

A Note on

Activities and Programs of Karnataka Forest Department



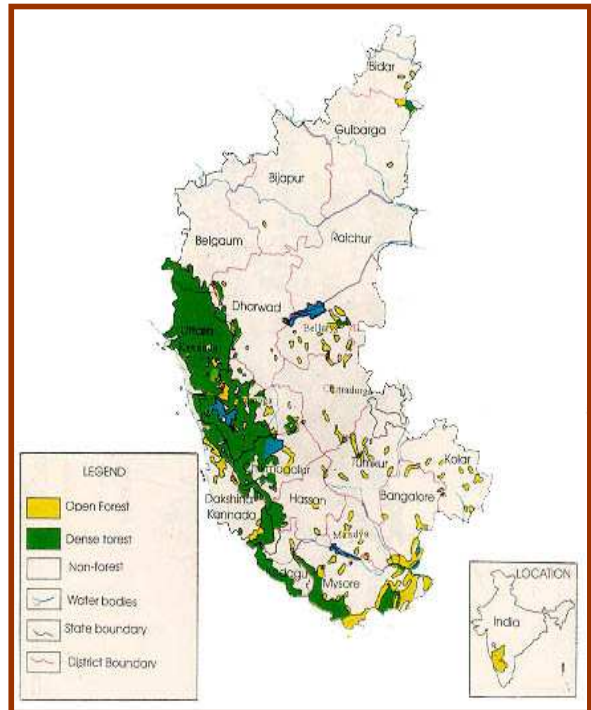
Karnataka Forest Department
Aranya Bhavan
Bangalore - 560 003

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Forest Department

Karnataka State is endowed with highly valuable and magnificent forests which are regarded as a unique ecosystem in the world. The State has 38.28 lakhs ha. of land area declared as forests, constituting 20.15% of the total geographical area of the State. The forests of Karnataka are world famous for many valuable species such as teak, rosewood, sandalwood, and numerous other hardwood species. Similarly these forests are the abode for rare and interesting wildlife.

The forests of Karnataka, besides playing a vital role in maintaining the environmental and ecological balance, are an important source of livelihood for millions of people in the State. The Western Ghats, being the origin of many South Indian rivers, are the source of water supply, support agriculture, and economic activities of the people.



The State Forest Department has been making every possible effort to conserve and protect these valuable forests for sustainable use. The Department has to protect these forests from numerous threats, such as fire, grazing, poaching and smuggling. Unfortunately due to the continuous increase in population, the forest resources have come under tremendous pressure from the local community who are dependent on these resources to meet their day-to-day need of fuelwood, timber, green leaves, fodder etc. Apart from this, the forests are being encroached for agriculture, plantation crops and housing. The Forest Department has been making all-out efforts to protect these forests from these threats. The Forest Survey of India's report based on the 1995-97 survey data has indicated an increase in the forest area in Karnataka by a net 6,500 ha.

The earlier emphasis on revenue generation has been replaced by the policy of conservation. At present the forests in Karnataka are managed according to the National Forest Policy of India 1988 by giving emphasis to the following three areas of forest management:

- Bio-diversity Conservation
- Sustainable development and management of forests to meet the local needs.
- Protection and management of forests through Joint Forest Planning involving local community through Village Forest Committees.

Forest resources and Productivity:

Forest Resources:

The extent and types of forest are given:

Sl. No	Type	Extent (ha.)	Percentage
1	Evergreen and Semi-evergreen	5,80,000	15.11
2	Moist Deciduous	5,78,000	14.96
3	Dry Deciduous	7,27,000	18.64
4	Scrub and Thorny	8,18,000	21.11
5	Un-wooded	11,25,430	30.18
	Total	38,28,430	100.00

According to their legal status, the forest area in Karnataka can be classified as follows:

Sl. No	Type of forests	Area (ha.)
1	Reserve Forests	28,68,996
2	Protected Forests	3,93,072
3	Un-classed Forests	5,23,100
4	Village Forests	12,420
5	Forests in private lands	30,842
	Total Forests	38,28,430

Demand and Pressure on Forests:

The expanding population of humans as well as livestock have increased the demand for forest produce and consequently put more pressure on the forests. Alienation of forest land for developmental activities like roads, railway-line construction, irrigation, mining and power projects, has further added to the problem. The encroachment of forests and degradation due to illicit removal, are the two major problems of the forest management.

