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# **Community forestry lessons for Australia: a review of international case studies**

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**Prepared by:**

**Eryl H Roberts (PhD)**

Environmental Sociologist

12 Gurubun Cl.

ACT 2913

(E-mail: [eryl.1@webone.com.au](mailto:eryl.1@webone.com.au))

**Madan K Gautam (PhD)**

School of Resources,

Environment and Society

The Australian National University

(E-mail: [Madan.Gautam@anu.edu.au](mailto:Madan.Gautam@anu.edu.au))



**THE AUSTRALIAN NATIONAL UNIVERSITY**

**CANBERRA, ACT 0002, AUSTRALIA**

**www: <http://sres.anu.edu.au>**

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## **EXECUTIVE SUMMARY**

**This report reviews and analyses a range of international case studies of community forestry so as to identify lessons that may be useful for community forestry in Australia. The definition of community forestry is “a community development based on multiple resources in forested ecosystems”. Community forestry exists when the community has a significant role in land use decision-making and is satisfied with its involvement in and benefits from the management of the surrounding forest.**

Australia, at present, has not introduced community forestry as a forest management option. Management decisions are largely made between the timber industry and the forest agencies of state government. If community forestry were to be introduced to Australian forestry, the challenge is to create a condition for collaboration with local people so that forests can be managed sustainably and to create long- term benefits for them.

Community forestry has been active and successful in many developing countries during the past two decades, with its main purpose being the alleviation of poverty amongst local forest communities and forest conservation. In developed countries where it operates, it is a more recent practice, yet it appears to be achieving remarkable success in its aims of sustainable forest management and securing socio-economic benefits for local communities.

The lessons learnt from the case studies will serve as guidelines for exploring the concept of community forestry in Australia. Altogether eleven case studies have been included in this review. Two studies are from India and Nepal; being selected as the two developing countries the most active in community forestry initiatives. Case studies from developed countries, such as Italy, Canada and the US, overall highlight each country’s successes and challenges. Many developed countries are actively involving indigenous people, into forest management planning. The results show a positive effect on their socio-economic conditions as well as a gradual improvement in the health of the forest ecosystem due to their sense of forest ownership. These same advantages have been observed amongst other forest communities once community forestry is applied. Recreational benefits can also be achieved from community forestry, which in turn, can further revitalise the local economy. Community forestry that is initiated from the ‘grass’ roots level appears to have a greater chance of success compared to those initiated from the government level.

# **COMMUNITY FORESTRY: A REVIEW OF INTERNATIONAL CASE STUDIES**

## **Definitions of Community forestry**

Community forestry has been defined in many ways, ranging from simple to complex:

At its most simplest, community forestry can be defined as community controlled or owned forest lands (Hyde, 1992).

Community developments based on multiple resources in forested ecosystems; that they exist when the community has a significant role in land-use decision-making and is satisfied with its involvement in and benefits from the management of the surrounding forest (Duinker *et al.*, 1991).

An urban or rural forestry or forest based activity controlled by the community either directly or through management accountable to the community through representatives. A direct result of these activities will be benefits, which accrue back to the community (Wicklund, 1993).

Whatever its formal definition, community forestry is clearly people-oriented. It involves local residents in decisions that affect their quality of life and in activities on forestlands near their community that affect them directly. In the Australian context, community forestry can be loosely defined as community involvement in local forestry for community benefit.

## **Philosophy behind Community Forestry**

Community forestry is founded on the belief that local residents should play a meaningful role in decisions affecting surrounding forests. Community people are increasingly seeking more say in how local forests are managed and used. Community forestry is one way in which this desire can be met.

Given that the forestry sector has reduced its staffing levels in many countries, there may be an untapped community resource, which could be utilised for forest management. Local people often act with greater accountability than other stakeholders such as the timber contractors, since the effects of forest management decisions have more direct impact on them. As a consequence, local communities have stronger reasons to favour sustainable forestry management practices. Resource managers around the world are finding that conservation is more effective when it includes local interests (Freeman, 1997). Yet local communities will only manage their forests if it is in their interests to do so. This means they must recover their 'costs' and be able to protect those values that they consider important (Brown *et al.*, 2002). For communities in developed countries, this generally includes recreation, tourism and environmental protection, as well as local employment.

