

---

# TOWARDS COMMERCIALLY ORIENTED COMMUNITY FORESTRY MANAGEMENT: COPING WITH ECONOMIC GLOBALISATION AND COMMERCIALISATION

Ani Adiwinata Nawir<sup>1</sup>

<sup>1</sup> CIFOR - Center for International Forestry Research, Jl. CIFOR Situgede, Sindang Barang, Bogor Barat 16115, Indonesia, a.nawir@cgiar.org

**Keywords:** *Community forestry management, economic globalisation, commercialisation, incentive framework*

## Abstract

Past and current community forestry (CF) management practices have not successfully improved the livelihoods of forest communities. There have been limited options for expansion and optimising economic forest benefits to lift these communities out of poverty. One recent challenge is the rapid development of economic globalisation and commercialisation. There are serious challenges in translating opportunities under globalised and commercialised economics into policy and socioeconomic incentives that benefit local communities.

It is important for local enterprises to be more commercially competitive in this globalised economic era. Ensuring feasible and viable management practices can help communities work themselves out of poverty. Increasing local producers commercial and business knowledge and skills, mainly understanding the risks of development options, can also help empower. This paper aims to explore important components and necessary conditions for developing feasible and viable enterprises that increase CF management resilience in this dynamic globalised economic climate. The main underlying assumption is that the communities involved are rational decision-makers interested in change. Important components of feasible and viable CF enterprises include: the need to have good institutional capacity in financial management and technical skills to implement commercial activities; a system for allocating benefits and costs; and an economically profitable forest unit. These should be supported by an incentive framework based on benefit-sharing and power-sharing principles.

## Introduction

Community forestry (CF) systems have been refined over time as experience is gained in programme design, and notable successes have been achieved as well as failures (Harrison and Suh, 2004). Scholars have analysed CF from different perspectives (Kubo, 2009), the review on CF in this paper focuses mainly on linking community forest uses and management, and livelihood strategies, which eventually provide the basis for economic decision making. The current CF approach analysed in this paper focuses not only on collective management, but also includes individual household activities, such as tree growing on farms (Arnold, 2001; Angelsen and Wunder, 2003). This is important to be emphasized, since some scholars tend to focus on CF in the context of natural forest-based management only based on formal rights, while excluding the de facto forms of forest uses and management. They

also exclude diverse agroforestry that provides integrated social, economic, and environmental benefits (e.g. Charnley and Poe, 2007).

Despite more than three decades of CF development as a concept and practical implementation, past and current CF management practices have failed to improve the livelihoods of forest communities. There has been little in the way of expansion and economic forest benefits provide no more than subsistence leaving these communities firmly in the grasp of poverty. In this paper, I explore important components and necessary conditions for developing feasible and viable enterprises and in turn a more resilient CF management more capable of dealing with the dynamics of globalised economics. I present specific case studies to give a clear overview. The paper is organised as follows: first, I discuss the evolving CF approaches and practices; second, I present the evolving CF approaches and practices and discuss challenges and opportunities for improving the livelihoods of forest communities, and

dealing with the rapid development of globalisation and commercialisation; third, I highlight the necessary and favourable conditions for local enterprises to become more commercially competitive within this globalised economic condition.

*The Evolving CF Approaches and Practices: Lessons Learnt from More Than Three Decades*

The current CF system has resulted from more than three decades of an evolution of practices and conceptualisation of the relationship between people and forests, specifically under the changing conditions within the communities and external influences. There are at least five key aspects that have shaped the direction of and approaches in the current CF. First, during the 1970s, there was a common understanding of the counter-productive impacts of industrial-based forest management based on logging, which resulted in ecological destruction and gaps in socioeconomic benefits for local communities (Arnold, 1992; Mallik and Rahman, 1994; Gilmour, 1998; Arnold, 2001; Poffenberger, 2006). The CF concept was designed to release the pressures on national forests and meet the people’s subsistence needs for forest products (Arnold, 2001; Poffenberger, 2006). Second, during the 1980s, there was a conceptualisation of the Sustainable Livelihoods Approach (SLA) as the mainstream of the development policy agenda driven by the Brundlant Commission Report in 1987

(Abbot and Guijt, 1998; Arnold, 2001; Solesbury, 2003). Third, during the 1990s, there was a reformulation of the Common Property Resource Management Concept based on Hardin’s ‘tragedy of the commons’ (World Bank, 1998; Meinzen-Dick *et al.*, 2004; Ostrom, 2004; 2008). Fourth, also during the late 1990s to 2000s and present, the decentralisation and devolution policies have influenced forest management since the late 1990s, in responding to increasing illegal logging and uncontrolled deforestation due to the failures of centralised government-based forest management (Shackleton *et al.*, 2002; Edmunds and Wollenberg, 2003; Gregersen *et al.*, 2005). And fifth, during all periods, the international donor agencies, such as WB (World Bank) and FAO (Food and Agriculture Organization of the United Nations) have always provided financial and technical assistance for community-based forest management programmes (Capistrano and Colfer, 2005). Figure 1 shows the evolving key drivers and CF approaches.

Despite initial failures during the 1970s to meet rural villagers’ subsistence needs through a broad range of forest products and services, and to release the pressures on natural forests, the CF movement gained voices for rural communities’ greater access and rights to utilise the resources in the 1980s (Deweese, 1997; Glasmeier and Farrigan, 2005; Poffenberger, 2006; Charnley and Poe, 2007). The formal recognition of communities’ access to forest areas has mainly been stimulated by the shift towards decentralisation and

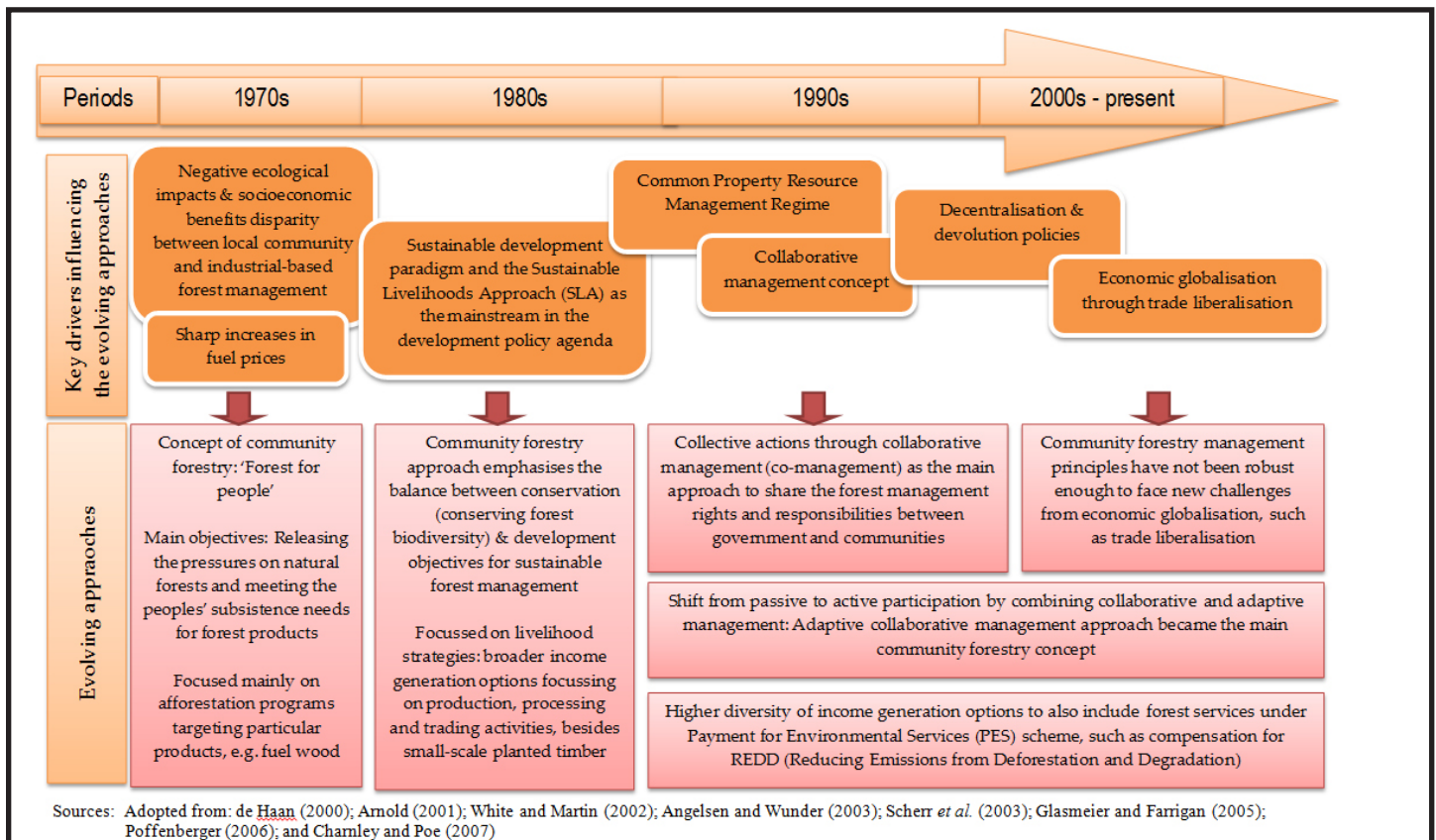


Figure 1. The evolving key drivers and CF approaches (1970s – present).

implementation of devolution policies (White and Martin, 2002; Scherr *et al.*, 2003). However, CF programmes have been mostly implemented as the last option in managing forests, particularly as part of the efforts to fix the problem and improve the forest condition through rehabilitation programmes; often with limited access to the benefits from the end products (Nawir, 2012).