The probable demand for firewood and timber in the State of Karnataka is as follows:

Produce	In lakh MT
Rural firewood:	160 lakh MT
Urban firewood	20 lakh MT
Non-domestic firewood	14 lakh MT
Timber (2001)	9.8 lakh cubic meters

Timber and Fuelwood Production:

Due to ban on felling of green trees in the forests, the timber production has come down in the State during the last 10 years. At present the timber harvest is confined to only salvaging dead and wind-fallen trees. On an average 60,000 cubic meters of timber is being harvested in the State by the Department annually. However this has further reduced to about 40,000 cubic meters now. However, from private lands, nearly 2.0 lakh cubic meters of timber is being supplied for commercial use. Import of timber from abroad is of the order of about 2.30 lakh MT/year. Similarly, the pulpwood and fuelwood extracted from the Departmental plantations is 1.1 lakh MT/year.

Sandalwood:

Sandalwood is the most precious wood grown in the State, fetching upto Rs. 28 lakhs per MT in auctions. Karnataka (along with Tamil Nadu) is known as the home of sandalwood. In the past, sufficient sandalwood has been extracted to meet its industrial and other demands. During the last several decades, sandal tree stock has depleted alarmingly. The smuggling of sandalwood is the main cause for the depletion of the stocking of sandalwood trees in the State. Due to the powers vested in DCFs to confiscate vehicles involved in smuggling, hundreds of vehicles and crores of rupees worth sandalwood are seized every year, confiscated and auctioned. The area under sandalwood trees has also decreased due to death of sandal trees by the incidence of spike disease which continued for about 50 years. This disease has since disappeared. The low incentive given for the sandal growth in private areas besides 'declaration' responsibility on private groups is another disincentive and a major reason for the decrease in the sandal growth in the private area. However the recent amendment in the Act has addressed these difficulties of farmers. At present the production has come down to about 40 MT.

Bamboo:

Bamboo is a very important and cheap forest produce used by poor people, farmers as well as forest-based industries. The Department supplies around 15 to 20 lakh bamboos to Medars and other local users. Bamboo is also utilized for making huts and temporary structures. The demand for bamboo for paper industries is around 3.12 lakh MT per annum. The production of bamboo by the Department is 80,000 MT per year. However, hardly any supplies have been made to paper industries in the recent years.



Cane:

Cane is another forest produce which grow naturally in forest areas of Karnataka. The Department extracts cane and allots them to the people who are manufacturing cane furniture. Based on the applications received for cane, the annual demand can be assessed at 10 lakhs for big canes and 2 lakhs (in numbers) for small canes. The department is able to supply around 5 lakhs big canes and 1.5 lakhs small canes annually. This quantity has got further reduced due to Working Plan restrictions. The balance is being brought in from other States and through imports.

Other non-timber forest produce (NTFP):

Other than the above, forest yields a large number of useful products, including medicinal plants like fruits, seeds, flowers, barks, leaves, honey wax, etc., the royalty from which amounts to Rs. 7 crores. A large number of tribals depend upon NTFP. 21 LAMP Societies are given the right to the NTFP at a nominal rate. NTFP form raw material for value added products, including for herbal formulations.



Iron ore and Granite Blocks:

The various ores and minerals found in the forest are defined as 'Forest Produce' under the Forest Act, though they are managed by the Mines and Geology Department under the MMRD Act. Still, operation of the Mines requires clearance under the Forest Conservation Act. Further, way permits are issued by the Department for their transportation. Important minerals are:

- i. Iron ore – 40 million MT, mostly from Bellary, Chitradurga and Kudremukh. Totally 63 mines are operating in the forest areas.
- ii. Manganese ore – 2.40 lakhs MT, mostly from Bellary District and in small quantities elsewhere.
- iii. Bauxite ore – 43,000 MT from Kundapur Division.
- iv. Granite blocks – These are used as tiles and flooring materials of various sizes after slicing and polishing. Large deposits of granite exist in forest areas. However, at present no such quarries are operating in forest areas; the ones that are operating are in other land.



