# CULTIVATING RURAL AMENITIES An Economic Development Perspective



© OECD, 1999.

© Software: 1987-1996, Acrobat is a trademark of ADOBE. All rights reserved. OECD grants you the right to use one copy of this Program for your personal use only. Unauthorised reproduction, lending, hiring, transmission or distribution of any data or software is prohibited. You must treat the Program and associated materials and any elements thereof like any other copyrighted material.

All requests should be made to:

Head of Publications Service, **OECD** Publications Service, 2, rue André-Pascal, 75775 Paris Cedex 16, France.

TERRITORIAL DEVELOPMENT

# CULTIVATING RURAL AMENITIES

An Economic Development Perspective

ORGANISATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT

## ORGANISATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT

Pursuant to Article 1 of the Convention signed in Paris on 14th December 1960, and which came into force on 30th September 1961, the Organisation for Economic Co-operation and Development (OECD) shall promote policies designed:

- to achieve the highest sustainable economic growth and employment and a rising standard of living in Member countries, while maintaining financial stability, and thus to contribute to the development of the world economy;
- to contribute to sound economic expansion in Member as well as non-member countries in the process of economic development; and
- to contribute to the expansion of world trade on a multilateral, non-discriminatory basis in accordance with international obligations.

The original Member countries of the OECD are Austria, Belgium, Canada, Denmark, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, Turkey, the United Kingdom and the United States. The following countries became Members subsequently through accession at the dates indicated hereafter: Japan (28th April 1964), Finland (28th January 1969), Australia (7th June 1971), New Zealand (29th May 1973), Mexico (18th May 1994), the Czech Republic (21st December 1995), Hungary (7th May 1996), Poland (22nd November 1996) and Korea (12th December 1996). The Commission of the European Communities takes part in the work of the OECD (Article 13 of the OECD Convention).

Publié en français sous le titre : CULTIVER LES AMÉNITÉS RURALES Une perspective de développement économique

Cover illustration supplied by the Japanese Ministry of Agriculture, Forestry and Fisheries

#### © OECD 1999

Permission to reproduce a portion of this work for non-commercial purposes or classroom use should be obtained through the Centre français d'exploitation du droit de copie (CFC), 20, rue des Grands-Augustins, 75006 Paris, France, Tel. (33-1) 44 07 47 70, Fax (33-1) 46 34 67 19, for every country except the United States. In the United States permission should be obtained through the Copyright Clearance Center, Customer Service, (508)750-8400, 222 Rosewood Drive, Danvers, MA 01923 USA, or CCC Online: http://www.copyright.com/. All other applications for permission to reproduce or translate all or part of this book should be made to OECD Publications, 2, rue André-Pascal, 75775 Paris Cedex 16, France.

# **Table of Contents**

Introduction	5
Chapter 1. Defining Rural Amenities	7
1. Initial approach and definition	
2. Classification and examples	
3. Main characteristics	
4. Public goods and externalities	15
Chapter 2. Internalising Rural Amenities	19
1. How to internalise externalities	19
2. The importance of property rights	20
3. The principles of internalisation applied to amenities	23
4. Setting prices for amenities	27
Chapter 3. Amenities and Rural Development	31
1. The search for synergy	31
2. The objectives of amenity policies	
3. Policies and instruments	34
Chapter 4. Stimulating Markets for Amenities	37
1. Markets for amenity use rights	37
2. Markets for products associated with amenities	
3. Commercialising ownership rights	42
4. Support for rural enterprises involved in valorising amenities	43
Chapter 5. Policies to Encourage Collective Action	47
1. Rationale for supporting collective action	47
2. Building an appropriate institutional framework	49
3. Incentive policies to stimulate collective action	
4. Direct support for collective action	52
5. Advantages and limitations	53
Chapter 6. Regulatory Policies	55
1. General principles	55
2. Designating rural amenities	56
3. Land use planning	57

4

4. Regulations specific to amenities	
5. Land reserves	
6. Compensation measures	
7. Advantages and limitations	
Chapter 7. Incentive Policies	
1. General principles	
2. Direct payments to provide amenities	
3. Payments for investments related to amenity quality	
4. Support for related activities	
5. Ex ante remuneration for opportunity costs	
6. Cross-compliance: direct payments linked to sectoral policie	es 72
7. Penalties for actions damaging to amenities	
Chapter 8. Ancillary Issues	
1. Co-ordination among actors	
2. Informing citizens	
3. Diffusing innovation and technological research	
Policy Recommendations	
1. What policies for rural amenities?	
<ol> <li>Who should bear the costs of providing amenities?</li> </ol>	
3. Policy principles	
Annex I. Case Study Summaries	
Annex II. Case Study Methodology and Participants	107
Annex III. Amenity Workshop	109
References	111

## BOX

1.	Amenity case studies	1	0	
----	----------------------	---	---	--

#### TABLES

14
25
32
48
•

## FIGURES

1. Amenity consumer's dilemma	17
2. Link between premium prices and types of amenity-linked quality	39
3. Technological models to optimise complementarities	84

# Introduction

Rural areas are home to a rich variety of amenities. They range from pristine wilderness to carefully managed landscapes, from ancient historical monuments to living cultural traditions. The demand for these amenities is increasing as rising incomes give city-dwellers both time and money to enjoy amenities found in the countryside. This growing interest in nature and cultural heritage offers new economic opportunities to rural areas where the economy often lags behind that in cities. However, encouraging rural development based on amenities is not a straightforward process. What are the best ways for rural people to realise value from amenities? How can they balance the preservation of amenities with the development of their local or regional economies?

Since its establishment in 1990, the OECD Group of the Council on Rural Development has given a high priority to the study of how rural amenities can contribute to rural development. The first phase of study was a theoretical examination of amenities intended to provide an analytic framework for subsequent research. The resulting study was published under the title, The *Contribution of Amenities to Rural Development* (OECD, 1994). The objective of the second phase was to take stock of amenity-related policy instruments used by Member countries to promote rural development. Examples from eight countries were described in the report, *Amenities for Rural Development: Policy Examples* (OECD, 1996a).

The Group suggested that subsequent studies should more systematically analyse the range of policy instruments aimed at promoting and utilising amenities for rural development. Hence, an in-depth and comprehensive set of case study analyses was proposed as the third phase of the activity. Thanks to contributions from Australia, Austria, France, Japan and Switzerland, five case studies have been conducted, each analysed by two experts and the OECD Secretariat (see Box 1 and Annexes I and II).

In conjunction with the case studies, a workshop on amenity policy instruments and a study tour of Japanese amenities were organised at the invitation of the Japanese authorities. At the workshop, the Secretariat and three experts analysed different types of policy instruments and participants from Belgium, Canada, Finland, Greece, Luxembourg, Norway and Sweden presented examples of amenities and policy responses from their countries (see Box 1 and Annex III).

This report synthesises findings from all three phases of work, as well as from the workshop, and presents amenity policy recommendations with a summary of the background concepts and principles. This report was prepared by Yukiya Saika and Jean-Eudes Beuret, with the assistance of Mario Pezzini, Andrew Davies and Priscilla Salant.

# Chapter 1 Defining Rural Amenities

## 1. Initial approach and definition

## What is a rural amenity?

The term "rural amenities" refers to a wide range of natural and man-made features of rural areas, including wilderness, cultivated landscapes, historical monuments, and even cultural traditions. Amenities are distinguished from more ordinary features of the countryside because they are recognised as having specific societal or economic value. These are places and traditions from which individuals, communities or society at large derive utility. It is this utility and corresponding *value* that allows rural amenities to be considered as important resources for rural development.

## The value of amenities

In general, the value of rural amenities may take one or more of the following forms:

- use value, from visiting or living in places where amenities are located;
- option value, from knowing one can visit an amenity in the future;
- existence value, from simply knowing an amenity exists; or
- *bequest value*, from the possibility of passing on an amenity to future generations.

Amenities with option, existence, or bequest value are said to have *non-use value* insofar as they have utility without being "used" in a physical sense. The fact that amenities often have significant non-use value increases the challenge of an amenity-based rural development strategy, as will be explored in this report.

Enjoying use and non-use values can be thought of as two direct ways of "consuming" amenities. A third aspect of this process is called "derived consumption", when the value of an amenity is transmitted to consumers through either the media or a product that embodies amenity value. The media make consumers aware

of an amenity and thereby increase both use and non-use values by attracting people to visit the amenity or persuading them that it should be maintained in the future. Products with which the amenity is identified (for example, food or crafts produced using traditional methods) can also make people aware of and more knowledgeable about an amenity, again, enhancing both use and non-use value.

## The supply of amenities

When people enjoy a scenic rural landscape, the value embodied in the landscape is realised without the need for an intermediate production process. For example, while the rural landscape is often a by-product of some production process (as in the case studies of terraced rice fields in Japan or farmed mountain pastures in Austria), it was not expressly created to be an amenity. This direct "consumer value" of amenities differentiates them from goods that have value as inputs into a production process, for example, trees with value as timber, or rivers with value as hydroelectric power. The consumer value stems from an amenity's existence and condition. Even so, amenities often require some inputs (such as roads or hotel accommodation) to make them accessible to visitors.

Amenities have a strong territorial connotation. Their value stems from unique attributes of a given region. These features can be both physical and cultural or a combination of the two. In the case study of Japan, Yoshinaga (1997) introduced the term *fudo* to express the interaction that has existed throughout history between nature and human beings in a particular area and how this *fudo* has shaped unique landscapes, lifestyles and productive activities.

The natural environment is also an important source of rural amenities. However, all natural resources do not currently have value as rural amenities. The natural environment has value as the life-sustaining habitat for humans and other living creatures. By contrast, the utility of the natural environment as amenities is associated with aesthetic and recreational attributes valued only in certain areas. Because the habitat and amenity values of the natural environment differ, strategies to provide optimal levels of each differ and may sometimes conflict.

Finally, the criteria for assigning value to amenities should be seen as evolving. Tastes and preferences change over time, adding value to some natural and cultural features and reducing the value of others. From this perspective, natural and cultural features have a potential future value – which cannot be anticipated. As such, the present distribution of amenity value should not imply that other natural and cultural features being without present value can be allowed to disappear.

#### Summary... the basic characteristics of amenities

- Rural amenities are unique natural and man-made features;
- They have value or utility which is linked to the provision of enjoyment or pleasure;
- Their value or utility is associated with consumer rather than productive value;
- Their value or utility can be consumed not only in the immediate area but also outside the area with or without the aid of media;
- Rural amenities are strongly associated with specific territorial attributes.

## 2. Classification and examples

#### **Classifying amenities**

It is useful to categorise amenities by the degree of human contribution in order to tackle these different issues effectively. The following categorisation, based on three different levels of human contribution, was proposed (OECD, 1997*a*):

- Almost intact nature;
- Interaction between nature and man; and
- Man-made.

For the category "almost intact nature", the amenity value derives from the lack of human intervention. Examples would include native forests, desert wilderness or high mountains. On the other hand, most rural areas (particularly in Europe and East Asia) have been transformed by human activities over long periods of time, and the interactions between nature and man are often important sources of rural amenities. Farming landscapes, traditional ways of fishing, forests managed for game or hiking are examples. In the case of man-made rural amenities, value often stems from the traditions or culture expressed in historical monuments or artefacts, traditional crafts or village festivals. People often put high value on these amenities, which symbolise their distinctive cultural identity.

#### Examples provided by OECD Member countries

A glance at the series of examples chosen by OECD Member countries as illustrations of amenities should help to clarify the range of features that can be classed as amenities as well as their place in the three-category scheme developed above and their common attributes.

## Box 1. Amenity case studies

The following amenities and associated policies were studied in the course of this project (See Annex I for more detailed descriptions and Annex II for the case study methodology):

**Australia** (almost intact nature): native forests are one of Australia's premier suppliers of rural amenities. However, tensions have been increasing between the need to conserve these forests for environmental and recreational purposes, on one hand, and support for traditional forest industries, on the other hand. The Regional Forest Agreement (RFA) process, on which the case study focuses, is designed to reduce these conflicts and promote a sustainable forest system by setting a framework (in the form of a signed agreement) for forest resource planning over twenty years.

**Austria** (interaction between nature and man): alpine pasture makes up 20 per cent of all land in Austria. How it is managed has important implications for land-scape, tourism and prevention of natural disasters. In addition to its productive function, mountain farming maintains sensitive alpine eco-systems and cultural landscapes. In 1972, the Mountain Farmers Special Programme was set up to support the multiple functions of mountain agriculture and maintain economic and social stability.

**France** (interaction between nature and man): established in 1967, France's Regional Nature Parks (RNP) are intended to implement development schemes based on conservation, management, and valorisation of natural and man-made amenities, reconciling the preservation of these amenities with the area's economic development needs. There are now 32 such regional nature parks in France, covering nearly 10 per cent of the country and involving over 2 600 rural communes.

**Japan**: four case studies have been conducted in Japan, each of which was based largely on interaction between nature and man (with the exception of the man-made historical sites at Asuka):

- The cultural landscape of Asuka village is made up of both historical artefacts (ancient shrines, temples and royal tombs) and a traditional setting based on rice cultivation. To preserve the landscape, which was under threat from urbanisation, a series of measures known as the Asuka Law imposed severe restrictions on land use, providing in return limited compensation for villagers.
- In Yufuin town, the tourist industry is based on combining hot springs facilities with a traditional rural landscape. However, the disappearance of traditional farming practices is threatening this harmonious landscape. In response, the municipal government encourages farmers to continue traditional practices by subsidising the market for traditionally prepared rice straw.

## Box 1. Amenity case studies (cont.)

- **Tanadas** are terraced rice fields built on steep mountain slopes. They were developed in ancient Japan and used in nearly all regions of the country. *Tanadas* are widely appreciated not only for their scenic appearance, but also because they represent the continuation of ancient agricultural and social customs. However, the laborious work required for their maintenance is causing them to disappear rapidly and the government is looking for ways to ensure their survival.
- The sailing trawler method of fishing in **Kasumigaura Lake** provided a stable source of income to several thousand fishermen until mid-century when sailing boats were replaced by more efficient engine-powered fishing vessels. In response to demands from local residents, municipalities on the lake started a project to recover the scenery created by the traditional fishing vessels. Now, sailing trawler fishing is considered to be crucial to local identity and is used as an image to market the region.

**Switzerland** (interaction between nature and man): the Napfbergland trail follows one of the country's most distinctive economic, ethnic, and cultural dividing lines – a border between two cantons, one with western and one central European culture, one of Protestant and one Catholic faith. The area's individual attractions are not considered as spectacular as those in the more mountainous Alpine regions of Switzerland, but by linking a series of natural and cultural sites a critical mass of attractions has been created to support rural tourism.

#### Amenities introduced at the workshop

The following amenities and associated policies were presented at the amenity workshop held in Tokyo in September 1997.

**Belgium** (interaction between nature and man, man-made): rural amenities in Belgium include natural parks, archaeological sites, specific village architecture, and unique local traditions and products. The government has been making efforts to valorise these amenities for sustainable rural development, using different types of policies including guidelines for land use planning, codes for land management, and sectoral policies (particularly related to agriculture and forestry).

**Canada** (almost intact nature, with some amenities created through interaction between nature and man and some man-made sites): Canada has 38 national parks and 131 historic sites run by "Parks Canada". Canada's National Park Policy aims to provide recreational and educational opportunities for the public while maintaining the ecological integrity of the parks. Among the main amenities presented were the Klondike National Historic Sites, which commemorate the history of the gold rush and were reconstructed under the Cultural Resource Management Policy, the Chilkoot Trail and the Kluane National Park Reserve.

## Box 1. Amenity case studies (cont.)

**Finland** (almost intact nature): Finland has innumerable natural amenities, including lakes, forests, wetlands, wild berries and fungi. These amenities offer abundant opportunities for small-scale enterprise, such as rural tourism, local culinary speciality products and wood-working. However these nature-based enterprises need to be networked and co-ordinated to overcome problems related to small scale, isolation, loss of traditional skills, and limited marketing skills. Thus, it has been proposed that support be provided in the form of infrastructure, information, a quality assurance programme, counselling, and training.

**Greece** (man-made): several projects are now being implemented to preserve Greek island villages as traditional pottery centres. These include regulations to preserve traditional settings and practices, education and information to raise both public and producer awareness, training programmes to hand down skills to younger generations, and exhibitions or fairs to stimulate markets.

**Luxembourg** (interaction between nature and man): the natural park in Luxembourg is a newly developed instrument intended to reconcile economic development with the preservation of nature and amenities. The principal measures to achieve this objective include participation of local communities; technical assistance; co-ordination of different ministries and administrations; and financial support to compensate for restrictions on land use.

**Norway** (interaction between nature and man): agricultural land, which comprises less than three per cent of the total land area, provide variety and contrast to the natural landscape. The interaction between agriculture and nature generates numerous valuable amenities. Several agri-environmental policies have been introduced to replace production-oriented subsidies; these have been characterised by strong local participation.

**Sweden** (almost intact nature): Sweden has mountainous areas and wildlife in the North; sparsely populated sub-mountain forests; a long coast with unique archipelagos and islands. Moreover, Sweden's historical and cultural identity is strongly influenced by its rural landscapes. A series of legislative actions have been introduced to protect the environment and rural amenities. Now, to coordinate these environmental acts, an "Environmental Code" is being drafted.

## 3. Main characteristics

Whether natural or man-made, rural amenities share certain general characteristics with important implications for development policy.

## Uniqueness, irreversibility and uncertainty

A rural amenity exists in a particular area and not in any other place. All amenities have their own unique aspects. It is usually impossible to reproduce the same amenity somewhere else.

An action that reduces the value of an amenity is often irreversible. It is impossible to restore the initial value of pure wilderness after human action. Reproducing man-made amenities may be possible but the replica will often not have the same value as the original. High amenity values are generally developed slowly, sometimes over centuries of use. Rural amenities can be assumed to be rare, which is one of the main reasons they are valuable. However, there is no definitive criterion for evaluating scarcity that unambiguously distinguishes an amenity from ordinary features of rural areas. Further, the value of a rural amenity can vary over time, for example, as tastes change or as income increases. The appearance or characteristics of amenities which are shaped or created by human activities are also subject to change.

#### Defining public goods: non-rival and non-excludable

Most rural amenities are to some extent public goods, which can be characterised as goods that are non-rival and non-excludable.

*Non-rival:* the supply of pure non-rival public goods is not decreased by individual consumption. The classic public good, non-rivalry example is a lighthouse. Once it is built and functioning, its use by an additional ship neither reduces its utility for other ships nor increases its operating costs. The extent to which a rural amenity is characterised by non-rivalry varies. For example, some amenities are valued for their mere existence, making them completely non-rival. In contrast, the number of fish, game and forest products decreases as people hunt or harvest, making them entirely rival goods. Most amenities are somewhere in between. In general, natural areas can only absorb a limited number of visitors before congestion starts to reduce each person's enjoyment.

*Non-excludable:* a good is non-excludable if it is impossible or unfeasible to exclude anyone from consuming it. The classic example of this is scenery. Non-excludability often renders the establishment of amenity markets difficult and sometimes impossible. In most cases, private goods are excludable and it is on this basis that markets are created through which people pay for the privilege of enjoying a particular good.

Table 1 illustrates how rural amenities fall along a continuum from public to private goods, depending on the degree to which they are non-rival and/or non-excludable. Some have both characteristics and are more purely public goods, others have one or the other characteristic and are semi-public goods, some have neither and are effectively private goods.

#### Amenities as externalities

Externalities occur when production or consumption by one person affects someone else involuntarily and without compensation. When the externality

Non-rival (up to a point)	Rival	
Ruins and temples in Asuka Canadian national parks Canadian historical sites	Craft enterprise in Finland Coarseware pottery in Greece <i>Tanada</i> owner system Labelled products of French nature parks	Excludable
Austrian mountain farming French regional nature parks Asuka rural landscape <i>Tanada</i> landscape Traditional farming in Yufuin Sailing trawl in Kasumigaura Greek pottery villages	"Everyman's right" to harvest natural products in Sweden Game fishing in Kasumigaura	Non-excludable
		Source: OECD.

Table 1. Classification of amenities

decreases the production or utility of the affected person, the externality is defined as *negative*. A good example is that of a factory that dumps untreated waste water into a nearby river, thus polluting the water for downstream users. In many policy areas, the notion of externalities refers almost exclusively to negative externalities, with public policy designed to minimise the harmful impacts of one activity on another. The amenities issue is more concerned with *positive* externalities, where one action has a positive impact on another. A classic example of a positive externality is given by a beekeeper who benefits neighbouring farmers by incidentally supplying pollination services.

Externalities, and more specifically *positive* externalities, are critical to understanding rural amenity issues and underpin many of the policy approaches discussed in this report. Many rural amenities are by-products and, in effect, created by the production of some other good. The celebrated rural landscapes in southern France were shaped by a particular kind of agriculture but were not intentionally created as an amenity. Not all amenities, however, are externalities. Historic sites and nature reserves, by contrast, are examples of non-externality amenities, where the amenity is deliberately produced and managed.

Rural amenities may also be created and maintained without being a byproduct specifically of agricultural production. For example, landscapes characterised by stone walls or hedgerows are not necessarily protected through subsidies to agricultural output. Even where amenities are externalities, the

relationship with production is often not direct, and may be inverse, *i.e.*, an increase in agricultural output could reduce supply of the amenity in question.

It is sometimes difficult to clearly distinguish amenities that exist as externalities from those maintained for their amenity value. If rural people provide amenities without being aware of doing so and without realising any profits, it can be taken as a case of pure externality. However, such cases are now rare. On the other hand, there are few cases where an amenity is produced only for that purpose. In fact, as the importance of preserving natural environments and cultural identities is better recognised, the intermediate case where amenities and other products are jointly produced is becoming more common.

Although the production costs of a positive externality can be assumed to be zero, the benefits accruing to the affected party are not. Therefore, it is logical that the provider of an amenity should be rewarded (so as to ensure the optimal provision of the amenity). Joint production, which transforms positive externalities into the intentional production of consumer value, is a key concept in achieving optimal supply through markets. The traditional rice drying processes of *Kakeboshi* and *Warakozumi* described in the Yufuin case study is a typical example of joint production.

## Territorial externalities

Although some amenity value will be capitalised in property values and both owner-occupiers of amenities and local residents might be able to capture value through rents and business ventures, it is difficult to capture the full benefits of public good amenities in the area where they are located. Tourists return home without paying for their enjoyment of landscape, or people enjoy the existence of an amenity without feeling the need to visit the area regularly. This phenomenon is called as a "*territorial spillover*" or "*territorial externality*".

How much territorial spillover occurs varies according to the type of amenity. In some cases the value of the amenity is, in effect, international. In others, the amenity is valued primarily by the people of the country or region and the values associated with the amenities, either use or non-use values, decrease with distance.

## 4. Public goods and externalities

## Combining the two aspects

Although many externalities have public good characteristics, not all of them are public goods. These two features of rural amenities, externality and public goods, often overlap, but they are separate issues. The type of amenity policies to be implemented depends on both elements. The distinction can be illustrated as follows:

- If an amenity (regardless of whether or not it arises from an externality) has sufficient use value and if it is socially and technically possible to control access to that amenity, it is a marketable good and the owner of the property rights will attempt to derive some benefit from it.
- National parks and cultural or historic monuments of national or international importance are protected by the public authorities because of their amenity or environmental value. They are public goods due to their high non-use value, but they are not externalities. Access to most of these sites is regulated and visitors must pay to visit them. However, in most cases, the bulk of the cost is borne by the State acting on behalf of the beneficiaries of the amenities' non-use value.
- Agricultural landscapes are a typical example of amenities provided to everyone as public goods which are the result of externalities. Amenities that are externalities are difficult to market and their ownership by public authorities is rare and problematic. It is almost impossible to control their supply without affecting productive activities.