In terms of commodities and products, the later reformulation of the CF concept has also taken into account the lessons learnt from the failure of the initial approach that focussed on afforestation (Arnold, 1992; Arnold, 2001). There has been more balance between conservation (e.g. forest biodiversity) and development under

the integrated approach as part of rural villagers' livelihood strategies (Arnold, 2001; Charnley and Poe, 2007). Therefore, the product focuses have shifted to include the natural forest production-based income generation options (for food and livelihood security), such as Non Timber Forest Products (NTFP) (Fisseha, 1987; Arnold, 2001). Harvesting NTFPs has been considered less destructive than timber exploitation (Arnold, 2001). However, despite the unquestionable role of NTFPs in livelihoods, timber is considered the more commercially important forest product providing high rents that are mostly captured by the rich, leaving NTFP' rents to the poor (Angelsen and Wunder, 2003; Sunderlin *et al.*, 2004). The poorest communities in many parts of

*Table 1. Preconditions for successful community forestry. (Source: Adopted from Pardo (1995) and Charnley and Poe (2007))*

<b>Ingredients for successful community-based forest management</b>	<b>Descriptions</b>
<b>a. Conditions at community management level</b>	
1. An identifiable community	This is not always as easy as it sounds, especially if areas are newly opened to migrants who may not yet have formed definite community groups
2. An identifiable area to be managed by the community with no conflicting use claims	Indigenous groups and more recent arrivals need to agree on the sharing of obligations and benefits
3. Security of tree tenure and land-use tenure (if not outright ownership)	Most governments are still reluctant to fully privatize state-owned land, but tree tenure is a little less troublesome
4. An institution to manage the forest, with the financial management and technical skills sufficient to do the job	Often this institution will require technical assistance from the national forestry department or NGOs
5. A universally accepted set of management objective	Short-term basic needs of some members may conflict with those who want to manage for long-term timber growth
6. A community interest in managing the resources (e.g. women's organisation)	Women's organisations, for example, have proved to be among the most dedicated community groups
7. A management plan meeting basic standards of good resource management	In many cases, indigenous management practices already exist and can be adopted with little or no modification
8. A forest unit that is economically profitable	To be sustainable, the benefits must equal or exceed the group's opportunity costs
<b>b. Necessary conditions involving commitment from third parties</b>	
1. A system for allocating benefits and costs	This is proving to be one of the more difficult issues to deal with, but there is room for creative community solutions
2. The authority and ability to make and enforce rules and regulations	When clear authority is provided by laws and regulations, most user groups are able to make and enforce their own internal rules
3. A strong commitment from the central government and the unconditional support of district forestry officers	The district forestry officers and their staff are key players because of their role as on-the-ground representatives of the government. They can assist communities in getting them organised, facilitating land claims and disputes, and providing community leaders with assistance to answer questions
4. Some means of subsidising uneconomic management	For unfeasible management, subsidy from the government is required in the beginning
5. Monitoring and evaluation mechanism	A means of monitoring the management of the resource and a means of correcting serious breaches of the management plan.



Table 2. Measures of success in implementing the community forestry approach. (Source: Adopted from Pagdee et. al. (2006)).

<p>1. The ecological sustainability indicators:</p> <ul style="list-style-type: none"> <li>• Forest conditions are maintained and improved (e.g. increase of forest area, species diversity, forest productivity, and number of valuable species and</li> <li>• Environmental degradation is being address (e.g. reforestation, soil erosion protection, and watershed management).</li> </ul>
<p>2. The equity indicators:</p> <ul style="list-style-type: none"> <li>• There is enhanced equitable sharing of the management function (right to manage), entitlement (right to access and control), and responsibility for a given territory or set of natural resources;</li> <li>• Equitable benefit distribution among community members is improving; and</li> <li>• There is increased investment in the future productivity of the forests.</li> </ul>
<p>3. The efficiency indicators:</p> <ul style="list-style-type: none"> <li>• A range of local needs, improved local living standards, and alleviated poverty are being met;</li> <li>• There is a decrease in the number of conflicts between local communities and the authorities;</li> <li>• Corruption is being controlled;</li> <li>• Mismanagement is being resolved (e.g. imbalance of administrative power, and imbalance between ecological and socioeconomic dimensions); and</li> <li>• There is a decrease in individual misuse of the forest (e.g. timber smuggling).</li> </ul>

the world comprise those principally engaged in NTFP extraction (Neumann and Hirsch, 2000). Timber-based CF, derived from either logging or plantations, can play a significant role in poverty alleviation (Angelsen and Wunder, 2003; Sunderlin *et al.*, 2004). Thus, small-scale plantations have become more important commercially as an option in community forest management, as funding becomes scarce and communities need to sustain their own financial sources for long-term sustainability of their activities.

One of the most recent challenges to the CF concept has been the push for economic globalisation through trade liberalisation. Economic globalisation has strongly affected the livelihoods of rural forest communities in practice, while the concept of CF has not caught up with the quick pace of the influences of globalisation on local livelihoods (see section on *Challenges for CF management practices dealing with the rapid development of globalisation and commercialisation*).

### CF Approaches and Associated Current Challenges in Improving the Livelihoods of Forest Communities

The current forms of CF are discussed within the two main challenges, particularly improving the livelihoods of forest communities and to what extent the CF management practices take into consideration the rapid develop-

ment of globalisation and commercialisation. The current CF concept has been broadly defined as forest management that has the central objective of ecological sustainability and gained long-term local social and economic benefits, with some degree of responsibility and with authority over forest management granted to local communities (Mallik and Rahman, 1994; Charnley and Poe, 2007). There are some basic common features in most CF definitions, such as (Mallik and Rahman, 1994; Hirsch, 1998; Arnold, 2001; Charnley and Poe, 2007): (1) CF is about using or

managing natural or plantation forests at the local level in a way that is compatible with local objectives and values; (2) CF involves a degree of decision making separate from state forestry agency control; (3) CF is an attempt to match simultaneously environmental, economic and social objectives related to forest resources; (4) specifically, the benefits must be sustainable, and the local community must participate actively; and (5) CF involves a number of users who live in the same area, and is primarily carried out by peasant farmers or smallholders.

### Three Major Categories of Forest Products and Services: Challenges and Opportunities for Improving the Livelihoods of Forest Communities

CF management practices, both past and current, have yet to improve the local forest community livelihoods. This is mainly because the highest proportion of economic rents, such as from commercial timber management, has not been captured by local communities as well as rural villagers engage in CF programmes. This can be analysed by understanding the characteristics of the benefits provided by the forests, which include Non Timber Forest Products (NTFPs), timber, and ecological services; and how these different types of benefits play vital roles in rural community livelihoods (Arnold, 1992; Angelsen and Wunder, 2003; Smith *et al.*, 2003; Pokharel and Suvedi, 2007). The forest benefits

include both those derived from extraction and those from planting in various forms, for example, agroforestry or monoculture (Arnold, 2001; Snelder and Lasco, 2008).

The most favourable characteristic of NTFPs for rural communities as livelihood options is that most NTFPs are a reliable source of subsistence and income at anytime, especially during difficult times for the poorest, as coping strategies or 'safety nets' (Angelsen and Wunder, 2003). NTFPs are more important for poor households with limited livelihood options outside the forests, such as hunter gatherers, and landless families, rather than wealthier farmers with land (Arnold, 1992; Wollenberg and Nawir, 1998). Despite long term community dependence on NTFPs, these products hardly serve as a means to elevate people out of poverty under increasing external pressures and challenges (Neumann and Hirsch, 2000; Angelsen and Wunder, 2003; Dunning, 2007). Some of the reasons for this include (Arnold, 2001; Ravallion, 2001b;a; Angelsen and Wunder, 2003; Wollenberg and Nawir, 2005): (1) the limited economies of scale to extract NTFPs for commercialisation purposes due to high harvesting costs per unit area, specifically the ratio between production and large areas to be covered for extracting the products; (2) there is often a lack of physical infrastructure in remote areas making it difficult to access markets, and high transportation costs, resulting in low product prices at the community level; (3) tenurial arrangements are usually based on communal customary rights, which often underlie the mode of NTFP collection under open-access conditions, and without secure rights there is little incentive for intensive management. On the other hand, establishing and enforcing property rights could involve transaction costs; (3) when opportunities beyond subsistence arise, the local communities receive only a small share of the profit margins, since they rely on middle-men or brokers due to the remoteness of their locations, and limited market information; and (4) the future long-term sustainability of incomes from NTFPs is in danger of following the diminishing forests in many parts of the world.

As NTFPs tend to be the poor person's share, other source of income from a forest comes from timber, which is the most important commercial product, and the benefits are mostly captured by outsiders due to high economic timber rents (FAO, 2001; Ross, 2001; Angelsen and Wunder, 2003; Sunderlin *et al.*, 2004). Similarly, benefits from timber produced in plantations are also captured by private companies and states, and rarely by forest communities (Nawir *et al.*, 2003; Dunning, 2007). For example, based on the meta-analysis of 54 case studies in East and South Africa, Asia and Latin America, it is suggested that the contribution of timber to communities' household incomes is only 2%, compared to other incomes from wild food, fuelwood, fodder, grass, and wild medicine at 84.5% (Vedeld *et al.*, 2004).

There are two important reasons for the 'unfavourable characteristics' of timber-based management that provide no advantages for most forestry communities, especially the poor. First, timber-based management is a long term investment in nature with high risks due to fluctuating prices, tenure insecurity, and natural hazards (e.g. fire) (Angelsen and Wunder, 2003; Sunderlin *et al.*, 2004; Herbohn, 2006). And second, feasible economies of scale requires a specific minimum production level, which can only be met by large-scale operations (Dunning, 2007). There are three approaches for allowing timber as a means to improve the livelihoods of forest communities: (1) providing local access to and management of natural forests, in some cases have been implemented through the decentralisation policy and devolution; (2) promoting smallholder tree growing, which requires innovative approaches; and (3) adding value-based options through small-scale wood processing, which needs a certain amount of financial capital (Arnold, 2001; Angelsen and Wunder, 2003; Dunning, 2007).

