Collaborative forest management: a review

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Summary

The term collaborative forest management (CFM) is adopted in this review because it has become popular internationally as a generic descriptor of a range of participatory approaches involving some form of co-management between government forest agencies and other stakeholders. It seems likely that Australia will go down its own track towards CFM, at least in some forest areas and communities. But as Africa has learned from Asia, the development of CFM in Australia could be vastly aided by heeding the wealth of experience of CFM from Asia, Africa, Europe and the Americas.

This paper outlines the 'drivers', trends and extent of various types of community-based forest management worldwide. The terminology of participation in resource management is covered, as are concepts of stakeholder power and accommodation of multiple interests, and the need for acceptance of action learning and 'emergence' in the collaboration process. A generic example of a 'start-up' process for collaborative management is presented, although the importance of developing locally appropriate approaches to CFM is emphasised. Brief reference is made to Australia's first CFM initiative, in the Wombat State Forest in Victoria, which prompted the writing of this review.

Keywords: forest management; community forestry; community involvement; participation; collaboration; decision making; learning; Australia

Introduction

At present, 11% of the world's forests are managed by communities, a far greater area than is managed by the forest industry, and about the same area as that owned by all private landholders combined. It is expected that the area of land owned and managed by the community will rise from 381 M ha in 2001 to 540 M ha by 2015 — representing 45% of the world's forest estate (Bull and White 2002). Much of this area is currently managed under some form of collaborative arrangement involving a sharing of power between stakeholder groups.

The importance of participatory forest management is exemplified by countries like Nepal, India and the Philippines, where, in total, about 100 000 communities are active in various forms of collaborative management of forests (Petheram *et al.* 2002). Acceptance of the concepts of collaborative forest management (CFM), and development of supporting policies and legislation, are growing rapidly (Alden Wily 2002). The extent and diversity of community involvement in management of forests around the world is illustrated by some examples in Table 1.

Community forestry models have existed in parts of Europe for centuries (Jeanrenaud 2001) but until recently most foresters in other western countries have considered CFM to be relevant only to developing regions. However, global trends such as decentralisation and environmentalism, and public concerns about over-utilisation of forests for timber, have led many industrial countries to explore various models for increasing community involvement in forest management. Canada's Model Forest Program, the United States' National Community Forestry Centres and England's Community Forests are three examples (Haley 2001; The Countryside Council 2002; Stephen 2003).

In Australia various forms of public participation in forest management have occurred — from consultation (as in the Regional Forest Agreements) and other forms of 'engagement' arranged by federal and state agencies, to direct action by environmental groups (Davey *et al.* 1997; White and Maclean 2001). This paper was prompted by moves towards community forest management in Victoria, and is written from the viewpoint that success in CFM will demand a much greater understanding of principles and processes of collaboration and communication than has been shown in the past by either government or public stakeholders.

In February 2002 the Victorian Government released its policy statement *Our Forests Our Future* (NRE 2002) that committed the Government to 'developing options for community participation in forest management' as a possible new approach in parts of the state. A Steering Group was established to seek the public's views on ensuring greater participation in sustainable forest management in communities surrounding the Wombat State Forest. This group commissioned a *Discussion Paper on Community Forestry* (Petheram *et al.* 2002), from which this review is largely drawn.

The terms of reference of the Discussion Paper required that a worldwide review of community forest management be prepared 'as a basis for discussion', and that a report be prepared 'outlining the strengths and weaknesses associated with the various models and their applicability to the Victorian situation and, in the first instance, the Wombat Forest'. The researchers argued that, rather

Table 1. The extent of participatory forest management worldwide: some examples

Nepal. Community Forestry (CF) (HMG 2000). Since 1980, about 850 000 ha of forest has been handed over to 12 000 'Forest User Groups' involving about 1.2 million households. Transfer occurs after application to the Forestry Department and joint completion of a CF Plan. Supportive policies, legislation and training of foresters have been adopted. There is evidence of improved forest conservation and water management. Some poorer groups have poorer access to forest in some areas.

India. Joint Forest Management (JFM) (Poffenberger 2000; Bahuguna 2001; Ram Prasad, *pers. comm*. 2002). Over 62 000 village communities (75 million people and 14 M ha of forest) participate with the Indian Forest Service across 26 states. The share of benefits to the community varies from 25% to 50% in return for inputs of labour and time. JFM is supported by policy and laws strengthening the role and rights of communities in forest management and use. Has been strongly criticised in some areas for inequitable distribution of benefits to different stakeholders.

