

## FORESTRY EDUCATION AND TRAINING: TIME FOR MAJOR REFORMS

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## ABSTRACT

Forestry education and training in India which is based on conventional forest management centred towards state, relying on a centralized bureaucracy, This has now begun to change, due to several factors including growing mobilization by affected communities, realization by government and civil society that effective conservation needs community involvement, and several global processes redefining forest management and governance. For protected areas, two new categories of governance have been recognized: 'shared governance or co-management of protected areas (CMPA)' in which governments and local communities jointly decide, plan, and execute management measures; and 'community conserved areas (CCAs)', in which local communities are the predominant decision-makers. Various governance types can be combined to conserve large 'landscapes' rather than only islands of PAs. The IFS syllabus needs revamping to centre around concepts and practices of participation, rights, CMPAs and CCAs, landscape-level conservation, and combining traditional and modern knowledge.

*Key words:* Forestry education, Training, Reforms.

## Introduction

In a welcome move, the Indian Forest Service syllabus as taught at the Indira Gandhi National Forest Academy is due for revision. Late last year (2011) a few civil society organizations were asked to comment on the revisions. This article is based on perusal of the syllabus as given in the 'Indian Forest Service (Probationers Final Examination) Regulations, 2007', and on three decades of interacting with communities and forest staff in various parts of India.

Before getting into the kind of changes that author thinks are needed in the IFS syllabus and teaching, it would be useful to provide some context of the changes that are taking place in forest-related policies and practice.

## Changing paradigms of conservation and management

Across the world, models of conservation and management of natural ecosystems are undergoing significant change. Early European and American models were based on centralized, trained bureaucracies and scientific bodies being mandated to conserve forests and protected areas. In most countries these have remained predominant till recent times, and prevail even now in many. Whatever the outcome of such models was for the ecosystems sought to be conserved, one key result in many countries and situations has been the alienation of local communities, the sidelining of their own knowledge and practices relevant to conservation, and the curtailment of customary and traditional rights to access and manage forest resources (Brockington *et al.*, 2006;

Dowie *et al.*, 2009). Frequent and often violent clashes between forest or PA managers and local communities have been amongst the results; so has the increasing difficulty of actually achieving conservation due to either lack of cooperation or outright hostility by people within or surrounding these areas.

All this is coupled with the fact that forestry agencies have rarely got the full resources and focus they need to carry out their responsibilities; where governments have been keen to divert forest lands, or continue to exploit forests for commercial timber in a big way, the forest agencies have often been sidelined. The agencies or their individual officers therefore often get sandwiched between a hostile local population and political masters who would rather not hear them voice opposition to their exploitation plans.

In the last 2-3 decades, there is a gradual but very visible change in the above situation in dozens of countries, towards more participatory, decentralised, integrative approaches (described briefly below). This is for a number of reasons:

1. Growing mobilization amongst communities at local, national and global levels, demanding secure rights and tenure to forests and forest lands, and involvement in (or outright handing over of) governance of local natural resources using their knowledge and practices.
2. Increasing realization amongst forest and PA agencies that they simply cannot achieve the

Forestry education and training need to be reoriented to focus on the new paradigms of participatory, rights-based and community-centred conservation and management.

conservation or sustainable use mandate on their own, and need both grassroots as also higher political support.

3. Similar realization amongst many influential conservation and forestry groups from civil society, and their advocacy for a range of issues including community rights, decentralised governance, and 'ecosystem' approaches which integrate conservation, livelihoods, cultural and other aspects.

Global evidence of the paradigm shifts taking place in forest and PA management is available in the framing of policies within the world's largest conservation body, the International Union for Conservation of Nature (IUCN), as also the wording of a number of global treaties such as the Convention on Biological Diversity (CBD). In the case of PAs, for instance, this shift is reflected in the various resolutions of the World Parks Congress convened by IUCN in 2003, and subsequently the 2004 Programme of Work on Protected Areas (PoWPA) of the CBD, which is legally binding on all contracting Parties including India ([http://www.iucn.org/about/work/programmes/pa/pa\\_event/wcpa\\_wpc/](http://www.iucn.org/about/work/programmes/pa/pa_event/wcpa_wpc/); <http://www.cbd.int/protected/pow/learnmore/intro/>). These international forums, and many subsequent to this such as the 2004 and 2008 World Conservation Congresses, have given the clear message that ecosystem (including forest) and PA management has to (amongst other aspects):

- Respect and recognize the rights of indigenous peoples and local communities that have traditionally lived amidst or used such areas;
- Recognise and support the conservation practices and knowledge of such peoples and communities;
- Centrally involve them in all decision-making relating to governance and management of such areas, including at both individual sites and for the system as a whole;
- Move towards policies and practices that integrate conservation, livelihoods, culture, and other aspects through the 'ecosystem approach' or across larger landscapes and seascapes rather than only through and isolated 'island' approach.