However, these options are possible, since there are some unexploited characteristics favouring community-based timber management (Godoy, 1992b; Scherr, 2004; Herbohn, 2006; Nawir *et al.*, 2007a; Bliss and Kelly, 2008). First, despite the long-term horizon, timber at a mature age, with certain economic value, can be harvested during difficult times; therefore, timber can be used as a form of savings with minimum labour requirements (FAO, 1985; Godoy, 1992b; Arnold, 2001). Second, there have been recent initiatives favouring the involvement of rural communities in timber-based forest management, such as the *Ejidors* in Mexico for logging activities, and outgrower schemes and/or other forms of community-company partnerships that can help to overcome the challenge of economics in terms of scale (Mayers, 2000; Antinori and Bray, 2005; Dunning, 2007). Third, the market niche opportunities come from the environmental and social timber markets that favour timber produced by communities at the small scale level (Scherr *et al.*, 2003; Bliss and Kelly, 2008). Further, there are more technical innovations for optimising the intercropping between timber species and food crops to meet subsistence household needs (Noordwijk *et al.*, 2008; Roshetko *et al.*, 2008).

The other category of benefits from forest is the ecological/environmental services provided to on-site forest users (e.g. water) and off-site beneficiaries at the regional, national or global levels (e.g. downstream water supplies) (Arnold, 2001; Angelsen and Wunder, 2003; Vedeld *et al.*, 2004). The mechanism, of Payment for Environmental Services (PES), is perhaps the most promising for poverty reduction. PES compensates local communities for the benefits from natural resources provided to those off-site, which are currently enjoyed for free (Angelsen and Wunder, 2003). Compensation mechanisms are relevant in at least four forest related areas: (1) carbon storage and sequestration; (2) biodi-

versity conservation; (3) hydrological services; and (4) tourism (Angelsen and Wunder, 2003; Vedeld *et al.*, 2004). However, applications on the ground are challenging and still limited, particularly in Asia and Africa.

### *Challenges for CF Management Practices Dealing With the Rapid Development of Globalisation and Commercialisation*

One definition of globalisation refers to a close association between global and local or 'glocalization' (Robertson, 1995 in Haan, 2000). This has been promoted mostly by key intergovernmental organisations (e.g. WB and IMF), to stimulate the global economic growth as a way to reduce poverty (Hansen, 1990; Tisdell, 2001). The most significant impacts of globalisation on CF can be observed from the changes in livelihood options (de Haan, 2000; de Haan and Zoomers, 2003; Pleumarom, 2007). It is believed that globalisation can open up more opportunities for non-traditional suppliers by creating new niche markets and potential buyers of scarce forest products looking for reliable sources, even from remote locations (Jaffee, 1995; de Haan and Zoomers, 2003; Scherr *et al.*, 2003; Roberts, 2008).

There are at least four serious challenges and their consequences in translating opportunities under globalised and commercialised economics into policy and socioeconomic incentives that can benefit local communities. First, the international trade policies favouring free trade bounded by multilateral agreements have counter productive impacts. There has been considerable debate about the extent to which international trade policies can effectively in attain the objective of environmental and socioeconomic sustainability, while multilateral agreements have been noted as having less consideration for social and ecological concerns (Tisdell, 2001; Pleumarom, 2007). However, the extent of the impacts varies, depending on the forest products that communities rely on as the main source of their livelihoods and how well they know the market as enterprises facing open competition with suppliers from other countries (Jaffee, 1995; Tisdell, 2001; Roberts, 2008). In India, for example, globalisation might drive the forest industry on wood and energy to import its raw materials and invest in plantations in other countries (Roberts, 2008). Second, intensive global forestry investment in estates (e.g. oil palm plantations) and agricultural crops (e.g. soybean), has led to more conversion of forest lands to other uses and also, displacing lands for food, creating local food security problems, shifts in labour and other capital allocations (Molnar *et al.*, 2011; Hoyle and Levang, 2012; Pacheco, 2012). Third, CF management principles have not been robust enough to face the new challenges coming from trade liberalisation, and adding to them the decreasing role of the state. Globalisation is often perceived as the end of the state (Haan, 2000). On the other hand, communities involved in CF do not have adequate management and financial

capacity, nor do they have the business knowledge and skills required to deal with international investors and traders (Jaffee, 1995; Antinori and Bray, 2005; Nawir, 2012). Local products cannot compete with imported mass-produced products. Therefore, there are two possible consequences: (1) a drop in prices and profits received by local producers; and (2) increased pressure on forests since they have to switch to unsustainable practices to instantly compensate the decreasing returns from the drop in price and profits.

### **Components of Feasible and Viable CF Enterprises**

Following the increasing complexities and multiple-objectives catered by various CF approaches; scholars identify key components in providing the guidance in initiating and implementing successful CF. These key components are important for feasible and viable CF in facing the dynamic globalised economic climate. CF as enterprises need to be prepared to face globalisation and trade liberalisation; however, adopting industrial forestry methods (with their attendant work rhythms and financial demands) can place severe strains on traditional cultural beliefs and authority systems (Forster and Vargas, 1995). Tailoring the approach to empower CF as enterprises thus becomes crucial (Jaffee, 1995). There are three major principles/indicators in preparing CF to be resilient in facing the dynamic globalised economic climate as enterprises: first, is the pre-conditions for a feasible CF programme, second, is the key indicators in measuring the successful impact of CF implementation, and third, is direct and indirect incentives to support feasible and competitive community enterprises.

#### *Pre-Conditions for Successful CF*

There are two major precondition categories first, those to be considered at the community management level, and second, those involving third parties (Table 2). At the community management level there are seven preconditions that provide a useful checklist in analysing what should be there to start with or in identifying the gaps in the existing conditions. Therefore, areas for improvement can be planned as part of the CF development programme. In line with the preparation steps, at the community management level, there are at least five necessary preconditions involving commitment from third parties, particularly the government in charge of managing the forest area. The underlying principle for the second category of pre-conditions is that there should be a process of devolution or decentralisation of rights, responsibilities, and authority from the state to forest communities (Charnley and Poe, 2007). It is expected that there is a more significant local control for more ecologically sustainable forest use and a better forest condition, as well as providing greater benefits from the improved forest and forest management for



the community (Charnley and Poe, 2007). These conditions are important for implementing benefit and power sharing, as discussed further in the next section.

### *Measures of Success in Implementing the CF Approach*

In preparing CF to be resilient when facing the dynamic globalised economic climate as enterprises, the second key indicators in guiding the implementation refer to the measures of expected successful impacts. From a worldwide analysis of 69 article-based case studies, it is suggested that there are three main indicator groups to measure success: ecological sustainability, equity, efficiency (Table 2) (Pagdee *et al.*, 2006). The ecological sustainability indicators focus on maintaining forest as the main natural capital as the centre of CF management by maintaining and improving the forest conditions, as well as addressing environmental degradation.

A mechanism for allocating benefits and costs through a benefit-sharing principle is the centre of the equity indicators as part of the measures of success in implementing CF in practice. The benefit-sharing mechanism provides forest communities with *de jure*/legalised access rights to forests and a share of the benefits derived from forests often generated by external commercial parties. This should cover the revenue generated from forest products, or jobs associated with forest-based activities; and/or local investment in community development projects in buffer zones (Wily and Mbaya, 2001; Dhakal and Masuda, 2009; Mahanty *et al.*, 2009). For example, the main aim of this approach in Southern Africa is to secure local co-operation in management, and in Zimbabwe, building on the Campfire programme (Wily and Mbaya, 2001).

The third measure on the efficiency indicators focuses on ensuring both local needs and the need for addressing the governance aspect, such as focussing on reducing conflicts and resolving mismanagement are required in implementing successful CF. Applying the efficiency indicators requires a power-sharing principle, which focuses on involving forest communities as managers based on devolving authority provided to them by the state as the incentives for communities to engage in sustainable forest use and management (Carlsson, 2000; Wily and Mbaya, 2001). The aim in power-sharing approaches is to localise management and put it into the hands of that group of society perceived as having the strongest and most sustained vested interest in the forest's future (Wily and Mbaya, 2001). With moves towards decentralisation and devolution, the transfer of power has mostly been in the form of joint management between government and local user communities, rather than complete devolution of rights and responsibilities to the latter (Berkes *et al.*, 1991; Arnold, 1998; Arnold, 2001; Matose, 2006). The co-management has been implemented through different partnership arrangements,

power-sharing and integration of local and centralised management systems as the essential components (Pomeroy and Berkes, 1997; Sandstrom and Widmark, 2007). There has been an increasing shift from passive to active community participation under Adaptive Collaborative Management (ACM) (Arnold, 2001; Nayak, 2004; Armitage *et al.*, 2008). At the end of ACM-based projects in Nepal and the Philippines, the researchers believed that ACM had provided realistic opportunities for the communities that enabled them to manage the forest resources sustainably, and share the livelihood benefits equitably (Hartanto *et al.*, 2003; McDougall *et al.*, 2008). However, implementing the ACM approach appropriately and effectively is quite challenging and takes up a lot of resources (e.g. time and budget). It requires reasonably clear property rights to the resources of concern (e.g. fisheries, forest), commitment to support a long-term institution-building process, key leaders or individuals prepared to champion the process, and the openness of participants to share and draw upon a plurality of knowledge systems and sources (Armitage *et al.*, 2008).

### *Direct and Indirect Incentives to Support Feasible and Competitive Community Enterprises*

Beyond the community management level, to be feasible and competitive under dynamic commercialised and globalised economic conditions, there should be a policy framework that provides direct and indirect incentives in place. 'Incentives' is defined as: 'Policy instruments that increase the comparative advantage of forest plantations and thus stimulates investment in plantation establishment and management (Enters *et al.*, 2004)'.