Philippines. Community Based Forest Management (CBFM) (Rene de Rueda, *pers. comm.* 2002). CBFM has become the national strategy for management of forest. There are 5000 social forestry projects covering 5.7 M ha of forest, 4.4 M ha of which has involved change in land tenure to People's Organisations (POs). Forest management is transferred to POs after approval of CBFM Agreements. POs prepare a Community Resource Management Framework for their forest.

Africa (Alden Wily 2002). Results of a community-based wildlife program in Zimbabwe (CAMPFIRE) provided an example for other regions, with many countries now introducing new legislation allowing community management. An upcoming law in Tanzania has led to over 500 Village Forest Reserves and 1000 clan-owned forests since 1996. Innovative CF initiatives exist in Ethiopia, Mozambique, The Gambia, Cameroon, Tanzania, South Africa and several other African countries.

Europe (Jeanrenaud 2001). Community-managed forests have existed in Switzerland and certain other countries for centuries. There has been a move away from industrial management of public forests, to multi-purpose management with increasingly participatory decision-making. In addition, there are 11 million forest-owning families, many belonging to 'community organisations' that provide information and services. In England, a network of 12 Community Forests is supported by The Forestry Commission and The Countryside Council (2002).

Canada (Burda 1998; Poffenberger and Selin 1998; Haley 2001; Holmes *et al.* 2002). The Model Forests Program started in the early 1990s and gave impetus to CF in some areas across Canada. In British Columbia legislation now allows communities to apply to manage local forests in partnership with government. The push from some communities to manage local forests has come from concern over vast loss of biological and timber resources from their areas.

United States of America (Poffenberger and Selin 1998; Kusel and Adler 2001). There has been considerable growth in community-based approaches to management of forests, lakes, watersheds and pollution. The main drivers have been environmental movements and frustration by communities over 'lack of voice' in management of local forests.

than evaluate all available models of community forestry for their suitability in Victoria, it would be more appropriate to provide information on the principles of collaborative forest management, as well as case studies and further reference material. Case studies were seen as an important means of enabling readers to envisage the situations under which CFM has been initiated in other countries, and the factors that can influence success (see Appendix).

The Discussion Paper (Petheram *et al*. 2002) was used as the basis for discussion at community meetings around the Wombat Forest in 2002. In January 2003, the new Victorian Minister for Sustainability and Environment declared that a community group would be established to explore the workings of a community forest 'model' (Thwaites 2003). This announcement made the Wombat the first state forest in Australia to be given 'community management' status, and places great onus on the community, including the local forest agency staff, to develop a suitable process and structure for CFM. Early progress of the CFM process in the Wombat Forest is reviewed by Anderson (2003).

This paper attempts to draw out the key points of CFM for natural resource managers and others interested in collaborative approaches with Australian forest communities. Many of the concepts of CFM have come from less developed countries, where there is extensive experience and literature on practices, policies and processes in CFM. Other principles come from participatory processes in (non-forest) natural resource management (NRM) in Australia. A third valuable source is the literature on 'collaboration' from regional planning and environmental management in Western countries. Fourthly, there is a new but growing literature from forest management in Western countries, where new collaborative programs are currently being evaluated 5–10 y after their inception.

Drivers towards collaborative forest management

During the past two decades, forest agencies worldwide have been forced to reassess the ways in which they define and carry out their forest management mandates. Globalisation has been accompanied by changes in economic circumstances and increased demands by the public for more inclusive decision-making processes (O'Brien 2003). Governments are decentralising forest management decision-making and (in many cases) devolving responsibility. These changes are sometimes taking place for ideological reasons, but often the major reason is pragmatic; that is, to seek economic efficiency. However, the changes to resource management are often rationalised by governments as being part of a democratisation process, and consistent with the aims of rural capacity-building (see Mohan and Stokke 2000).

Forestry agencies internationally are seeking innovative arrangements, often involving a reduction in staffing levels of agencies, and sometimes strategic alliances with a variety of partners. These and other changes have often resulted in public dissatisfaction with the level or quality of on-the-ground forest services (Scherl *et al*. 1994; Mayers and Vermeulen 2002).

