

CHAPTER 6
MAJOR ACTORS AND THEIR CURRENT ROLES RELEVANT TO
BIODIVERSITY

6.1 Governmental

Department of Forests: In Uttara Kannada, out of the total geographic area of 10,246 km², the forest area of all types all types account for 7397.28 km² or 72.2%. The forest area under the control of the Forest Department is 6866.06km². It means the department controls 67% of the total geographic area of the district, and is therefore the prime stakeholder. The Forest Department came into existence during the British period in the mid 19th century. The department has been mainly interested in commercial timbers, bamboo and marketable NTFP. Of late, under the Joint Forest Management System, village forest committees have been formed in several villages.

Table 6.1 The forest area of the Kanara Circle as per legal status

Sl.No	Department	Type of Forest	Area in Sq.km
1	Forest	1. Resereved	6840.948
		2. Protected Forest	25.090
		3. Village Forest	-
		4. Un-classed	0.020
		TOTAL	6866.058
2	Revenue	1. Reserved Forest	-
		2. Protected Forest	505.075
		3. Village Forest	26.150
		4. Unclassed	-
		TOTAL	531.225
		GRAND TOTAL	7397.283

Source: Annual Administrative Report of Forest Department, Kanara Circle 2000-01

Department of Agriculture: The Department with its extension wing is the major player in cultivated diversity. It distributes HVY seeds, chemical inputs and pesticides. It also provides technical know how through its extension wing. Its perception of cultivated diversity is based on the idea that the varieties evolved by formers are '*primitive*' and cannot yield good returns. It also ignores the indigenous agricultural knowledge/practices that is practiced by farmers, saying that they are not '*scientific*'

Department of Horticulture: The Department plays major role in assisting farmers in providing quality material for planting fruit and spice varieties suitable to the region. It possesses technical know-how in developing horticultural crops. It also provides assistance to farmers to grow vegetable crops. As the government finances have been reduced in recent years, the support provided by the department has become negligible.

Department of Fisheries: This Department is concerned with the management of marine, estuarine and inland fisheries. The Department is responsible for execution of

Government rules and regulations on fisheries, as well as executes various state schemes for the promotion of fishereis.

6.2 Citizens groups/ NGOs/other organisations

Joint Forest Planning and Management (State sponsored): The Joint Forest Management (JFM) programme was initiated in India during 1990. It promotes participation of local communities in protecting and regenerating forests, jointly with the State Forest Department. The Government of Karnataka implemented the JFM programme in the State in 1993. It is referred to as JFPM. The programme was initiated in Uttara Kannada in 1993 itself, largely with the support from British DFID grant. About 25% of the villages are covered under the JFPM programme. All the households of the villages are deemed to be members of the JFPM General Body. The GB elects a Managing Committee which as per statutory requirement should have two women members. The JFPM has been mostly assigned highly degraded parts of the forests for management. The range of issues dealt with by the JFPM in their microplans include fodder development, raising of NTFP and fuelwood yielding plantations, use of energy saving devices, encroachment problems, and various other location specific issues (Bhat et al., 2000).

NGOs: Karwar Rural women and Children Development Society (KRWCDs) organised training to the village community of Satgeri about environment and forestry and JFPM related issues. VIKASA Rural Development Society, Mundgod started working with the Bellankere VFC in 1997. It organised the landless to participate in VFC activities. Karwar Diocesan Development Council (KDDC) helped Saralgi villagers through awareness programmes on forest resources, and honey extraction methods from rock bees. Other NGOs who have worked or are still working for JFPM and other forest related issues in Uttara Kannada are CHINEYARD, Mundgod, Gowli development society, Kirwatti, Hindulida Guddagadu Janara Vikasa Sanga, Ankola, India Development Society, Haliyal, Mysore Society for Rural Development, Karwar, Pragatti Vanita Samaja, Ankola, Prayatna Vikasa Sangha, Karki, Honnavar, Siddi Development Society, Yellapur and Snehakunja, Honnavar and OXFAM.

District HOPCOMS (Horticultural Producers Co-operative and Marketing Society): This is an association at the district level with wide range of membership all over the district. It primarily deals with marketing of the horticultural produce of the farmers to get right price. It also attempts to establish a direct linkage between consumers and producers through HOPCOM retail outlets.

Parisara Sanmrakshana Kendra: This is a people's movement working on forestry issues and organic agriculture. It also works towards conservation of traditional rice varieties in the district.

The Federation for Revitalisation of Local Health Traditions (FRLHT) has started a Medicinal Plants Conservation Area (MPCA) in the Devimane Ghat forest of Kumta taluk for *in situ* conservation of medicinal plants.

6.3 Local Communities

Gowlis are nomadic pastoralists. They possess vast indigenous knowledge on raising, husbanding buffaloes. They also keep special variety of buffaloes known as 'Gowli Buffaloes'. They also use numerous plants as veterinary medicine. In recent years they are forced into settled agriculture. For *Gowlis* the biodiversity of natural forests and pastoralism go together.