There are three important reasons why creating the right incentives is well grounded. First, there is a high expectation that under the current trends of implementing decentralisation and devolution of power to local communities, the roles of government have shifted, from being involved directly in implementing any programme, to taking prominent roles in providing direction, facilitating and stimulating the key agents to be interested in implementing any forestry related programmes voluntarily (Berkes *et al.*, 1991; Meijerink, 1997; World Bank, 1998; Carlsson and Berkes, 2005). Second, a 'command-and-control' approach, in the absence of economic incentives has been demonstrated to be ineffective in stimulating NRM (Natural Resources Management) and for reforestation initiatives to be successfully executed (Wunder, 2005; Nawir *et al.*, 2007).

The incentives are divided into direct and indirect incentives. Indirect incentives are categorised into variable and enabling incentives. Direct incentives include, for example: seedlings, specific provision of local infrastructure to support plantations, grants, tax concessions, differential fees, subsidized loans, and cost-sharing arrangements. There are two categories of variable incentives, which are sectoral incentives (e.g. input and

output prices, harvesting restrictions, trade restrictions (e.g. tariffs), a reasonable timber transportation tariff) and macro-economic incentives (e.g. exchange rates, interest rate policies, fiscal and monetary measures (e.g. income taxes)); enabling incentives (e.g. land tenure and resource security, socioeconomic conditions, accessibility and availability of basic infrastructure (ports, roads, electricity, etc), producer support services, market development, credit facilities, political and macro-economic stability, national security, and research and extension). These incentive frameworks provide the policy umbrella for effective efforts as part of the first (pre-conditions for successful CF) and second components in implementing a successful CF approach. These incentive frameworks at the national level should be in line with the multilateral trade agreement, and vice versa, the multilateral agreement should be designed by taking into account the local conditions from ecological, socio-cultural, and economic perspectives.

## Conclusions

After more than three decades, community forestry has evolved in its approaches and concepts regarding the relationship between local people and forests, which have been affected by the state and donor interests as well as the international agenda for forest management priorities at different times. In this era of economic globalisation and commercialisation, there are few options for community forestry management to alleviate poverty. Keeping up with the dynamics of global economic changes is a major challenge. Beyond subsistence and natural-forest focuses, there are, however, opportunities for community forestry management to be developed as enterprises. However, an advanced level of business knowledge is required if these enterprises are to enjoy significant benefits for smallholder producers and other rural villagers. It is also important for local producers to understand the risks associated with all development options. Further to success is the need for realistic and effective management practices that can assist communities to develop successful locally developed businesses and so escape the clutches of poverty.

The benefit sharing and power sharing principles are keys for government in developing incentives framework to facilitate feasible and profitable smallholder enterprises. The benefit-sharing principles are the centre of the equity indicators that provide communities with legalised access rights to forests and a share of the benefits derived from forests often generated by external commercial parties. Applying the efficiency indicators requires the power-sharing principle based in devolving authority to a community by the state as the incentives for communities to engage in sustainable forest use and management. A common form of power-sharing

includes co-management that is ideally implemented in line with the Adaptive Collaborative Management (ACM) framework.

## References

- Abbot, J. & Guijt, I. 1998. *Changing views on change: participatory approaches to monitoring environment*.
- Angelsen, A. & Wunder, S. 2003. *Exploring the forest-poverty link: Key concepts, issues and research implications*, Center for International Forestry Research (CIFOR), Bogor.
- Antinori, C. & Bray, D. B. 2005. *Community forest enterprises as entrepreneurial firms: Economic and institutional perspectives from Mexico*. *World Development*, 33, 1529-1543.
- Armitage, D. R., Plummer, R., Berkes, F., Arthur, R. I., Anthony T Charles, Davidson-Hunt, I. J., Diduck, A. P., Doubleday, N. C., Johnson, D. S., Melissa Marschke, McConney, P., Pinkerton, E. W. & Wollenberg, E. K. 2008. *Adaptive co-management for social-ecological complexity*. *Frontiers in Ecology and the Environment*, 6.
- Arnold, J. E. M. 1992. *Community Forestry: Ten Years in Review*, Food and Agriculture Organizations of the United Nations, Rome.
- Arnold, J. E. M. 2001. *Forests and People: 25 years of Community Forestry*, Food and Agriculture Organisation of the United Nations, Rome.
- Berkes, F., George, P. & Preston, R. 1991. *Co-management: the evolution of the theory and practice of joint administration of living resources*. *Alternatives*, 18, 12-18.
- Bliss, J. C. & Kelly, E. C. 2008. *Comparative advantages of small-scale forestry among emerging forest tenures*. *Small-scale Forestry*, 7, 95-104.
- Capistrano, D. & Colfer, C. J. P. 2005. *Decentralization: Issues, lessons and reflections*. In: COLFER, C. J. P. & CAPISTRANO, D. (eds.) *The politics of decentralization*. Earthscan, London, Sterling
- Carlsson, L. 2000. *Policy networks as collective action*. *Policy Studies Journal*, 28, 502-520.
- Carlsson, L. & Berkes, F. 2005. *Co-management: concepts and methodological implications*. *Journal of Environmental Management*, 75, 65-76.
- Charnley, S. & Poe, M. R. 2007. *Community forestry in theory and practice: Where are we now?* *Annual Review of Anthropology*, 36, 301-336.
- de Haan, L. J. 2000. *Globalization, localization and sustainable livelihood*. *Sociologia Ruralis*, 40, 339-365.
- Dhakal, M. & Masuda, M. 2009. *Local pricing system of forest products and its relations to equitable benefit sharing and livelihood improvement in the lowland community forestry program in Nepal*. *Forest Policy and Economics*, 11, 221-229.



- Dunning, G. 2007. The potential of commercial forestry to reduce poverty. In: OBERNDORF, R., DURST, P., MAHANTY, S., BURSLEM, K. & SUZUKI, R. (eds.) *A cut for the poor*. FAO and RECOFT, Bangkok.
- Enters, T., Durst, P. B., Brown, C., Carle, J. & McKenzie, P. 2004. What does it take? The role of incentives in forest plantation development in Asia and the Pacific. Executive summary. RAP Publication 2004/28. Asia-Pacific Forestry Commission, Food and Agriculture Organization of the United Nations, Regional office for Asia and the Pacific, Bangkok.
- Fisseha, Y. 1987. *Small-scale forest-based processing enterprises*, FAO, Rome.
- Glasmeyer, A. K. & Farrigan, T. 2005. Understanding community forestry: a qualitative meta-study of the concept, the process, and its potential for poverty alleviation in the United States case. *The Geographical Journal*, 171, 56-69.
- Haan, L. J. d. 2000. Globalization, localization and sustainable livelihood. *Sociologia Ruralis*, 40, 339-365.
- Hansen, S. 1990. Macroeconomic policies and sustainable development in the Third World. *Journal of International Development*, 2, 533-557.
- Harrison, S. & Suh, J. 2004. Progress and prospect of community forestry in developing and developed countries. *Small-scale Forest Economics, Management and Policy*, 3, 287-302.
- Hartanto, H., Lorenzo, M. C., Valmores, C., Arda-Minas, L., Burton, E. M. & Prabu, R. 2003. Learning together: Responding to change and complexity to improve community forests in the Philippines CIFOR, Bogor.
- Hoyle, D. & Levang, P. 2012. *Oil palm development in Cameroon*. WWF Cameroon, Cameroon.
- Jaffee, D. 1995. *Confronting globalization in the community forests of Michoacán, Mexico: Free trade, neoliberal reforms, and resource degradation*. Institute for Environmental Studies, Madison.
- Kubo, H. 2009. Incorporating agency perspective into community forestry analysis. *Small-scale Forestry*, 8, 305-321.
- Mahanty, S., Guernier, J. & Yasmi, Y. 2009. A fair share? Sharing the benefits and costs of collaborative forest management. *International Forestry Review*, 11, 268-280.
- Mallik, A. U. & Rahman, H. 1994. Community forestry in developed and developing countries. *The Forestry Chronicle*, 70, 731-735.
- McDougall, C., Ojha, H., Banjade, M. R., Pandit, B. H., Bhattarai, T., Maharjan, M. & Rana, S. 2008. *Forests of learning: Experiences from research on an adaptive collaborative approach to community forestry in Nepal*, CIFOR, Bogor.
- Meijerink, G. W. 1997. *Incentives for tree growing and managing forest sustainably: more than just carrots and sticks* Stichting BOS, Wageningen.
- Molnar, A., Barney, K., DeVito, M., Karsenty, A., Elson, D., Benavides, M., Tipula, P., Soria, C., Shearman, P. & France, M. 2011. *Large acquisition of rights on forest lands for tropical timber concessions and commercial wood plantations*. Policy Brief. International Land Coalition, Rome.
- Nawir, A. A. 2012. *Strategies to enhance small-scale commercial tree-growing inside state forests in Indonesia (Case study analysis in Jambi, West Kalimantan and West Nusa Tenggara)*. PhD Thesis, Australian National University.
- Nawir, A. A., Murniati, Rumboko, L., Hiyama, C. & Gumartini, T. 2007. Chapter 5. Portraits of rehabilitation projects in Indonesia: impacts and lessons learnt. In: NAWIR, A. A., MURNIATI & RUMBOKO, L. (eds.) *Forest rehabilitation in Indonesia: Where to after more than three decades?* Center for International Forestry Research (CIFOR), Bogor, Indonesia.
- Nawir, A. A., Santoso, L. & Mudhofar, I. 2003. *Towards mutually beneficial company-community partnerships in timber plantation: lessons learnt from Indonesia*. Working Paper 26. CIFOR (Center for International Forestry Research), Bogor.
- Neumann, R. P. & Hirsch, E. 2000. Commercialisation of non-timber forest products: review and analysis of research, CIFOR (Center for International Forestry Research) and FAO (Food and Agriculture Organization of the United Nations, Bogor and Rome).
- Noordwijk, M. V., Roshetko, J. M., Murniati, Angeles, M. D., Suyanto, Fay, C. & Tomich, T. P. 2008. Farmer tree planting barriers to sustainable forest management. In: SNELDER, D. J. & LASCO, R. D. (eds.) *Smallholder tree growing for rural development and environmental services: Lessons from Asia*. *Advances in agroforestry volume 5*. Springer.
- Pacheco, P. 2012. *Soybean and oil palm expansion in South America. A review of main trends and implications*, Center for International Forestry Research (CIFOR), Bogor.
- Pagdee, A., Kim, Y. & Daugherty, P. J. 2006. What makes community forest management successful: A meta-study from community forests throughout the world. *Society & Natural Resources*, 19, 33-52.
- Pardo, R. 1995. Community forestry comes of age *Journal of Forestry* 93, 20-24.
- Pleumarom, A. 2007. *Tourism, globalisation and sustainable development*. Tourism Investigation and Monitoring Team, Untamedpath, Bangkok.
- Poffenberger, M. 2006. People in the forest: community forestry experiences from Southeast Asia. *International Journal Environment and Sustainable Development*, 5, 57-69.
- Roberts, D. G. 2008. Globalisation and its implications for the Indian forest sector. *International Forestry Review*, 10, 401-413.
- Roshetko, J. M., Snelder, D. J., Lasco, R. D. & Noordwijk, M. V. 2008. Future challenge: A paradigm shift in the forestry sector. In: SNELDER, D. J. & LASCO, R. D. (eds.) *Small-*