Increasingly, civil society is demanding a greater say in the way forests are managed, and in how the benefits accruing from them are distributed (O'Brien 2003). This is adding to pressures for governments to become more transparent and to involve a wider

range of stakeholders in their decision-making. Gilmour (2000) observes that many managers across both public and private sectors are realising that participatory approaches are likely to produce more widely accepted and durable outcomes than the centralised decision-making of the past.

Numerous stakeholder groups claim legitimate interests in the results of forest planning and implementation of field programs, including forest agency and other departmental staff, townspeople, shires and local authorities, environmental NGOs, forest industry organisations, water authorities, and tourism and recreation groups. Nowadays global interest groups can also have a stake in the management of particular forests. This wide variety of interested groups (or 'pluralism') has broad ramifications for sustainable forest policy and approaches to planning and management (Anderson *et al.* 1998).

In this new management environment, the role of government staff is changing from direct control over forest management to one of facilitating a process of participation of key interest groups. The direct authority and responsibility for forest management decision-making is often being shared with, or passing to, others. This requires a new style of management for agency staff, involving work with a range of stakeholders with different interests in forests (Gilmour and Fisher 1991).

It is clear that modern forest managers cannot operate under 'prescribed' blueprints or models. Organisational cultures are needed that are based on flexibility, 'learning and exploration' — allowing agency staff (and others involved) to analyse changing situations and respond effectively to them (these aspects are taken up in more detail later in presenting an overarching philosophy for CFM).

Initially, community-based forestry in developing regions appeared to have little relevance to forestry in industrial countries like Australia. It started in association with impoverished communities that were highly dependent on a multitude of (mainly non-timber) forest products, such as fuel, forage, herbs and medicines. Poverty reduction and equitable distribution of benefits and traditional rights to forest access were major considerations. As a result, foresters in many 'developing' regions are becoming increasingly experienced in dealing with participatory methods of involving communities in forest management (see Hobley 1996).

Many Western countries, however, have started exploring participatory approaches to forest management, driven by growing environmental pressures, decentralisation, reduced government services, change in emphasis from commercial wood production towards conserving biodiversity and ensuring water quality, as well as dissatisfaction with past forestry practices (see Poffenberger and Selin 1998; Haley 2001; Jeanrenaud 2001; Kusel and Adler 2001).

Names and terms

The wide range of countries and situations in which forms of community forestry exist (Table 1) has led to the use of numerous terms for the same or similar concepts. Some names have come to have specific meanings in particular countries, but more general interpretation in other regions. In this review the term 'collaborative forest management' (CFM) is adopted as a generic description of a range of approaches involving some form of co-management between government and other stakeholders. Here, CFM is regarded as almost synonymous with various other terms, such as community forestry, community-based forest management or participatory forest management. The term 'social forestry' has a wider range of implications, while 'joint forest management' originated in India, but has rather specific meanings that may differ between countries.

Figure 1 depicts a continuum of forms of collaborative management — reflecting different levels of leadership, authority, responsibility, control and benefit to government and community partners.

The term 'community' can be confusing, as communities are seldom bounded, homogenous entities. Rather, communities are characterised by diversity in affluence, gender, age, ethnic origin, occupation, goals and other aspects of social identity (Mearns *et al*. 1997; Leach and Fairhead 2001). The terms 'stakeholder' and 'interest group' are widely used in literature on CFM to include those individuals, groups and organisations that have an interest or 'stake' in forests (Engel *et al.* 2001).

Participation and power in collaborative management

Types and levels of citizen participation have been discussed by numerous authors, including Burke (1968), Arnstein (1969) and Pretty (1995), whose typologies of participation are well known. Experience in collaborative management indicates that there is often a move towards higher levels of participation over time, as trust is built between the key stakeholders. Hence, activities and techniques based on different levels could be appropriate at different stages of a collaborative process, depending on the needs and objectives at the time. For instance, 'informing citizens' is generally regarded as a low level of participatory activity (e.g. Arnstein 1969) yet could be entirely appropriate for certain purposes or stages in a CFM process (Buchy *et al.* 2000).