Administration of the Department:

Forest Department is headed by the PCCF. There is also a separate PCCF for Wildlife, and another for Research and Training. In the field, the administrative hierarchy and the number of posts are as under:

Circles	Territorial Circles	13
	Research Circle	1
	Training Circle	1
Divisions	Territorial Divisions	37
	Social Forestry Divisions	27
	Wildlife Divisions	10
	Research Divisions	5
	Vigilance Divisions	9
	Training Divisions	1
	Working Plan Divisions	6
Sub Divisions	Territorial	80
	Social Forestry	35
	Wildlife	20
Ranges	Territorial	223
	Social Forestry	162
	Wildlife	56
Sections		1009
Beats		2819
Watchers		1094

Beat is the basic unit in the Forest Department. Watchers support the Beat Guards in their perambulation duties or carry out specific lower level functions.

Forest Protection:

Through various measures, the Department has been providing protection to forests from various threats such as fire, encroachments, illegal felling, smuggling and poaching.

(i) Forest Offences:

Forest offences such as poaching, smuggling of timber, sandalwood smuggling have been a big problem for the Forest Department to control. Annually, on an average nearly 13,000 forest offence cases are booked by the Forest Department on various types of offences. To tackle the problem, the Department has created mobile squads and anti poaching camps in addition to the regular protection measures. The Forest Department has a well-developed communication wireless network system which is helpful in detection, prevention and controlling the forest offences.

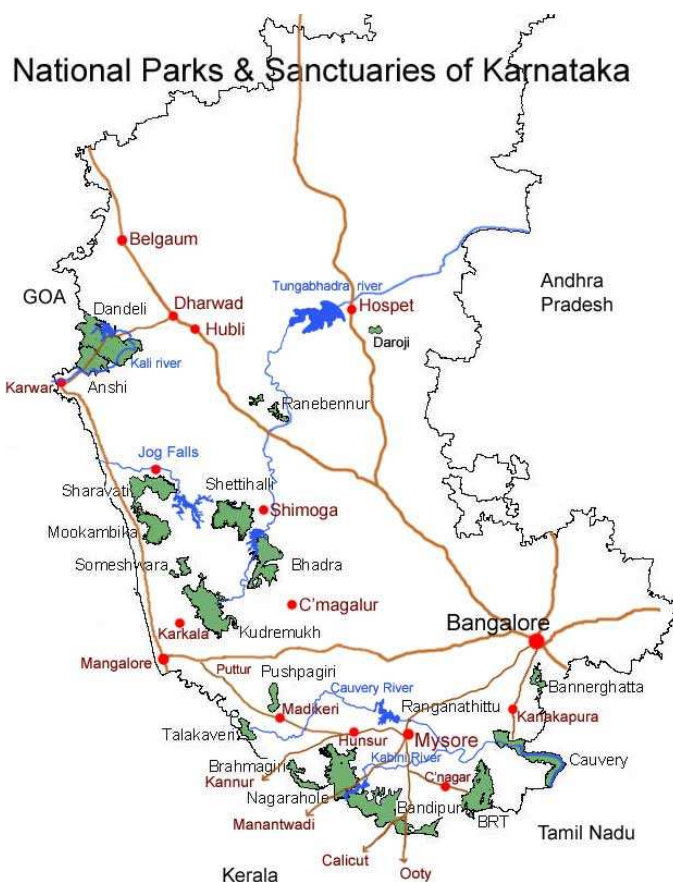
(ii) Forest Fires:

Annual fires set by the forest-dwellers, grazers and villagers are the major cause of occurrence of forest fires. The Department has been making all out efforts to control the forest fires through various fire protection measures. Annually 2-3% of scrub and dry deciduous forests are subjected to fire.

(iii) Encroachment of Forest land:

At present, 84,799 hectares of forests area is under encroachment, causing fragmentation and reduction of forest lands. This is a serious offence under law. The department has initiated

action to evict the encroachers, by undertaking surveying and demarcation of forests boundaries. In the last two years, nearly 10,000 ha of forest areas have been evicted and planting has been done in majority of the cases. Further, the Department has established protection camps in sensitive areas to prevent encroachments, besides regular protection measures.