The global paradigm shifts are partly an outcome of, and partly leading to, policy trends in many countries providing greater involvement of, or outright governance powers to, indigenous peoples or local communities. A recent publication reveals that forest area under indigenous peoples' or local communities' ownership or management is estimated at about 500 m.ha.; this has steadily increased from about 10% of the world's forests

to about 15% (RRI, 2012).

#### Protected area governance paradigms

Similar trends are being seen in the case of protected areas (PAs). Policies, laws, or actual practice are changing in many countries towards two major new governance paradigms. First, where governments and communities share decision-making powers, responsibilities, and benefits, also called 'shared governance or co-management PAs' (CMPAs); second, where the predominant decision-making is by communities, also called 'indigenous peoples and local communities conserved territories and areas' (ICCAs) (Borrini-Feyerabend, 2008; Dudley, 2008; Borrini-Feyerabend, 2010 a&b; Kothari, 2006 a,b&c).

In one sense this should not be surprising. More and more evidence is available of how both forest and PA governance by the state was superimposed upon pre-existing customary territories of indigenous peoples or local communities. For instance, the majority of PAs in Chile, Philippines, and Australia (amongst others), were established on indigenous or community lands (Arce and Alwyn, 2012; Pedragasa, 2012; Smyth and Grant, 2012). In some countries like Bolivia, indigenous rights were respected while establishing PAs (Miranda and Vadillo, 2012), but in very many countries they were not. This situation has been changing over the last few years. As such peoples and communities find their voice and demand decentralised governance, there is bound to be a shift in policies, even if in some countries it may extremely slow or interrupted by repressive action against communities demanding their rights. The evidence put together by the Rights and Resources Initiative indicates that the trend is inexorable, though uneven across the world.

It is important to realize that CMPAs are not simply about sharing some benefits, or 'involving' local people in management actions that are decided by official forest agencies. It is about sharing power and responsibilities, about institutions where government and communities jointly take decisions; in some countries this has been practiced from the start of formal PA policies being initiated, but in most it is a more recent trend (Kothari, 2006a).

ICCAs are the 'new kid on the block', as far as formal or official conservation policies are concerned. Defined as "natural and/or modified ecosystems, containing significant biodiversity values, ecological benefits and cultural values, voluntarily conserved by indigenous peoples and local communities, through customary laws or other effective means", ICCAs include a bewildering variety of sites and territories. They range from tiny

sacred forests and ponds with nesting waterfowl provided full protection by the nearby village, to huge territories of indigenous (including mobile/nomadic) peoples (Kothari *et al.*, 2012).

In many ways ICCAs are the world's earliest PAs, some of them thousands of years old; but surprisingly their formal recognition is very recent. There is increasing evidence that ICCAs may actually cover as much if not more than the total area covered by government PAs (currently about 13% of the world's terrestrial surface) (UNEP, 2012; Kothari *et al.*, 2012)

Some countries like Australia realized the potential of indigenous or community conservation much earlier than others; today, indigenous protected areas that are under the control of aboriginal peoples (on their own or with involvement of government agencies) cover over 25% of the PA estate of the country (Smyth and Grant, 2012). Subsequent to the recognition given to ICCAs by the IUCN, and the explicit requirement of the CBD PoWPA for all countries to recognize and support ICCAs, several other countries have started exploring this option for conservation. The Philippines is currently undergoing a major review of its PA legislation, with the explicit purpose of recognizing ICCAs in ways that indigenous peoples find acceptable and which will make it easier to protect them against destructive forces like mining companies; given that indigenous territories cover over 60% of the country's forests, this could be a powerful way to achieve long-lasting conservation (Pedragosa, 2012). In the south pacific and south-east Asian, local communities govern hundreds of locally managed marine areas (LMMAs), showing that integrating conservation and livelihood is eminently possible, and they are given recognition by the governments.

It is important to realize that the policy and legal recognition of ICCAs needs to happen in ways that are both appropriate and adequate. They must respect or provide for secure land and resource tenure, mandate diverse local ways of governance and management rather than impose uniform solutions from above, help protect them against destructive external forces, provide support for building capacity, and so on (Borrini-Feyerabend *et al.*, 2010b; Kothari, 2012).