It is clear from these examples that in order to formulate policy with regard to rural amenities, it is first necessary to determine whether the amenities in question exhibit the characteristics of a public good, a private good, or a combination of the two. Second, it is necessary to know whether or not they stem from an externality. The valorisation of an amenity may depend on the possibility of transforming either a public good amenity to a private one, or an externality to non-externality or joint production.

#### A final complication: the question of free-riders

Any person wishing to benefit from a public good can pay to ensure that the good will be supplied. However, non-rivalry and non-excludability mean that others will be able to benefit from that good without paying. Consequently potential consumers lose the incentive to state their true willingness to pay since they can gamble on the good being provided to others who express some willingness to pay. Those who gain the benefits of the good without paying or by paying less are known as "*free-riders*".

Overall, the free-rider phenomenon causes amenities to be provided at a sub-optimal level. Assume, along the lines of game theory, that consumers can obtain an amenity value of 1 unit provided that a certain number of them are prepared to pay (see Figure 1). If every consumer pays 1 unit, each individual's total benefit will be 1 unit. If one consumer can receive the amenity value without payment, his total benefit will be 2 units (1 unit of benefit without paying 1 unit of cost). If, against expectations, nobody pays for the amenity, the consumer will not

		Individual benefit		Social	benefit
		Consumer N-1		Consur	ner N-1
		Pays	Does not pay	Pays	Does not pay
Consumer 1	Pays	+1, +1	-1, ±0	+100	-1
	Does not pay	+2, +1	±0, ±0	+100	±0

## Figure 1. Amenity consumer's dilemma

Source: OECD.

get the benefit of the amenity (0 unit), but will not have paid unnecessarily. Under the circumstances, what should be the rational choice of an individual consumer? A dominant strategy, *one that is optimal for a player no matter what an opponent does*, is for the consumer not to pay. In other words, the rational strategy is to be a free-rider.

The rational choice for society as a whole, however, is different. It is difficult to calculate the amount of amenity benefits which society receives as a whole, so we assume that social benefit is the sum of individual benefits. Thus, if there are 100 people in a society, the social benefit of the amenity is 100 units. When all 100 people pay 1 unit, the total social benefit is 100 units. There would be no significant difference to the social benefit even if one consumer does not pay for it. However, if large numbers of people do not pay, the society loses the amenity of 100 units value. Hence, the rational choice for society is to make (most) people pay for it.

In a small society, a number of social incentives are at work, such as friendship, social status, and prestige. These restrain individuals from being free-riders. But, as the size of the society increases, the relative importance of each individual's contribution to collective action, as well as each individual's share of the value, declines (Udehn, 1996). This suggests that public good problems can be solved more easily for amenities with local significance (and smaller "societies") than for national and international ones.

# Chapter 2 Internalising Rural Amenities

## 1. How to internalise externalities

## What does it mean to internalise an externality?

Internalisation means taking account of the existence of an externality in order to ensure that the activity that produces the externality not only continues to do so but also produces the optimal amount of the externality. Internalisation can be achieved in three ways:

- First, where property rights are defined and enforceable and transaction costs are not excessive, the producer and consumer of the externality have a market incentive to negotiate a mutually beneficial trade.
- Secondly, a tax can be imposed or a subsidy provided equal in value to the external cost or benefit on either the externality-generating or externality-affected party.
- Thirdly, the generating and affected parties can be placed within a single ownership structure. The external cost, then, becomes internal and is taken into account by the owner(s). The acquisition of lands with significant amenity or environmental value by governments can be considered as the application of this third approach.

The policy challenge with internalising externalities lies largely with the problem of assessing the "optimal" level of provision of amenities and the value/cost of providing this amount of amenity.

## A principle for the internalisation of negative externalities, the Polluter Pays Principle (PPP)

The *polluter-pays principle* (PPP) was adopted by the OECD Council of Ministers in 1975 as an "efficiency principle for the implementation of national environmental policies". Bugge (1996) describes the *PPP* as having three meanings: *i*) as an economic or efficiency principle; *ii*) as a legal principle; and *iii*) as a principle of international harmonisation of national environmental policy.

The PPP as an economic efficiency principle means that the social costs of pollution should be internalised in the polluter's costs. The efficient or optimal level of pollution is that which gives the maximum difference between the total benefits of pollution abatement measures and the total costs of these measures.

As a legal principle, the PPP is primarily aimed at distributing costs between the polluter and the victim of pollution. It implies that the polluter should bear the costs of preventing or remedying the injury caused, since the polluter is generally seen as the "wrong doer".

As an international principle of harmonisation of environmental policy the PPP mainly aims to avoid great differences in the competitive situation of industries across countries. Its core concept is *no subsidy*, which means strictly limiting public financial support to measures to prevent pollution.

There are, however, many preconditions, limitations and exceptions to this principle. In economic terms, the granting of a subsidy to a potential polluter for not polluting is often as efficient as a tax. Public financial support for pollution abatement is often applied under certain conditions so as to avoid unwanted social problems such as factory close-down or increased unemployment due to a strict application of the principle. Whether the polluter or the victim should pay is unimportant from an efficiency point of view. In legal terms, it is often difficult to define what pollution is: such a definition would have to define a number of harmful effects as well as a threshold for pollution below which the polluter is not required to pay. It is then difficult to determine who is the polluter and who has to pay. For example, in the case of several farmers who pollute the watercourse in a drainage basin, it is very difficult to determine how much each one should pay.

#### Implications for amenities

The PPP primarily applies to environmental nuisances, that is, to negative externalities. Amenities, however, are *positive* externalities and PPP is not, therefore, directly applicable. It nevertheless provides an example of how the question of internalisation of externalities has been approached, including the key question of how to quantify the externality and give it a value/cost. Taking as a point of departure, the crucial issue of property rights, the next section presents a proposition for internalising positive externalities more suited to the specific case of amenities.

## 2. The importance of property rights

## Property rights and internalisation

As the Coase theorem implies, establishing unambiguous property rights is the key to optimising amenity value. The theorem states that the outcome of the

trading process is the same irrespective of whether it is the producer or consumer of the externality who holds the right to veto the use of the resource. In other words, the efficiency of the social agreement obtained is independent of the assignment of property rights. If the property right to an amenity is assigned to the provider, the consumer will compensate the provider to optimise the amenity provision. If the property right is assigned to the consumer, the provider will compensate the consumer for any losses. Thus you end up with the same allocation regardless of the assignment of property rights.

## Property rights relating to amenities

It is often difficult to determine who holds the property right to an amenity. While the property rights to land are often clearly established, ownership does not always confer unlimited rights regarding the amenities located on the land. For example, the community may have rights over classified sites, the water in watercourses and the quality of that water. The owner of land along a river, for example, is not entitled to do whatever he or she wishes with the water. Other complications include the following:

- Rights to amenities are often vague. A landowner's rights and obligations with regard to amenities arising from the use of the land are not always legally defined.
- There are variations between countries, and even between regions, in how property rights are interpreted. In some countries, for example, public access to privately owned farmland or forests is the right of all citizens, whereas in other countries access can be prohibited by the landowner.
- Rights can change over time. In Italy, for example, the collection of mushrooms and access to landscape in areas of common property used to be unrestricted and free of charge under traditional property and customary law. However, increasing demands for nature and natural products brought about the reconsideration of these property rights (OECD, 1996*a*).

## A point of reference that determines the assignment of rights

According to Hodge (1994), there needs to be a "reference point" for environmental quality with respect to land use. In the case of amenities, this means the legal owner of an amenity should be obliged to achieve a level of quality or provision corresponding to the reference point. This point may be determined in one of two ways. First, it may be legally defined by property rights, which entail obligations related to the amenity, for example, an obligation to maintain the banks of a river, to leave trees standing, or to preserve an historic building. Second, it may be agreed to tacitly, as it is with the right of free access to cultivated land in Sweden, which is accepted tacitly by all citizens. When landowners do not achieve the level of quality that has been legally or tacitly determined (here, the "reference point"), they produce a negative externality insofar as the affected party is unable to enjoy the amenity to which he or she is entitled. In this case, the rights of the beneficiary of the amenity are recognised. When landowners do more than they are required to do under the legal or tacit standard, they are regarded as producing a positive externality. In this case, their rights over the amenity are recognised.

#### Amenity property rights: examples in the case studies

The case studies provide ample evidence of the variety of ownership structures. The case study of Australian native forests deals with an amenity that is almost entirely in public ownership. At the same time, some forest industries have licences to extract timber dating back several decades and they play an important role in managing the forest. These accumulated rights are use rights rather than property rights.

In the case of mountain farming in Austria, farmers have the option of being paid by the government to carry out an activity which generates externalities in the form of landscapes. They may choose whether or not to take part in the programme. They are therefore regarded as having property rights over land use in Alpine areas, and also to the corresponding amenities.

In France, Regional Nature Parks are initiated by local people. They decide what should be preserved and how. Therefore, it is clear that local people are considered to hold property rights over the amenities in the area designated as a park. Probably the main beneficiaries of the amenity value are local people, though at least some value is enjoyed by visitors and by consumers of valueadded goods produced in the parks.

In Japan, there was nation-wide discussion of how to preserve the landscape, ruins and temples of the Asuka village. The amenities in Asuka have high use as well as non-use value. The villagers eventually agreed, in some cases reluctantly, to comply with regulations regarding the use they could make of their land, in return for a certain amount of compensation from the authorities. In this case, the primary holder of property rights is the Japanese nation. *Tanada* may also be considered to be of national importance and summits have been held to make the public aware of the need to preserve *Tanada*. However, it has not proved possible until now to introduce regulations on the use of land on which they are built. To date, only one municipal authority has introduced local legislation setting out the obligations of government, citizens, and farmers with regard to the preservation of *Tanada*. In other cases, the rights are held entirely by the landowners.

Again in Japan, Yufuin farmers have property rights over the implementation of *Kakeboshi* and *Warakozumi*. The scenic beauty used to be the externality of certain rice production processes but it is difficult to force farmers to continue these farming

methods without any monetary incentives. Thus, they are paid for the labour involved in these two traditional practices.

Lastly, traditional trawlers in Kasumigaura Lake seem to have much more local than national significance. The restoration of the trawlers was financed by local governments since sail trawl fishing was considered to be important to local identity. The operating costs of the trawlers are paid by local governments and tourists and contributions are also made by local government employees and local fishermen through their volunteer labour. Local fishermen play an important role in providing the amenity, but they are not the sole providers. It is local people or local governments who initiated, and now finance and manage the restoration project. The situation is very close to that of French Regional Nature Parks. Both the amenity providers and the main beneficiaries are local people. And, *de facto*, local people hold the property rights.

It is not easy to decide who has property rights over an amenity. As seen above, when an amenity has high use value, it is generally accepted that the producers have the property rights. When an amenity has high non-use value, who holds the property rights is more likely to vary. It may be the providers, local communities, or the nation as a whole.

## 3. The principles of internalisation applied to amenities

## Positive externalities: the Beneficiary-Pays Principle (BPP) as reference

This principle comes from the field of public finance, which focuses on the funding of publicly provided services. Reference is made, on one hand, to equal sacrifice, whereby every taxpayer is obliged to pay an equal amount of income to benefit from the public service. On the other hand, reference is also made to the beneficiary pays principle, under which the tax burden is distributed between taxpayers according to the benefit they derive from the public service.

The beneficiary-pays principle is acceptable as a legal, economic and development principle. It is considered just and equitable that the person who benefits from something pays the person who produces it. It is economically sensible in that it allows externalities to be internalised. It is of interest in terms of rural development in that it allows funding to be channelled towards the providers of rural amenities.

The principle does pose problems in terms of implementation, however. The closer an amenity is to being a public good, the harder it becomes to determine who benefits from the amenity and to estimate demand. High non-use value complicates the situation further, because free-riders do not reveal their demand for the amenity. In contrast, the principle is easier to apply when amenities do not have characteristics of non-rivalry and non-excludability, and when use value is high.

To reduce the problems involved in identifying beneficiaries, matters may be simplified through the application of principles derived from the BPP.

# When the beneficiary is a consumer of amenity generating products: the Consumer-Pays Principle

When it is easier to identify the providers than the beneficiaries of the amenity, a more practical way of achieving economic efficiency is for the provider to internalise the external costs and then to pass these costs on to consumers.\*

Several of the case studies describe products for which higher prices can be charged by virtue of a label that associates the product with an amenity. Examples include, first, expensive cider produced by traditional methods (which generate landscapes and perpetuate local customs) in the Normandy-Maine Regional Nature Park and, second, regional products bearing the trademark of the Kasumigaura Lake sail trawls. In both cases, the cost of providing the amenity is borne by the consumer through a surcharge applied to the product.

This derivation of the beneficiary-pays principle works when beneficiaries of an amenity also consume a product manufactured by the amenity provider. However, the scope of this principle, which can be called consumer-pays, is limited for public goods amenities because of the free-rider problem. Many people would like to preserve mountain farming but decline to buy more expensive mountain farm products. Moreover, the beneficiaries of externalities are not always consumers of externality-generating products. For example, the beneficiaries of the traditional farming methods used in Yufuin are not consumers of the rice that is produced in the region.

It is also difficult to use the consumer-pays principle as an international harmonisation principle, since the advantages that populations derive from a positive externality arising from a rural activity vary from one country to another and from one region to another. So, too, do the costs of maintaining an amenity even when the products whose production process is responsible for the amenity are the same. Thus amenity providers must charge a different price for their product according to the value of the amenities, in which case products that are more expensive will find it harder to compete in international markets.

<sup>\*</sup> This is one of the reasons why the polluter-pays principle is widely accepted as the principle of economic efficiency in the environmental field. The costs of pollution abatement are borne by polluters, and then internalised in product prices. Hence they are borne first by producers and then passed on to consumers.

## Cases where non-use values predominate: the Provider-Gets Principle (PGP)

The provider-gets principle (PGP) is a subset of the beneficiary-pays principle (BPP) in that providers are paid for the amenity, although in this case, the source of funding is unimportant. The BPP is more rigorous in economic terms in that only those who are prepared to pay the price of the amenity are expected to pay, which theoretically leads to an optimal level of supply. However, for amenities with significant non-use value, stringent application of the beneficiary-pays principle entails the following risks:

- The supply of the amenity may be sub-optimal due to the difficulty in identifying the beneficiaries.
- There is a danger that only users of the amenity (who are therefore readily identifiable) will be made to pay, leaving non-user beneficiaries in the position of free-riders. Users might then be discouraged by overly high charges in the form of fees for access to the amenity.
- Lastly, since many people consider these amenities to be part of their common heritage, they may refuse to pay an access charge. The laws and customs of some countries bear witness to this problem by establishing the principle of free access to certain amenities (free access to agricultural land in Scandinavian countries, to mountains and forests in Switzerland, etc.).

Therefore, when the PGP is applied to amenities with high non-use value, it may be important to devise a means of passing on costs to a large number of people.

## Fiscal equivalence: a guiding principle for internalisation at the territorial level

The external effects of a rural amenity often extend beyond the region concerned. In most cases, the beneficiaries of such a territorial externality are urban dwellers who rarely have the chance to experience rural amenities in their daily lives. Territorial externalities (which, in the case of amenities, are positive) must be internalised if the amenities are to be provided at an optimal level.

Policy instruments required for the internalisation of territorial externalities are not different from those for the internalisation between agents. Regardless of whether an externality is territorial or not, regulation is necessary to determine unclear property rights over amenities. The establishment of amenity markets should be encouraged to the extent possible, in any case. However, when public goods characteristics make government intervention desirable, financial responsibility for providing the amenity should be distributed among levels of government proportionate to the degree of territorial spillover. For example, if the spillover is limited to surrounding communities, then responsibility should be distributed only to nearby local governments. Alternatively, if the spillover extends to the national border, then responsibility should be shared throughout the country.

Type of principle	Beneficiary-pays principle	Consumer-pays principle	Provider-gets principle
As an economic efficiency principle	Applied to secure payment from users. Difficult to apply to non-user beneficiaries	Applied when the benefit derived from the amenity is realised through the purchase of a good.	Less effective due to difficulties in ascertaining demand Applied to ensure payment by non-user
As a legal principle	Acceptable	Acceptable if	beneficiaries Less acceptable
	Acceptable	consumers and beneficiaries overlap	because non- beneficiaries may be covered
As an international harmonisation principle	Effective but often difficult to apply	Less effective for non- marketable amenities	

Table 2. Principles for internalising amenities

Olson (1969) analyses the case in which political borders for managing a public good do not coincide with those of the area in which beneficiaries reside. Optimal supply of the public good can only be ensured when that coincidence is re-established. From a financial point of view, this is called "fiscal equivalence". It involves institutional mechanisms that allow taxes to be levied in beneficiary areas and redistributed to supply (or provider) areas. This implies vertical co-operation between central and local government entities and horizontal co-operation between government entities at the same level. In short, fiscal equivalence is the application of the beneficiary-pays principle to territorial externalities (Blöchliger, 1997).

## Summary

Internalising externalities is hindered by the difficulties involved in determining the optimal level of provision of a given amenity and the value or cost of that provision, and in determining the relationship (the level of "jointness") between the externality and other production. Defining the property rights that pertain to a particular rural amenity is a critical step in ensuring a socially optimal level of supply, regardless of whether the rights are legally or tacitly established. The concept of a "reference point" can help distinguish between landowner rights and obligations. If an amenity produces a positive externality, supply is said to exceed the reference point, and the beneficiary-pays principle or its derivatives always apply.

- If access to the amenity can be restricted, it becomes a private good, and charging users directly becomes feasible (the beneficiary pays principle).

OECD 1999

- If beneficiaries of an amenity also consume products that are somehow linked to its production, they indirectly pay for the amenity through a surcharge levied on the products (the consumer pays principle).
- If identifying beneficiaries is difficult because an amenity has high non-use value or other public goods characteristics, the State can act as an intermediary by levying charges to generate funds that can, in turn, be used to pay for providing the amenity (the provider gets principle).
- If an amenity with public goods characteristics generates territorial externalities, the appropriate level of government can substitute for the market in generating funds to cover the costs of providing the amenity (the provider gets principle under conditions of fiscal equivalence).

As much as possible, payments to amenity providers should come proportionately from the users (through access charges, for example) and non-users (from general taxes or taxes targeted on certain groups) according to their respective benefit.

To internalise negative external costs (generated by actions which degrade amenities or cause the amenity to fall short of the legal or tacit reference point), the polluter-pays principle applies.

## 4. Setting prices for amenities

## The difficulty in establishing a price

It is not difficult to price amenities which resemble private goods because the price can be determined through the market. When an amenity has public good characteristics, however, public authorities may be obliged to intervene, most notably, to pay or compensate providers. In the absence of a market for public goods amenities, either of two methods can be used to set prices. One is based on costs, the other on benefits.

## Price-setting according to costs

Three types of costs are associated with providing amenities: direct, indirect and opportunity costs.

First, direct costs are incurred in providing or preserving an amenity and refer to inputs needed to establish and maintain the amenity. For example, to establish and maintain a national park, governments may purchase sensitive or scenic areas, provide infrastructure such as roads and gates, and hire staff for maintenance work. Historical monuments need restoration work in addition to the above costs. Amenities that are externalities are generally assumed not to involve direct costs since the provision of the amenity is an almost fortuitous outcome of another economic activity. However, additional inputs may be required for amenities that are not full externalities. For example, restoration work may need to be carried out on stone walls or hedges that are no longer required with present cultivation technology and special training may be needed to maintain traditional craft skills.

Indirect costs pertain to activities such as planning, formulation of laws, monitoring, and providing public education and information about the amenity. The latter two activities are critical since awareness by both producers and beneficiaries is a precondition for providing, maintaining, and supporting amenities (OECD, 1997*b*). Hence, these costs are commonly covered by public authorities.

The foregone return on using resources for one activity instead of another is referred to as an opportunity cost. For example, land designated for a national park could have been used for forestry production or resort development. The foregone benefit from forestry or tourism, which can be relatively accurately estimated, is the opportunity cost.

#### Price-setting based on the benefits provided

How is it possible to discover what the price would have been, had a market existed? Willingness to pay is one indicator of the monetary valuation placed by an individual on a good or service. Johansson (1994) explained several different methods to assess willingness to pay for rural amenities and other environmental commodities. The most common ones are the *contingent valuation method* (CVM), the *travel cost method* (TCM), and the *property value method* (PVM).

The CVM ascertains an individual's willingness to pay by asking hypothetical questions. To avoid inaccuracy and biases, the questions should be carefully worded with information about the issue, the likely consequences of different alternatives and the manner of payment. The TCM calculates a price for a rural amenity or a recreational site by adding up the individual's travel costs to the site. The TCM is based on people's actual behaviour, in contrast to the CVM. However, the method is able to cover only use value. The PVM, or *hedonic pricing method*, estimates an implicit or shadow price for each attribute of a property by checking the difference in market prices between a property with certain attributes and without.

While these methods were developed specifically to quantify intangible value, their application to valuing rural amenities is limited. At the minimum, we must realise that a single method cannot cover the full range of amenity value.

## In practice... policies to price amenities

In theory, pricing rural amenities is an important part of optimising the allocation of rural resources. However, pricing based on derived benefits is both a complex and incomplete method, further complicated by characteristics such as irreversibility and uncertainty. In practice, many of the amenity-related policies examined in the case studies are based on an *ex ante* objective with regard to the provision of the amenity, independent of any price assessment. Examples include the following.

- Australian forest management involves balancing the requirements of domestic and international environmental standards with forest industries and recreational uses. Of the three, the revenue foregone from the sale of licences and other income related to the timber industry can be accurately measured (opportunity cost), while environmental set-aside is difficult to cost and recreational uses can be argued to have a larger value than the direct revenue they generate.
- The policy in Austria is to maintain economic activities that produce positive externalities. In the case of mountain farmers, subsidies support farming to preserve the landscape. Payments to mountain farmers are set so as to maintain farm household income levels, rather than to compensate for either the direct or opportunity cost of providing amenities.
- In the case of Asuka village in Japan, the policy is to compensate for the opportunity costs of preserving amenities. Compensation is provided by governments for development opportunities which cannot be exploited because of strict land use regulations. In the case of sail trawlers in Kasumigaura, the community covers the direct costs of providing the amenity. Local governments pay most of the costs of maintaining and restoring these amenities on behalf of local people who wish to preserve them. Local governments or local enterprises are trying to recover the costs by marketing amenity value, notably by promoting tourism.
- In France, the government pays for indirect costs associated with the Regional Nature Parks. In each park, a team of professionals carries out the task of collecting and disseminating information on the park's amenities. The cost of this work is borne by the authorities, while the funding of parks is divided between levels of government (communes, regions, central government).

# Chapter 3 Amenities and Rural Development

## 1. The search for synergy

## Relationships between amenities and rural development

There are three types of relationship that can exist between amenities and rural development:

- Synergy: *i.e.*, when preserving amenities supports development. For example, sustainable tourism stimulates economic activity and the arrival of new populations in the countryside without destroying the underlying amenity.
- Antagonism: *i.e.*, when preserving amenities dampens the rural economy. Sometimes, preservation reduces rather than increases human activity so that economic growth is constrained.
- Interdependence: *i.e.*, when economic stagnation negatively affects amenities. Man-made amenities require at least some economic development. When a rural area is depopulated because of economic decline, the associated cultural values and environmental resources are both threatened.