Kumri Marathis live in the crest line forest region-cultivating paddy. Most of them cultivate traditional paddy varieties. They were in the past shifting cultivators. They weave baskets using canes and palm leaves. They practice organic agriculture and have the knowledge of plant based practices for treatment of pests and disease. Some of them are reputed medical men possessing traditional knowledge in treating certain chronic ailments using herbal medicines- such as Krishna Marathi of Yelavalli village in Kumta who treats effectively kidney stones.

Kunbis live in forest region of Yellapur and Joida taluka of the district. Most of them are small/marginal farmers growing traditional paddy varieties. They have knowledge of utilising wild food resources from the forests. They are experts in weaving baskets and mats using *Phoenix* leaves. NTFP contribute substantially for their livelihood. Women and men gather NTFP.

Siddis who live in the villages and forest hamlets of Yellapur and Haliyal taluks are critically dependent on NTFP; women spend substantial time collecting NTFP. They are also small scale farmers and farm labourers.

Medars are bamboo workers. They make baskets and mats using bamboo.

Halakki Vokkals live in the coastal areas of *Ankola* and *Kumta*. They are specialists in paddy cultivation and in growing excellent vegetables organically. They weave baskets and mats using various plant materials. Many of them have traditional knowledge in treating diseases such as paralysis and also in bone setting.

Gam Vokkals are coastal peasants having expertise in growing salt tolerant paddy in estuarine rice fields. The community is a repository of tidal flows in the estuaries and raising of mangroves.

Bedars are traditionally hunters also are small-scale agriculturists.

Havyak Brahmins are basically spice garden owners growing areca, cardamom and pepper. They possess indigenous knowledge of raising, husbanding spice gardens. They also use wild uncultivated plant resources as food or supplementing food items. They have great dependence on *beta* forests and *minor forests* for leaf manure.

Gauda Sarswat Brahmins traditionally traded in various agricultural and forest produce; many of them to this day continue to trade in such items.

Ganigas are traditionally oil pressers. They extracted oils from various cultivated and semi-wild oil seeds, the latter including *Calophyllum inophyllum* (*Honne*) of the sand shores of the district. The numbers of these trees have substantially declined due to human pressures.

Gudigars are famous as wood carvers; they have dependence on several kinds of trees such as teak, rosewood, sandalwood, nandi, shivuni etc. for carving purpose.

Konkan Marathas have much dependence on agriculture for livelihood.

Kurubars are shepherds and traditional blanket weavers

Lingayats traditionally are farmers and traders of agricultural and forest produce.

Mukris collect a variety of forest produce for sale. Several of their women even to this day gather wild fruits, cashew nut, and wild spices for trade.

Halleers are forest produce gatherers and sellers.

Hasalars are traditional field and garden labourers and gatherers of forest produce.

Naduvars are coastal agriculturists

Namadharis are agriculturists, gatherers of forest produce and traditional toddy tappers. They were traditional keepers of the *kan* forests; a section of the Namadharis are known as 'Kan-divars'.

Uppars have dependence on bivalve shell for lime making.

Kare Vokkals are forest dwelling community living in Sirsi, Yellapur, Siddapur and Kumta taluks. They are small/marginal farmers, organic cultivators and grow traditional paddy varieties. They also possess indigenous knowledge of wild plant resources and their use for agricultural purpose. Sacred forests are important in their traditional culture.

Jains are traditional cultivators.

Ambigas are fishermen who fish in sea, estuaries, rivers and ponds. The Ambiga women spend substantial part of their time in gathering and marketing shell fish and in fish selling.

Gabits and *Daljis* are sailors and fishermen of the sea.

Harikantras fish in the sea and estuaries. Some are also small scale peasants.

Konkan Kharvis fish in the sea. The *Khande Kharvis* also fish in the sea; they also build boats. Their women prepare ropes from coconut fibre.

Bhois fish in the sea and rivers.

Mogers fish in the sea as well as cure fish.

Pagis of Karwar fish in the river and ply ferry boats.

Today various non-fishing caste groups have entered into fishing, fish processing and trade thereby depriving substantially the traditional fishermen of their livelihoods.

6.4 Biodiversity/biomass based industries

The industries such as plywood, paper, match, packing cases etc. have played decisive role in forest exploitation for raw materials during the post-independence period. These industries got most of the raw materials from the forests of Uttara Kannada at highly concessional rates. A detailed analysis of industrial extraction by forest-based industries is given in Gadgil and Chandran (1989).

The **Indian Plywood Manufacturing Company (IPMC)**, Dandeli, started operating in the district, from 1940's, extracting mostly deciduous timbers to begin with. Later its operations, which involved extraction of ever-increasing number of tree species, spread to the evergreen-semi-evergreen forest belt. The company was leased 61.5 acres of land at Rs. 0.25 rent for acre at Dandeli. Stones and earth were permitted to be freely quarried for company use. The company had freedom to construct any roads or slides. Water from Kali river was freely allowed. Company vehicles were toll-free on forest roads.

