then summarise their thoughts on flip charts. 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. Questions might include:

1. In conservation programmes, what are the pros and cons of working with women; what are the pros and cons of working with men?
2. What are the major causes of environmental degradation in your area?
3. In what ways are rural women or poorer urban women as a group particularly vulnerable to problems of environmental degradation?
4. In your work, have you found any traditional practices or beliefs that affect women's role in conservation? What do you think about these traditional practices?

EXERCISE 3

Local cultural practices

Ask the participants to design and perform a short role-play which illustrates how local cultural practices can make working with women both easier and more difficult. For example, which cultural practices can be challenged or changed, which need to be handled carefully?

EXERCISE 4

Community attitudes towards development

Ask the participants to design and perform a role-play that illustrates the different attitudes towards a particular proposed development activity, from the point of view of:

- the development workers
- the men in the rural community who will be involved in the activity
- the women of the same community.