Power held by various stakeholders is a crucial issue in the establishment and maintenance of collaborative initiatives, because it has a strong impact on why people will or will not participate, and how active participation might be encouraged. Power has often been misused in participatory management contexts by particular stakeholders to ensure that advantages are retained over less powerful groups (see Mearns *et al.* 1997; Buchy *et al.* 2000). Unequal power distribution can also exist *within* interest groups, based on issues such as gender, culture, age or commercial advantage, and can have profound influences on equity and sustainable management of natural resources (see Dovers 2000; Gleeson 2000).

Collaborative partnerships strive to accommodate multiple interests — but this cannot be achieved if there are disparities in power that prohibit some stakeholders from accessing resources, expressing views or gaining recognition for their interests. Different stakeholders achieve power in different ways, and CFM facilitators and participants need to understand (and deal with) the power relationships that exist. An analysis of different forest stakeholders and their broad interests, conflicts and means of exerting power or influence is a critical part of a CFM process. The accommodation of multiple interests in CFM requires leaders

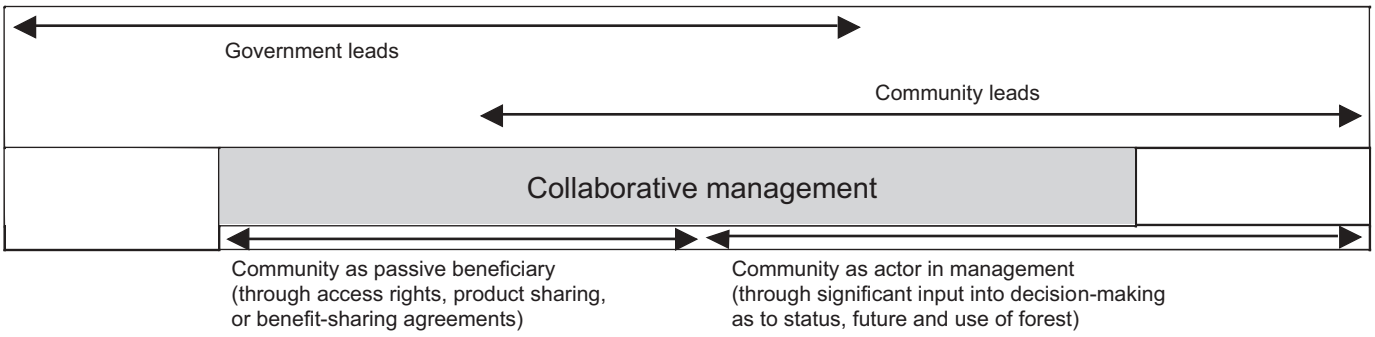

Figure 1. A continuum of forms of collaborative management — involving different levels of leadership, authority, responsibility, control and benefits to government and community partners (adapted from Dubois and Lowore 2000)

or facilitators to seek means of 'empowering' groups whose views are easily over-ridden by others with greater power (Dubois and Lowore 2000).

Collaboration as a new approach in resource management

Collaboration is a process that involves people constructively exploring their differences and common aims, and then seeking a vision and developing plans for changed management, agreeable to all parties.

Collaboration involves more than just organised participation because, in collaborative management, stakeholders must come to the table with a desire to develop shared goals and then work out strategies for achieving those goals (Gray 1989, 5).

The process of collaboration is 'emergent' (i.e. emerges from the efforts of the participants) rather than a prescribed plan or state of an organisation. Typically, collaborations progress from 'under-organised' systems in which individual stakeholders react independently to a problem, to more organised relationships characterised by concerted and joint decision-making (Brown 1980). This is in contrast to *cooperation* and *coordination*, which indicate static patterns of inter-organisational relations. In collaborations the parties become involved in developing a process, including important pre-negotiations needed to bring stakeholders together. Benefits claimed by proponents of collaboration, over alternative means of dealing with multiparty problems, are listed by Gray (1989) and Fratus *et al.* (2003):

- comprehensive analysis of the problem domain improves quality of solutions,
- capability to respond is more diversified because of different skills and ideas,
- collaboration is useful for re-opening deadlocked negotiations,
- the process ensures each stakeholder's interests are considered in any agreement,
- parties retain ownership of the solution,
- parties most familiar with the problem, not their agents, invent the solutions,
- participation enhances acceptance of solutions and willingness to implement,
- the potential to discover novel, innovative solutions is enhanced,
- relations between stakeholders can be improved by working together (implies skilful leadership and facilitation),
- costs associated with other methods are avoided (e.g. enforcement and litigation),
- mechanisms for coordinating future actions among stakeholders are established.