Wild Life Management:

Karnataka has a treasure of well-protected wildlife sanctuaries and National Parks. There are 5 National Parks and 20 wildlife sanctuaries covering an area of 6700 km² which constitutes 17.5% of the total forest area. These are spread across several forest types ranging from the evergreen to scrub type of forest, representing different eco-systems, each containing rare and endangered species of plants as well as animals and birds. The major wildlife

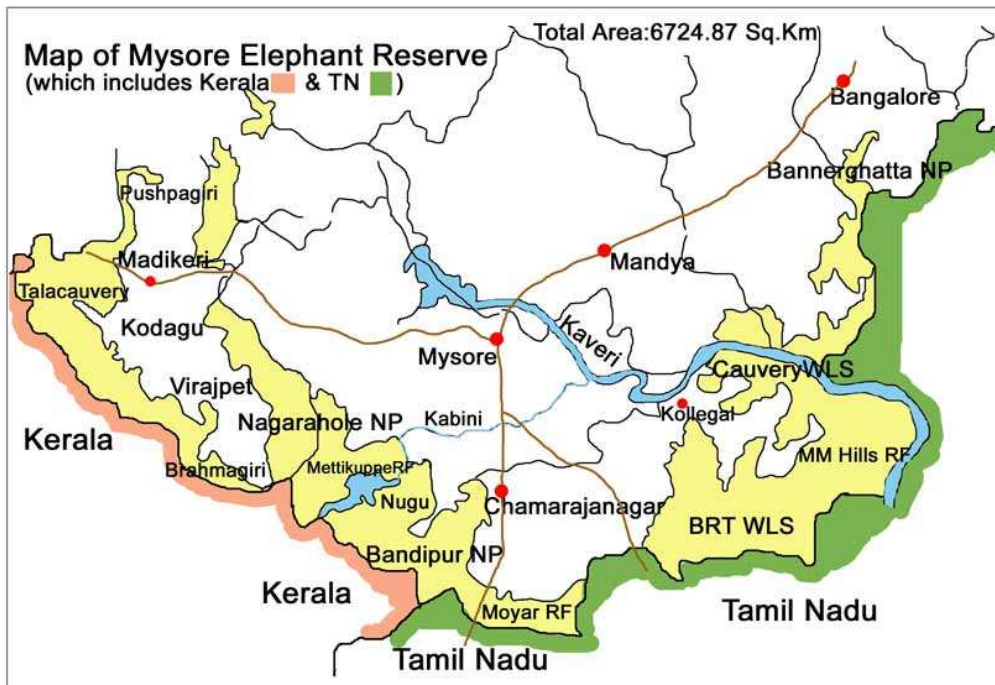
species estimated in the state are as under:

Tigers	-	395
Elephant	-	6098
Panthers	-	620
Indian Gaur	-	1360

The “Project Tiger”, a major initiative launched by Govt. of India in Karnataka, among other States, during November 1973 for protection and management of Bandipur Tiger Reserve, has been internationally acclaimed as a good success.

Similarly, Bhadra Wildlife Sanctuary was brought under Project Tiger in 1998 by Govt. of India, and the programs have been implemented as per the project guidelines.

There is also a Project Elephant under which the Mysore Elephant Reserve has been constituted, which covers the landscape from Kodagu to Bannerghatta, along our border with Kerala and Tamil Nadu.



All National Parks and Sanctuaries are managed as per the sanctioned Management Plans. Seven plans are in currency and the balance 19 have recently expired, and are under revision.

Working Plan and Research:

The Forest Department has a well-developed Working Plan and Research Wing to address Forestry Research and to prepare Working Plans for the management of forests. The Working Plan Wing uses modern techniques like Geographical Information System and remote sensing. Similarly, the Research Wing has taken up various research projects in the field of tree improvement, bio-diversity conservation and socio-economic issues. The working plans are written for the forest management on a 10 year cycle. As per the direction

of the Supreme Court the Department has completed the working plan preparation for all 37 Divisions.

Afforestation Programs:

Karnataka Forest Department has implemented afforestation program under various schemes, including externally aided and Centrally Sponsored Schemes. During the year 2005-06, 42,407.75 ha. of barren land and degraded forest lands has been afforested in the state. For the year 2006-07 the afforestation target is 32,697 ha.

Farm Forestry and Seedling Distribution:

A large-scale farm forestry program is under implementation throughout the state to increase the tree cover along the boundaries of farmlands and marginal lands to enhance farm income and to mitigate environmental and erosion problems. During 2005-06, 316.42 lakhs seedlings were raised and distributed to the farmers to take up tree planting under various schemes. For the current year 2006-07, 217.60 lakh seedlings will be raised for distribution to farmers during 2007-08.