As shown in Table 3, these relationships are reflected in the case studies. Synergy is apparent in France's Regional Nature Parks where the preservation of amenities goes hand-in-hand with tourism development and the sale of labelled products. The image of amenities is thus capitalised upon in commercial terms.

In contrast, a stagnant economy in the village of Asuka is due partly to amenity preservation. In Asuka village, land use regulations force local farmers to preserve the historic landscape, and because they do not have any means of capturing value from the landscape, the price of land has stagnated. In contrast, in an adjacent area where the major industry is agriculture, land prices increased dramatically during the economic boom of the late 1980s.

The Austrian mountain area case study illustrates an interdependent relationship between amenities and development. Some Austrian Alpine areas with a remarkably well-developed economy, strong growth in population and buoyant

	The preservation of amenities is accompanied by	The destruction of amenities is caused by
By economic development	<b>Case 1: Synergy</b> French Regional Nature Parks Swiss Border Trail	<b>Case 2: Antagonism</b> Certain Alpine areas of excess tourism
By economic stagnation	<b>Case 2: Antagonism</b> Asuka region in Japan	<b>Case 3: Interdependence</b> Mountain areas where declining agriculture threatens the landscape
Source: OECD.		

demand for housing, have reached a settlement density that threatens resources. Hence, antagonism between amenities and development is beginning to develop. Other mountain areas, in contrast, have a less dynamic economy and are threatened by out-migration. Preserving their amenities depends on agricultural activities being maintained.

Finally, the explicit aim of the Regional Forest Agreements in Australia is to reduce antagonism resulting from economic stagnation linked to preservation of amenities and, instead, to create a synergetic relationship between economic and ecological interests. As yet the agreements are too recent to have clear results; however, first indications from the RFA in Tasmania suggest that the guarantees provided by the RFA have encouraged additional investment in the timber industry despite restrictions on output.

#### Economic development with conservation: the key policy challenge

Reconciling economic development with amenity preservation is the major policy challenge identified in OECD's amenity study. Most activities that produce amenity value in rural areas are economically marginal, so their continued survival depends on some kind of payment to suppliers. As a consequence, the priority now is to find strategies that capitalise on the value of amenities. Appropriate compensation for amenity providers must be made in order to promote economic development of the high-amenity areas since development and preservation are so often inter-related.

## 2. The objectives of amenity policies

## Seeking an optimum in amenity supply

As the preceding discussion makes clear, markets do not necessarily yield an optimal supply of amenities. Moreover, demand by people who value amenities

but do not use them directly cannot be evaluated with any precision. Because action will necessarily be based on uncertain knowledge, policies should take account of the following:

- Demand for amenities from future generations is likely to be high under conditions of economic growth since the income-elasticity of demand for amenities is positive and generally greater than one (Blöchliger, 1994). Further, the trend towards a reduction in work time increases leisure time and interest in amenities (Ueta, 1997).
- We cannot know how future generations will want to use an amenity. Just as
  recreational use of amenities developed alongside industrial civilisation,
  so other uses may emerge. This suggests we should avoid irreversible
  damage that would limit the possibilities for enjoying or using amenities.

By broadening the concept of economic value to include more than present use value, the economic usefulness of protecting amenities is more clear, even from a cost-benefit perspective (Ueta, 1997). A primary objective of amenity policy is to, first, establish supply at a level that matches existing demand and assumes demand by future generations and, second, protect amenities from irreversible damage so that a range of future uses is ensured.

## From conservation to "realising value"

The major aim of amenity policies is to exploit their value for rural development. Clearly, the valorisation of amenities is the best incentive for their conservation,\* but beyond this, the goal is to help rural territories recover the value of their amenities from the users (many of whom are city dwellers) and, thereby, to exploit crucial resources for development.

- Amenity supply is often justified at the level of beneficiaries, but not from the standpoint of the supplying agent or territory, which may have to forgo other development opportunities. Amenity policies should enable provider agents and territories to obtain remuneration from beneficiaries for their contribution to amenity supply, by making up for market failures;
- Amenities are the only sphere in which some territories have a comparative advantage, in part because amenities are highly specific to their location and cannot be transferred or moved like other assets. Some offer great potential in terms of profitable exchanges with fast-developing urban areas (Ueta, 1997). Policies should encourage amenity-rich territories to realise

<sup>\*</sup> Whereas conserving natural assets is the primary aim of environmental policy, it is only a subsidiary aim of amenity policy.

amenity value, which in turn, will promote development and greater balance between less favoured rural areas and growing urban areas.

## 3. Policies and instruments

#### Two main types of policy

Two general types of policy, along with several types of instruments, were identified in the study.

- 1. Policies designed to stimulate direct co-ordination between amenity providers and beneficiaries, either through the market or through co-operation among agents acting collectively.
  - **Support for enhancing an amenity's commercial value**: the aim is to encourage commercial transactions between providers and beneficiaries, where the transaction involves either direct enjoyment of the amenity or purchase of related products. Typically, this instrument targets amenities that have private goods characteristics, so that a market can be established, sometimes with assistance.
  - **Support for collective action**: the aim is to promote and support actions by groups of agents with a view to adjusting amenity supply and demand. Typically, this instrument targets amenities which require *a*) collective action for maintenance and/or *b*) valorisation by providers and beneficiaries.
- 2. **Policies designed to change the economic ground rules** so as to encourage individual acts that increase or maintain the supply of amenities. Amenities that are amenable to this kind of policy are mainly those with public good characteristics and/or externalities.
  - Regulations: the aim is to determine and/or reassign rights relating to ownership and use of the amenities, when these rights are not clearly defined, or need to be reassigned either to promote valorisation or avoid further degradation. In the case of a private good amenity the clear definition or reassignment of property rights may facilitate the establishment of markets. In contrast, when society is considered to hold the property right, regulations are often imposed to restrict individual ownership over an amenity.
  - Financial incentives: the aim is to compensate providers for supplying amenities and to tax actions which have a negative impact on amenities thus forcing the provider to internalise costs. When amenities have public goods characteristics, and/or generate externalities, the government

effectively substitutes for the market by using financial incentives to send signals to providers.

The policies and instruments described above, along with so-called "accompanying" or "ancillary" measures (operational and financial co-ordination, providing information, and technological research) are explored in Chapters 4-7.

## Chapter 4 Stimulating Markets for Amenities

## 1. Markets for amenity use rights

#### Establishing exclusivity

As the earlier discussion makes clear, markets do not always produce an optimal supply of amenities. One way of improving markets is to limit access to amenities and charge beneficiaries for their use. Such a strategy makes sense when the amenity is potentially a private good, for example, if it can be fenced or has only a limited number of access points. It also makes sense when enjoyment of the amenity depends on the use of infrastructures and services that are themselves excludable. Hence, access rights can be paid for at the same time as services. An example is a high amenity landscape that visitors can enjoy while staying at a farm guest house. Sometimes, payment is indirect, for example, for parking, licenses or permits. To have access to streams and rivers in France, for example, anglers must buy a fishing license from the club that manages the fishery and checks licenses.

#### In practice... funding Canada's national parks and historic sites

In Canada, all visitors have had to pay entrance fees to national parks and historic sites since 1994. This money is reinvested in managing and providing services at the parks and historic sites. In 1996-97, Parks Canada, which operates the parks and historic sites, collected roughly 16 per cent of its budget through visitor entrance fees and sale of services.

At Canada's Chilkoot Trail, for example, visitors pay a daily access fee of Can\$ 35 per adult or alternatively a one-year pass for Can\$ 105 to hike the trail and view conserved historic remains along the way. They pay at a reception office where they receive information booklets. Parks Canada staff provide information and check passes. In 1997, Can\$ 140 000 were collected this way to fund services and conservation of the Chilkoot Trail.

#### Role of the public sector

In many countries, access to forests, woodland, mountains and rivers is open to all. For example in Switzerland, free access to roads and privately owned forests is a statutory right. In Scandinavian countries, access to the entire countryside is free. These customs are reflected in the Swedish concept of universal rights or *allemansrätt*. Depending on customs and traditions, there may be some limited and prudent role for the government to modify such rules, thus making it easier for private providers to charge access fees.

In the case of amenities linked to publicly owned land, the government itself may charge access fees and, by doing so, become the "operator" of the market. Similarly, when an amenity is produced by many private owners (who may be scattered over the countryside), the government may act as an intermediary. For example, it can charge fees and either earmark the resulting funds for management or distribute them back to the private providers. The government may also encourage and support amenity management organisations to collect fees and maintain amenities. Such organisations can be semi-public or private associations.

#### Advantages, limitations and application conditions

Markets for amenity use rights have the same advantages as all markets in that they can signal producers about the need to adapt to consumer preferences. In other words, they have the potential to unambiguously reveal the public's interest in a given amenity. On the other hand, they also have some limitations. First, they only make direct users pay. Beneficiaries who derive non-use value from the amenity become free-riders. Therefore, to encourage rural development, markets for amenity use rights must be combined with a mechanism that levies payments from free-riders, possibly through taxation. (For example, in addition to charging visitor access fees to national parks and historic sites, Canada levies taxes on all citizens to cover the costs of establishing and maintaining these amenities.) Second, amenity use markets may encounter resistance by citizens who reject the idea of paying for access to a common heritage they consider their own. Finally, markets for amenity use rights could exclude lowincome users who cannot afford to pay for access to amenities.

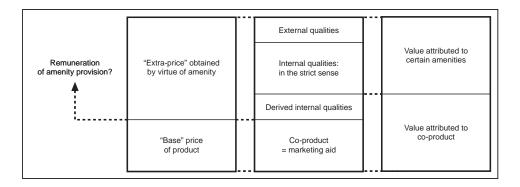
#### 2. Markets for products associated with amenities

Case studies from Member countries contain many examples of efforts to encourage markets for so-called labelled products whose quality is associated with specific amenities. These products include traditional crafts, fresh and valueadded food products, and tourist services. The most common strategies are to promote product identification or differentiation (through the labels themselves); consumer awareness (through advertising); and quality standards. Labelled product strategies are intended to exploit market niches and increase prices. According to the OECD (1995), "a worthwhile and increasingly widespread strategy for marketing niche products and services is to connect products with brand images such as particular landscapes, cultural traditions or historic monuments". If an amenity is the source of higher market value for a product, it will be in the interests of producers to ensure maintenance of the amenity. The income from product sales may also have a "knock-on" effect on the development of the territory concerned.

Several types of amenity-linked quality can add a premium to prices:

- Internal quality, in the strict sense, whereby the amenity itself is part of the product. For example, traditional designs and materials may be incorporated into a craft product such that both aesthetically and structurally the craft product is of high quality.
- Derived internal quality product whereby the amenity endows the product with specific characteristics. Farm produce may have superior health properties because it is produced in a particular natural area. The consumer pays for the extra quality independently of the amenity.
- External qualities, whereby the product and the amenity are linked, typically, in an intangible way related to the place of production. For example, a mountain farming landscape may not make dairy products taste better, but it does provide an attractive marketing image. The extra price, then, reflects demand for the amenity.

## Figure 2. Link between premium prices and types of amenity-linked quality



Source: OECD.

More than one type of quality can be combined in a single product. For example, ecological quality or quality connected with geographical origin and tradition, as defined by Swiss law relating to agriculture, combines external and derived internal qualities.

#### Role of the public sector

Government agencies can support amenity-linked products in various ways. For example, they can identify and promote rural tourism products such as on-farm catering and accommodation, thus valorising a "living environment" amenity. They can also assist by creating a system that guarantees the link between product and amenity (amenity label) and by disseminating promotional material.

By establishing standardised forms of certification and guarantees, the government encourages consumers to trust amenity labels. Most often, these labels pertain to:

- a production process that conserves amenities (as with products from livestock raised at pasture, which maintains certain landscapes) or makes direct use of an amenity and provides for its transmission (products made with traditional skills, ski resorts with a "village resort" label given for the preservation of their character);
- a territory whose amenities give the product a certain image. Territorial brand images can be highly attractive to consumers and can be applied to whole ranges of products.

In some cases, modern quality control standards are an obstacle to valorising amenities through traditionally produced, labelled products. For example, sanitation requirements often preclude the use of traditional cheese production methods in France and Switzerland (Blöchliger, 1997). Hence, some countries may consider introducing separate standards for specific regions or types of manufacturing processes if they want to promote development opportunities related to labelled products.

### In practice... France: "Regional Nature Parks" labels

In France, each regional nature park has a brand name which is the exclusive property of the State and is protected by the National Institute for Industrial Property. It is managed by the park authorities which, as part of their commercial strategy, permit its use as a label. This quality label highlights the park's amenities: it may be applied to farm produce, craft products, tourist services, etc., and it gives these goods and services a commercial quality bonus (essentially, external quality).

In the Parc de Brière, for example, the park label is used by enterprises organising boat trips around the marshes and by restaurants. The specifications

stipulate that visitors must be given a high-quality commentary on the Brière marshes' wildlife, flora, history and traditions. Restaurant proprietors must also comply with quality criteria for their buildings and catering (local specialities). Generally speaking, all food and farm produce, industrial, craft and tourist products eligible for the brand name must be manufactured, processed or sold within the park, and made from raw materials from the park.

The "Gîtes panda" label is another example of valorising amenities. Created in 1993 by the *Fédération des Parcs*, the WWF and the *Fédération Nationale des Gîtes de France*, this label is attributed to self-catering holiday accommodation close to natural amenities. Criteria include geographical location, direct access to "discovery trails" and the availability of educational materials at the accommodation.

## In practice... Protected Designations of Origin

According to EU Regulation No. 2081/92, a Protected Designation of Origin (PDO) is: "the name of a region or well defined area ... which is used to designate an agricultural product or food originating from that region ... whose quality or characteristics are essentially or exclusively due to the geographical environment, including natural and human factors, and of which the production, processing and manufacture occur within the geographical area so defined".

To benefit from a PDO, specifications must be drawn up defining the geographical production area and method of manufacture of the product, with details of the proof of origin of the product (traceability). The specifications must also describe the product's effective link with the area. Verification of the specifications is mandatory and takes place at all levels (farmers, processor, retailer). European Regulation 2081/92 recognises that these products may "become an important asset for rural areas" and several ancillary measures have already been introduced (Council regulations 2085/93 and 3669/93, Commission regulation 860/94, etc.) for agrofood products that benefit from this regulation (Barjolle and Mesplou, 1997).

## Advantages, limitations and complementary measures

The strategies described above all use markets to encourage the supply of amenities. Some also allow producers to realise a return on the external qualities of their product, thus, to capitalise on demand for non-use value. Nevertheless, significant free-rider problems may still exist. A further problem is that product vendors are not always amenity providers. They are not obligated to provide or maintain the amenity, even though they receive an amenity-related premium on their product. It is theoretically possible, though perhaps not always politically acceptable, for the government to overcome this problem by redistributing part of vendors' profits to amenity providers, for example, by levying a tourism facility tax and returning it to local farmers who maintain the landscape.

## 3. Commercialising ownership rights

Another market strategy is to encourage owners to sell to beneficiaries some or all of their rights to land on which an amenity is located. This could involve either a total transfer of ownership rights via the real estate market, or a restriction on actions by the owner that might damage the amenity. In either case, the owner would be compensated at a price commensurate with the rights he or she has transferred.

## Role of the public sector

Users' associations often buy up land where amenities are located and, in some cases, government agencies can facilitate these transactions. For example, the nongovernmental organisation Ducks Unlimited, which has members in the United States and Canada, buys land to protect water-fowl habitats. In France, the *Fondation pour la Protection des Habitats Français de la Faune Sauvage* also buys land, as do the Wildlife Trusts, National Trust and Royal Society for the Protection of Birds in the United Kingdom. Transaction costs can be prohibitive, however, because beneficiaries are widely scattered. Government agencies can intervene in various ways:

- They may act as intermediaries. Where the amenity is of interest to a great many citizens, authorities may buy land themselves in the name of the beneficiaries. They may do so directly or set up semi-public bodies for this purpose. In Great Britain, the Nature Conservancy Council, a public body with the task of creating national nature reserves, can enter into management agreements with landowners (purchasing part of their ownership rights) or buy land if necessary (involving complete transfer of rights).
- Sometimes, public agencies buy only those rights whose exercise damages an amenity, such as the right to remove hedges. Alternatively, the right to conduct business on private or State-owned land may be ceded on longterm lease to an enterprise or co-operative charged with developing it and exploiting its value as an amenity. This approach has been used in the municipality of Remignac, Quebec, on public forest land, to create jobs and to preserve traditional skills and scenic amenities (Apedaile, 1997).
- They may provide financial support for transactions. The authorities may help amenity beneficiaries' organisations to buy land, either through partial financing or by issuing bonds especially intended for land purchase. In the United States, most states issue guaranteed bonds to finance land purchases with a view to supplying rural amenities (OECD, 1996*c*).

### In practice... two illustrations from the United States

- Financial support for purchase by user groups: In California, the State Coastal Conservancy can grant subsidies to non-profit groups with plans to purchase, restore or provide access to the waterfront. In early 1992, for example, roughly US\$40 million were paid out to groups that purchased 18 000 acres, either for direct purchase of land or for services.
- Semi-public environment rehabilitation banks: Environmental damage caused by development, or advantages connected with acquiring or rehabilitating a resource, are compensated through a system of debits and credits allocated to the promoters. The funds are used to buy up large tracts of land to protect amenities. This system has been used in California, Florida, Louisiana and Oregon.

#### Advantages and limitations

Again, the success of these measures depends on market flexibility and low implementation costs. To conduct such transactions successfully, for example, all the landowners must be identified, and purchase agreements and management contracts must be developed. These efforts often entail prohibitive transaction costs, especially when the suppliers and beneficiaries are widely scattered. In these cases, other measures may be more effective. Generally speaking, it is often necessary to supplement these measures by helping providers and/or users to act collectively through representative organisations.

## 4. Support for rural enterprises involved in valorising amenities

Another market strategy is to support the emergence and growth of enterprises that help providers realise value from amenities. Objectives of this strategy are to *i*) conserve amenities as a resource for development, since it is in the interest of these enterprises to organise and maintain the source of their activity, and *ii*) stimulate rural development, especially in less favoured areas whose comparative advantage is based on amenities. Territorial strategies and networking are two measures commonly used to support amenity-related rural enterprises.

Territorially based supports make use of complementarity between several amenities and their immediate environment. Different cultures express this relationship in different ways. The Japanese term "*Fudo*", for example, covers such factors as an area's climate, weather patterns, geology, soil, topography and visual features. Thus an amenity is rarely independent of other amenities in the same territory.

Some amenities are sufficiently outstanding to attract large numbers of customers for the rural enterprises that are associated with them. Others can only achieve sufficient visibility by networking with other amenities, either of the same kind or in the same territory. In such cases, emphasis is on networking, or building relationships between enterprises, or even between the amenities themselves. For example, the amenities along the border trail of Napfbergland, Switzerland, are not spectacular, but networking creates a "critical mass" of amenities to attract potential customers for local enterprises. Where amenities of the same type are organised in a network, producers can set up theme tours, for example, of castles, crafts or outstanding villages.

## In practice... Greece: support for amenity-based enterprises

The village of Margarites was one of the four main Cretan centres where coarse pottery was produced. The pots are now made for decorative purposes, and support is provided through a range of measures:

- Amenity networking: to stimulate tourism: public agencies are trying to purchase a pottery workroom that will be used as a museum, to revive local clay quarrying, and to set up a regional network of towns with historic and archaeological sites.
- Collection and dissemination of information about amenities, including inter-enterprise exchanges: this involves studying pottery-related amenities, holding biennial conferences on ceramics and organising exchanges with potters in other countries.
- Classification of amenities and payment of compensation: the village has been classified by a Presidential decree that lays down building regulations, and the kilns and workshops have been listed by the Ministry of Culture. Demolition is illegal and it is mandatory to conduct a study prior to any renovation work. To compensate for these legal obligations, the government offers low-interest loans for restoring real estate and reduced land tax and conveyance duties.
- Government subsidy: enterprises can obtain direct grants, low-interest loans and reductions in some taxes if they meet conditions laid down in the incentives law or in special programmes for support to small and medium-scale enterprises and independent craft workers. Furthermore, the prefecture can partly finance development projects.

#### In practice... Finland: support for nature-based small scale enterprises

Having observed that small firms can market both tangible and intangible values of natural produce, Finland has set up support schemes for small naturebased enterprises. In 1996 and 1997, two million dollars were earmarked for

seeking out and promoting these enterprises. In 1996, a working group was formed to study obstacles to their development. Its main proposals were:

- to merge the enterprise advisory services provided by the Ministry of Labour, Trade and Industry and the Ministry of Agriculture in a one-stop office and to organise training and research based on the needs of entrepreneurs;
- to gather and disseminate information on these enterprises to inform consumers and entrepreneurs, to foster the formation of networks, and to take the needs of these enterprises into account in planning infrastructures in connected with recreational use of the countryside;
- to foster co-operation between sectoral and consumer organisations so that entrepreneurs have a clearer idea of consumers' needs and wishes;
- to simplify regulations by bringing together the rules applying to these enterprises in an easily understood form, and to reduce taxes;
- to encourage enterprises to form large-scale networks by encouraging local and regional co-operation and helping enterprises implement territorywide schemes.

## Summary

## Market stimulation

Policies

Stimulating market transactions that concern amenities directly or indirectly between amenity providers and beneficiaries.

- Procedures
  - Introducing charges for use or entry fees: amenities thus become consumer goods.
  - Quality policies: support for commercial valorisation of the quality bonus deriving from an amenity.
  - Certification: guarantee the link between an amenity and a product.
  - Support for rural enterprises involved in commercial development of amenities.
  - Support for commercialising ownership rights so that beneficiaries can purchase rights.

# Chapter 5 Policies to Encourage Collective Action

#### 1. Rationale for supporting collective action

Amenities often involve a large number of providers and beneficiaries, for example, landscapes maintained by many farmers and enjoyed by many local residents and visitors. Furthermore, many amenities in the same territory may be treated together with regard to their valorisation. Hence, collective action often makes more sense than individual effort. Protection of amenities may occur as part of broader collective action for economic development at the local or regional level. Typical strategies intended to encourage collective action are generally aimed at creating favourable institutional conditions, empowering local community members to make decisions affecting their own communities, providing incentives to initiate collective action, and providing various kinds of support including both facilitation and funding.

#### Types of collective action

Collective action may be undertaken by formal and informal organisations or the establishment of voluntary agreements by which individuals agree on how they can work together to supply an amenity. Two types of voluntary agreement are used:

- Self-regulation: sometimes it is in the interests of providers to make sure an amenity is protected, either because they are beneficiaries themselves, or because everybody recognises amenity provision as their responsibility. Still, they will only make the effort to provide the amenity if they know other people will do the same. Hence, providers may co-operate to establish common rules of conduct (self-regulation) under a written or informal, voluntary agreement. Voluntary conservation bodies formed by farmers illustrate this approach (Steenblick, 1997). Self-regulation may also involve users wishing to preserve the amenity they use.
- Agreements between providers and beneficiaries: when providers and beneficiaries see that an amenity is deteriorating, they may try to reach

common agreement on how to amend the situation. They identify the constraints and wishes of each party, decide on objectives, and share responsibilities with or without financial compensation. In France, mineral water bottling firms and farmers have concluded agreements of this kind to protect water quality.

The content of such schemes varies widely, as can be seen from Table 4.