Complex and difficult issues and problems that have evaded simple solution in the past are usually the subject of collaborations (Gray 1989). Collaboration is not a panacea that will end conflict. Many multiparty problems are difficult and political because they involve 'distributional' issues — where stakeholders are concerned about the allocation of funds or other resources, or the setting of rules. Collaboration may not always be possible at a particular time because powerful or weak stakeholders refuse to become involved. Some parties will see considerable risks in collaborating, or fear that they will be poorly represented. Success depends as much on legitimising different parties' interests, as upon substantive outcomes (Gray 1989).

For collaboration to start it may be necessary for some third party (convenor) to propose the possibility and to:

> introduce a mind-set, a vision, a belief in the creative potential of managing differences. They must couple this mind-set with a constructive process for designing creative solutions to complex problems. (Gray 1989, 20)

The design of processes of pre-negotiation, and of meetings between stakeholders, is critical to success, and requires skill and sensitivity to local issues of risk and power and representivity. Many well-intended efforts to achieve collaboration have only exacerbated the existing conflict, through poor facilitation and failure to manage differences (Carpenter and Kennedy 1988).

The flexibility and transparency in a CFM process means that the results could be very different to those envisaged by the initiating group. Matters of scale (e.g. how large an area, or what land types to embrace) and of responsibilities and roles can be especially unpredictable. For instance, a collaborative partnership may decide to seek control or major influence over certain aspects of forest management, such as timber harvesting or wildlife management, but not over others.

Main principles, values and concepts in collaborative management

Successful collaborations invariably establish and adhere to a set of principles and values to guide their endeavours and the relationships between members and the wider public. The following list is drawn from Borrini-Feyerabend *et al.* (2000) and other authors, as fundamental in modern approaches to CFM:

- pluralism — recognising different values, interests and concerns involved in managing a set of forest resources, both within and outside the local community (Anderson *et al*. 1998),
- being open to various types of resource management entitlements (e.g. different tenurial arrangements and other rights) — beyond the ones commonly recognised,
- avoidance of the placing of blame; focusing rather on future plans,
- seeking transparency and equity in natural resources management,
- allowing the civil society to assume ever more important roles and responsibilities,
- harnessing the complementary capacities of different institutional actors,
- linking entitlements and responsibilities in the context of natural resource management,
- appreciating that the process is more important than the short-term products,
- learning by doing through on-going revisions and improvements in management,
- preparedness to allow adequate time for mutual trust and co-learning to occur.

In addition to the principles and values listed above, the literature on CFM identifies various concepts as contributing to the understanding and practice of collaborative management:

- adaptive management (Buck *et al.* 2001),
- accommodating multiple stakeholder interests (Wollenberg *et al.* 2001),
- combining human and biological sciences,
- governance (Fisher *et al.* 1999),
- conflict management (Carpenter and Kennedy 1988; Chamala and Mortiss 1990),
- social communication (Borrini-Feyerabend *et al.* 2000),
- action learning and organisational learning (Gray 1989; Ingles *et al.* 1999).

Key features of a CFM process

Putting collaborative management into practice requires those people participating to plan a process appropriate to the local circumstances. The literature describes various processes ranging from three to five stages, but there is general accord about 'what it takes' to get to the table, to explore, to 'accommodate multiple interests', and to 'reach agreements for action' (Ramirez 2001). The flow diagram in Figure 2 embodies the stages common to many cases of collaborative management. The steps within each stage in Figure 2 can vary widely, but a review of major proponents of collaborative processes reveals a remarkably similar series of activities.

The ideas suggested here on design of a CFM process are drawn from numerous sources, but the work of Gray (1989), Gilmour and Fisher (1991), Ingles *et al.* (1999) and Borrini-Feyerabend *et al*. (2000) are particularly valuable. These authors have worked in collaborative processes in a wide range of domains; from protected areas in Africa, to environmental and land management issues in the USA, to community forestry in Nepal and Cameroon. The models of CFM from western countries are mostly new and too poorly documented at this stage to provide much guidance on design of processes (e.g. Kusel and Adler 2001; Holmes *et al*. 2002). However, there are useful manuals of collaboration in resource management in general (e.g. Adler and Birkoff 2000; Fratus *et al.* 2003). Case studies of collaborative management from numerous sources (e.g. Petheram *et al.* 2002) show that no two processes for CFM are quite the same, and that the stages depicted in Figure 2 and the steps within each stage must be designed to suit local circumstances. For example, sometimes the 'start-up team' evolves spontaneously among local individuals; elsewhere the process has been prompted through facilitation by government or non-government agencies. An essential feature of any CFM process is participatory action research, or iterative cycles of reflection, planning and action (e.g. Fisher 1999).