Village Forest Committees:

The Forest Department is in the process of implementing the Joint Forest Planning and Management Scheme by establishment of Village Forest Committees (VFC) through which the local communities are involved in the protection and management of Forests, with benefit-sharing mechanism. Started in North Kanara Circle in 1992, it was extended to Shimoga Circle in 1995-96 under the Western Ghats Project. Subsequently, with the implementation of JBIC project, more VFCs were formed. So far around 3,887 VFCs, have been set up. On 19-6-2002, a comprehensive G O has been issued by the state Govt. covering all aspects of the Joint Forest Planning and Management including Tree Patta Scheme and scheme of raising trees on lands belonging to institutions / Communities / Govt. Departments. It is hoped that this JFPM process will help in overcoming the forest-man conflict around forest areas.

Plan Schemes

The Department is implementing a number of Plan Schemes sponsored by the state and the centre. The combined financial expenditure for the last 3 years as under:

Year	Plan Schemes Out lay (Rs. in Crores)
2004-05	87.26
2005-06	90.40
2006-07	165.65

The increase during the 2006-07 is due to the JBIC project under which Rs. 108 crores is budgeted.

a) **Central sector schemes:** The Forest Department is implementing 6 centrally sponsored and 2 central sector plan schemes with an outlay of Rs. 22.07 crores & Rs.3.00 crores respectively. Some of the important Centrally Sponsored Schemes are:

- a. Integrated Forest Protection Scheme – Rs. 1.00 crore
- b. Project Tiger-Bandipur, Nagarhole and Bhadra – Rs. 9.50 crores
- c. Development of Wildlife Sanctuaries and National Parks – Rs. 8.75 crores
- d. Area-oriented Fuelwood / Fodder Project – Rs. 0.50 crore

b) **State sector schemes:** The KFD is implementing 12 State sector schemes with an outlay of Rs. 12.53 crores. Some of the important schemes implemented under the State sector schemes are –

- Development of Degraded Forests – Rs. 2.00 crores
- Raising seedlings for public distribution – Rs. 3.00 crores
- Ecotourism – Rs. 2.00 crores
- Greening Urban area – Rs. 2.00 crores
- Forest Research – Rs. 0.12 crore
- Demarcation and Survey – Rs. 0.20 crore



c) **District sector schemes:** The District Sector schemes are implemented by the Social Forestry Divisions under the administrative control of the Zilla Panchayats. The budget provision for 3 District sector schemes is Rs. 19.35 crores. Most of the grants under the District sector schemes are utilized towards salary and administrative expenditure. The amount available for afforestation work is Rs. 1.34 crores. The schemes which are implemented are as follows: –

- Social Forestry – Rs. 18.00 crores
- Vanasamvardhana Yojane – Rs. 1.34 crores

Externally Aided JBIC Project

The Karnataka Forest Department has completed one externally aided afforestation project with the Assistance of Japanese Bank of International Co-operation (JBIC) from 1997-98 to 2004-05 at an outlay of Rs. 722.5 crores. In brief the targets and achievements during the project period are as under:

Particulars	Target	Achievement
Afforestation	2,00,000	2,00,000 ha.
VFC creation	3,100	3,149 nos.
Vehicles	99	92 nos.
Computers	312	622 nos.
Buildings	1,761	1,715 nos.
Training (JFPM & local)	-	46,143 persons

Karnataka Sustainable Forest Management & Biodiversity Conservation Project

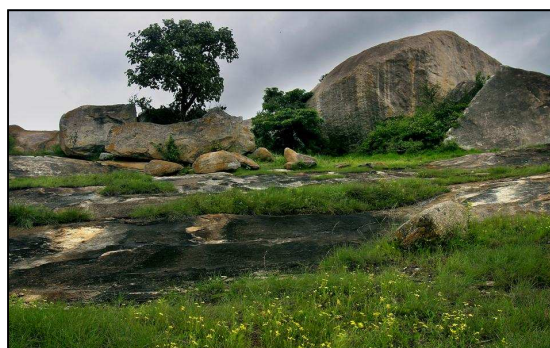
It has commenced a second JBIC project, viz., **Karnataka Sustainable Forest Management & Biodiversity Conservation Project**. This project is being implemented from 2005-06 to 2012-13 with the assistance of JBIC at an outlay of Rs. 745.00 crores. This project is under implementation in all the 27 Districts of the state covering both 'Maidan' areas and Western Ghat districts.

Project objectives

To restore forests in bringing about ecological restoration and also facilitate livelihood improvements of the inhabitants of the project villages by afforestation through JFPM in the State of Karnataka, which further contributes to reducing poverty and preserving biodiversity.