- 
- holder tree growing for rural development and environmental services: Lessons from Asia. *Advances in agroforestry volume 5*. Springer.
- Scherr, S. J., White, A. & Kaimowitz, D. 2003. Making markets work for forest communities. *International Forestry Review*, 5, 67-73.
- Snelder, D. J. & Lasco, R. D. 2008. Smallholder tree growing in South and Southeast Asia. In: SNELDER, D. J. & LASCO, R. D. (eds.) *Smallholder tree growing for rural development and environmental services: Lessons from Asia. Advances in agroforestry volume 5*. Springer.
- Solesbury, W. 2003. *Sustainable livelihoods: A case study of the evolution of DFID policy*, Overseas Development Institute, London.
- Sunderlin, W. D., Angelsen, A., Belcher, B., Burgers, P., Nasi, R., Santoso, L. & Wunder, S. 2004. Livelihoods, forests, and conservation in developing countries: An overview. *World Development*, 33, 1383-1402.
- Tisdell, C. 2001. Globalisation and sustainability: environmental Kuznets curve and the WTO. *Ecological Economics*, 39, 185-196.
- Vedeld, P., Angelsen, A., Sjaastad, E. & Kobugabe, B. 2004. *Counting on the environment: Forest incomes for the rural poor*. Environmental Economic Series No. 98. World Bank, Washington, D. C.
- White, A. & Martin, A. 2002. *Who owns the world's forests? Forest tenure and public forests in transition*. Forest Trends, Washington, D. C.
- Wily, L. A. & Mbaya, S. 2001. *Land, People, and Forests in Eastern and Southern Africa at the Beginning of the 21<sup>st</sup> Century*, World Conservation Union (IUCN), Nairobi, Kenya.
- Wollenberg, E. & Nawir, A. S. 1998. *Estimating the incomes of people who depend on forests*. In: WOLLENBERG, E. & INGLES, A. (eds.) *Incomes from the forest: methods for the development and conservation of forest products for local communities*. CIFOR and IUCN, Bogor.
- World Bank 1998. *Report from the international Community-Based Natural Resource Management (CBNRM) workshop, 10-14 May 1998*.
- Wunder, S. 2005. *Payment for environmental services: some nuts and bolts*, Center for International Forestry Research (CIFOR), Bogor.





Towards commercially oriented community forestry (CF) management:  
coping with economic globalization and commercialization

Ani Adiwinata Nawir  
Center for International Forestry Research (CIFOR)

IUFRO 2012 Small-scale Forestry Conference

Amherst, 24 September 2012







## Scope of the presentation:

1. Setting the context: what & why?
2. The evolving community forestry approaches and practices: lessons learnt from more than three decades
3. Community forestry approaches for improving the livelihoods of forest communities: challenges & opportunities
4. Components of feasible and viable community forestry enterprises in facing the dynamic globalized economics climate
5. Conclusions



## Community forestry: the current concept

It is broadly defined as:

- ❖ Management with the central objective to match simultaneously of ecological sustainability & gained long-term local, social and economic benefits,
- ❖ Some degree of responsibility & with authority granted to local communities: independent decision making from state forestry agency control.

Sources: Mallik and Rahman, 1994; Hirsch, 1998; Arnold, 2001; and Charnley and Poe, 2007



## Community forestry: the common features

- ❖ Managing natural or plantation forests at the local level in a way that is compatible with local objectives and values,
- ❖ It is expected the benefits must be sustainable & the local community must participate actively, &
- ❖ Involves a number of users who live in the same area, and is primarily carried out by peasant farmers or smallholders.

Sources: Mallik and Rahman, 1994; Hirsch, 1998; Arnold, 2001; and Charnley and Poe, 2007





# Community forestry: current management types

- ❖ Not only on collective management – including an individual household basis
- ❖ Not only based on formal rights - including de facto forms of forest uses & management

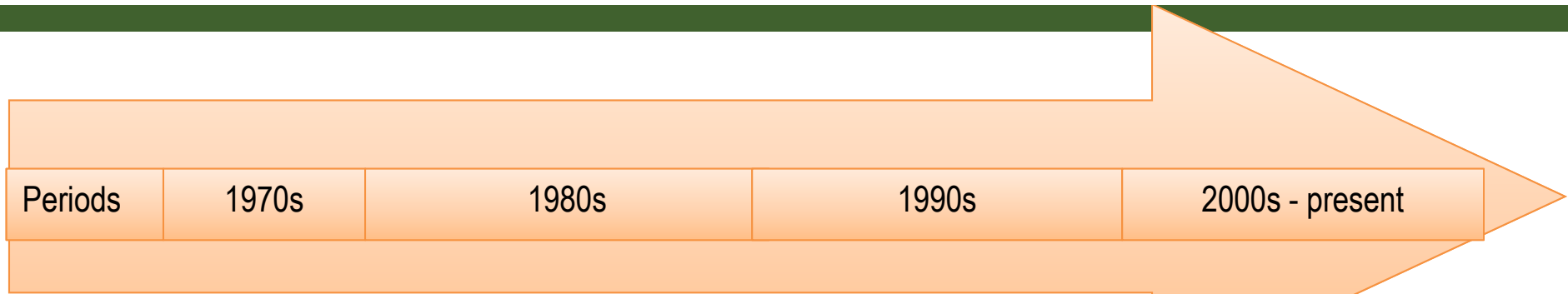
Management of forestry resources	Types of control or ownership of resources		
	Private	Communal	State
Communal	Private lands organised by community institutions	Communal on community lands (e.g. CBFM in Nepal)	State land allocated for community-based forestry projects (e.g. reforestation projects)
Private	Privately managed forests around households (e.g. farm forestry)	Privately-managed on community lands (e.g. Customary land in Borneo: <i>tembawang</i> )	Public land allocation schemes for individually management
Co-management	Co-management on privately-owned lands (e.g. outgrower schemes)	Co-management on communal lands (e.g. Joint Forest Management)	State lands allocated to community group (e.g. CBFM in the Philippines)

# Scope of the presentation:

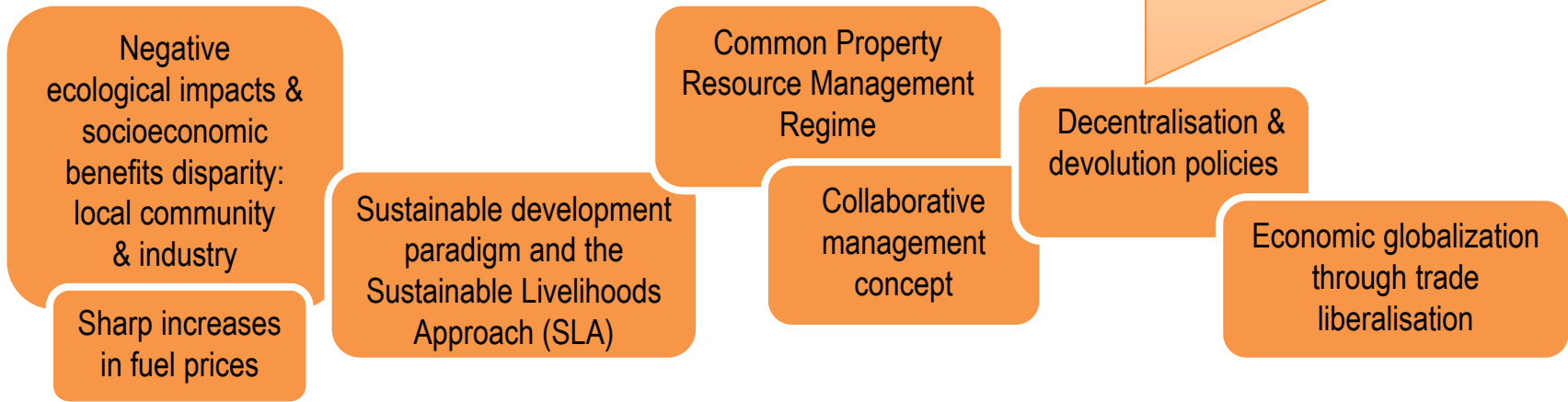


1. Setting the context: what & why?
2. The evolving community forestry approaches and practices: lessons learnt from more than three decades
3. Community forestry approaches for improving the livelihoods of forest communities: challenges & opportunities
4. Components of feasible and viable community forestry enterprises in facing the dynamic globalized economics climate
5. Conclusions