Type of action	Action and aims
Collective action by amenity providers	1. Networking among complementary amenities: to make amenities more visible and so open up more possibilities for their valorisation.
	<b>2. Networking for the certification of several amenity offerings</b> : to enable commercial valorisation by certifying collectively the link between product and amenity.
	<b>3. Self-regulation by voluntary agreement among providers</b> : to supply an amenity jointly and so preserve possibilities for its valorisation.
Collective action by beneficiaries	<b>4. Pooling and communication of private demand</b> : to communicate a social demand to providers and the authorities.
	<b>5. Direct action on provision of an amenity</b> : to purchase lands of amenities or certain rights to preserve them.
Concerted action by providers and beneficiaries	6. Negotiation with a view to voluntary agreement between supply and demand sides: to communicate supply and demand and agree how to share the burden for optimum provision.
	<b>7. Concerted territorial management of amenities</b> : to provide an appropriate territorial scale to achieve optimum valorisation of amenities.
Source: OECD.	

Table 4. Types of collective action

#### Which organisations to support, and why?

- Beneficiaries' organisations: Amenity users may form specific interest groups whose members are few in number but easily mobilised around an immediate interest, as with ramblers for maintaining footpaths and anglers for watercourses. But when many people are scattered over a wide area (as in the case of amenities with high non-use value), they are harder to mobilise for collective action.
- Networks of amenity providers: Governments can support networks of agents seeking to reconcile their productive activities with the provision of an amenity. Examples are voluntary conservation bodies producing technical

guidelines (rules for good production practice, specifications) that will benefit the community.

- Miscellaneous voluntary bodies active in the amenities sphere: Public agencies often finance voluntary organisations and delegate some tasks to them. Many such groups can mobilise volunteers keen to conserve amenities. For example, to preserve private heritage, they may take action and raise funds for rehabilitation more easily than a public authority.
- Local development organisations which may include provision and/or preservation of amenities in their local planning and development strategies.

#### 2. Building an appropriate institutional framework

Collective action can be facilitated by assistance in the areas of consultation and organisation. To lay the groundwork for such action, appropriate structures of consultation can be made available whereby agents can come together to take action. As the process goes forward, people can benefit from recognised forums for joint planning. Then, as the action takes shape, these bodies should be legally or socially recognised and turned to account.

A key to the development of an appropriate institutional framework for collective action is close consultation between the relevant authorities, *e.g.* government, and the local community or group. This can take the form of a partnership at the local level between government, community and other stakeholders which allows a free exchange of information and perspectives at the local level. Local communities are empowered to develop their strategies within an agreed framework and government authorities are better positioned to target their support.

#### Resources made available to agents by the authorities

- Consultation structures: central or local government makes provision for suitable structures where amenity providers and beneficiaries can discuss and plan together. These exchanges will be a starting point for collective action.
- A recognised framework: collective action brings into play different kinds of organisation on various scales, *e.g.*, associations and local government bodies, some operating at the territorial level of the amenities, others at the level of a beneficiaries' network. The recognised forums available must be appropriate to such a varied mix of agents taking part in discussion and decision making.
- Forms of agreement: collective action may generate voluntary agreements. The form of agreement (contract, charter, etc.) depends on the types of agents (providers and/or beneficiaries), the degree of constraint they decide to accept, and their capacity to adhere to their commitments and

impose sanctions. Legal or social recognition of the agreement is a major asset. This may require models or standard forms of agreement.

#### In practice... the Australian government's Regional Forest Agreement (RFA) process

The RFA process is a mechanism by which the Commonwealth and State Governments can come to a mutual agreement on the long term management and use of forests in a particular region. RFAs recognise that Commonwealth and State Governments both have a range of obligations and interests regarding the protection of forest values and resulting economic and social implications which must be addressed before decisions on the use of forest resources can be made. RFAs through joint co-operation between the State and Commonwealth governments aim both to streamline and co-ordinate decision making across the range of central and regional government agencies concerned. The agreements are binding and have a life-span of twenty years, reviewable every five-years.

Three RFAs (East Gippsland, Central Highlands in Victoria and Tasmania) have been signed with the remaining nine major forest regions anticipated to be covered by an RFA by the end of 1999. These agreements provide guaranteed outcomes for the community, the environment and the forest-based industries in the regions involved, all of whom are involved in the initial formulation and negotiation of the agreements. The long-term forest management arrangements put in place by the RFA provide certainty both for conservation and for resource access and use, leading to increased investment, industry development and jobs in regional Australia.

Voluntary involvement of the community, and other stakeholders in the RFA decision-making process ensures acceptance of the agreement in the long term through ensuring that all stakeholder issues have been taken into account and the full range of information is available to the governments involved.

#### In practice... a framework for action to help conserve Japanese "Tanada"

The Japanese are keen to preserve "*Tanada*" because of their value as heritage and aesthetic and cultural assets, but farmers tend to abandon them because their upkeep is very labour-consuming. A conservation movement has begun in response to this trend. The "*Owner System*", which involves both town-dwellers and *Tanada* owners, was introduced in 20 towns and villages. The farmers lend their *Tanada* to the local authority, which invites city dwellers to work in the *Tanada* and selects volunteers, who pay between US\$240 and US\$400 to rent between 30 and 150 m<sup>2</sup> of *Tanada*. They receive advice from farmers and cultivate *Tanada* for their own profit. In this way, the terraces are preserved. The local authority also organises festivals and other events to celebrate transplanting, weeding, and harvesting of the rice. These occasions provide opportunities for farmers and city dwellers to meet and get to know each other.

#### 3. Incentive policies to stimulate collective action

Often, some form of incentive is needed to motivate people to act together in a way that reveals their hidden demand. To encourage self-regulation, the authorities can set or negotiate a common goal for supplying an amenity. This leads providers to agree among themselves on rules governing their own actions. To stimulate collective action, the government can offer monetary incentives conditional on joint action, and can organise or support gatherings among providers and/or beneficiaries of an amenity.

#### In practical terms, a range of possible measures

*Putting providers in a non-co-operative game situation:* having set or negotiated common goals for amenity provision, the government issues a "threat". It announces that if the goal is not attained, regulatory restrictions will be introduced (Glachant, 1995). This is justified if provision of the amenity is regarded as the providers' obligation. Rather than having rigid rules imposed on them, or losing a subsidy, providers will try to reach agreement on self-imposed rules. On a microeconomic scale, they are in a "non-co-operative game": failure to make an effort leads to regulatory sanctions and the effort of isolated individuals may have the same result. Only if the number of individuals making an effort is sufficient to maintain the amenity can sanctions be avoided. This leads the providers to cooperate (Beuret, 1997). This approach was taken in the national environment plan published in the Netherlands in 1989. Social objectives regarding the reduction of pollution were combined with strategies for negotiating with "target groups". The same principle can be applied to amenities.

*Incentives conditional on territorial collective action:* the government makes payment of individual economic incentives conditional on co-operation between the providers and/or beneficiaries of an amenity.

*Incentives by contest:* while these can only be used on a "one-off" basis, they are effective for amenities that are highly valued by a given group in terms of identity or heritage. This group will react best to the stimulus of a contest if the operation enables them to assert their identification with the area. In France, contests organised around maritime heritage have given rise to many amenity rehabilitation initiatives for waterway infrastructures, boats, etc., undertaken by local groups for the benefit of all.

#### In practice... incentives implicit in the Australian RFA process

A major incentive for collective action in the RFA process is provided by the long-term nature of the agreements. The 20-year time horizon, while perhaps reducing the total level of production, provides nonetheless a stable context for investment by the forest industry sector, ensuring that no new reserves will be created while also guaranteeing no expansion of extractive industries for environmental groups. The transaction costs savings produced by the resolution of conflict among user groups is a strong implicit incentive. However, in order to ensure that all parties make the necessary compromises to reach a durable agreement, the presence of the federal government as guarantor, as well as provider of compensation packages where required, appears to be necessary – *i.e.*, the agreements impose collective action top-down – they are not voluntary agreements.

#### 4. Direct support for collective action

Once the conditions for collective action have been created and collective initiatives encouraged, the next step is to provide direct support through financial or human resources, training, methodological back-up, etc.

When the amenities are public goods, private contributions to nongovernmental organisations (NGOs) that undertake collective action are often minimal, even if the amenity is of great value to the community. This makes it worthwhile for the authorities to provide financial assistance. The authorities can also help by involving NGO's in amenity management, consultation and decision-making structures.

#### In practice... varied forms of support

- Japan: official support for citizens' action to preserve rice terraces. In certain regions where there are rice terraces (*Tanada*), citizen groups have formed to encourage their continued cultivation and upkeep. To support this movement, a "land, water and heritage fund" has been set up, financed by central government, the prefectures, local authorities and private organisations. It finances, for example, the building of small access roads and the repair of overflow ditches.
- United States: close partnership between providers' and beneficiaries' groups in an official project. A coalition of groups of environmentalists, farmers and recreation specialists in Iowa has formulated a three-year Resource Enhancement and Protection Program, born of a desire to halt the severe erosion of arable land, wetlands and other critical natural resources. Additional aims are to improve management of farmland and raise public awareness of environmental issues. The program is run by the

State Natural Resources Department and supervised by an independent commission nominated by the Governor. The citizen groups who originated the scheme are involved in its implementation.

- France: support for groups of amenity-providing farmers. The *Réseau Ouest Agriculture Durable* is made up of groups of farmers who run their farms on experimental lines, seeking to reconcile production objectives with environmental and amenity quality goals. The organisation issues technical guidelines, defines eco-friendly practices, and formulates rules. The farmer groups receive financial support from the authorities since their activities benefit all the users of the amenities.

#### 5. Advantages and limitations

Amenities have a strong territorial and collective dimension, insofar as each amenity exists in an area with physical or cultural characteristics that distinguish it from other areas (OECD, 1994). Whereas most amenity-related public policy applies to individuals or administrative spatial units, some policies pertain to collective action whereby people mobilise around the amenity at the appropriate scale. People are attached to their area by virtue of cultural and identity factors that draw them into collective action. Collective action helps make up for the inadequacies of the territorial dimension in other policies, and provides a channel for the expression of local needs, values and identities.

The main limitation stems from the voluntary nature of this approach. In some cases, people who benefit from an amenity can enjoy the results of collective action without participating in it. Furthermore, a support policy may accentuate the gap between dynamic communities and others where people are less motivated. Policies to support collective action are necessary but not sufficient: they do not always enable providers to get paid for supplying an amenity, no action takes place if local people are not sufficiently motivated and organised, and local interests may be the only ones represented. Interconnection with other policies is typically needed. For example, to prevent free-riders from taking advantage of collective action without contributing, self-regulation can be combined with external regulation.

The advantages of voluntary agreements are that local communities maintain ownership over the decision-making process and the outcomes and are therefore more likely to target the pertinent issues. This helps ensure compliance in the long run and makes a positive contribution to the human and social capital of the community. This contrasts with situations where decisions are imposed without the consent of the community. Further, where flexibility is built into the outcomes of the decision-making process, communities are able to adapt their actions as circumstances change.

#### Summary

Support for collective action

• Policies

Stimulating and supporting collective action by which amenity suppliers and/ or beneficiaries seek to adjust their supply or demand.

- Procedures
  - Institutional policies: providing a legal framework within which collective action can develop.
  - Incentive measures to stimulate collective action by the agents concerned.
  - Representing the public interest in co-ordination between amenity providers and beneficiaries.
  - Direct support for organisations that provide a framework for collective action.

## Chapter 6 Regulatory Policies

## 1. General principles

#### **Definition of regulation policy**

In the context of amenities, regulations either define existing ownership rights more precisely, or restrict them. Often, these rights are only partially defined or are set by conventions or custom without legal basis. Hence, the aim of regulations is to remove the uncertainty surrounding ownership rights, to provide clear indications of rights and obligations and to punish infringements. When the rights of individual owners are newly restricted, compensation is often proposed to persuade them to accept the regulation. Compensation, however, does not provide incentives to promote amenities: land owners will not provide amenities beyond the level described in regulation.

#### A range of regulations reflecting diverse ownership rights

Regulations concerning amenities are based on and relate to existing ownership rights, and since these rights vary from country to country, the range of regulations is very wide. For example, there is considerable variation in the right of access to land in Europe. In England, access to farm land is customary and tacitly understood, but not legally guaranteed. In contrast, the public enjoys broader access rights in Austria and the Scandinavian countries. In Sweden, for example, all citizens have legal rights of access to land and standing water and the right to gather mushrooms and other natural products, on condition that they cause no disturbance or destruction. Similarly, countries differ on what kind of hunting and shooting rights are accorded to the public. In Portugal, with limited exceptions, everyone is authorised to hunt in rural areas regardless of who owns the land. In most Scandinavian countries, the right to hunt is reserved for the owner of the land.

#### 2. Designating rural amenities

How policies identify, demarcate and classify amenities has implications for regulations that define or restrict ownership rights or economic activities. Typically, rural amenities are defined in spatial terms, but sometimes references are made to plant or animal species, architecture, or other non-spatial features.

#### Spatial classification: protected areas

The spatial definition of amenities leads to a demarcation of sensitive areas subject to specific protection measures, such as national parks, nature reserves, protected landscapes, and natural sites. All OECD countries have designated protected areas, of which there are an estimated 10 000 to 20 000 in Europe alone (IUCN, 1994). In every country, national and regional laws define different categories of protected area. The criteria on which these areas are defined vary, but the six categories proposed by the International Union for Conservation of Nature and Natural Resources (Resolution 19.4 of the 19th session of the General Assembly of the IUCN) are generally recognised and accepted.

Some areas have been protected for reasons other than conserving amenities. In England, Sites of Special Scientific Interest, whose conservation is of primary importance, are defined solely on the basis of scientific criteria, with no reference to the scenery. In contrast, the English Areas of Outstanding Natural Beauty are defined solely on the basis of scenic criteria while National Parks combine both scientific and scenic criteria and have objectives for both conservation and recreational use. In Germany, a distinction is made between nature reserves, which are relatively small, and areas of landscape protection (*Landschaftschutzgebiete*), which are larger and subject to less restriction of rights.

#### Non-spatial classification

Non-spatial amenities include lists of endangered species and biodiversity which are subject to specific forms of protection or monitoring. Many countries have also drawn up lists of endangered breeds of sheep, pigs, cattle and other livestock, and some have introduced related regulations. Spatial and non-spatial definitions are often combined. For example, the European Union directive on species and habitats obliges member states to create "Special Areas of Conservation".

Other non-spatial amenities include heritage that is considered to be valuable to the public. This Heritage classification may restrict the rights of the land owner. In the Walloon Region of Belgium, for example, this category includes monuments, architectural units and sites of historical, archaeological, scientific, artistic, social or technical interest. The classification, applied by decree of the Minister of Land Use Planning after a public inquiry, prohibits any inopportune modification

of the amenity concerned. These classification measures often lead to the establishment of protected areas. In Sweden, a recent report suggested protection of built heritage and its surrounding landscape together, through the establishment of "heritage reserves". These reserves would include, for example, buildings, gardens, fishing ports, old villages, and agricultural landscapes.

## In practice... in Japan, land use regulation under the Asuka Law

Land use in Asuka-Mura, a village with a rich historical heritage, is strictly controlled according to a system of typologies. Type 1 areas (125.6 hectares) are those essential to the conservation of an amenity and are subject to very strict regulation. In Type 2 areas (2 277.4 hectares), it is specified that every effort must be made to conserve the existing sources of amenity. In return, owners can sell their land to the State and may claim a deduction of up to 20 million yen from the tax levied on capital gains from property sales.

In addition, the whole village has been classified as an "area of aesthetic value", which implies that development, construction, production and similar activities are either prohibited or require a licence. Historic relics are protected by the law on the protection of cultural treasures, while the use of agricultural land for non-agricultural purposes is regulated by the law on the promotion of agriculture. The amenities of the Asuka region are thus conserved through carefully regulated land use.

#### 3. Land use planning

Another category of regulatory policy defines the possible uses for different zones within a given territory. Typically, activity in some zones is restricted to a single use (such as residential, industrial, or agricultural) while other zones are open to a range of uses.

Many countries have adopted land use plans which are implemented through zoning mechanisms originally designed to avoid the "pockmarking" of landscapes with unplanned, scattered development. Zoning mechanisms vary according to the scale of their application, whether they are voluntary or mandatory, and the degree of restriction imposed. They may give indications as to preferred activities, reserve specific areas for specific activities or prohibit certain activities altogether.

# In practice... Regional Forest Agreements in the establishment of a stable forest reserve system

In 1995 the Commonwealth and the States of Victoria, Tasmania, New South Wales and Western Australia identified deferred forest areas which might be required for a reserve system and should be protected pending the completion of Regional Forest Agreements. The Commonwealth and Victoria then signed an Interim Forest Agreement (IFA) which makes provision for the protection of such areas by limiting increases in production among most extractive industries based on the area.

To form the basis for developing a Forest Agreement for a particular region, the Commonwealth and the State jointly assess the forest region. There are two main streams of assessment, those required to ensure that the environmental and heritage obligations of governments are met and those required to ensure that the social and economic implications of forest use decisions are fully considered. The overall aim is to ensure that the set-aside and reserve system covered by the agreements represents a stable and sustainable approach to regional land use. The land-use plans which underlie the negotiation of the RFA involve both spatial planning and also the use of production quotas and targets which limit the overall cut from a sub-region without specifying precisely which areas should be harvested. This provides some flexibility for the local management of resources.

#### In practice... land use planning in Wallonia, Belgium

Wallonia's town and country planning and heritage law (*Code Wallon de l'Aménagement du Territoire, de l'Urbanisme et du Patrimoine*) contains plans and regulations aimed at ensuring careful land management and the conservation and development of the region's cultural and natural heritage.

A Regional Development Scheme, currently on the drawing board, will organise the land use aspects of policy on environmental improvement and conservation of natural resources, as defined in the current Environment Plan for Sustainable Development. It will provide general guidelines for land use planning. Other plans allocate the land in a given territory (residential areas, industrial areas, etc.) and define the activities permitted in each type of area. The region is organised into 23 Sector Plans, drawn up in the 1970s and 1980s and now being revised. In addition, communes can initiate Individual Land Use Plans. These are a more precise complement to the Sector Plans and cover part of the area of the commune in great detail. They are the only plans that apply directly to individuals. Lastly, the Structure Schemes lay down the conditions for the commune's overall development plan.

#### In practice... Swiss land use policy

Switzerland has strict land use regulations on land zoned for agriculture, where economic activities other than "soil-based" ones (growing crops or raising livestock) are generally not allowed. Unlike less restrictive policies in other countries, the Swiss policy has excluded competing land uses from rural areas, and has thereby contributed to preserving farming landscapes. As undisturbed cultural

landscapes throughout the world become increasingly rare, the beauty of Swiss Alpine and pre-Alpine landscapes attracts a growing number of tourists. In the near future the land use policy is expected to expand the definition of agricultural activity from soil-based to product-based, which will allow renovation or construction of farm buildings for the production of value-added agricultural products or for the provision of farm-related services. If adopted, this amendment is expected to allow new development opportunities that will help rural areas in Switzerland to realise the value of well-preserved landscapes.

## 4. Regulations specific to amenities

## Restriction of permitted uses

Some regulations restrict existing and new uses of landscape and other amenities, while others require that preliminary impact assessments be conducted before certain changes are implemented. Such regulations may be applied on the basis of zoning or to specifically designated amenities:

- In OECD countries, the most common examples concern the restrictions imposed on buildings, urbanisation and infrastructures. Measures of this kind often accompany land use planning. They tend to be stricter in Europe, particularly in the densely populated countries of North-Western Europe, than in North America. In some cases, building is prohibited altogether while in others, the rules stipulate compliance with certain conditions (minimum distances from sensitive areas, maximum heights, materials used, keeping the local architectural style, etc.).
- Uses which cause pollution (such as intensive pig farming) are often not permitted once the results of impact studies are known. In Belgium, permits for building on or dividing estates are subject to an assessment of the environmental effects. A prior notice of appraisal is drawn up and is sometimes followed by an environmental impact study. When the project involves activities likely to cause pollution, a licence to operate, usually subject to a public inquiry, is also necessary.
- Changes of use, such as clearing, draining, converting from forestry to agricultural uses, and creating reservoirs, are often highly regulated. This is particularly the case when changes are deemed irreversible.

## Rules applied to acts likely to damage amenities

Some regulations define how production or consumption connected to an amenity, either directly or through external effects, is to be carried out. They prohibit some activities (use of certain products, destructive acts, etc.), require permits or mandate certain practices (dates for performing certain operations, required upkeep, etc.). These rules can be categorised as follows.

- Rules governing the use of inputs: many countries require approval for the use of pesticides for example. In the United States, this involves the analysis of pesticide accumulation in fish, rabbits and birds, as well as the likely symptoms provoked by such accumulation (OECD, 1997*c*). In Japan, approved agri-chemicals are subject to regulation and surveillance to ensure compliance with legislation on water and food product quality.
- Rules applied to basic acts: in OECD countries, agriculture is especially subject to this type of rule, which relates to the landscape, to outstanding natural sites, etc. Their purpose is to prevent the destruction of structures in the landscape and natural sites and to enforce the conservation and upkeep of structures for recreational use. These rules reflect the specific concerns of each country. In the United Kingdom, there are regulations for protecting hedges, which are considered important from the point of view of history, landscape and wildlife. Anyone wishing to remove a hedge must obtain approval from the local authorities. In Portugal, there is no rule on the destruction of hedges or landscape structures, but it is forbidden to cut down oak trees and cork-oak trees without a permit. Many OECD countries have protection measures for wetlands, such as the "Clean Water Act" in the United States, under which farmers wishing to drain a wetland must obtain permits from the US Army Corps of Engineers.

One of the strictest regulations in Europe is Denmark's "General Protection Regulation". It prohibits the deliberate alteration of landscape features by sowing, planting, draining or filling in ditches or lakes. Pesticides and fertilisers may only be used if the practice is already established on the site. This regulation applies to lakes with a surface area of over 100 m<sup>2</sup> and to moors, marshes, ponds, salt marshes and permanent grasslands covering areas of over 2 500 m<sup>2</sup>. Measures as strict as this are rare in other OECD countries.

#### Systems of rules for good management of amenities

In some countries, systems of sets of rules are established to ensure conservative management of an amenity or group of amenities. These rules are listed in "codes of good practice" or "specifications". They are complex systems involving relatively stringent constraints and are therefore often accompanied by compensation measures. There are several different types, involving different public interventions.

The authorities define "codes of good practice" which serve as a legal reference. England and Wales, for example, have codes of good farming practices. Compliance with these rules is not mandatory, but infringements may be taken into account if a farmer is accused of causing pollution. The

European Community's Nitrates Directive requires member states to produce such codes for pollution of agricultural origin.

- The authorities define "specifications" for access to financial incentives. These are defined in relation to specific economic operators, in such a way that the operators may receive state support only if they comply with all the rules included in the specifications.
- The authorities recognise "specifications" that have been defined on a voluntary basis by groups of amenity providers. Providers of amenities define specifications as part of voluntary self-regulation. They then seek legal recognition of these specifications. It is not uncommon for governments to issue regulations that create a framework in which such specifications can take place.

#### **Regulations applied to performance**

Some rules establish a level of performance related to conservation and provision of an amenity. The level may pertain either to the final result (performance regulations), or to stages in the process (process controlling systems) of providing the amenity. These rules are based on a set of standards, and providers who do not achieve the standard are sanctioned in some way. These rules may apply to individuals or to groups of providers. When they apply to groups of providers, they often lead to voluntary agreements.

For example, water quality standards set maximum concentrations of pollutants. If these concentrations are exceeded, the polluters are liable. The application of these regulations is sometimes difficult and costly, however, because of the diffuse nature of pollution.

It is difficult to apply these regulations to amenities, because objectively verifiable indicators are rarely available. For example, we have no indicators of landscape quality or enjoyment derived from a pleasant environment. Partial indicators are typically unsatisfactory because they can produce behaviour focused on compliance with standards rather than on efficient management of the amenity.