Project activities

- Afforestation
- Biodiversity conservation
- Participatory forest management
- Soil and moisture conservation
- Farm forestry
- Basic infrastructure for field staff
- Support activity for forest management



The progress achieved under various components as of 2005-06 is as follows: –

Particulars	Target	Achievement
Afforestation	24,000 ha.	23,896 ha.
VFC creation	300 nos.	417 nos.
Vehicles	10 nos.	11 nos.
Computers	74 nos.	74 nos.
Buildings	21 nos.	21 buildings are under progress
Training (JFPM & local)	520 batches	520 batches

Under the project, Rs. 60.712 crores has been spent on various activities in the first year of the project.

Non Plan Schemes:

The Non Plan Schemes primarily account for the salary of the departmental staff. Further it is spent on revenue works, maintenance and protection. During the year 2005-06, the Non-Plan expenditure was Rs. 168.67 crores. For the year 2006-07 Rs. 166.73 crores is earmarked.

Summary of expenditure budget:

The following table summarizes the expenditure of the Forest Department for both Plan and Non-Plan schemes –

Expenditure (Rs. crores)			
Schemes	2004-05	2005-06	(Budget) 2006-07
Externally Aided	40.73	41.90	108.70
CSS	18.80	25.33	25.07
State	9.52	7.60	12.53
District	18.21	18.91	19.35
Non Plan (incl. Salary)	202.53	168.67	166.73
Total	289.79	262.41	332.38

Revenue

Over the years the forest revenue has remained stagnant due to various reasons. As per the National Forest Policy of 1988 the Forest Department is no longer classified as revenue earning department. The Govt. of Karnataka has imposed ban on green felling of trees in the forest from 1990. Due to these policy guidelines the department is salvaging only the dead and fallen trees. Further there is no felling whatsoever in wildlife areas. However, as the green felling ban does not apply to fuelwood plantations and green bamboo extraction, the Department is extracting fuelwood and pulpwood from the matured plantations. The details of revenue of the Department over the last 3 years are as below:

Year	Revenue (Rs. crores)
2003-04	179.77
2004-05	168.70
2005-06	111.31

Forest laws, etc.,

Forest, being one of the oldest departments, is governed and administered by a set of well structured special laws. Such Laws, Codes, etc, are as under:

1. Karnataka Forest Act 1963
2. Karnataka Forest Rules 1969
3. Karnataka Preservation of Trees Act 1976
4. Karnataka Forest Conservation Act 1980
5. Wildlife Protection Act 1972
6. Karnataka Forest Code
7. Karnataka Forest Account Code
8. Karnataka Forest Manual



Forest Corporations

There are three major Forest Corporations in the State with different management objectives and activities, viz., (i) Karnataka Forest Development Corporation, (ii) Karnataka State Forest Industries Corporation, and (iii) Karnataka Cashew Development Corporation.

(i) Karnataka State Forest Industries Corporation:

Karnataka State Forest Industries Corporation was established in the year 1973.

The objectives of KSFIC are:

- Logging
- Pulpwood supply
- Run firewood depots
- Sawmills
- Furniture units

The staff strength is 292. Total income (turnover) during 2005-06 was Rs. 31.24 crores. The net profit for the same year was Rs. 2.69 crores.

(ii) Karnataka Forest Development Corporation:

Karnataka Forest Development Corporation was established in the year 1972. The main activities of the Corporation are as follows:

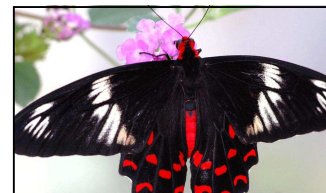
- Rubber plantations management – 4,443 ha.
- Pulpwood, teak & bamboo – 65,600 ha.

The staff strength of the corporation is 848 regular staff and 2128 permanent workers (repatriates from Sri Lanka). The turnover for 2005-06 is Rs. 41.68 crores and the net loss is Rs. 6.80 crores.

(iii) Karnataka Cashew Development Corporation:

Karnataka Cashew Development Corporation was established in the year 1978 with an objective of taking up cashew development in the coastal belt of Karnataka on degraded forest land. The vital statistics of KCDC is as under:

- Cashew plantations – 26,734 ha.
- Fuelwood – 9,147 ha.
- Staff strength – 126 Nos.
- Turnover (2005-06) – Rs. 3.80 crores



KCDC has a burden of overdue payment of Rs. 6.0 crores to the banks, due to failure of the pulpwood plantation project taken up in the past.