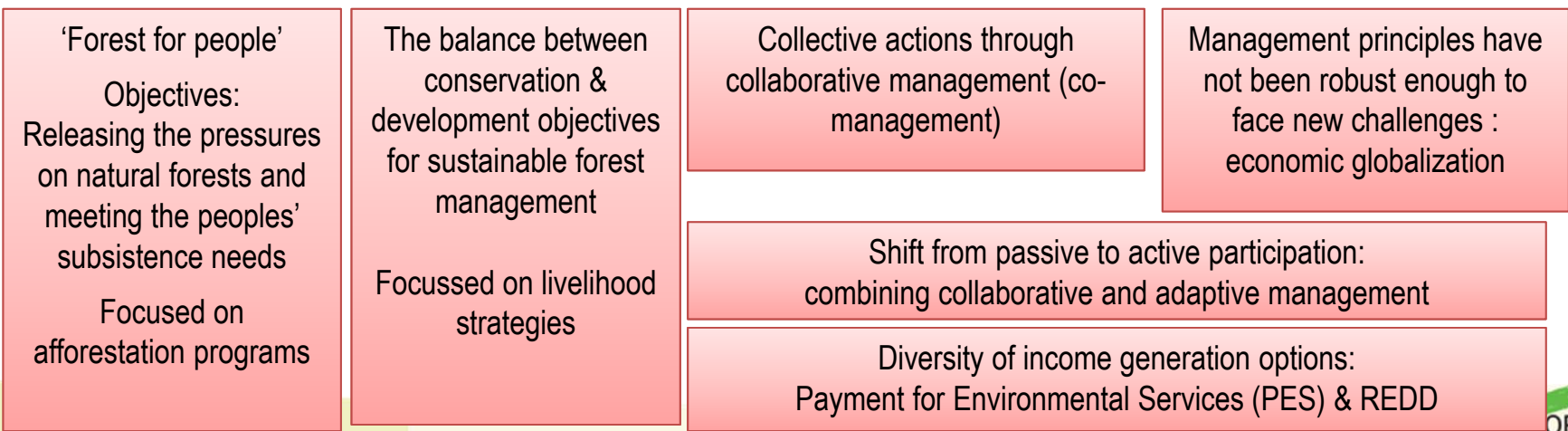




Key drivers influencing the evolving approaches



Evolving approaches





## Important lessons learnt: limited community participation & exclusive rights

1. Defined externally by all stakeholders **but** not local communities
2. Benefits focus mainly on **natural forest-based products** for household **subsistence**, compared to rights for private and state-owned companies
3. The **slow pace** of **community empowerment efforts** compared to the **rapid development** of the **globalized economy & commercialized market**
4. Implemented as **the last option** in managing the forests and improving the forest condition, mainly aims **to enforce the state property status**:  
E.g. reforestation programmes with limited access to the end benefits
5. Nevertheless, the CF movement gained voices for communities' greater access & rights to utilise the resources in the 1980s,  
& stimulated by **the shift towards decentralisation & devolution policies** in 1990s



The delay in decision by the government to involve communities in managing state forests has caused financial & ecological impacts:  
**Illustration from Indonesia (Sumbawa, West Nusa Tenggara)**

Tenurial conditions	State property enforced	<b>Impacts:</b> → Current standing stocks 37%-55% from initially planted → Economic lost ≈ 6 times current potential annual income				
	Open access	Illegal farming		Post reforestation programme: Illegal logging & forest encroachment		Forest encroachment
	Common state property				<b>Programme to involve community:                  Collaborative management</b>	
Year	Before 1990	1990 - 1995	1996 - 2000	2001 - 2005	2006-current	

File: Rev Chap 4 Time line copy

# Scope of the presentation:



1. Setting the context: what & why?
2. The evolving community forestry approaches and practices: lessons learnt from more than three decades
3. Community forestry approaches for improving the livelihoods of forest communities: challenges & opportunities
4. Components of feasible and viable community forestry enterprises in facing the dynamic globalized economics climate
5. Conclusions





## The characteristics of the benefits from the forests: NTFPs, timber & ecological services

## NTFPs (Non Timber Forest Products):

reliable sources of subsistence & a coping strategy during difficult times for the poorest with limited livelihood options outside the forests

Challenges to lift local people out of poverty:

1. **Limited economies of scale for commercialization**: high harvesting costs per unit area
2. **Remote areas**: difficult access to market & high transportation costs, resulting in low product prices at community level
3. **Tenurial arrangement**: little incentive for intensive management - enforcing property rights involves significant transaction costs
4. **Opportunities beyond subsistence**: the communities receive only a small share of the profit margins (e.g. Bioprospecting)
5. The long-term **sustainability of incomes is in danger** due to the diminishing forests in many parts of the world.



## Timber:

benefits from timber captured mainly by private companies and states  
(e.g. contributions to household incomes is only 2%)

1. The **'unfavourable characteristics' of timber-based management** to the poor, due to:
  - a long term investment with high risks due to price fluctuations, tenure insecurity, and natural hazards (e.g. fire)
  - feasible economies of scale require a large-scale operation
2. **Timber potentially can improve the livelihoods** of forest communities, challenges:
  - providing exclusive access & rights: opportunities through decentralisation policy and devolution
  - promoting smallholder tree-growing: requires innovative approaches
  - adding value-based options through small-scale wood processing: needs a certain amount of financial capital





## Ecological services:

provided to on-site forest users and off-site beneficiaries at the regional, national or global levels (e.g. downstream water supplies)

- ❖ Mechanism of Payment for Environmental Services (PES):
  -  the most promising poverty reduction scheme that compensates locals for off-site benefits currently provided free of charge (Angelsen and Wunder, 2003)
- ❖ Compensation mechanisms are relevant :
  - carbon storage and sequestration
  - biodiversity conservation
  - hydrological services
  - tourism
- ❖ Under explored – practical applications on the ground are challenging & still limited in Asia and Africa.





Past and current community forestry management practices have not successfully fully alleviated poverty of the forest communities, due to few opportunities to capture the highest proportion of economic rents from forest benefits



There are three challenges in translating opportunities under globalized and commercialized economics that can benefit local communities

Commercialization: towards more market-oriented production processes

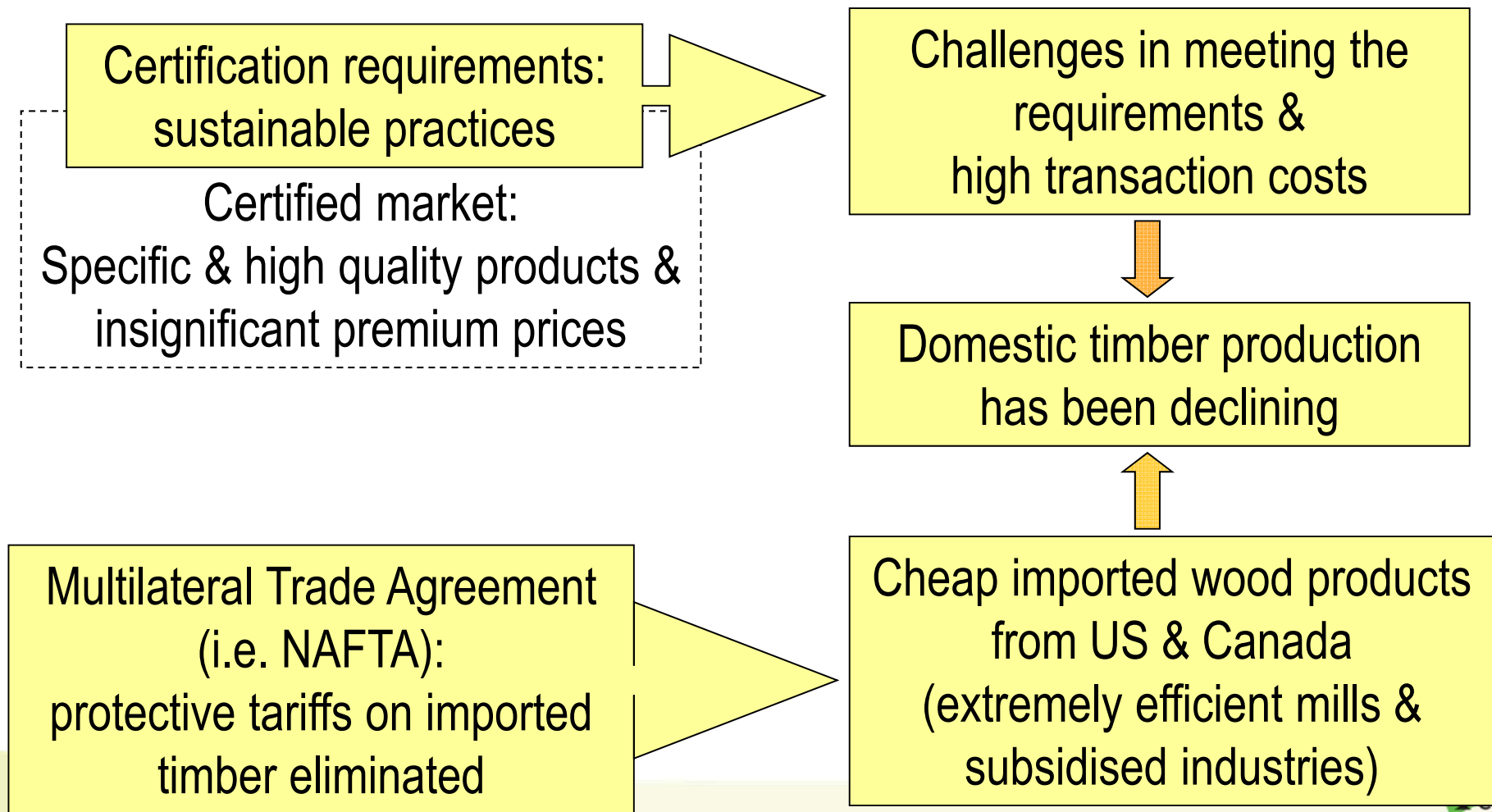
Globalization: a close association between 'global' and 'local' or 'glocalization' (Robertson, 1995 in Haan, 2000)