Problems in CFM

Problems in implementing CFM are mentioned by various authors, although usually in the context of developing more effective CFM processes. Cases in Asia refer to inequities in benefits from forests for different sectors of community (e.g. some Joint Forest Management in India, see Hobley 1996; Hill and Shields 1998). Slee and Snowdon (1999) calculate that three locally-derived options for 'rural development forestry' in the UK generate lower financial and social outputs than conventional forestry systems. Mohan and Stokke (2000) provide a number of philosophical objections to handing over power and responsibility to local communities in general.

It is clear that CFM cannot end all conflict and problems in forest management, and that its effectiveness and success depends largely on:

(1) the extent to which participants can learn and adapt to change,
(2) the support received in developing a CFM process that can result in progress towards the shared vision.

In 1999 Sinclair and Smith reported on Canada's Model Forest (MF) program 5 y after its inception — to assess how well the stakeholders in management partnerships were working together. They found that in some MFs most partners were industry and government personnel and academics. Most partnerships were chaired by government officials steeped in a traditional forestry paradigm. Only 2 of 10 MFs studied had used consensus in decision-making. Most MF boards were clearly not including all parties with significant interests in forest management. Most notably, the participation of native peoples was lacking. Problems of volunteers accommodating work schedules, and of burnout, were common. Feedback of information was generally poor and

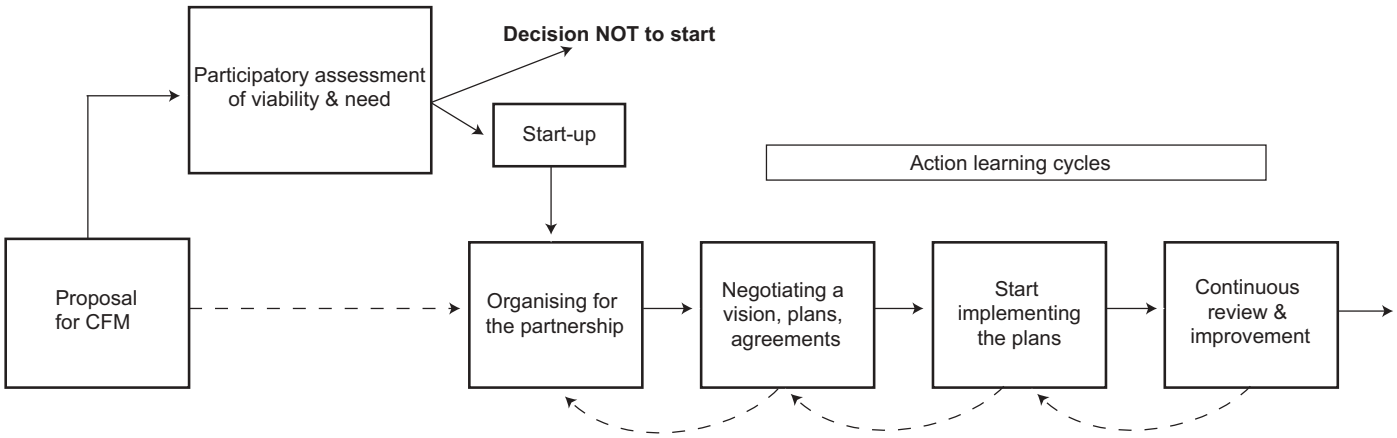

Figure 2. A generalised process for collaborative forest management (adapted from Gilmour and Fisher 1991, Ingles *et al.* 1999, Borrini-Feyerabend *et al.* 2000 and Petheram *et al.* 2002, who each suggest a series of steps within each stage of the process)

accountability of members to their constituents was haphazard. The MF Boards had had little influence on management. At that stage the MF Program in general lacked a set of principles that could guide members on many of these important issues — that are elsewhere accepted as essential elements of participatory decision-making in CFM models. Yet, in this and later reviews of MFs, most stakeholders consulted were enthused about future prospects for improved collaboration and forest management outcomes, based on lessons learned to date (see Haley 2001 and Holmes *et al.* 2002).