#### Cross-linked regulations: modifying sectoral regulations

Some regulations and procedures are set with strictly sectoral objectives, so as to give them a dual objective combining economic development with optimised supply of the amenity related to the sector in question.

Sectorally-targeted regulations sometimes have much more significant consequences for amenities than amenity management rules themselves. For example, state support for restructuring farms through land development typically has major consequences for the landscape. European subsidies for retiring fishing boats aim to reduce catches and modernise the fishing fleet, but they also impact on the historic and aesthetic amenities associated with these boats. A possible alternative to new regulations for amenities might be adjustment of sectoral regulations in order to take concerns about amenity conservation into account in the sector's economic development objectives.

#### In practice... in Denmark, the transfer of set-aside obligations from farmland to areas of environmental protection (OECD, 1997b)

Denmark's land set-aside programme comes under the section of the Common Agricultural Policy aimed at reducing agricultural surpluses. Initially, the programme had only sectoral objectives unrelated to amenities or the environment. However, it became apparent that environmental benefits from reduced nitrate leeching would result if set-aside obligations were concentrated in endangered areas. Since 1995, Danish farmers have been able to transfer their set-aside obligations to other farmers who will apply them in endangered areas and benefit from European set-aside compensation.

#### 5. Land reserves

#### Principle and methods of application

In some cases, the state appropriates all ownership rights to sites of national interest that require tightly controlled management, or where amenities are being rehabilitated by public agencies. The government buys these areas and either manages them directly or through subcontracts. Sometimes the authorities rent such areas if purchase is difficult or if protection is necessary for only a limited time (for example, to allow regeneration of a species). In the United States, the municipality of Lakewood, Colorado, rents land (for conservation purposes) from owners who receive an annual payment and are exempted from land taxes.

Many governments have procedures for purchasing properties endowed with amenities. In 1995-96, Sweden spent SEK 70 million on acquiring land in order to protect forests, wetlands, plant populations, etc. These purchases were made by different state or semi-public organisations specialising in particular types of amenity. In France, the *Conservatoire du Littoral* purchases coastal sites to protect them, the national forest authority manages state-owned forests and is entitled to make purchases, and the *Fondation Nationale pour la Protection des Habitats Français de la Faune Sauvage* acquires key areas for wildlife.

Rather than actually negotiating the transfer of ownership rights, governments sometimes use their authority to acquire land by expropriation or "pre-emption rights". In the United Kingdom, inside the "Sites of Special Scientific Interest", the

nature protection office can expropriate land with a decree for protection of nature on areas threatened with major damage which could not be adequately safeguarded by negotiation procedures.

## An important tool when inter-generational management is necessary

Land reserves are most appropriate under the following conditions.

- When it is likely to take several generations for the amenity to generate a return, as in the case of forests with high amenity value.
- When conservation of the amenity depends on prohibiting all economic activity. For example, in 1988 the tropical rainforests in Queensland, Australia, were included on the World Heritage List. The conservation of such natural forests requires the prohibition of all forestry, and this is only possible if the timber harvest is publicly owned.
- When the rehabilitation of an amenity involves operations that are not directly profitable but are justified by the non-use value attributed to the amenity. For example, Denmark launched a large-scale project to restore the "natural" configuration of the River Skjern in the western part of the Jutland Peninsula.

Using land reserves in this manner excludes all possibility of economic use of the property concerned. Hence, it is best used as a last resort or for a transition period. Once the restoration is complete, the amenity may again be made available for development, either by sale or rental.

## 6. Compensation measures

If a new regulation applied to an area endowed with amenities requires extra efforts on the owner's part or takes away some of the owner's rights, it is often necessary and justifiable to provide compensation to the owner. Compensation may be granted to individuals, businesses or on a territorial scale. If a regulation precludes possibilities of economic activities in a given area, the beneficiaries or the community as a whole may pay compensation, which may then be used to fund development that is compatible with amenities.

Payment of compensation involves assessing the cost of the loss or reduction of ownership rights. This is generally calculated by subtracting the estimated profits generated under the new, restricted ownership structure from the estimated profits that would have been generated under the original rights. Not surprisingly, these calculations are often difficult and contentious.

#### In practice... Luxembourg, compensatory measures at the territorial level

Haute Sûre Lake in Luxembourg provides drinking water for about two-thirds of the country's population. The area is also the source of other amenities connected with the natural environment, scenery, forests, flora, fauna and architectural and cultural heritage. For many years, local residents have been restricted in terms of their economic activities (agriculture, forestry, tourism and industry) without receiving adequate compensation.

Over the course of discussions about creating a nature park, residents emphasised that they should be compensated for actions that benefit people who mostly reside outside the area, including water users, tourists, campers, and holiday home owners. A park was created, with a budget financed by the communes and various ministries (outside contributions). Since water is a consumable good, it was practical to levy a tax on the end consumers, and then to compensate the local providers for the restrictions that had been placed on them.

#### In practice... Compensation to timber industries in the Australian RFA process

The Commonwealth Government has developed the Forest Industry Structural Adjustment Package (FISAP) which comprises a number of measures to facilitate the long term restructuring of the native forest industry, and to provide safety net assistance to those native forest industry businesses and workers which may be adversely affected by the implementation of Regional Forest Agreements.

The FISAP package consists of four elements:

- Rescheduling assistance State forest agencies will be able to apply for a grant equivalent to 2 years interest on a commercial loan to assist with new roadworks that are necessary to facilitate coupe rescheduling as a result of RFA;
- *Labour adjustment* established for workers including self employed who have been displaced from the native forest sector as a result of RFA.
- Restructuring assistance provides assistance for eligible forest industry businesses which have good long term viability and which either need to restructure in order to utilise a different forest resource base or are willing and able to move to new value adding opportunities within the same sector or elsewhere in the forest industries.
- *Business Exit assistance* available to those businesses whose departure from the industry would enable other businesses with good long term prospects to remain and invest in value adding opportunities.

## 7. Advantages and limitations

Regulations are most effective in preserving amenities in situations of uncertainty and/or irreversibility. They also appear to be needed when ownership rights are not clearly defined in relation to amenities, for example, when it is unclear whether owners have the right to destroy an amenity or whether the owner is responsible for the upkeep of the amenity. Regulations provide a "benchmark" for setting owner obligations and they also form a basis for introducing financial incentives.

However, regulations generally discourage innovation and preclude possibilities for exploiting resources. Further, their application can be costly. Most regulations conserve amenities but do not encourage their management. They must only be used when other instruments are inefficient or require a clearer definition of ownership rights in order to permit the valorisation of the amenities. Regulations should be carefully designed and implemented so as not to discourage possible valorisation of the amenity.

## Summary

## **Regulatory policies**

• Policies

Determining and/or reallocating the rights attached to ownership and use of amenities.

- Procedures
  - Upstream of regulations: policies that *classify and designate* rural amenities, policies on *physical planning* of activities.
  - Regulation policies: restricting ownership rights in protected areas; rules on "good management" and control of production processes; rules based on overseeing results in terms of amenities; cross-linked regulations applied to a sector.
  - Land reserves: the authorities obtain full ownership rights.
  - Downstream of regulations: compensation for loss of ownership rights.

## Chapter 7 Incentive Policies

#### 1. General principles

The objective of financial incentives is to encourage specific behaviour by individuals or organisations. Incentives may be positive, such as direct payments, or negative, such as fines or taxes. Incentives increase the relative attractiveness of conservation activities and valorisation over acts of destruction. Unlike regulations, however, incentives leave economic operators free to choose. Each will react, or not, to the proposed incentives. In economic terms, the aim is to internalise production of amenities. The State substitutes for the market in proposing remuneration for individuals or territories that supply amenities, and in imposing fines on those who damage them.

Incentives may be applied to individuals or at a territorial scale. In the latter case, local authorities receive compensation if they introduce rules or direct their action in such a way as to limit activities that are harmful to amenities. They can then use this compensation to promote development based on protection and valorisation of local amenities.

#### 2. Direct payments to provide amenities

To encourage provision of a particular amenity, subsidies can be granted to the amenity owners or managers to remunerate them for specific action. Payments may be periodical, usually annual, for on-going actions, or they may be occasional to finance a specific project or investment. Such payments are justified by the need to remunerate the provider of a public good, in particular when that good has a high non-use value which cannot be expressed in market terms.

#### In practice... remunerating service provision

Amenity management contracts can be drawn up with providers, usually for 5 to 10 years. Such contracts are most common in the agricultural sector. Traditional

agriculture used to provide amenities through positive external effects. However, with modernised farming systems, many positive externalities are threatened, so governments are trying to maintain the supply of these amenities by remunerating them as a provision of services.

For example, in 1992, Switzerland introduced "contributions for ecological services", which encourage production methods that are more respectful of the environment (organic agriculture, integrated production) or animal welfare (paddock grazing and free-range poultry farming) and the conservation of the natural wealth of species (Article 31*b* of the Agriculture Act, 1992). These contributions involve remunerating, on a contractual basis, the supply of ecological services beyond those prescribed by current legislation. The approach was introduced in the European Community in the 1980s for services such as conservative management of nature areas of high value, public access to farmland, and the upkeep and valorisation of built heritage. Today, most EU direct payments of this type are covered by Regulation 2078/92, which aims to promote methods of production that are compatible with environmental protection and nature conservation. As far as amenities are concerned, these payments are made in exchange for specific commitments:

- not to take actions which, although legally possible and economically profitable, are harmful to certain amenities, such as draining wetlands, destroying hedges, and transforming old buildings.
- to engage in activities or practices that are useful for the amenities but which are no longer economically profitable because of changes in production methods. The conservation of farm landscapes and wildlife habitats often depends on maintaining agricultural or forestry practices that are no longer directly viable.
- to carry out specific acts of rehabilitation, management and development of amenities.

The amount of payments is usually calculated on the basis of the production cost of the service provided. This service may be either a specific act or a series of acts, as the following examples show.

# In practice... Japan: maintaining traditional practices, source of an attractive landscape

Mainly because of mechanised production, the town of Yufuin is losing traditional farming activities such as *Kakeboshi* (drying the rice stalks) and *Warakozumi* (making stacks of the dried rice straw). In 1991, the local authority, the tourism association and the Spa Hotels Federation (which contributed 76 per cent, 14 per cent and 10 per cent of the funds respectively) undertook to finance "Measures for the conservation of the rural landscape by the supply of rice straw". Payments are made to cattle farmers who buy dry rice straw to use it as bedding for the animals

and then return the organic matter to the rice-farmers. The amount of the aid is 50 per cent of the cost of using these practices.

The decision was made to grant the aid to the buyers of the straw rather than to the rice-farmers to ensure that they really do use their traditional skills. This mechanism not only conserves the landscape, but also improves the production of rice via the supply of organic fertiliser and boosts cattle farming, which maintains a pasture landscape. In 1996, this mechanism was in operation on 56 farms and 47.6 hectares of paddy fields, which provide a conserved landscape.

#### In practice... Norway: the "Acreage and Cultural Landscape Scheme"

This programme was introduced in the late 1980s. Aid is granted on a per hectare basis to farmers who, in addition to the basic rules on land, air, heritage, nature, recreational areas, abide by the following rules:

- Streams and rivers should not be canalised or channelled underground;
- Open ditches should not be closed;
- Forest margins and other areas of fringe vegetation should not be ploughed up;
- Stone walls, clearance cairns and remnants in fields should not be removed;
- Land grading is not to be undertaken;
- Paths are not to be closed or tilled;
- Fringe vegetation is not to be sprayed with chemicals.

If one of these rules is not complied with, payment is suspended for up to three years. The grants vary according to crop type and the location and size of the farm. Since 1991, this programme has been supported by the "extended support to landscape maintenance and development scheme" and in 1997 a fund for the "restoration of listed buildings" was introduced. Contracts are signed with local authorities on the conservation of biodiversity, cultural elements, ancient monuments with their surroundings, and areas characterised by traditional farming practices, on the improvement of public access to the countryside and on the restoration of certain farm buildings.

## 3. Payments for investments related to amenity quality

Financial investments can often enhance the quality of an amenity, increase its supply, or limit negative impacts from development. Investments can be made, for example, in the restoration of fragile ecosystems and landscapes by planting hedges or copses and maintaining low walls, terraces, or traditional buildings. Alternatively, they may involve the purchase of machinery needed for upkeep of the landscape (such as hedge trimmers), or aforestation, which is increasingly important for amenities in the OECD countries. An example of the latter is European Community Regulation 2080/92, which provides for aid not only for aforestation, with larger payments for broad-leaved trees, but also for infrastructure such as forest roads and fire-breaks.

Grants for converting a production system (*e.g.*, from conventional farming to organic farming) also fit into this category because these are costly investments over several years. Since 1988, the Canadian government has operated a programme aimed at encouraging farmers who occupy erodable land to stop growing annual crops and plant permanent vegetation cover, which they commit themselves to maintaining for 10 or 21 years. Part of the payment they receive covers the investment of establishing a vegetation cover (OECD, 1997*b*).

Typically, the state contributes between 25 and 50 per cent of the cost of these investments, which often have the additional impact of creating new jobs. Care must be taken, however, to prevent unintended and negative consequences. For example, massive re-forestation of non-native species can degrade traditional landscapes and harm native species.

#### In practice... Wales: investment grants that boost the local economy

An agri-environmental mechanism called *Tir Cymen* has been introduced in Wales. It involves both annual payments granted on a contractual basis to farms, and investment grants, mainly for restoring of stone walls. A study of 131 farmers and 35 local small businesses participating in the programme showed not only that the grants compensated for losses resulting from the obligation to conserve amenities, but that farm income had risen by an average of £1 616 per year. The participating farmers were able to maintain employment on their farms at a time of national decline, while casual work grew by 98 per cent on these farms. This suggests that a substantial profit for the local economy can come from investment grants linked to amenities (Baldock, 1997).

## 4. Support for related activities

Some payments are intended to maintain economic activities that produce amenities, rather than to provide amenities directly (as in the examples described above). The most common case involves payments to maintain hill and mountain farming that is essential for the upkeep of the landscape. In France, a special mountain indemnity aims both to compensate a handicap and to provide a lumpsum remuneration for the upkeep of mountain areas. In Switzerland, payments linked to product output were replaced in 1992 with payments linked to ecological

services as well as by direct compensatory payments based on the size of the farm and natural handicaps. The goal is to ensure an equitable income for farmers and to allow agriculture to "accomplish the tasks and provide the services of public interest expected of it" (Stücki and Lehmann, 1996), since the two elements are linked.

The concept of making payments to maintain activities that produce amenities was originally developed to support agriculture's role as a provider of both food and rural amenities. Now, the concept of co-production is widely discussed, if not accepted, at an international level. Its applications have been expanded to include craft activities whose disappearance would cause the irreversible loss of skills necessary for the upkeep or rehabilitation of amenities. In general, the size of such payments is based on criteria relating to income levels and numbers of economic units, rather than on the value of the amenity supply, even though their primary objective may be to preserve the amenity. Such payments are sometimes criticised in that they may be considered a form of subsidy that distorts free market competition.

## In practice... Austria: the special programme for mountain farmers

The conservation of Austrian Alpine areas is inconceivable without agriculture, but the productivity of the region is around 25 per cent lower than that of other regions. Austria has a policy of sustaining the existence of these farms, which are "necessary to maintaining a population and an agriculture suited to the region's particular characteristics, but also to conserving the cultural and recreational landscape". This policy is implemented, in part, through direct payments.

Austria's direct payments to maintain farmers are based on a classification of farms according to the difficulties encountered. Criteria include percentage of difficult land, notably on a slope; accessibility of the farm; and amount of land. The allowance paid includes, first, a basic premium that takes into account the income of the farm family, assessed according to the agricultural and forestry value of the farm, and second, the farmer's non-agricultural income and working conditions. The main purpose of this allowance is to maintain income and so keep the farm going. In addition, a hectare premium is paid for the third to the twelfth hectare, regardless of the difficulties of the farm. Its purpose is to maintain the production of amenities on each hectare qualifying for a premium. Many of the provinces have introduced direct complementary payments of the same type.

These direct payments have contributed to conserving Austria's Alpine agricultural landscape. From 1980 to 1990, the number of farms fell by 20 per cent in Zone 1 (least difficulties) and by 13 per cent in Zone 2, but only by 8 per cent in Zones 3 and 4 (most difficulties).

## 5. Ex ante remuneration for opportunity costs

Decisions not to undertake actions likely to damage an amenity may be considered equivalent to acts of amenity provision, which as we have seen, are often eligible for incentives. For the state to remunerate someone for foregoing some damaging activity, he or she must first make known the intention to carry out the activity.

In practice implementing such incentives is difficult. In the United Kingdom, farmers on "Sites of Special Scientific Interest" are permitted to use their land as they see fit. They can declare their intentions if they wish to carry out any potentially destructive activity and obtain a grant if they forego that plan. The grant corresponds to the loss entailed by abandoning the project. There is a risk, however, that they make a false declaration which would add "behaviour costs" to already high monitoring costs.

In Switzerland, the interests of mountain communes and cantons that wish to generate revenue by installing hydroelectric stations conflict with those of beneficiaries of amenities provided by the Alpine areas. To solve these conflicting interests, the Swiss government introduced a mechanism financed by general tax revenues. Compensation is paid to local authorities that forego hydroelectric dam projects in areas of national importance. The amount of compensation depends on the loss of revenue and the probability of the project's execution. Local authorities that receive the payments are required to protect their amenities against any harmful development. Implementing such a measure is most practical in the case of major projects with a small number of operators, so that monitoring costs are lower and the real intentions of the operators can be better known.

#### 6. Cross-compliance: direct payments linked to sectoral policies

Cross-compliance measures require that producers meet certain criteria (typically related to government programme participation) to qualify for public support tied to sectoral policy. In the context of amenities, cross-compliance measures require that amenities be managed in a certain way in return for government payments.

In the United States, cross-compliance is used to improve the management of highly erodable soils and to reduce draining of wetlands. For example, since 1985 farmers who drained wetlands for agricultural purposes have typically lost benefits from the main price support programmes. Cross-compliance seems to have contributed to a substantial decline in some practices with negative environmental impacts (OECD, 1997*b*).

In the European Union, member states are allowed to link environmental conditions to certain livestock farming subsidies, notably sheep and cattle premiums.

Only the United Kingdom has taken advantage of this option – to reduce overgrazing by sheep in a number of sensitive areas (Baldock and Mitchell, 1995). The European Commission recently proposed an extension of the cross-compliance system within the Common Agricultural Policy, notably to payments allocated to arable land. However, it is unlikely that many member states will introduce such measures because they could put their agriculture at a disadvantage relative to their direct competitors in Europe.

## 7. Penalties for actions damaging to amenities

Conceptually symmetrical to direct payments that remunerate the supply of amenities, these measures punish potential or actual damage to amenities. They may take the form of either taxes on actions that negatively affect amenities, or mandatory compensation for losses resulting from such actions. In either case, the purpose is to force the internalisation of external costs by those who incur them, so that activities detrimental to amenities are discouraged.

## Taxes applied to activities likely to damage an amenity

These taxes are designed so that the loss of the potential or actual value of amenities is internalised by those responsible for the damage. They are applied to production or consumption activities that have negative external effects on amenities, or to the excessive use of amenities, which may lead to their degradation. The amount of these taxes is proportional to either a quantity of product or volume of activity.

These taxes can apply to inputs that are potentially damaging for amenities. For example, some OECD countries have imposed taxes on fertilisers and/ or pesticides. Denmark introduced a tax on pesticides in 1996, at a rate of 27 per cent for insecticides, 13 per cent for fungicides and 3 per cent for wood protection products. These taxes represent a stage in the implementation of the Polluter Pays Principle.

Taxes can also be applied to the use of an amenity when over-use endangers its integrity. For example, the amenity value of rivers and lakes may decrease if water quality drops because of excessive use. Because over-use tends to result from sub-optimal prices (in this case, a price of zero), user taxes may decrease demand. Taxes on water were introduced in France and are proposed in Spain. In the case of congestion or over-use of outstanding natural sites, access charges or taxes on vehicle parking could be introduced to better manage the number of visitors. Taxes are best suited to situations in which there is a clearly established correlation between damage to an amenity and repeated actions which are objectively quantifiable. They are less effective when the determinants of amenity provision are less well known, or when it is difficult to ascertain which specific actions are damaging the amenity.

#### **Compensatory measures**

Compensatory measures require that the person causing damage to an amenity must either pay compensation equal to the loss of amenity value or must carry out an act of rehabilitation that generates amenity value equal to the loss caused. This discourages economic agents from damaging amenities and is a way of ensuring the maintenance of overall amenity value. Compensatory measures are suitable in cases of isolated damage:

- Physical compensation: the instigator of the damage is required to perform an act of rehabilitation or betterment of an amenity. This could involve, for example, re-creating a similar amenity somewhere else or undertaking corrective betterment. If trees are felled, the instigator may be obliged to plant the same number of trees. Article 6 of the EU Habitats and Species Directive includes a requirement for compensation where damage is, exceptionally, permitted on sites in the Natura 2000 network. In the United States, an experiment with "mitigation banks" has been initiated by the US Department of Agriculture under the 1996 Federal Agriculture and Reform (FAIR) Act. The "banks" will consist of wetlands that have been restored and upgraded to compensate for the future conversion of other wetlands into farmland.
- Financial compensation: the instigator pays compensation to a local authority or to an organisation that represents the beneficiaries of the amenity that has been damaged. The recipient of the compensation must use the funds for restoring and improving the amenity. For example, in France, the law requires that builders of motorways must pay 1 per cent of the total cost of the work to communes affected by this development. The communes then use the funds to landscape the area.

#### Summary

#### Financial incentives

Policies

Remunerating amenity provision, and taxing actions that have a negative impact.

- Procedures
  - *Direct payment* (or tax exemptions) for amenity providers, either *ex ante* (for foregoing a destructive act) or *ex post* (for an act of conservation).

- *"Cross-compliance"* policies: eligibility for sectoral public support is conditional (on taking part in an amenities programme, complying with regulations, etc.).
- *Compensatory measures:* damage entails an equivalent act of renovation or payment of a compensation tax or indemnity.

# Chapter 8 Ancillary Issues

# 1. Co-ordination among actors

# Institutional framework for amenities

While the value of some individual rural amenities is not high enough to draw significant numbers of tourists or to a make a labelled product strategy feasible, an ensemble of amenities may create a highly valuable development asset. In this case, co-ordination among amenity providers, amenity-based enterprises (such as hotels), and supporting institutions is essential. Since many such sets of amenities derive from their connection with a specific local area, it is often the case that the local government is the most appropriate institution for a co-ordinating role. Unfortunately, political borders do not always coincide with sets of amenities, which may spread over several political regions or, alternatively, reside in only part of a region. In this situation, it is necessary to create a new institution to encourage co-operation and co-ordination among different actors.

# In practice... Switzerland: "The Association of the Border Trail Napfbergland"

Along the border trail *Napfbergland* are a variety of amenities, including the Napf peak with surrounding alpine farming landscape, irrigated meadows, historical buildings and a proposed biosphere reserve.\* The combination of these cultural and historical amenities is expected to attract tourists and to make possible the use of a labelled product strategy. About 75 km in length, the trail follows the political border between the cantons of Berne and Lucerne, and the region encompasses many municipalities. The Association of the Border Trail *Napfbergland* was

<sup>\*</sup> Biosphere reserves are part of the UNESCO Programme, "Man and Biosphere". The programme's goal is to promote economic development without jeopardising animal and plant diversity. To integrate development and preservation objectives, three zones are designated within each reserve: a strictly protected core zone; a transition zone in which minimal economic development can occur, as long as it is environmentally benign; and a less restricted, sustainable development zone.

established to promote marketing of the border trail and surrounding amenities which spread across political entities. The association is comprised of concerned municipalities and regional governments; tourism organisations; culture and nature protection organisations; private firms such as restaurants and hotels; public and private foundations; and local individuals. Cantons and the Federation are not members but are involved through financial contributions.