## **Objectives of Community Forestry**

The goals and objectives of community forestry will vary according to the individual community's needs and aspirations and whether it is a developed country or a developing country. In developing countries the aim is to meet the basic needs of the community such as fuel wood, fodder, building materials, medicines and food. Whereas, the goal of community forestry in developed countries is to strengthen community stability including reducing unemployment, by enhancing sustained economic benefits from forestry (Mallik and Rahman, 1994). However, in both developed and developing countries, community forestry aims to alleviate environmental degradation.

## **Status of Community Forestry Internationally**

Major investments have been made in recent decades in the development of community forestry. Initially, community forestry was conceived as a strategy to address deforestation and rural development in developing countries. Hence, there is a long list of community forestry initiatives in developing countries during the past two decades.

In developed countries there is growing public interest in community forestry as an alternative form of forest management. In the UK, Canada and the USA, the process of community forestry has been a success story of land management and forest regeneration during the last decade.

There is a growing recognition that rural communities derive a far wider range of benefits from forests than has previously been acknowledged, and that local forest management can make a critical difference to the socio-economic sustainability of rural populations. A growing number of communities in several developing and developed countries are attempting to gain a greater control over their forest resources. To address this issue, national policies are being developed to re-engage communities in forest management decision-making.

## **CASE STUDIES**

Eleven case studies have been included in this report from both developed and developing countries so as to learn about the critical ingredients for successful community forestry. The study of all eleven case studies was based solely on literature reviews. Some case studies were able to be reviewed more extensively than others due to the extensive literature available, whereas with other case studies there was limited information available. The case studies were deliberately chosen from a variety of countries in order to gain a broad international perspective.

### ***Case Study 1: England's Community Forests***

A Community Forest project was launched in England in 1990. It is basically a large-scale social forestry project that aims to stimulate environmentally-led regeneration. In total there are twelve community forests established in England to date, with the purpose of providing well-wooded landscapes around some of England's urban areas for work, wildlife, recreation and education. By now, over half of England's population live within two hour's drive or less of a Community Forest. The Community Forest project is separate from both the Forestry Commission and the Countryside Commission even though it was the Forestry Commission itself, which had identified a need to bring forestry closer to people, and to create and manage new woodland in England, based on multipurpose principles.

In England, community forestry has demonstrated the beneficial impact of multipurpose forestry, in particular, that of protecting and rebuilding of environmental capital. It has involved the creation of larger woodland areas where forestry and recreational benefits can be maximised. Generally, plantings have been on urban fringe areas, which are often derelict and ugly. Sometimes however, farmers may be reluctant to allow trees to be planted on their agricultural land despite the grants they receive, as they fear increased public access and potential vandalism to their land. The benefits of increasing woodland cover in these areas are great for the surrounding urban populations. It is seen as major environmental improvement, which in turn improves the economic viability of the area. Hence Community Forestry is of economic relevance in England at the local level. At this level it can alter the relative attractiveness of different sites, especially improving the quality of life of the urban environment thereby helping to attract inward investment. It also helps generate employment

in both forest-based industries and in related industries such as recreation, sport, tourism and environmental services.

Another aim of Community Forestry is that of engaging with local people and thereby improving their social well-being. These woodlands are intended to provide a focus for people to work together to improve the quality of their environment as well as their enjoyment of it and to encourage their sense of pride and place. It also intended to help people understand their natural world and provide children with an outdoor classroom.

Each Community Forest is a partnership between its two national sponsors, the Forestry Commission and the Countryside Commission – agencies of the national government and the relevant local authorities in the target areas. Other sources of funding include a wide range of public, private and voluntary sector sources. This large scale funding is one of the reasons for the huge success of this Community Forestry programme. Critics of the programme point to the lack of community led initiatives so that without this funding there is likelihood that the programme is unsustainable.

The emergence of Community Forests in England epitomises the change in society's expectations of forestry over recent years, with forests increasingly managed for multiple objectives, not just timber production, as in the past.

**Lesson:** *Bringing forests closer to the urban areas can help reconnect urban people to nature thereby improving their social well-being hence bringing about social benefits for the community.*

**Further reading:**

<http://www.communityforest.org.uk>

[http://www.banc.org.uk/ecosarta/arts22\\_3/ecosart2.html](http://www.banc.org.uk/ecosarta/arts22_3/ecosart2.html)

<http://agrifor.ac.uk/hb/650518ba4fac62d7746f4021ec15c1bb.html>

**Case Study 2: Community Forests of Native Americans, USA.**

Many Native Americans have regained greater control over their forest areas through legislation, new treaties, and other agreements with the government and the private sector over the past few decades. A growing number of groups have worked to balance traditional cultural values with the development of modern forest management systems for meeting commercial, social and religious goals. Although there have been cases of commercial failures there have also been many successful ventures (Poffenberger and Selin, 1998).