#### Situation in India

Since 1990, India has formally moved towards more participatory forestry, with its shift to Joint Forest Management. However, several critical reviews have shown that while the spread of JFM has been impressive (covering over 22 million hectares, managed JFM Committees in over 100,000 villages), the situation is far from being one of genuine 'shared governance or co-

management' (MoEF-MoTA, 2010). The recent directive of the Ministry of Environment and Forests (MoEF) to bring JFM committees under the gram sabhas, could lead to further democratization and decentralisation of decision-making; but on the other hand, it is surprising that such a move does not make reference to, or use of, the democratization that is provided for by the Scheduled Tribes and Other Traditional Forest Dwellers' (Recognition of Forest Rights) Act 2006. This Act (hereafter called the Forest Rights Act or FRA 2006) mandates the recognition of the right of gram sabhas to manage and protect forests which they have been traditionally protecting and conserving, through committees they set up. As noted by a joint committee of the MoEF and the Ministry of Tribal Affairs (MoTA) set up to review implementation of the FRA and make recommendations on forest governance, the central and state governments should be actively facilitating gram sabhas to claim community forest rights and establish such institutions for protecting and managing forests (MoEF-MoTA, 2010). According to it, potentially half or more of India's forests could come under such decentralised governance. It also recommends, however, measures that would help villages build (or rebuild) the capacity to conserve and manage, and the nesting of gram sabha committees within larger landscape and district/state level bodies that are democratically comprised, and can ensure both conservation as also livelihood security.

With regards to PAs, India is yet very far from a genuine situation of shared governance or co-management. Programmes of ecodevelopment have generated some level of involvement of communities within/around PAs, and some level of benefits to them from PA-related activities. But decisions relating to individual PAs or the PA system as a whole are still taken exclusively by the government; even the Sanctuary Advisory Committees that were to set up under the Wild Life (Amendment) Act 2002, have not been set up in any state. The MoEF-MoTA committee mentioned above has recommended a move towards co-management, as have many civil society organizations working on conservation and rights issues; as has been pointed out, India is in violation of its commitments under the CBD PoWPA if it does not move in this direction.

One increasing possibility is that where communities get their community forest rights recognized within PAs (as has happened in at a few sites), they will push for community-based governance or shared governance of the PA. This is for instance the case with the Biligiri Rangaswamy Temple Sanctuary and Tiger Reserve in Karnataka (Kothari *et al.*, 2011).

Another possibility is where the provision of critical wildlife habitats (CWH) in the FRA is implemented in its full spirit and letter. As indicated in detailed proposed guidelines by the future of conservation network (and the 2011 draft guidelines of the MoEF, currently under finalisation), there is significant potential in this provision to generate a landscape of various governance and management types from strict protection to sustainable use, from shared governance to community conservation (see proposed guidelines at <http://www.kalpavriksh.org/index.php/conservation-livelihoods1/networks/future-of-conservation.html>).

As regards ICCAs, there is some progress in India towards their recognition (known here more as community conserved areas or CCAs). This has been a result of considerable civil society effort to (a) point to the existence of thousands of CCAs, and (b) advocate their appropriate recognition both to help them achieve more effective conservation and to secure livelihoods based on these ecosystems. The MoEF has since the 11<sup>th</sup> 5-Year Plan had a scheme with guidelines on appropriate support of CCAs. These are also now recognizable under a number of laws: as community reserves under the WLPA, as biodiversity heritage sites under the Biological Diversity Act 2002, as Community Forest Resources under the Forest Rights Act 2006, and in a few state-specific laws (Pathak, 2012).

However, actual progress towards recognition and support has been extremely slow. This is partly because some of the legal provisions are regressive or inappropriate; for instance the WLPA provision for community reserves (CRs) imposes a uniform institutional structure for management, ignoring the enormous diversity of structures that already manage such areas; it does not allow for existing PAs to be converted directly to CRs even if it is recognized that they may be better conserved by such a change; and it does not allow for government lands to be declared CRs, even though thousands of existing CCAs are actually on such lands (for the simple reason that most commons were converted into government lands during and after colonial times).

The FRA 2006 has provided much greater potential for giving legal backing to forested CCAs. This is seen in the case of Vidarbha in Maharashtra where about 350,000 acres of forest have been recognized as CFRs for gram sabhas to manage; in most other parts of the country, however, progress towards recognizing CFRs is, in the words of the MoEF-MoTA Committee, "abysmally slow" (MoEF-MoTA, 2010). A 24<sup>th</sup> May 2012 letter from MoTA to state governments notes that the CFR right to manage and protect forests has "largely either not been

implemented or been misimplemented".