# **Operational co-ordination**

The active involvement of multiple and varied agents concerned with the provision and use of amenities is a key part of successfully balancing amenity preservation and economic development. Apart from the actual providers of amenities, these agents include: enterprises which try to realise amenity value; public agencies with responsibility for amenity up-keep or, more generally, local economic and social well-being; local communities or firms which are affected by a valorisation strategy; and the local population. Co-ordinating actions between such a varied group of agents can be accomplished through an informal network or formal institutional framework. Another approach is to develop formal or informal consensus agreements on how amenities will be used and managed.

# In practice... community consultation in the Regional Forest Agreement process

The Regional Forest Agreements (RFA) are based on a comprehensive assessment of the forest region in consultation with the full range of communities and stakeholder groups.

Stakeholder analysis is integral to the assessment process, because it enables the analysis to include the perceptions of different stakeholder groups and their likely responses to policy alternatives. It also allows for those with less power to represent their views. At least, ten types of stakeholder groups were identified for the social assessment process, including: timber; non-timber forest products (apiary, craftwood, etc.); conservation bodies; tourism interests; mining and prospecting interests; landholders; and Aboriginal community interests.

The Social Assessment Process is an innovative component of the RFA. It provides in the first place a means of gathering information to create a socio-economic profile and second, a platform for all stakeholders to input into the policy process. It is a highly participatory process and provides a range of opportunities for different and competing interests to present their viewpoints. As this participation is established on a strong information base created by the SAP, it can be anticipated that better information is likely to lead to more informed contributions by the representatives of the different stakeholders, and to improvements in resource allocation as a result of better quality information.

# Financial co-ordination

Government agencies sometimes fund direct payments or tax exemptions made as incentives or compensation for a loss of ownership rights due to regulations. Such public funding may come from local, regional or national governments. The amounts contributed by each level may be viewed as reflecting the relative shares of local and external taxpayers in the funding.

As discussed earlier in this report, amenities pose spillover problems when some beneficiaries live outside the area where the amenity is provided. Hence, there is a transfer of utility from the area that provides the amenity to typically urban areas that benefit from the amenity. External contributions can attenuate this spillover effect. This means balancing the contributions from each level of government to reflect the respective benefit derived from the amenities by local and external users.

For example, Switzerland's *Fond Suisse pour le Paysage* (FSP) supports landscape actions implemented by municipalities and cantons. The percentage contributed by the national government to FSP-funded activities depends on the amenity's national interest and can be up to 100 per cent. The financial commitment of each level of government (local, cantonal, national) depends on the size of the spillover effect generated by the amenity.

# In practice... Japanese contributions to the fund for the upkeep of Asuka village

The fund for the upkeep of Asuka village is a mechanism created by the village to maintain its historical amenities and the surrounding countryside. It has been used to finance the monitoring and management of historical relics, compliance with standards for the quality of materials and colours used for the walls and roofs of buildings, maintenance of hedges, and training of pilot farmers. About 75% of the funds come from the national government, 20 per cent from the prefecture and 3 per cent from the village. As these amenities are of national interest, most of the funds (97 per cent) come from outside the area. Hence, the spillover effect is reduced and non-user beneficiaries pay for the value they receive.

# Targeted levies: generating funds through designated earmarked taxes

Another source of funding for amenity-based development comes from designated or earmarked taxes. Revenue from this kind of tax is earmarked for spending on amenities and does not enter the general budget. These taxes are often introduced as an alternative to user access fees, which can be difficult to charge or inappropriate because of an amenity's non-use value. Earmarked taxes can be levied on either those whose actions damage the amenity or those who benefit from it. In the United States, the State of Maryland levies a special tax on the sale of farmland for urban development. The funds collected are used by the government to buy land and control urbanisation (OECD, 1997*d*). Similarly, some of the German *Länder* have introduced earmarked taxes and used levies on new buildings for nature conservation activities. The amount of the tax is based on how much damage is caused by the building to the surrounding countryside, according to criteria such as the surface area affected, the number of trees felled, and the length of roads built. Some taxes are also based on the estimated cost of reconstructing the amenities concerned.

Earmarked taxes can also be levied on beneficiaries. A common example is that of tourist taxes levied on visitors to a high-amenity region. These taxes can be used by public authorities for incentives or direct intervention to support amenity provision. Similarly, the earmarking of some land taxes for action related to amenities is a way of making residential users of these amenities pay. These taxes are proportional to the value of the residential private property, which is itself often linked to the value of the surrounding amenities.

Finally, earmarked taxes can be levied at the scale of territories. In France, at the level of the *département*, a sensitive natural areas tax is levied on all new buildings and is used to purchase natural sites. A system of readjustment allows for the revenue from this tax to be redistributed from the most urbanised territories, whose residents are major beneficiaries of rural amenities, to the rural territories that provide these amenities.

# Redistributing profits derived from amenities to providers

In some markets, the exploitation of amenities benefits economic operators who are not the providers. For example, an outstanding natural site can attract tourists and generate revenue for hotels and leisure facilities which contribute nothing to the conservation of the amenity.

In this case, the business community that benefits from exploiting amenities should be encouraged to support providers. This sometimes happens spontaneously because all the agents stand to gain from such action. For example, in Yufuin, in Japan, the tourist association and the hotel union contribute voluntarily to a fund set up to support the provision of amenities by farmers. If such support mechanisms are not created spontaneously, national or local public authorities can introduce earmarked taxes levied at the point of sale. Enterprises that take advantage of amenities are subject to a tax proportional to their profit, so that some of that profit can be redistributed to the amenity providers. Another strategy is to require users of an amenity's brand image to contribute to funding actions in support of the amenity. Businesses who contribute to the cost of amenity management

are allowed to use the image of the amenities, or the image of the action conducted in support of the amenities, for commercial purposes.

## In practice... France: financing of Regional Nature Parks and the system of gateway-towns

Like other regional nature parks, that in Normandy Maine comes under the responsibility of an association of interested local bodies based on both vertical and horizontal co-operation. They include the communes of the park, the *départements* and regions concerned and the towns located around the perimeter of the park. The communes contribute only 1.5 per cent of the funding for the operating expenses of the park, which is in itself a mechanism to compensate for spillover effect. Given the regional, national and international public interest in the amenities concerned, other contributions come from the regions, *départements*, the French Ministry of the Environment and the European Union. A final contribution (5.4 per cent) comes from 15 "gateway-towns".

Gateway-towns are mid-sized towns located near the park but outside its boundaries. They have a rich heritage and undertake to implement a municipal environmental charter. The citizens of the gateway-towns contribute more to the funding of the park (FF 4 per capita in 1995) than the citizens of the park communes (FF 1.6). This contribution is to be interpreted as payment for the tourism benefit (accommodation, business) that the gateway-towns derive from the presence of the park.

# 2. Informing citizens

Information on existing amenities gives citizens the opportunity to act with full knowledge of the facts. Under market conditions, it reduces the information asymmetry between amenity providers and beneficiaries. It also encourages beneficiaries of amenities to adopt reasonable purchasing behaviour towards amenity-linked products. Furthermore, collective action is far more effective when people are informed and motivated. Adequate information needs to be made available in a form that is accessible to everyone. The public authorities can either gather information and distribute it themselves or assist other organisations to carry out these tasks.

People need to know which amenities exist around them (especially those which have a non-apparent value because of their uniqueness, history, etc.), who contributes to providing amenities, which threats endanger the amenities, and which solutions exist for reconciling economic development and amenity conservation. A description of important information-related activities follows.

# What information to collect and disseminate

- An inventory of amenities and potential threats. This can be done by public authorities or independent experts. Some amenities that are outstanding because of their uniqueness or history need to be identified before their value can be estimated. Threats to amenities also need to be identified. Some, which take place gradually, may not be obvious.
- Identify providers and supply, as well as beneficiaries and demand. The supply of amenities is often the result of the combined contributions of multiple providers, which are difficult to single out. Action on the provision of amenities can only be undertaken with sufficient knowledge of the providers. It is therefore important to identify not the providers but the links between their actions and impacts on the amenities concerned. If scientific knowledge is unavailable, "presumption indicators" can be used to assess the probability of the positive or negative impact of agents' actions.

Providers cannot act collectively to maintain and improve the supply of amenities unless they know who the beneficiaries are. Often, providers are not aware that there is a demand, particularly if it pertains to non-use value. The evaluation of demand often involves complex and costly tools. As this is in society's interest, however, it can be justifiably undertaken by the public authorities.

Publicise economic development strategies that support the conservation of amenities. Citizens must be aware of strategies that combine amenity conservation with development objectives in order to make informed political decisions and possibly work collectively to implement the strategy. For example, the Nature Conservancy in Nebraska, in the United States, acquired a plot of farmland that serves as a habitat for migratory birds and aquatic species. It is used as a demonstration site to show that it is possible to create synergy between farming, eco-tourism and protecting habitats for wildlife (OECD, 1996b).

# The value of clear information for local people

The information gathered on amenities has two major functions, first, to assist citizens in their decisions regarding market forces and collective action, and second, to form the basis of a language of negotiation between providers and beneficiaries. If providers and beneficiaries are to agree on how to manage amenities sustainably, their dialogue must be based on shared references. Therefore, information must be made available to all in a readily accessible form.

# In practice... the process of community consultation in the Australian RFAs

The RFAs include a lengthy series of socio-economic assessments that are designed to gauge the impact of different RFA options on the local communities concerned. These assessments represent not only an important method of profiling the region, but also a way of raising awareness about the RFA within the local community. In particular, the Community Co-ordinator, who is responsible for gathering the regional profile data, plays a key role in explaining the objectives and implications of RFA to local residents. Information gathered through telephone surveys and questionnaires is fed into a "Directions Report" which presents the range of alternatives that seem to present themselves to policymakers. This document is then circulated widely in the communities concerned and a series of town meetings are organised by representatives of the national and state governments at which issues can be raised both by individuals and by local interest groups.

# In practice... Finland's information strategy for nature-based enterprises

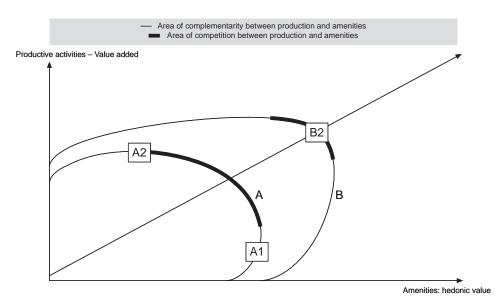
As part of its policy of support for nature-based enterprises, a working group from the Ministry of Agriculture and Forests has proposed that comprehensive and accessible information should be made available and should cover both demand for amenities and methods of valorisation:

- natural resources and their availability: gathering natural products, organic farms (produce and location), protected natural areas and their current and potential uses, the conditions to be met to ensure sustainable use of natural resources;
- markets, demand, prices, competition and analyses of competitiveness, distribution and end products;
- recent studies and research on promising products, machinery and equipment, systems of quality assurance, and case studies on successful experiences by nature-based small enterprises.

# 3. Diffusing innovation and technological research

Future research should have the objective of finding production technologies and methods that simultaneously increase the value added by productive activities, while enhancing amenity value. Instead of only focusing on maximisation of the profits generated for productive economic operators, the aim should be to optimise both production profits and people's enjoyment of amenities. This principle is illustrated in Figure 3.

The relationship between amenity provision and the supply of goods is often a competitive one, especially when high levels of productivity are attained (represented by the thick part of the curve in the diagram), but complementarities also



## Figure 3. Technological models to optimise complementarities

Source: OECD.

exist. The aim is to direct research towards new technological models (transition from curve A to curve B) that increase the areas of complementarity and reduce the areas of competition, by seeking economic growth that takes into account both the value-added of economic activities and the pleasure value of amenities.

#### The example of agriculture

In agriculture, early technological progress resulted in the creation of landscape amenities. Later, intensification began to have a detrimental impact on these amenities and caused their value to decline. Still today, many research programmes aim at increasing agricultural production and maximising agricultural profits within a strictly sectoral framework. In the context illustrated in Figure 3, the aim is to move from point A1 to point A2 in a technological model where agriculture and amenities are in competition. An alternative is to direct research towards new technological models, that is, trying to move from curve A to curve B and trending towards an optimum B2.

In France, for example, an association of farmers is experimenting with farming systems based on the reactivation of internal economies, by reducing production costs, cutting back on polluting inputs and preserving a pasture and woodland land-scape. The French national institute for agronomic research (INRA) has implemented

a research programme with these farmers aimed at seeking ways of improving the complementarity between agricultural production and amenities.

# Summary

# Financial and operational co-ordination

• Policies

Co-ordinating actions, making sure they are financed by beneficiaries and that profits from amenities are redistributed to providers.

- Procedures
  - *Taxes* levied from amenity beneficiaries to fund compensation or incentive measures.
  - Policies for *redistribution* of profits from amenities to provider individuals and territories *via taxation*.
  - *Co-ordination* of public and private actions and introduction of forms of amenity *governance*.

# Information

Policies

Making available information to enable each agent to act with full knowledge of the facts, either in the market or through collective action.

- Procedures
  - Information policies: making available to the public information on the existence and value of amenities, their supply and demand, the dangers they face.
  - Education policies: raising awareness among providers and beneficiaries as to the value of amenities, their responsibilities towards future generations, etc.

# Technological research

Policies

Looking for technologies that will reconcile economic viability and amenities.

- Procedures
  - *Research* policies: where there is competition between productive activities and amenity conservation, research can be undertaken on technologies that optimise both immediate economic efficiency and amenity conservation.

# **Policy Recommendations**

Amenities are natural or man-made resources that are appreciated for their aesthetic value, the enjoyment they provide, or simply their existence. Wilderness areas, remarkable landscape, or historic heritage are examples of amenities that have consumer value rather than productive value. Many of these amenities result from the interaction between man and nature, and, often, they are externalities of productive activities.

The public goods characteristics common to many rural amenities have two important implications for development policy. Both stem from the fact that the costs and benefits of amenities are not reflected in market prices. First, markets do not automatically ensure enough supply to meet today's demand, yet at the same time determining the (present and future) optimal level of supply is difficult. Second, agents and places that currently provide amenities may not be rewarded properly, and therefore may allow the irreversible degradation of these amenities. Again, given the difficulty of defining optimal supply, the additional costs involved in optimising supply are not easy to quantify. Public policies can correct such market failures, but they need to be carefully designed and evaluated to make sure their benefits outweigh their costs. The following recommendations are made for the development of policies aimed at rural amenities.

# 1. What policies for rural amenities?

## Primary aim is to realise amenity value for economic development which in turn optimises its supply to meet demand

The overall policy objective is to ensure that amenities are provided at a socially desirable level by ensuring that agents and/or places that provide them benefit from their actions. In other words, policies should promote complementarities, rather than antagonisms, between economic development and amenity preservation.

The synergy with rural development can only be achieved through valorisation of amenities. Conservationist policies, like environmental ones, are liable to decrease economic activities, so that the territories concerned may lose the means to maintain and manage their amenities. By contrast, valorisation encourages agents to manage amenities in a dynamic way and to include them in a more general approach towards simultaneously productive and hedonic development. This, in turn, provides an incentive to conserve the amenities.

Amenities can be valuable assets for rural development, especially for areas with a comparative advantage only in this sphere. Hence, amenities may allow rural areas to take advantage of the economic dynamism of urban areas by sharing the costs and benefits of amenities in an appropriate way. Support for establishing or enhancing markets enables amenity providers to exploit use value, as well as to receive compensation for non-use value. Such market-related strategies can generate an economic dynamism at the level of both individuals and territories providing amenities.

# Priority should be to support the market to fulfil efficiently its role in realising amenity value

Each amenity has a utility for which there is a demand. To the extent that a well-functioning market reveals the optimal level of supply and demand, it is the most efficient mechanism for allocating resources. In the case of amenities, markets are the only effective tool for evaluating demand, and if an amenity is a private good with significant use value, a market can be established without many difficulties. Rural tourism, the migration of residents and enterprises to attractive rural places, and the commercialisation of niche products with a specific rural image are all examples of successful market-based economic development. Commercial development of amenities offers market-related benefits in terms of transparency and flexibility. However, it may also lead to over-use and the degradation of amenities.

Government assistance may stimulate or facilitate market transactions between amenity providers and beneficiaries. For example:

- Institutional changes may enable providers to charge for direct use of amenities. Charges can be levied either at access points (*e.g.*, parking lots or gates) or by sale of licenses or passes.
- Support may be provided for the emergence and growth of rural enterprises that valorise amenities. Support may include encouragement for networking or co-operation; collection and dissemination of information; a variety of subsidies; or other measures.

# Some public good amenities can be treated as private goods under specific institutional arrangements

Many amenities exhibit some public good characteristics and their consumption is not always through direct use. Nevertheless, it may still be possible to simulate or transform them into private goods. For example:

- Quality assurance systems may be used to guarantee the link between a specific product and the amenity. In effect, quality labels or product certification internalise amenity value (including especially non-use value) through the market.
- Ownership rights over amenities (even with significant non-use value) can become tradable provided that public authorities act as intermediaries. Acting on behalf of the beneficiaries, authorities may buy land or the rights to actions which damage amenities. Alternatively, they may help organisations of beneficiaries to buy the land or rights to actions.
- Regulations may be developed to establish an institutional framework for trade in amenities or to define who holds property rights and use rights. Such regulations will facilitate the establishment of markets by adjusting transaction costs.

One disadvantage of market approaches is that low-income beneficiaries may be excluded. It is essential that all beneficiaries maintain and/or gain access to the amenities concerned, particularly to amenities considered as common heritage.

# Amenities which are public goods and/or externalities may require government direct intervention

Market approaches are not sufficient either when non-use values are high and non-users behave as "free-riders", or when amenities are externalities, that is, they are by-products of some other production activity. In such cases, public sector instruments can help providers realise amenity value. For example, financial incentives from the government may remunerate providers, or disincentives may impose fines on those who damage amenities.

Other kinds of non-market instruments create conditions for internalisation. For example, the government may officially designate amenities; establish rules or codes for good management; or set up land reserves. Alternatively, public authorities can persuade or encourage providers and beneficiaries to act collectively to form a framework for valorising amenities through voluntary agreements or networks. They may also raise awareness of amenities through education efforts and the dissemination of information.

The merits and limitations of these non-market approaches are discussed in the report. Three important implications from the discussion deserve particular emphasis.

First, incentives shape agents' behaviour by making it more opportune to act in ways that favour conservation and valorisation of amenities. On a territorial scale, they make it possible to reduce the spillover effect and can be used to stimulate a form of development based on valorisation of amenities. They have the advantage of leaving economic agents free to choose (allowing for available incentives) and they open up prospects for forms of development consistent with amenity conservation. Their main disadvantages are their administrative cost, which is often high and difficult to accurately accord with theoretical costs, and the fact that subsidies to economic agents can distort competition.

Second, because regulation is a source of rigidity, it should be used only where strictly necessary. Furthermore, apart from simple conservation of amenities, regulations encourage people neither to manage amenities nor to enhance their value. Still, regulation is often necessary, both to clearly establish agents' rights and responsibilities with regard to amenities, so laying the basis for applying other instruments, and for amenities that concern future generations and are at risk of irreversible damage. Regulation establishes property rights clearly and/or displaces them in the interests of the amenity, in which case it may be combined with compensation measures.

Third, amenities typically have important collective and territorial dimensions. That is, they involve large numbers of providers and beneficiaries spread over large geographical areas. In addition, their supply is often influenced by policies targeted at something else entirely, and at *individual* actions. Therefore, policy support for collective action is especially appropriate for amenity-related development. Not only does it address the collective dimension of amenities by helping organise providers to co-ordinate supply or beneficiaries to express demand, but it also makes up for the individual focus of other policy instruments.

# A policy package is more likely to be successful than single instruments

Which policy instrument is likely to be the most effective depends on many considerations. These include: characteristics of the amenity (private/public good; relative level of use and non-use; local or national level, etc.); its consumption mode (direct, indirect or non-users); existing property rights (defined or not, private or public appropriation); and the number and dispersion of suppliers and beneficiaries. For example, if amenities are excludable, market-oriented instruments are appropriate since excludability is a pre-condition for markets or quasimarkets to be created. In contrast, regulations and economic incentives are

needed when many agents are responsible for providing the amenity, and collective action reduces the higher transaction costs that inevitably occur.

However, each instrument has strengths and weaknesses when applied for the purpose of valorising amenities. If the necessary pre-conditions for each instrument, and the complementarities between instruments, are understood, they can be combined successfully when designing amenity policy. For example:

- Markets for rights to use amenities only make direct users pay. When amenities have significant non-use value, financial incentives should be combined with markets for use rights so that excessive burdens are not placed on providers and users.
- Markets for amenity ownership rights have the advantage of flexibility, but high transaction costs, due to the scattered nature of providers and beneficiaries, often mean that supplementary measures must be used to encourage collective action.
- The main limitation of collective action stems from its voluntary nature. Hence, regulations or financial incentives can be combined with support for collective action to prevent "free-rider" behaviour.

Furthermore, individual amenities are often "mixed" goods, that is, they have characteristics of both public and private goods, or their value depends on the presence of other amenities. Such features mean that several instruments should be implemented simultaneously. The coherence of the instruments is an important consideration in the design of the package. In general, however, a policy package is more likely to be successful at promoting rural amenities than single instruments.

# 2. Who should bear the costs of providing amenities?

# Property rights over amenities should be carefully assigned

Whether providers of amenity resources should be paid for the cost of maintaining the current level of supply depends on how a particular country or region construes the property rights, that is, the obligations and privileges related to the amenity. It is useful to approach this issue by thinking in terms of a reference point that delimits, on one hand, actions that should be penalised because they fail to meet acceptable standards or degrade the resource, and, on the other hand, actions that should be rewarded since they go beyond what providers are expected to do.

In the case of amenities with private goods characteristics (in terms of being excludable and of relatively high use value), the reference point is determined by the market and prices will determine an optimal level of supply and demand.

However, when amenities have relatively more public goods characteristics or result from externalities, society must decide who holds the property rights, that is, whether the amenity is a *negative* or *positive* externality, on the obligation side of the reference point or on the privilege side. Often, the reference point is not yet established or is only implicitly defined in rules and regulations or customary law. Hence, it may be necessary to explicitly clarify property rights (that is, obligations and privileges) so that the market can function more effectively or governments can take actions to optimise provision of the amenities (either by wielding a "stick" or offering a "carrot").

Property rights over amenities vary across resources, countries and time. Prudent modification of the existing distribution may be necessary to bring amenities directly into the market or to revitalise a weak rural economy. It is not easy to build social consensus on the distribution of property rights associated with the use of amenity resources. Education and information to raise the awareness of people and efforts to motivate them to be involved in collective processes are useful and should be systematically encouraged.

# Beneficiaries of amenities should be identified and required to pay for the costs incurred as far as possible

The valorisation of amenities should be internalised, with individuals and territories providing amenities being paid by the beneficiaries, just as if a market existed. Policy will therefore be based on the beneficiary-pays principle. Internalisation is either direct through a market stimulated by adequate policies, or through the government paying amenity providers from funds collected from beneficiaries.