The Native Americans of the western US are seeking to demonstrate that forest management can be tied to the conservation values of their own cultural tradition, rather than be driven only by economics as has dominated the commercial timber industry. Native tribes seek to achieve multiple objectives through their forest stewardship practices. Through their holistic approach to forestry, they are helping redefine sustainable forest ecosystem management.

**Lesson:** *Allow indigenous people control over the management of their native forest areas. This will encourage them to protect the forest ecosystem, gain local employment and conserve tribal traditions.*

**Case Study 3: Hayfork, northern California, USA**

A number of formerly timber dependent communities in the American West are trying to set up community forestry and become stakeholders in sustainable forest ecosystems. However they are often held back from being involved in forest management by government red tape.

Therefore efforts towards community forestry are focused on loosening up government restrictions.

As an example, the rural residents in Hayfork, northern California, are trying several approaches to get a greater role in decision-making and a greater share of the benefits of national forest management – the two main elements of community forestry.

Community forestry involvement in Hayfork has become more forceful through the formation of bioregional groups in which they come together to discuss common concerns in local forest management. With agency mandates to respond to community concerns, these groups are growing in influence and are bringing community issues to national attention (Danks, 1996).

The benefits the Hayfork community received from its community forestry initiatives is that it became mobilized to create and implement an integrated programme of job retraining, research and education in order to establish a more sustainable forest-based economy (Poffenberger and Selin, 1998).

**Lesson:** *Communities in forested areas where there is high unemployment, will benefit from community forestry as it gives greater ability for local job creation, hence improving the local economy.*

#### ***Case Study 4: Vernon, British Columbia, Canada***

In Canada, one of the most important steps in initiating sustainable forest management is considered to be the establishment of community-based, collaborative partnerships i.e. community forestry. In doing so, local communities may improve their level of understanding of the broad range of values in their local forest area and can better contribute to the development of consensus on how the forest should be used (Hall, 1996).

In Canada, British Columbia has taken the lead towards greater community participation in forest and land-use planning and management. The British Columbian government's mandate is to work to improve the quality of life for workers and their families by giving local communities new opportunities to manage local forests in order to meet local economic and social needs and to have a greater say in implementing forest renewal.

By 1993, public concern in British Columbia over the visual impact of clear cutting and the loss of jobs as large industries influenced the closure of smaller operators, resulted in the establishment of the Small Business Forest Enterprise Program by the local government. The project's aim was to develop alternatives to clear cutting and to increase community income from wood-based enterprises. This in turn would lead to sustainable forest management systems with the new added objective of protecting the natural environment and encouraging community economic and social stability. Forest communities are increasingly demanding opportunities to engage in forestry but have rejected the volume-based tenures in search of alternatives to large-scale industrial forestry. This is forcing the government towards greater local control over land-use planning

In Vernon, the local Ministry of Forestry has worked with local loggers and wood processors to develop environmentally sound and economically successful alternatives to conventional clear cutting. The programme redesigned the system of timber sales to encourage local involvement (Poffenberger, 1998). Now far more small cutting contracts were made with local operators. Government foresters were very careful to involve the community in decision-making. Alternative logging also employed more individuals than the past clear cutting method did. Overall the Vernon project was a financial success with almost double the income generated by this project compared to the previous clear cutting period and with the added benefit of reduced environmental costs.

**Lesson:** *This project supports how sustainable methods of forestry production can be developed that allow workers in small forest dependent communities a greater degree of job security, reduce unemployment and revitalise the local economy.*

**Further reading:**

Duinker, P. *et al.*, 1991.

Roy, M.A., 1989.

Wicklund, M. 1993.

<http://denmanis.bc.ca/directory/tenure.htm>.

**Case Study 5: Waswanipi Cree Model Forest, Quebec, Canada**

The new political and legal landscape in Canada encourages state and tribal cooperation. Tribal groups must be considered in forestry management because of recent legal reforms (Sherry and Myers, 2002). Co-management regimes are promoted as a means to enable this co-operation and are arising because of many factors: tribal dissatisfaction with state management systems that overlook traditional approaches and undermine local stewardship and harvesting interests; environmental degradation and loss of wildlife; tribal land and resource claims as well as concerns over economic and industrial development pressures.