What changes are needed in the IFS syllabus and teaching methods?

Given the above context and trends, the current (2007) IFS syllabus is inadequate or incomplete on a number of counts. It does not take on board a number of new situations, both globally and within India. At the very least, it needs to bring in the following additional elements or changes:

#### *In the Introductory Phase*

Given the realization that traditional knowledge of forests (species, dynamics, etc.) is extensive and important for the future of forest management and conservation, it is important to build in ways to impart this knowledge to probationers. This can be done both through introducing ethnobiology in the subjects (ethnobotany is already included), as also bringing in experts from communities to talk about their own knowledge systems relating to forests. This may seem rather difficult, but a start can be made and gradually more can be introduced till it becomes as central a part of the syllabus as modern knowledge.

Both the history and emerging trends in forestry need to include community-based governance, as it is increasingly realized that communities had a variety of institutional and customary practices to sustainably manage and conserve forests, especially in pre-colonial times, and that there are many renewed initiatives by communities to govern and conserve forests in modern India (not only JFM, but self-initiated conservation by communities). The corollary to this is also the history of the alienation of communities from forest governance, esp. as a result of colonial policies.

#### *In Professional Phase - I*

Under 'Forest Policies and Laws', the FRA 2006 needs to be incorporated; it is surprising that a syllabus formulated in 2007, and the proposed revisions to it in 2011, omitted this central legislation. The module on this should incorporate the basics of the FRA and its Rules, their implications for forest governance and management, and a regularly updated sharing of the status of implementation. Field visits should include at least one to an area where communities have obtained community forest resources and are planning or implementing their management practices.

Under 'Biodiversity Conservation', the history and current practice of Community Conserved Areas (CCAs) should be integrated, using the increasing documentation on this that civil society is undertaking. This module too should have at least one field visit, to a CCA under active governance and management (*noting*

that JFM sites do not qualify as CCAs unless predominant decision-making is by the community).

#### *In Professional Phase - II*

Under 'Forest Survey', community-based mapping and surveying should be taught. As communities gain CFR recognition under FRA, or for other purposes, they are increasingly doing mapping and surveying either on their own or with help from civil society organizations. A visit to one such site would be useful to incorporate; perhaps this could be combined with the CFR recognition process under the point above.

Under 'Wildlife Management', the new paradigms of conservation and PA governance mentioned above need to be integrated in a significant way. This would include both the global trends in policy such as the IUCN governance and management category matrix, (Dudley, 2008), as also what may begin to happen in India when there is some genuine community involvement in decision-making with regard to PAs. Where, during their mid-career training or exposure forest officials get to go abroad, this component should be integrated with lectures from appropriate PA governance experts and visits to sites with ongoing successful shared governance.

Under 'Non-timber forest produce', the new situation created by the FRA 2006 in which MFP is to be owned by forest-dwelling communities, needs to be reflected. Currently (as of mid-2012), the MoTA is actively considering ways to make this ownership effective, including by resolving issues of collection, transit, and marketing. There is also recognition that more work is needed on issues of sustainability. This will play itself out with significant changes in MFP management in the future, and the IFS syllabus needs to be modified to integrate it.

#### *In Convocational phase*

Under 'Forest Protection', the 2007 text assumes that all human interventions/uses are damaging, whereas increasing scientific work shows that at certain levels and kinds of uses, forests are able to absorb impacts, and there may in some cases even be positive impacts. The subject needs to be dealt with in a much more nuanced way, as otherwise foresters are trained to think of people in forests as mostly a problem. For all the factors given below, the training should include positive, neutral, and negative impacts. Additionally, possibly the biggest threat to forests today is diversion for 'development' projects, this should be a prominent part of the syllabus... including the problems related to the entire process of forest diversion/clearance of projects under FCA, which has only increased in the 1990s and 2000s.

Throughout subjects like 'General Protection', 'Forest and People Interface', and 'Social analysis', aspects of forest and PA governance, shared governance and co-management, ICCAs, community rights and tenure, need to be integrated.

Under 'Participatory Forest Management' with the FRA 2006, the situation is substantially changing, with communities having the right to govern/manage areas they claim as community forest resources; this perspective, which can be broadly be called 'community forest governance and management', needs to be included, else forest officials will not be able to deal with ground situations, and help communities in sustainable governance and management.