Supporting roles in collaborative forest management

The development of CFM can be greatly influenced by the support available from government or other agencies. Appropriate support requires good skills in participatory techniques, as well as sound understanding of collaborative processes and a strong will to enhance the process and the capacities of the partners in whatever ways are needed. DFID (2000) states that collaborative management of natural resources refers to:

- the establishment of a coalition or partnership of stakeholders committed to agree on common visions for the future and to negotiate plans and agreements,
- the arrangements for management that are negotiated by multiple stakeholders and are based on rights recognised by government,
- the process for sharing power among stakeholders to make decisions and exercise control (or at least advice) over resource use (see DFID 2000).

Initiatives to support CFM need therefore to be capable of providing a wide range of types of support and of co-learning with other partners. The support team must take an integral part in the learning process of CFM and be receptive to new ideas and needs that emerge. The following list of common constraints and pitfalls in supporting CFM initiatives is drawn from Ingles *et al.* (1999):

- mistakes in starting too big and setting physical (not human) targets,
- rushing to start CFM before an appropriate process is developed,
- lack of appropriate training, understanding of CFM or commitment by convening or supporting organizations or individuals,
- imposition of CFM 'models' without adequate participation of interest groups,
- provision of CFM 'support programs' of too short a lifespan,
- beliefs that knowledge of 'forestry' experts has greatest relevance,
- lack of confidence in ability of local people to manage resources,
- difficulty in accepting error as a learning experience,
- tendency to overlook local institutions and local perceptions,
- belief than anybody can be an expert in facilitating collaborative management,
- improper or unskilled design and use of participatory processes.

There is wide agreement that, for forest agencies involved in supporting CFM, the need for training of senior and local staff in principles and practice of collaborative management is paramount.

Concluding comments — and the Wombat CFM initiative

The many thousands of communities involved in various forms of participatory forestry around the world (Table 1) have embraced participatory management for a variety of reasons. A main difference between the situations in which CFM occurs in developing regions, and that of forests in Australia, relates to the location-specificity of stakeholders and impacts. Whereas in poor rural areas in developing countries the stakeholders are mainly local and highly dependent on forests (e.g. for food, fuel, jobs), in countries like Australia there is a growing list of interest groups who reside distant from forests, and indeed globally. Nevertheless, many of the commonly-stated rationales for greater participation in forest management are increasingly being adopted and quoted in industrialised countries (e.g. Haley 2001; O'Brien 2003) by

communities, by environmental groups, and even in Australian federal and state forestry policies.

It seems that Australia will go down its own track towards CFM, at least in some forest areas and communities. The trend towards involving the public in forest management decisions in Australia started over 30 y ago and has been continued in recent years through the Regional Forest Agreement process (e.g. Davey *et al*. 1997; White and Maclean 2001). Apart from the recent initiatives by Victorian State Forestry, the level of community participation so far has been relatively low, and somewhat top-down (Dargavel *et al.* 1998; Buchy *et al*. 1999).

A desire for more local voice in forest management has been strongly expressed by communities adjacent to certain Australian forests (Anderson 2003; Russell 2003; Vulcz 2003). The CFM approaches to be developed here will be unique. Yet, as Africa has learned from Asia, the CFM development process in Australia could be vastly aided by heeding the wealth of experience of CFM from Africa, Asia, Europe, North America and other continents.

Although a generalised process for CFM was depicted in part of this review (Fig. 2), this should be regarded only as an example. A workable process of collaboration can be developed only by the collaborating partners to suit local circumstances. One common feature of all CFM processes, however, is action learning which enables participants to make (and let others make) decisions and mistakes, and to learn from these and move on in the direction of their shared vision for the forest and community. Another primary requirement is for openness and acceptance by those involved of the rights and views of other participants.

A CFM process is vastly different to the usual concepts held by most Australian resource managers about 'community involvement' — which stem from previous experiences of public consultation, reference groups and other engagement techniques. The existence of strong conflict makes it hard for stakeholders to start dialogue. Yet (as argued by Stephen 2003) without some serious conflict, opponents may see no need to come to the table and to work out a process that will give hope for each party achieving at least some of its goals.