Promoted as a way to reduce poverty by creating new niche markets and potential buyers of scarce forest products: multilateral agreements – AFTA, NAFTA



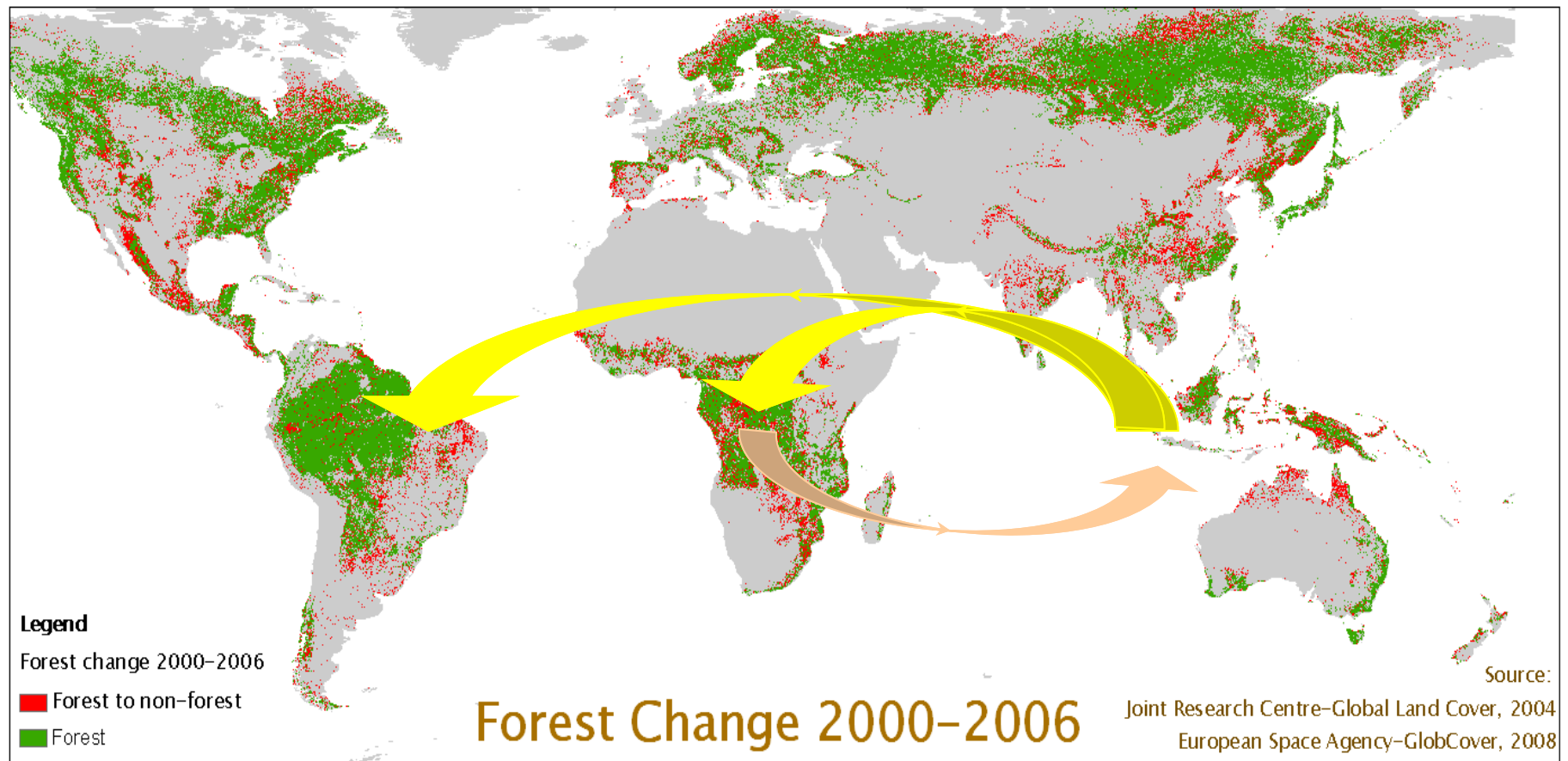


(1) Low comparative advantages & lack of consideration for local socioeconomic & sometimes stringent ecological concerns in multilateral agreements,  
➔ Unfair competition & difficulties for smallholders to meet global market requirements - **E.g. Case of smallholder timber production in Mexico**



(2) Direct and indirect land use changes driven by foreign companies' investments in agricultural and forestry plantations:

Moratorium in Indonesia: Oil palm companies look for lands in new regions



Source: Nawir *et al.*, 2011



### (3) CF management principles have not been robust enough to face the new challenges coming from trade liberalisation

The slow pace of development for community empowerment, communities involved in CF do not have:

- ❖ adequate management and financial capacity
- ❖ the business knowledge and skills required to deal with international investors and traders

Impacts:

- ❖ local products cannot compete with imported mass-produced products
- ❖ a drop in prices and profits received by local producers;
- ❖ increased pressure on forests:  
they have to switch to unsustainable practices to compensate the decreasing returns from the drop in price and profits







## Scope of the presentation:

1. Setting the context: what & why?
2. The evolving community forestry approaches and practices: lessons learnt from more than three decades
3. Community forestry approaches for improving the livelihoods of forest communities: challenges & opportunities
4. **Components of feasible and viable community forestry enterprises in facing the dynamic globalized economics climate**
5. Conclusions



## 4. Components of feasible and viable community forestry enterprises in facing the dynamic globalized economics climate

- 4 (1). The pre-conditions for feasible CF program
- 4 (2). Key success indicators implementing CF
- 4 (3). Direct and indirect incentives to support feasible and competitive community enterprise





4 (1). The pre-conditions for feasible CF program to support robust management practices





## Pre-conditions at community management level: robust management practices

An Identifiable community

Secure tree & land-use tenure

A community interests in managing the resources

A management plan: basic standards of good resource management

An Identifiable area

An accepted set of management objectives

An institution with sufficient financial management & technical skills

Economically profitable forest unit

## Necessary conditions involving commitments from the third parties (e.g. central & local government)

A system for allocating benefits & costs

The authority & ability to make & enforce rules & regulations

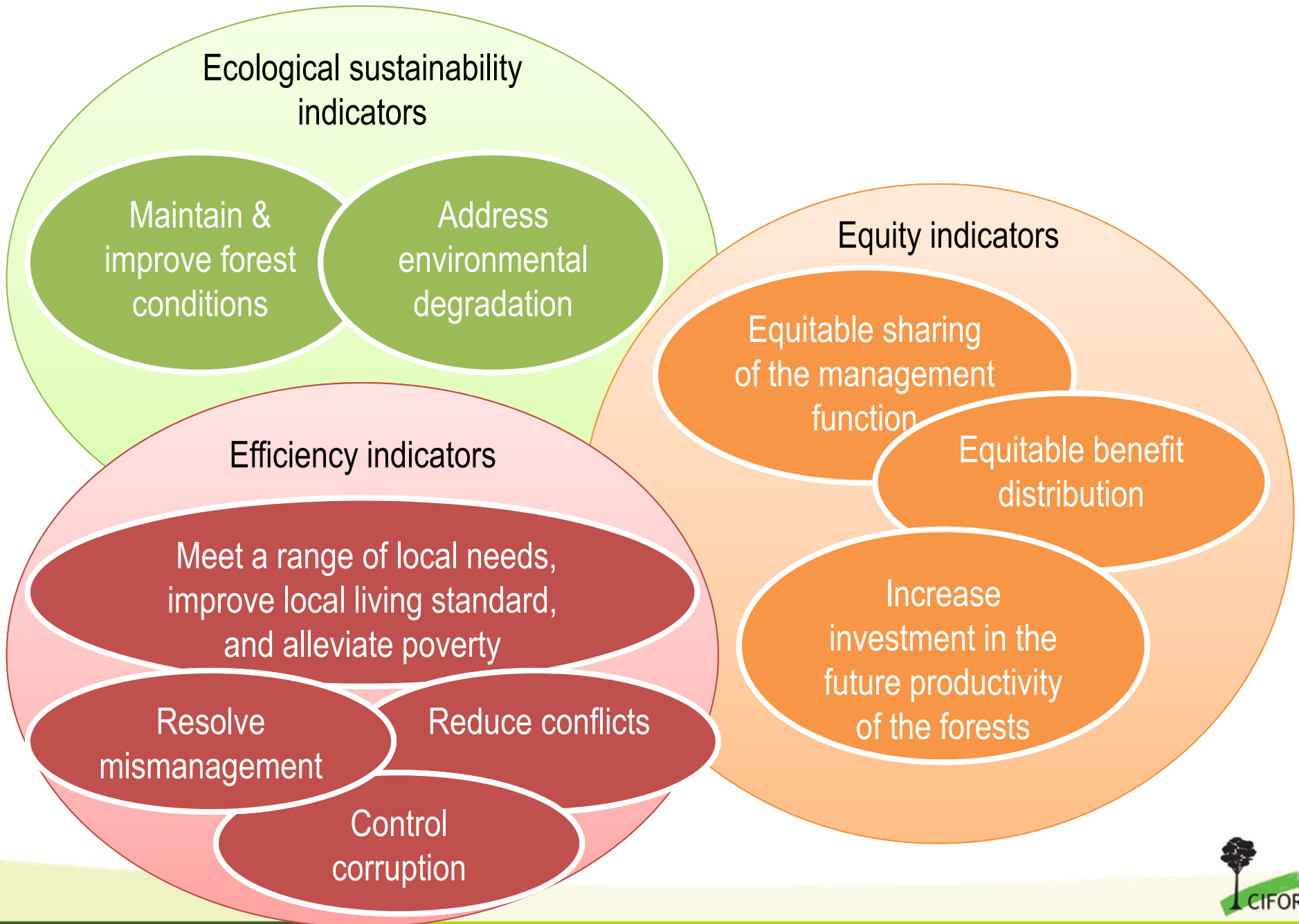
A strong commitment from the central government & the unconditional support of district forestry officers