This is obviously easier for amenities of local rather than national importance, and those for which the access can be limited. Whenever it is technically and culturally feasible to create or stimulate markets, whether for amenities or for complementary goods, this solution is preferred to more interventionist forms of policy. Reinforcing the role of NGOs and interest groups in their capacity to represent and articulate specific social demands (even for non-use value) is another possibility of implementing decentralised mechanisms of compensation. A third possibility is to promote compensation agreements between enterprises who provide and those who benefit from amenities, between the farming and tourism sectors, for example.

Even if individual beneficiaries cannot be identified, it is important to identify the geographic scope of the circle of beneficiaries, to ensure as much fiscal equivalence as possible. Most amenities are of local or regional importance, so the most effective way of enhancing their value is to develop policies at sub-national level.

# The State should represent the public interest if the beneficiaries cannot be identified

Supply and demand for amenities are rarely shaped by price signals from the market. On one hand, supply is often influenced or even determined by the unintentional involvement of economic agents. And on the other, demand may take the form of direct use, indirect consumption (through the media) by people outside the immediate area, or non-use consumption by people who derive utility from the existence value of the amenity.

Many amenities are therefore externalities which have to be internalised to encourage optimal supply. Amenity policies are designed to make it possible to internalise these externalities through an amenities and/or property rights market, or through government taxes or subsidies equal to external costs incurred by the provider or to the external benefit obtained by the beneficiary. This is what the beneficiary-pays principle does: providers are compensated by beneficiaries through the market when the use value of the amenity is significant and a market can be established, and through government incentives if not. These policies should be financed insofar as possible by those who actually benefit from the amenity, principally through earmarked taxes.

However, strict application of the beneficiary-pays principle is seldom possible because benefits are so difficult to pinpoint and identify. When free-rider behaviour prevents a satisfactory application of the principle, either because excludability is technically or culturally impossible, or because non-use values are high, then payments have to be financed by general taxes (the provider-gets principle). In this case, the State represents the public interest, although there is no guarantee that payments are made according to the preferences of individual tax payers.

To the extent possible, interventions should be temporary and seek to permanently alter demand and/or supply conditions, so that the amenity will continue to be enjoyed at minimum or even zero economic cost. In particular, policy makers should favour interventions that can be converted, in the long run, into self-sustaining market based activities that are consistent with the protection of amenities.

# 3. Policy principles

# A territorial dimension in policy should be ensured

All policy should work towards territorial coherence in economic agents' actions given the collective dimension of amenities. There are three main reasons why a territorial approach can be useful in developing amenity policies.

 Each rural region is usually home to amenities of very different nature and their value depends in part on their combined existence, which shapes specific regional images.

- The diversity of environmental situations within countries requires policies that are adapted to local/regional circumstances, rather than uniform polices implemented nationally.
- An amenity of national or international interest generates strong territorial spillovers between the region that provides it and other places within or outside the country.

Such flows of uncompensated benefits need to be internalised if resources are to be used in the socially desired way. Developing amenity policies that are sensitive to spatial differences allows for better co-ordinated sectoral policies and collective action at the level of rural regions. They also improve the link between urban and rural policies.

# Most rural amenities cannot be re-produced and no one knows future demand for them, so their preservation should be carefully designed

Because many amenities are unique, their destruction would constitute an irreversible loss. The interests of unrepresented beneficiaries have to be protected. But representing future generations is problematic, since no one knows what they will want. At the same time, the natural forces and socio-economic dynamics that shape and degrade amenities are not always well understood. Therefore, great caution should guide the design and implementation of policies that directly or indirectly impact amenities. The government should take upon itself the task of representing the public interest, or entrust this task to an independent body of recognised legitimacy.

# Amenity policies should be monitored and evaluated to gain credibility and ensure effectiveness

If amenity-related policies are to gain credibility, it is essential that they be monitored and evaluated. The effects of amenity-related policies have not been well assessed in the past, even though the necessary tools are fairly well known. The design of a monitoring and evaluation system should be started during the policy formulation process, by defining, among other things, measurable and specific objectives. Proper monitoring allows progress to be tracked and also ensures transparency and accountability in the use of the funds. Undertaking more rigorous evaluations of policy instruments is critical to designing amenity-related strategies that are effective, efficient and applicable. A higher efficacy also means choosing instruments that minimise negative impacts on other areas, including in the fields of trade, employment and environment policy.

# Annex I Case Study Summaries

#### Australia: the Regional Forest Agreements and Social Assessment process

#### Introduction

The focus of the Australia case study is the Regional Forest Agreement process and, in particular, how the preparation, negotiation and implementation of these agreements could 1) help to resolve ongoing disputes over competing forest uses; 2) serve to clarify the amenity value of Australia's native woodland; and 3) facilitate the development of commercial activities linked to these amenities.

The Regional Forest Agreement (RFA) process is designed to provide a stable longterm framework for the management of Australian forests, combining an internationally competitive and ecologically sustainable forest product industry, with a forest reserve system above international standards. However, the agreements go beyond simple extraction issues, such as logging quotas and set-aside, taking into account wider local economic development issues as well as sustainable development concerns.

In order to broaden the debate leading to the signature of these agreements, the Australian authorities included as an integral part of the mechanism an exhaustive Social Assessment process. Among other things, this assessment aimed at drawing the whole range of local interests into an interactive consultation leading, it was hoped, to a more balanced assessment of the characteristics of each locality and a clearer picture of the current and future place of native woodlands (and economic and non-economic activities associated with them) in the lives of the communities concerned.

The case study looks at the RFA process as it has been developed in one particular region (North-East Victoria) and draws lessons for other OECD countries both from the RFAs as innovative examples of strategic spatial planning for amenities, and from the Social Assessment process as a means to measure amenity "values" as they are perceived locally, regionally and nationally. As such, this case study complements other previous case studies by placing the emphasis on governance issues related to amenity management and development.

#### Brief description

Native forests are arguably Australia's premier supplier of rural amenity values, through recreation and conservation values. In the past, there has been profound disagreement about how the forests should be managed and about whether the needs of a competitive forest industry can really accommodate those of amenity preservation. From the perspective of the Australian government, it is essential to strike a balance between maintaining or increasing the supply of amenities, from a local and national point of view, and promoting economic development. The need to preserve amenities must not paralyse local economic

development, but neither should economic development be allowed to destroy an area's characteristic amenities.

Past policies to achieve sustainable development objectives were based on compensating forest users for loss of access, or subsidising individuals, communities or industries to maintain financial viability eroded by restrictions imposed on their activities. The government is now re-orienting towards a long-term strategy that emphasises rural development and the creation of more enduring employment opportunities, while maintaining the conservation values of the forests.

The RFA process should be seen as one element in this shift towards more strategic integrated programming. The RFA is a mechanism whereby Commonwealth and State Governments can come to a mutual agreement on the long term management and use of forests in a particular region. A central aim is to take account of the full range of forest values (market and non-market) and consider both economic and environmental benefits and costs in making policy or resource use decisions. The long term forest management arrangements put in place by the RFA provide certainty both for conservation and for resource access and use, leading to increased investment, industry development and jobs in regional Australia. Three RFAs (East Gippsland, Central Highlands in Victoria and Tasmania) have been signed with the remaining nine major forest regions anticipated to be covered by an RFA by the end of 1999. Initial evidence from Tasmania suggests that increased industry confidence resulting from the RFA is already generating interest in investment in forest related industries.

In the preparation of the RFAs, a process of Social Assessment was developed to predict the future effects of policy decisions upon local people and their communities. Detailed information was collected on the social and biophysical environment, the historical background of each area and its response to change, political and social structures, culture, attitudes, social-psychological conditions, community vitality and population statistics. A variety of data collection methods and data sources were used as part of the North East Victoria Social Assessment to strengthen the study design and validate the results. The methods included documentary analysis, secondary statistical analysis, mail and telephone surveys, personal interviews, participant observation, informal networking and workshop techniques. This information was then used to predict the likely impacts, both positive and negative, which may be experienced by individuals and groups and to determine ways in which such impacts could be managed. Social assessment was also used as a mechanism to facilitate stakeholder and community participation in the decision making process. Through participatory techniques such as workshops and public meetings, people were involved in the collection of social information relating to their area. The Social Assessment Process is a particularly innovative component of the RFA and receives special attention in the case study.

Involvement by stakeholders in the Agreement and Social Assessment process increases the broad understanding by all stakeholders of the range of issues being assessed, and facilitates acceptance of the Agreement outcomes and compliance in the long term. It also enables governments to strategically target assistance where the Agreement places significant adjustment pressures on particular communities and/or industries. Ownership by communities, in particular, through participation in the assessment and planning processes is key. Without this, RFAs between Governments alone will not be nearly as effective.

#### Austria: the cultural landscape of mountain areas

#### Introduction

The cultural landscape is composed of a multitude of elements such as settlements, farms and farm buildings, pasture and arable land, orchards and vineyards, woodland areas, hedges, paths and roads, waterways, etc. This cultural landscape with its socio-economic, cultural and natural dimension has considerable rural amenity value and represents the most important basis for tourism in Austria which is an essential element of national economic development.

Rural cultural landscapes in mountain regions are still very much the products of agriculture. Mountain farming plays a key role in producing the cultivated landscape and safeguarding it against erosion and such induced hazards as avalanches and mud-slides. However, as commercial enterprises mountain farms face significant disadvantages that do not affect lowland agriculture and which compromise their relative profitability: steep gradients of farmed areas, shorter growing season, extreme weather conditions, poor transport networks and inadequate and expensive infrastructure. As competitive pressures have increased, the number of farm enterprises in mountain areas is threatened by decline.

This case study assesses the actions taken by the Austrian authorities to harness the amenity values in mountain areas in order to encourage the continuation of mountain farming. The case study focuses in particular on the Mountain Farmers Special Programme (MFSP) and the support for integrated regional development actions, both established for more than 20 years. It discusses the options for developing a more explicit link between such direct payment mechanisms and amenity values in the cultural landscape.

#### Brief description

In Austria, 36 per cent of all agricultural and forestry holdings are categorised as mountain-farmer holdings. They cultivate 44 per cent of the agricultural land area, of which a high proportion is pasture grassland, and over 50 per cent of the woodland. The average income from agriculture and forestry of mountain farmers is only 80 per cent of that of non-mountain farmers (for the category of farms with extreme cultivation difficulties, it is only 60 per cent). The proportion of public funding in this income is already very high (averaging 32 per cent of total income from agriculture and forestry in 1994 and 66 per cent after accession to EU; for farms in zone of difficulty four, however, it was as much as 60 per cent in 1994 and 83 per cent in 1995). Non-agricultural income in 1994 represented 27 per cent of total income. These figures clearly demonstrate that the problems in mountain areas cannot be solved by agricultural market and structural policy measures alone and that the continuation of mountain farming appears to require public sector intervention.

As it became clear that separate economic development of favoured and less-favoured areas could no longer be counteracted by agricultural pricing policy, the government introduced its own special mountain-farmer programme in the early 1970s with a strong regional emphasis, in which there was already a role for production-neutral direct payments to mountain farms, which were subsequently successively extended. There appears to be general agreement, that alongside the production function, the conservation and shaping of the cultural landscape and the maintenance of settlement density are important concerns.

Opinion polls confirm that policy measures in favour of mountain areas are supported by the Austrian population. A recent study on models for valuation and remuneration of public goods found that the Austrian population and foreign visitors appreciate positive externalities of farming. Over two-thirds of the persons interviewed saw agriculture as contributing to the maintenance of landscapes for recreation and tourism, as well as to the preservation of a valuable traditional lifestyle.

Since Austria's EU accession in 1995 this policy has had to be adjusted to the EU scheme for less favoured areas (LFA). Although this resulted in a budget increase of about ATS 1 billion, studies have shown that the changes benefited primarily larger, better off farms with rather low handicaps while small mountain farms would have lost significantly. The Austrian Government thus obtained a maintenance clause which, at least for a period of ten years, allows them to compensate for losses incurred by mountain farmers as a result of the adoption of this system.

In the light of rapidly increasing expenditures for mountain farming on the one hand, and clear differences in the effectiveness of direct payments between the present EU LFA scheme and the previous Austrian MFSP it appears reasonable to review the options for the future design of mountain policies. For Austria this appears particularly urgent since the maintenance clause will expire in 2004. It has presented its ideas to the EU in a "Memorandum on mountain and hill farming" (4 July 1996). The EU document "Agenda 2000" and subsequent proposals for detailed regulations will provide further opportunities for reconsidering the present mechanisms of the LFA policy. Given the great diversity in (mountain) farm structures in Europe it will not be an easy task to identify the most appropriate design.

The case study discusses how future policy for mountain farming could take explicit account of the amenity values of cultural landscape and how these policies should be based on an integrated, multi-sectoral, territorial approach which:

- encompasses natural and cultural aspects of landscape amenity in the *mountain* areas;
- recognises the particular importance of the multi-functionality of mountain farming;
- encourages the provision of public goods from agriculture through adequate remuneration;
- targets payments more effectively to those farms and practices that provide greatest value;
- nurtures the integration of pluriactive farmers into the local and regional economy; and
- looks for an increased valuation of the specific amenity value of cultural landscapes in integrated rural development programmes.

#### France: rural development in a Regional Nature Park

#### Introduction

It is essential to strike a balance between maintaining or increasing the supply of amenities and promoting economic development. The need to preserve amenities must not paralyse local economic development, but neither should economic development be allowed to destroy an area's characteristic amenities. Consequently, a way must be found to reconcile these two needs. The French case study looks at the Regional Nature Park (RNP) system – using the example of the Normandy-Maine Park – and asks whether this is a relevant and effective means of achieving these twin goals.

The policy of regional nature parks is an integral element of overall rural development policy in France. Its aim is to promote the development, based on local resources, of areas that possess significant environmental assets. Launched 30 years ago, at a time when the emphasis was more on redistribution and exogenous development in rural areas, this policy can now be seen to have been particularly innovative in that it proposed development that was both sustainable (a multiannual monitored approach based on the area's resources) and integrated (partnerships were established between all of an area's actors including the central government).

Regional nature parks continue to attach great importance to their role as zones of experimentation, especially with regard to agro-environmental measures, renewable energies, support to small businesses, partnerships with cities (gateway-towns) as well as training and civic education.

#### Brief description

Established by an initial decree in 1967,\* regional nature parks were intended to implement, within a clearly defined territory marked by exceptional natural and cultural heritage, a development strategy aimed at protecting, managing and enhancing all aspects of this heritage.

There are currently around 30 regional nature parks in France, covering nearly 10 per cent of the national territory and including over 2 600 rural communes and 2.3 million inhabitants. There are currently plans to create another 15 RNPs, and the concept has been adopted in more than 15 countries. Although the decision to create a RNP was originally made at the central government level, since 1975 parks have been established by local initiative. Regions now initiate the procedure of classifying an area as a RNP and draw up the park's charter in co-operation with local authorities, subject to central government approval.

Regional nature parks are based on a conjunction of three basic elements: a specific area, a strategic plan, and a contract:

For an area to be classified as a "regional nature park", it must be a rural area with a distinctive identity and a rich natural and cultural heritage but whose ecological balance is fragile and under threat. Its boundaries do not necessarily coincide with administrative subdivisions, but are based on an assessment of heritage values by those communes that have chosen to belong to the park.

Regional nature parks base their action on a strategic plan designed to ensure the sustainable protection, management and harmonious development of the area in question. This plan is implemented by a body that includes all the local and regional authorities involved (*i.e., régions, départements* and communes concerned are represented on a *syndicat mixte* or joint governing board).

This project is given concrete form in a contract known as the Regional Nature Park Charter, which binds all partners to the project for a period of 10 years, sets the objectives to be achieved, sets out the policies to be undertaken and defines specific measures for implementing them.

<sup>\*</sup> Specific legislation governing regional nature parks was only passed in 1993 (Section 2 of the Act on the protection and development of the countryside), supplemented by a decree in 1994 (No. 94-765-1/9/1994) and by several sections of the Act reinforcing the protection of the environment (No. 95-101-2/2/1995).

As forerunners of an overall, multi-actor approach to the development of rural areas, regional nature parks provide an invaluable source of ideas, experience and expertise relating to amenity management in rural areas in general. The parks are places for experimentation, in which different ways of diversifying rural economies can be monitored and evaluated. For example, the parks:

- help to establish and develop agriculture that is more environmentally sound; for example, the first French agro-environmental measures were introduced within RNPs; this was also the case for sustainable development plans and programmes to diversify agricultural activities and establish high quality production and processing networks.
- promote the development of rural tourism by supporting enterprises in this sector, by introducing a seal of quality for tourist products (nature trips, self-catering cottages, nature hotels, etc.), and by creating and managing educational facilities (centres devoted to specific themes, exhibits, discovery trails, ecomuseums, etc.).
- promote initiatives based on solidarity between communes and help to bridge the gap between cities and the countryside, in particular through the special relationship they establish with their "gateway" towns.

The methods and tools used to promote development in the parks can unquestionably be put to good use throughout France's rural areas, and this has led the government to incorporate into its regional development policies the approaches to sustainable and integrated development that have worked successfully in the Regional Nature Parks.

#### Japan: a series of four separate case studies on different amenities

#### 1. Historical fudo and amenities of the Asuka Region

#### Introduction

From the sixth to the eighth centuries Asuka-mura was the political, economic, and cultural centre of its region, and today retains much of the historical and cultural heritage dating from that period. The amenities of the Asuka region are, however, also closely linked to the continuing harmony between the present day lifestyle and productive activities of the local population and the *fudo*, a concept which includes, but is not limited to, climate, soil and geographic conditions of the region. This case study is interesting because there are several sources of amenities in the area – natural and man-made, ancient and ongoing – and because some of the amenities are clearly market goods, while others have public good characteristics.

Since 1970, various policies centred on regulation of land use have been introduced with the aim of preserving historical sites and, at the same time, several enthusiastic conservation movements have started up outside the public sector. This case study examines the debate surrounding amenities in Asuka region in terms of the balance between conservation of amenities and promotion of economic development. Particular consideration is given to the impact that preservation policies will have on productive activities and on the lifestyle and opportunities of the people inhabiting the region. The location of historical sites in the suburbs of urban areas adds particular significance to the debate, particularly with respect to land use issues.

#### Brief description

The historical importance of the Asuka region is reflected in the concentration of monuments and artefacts in the area, including shrines and temples (highly regarded for their architecture, known as Asuka style, which applied advanced techniques of arrangement and structure) and ancient tombs many of which are highly decorated and assumed to be royal tombs, as well as innumerable stone monuments and markers scattered across the region. In addition, there is a distinctive local identity with strong echoes in local customs, rituals, music, folklore and decorative arts. The *Man'youshu*, the oldest collection of poems in Japan, is an example of the type of cultural amenity strongly associated with the region, as are poems describing the life and nature of Asuka written by the famous poet Kakinomoto Hitomaro.

As pressures from urbanisation and decline in agriculture and other local economic activities have increased, there have been increasing calls for intervention to ensure the protection of local amenities. The first problem to be solved was whether to create a special law for the Asuka region or to adopt general laws such as the "Ancient Capital Preservation Law". However such legislation provided funds for specific designated historic sites, but was not designed to be an integrated regional policy tool for areas like Asuka where people actually lived and worked. A special law for the Asuka-mura was therefore proposed which envisaged preservation through spatial planning regulations, economic measures such as tax concession and compensation for the loss of opportunity – and some measures for the promotion of alternative (agri-)industrial enterprises.

Even in Asuka-mura, however, the preservation of amenities has created problems. In the 15 years since the establishment of the Asuka Law, anxiety has grown over the continuing decline of economic activity, partly as a result of land use regulations, and a perceived decline in acceptance of the value of the amenities by residents of the region. If the desire to preserve amenities continues to exacerbate the loss of economic opportunity and entrain dissatisfaction with the Asuka Law idea, then this could cause a decline in the quality and level of the amenities provided. Up to now, Japanese citizens have enjoyed the optimal level of amenity provision in Asuka region, appropriately maintained, with Asuka-mura residents carrying the burden. In the future, a more equitable distribution of costs may be necessary in order to safeguard the area's historical *fudo*.

#### 2. Terraced rice fields (Tanada)

#### Introduction

This case study examined *Tanada* (terraced rice paddy fields), an example of amenitybased development that benefits both urban dwellers and the local rural population.

More than 70 per cent of the total land area of Japan is mountainous. Almost all communities located in upland regions have experienced out-migration and economic stagnation over the past three decades. In the 1960-70s, the Japanese government attracted enterprises to rural regions facing depopulation by offering various inducements (such as tax incentives, development of facilities in the surrounding area, etc.). Although this produced some good results in terms of the number of enterprises that relocated, the net impact on the development of the area concerned was not always apparent. Increasingly, local governments prefer strategies where employment opportunities suit the natural environment and traditions of the region. In these areas, in particular, attention has turned to amenities as a source of development opportunities.

In general, there is little tradition of seeing rural spaces as amenities in Japan. Nor was there much understanding that the maintenance of the amenity and its preservation involved a high cost and that most of that cost was borne by the inhabitants and farmers living in the region. As a result of this lack of appreciation, rare natural resources were lost or damaged beyond recovery. However, active popular movements have started up that position the amenities at the centre of the economy of the region, and policy measures to meet these goals are being introduced in many areas.

#### Brief description

A *Tanada* is a stair-shaped paddy field constructed on steep slopes. These paddy fields sometimes have ponds in the upper part of the valley which function as their water source. To store water, each terrace of the paddy field is flat with peripheral weirs made of stone or mud retaining the water.

Since terraced rice fields are small and the temperature of the water for irrigation is low, they are not highly productive. On the other hand, a stable yield can be expected since they are unaffected by flooding and they are located on otherwise unusable land. *Tanada*-type farmlands were developed in ancient Japan and have been used extensively ever since. With the population boom, *Tanada* were developed in nearly all regions, except Hokkaido, the northern limit for paddy fields, and a large proportion still exist today.

The importance of *Tanada* as opposed to other terraced and non-terraced methods of farming, and the source of its significance as an amenity, lies in its (symbolic and actual) role in Japanese history and culture. The productivity of rice paddy fields is very high in comparison to other crops, and paddy fields have been a foundation of the economic and social development of Japan for hundreds of years. *Tanada*, in addition, symbolise Japanese enterprise, both in terms of technological expertise and physical endeavour. Moreover, once a paddy field is established, rice production gives unusually stable yields and so is one of the more environmentally sound agricultural methods. This notion of an agricultural tradition in harmony with nature is a strong cultural trait.

However, the number of *Tanada* has been rapidly declining over the past few decades. Although there are various reasons for this, the most important is that the maintenance and preservation of *Tanada* requires too much physical labour for many of the ageing farming population and is often neglected by younger farmers. Even if this work was not neglected, the income obtained from *Tanada* is not sufficient to earn a living. Recently, movements to have the value of *Tanada* recognised have started up at different levels with the hope of gaining support for the preservation of *Tanada*.

Policy measures for maintaining and preserving *Tanada* are just beginning and the central government has not yet established a policy framework for rural amenities. The local governments, despite having fewer resources, have made strenuous efforts in hammering out various programmes. The objectives and measures vary but some common elements can be discerned. First, there is a general consensus not only among members of the community where *Tanada* are located but also among inhabitants living nearby to allow the local government to make expenditures for preservation of *Tanada*. Second, farmers increasingly agree with the policy measures and behave co-operatively despite certain restrictions to their property rights.

Nevertheless the present range of measures are only halfway to creating effective rural amenity and development policies. A future policy framework for rural amenities must deal with the fundamental social and economic problems, especially focusing policy measures on encouraging younger people to stay.