Over the past few years, local involvement in management has increased both on tribal reserve land and on Crown lands. However, co-management agreements often emerge out of conflict, and are agreed upon due to political diplomacy (Poffenberger and Selin, 1998). Despite this however, community involvement in forest management in Quebec has been improving in recent years, facilitated by a recent law that allows local municipalities to sign forest management agreements with the provincial government, in effect allowing the creation of community forests.

The Waswanipi are a local tribe in Quebec who have a successful community forestry management system in operation (i.e. the Waswanipi Cree Model Forest<sup>1</sup>). The Waswanipi tribe is noted for its community cohesion and participation in forest management (Poffenberger and Selin, 1998). Yet this community did not develop these characteristics in isolation. It had the full commitment of Canada's government and received logistical and financial support.

The Waswanipi Cree Model Forest is based on a strong partnership of individuals and organizations with different experiences and backgrounds in resource management. As the tribe's heritage is closely linked to the forest, the Waswanipi Band Council's proposal expressed a strong desire to use traditional environmental knowledge as the basis for sustainable forest management. The vision of the Waswanipi Cree Model Forest is to link traditional tribal ties with the development of resource-based activities such as forestry, tourism, and recreation. To achieve this vision, the Waswanipi Cree Model Forest will combine its expertise in traditional knowledge with applied research and technologies to develop new sustainable forest management practices.

**Lesson:** *Indigenous people's strong community cohesion as well as their traditional skills and knowledge in sustainable forest management are prime ingredients for success in community forestry.*

**Further reading:**

Hall, J.E., 1996.

Roy, M.A., 1989.

[http://mf.ncr.forestry.ca/content/waswanipi\\_e.html](http://mf.ncr.forestry.ca/content/waswanipi_e.html)

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<sup>1</sup> Canada's Model Forest Program began in 1991 and is an attempt by its government to promote sustainable forest management with strong community involvement.

### ***Case Study 6: Gassinski Model Forest, Russia***

Canada's model forest concept is being adopted outside Canada through the International Model Forest Program. For some countries, this is a pioneer step in attracting public participation in forest management. For others, it is an agreement to join forces and access the best knowledge available on sustainable forest management. In turn, these countries can adapt and adopt that knowledge to reflect their local conditions. To date, twelve countries have adopted a model forest program (<http://www.idrc.ca/imfn/sites/index.html>), with Canada having by far the greatest number. Many other countries have also or are in the process of expressing interest.

The issues faced by model forests are diverse and include conservation of threatened or endangered species, organic agriculture and agroforestry, development of an economic base around minor forest products, cross-cultural awareness among indigenous and non-indigenous communities, environmental education in schools and in the workforce, the application of new technologies such as GIS, GPS, biotechnology, and many others.

In Russia, the Model Forest has been introduced to the Gassinski Forest. This temperate Model Forest occupies about 385,000 hectares of land within the Nanai Experimental Forest in the State of Khabarovsk. The Nanai Forest is dedicated to the introduction of sustainable forest management.

The Gassinski Model Forest is an important economic source for industry and individuals. This forest is a primary source of pine nuts as well as timber production. The six villages in and around the model forest, including an indigenous people called the Nanai, are also dependent on the forest. The native Nanai's economic bases are closely linked to their traditional way of life. It is essential to ensure the conservation of the natural resources of the area, which will, in turn, ensure the protection of the traditional economy of these indigenous communities.

**Lesson:** *This is an example of a community forestry fully endorsed by the Russian government with a prime aim being the conservation of the traditional economy of a native group of people – the Nanai – as well as forest ecosystem conservation combined with economic timber production.*

**Further reading:**

<http://www.modelforest.net/e/home /inte /russ /gassinse.html>

### ***Case Study 7: Forestry in the Central Rhodopes, Bulgaria***

In the wake of the political reforms of the early 1990's, most of the countries of Central and Eastern Europe, including Bulgaria, adopted new forestry legislation. In most cases, the perceived need for new forest laws has been related to reforms in the area of land tenure, mainly the recognition of private property rights. These new forest laws widely recognise the multiple beneficial role of forests and the need for their sustainable management. Although these countries have advanced technical capacity in forest management, they have difficulty in adapting to the changing situation and demands. The main problems at present are: the need to provide extension and incentives to new and generally small-holder private owners and the need to ensure that forestry continues to provide development opportunities for the rural poor.