Progress of CFM in the Wombat State Forest

Interest groups in and around the Wombat State Forest have debated the possibility of various forms of community forest management for many years (Nelson 2002; Anderson 2003). Some groups have been actively involved in monitoring timber harvesting. Others have had an impact on management through direct action or protests. Some may feel reluctant to be part of the present move towards CFM because their own views and aspirations have not been supported in the past, or they mistrust the aims of government. Still others fear that an inappropriate model of community management will be imposed upon the community, or that the model will not deal adequately with their particular values or interests. Forest agency staff (also part of the community) have been concerned that neither policy nor legislation allows them to devolve certain of their current responsibilities, such as fire and timber management, to the community. Nevertheless, progress in the first year of CFM in the Wombat has been remarkable — in the amount of community learning achieved, the discussions on alternative CFM models, the forming of discipline groups (e.g. on weeds, communication), holding of forest field days, developing local silvicultural prescriptions for restorative forestry, and establishment of a database on the forest and community forestry (Anderson 2003).

As in all CFM initiatives, a daunting prospect for those initiating the process is the gulf to be travelled by many stakeholder groups (including agency staff) in terms of the current positions (lack of trust, entrenched attitudes to the forest debate), to reach the state required for effective collaboration. This situation, however, is common to many environmental and resource management conflicts around the world, where well-tested processes have been used to achieve transformation toward a common vision. Most important is that all forest stakeholders understand the fundamental need in collaboration — for a serious modification of attitudes and positions, before trust can be forged and real progress made (Adler and Birkoff 2000).

Appendix: Summary case studies of CFM in some western countries

Five case studies from western countries, chosen from 11 cases in Petheram *et al.* (2002), are summarised below. Further information on these, as well as on case studies in less developed countries, is available in the papers mentioned.

The *Val di Fiemme,* Italy: Traditional institutions support thriving communities

The *Val di Fiemme* is one of several long-established communities in northern Italy that jointly own and collectively manage forest land. Inhabitants of 11 townships share a 20 000 ha estate, which is 60% forested. This right goes to *vicino* – people who have lived there for 20 years or are descendant of a *vicino*. The forests are managed by two foresters and nine wardens and provide about 46 000 m^3 of wood per annum — processed at their own sawmill. Forest Stewardship Certification was gained in 1996. Revenue from forest is used to provide public services (Jeanrenaud 2001).

The Applegate Partnership: Northern USA

Applegate watershed ranges across two counties on state and private land. Issues include timber, water quality and environmental activism. The partnership was formed in 1992 by two individuals and assisted by volunteer facilitators. A Board of nine developed a vision, rules, and a set of shared goals. This vision, leadership and a sense of place led previously antagonistic groups to work together to achieve mutual goals. Emphasis is placed on elimination of the 'culture of blame' that has existed in the past (Sturtevant and Lange 2001).

Eastern Ontario Model Forest (EOMF)

The EOMF is one of 11 in a Network of Model Forests across Canada. It is regarded as a particularly successful example, and the community has used the partnership for a number of landscape and community projects. It has gained credibility as an organization devoted to people and forests — founded on principles of respect, equity and empowerment. These values, as

well as other espoused by the Mohawk community and adopted by the EOMF — encourage living in harmony with forest now and into the future (Holmes *et al.* 2002).

The Mersey Community Forest, Northern England

One of 12 English community forests, and based around Liverpool. The community potentially includes all institutions and individuals in the region, including local government, landholders and industries. Establishment involved engaging key partners who had land, capital and/or resources. Boundaries were defined by the councils willing to provide financial and statutory support. Preparation of the Forest Plan was valuable but not as participatory as was hoped, and ways are being sought of gaining greater public involvement (Pagan and Race 2002).

Community Forest Agreements: British Colombia (BC), Canada

In 1998 the BC Forest Act was amended to allow community forest agreements. Initially there are a number of pilot agreements with BC communities, ranging in area from 400 to 20 000 ha. Pilots have a five-year term, during which the tenure will be evaluated. Long-term agreements of 25–99 years may be offered to communities that operate successfully. Following the pilot, the government will also decide if additional community forest agreements will be offered (Davey *et al.* 1997).

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