#### 3. Traditional rice farming and hot springs in Yufuin

#### Introduction

Yufuin-cho (town) is famous in Japan for its hot springs. It is a health resort where local people and tourists can enjoy amenities formed by the hot springs in an attractive rural setting (in contrast to the fashionable and more developed spas of neighbouring cities). However, in recent years, the effects of the policy of set-aside of paddy fields, the ageing of the farming population and the change in operational systems have been acutely felt, and traditional farming practices which once dominated the landscape are disappearing from the area.

This case study examines the responses of local government to the concerns of tourists and residents who emphasised the importance of the cultivated landscape in the overall attractiveness of the hot spring amenity. The central issue was how to internalise the costs of providing this type of amenity which is non-excludable (any visitor to the area can freely appreciate the paddy fields), quasi-irreversible (because if such farming practices no longer take place, the tradition of the skill will be discontinued, possibly lost) and non-tradable (specific to the area).

#### Brief description

Yufuin-cho is not typical of the recreational hot springs found in Japan because it blends the health resort with the attractions of the surrounding rural landscape and distinctive customs and lifestyle. In particular, the traditional landscape is shaped by farming practices such as *Kakeboshi* (method of drying rice stalks to harvest the grain), and *Warakodzumi* (pile method of storing the dried rice straw after harvest) which decorate the winter paddy fields and provide the local landscape with its special character.

After the rice harvest in the middle of September, the farmer hangs the grain-heavy rice stalks to dry (*Kakeboshi*) for ten days after which the rice grain is removed. The rice straw is then made into mounds in the paddy fields to dry naturally (*Warakodzumi*). The *Warakodzumi* are left in the field to dry until March. During this drying period, the straw is sold to livestock farmers as cattle feed or to be used as bedding in barns. After the straw has been used by the livestock farmers as feed or bedding, the straw is composted and the resulting manure is returned to the paddy fields.

The rice farming landscapes which appear from the planting in spring to the harvest in autumn will exist as long as rice farming is maintained, but the traditional winter landscapes created by *Kakeboshi* and *Warakodzumi* are slowly disappearing. In Yufuin-cho, the widespread use of large combines and tractors, which started about 15 years ago, means that rice stalks are automatically cut into short pieces and scattered or ploughed under directly with a tractor. The time needed to plough straw under with a tractor for a 10 acre field is about one hour, while the time needed to create *Warakodzumi* mounds is about 3-4 hours. Considering the time and labour needed to sell the dried straw to the livestock farmers and then return the compost to the fields, the time-saving benefits of large agricultural machinery are clear.

A programme of "measures for the preservation of the rural landscape by securing a supply of rice straw" were begun with financing from the Yufuin-cho, the tourist association and the Hot Springs Inn Union in 1991. This policy aims to preserve the landscape of *Kakebashi* and *Warakodzumi* by encouraging livestock farmers to buy the naturally dried rice straws produced by the *Warakodzumi* method and use it for cattle bedding. In spite of this programme, it may be that farmers will not be able to provide the amenities in the near future if additional policy measures are not taken. The government still needs to find a

method of internalising the costs of providing the amenities into the benefits enjoyed by the consumer.

#### 4. Sailing trawl fishing

#### Introduction

Over the centuries, traditional fishing techniques have produced unique amenities by integrating the economic activity relating to a local natural resource with the history and culture of the area. This case study describes the example of the "sailing trawl" fishing method used in Kasumigaura and Kitaura Lakes, focusing on its amenity aspects and on measures to preserve and develop amenity values.

The amenity can be considered to be made up of 3 constituents: the sailing trawler fishing activities themselves, the tradition and culture associated with sailing trawlers, and the natural environment of Kasumigaura and Kitaura Lakes. All three components have amenity values for local inhabitants and urban visitors alike.

#### Brief description

Kasumigaura and Kitaura is Japan's second largest lake with an area of 220 km<sup>2</sup>. It extends over 19 cities, towns and villages in Ibaraki Prefecture. The lake is shallow, with a maximum depth about 7 m, and the average around 4 m. It is an important resource for Japan's inland fishing industry (which employs 2 500 people in the area) and an important fishing culture has developed around the lake.

Sailing trawler fishing is the traditional method, suited to both wind conditions and the shallowness of the lake. However, these vessels are difficult to handle and liable to capsize if the proper techniques are not used, and experience is needed to judge gusting winds and trim the large sail accordingly. The fishermen with such operational expertise are ageing and their numbers have been in slow decline. Similarly, the carpentry skills to make and repair the wooden-hulled boats are also dying out.

Following concerns from both fishermen and the general public the local government introduced amenity preservation policies. The local governments had a number of objectives: to raise awareness in the local population that their distinctive culture was in danger; to transmit the traditional technologies to new generations, and to explore ways to attract visitors into the region, actively using the sailing trawl as a tourist resource.

The case study describes a survey undertaken by the local government in order to identify and measure the values placed on the sailing trawler amenity by local people.

With the co-operation of the local-government bodies which actually operate the sailing trawl fishery, a questionnaire survey was distributed local people in December 1996. In this, mainly the non-use value was evaluated by through contingent valuation. From 313 citizens who answered from 4 municipalities the test calculated a non-use value of 38 million, a value approximately double the actual total subsidy. The survey found that existence values for sailing trawler fishing were high, with a large majority of respondents assessing the aesthetic qualities of sailing trawlers highly and very highly. In addition, the option and bequest values were tested and found to be high; in other words, although the regional inhabitants may not actually visit the amenity, they have a strong interest in their preservation.

On the basis of this survey, the local governments have introduced a range of policies to maintain trawler fishing, including measures to improve water quality and increase fish stocks, but also including policies to improve the landscape more generally and thereby build a stronger overall local economy.

#### Switzerland: linking rural amenities - the Napfbergland border trail

#### Introduction

The "Napfbergland" (or Napfberg region) is a pre-Alpine region south of the Swiss *Mittelland* and north of the mountain ranges of the Alps. It covers an area of 1 600 square kilometres and lies at an altitude of between 700 and 1 400 m above sea level. The region is divided in two by the border between the cantons of Bern and Lucerne. Although the topography is the same on both sides of the border, two sharply distinct cultural, ethnic and economic spheres have developed. In prehistoric times, this was a border area between western and central European civilisations, and since the 16th century, the border has separated the Protestant Bernese from the Roman Catholic Lucernese. The border is therefore more than an arbitrary administrative demarcation and remains to this day a clearly discernible interface.

The Napfbergland border trail follows closely the cantonal border for about 75 kilometres, starting at St. Urban close to the *Mittelland* and ending on top of the Brienzer Rothorn, an almost alpine peak above Interlaken and Lake Brienz. The trail incorporates existing hiking trails with overnight stays either in guesthouses along the trail or in surrounding villages.

The Napfbergland is economically weak, compared to the surrounding regions. The trail is considered as one instrument that should contribute to the local economy and to local job creation. The users of the border trail should contribute to touristic value added, mainly through overnight stays and the purchase of local products. Through multiplying effects the remainder of the local economy should also benefit.

#### **Brief description**

The Napfbergland is a typical region of the Swiss pre. Alps with an attractive landscape and its amenities mainly created by man. The border trail Napfbergland is a long distance trail that follows the historically important border between the two cantons of Bern and Lucerne and introduces the visitor into the amenities of the region. The border trail is a tentative to make use of amenities as a means for sustainable economic development in a region whose economic resources are otherwise rather restricted.

The border trail is an idea that is quite new for the Swiss. There are some long distance trails (strada alta, Lötschberg-Südrampe, etc.), but their straightforward link to the respective amenities and the presentation with a label has been unknown until now. Comparisons to other long distance trails (or similar proposals) are quite impossible therefore. If the idea is going to be a success, it will prove that there are in fact private amenity markets and that amenity policy is not depending entirely on public support. The border trail is a good example to put the term "sustainable economic development" into more concrete terms.

The highly valued, cultural landscape in Switzerland's Napfberg region is a clear, unambiguous example of a rural amenity. Like other amenity case studies in Austria and Japan considered by OECD, the amenity considered in the Swiss case is shaped by small-scale, labour intensive agriculture on moderate and steeply sloping hillsides. The countryside is home to people living in small villages and on farms, in the midst of cultivated fields and forests. It is an ever changing landscape created by generations of interaction between humans and nature. A visitor to the Napfberg region sees not merely a single attraction, but a series of natural and cultural sites that together comprise an amenity with important public goods characteristics.

The Napfberg Border Trail project, begun in 1997, is intended to diversify the regional economy through tourism (Blöchliger, 1998). Other objectives are to create a regional identity recognised by the local and non-local population; symbolise both the ideas of borders

and overcoming borders; and build support among the urban population for preserving the amenity value of cultural landscape. In so far as the project is expected to generate additional rural household income through the *mise en valeur* of a nationally significant cultural landscape, it can legitimately be called an amenity-based rural development strategy.

The Border Trail project is an ingenious, market-oriented response to Switzerland's interest in stabilising the relative balance between urban and rural population numbers and reducing agricultural surpluses. It takes into account economic concerns about rural income levels, and social concerns about maintaining rural settlement patterns. In addition, it addresses cultural issues related to safeguarding rural traditions. The advantage of such a market-oriented approach is that it seeks to compensate for lower farm household incomes by encouraging non-farm and farm-related economic activity. Its success depends on the kind of actions discussed earlier in this report, namely, increasing project funding, building a network of support, encouraging farm household income diversification, forging a link with the proposed Biosphere project, and, to the extent that market signals are insufficient, making direct payments to the providers of the amenity.

Past public policies in Switzerland have insulated the Napfberg region from economic and social trends that have diminished the value of cultural landscapes in many other industrialised countries. In particular, Swiss agricultural policy has supported farm household incomes through high price supports, thereby slowing the out-migration of farmers that has occurred elsewhere. Further, Swiss land use policy has prevented competing uses for rural land from displacing farming, thereby preserving countryside that in other countries has been developed for residential, retail, and industrial purposes. The beauty and relatively undisturbed condition of the resulting landscape is extraordinary and rare.

On-going reforms of both agricultural and land use policies signal a willingness on the part of the Swiss people to carefully introduce limited market forces into the rural landscape. Similarly, their investment of public funds into rural development projects like the Border Trail shows that they see markets as one means of preserving their rural amenities. However, given the public goods characteristics of the Napfberg region and the limits to market approaches (as discussed earlier in this report), regulated markets for land and direct subsidies to amenity providers can still be justified to some degree.

Trade liberalisation, economic restructuring, and competing uses for rural open space will inevitably change the current balance between human activity and nature that is so highly prized by the Swiss. In one sense, all these forces work against what the Swiss are trying to accomplish in terms of preserving rural amenities. And yet, in another sense, they make the Swiss rural landscape an even more valuable development asset than it was in the past. As telecommunication continues to lessen the disadvantages of distance (especially in the growing service sector), the quality of life in places like the Napfberg region becomes ever more valuable. The challenge in Switzerland is to develop flexible policies and innovative strategies of which the Border Trail project is one example that help local residents adapt to these powerful forces while preserving what they cherish.

# Annex II Case Study Methodology and Participants

The aim of the case studies was to review a variety of rural amenities and their associated policies and to derive common guiding principles for amenity policy.

A three-stage methodology was followed for each of the case studies:

- A descriptive national report was prepared by the national authorities with the assistance of experts and the Secretariat containing information on the amenity, management strategies, associated policies, the relationship with the economy of the region, etc.
- A team of international experts took part in a study mission, along with the Secretariat, during which experts had the opportunity to discuss with national and local authorities, to undertake interviews, to realise on-site inspections, to meet local experts, etc.
- Finally, each expert of the team wrote an individual analytical report following the mission.

Five countries participated in the case study activity and prepared national reports:

- 1. Australia: "Rural Amenities and Development in Australia's Native Forest" by the Rural Policy Division of the Department of Agriculture, Fisheries and Forestry.
- 2. Austria: "The Cultural Landscapes in the Mountain Area of Austria" by Mr. Gerhard Hovorka, Federal Institute for Less-Favoured and Mountainous Areas, Vienna.
- 3. France: "Rural Amenities and Development in a Regional Nature Park" by Ms. Anne Stenger and Mr. Pierre Dupraz, National Institute for Agronomic Research, France.
- 4. Japan:
  - "Historical *"Fudo"* and Amenities in the Asuka Region" by Mr. Kenji Yoshinaga, National Research Institute of Agricultural Economics, Japan;
  - "The Amenity of Terraced Rice Fields (*Tanada*) and Policy Measures for Preservation" by Mr. Motoyuki Goda, National Research Institute of Agricultural Economics, Japan;
  - "Amenities: Traditional Rice Farming and Hot Springs in Yufuin" by Mr. Kentaro Yoshida, National Research Institute of Agricultural Economics, Japan;
  - "Sailing Trawl Fishing Village Amenity" by Mr. Yasuji Tamaki, Ministry of Agriculture, Forestry and Fisheries and Mr. Takayuki Hanya, Central Marine Products Research Laboratory, Japan.

5. Switzerland: "The Border Trail Napfbergland" by Dr. Hansjörg Blöchliger, BSS-Economic Consultants.

The list of the experts is as follows:

- Mr. Leonard Peter Apedaile, Peer Diagnostics Ltd., for the French and Japanese cases.
- Mr. David Baldock, Institute for European Environmental Policies (UK), for the Japanese case.
- Dr. Hansjörg Blöchliger, BSS Economic Consultants (Switzerland), for the French case.
- Dr. Jean-Eudes Beuret, National Institute for Agronomic Research (France), for the Australian case.
- Prof. Ian Hodge, University of Cambridge (UK), for the Austrian case.
- Mr. Heino von Meyer, Pro Rural Europe (Germany), for the Austrian case.
- Prof. Priscilla Salant, Washington State University (USA), for the Swiss case.
- Prof. Otmar Seibert, Fachhochscule Weihenstephan (Germany), for the Swiss case.
- Prof. Bill Slee, University of Aberdeen (UK), for the Australian case.

# Annex III Amenity Workshop

In addition to the case studies, a workshop was organised which facilitated the presentation and discussion of a wide range of amenities and amenity policies. At the invitation of the Japanese authorities, the 13th Session of the OECD Group of the Council on Rural Development was held in Japan in September 1997. Taking this opportunity it was also proposed to organise a workshop on amenity policies on the following day of the session (23 September 1997) in Tokyo.

The OECD Secretariat and three experts presented a comprehensive analysis of policy instruments:

- Mr. David Baldock, Institute for European Environmental Policies; "Towards policy guidelines for intervention by public authorities: regulations and economic incentives";
- Dr. Jean-Eudes Beuret, OECD consultant; "Favoriser l'action collective des fournisseurs et bénéficiaires d'aménités : quelles politiques d'appui ?";
- Dr. Hansjörg Blöchliger, BSS Economic Consultants; "Institutional governance of amenities: territorial spillovers and the principle of fiscal equivalence";
- Mr. Yukiya Saika, OECD administrator; "Issue Paper on Amenity Policy Instruments: a Stock-taking Report of OECD Work";
- Prof. Kazuhiro Ueta, Kyoto University; "Promotional measures for the conservative utilisation of rural amenities".

The following participants from the OECD Group presented case studies:

- Belgium: Mr. Jacques Reginster, Ministry of the Walloon Region, "La politique pour les aménités rurales";
- Canada: Ms. Heather A. Clemenson, Agriculture and Agro-Food Canada, "Natural and Historical Amenities: Kluane National Park Reserve and The Chilkoot Trail National Historic Sites";
- Finland: Mr. Kari Gröhn, Ministry of the Interior, Ms. Eeva Karjalainen, Finnish Forest Research Institute and Mr. Risto Matti Niemi, Ministry of Agriculture and Forestry, "Utilising Nature in Small-scale Rural Enterprise";
- Greece: Ms. Calliope Pachaki, Centre of Planning and Economic Research, "Rural Amenities Policy in Greece: Traditional Activities in Specific Rural Areas";
- Luxembourg: Mr. Jean-Pierre Dichter, Ministry of Agriculture, "Les parcs naturels, une chance pour les aménités rurales";
- Norway: Ms. Oddny Kjelsen, Ministry of Agriculture, "The agricultural landscape ... conservation and sustainable use";

- Sweden: Mr. Anders Roselius, Ministry of Industry and Trade, "Natural and cultural values of the countryside. A description of Swedish policy".

# References

#### APEDAILE, L.P. (1997),

"The Regional Natural Parks Tool in an Amenities Strategy for Rural Development", OECD document [RDP/WD(97)14], Paris.

#### APEDAILE, L.P. (1998),

"Japanese Experience with Amenity Strategies for Rural Development", OECD document [RDP/WD(98)3], Paris.

## BALDOCK, D. (1997),

"Towards policy guidelines for intervention by public authorities: regulations and economic incentives", OECD Document [RDP/WD(97)18], Paris.

#### BARJOLLE, D. and MESPLOU, P. (1997),

"Gestion et promotion des Appellations d'Origine Contrôlé et des Indications Géographiques Protégées Suisse : stratégies des acteurs et rôle des institutions", EPFZ. IER, Zurich.

#### BEURET, J.E. (1997),

"Favoriser l'action collective des fournisseurs et bénéficiaires d'aménités : quelles politiques d'appui ?", OECD Document [RDP/WD(97)19], Paris.

#### BLÖCHLIGER, H.J. (1994a),

"Exploratory Framework" in *The Contribution of Amenities to Rural Development*, OECD publication, Paris.

## BLÖCHLIGER, H.J. (1994b),

"Main result of the study" in *The Contribution of Amenities to Rural Development*, OECD publication, Paris.

## BLÖCHLIGER, H.J. (1997a),

"Institutional governance of amenities: territorial spillovers and the principle of fiscal equivalence", OECD Document [RDP/WD(97)21], Paris.

## BLÖCHLIGER, H.J. (1997b),

"The System of the French "*Parc Naturel Régional*": a Useful Tool for Amenity Preservation and Rural Economic Development?", OECD document [RDP/WD(97)13], Paris.

#### BUGGE, H.C. (1996),

"The Principles of *Polluter-Pays* in Economics and Law" in *Law and Economics of the Environment*, Juridisk Forlag, Oslo.

#### CLEMENSON, H.A. (1997),

"Natural and Historical Amenities: Kluane National Park Reserve and The Chilkoot Trail National Historic Sites", Room Document No. 6 for the OECD Workshop on "Policies for Rural Amenities", held 26 September 1997 at Tokyo, Japan.

112

COASE, R. (1960), "The Problem of Social Cost" in the journal of Law and Economics 3. DICHTER, J.P. (1997), "Les parcs naturels, une chance pour les aménités rurales", contribution by Luxembourg to the OECD Workshop on "Policies for Rural Amenities" held on 26 September 1997 at Tokyo, Japan. DIXON, J.A. and SHERMAN, P.B. (1990), Economics of Protected Areas, Island Press, Washington DC. GLACHANT, M. (1995), "Les accords volontaires dans la politique environnementale : une mise en perspective de leur nature et de leur efficacité", in Économie et prévisions, No. 117-118, pp. 49-58, Paris. GODA. M. (1997). "The Amenity of Terraced Rice Fields (Tanada) and Policy Measures for Preservation", OECD document [RDP/WD(97)10], Paris. GRÖHN, K., KARJALAINEN, E. and NIEMI, R.M. (1997), "Utilising Nature in Small-scale Rural Enterprise", Room Document No. 1 for the OECD Workshop on "Policies for Rural Amenities", held 26 September 1997 at Tokyo, Japan. HODGE, I. (1994), "Rural Amenity: Property Rights and Policy Mechanism" in The Contribution of Amenities to Rural Development, OECD publication, Paris. HODGE, I. (1997). "Amenity Policy, Sustainability and the Maintenance of the Cultural Landscape", OECD document [RDP/WD(97)11], Paris. HOVORKA, G. (1997), "The Cultural Landscapes in the Mountain Area of Austria", OECD document [C/RUR(97)7]. Paris. JOHANSSON, P.O. (1994), "Characteristics and Valuation of Rural Amenities", in The Contribution of Amenities to Rural Development, OECD publication, Paris. KJELSEN, O (1997), "The agricultural landscape. Conservation and sustainable use", contribution by Norway to the OECD Workshop on "Policies for Rural Amenities" held on 26 September 1997 at Tokyo, Japan. MEYER (von), H. (1997), "Amenity Based Rural Development. Austrian Mountain Policy: Review and Outlook", OECD document [RDP/WD(97)12], Paris. OECD (1994), The Contribution of Amenities to Rural Development, OECD publications, Paris. OECD (1996a). Amenity for Rural Development. Policy Examples, OECD publication, Paris. OECD (1996b), "Wetland Conservation Case Study: United States. OECD Seminar on Environmental Benefit from a Sustainable Agriculture", OECD document [COM/AGR/ENV/ EPOC(96)122], Paris. OECD (1996c). "The Role of Agriculture in Protecting Biological Diversity Case Study: United States.

OECD Seminar on Environmental Benefit from a Sustainable Agriculture", OECD document [COM/AGR/ENV/EPOC(96)132], Paris.

#### OECD (1997a),

"Toward policies for the "*Mise en Valeur*" of Rural Amenities", OECD document [C/RUR(97)5], Paris.

## OECD (1997b),

"Issue Paper on Amenity Policy Instruments: a Stock-taking Report of OECD Work", OECD document [RDP/WD(97)17], Paris.

## OECD (1997c),

Agriculture, pesticides et environnement : quelles politiques ?, Paris.

## OECD (1997d),

Réformer la réglementation environnementale dans les pays de l'OCDE, Paris.

## PACHAKI, C. (1997),

"Rural Amenities Policy in Greece Example: Traditional Activities in Specific Rural Areas", Room Document No. 4 for the OECD Workshop on "Policies for Rural Amenities", held 26 September 1997 at Tokyo, Japan.

#### REGINSTER, J (1997),

"La politique pour les aménités rurales", contribution by Belgium to the OECD Workshop on "Policies for Rural Amenities" held on 26 September 1997 at Tokyo, Japan.

#### ROSELIUS, A. (1997),

"Natural and cultural values of the countryside. A description of Swedish Policy", Room Document No. 2 for the OECD Workshop on "Policies for Rural Amenities", held 26 September 1997 at Tokyo, Japan.

#### SCHMID, A.A. (1995),

"The environment and property rights issues", in Bromley, D.W. (Ed), The handbook of environmental economics, Basil Blackwell Ltd., Cambridge Mass., 705 p.

# STENGER, A. and DUPRAZ, P. (1997),

"Rural Amenities and Development in a Regional Nature Park", OECD document [C/RUR(97)8], Paris

#### STÜKI, E. and LEHMANN, B (1996),

"Les paiements directs, instrument central de la politique agricole suisse", IER-CERME/ EPFZ, Château-d'Oex.

#### TAMAKI, Y. and HANYA, T. (1997),

"Sailing Trawl Fishing Village Amenity", OECD document [RDP/WD(97)9], Paris.

# UDEHN, L. (1996),

The Limits of Public Choice. A sociological critique of the economic theory of politics, Routledge, London.

# UETA, K. (1997),

"Promotional measures for the conservative utilisation of rural amenities", OECD Document [RDP/WD(97)20], Paris.

#### YOSHIDA, K. (1997),

"Amenities: Traditional Rice Farming and Hot Springs in Yufuin", OECD document [RDP/WD(97)7], Paris.

YOSHINAGA, K. (1997),

"Historical "*Fudo*" and Amenities in the Asuka Region", OECD document [RDP/WD(97)8], Paris.

OECD PUBLICATIONS, 2, rue André-Pascal, 75775 PARIS CEDEX 16 PRINTED IN FRANCE (04 1999 05 1 P) ISBN 92-64-17060-X – No. 50663