When in state ownership, Bulgaria's very extensive forest areas<sup>2</sup> were managed in a sustainable way but after they were handed back to private small holders in the early 1990's, their sustainable management has become more difficult especially with the rise in illegal felling. Under these conditions, community forestry is considered as a viable solution that can balance environmental protection, public use of the forest and the need for the forest to contribute to rural development as well as overall economic growth. An understanding by the community of the importance of forests will enable the provision of multiple benefits and a sustainable resource.

One case example of community forestry in Bulgaria reveals the typical problem of its implementation – community participation. The Bulgarian Society for the Conservation of the Rhodope Mountains wished to support local initiatives for conservation and sustainable development in forested areas in Central Rhodopes. In order to determine the local communities' priorities for development and conservation, workshops were organised between project staff and villagers. The idea was to develop a foundation for participatory planning for forest management.

However, when it came to implementing the project, participatory planning with the villagers was not a success. This was due to project staffs' lack of experience and skill in implementing eco-development projects at the community level. They had had no previous experience working with local people and could not establish a working rapport. Furthermore, project staff did not value villagers local forestry knowledge hence they had a top down approach to forest management and the hierarchical organisational culture of the project staff hindered the participatory planning process from the village level (Pimbert, 1996).

Bulgaria's forest management culture had evolved from a history of top-down relationships with local people. This attitude of arrogance combined with an unwillingness to address local people on their own terms, produced an unwillingness to cooperate on the part of local interests. This form of communication by officials leads to a sense of misunderstanding by local people and inhibits the implementation of successful community forestry.

**Lesson:** *There must be commitment to working with local people to ensure local participation in the planning process, as it is local people who ensure the sustainability of community forestry.*

#### ***Case Study 8: Strathmashie Forest, Scotland.***

In Scotland, many rural communities have been setting up local action groups, which in turn are planning community woodlands. It is these initiatives that are welcomed and encouraged by many conservation organisations that in turn will act as advisors in pointing the community in the right direction. Participation has given the people a sense of stewardship and an understanding of how they can achieve sustainable and economic benefits.

Laggan is a small settlement in Scotland that was the first British community to be granted community control of a State owned forest for rural development purposes in 1995. The newly formed community forestry group became known as the Laggan Forestry Initiative and began work on a management plan for the forest. Its major objective was to provide sustainable employment for present and future generations based on the commercial management of the forest. The community stands to benefit both directly through the creation of modest employment opportunities and indirectly through the creation of local value added wood processing industries and recreational facilities which in turn has increased tourism in

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<sup>2</sup> Bulgaria has 33.2% of its land area forested. Its main forest area is primarily productive, but up to 25% is protective, 2% recreational and 1% has other functions (Render, 1999).

the area. The other objective of enhancing the forest's conservation and amenity features will also encourage its tourist potential (Jeanrenaud and Jeanrenaud, 1996).

Laggan Forest Working Group has begun the preparation of a 25-year design plan and a 5-year joint management plans for the forest. This collaboration was the first example of its kind in Scotland of joint forest management, where ownership of the forest remains with the Secretary of State, and that for the foreseeable future Working Group will retain ultimate management control of the forest

**Lesson:** *If the local community is motivated to manage a community forest, then the area may benefit both economically, from the creation of local forest jobs and from recreation related income, and ecologically from the practice of more sustainable timber harvesting techniques and the involvement of conservation groups.*

**Further reading:**

Jeanrenaud, S. and Jeanrenaud, J., 1996

<http://www.caledonia.org.uk/socialland/>

<http://www.laggan.com/forestcommunity.htm>

**Case Study 9: Nepal**

Forestry is extremely important in Nepal to both society and the environment. It supports agriculture and the fragile hilly areas. Rural people use the forest for fuel wood, fodder, timber, wood fibre, fruits, seeds, herbs and compost manure. Hence, the forest is the backbone of Nepalese agriculture, sustaining the livelihoods of its rural people.

In Nepal, forests have long been an integral part of rural life. Traditional societies historically coexisted with the forests and their production systems were grounded in utilizing wild resources on a sustainable basis. When the government began preparing management plans for managing the forests, they were not effective because local people who were using the forests were not involved in the planning processes, with local people viewed as threats to the forest and were often even deprived access to the natural basis of their livelihood. This led to resentment and demolished any sentiments of forest stewardship, which in turn led to over exploitation of forest resources both by the government and local people. However, in the early 1980's, the government realized the role and value of the local communities in sustainable forest management and began community forestry as a forest management system (Joshi, 1997).