Some means of subsidising uneconomic management

Monitoring and evaluation mechanism



## 4 (2). Key success indicators implementing CF: expected outcomes





#### 4 (3). Direct and indirect incentives to support feasible and competitive community enterprise

*'Incentives' is defined as:*

*policy instruments that will motivate and stimulate **economic agents** by creating an environment in which **it becomes attractive to such agents to pursue a certain behaviour** (in this case community forest management) that will be beneficial from society's point of view (Meijerink, 1997).*



There are two important reasons why creating the right incentives is well grounded:

1. Under the current trends of implementing decentralisation and devolution of power to local communities **the roles of government have shifted:**

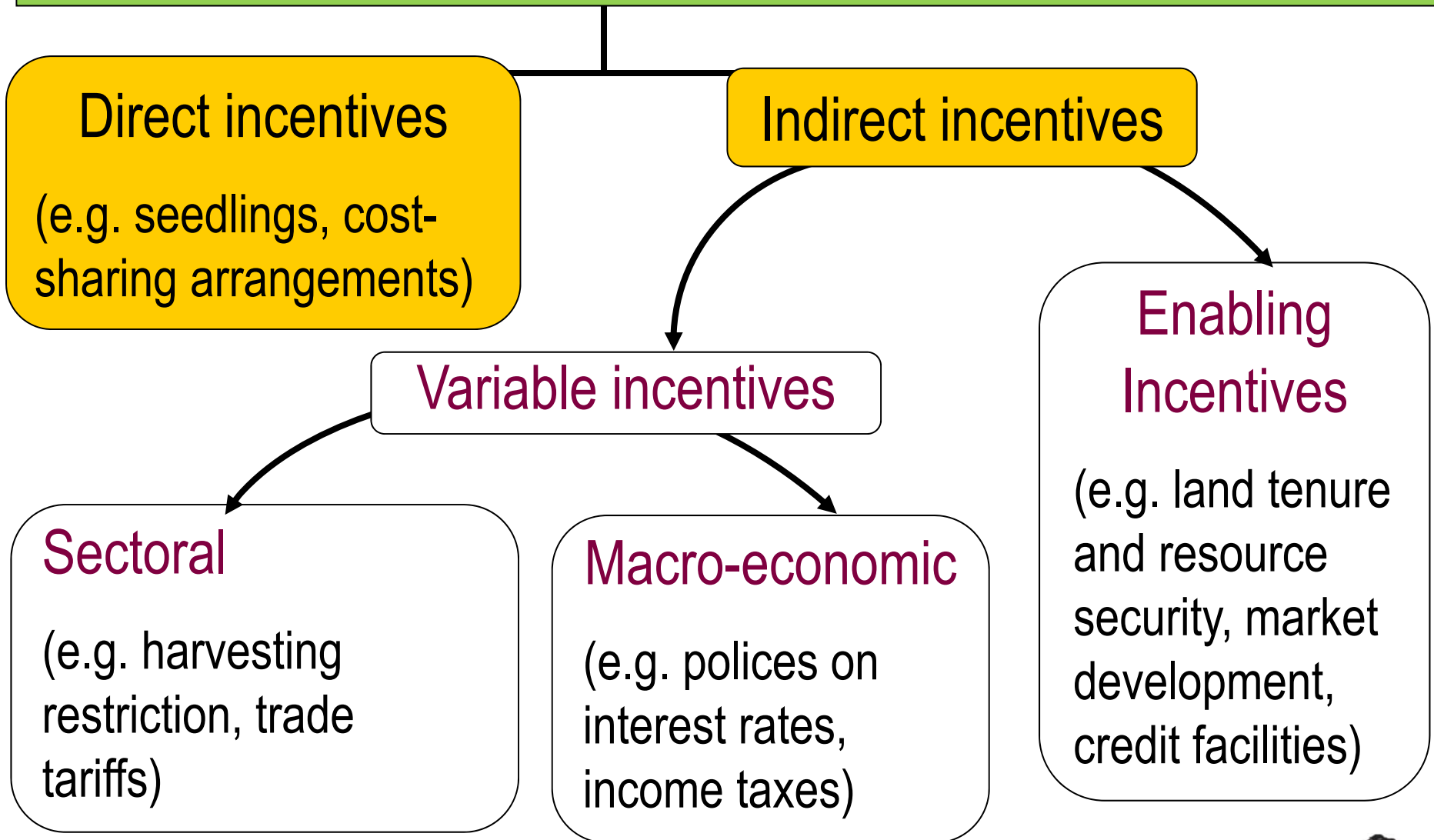


From being involved to taking **prominent roles in providing direction, facilitating and stimulating the key agents' interest** in implementing any forestry related programmes voluntarily

2. A **'command-and-control' approach**, in the absence of economic incentives ineffective in stimulating NRM to be successfully executed



# Framework to develop incentives

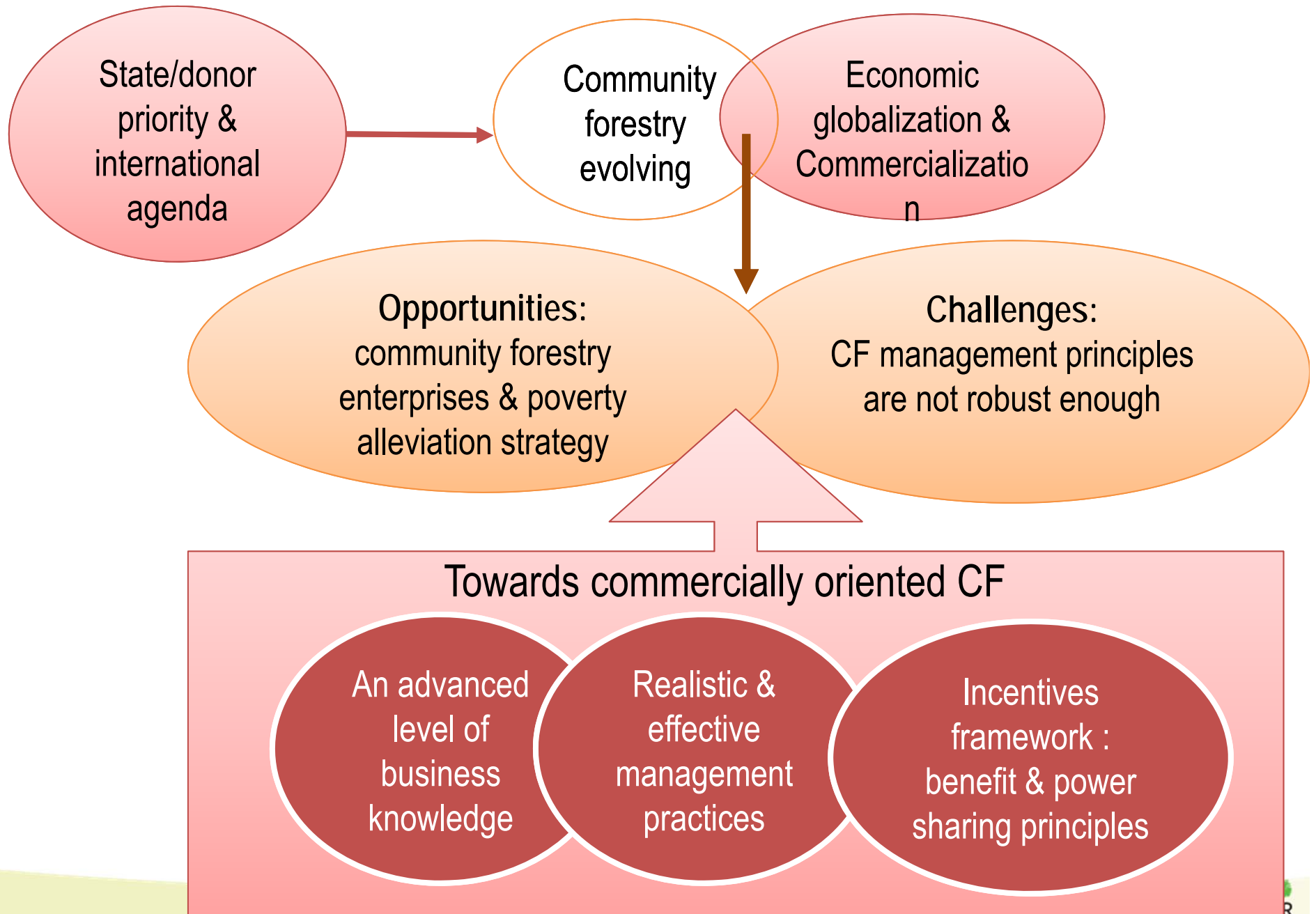






## Scope of the presentation:

1. Setting the context: what & why?
2. The evolving community forestry approaches and practices: lessons learnt from more than three decades
3. Community forestry approaches for improving the livelihoods of forest communities: challenges & opportunities
4. Components of feasible and viable community forestry enterprises in facing the dynamic globalized economics climate
5. Conclusions





# IUFRO 3.08.00 Small-Scale Forestry Conference 2012: Science for Solutions

24-27 September 2012

Amherst, Massachusetts USA



**CONFERENCE PROCEEDINGS**





*IUFRO 3.08.00 Small-Scale Forestry  
Conference 2012: Science for Solutions*

24-27 September 2012

Amherst, Massachusetts USA

<http://iufrossf2012.org/>

Coordinated by the Family Forest Research Center  
([www.familyforestresearchcenter.org](http://www.familyforestresearchcenter.org)) – a joint project between  
the USDA Forest Service and the University of Massachusetts Amherst

Conference Sponsors



**UMASS  
AMHERST**



**CONFERENCE PROCEEDINGS**

Designed and Edited by  
Spencer R. Meyer

Cover Image

This word cloud represents the nearly 150,000 words contained in this document. The larger the relative size of the word, the more prominently the word appears in this proceedings.