Under 'International Conventions', a number of conventions relating to indigenous peoples and local communities need also to be taught; these include the Universal Declaration of Human Rights (1948), the UN Declaration on Rights of Indigenous Peoples (2007), and the FAO/UN Guidelines on Land Tenure (2012).

Under 'Forest Administration', given the new perspectives mentioned above on governance, the institutional structures by which communities do self-governance of forests should be included.

#### *Exercises, Excursions and Tours*

Tours should include visits to 'community conserved areas', and/or 'community forest resource areas' where communities have traditionally protected forests, or have taken up conservation more recently.... *Not* JFM areas, but self-initiated or community-governed areas, which exist in all the parts of the country where these tours will be taken.

This could also include exercises with communities that are doing their own mapping, surveys, and studies in relation to 'community conserved areas', and/or 'community forest resources' under the Forest Rights Act.

#### *Weightage to Subjects/Modules*

Given the realization that forest management and conservation these days is as much (if not more) about forest-people interface than about silviculture, etc, the relative weightages need substantial change. 'Forest policies/laws', 'forest protection', and 'forests and people' together currently get only about 13%; they should surely get at least 25-30% weightage.

#### *Towards mutual education and learning*

No single sector in India has a monopoly over forestry or PA expertise and experience. Forest officials claiming this, or equally, forest-dwelling communities claiming it, would be seriously mistaken. Combining

various experiences and knowledge systems, traditional and modern worldviews, old and new technologies, and the vast human resources available with various sections of Indian society, are essential if India's forests and wildlife are to survive into the future.

Old stereotypes, of villagers as ignorant and incapable, of forest officials as corrupt and repressive, of civil society organizations as self-serving and exploitative, even if true in some or many instances, have to be seen for what they are: stereotypes. The more officials and communities and activists and researchers work together in situations of equality and respect, the more these images will change, and the more all these

actors will be able to reinforce each other, and engage in mutual learning and collaborative action. This is already seen in many other countries where genuine shared governance situations have been created, or where communities have been trusted in and facilitated to develop the capacity to manage forests and wildlife; as also in some individual situations in India where officials have gone beyond their brief to generate genuine partnerships with local people. For this to get built into the system and become the norm rather than the exception, changes are needed in syllabi, learning methods, policies and programmes, some of which are indicated above.

### वानिकी शिक्षा और प्रशिक्षण : प्रमुख सुधारों का समय

आशीष कोठारी

#### सारांश

भारत में वानिकी शिक्षा और प्रशिक्षण, जो परम्परागत वन प्रबंध पर आधारित है, एक केन्द्रीकृत नौकरशाही पर आश्रित राज्य पर केन्द्रित है। अब यह प्रभावित समुदायों के द्वारा बढ़ रहे संचालन, सरकार और सिविल सोसाइटी द्वारा यह अनुभूति कि प्रभावी संरक्षण के लिए समुदाय भागीदारी की आवश्यकता है और वन प्रबन्ध एवं शासन को पुनर परिभाषित करने वाली कई विश्व प्रक्रियाओं सहित अनेकों कारकों के कारण परिवर्तित होना शुरू हुआ है। संरक्षित क्षेत्रों के लिए शासन की दो नयी श्रेणियों को मान्यता दी गई है; 'संरक्षित क्षेत्रों का सहभागी शासन अथवा सह-प्रबंध (सी एम पी ए)' जिसमें सरकार और स्थानीय समुदाय संयुक्त रूप से निर्धारण और योजना बनाते हैं तथा प्रबंध उपायों का निष्पादन करते हैं; और 'समुदाय सुरक्षित क्षेत्र (सी सी ए)' जिसमें स्थानीय समुदाय प्रधान निर्णय कर्ता होते हैं। विभिन्न शासन प्ररूपों को केवल संरक्षित क्षेत्रों के द्वीपों की अपेक्षा विशाल 'भूदृश्यों' को संरक्षित करने के लिए सम्मिलित किया जा सकता है। भारतीय वन सेवा पाठ्यक्रम को सहभागिता, अधिकार, संरक्षित क्षेत्रों का सहभागी शासन अथवा सह प्रबंध और समुदाय सुरक्षित क्षेत्र, भूदृश्य-स्तर संरक्षण एवं पारम्परिक तथा आधुनिक ज्ञान को सम्मिलित करने के सिद्धान्त एवं पद्धतियों के आसपास केन्द्रित करने के लिए नवीकरण करने की जरूरत है।

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