The development of community forestry in Nepal is a major initiative of the government, which seeks to markedly improve the socio-economic conditions of rural communities and halt environmental degradation. The transfer of the management rights from the government to the local people for selected forests represents an important opportunity for the local communities to manage and utilise the forest (Shrestha, 2002).

Community forests in Nepal tend to have a positive impact on degraded land and forests, increasing biodiversity, with degraded forests being rehabilitated through protection and replanting of new species (Collett, 1996). Excessive grazing, fires and forest encroachment activities tend to significantly decrease or altogether stop and forest products are harvested on a sustainable basis (Devkota, 2001).

However, despite its achievements, there are also some limitations to community forestry in the Nepalese context. These are basically issues relating to equity within local forest communities with disadvantaged groups, whether by wealth, gender or caste, being the ones most likely to suffer from the following:

Failure to give access rights to all people who depend on local forests.

Disputes over the geographical boundaries of forests and other land uses.  
Unequal and discriminatory portioning of the uses.  
Unequal participation by stakeholders in key decision-making process.  
Unfair distribution of workloads.  
(Source: Shrestha, 2002)

**Lesson:** *From a conservation perspective, Community Forestry is very successful in Nepal. Yet from a social point of view Community Forestry has given rise to an inequitable distribution of benefits in favour of influential people and at the expense of suppressed people. Here the challenge is how to ensure an equitable distribution of benefits from the forest to all community forestry stakeholders.*

**Further reading:**

Paudyal, B.R., 1996.

<http://www.mtnforum.org/resources/library/josha97a.htm>

**Case Study 10: Joint Forest Management, India**

In India, community forestry is being promoted under a concept called Joint Forest Management. The programme comprises a partnership between local community institutions and state forest departments for sustainable management and benefits sharing.

Although the primary objective of community forestry in India is that of growing timber, the programme deals mainly with the reforestation and rehabilitation of degraded forestlands. This is accomplished mainly through the natural regeneration of Sal (*Shorea robusta*) forests, which in many areas regenerates easily if protected from grazing animals (Pardo, 1995).

The prerequisite for Joint Forest Management is an agreement between government and local people – the management plan. Yet the management plan can be prepared solely by the forest department without adequate negotiation with local people (Jain, 1996). This is a limitation to community forestry's success in India. The local people are requested to look after the forest but it is the government, which logs the timber. For example, in Bihar state, Krishnaswamy (1995) mentions that low participation persists because people do not expect to benefit from the forests they are supposed to protect. The government generally only designates poorly stocked, relatively unproductive and degraded forests for Joint Forest Management. Revenue sharing between villagers and the government only reduces the inadequate return local communities receive from these forests. Ideally, the community needs all the benefits to have a reasonable chance at rural development (Paudyal, B.R., 1996).

*Lesson: The difficulty the government is facing is fulfilling the basic needs of local people, achieving the government's economic goals and addressing environmental needs all at the same time. The reality is there is little incentive for the local people to help the government achieve these goals because their returns will be much lower in comparison to their workload input. Hence community participation is a limiting factor.*

**Further reading:**

<http://www.teriin.org/jfm/jfm.htm>

**Case Study 11: Northern Alps, Italy**

Magnifica Comunità di Fiemme (MCF) is a community forest in the Alps of northern Italy. It is a partly private, partly public institution. The area comprises of eleven communities. The local economy of agriculture and forestry is now supplemented heavily by tourism, especially skiing. The total land owned by this community forest is mostly forest with some alpine

meadows and pasture and a small proportion of unproductive land. Of the forest area about a quarter is protective forest and the rest is productive forest (Duinker and Pulkki, 1998). The forest is dominated by Norway spruce (*Picea abies* Karst.), partly due to climate and topography, and partly due to its being favoured for its high-quality timber (Duinker and Pulkki, 1998). The production forest is divided into ten units, each with its own management plan. The plans, which have the force of law, are prepared by the foresters or hired consultants, and are approved by a variety of bodies, including the provincial government.

MCF has a strong emphasis on quality timber grown and is processed locally. It owns a modernized saw mill that is the key to its economic viability as it can process value-added products for speciality markets.