Due to exploitation beyond the regenerative capacity of the forests, the factory had to depend on imported timbers from early 1980's or so and the lack of enough raw materials is said to have caused the closure of the factory. Exploitation of timbers within the district even affected the endangered *Myristica* swamps, the endemic *Dipterocarp* forests and various NTFP species of great value to the people such as mango, cinnamon, wild nutmegs.

The exploitation certainly went beyond the sustainable capacity of the forests so much so by mid-1980's the state government stopped the direct extraction of raw materials from the forests by these industries. But already colossal changes in the vegetation, even of rare species and habitats have been effected. However, some of them continue to get raw materials from forest plantations. There are also several tile factories heavily dependent on the forests for firewood supply.

The **Chip-Board Factory**, Dandeli an undertaking of the IPMC, produced chipboards from lops and tops, under-sized trees felled by the IPMC and from bamboo. The factory's use of resources was non-sustainable.

The **West Coast Paper Mills**, Dandeli was established in 1958. Bamboo from Uttara Kannada forests was allotted at the rate of Rs. 3.12 per tonne of paper pulp produced, with periodic marginal revision in prices. The company was free to discharge the effluents into the Kali river, obeying the directives from the District Collector. The extraction limit of bamboo was fixed at 100,000 tonnes of bamboo per year. The extraction of bamboo by the company exploded the myth of 'sustained yield' in forestry in a matter of two decades. Bamboo, which was considered almost a weed in the timber forests, by the Forest Department was nearly eliminated within four decades of the factory's operations. Today the factory has shifted the raw material base to various trees (grown in plantations and also purchased from the market). The depletion of bamboo known as "poor man's timber" caused great hardships to basket and mat weavers and rural people.

The **Western India Matchwood Company (WIMCO)** started extracting various species of matchwoods from especially the fragile evergreen-semievergreen forests from 1950's at concessional rates. The species allotted included NTFP species like mango, gulmav (*Persea macrantha*), and *Spondias*. The resource extraction was beyond regenerative capacity of the forests.

Doddannavar and Company, Belgaum was permitted to extract softwoods at concessional rates from the district, with effect from 1966 almost to mid-1980's. Even mango trees of great value to the people was allowed to be extracted. When the company felled trees in the village forest panchayat managed Murooo-Kallabbe forests of Kumta, the people protested leading to the cancellation of the village forest panchayat system itself by the State Government. Although the VFP approached the High Court and won the case, along with another VFP from Halkar village of Kumta, the VFP system, started by the British, in early 1930's collapsed, except in Halkar.

Of the major beneficiaries of timber extracted from Uttara Kannada, throughout its commercial timber extraction history of 200 years are the ship-building, railways, saw mills, tile factories, furniture industry, pencil industry and many small and cottage industries producing photo-frames, wooden toys, games and sports equipment, musical instruments, bobbins, straw boards, building materials etc.

There are 24 tile factories in the district. These factories had heavy dependence on forests for their fuel requirements. The difficulties in getting fuel resulted in the closure of some of them, and other are finding it hard too.

In general, the scarcity of timber in Uttara Kannada, which was well known for its forest wealth, caused spiralling prices for wood. So much so, today for housing needs people have to pay heavy price for timber. Most people are today resorting to concrete houses not suitable for the climatic conditions of the district.

There are 21 ice plants, cold storage centres, canning and fish-meal production centres, most of them heavily dependent on marine and estuarine fish production for their very existence.

The *chemical and pesticide industries* are pushing their produce on farmers wooing them to use the chemical inputs in agriculture. They are not concerned with conservation of biodiversity. The highest quantity of pesticides is used for cultivation of cotton in the dry region on the edge of Western Ghats.

There are several cashew factories, for the working of which cashew produced in the coastal tract is vital. These factories generate considerable employment especially for women.

Production of coir and many other products from coconut husk employ several rural people.

Jaggery production is a seasonal cottage industry. Making of cane and wooden furniture, wood carving, bee keeping , food and beverages production, preparation of pickles, lime making from bivalve shells and several other enterprises are biomass dependent.

6.5 Conclusions

All the farmers, including the specialised spice gardeners have heavy dependence on forest organic matter for agriculture. The very collection of leaves and dry wood caters to the livelihoods of thousands of people almost every day. Forests and fisheries generate the largest number of jobs in the district. Any excessive interference with the forests by any outside agencies can upset the very ecological balance in the district as well as affect the livelihoods of substantial section of the society. The excessive commercial exploitation of the forests, as well as fisheries have severe negative impacts on biodiversity and livelihoods.

In Uttara Kannada there are a number of traditional communities whose livelihoods and welfare