Duinker and Pulkki (1998) believe that the MCF is successful in terms of socio-economics and low-impact logging, but that it is not a success when perceived through the viewpoint of conserving natural biodiversity and ecosystem functions. However, the MCF, whether natural or not, is a sustainable situation which fully involves the community in decision-making, so from this perspective, it is successful.

While the MCF is an example of a community forest, which is clearly focussed on timber production as its primary management objective, this is not representative of northern Italy's community forests as a whole. In fact, there is a clear trend in recent years toward more multipurpose management especially management for recreation and the production of non-timber forest products (NTFPs). For example, timber sales account for only one third of total revenues in other important Italian community forests: the *Regole* of Cortina, where access rights for sports and tourism constitute the main source of revenue; and the *Comunali Parmensi*, where revenues are generated primarily from the sale of harvesting permits for medicinal herbs and mushrooms (Merlo, 1995). Merlo (1995) performed a cost-benefit analysis for the 1980's decade from communal properties in the eastern Alps managed by two consortia. The results of the analysis show three clear trends: increasing management costs, decreasing revenues from timber and pastures, and increasing value of NTFPs and recreation. All three of these trends can be explained by the shift in management objectives, which has increased the emphasis on conservation and recreational uses of the forest. This has resulted in decreased harvesting and a consequent increase in growing stock. The current value of NTFPs and recreation greatly exceeds that of timber production for these areas.

Italy's community forests display a high degree of adaptability, and it is this quality which has ensured their survival despite numerous socio-economic changes. Their ability to respond to changing social demands stems from their community-based, participatory decision-making process, and it is this that sets them apart from both public and private forests. This success has helped to change the image of many alpine regions in northern Italy; formerly considered under-developed or marginal lands, they are now seen as models of sustainable development (Merlo, 1995).

**Lesson:** *Local people want to earn a viable income from their community forest. This was achieved through the selection of high quality timber and the local processing of that timber. Tourism and recreational attractions were other sources of revenue from the forest as too was the harvesting of non-timber forest products. This community forest generated local employment and diversified its interests in order to secure its economy.*

**Further reading:**

Morandini, R., 1996

## **DISCUSSION AND CONCLUSION: IDENTIFICATION OF INGREDIENTS FOR SUCCESSFUL COMMUNITY FORESTRY**

By definition, community forestry is site-specific, with comparative success or failure largely determined by unique local conditions. However, a consensus has emerged about the ingredients or conditions for successful community forestry. These include:

*Transparent relationship with all participants* - The role of individuals and agencies – including eligibility and selection of an advisory board and the decision-making process must be formally established. This includes the process for distributing benefits within the community. Benefit-sharing was problematic amongst some stakeholders in the Nepal community forest projects.

*Community vision and commitment* – a community forest must reflect both the interests and needs of its community and the capabilities and resources of the land base. This was well illustrated by the community forestry initiative in the Northern Italian Alps.

*Community involvement* – to ensure community involvement, the community forest must reflect community values, target community objectives and deliver community benefits. This was achieved by the community forest project of the Indigenous community in Quebec. Decision-making must reflect diverse community interests and include all stakeholders. Training programmes should develop the local skills and knowledge required to manage the forest over the long-term.

*Institutional support* – the presence of established institutions to provide both technical support and operational skills is a necessary foundation. See for example the Hayfork community forestry project in the USA

*Communication* - the community forest must be developed from the community. This has been lacking in some of the community forestry case studies examined, reducing its effectiveness (for example, the Bulgarian case study).

*Education* - education in basic forest management for the community by is critical to all phases of development of the community forest and should be organised by forest agencies.

*Commitment of resources and support* - Commitment at all levels is an important ingredient for successful community forestry. This commitment is required at three levels: funding, staff and community. Firstly, funding must continue throughout the shared agreement of community forestry. Secondly, staff must be committed to the creation and on going support for a community forest because one of the biggest challenges is working effectively with the government (i.e. community-government relations). Lastly, the local population must have confidence and commitment to both get started and to maintaining their forest, as well as having good community-community relations. Community forestry initiatives that come from the “grassroots”, rather than being initiated by the government are usually more resilient and successful.

The challenge is to develop frameworks so that lessons learned from successful community-based initiatives can be replicated widely. All of the eleven case studies represented above reveal different degrees of successes and limitations of community forestry (reviewed in Table 1, below). The assessment of each community forestry case study is subjective as insight into the effectiveness of each case study was gathered from secondary data. The assessment was graded into three broad categories i.e. good, average and limited.

**Table 1:** Level of achievements on environmental, economic and social improvement through the community forestry initiatives reviewed.

<b>Key indicators for successful community forestry</b>			
<b>Case study location</b>	<b>Environmental improvement<sup>3</sup></b>	<b>Local economic improvement<sup>4</sup></b>	<b>Social well being<sup>5</sup></b>
England	Good	Average	Average
Native Americans	Good	Good	Good
Northern California	Average	Good	Good
British Columbia	Average	Good	Good
Quebec's indigenous community	Good	Good	Good
Gassinski Forest, Russia	Average	Good	Good
Bulgaria	Limited	Limited	Limited
Scotland	Good	Good	Good
Nepal	Good	Average	Good
India	Average	Limited	Limited
Italy	Average	Good	Good

(Source: authors' conclusion from the case studies)

### **An approach to developing a community forest**

In order to establish a community forest it is first necessary to define the community, especially who should be included. Next it is important to resolve any conflicting claims on resources e.g. timber industry versus environmental interests. Indigenous claims and cultural concerns must also be considered in any reallocation of forest resources. Only then can the local institutions be developed for community input into forest management.

Establishing a meaningful process of community input into regional planning requires a sustained and long-term effort, including the establishment of new communication channels, the identification of local leaders and the building of rapport necessary for substantive exchanges among a diverse group of stakeholders (Poffenberger and Selin, 1998).

Community forestry can only work when the government is willing and able to experiment with new ideas, and modify forest policy and legislation as necessary and a political commitment to decentralisation. There should be an appropriate institutional framework set up with some key people in the forest authority genuinely committed to community forestry. Similarly from the grassroots level, local people should see an advantage in collaborating with other interest groups in order to achieve greater control over the forest resource. There should be prolonged and committed partnerships between communities and the government, reliable funding, strong leadership and comprehensive awareness raising. Only when and if these conditions are met, will community forestry become a viable forest management strategy.

<sup>3</sup> Environmental improvement: Criteria based on success or failure of tree plantation and protection or conservation of planted area or natural forests, or ancient woodlands

<sup>4</sup> Local economic improvement: Criteria based on direct opportunities which arise from community forestry, such as partial or full employment, promotion of tourism and income generated activities or indirect opportunities, such as support on bee keeping and animal rearing that resulted from adjacent community forest management.

<sup>5</sup> Social well being: Criteria was based on support to livelihoods, equity, awareness and empowerment of marginal people or gender related issues, improvement in water quality, literacy and spiritual feeling, bond among people and forests or trees.

As new demands on forests emerge, so to new management models, such as community forestry, may be required to address society's changing relationship with its forests. Community forestry is a means whereby several desired outcomes can be achieved i.e. greater accountability for public and industrial foresters, meaningful opportunities for local people to share in the responsibility for managing forests and hopefully more diverse and healthier forests which provide a wide range of benefits to society. The lessons learnt from these case studies and others, may assist the establishment of community forestry in Australia, where appropriate.

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**Web resources:**

- [http://mf.ncr.forestry.ca/content/waswanipi\\_e.html](http://mf.ncr.forestry.ca/content/waswanipi_e.html)
- [http://www.iucn.org/themes/spg/beyond\\_fences/bf\\_introduction3.html](http://www.iucn.org/themes/spg/beyond_fences/bf_introduction3.html) “*Beyond Fences: seeking social sustainability in conservation*”.
- [http://www.modelforest.net/e/home/\\_inte/\\_russ/\\_gassinse.html](http://www.modelforest.net/e/home/_inte/_russ/_gassinse.html)
- <http://www.mtnforum.org/resources/library/josha97a.htm> Joshi, 1997 *Community forest in Nepal: 1978-2010*.
- <http://denmanis.bc.ca/directory/tenure.htm> “*Community forest pilot projects*”.
- <http://www.caledonia.org.uk/socialland/> Tylden-Wright, R. “*The Laggan Forest Partnership*”
- <http://www.laggan.com/forestcommunity.htm> “*Laggan community forest.*”
- <http://www.communityforest.org.uk> Render, M. “Community Forestry in transition societies of central and eastern Europe”.
- <http://www.communityforest.org.uk/conf.html>
- <http://www.idrc.ca/imfn/sites/index.html>