

# HIVOS

Prakruti

Empowerment of Women  
Through NWFP Based  
Enterprise Development



**ANNUAL REPORT 2007-2008**

Prakruti

Empowerment of Women  
Through NWFp Based  
Enterprise Development

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On Behalf of Managing  
Committee



Reporting Period: April 2007 to March 2008.

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## Annual Narrative Progress Report 2008

### A. Context of the Organization

#### 1. Did any important developments in the Socio – economic, political and ecological context occur during the reporting period? If so explain how these influenced your organization or programmes.

- The district is agrarian and the main crops of paddy and spice. The spice crops like vanilla beans are facing fall in prices. The international markets have great influence on the fluctuating prices which affect the farmers. The agrarian crisis has deepened because of fall in prices and increased cost of cultivation. Though most of the farmers have very little land, on an average about two acres, there is high indebt ness leading to farmers suicides, which is a new phenomenon in this region.

The forest dwellers are dependent on collection and sale of non timber forest produce. However the prices of these forest produce is also falling leading to cash crunch for the weakest sections of the people. The agricultural laborers are migrating to urban areas like Bangalore and to adjoining states like Goa. They get more wages in these areas than what they get in the villages of Uttara Kannada.

Socially the skewed sex ratio between male and female population has led to very serious social condition where the village house holds. The sex identification and the social pressure have led to decimation of girl child ~~from~~ the general population.

- ✕ Politically the right wing BJP has gained more ground in both urban and rural areas. There is widening gap between the religious communities, spreading rumor of amassing weapons for creating violence. There is no trust between majority and minority communities. In fact there is no medium of communication between the two major religious communities. This has led to mutual suspicion leading to tensions. This tense situation is visible in the attitude of people. The mutual distrust might explode into communal violence.✕

On the ecological front, the region is facing unprecedented challenges and problems. The party in power has come to gain stronghold in the region claiming to protect natural resources. However there are new forces which lead to new developmental

project that destroy the fragile natural resources both land water and forests.

The effects of global warming and climate change have been very negative on the ecology of the region. This climate change has led to changing rainfall pattern, wherein it has rained every month all through the year during 2007-08. This has had negative impact on agricultural crops and its harvesting. Without any dry period, it is difficult to harvest and process agricultural crops. Farmers and farm laborers have suffered due to the change in the pattern of the rainfall and climate change.

Similarly, climate change has had disastrous consequences for forest dwelling communities and tribals like Siddis, who depend on collection of Non Timber Forest Produce. The moisture of rains has destroyed many crops from the forest. They could not collect the produce due to rains. Thus, it has negative impact on livelihood. At macro level the policies of state and central government is taking toll of natural forests, destroying the fragile biodiversity as well taking away the livelihood resources of people, who are dependent on natural resources for survival.

In conclusion we can say that the climate change has had negative impact on forest, biodiversity and livelihood of people. This gets accelerated by state policies that favor destructing of natural forests.

#### **B. Internal organization**

##### **2. What major policy decisions have been taken during the reporting period (e.g. with regard to mission, long – term objectives, strategies)?**

- Our mission: *To evolve sustainable livelihood opportunities for forest dwelling communities as well as conservation of biodiversity of tropical forests.*

The long term objectives of empowering forest dwellers, improving their socio – economic condition is progressing gradually. The activities and the programme initiated to help the forest dwellers and especially with the women's groups is a step towards the empowerment and sustainable use of forest resources.

However, the strategies adopted like change in the policy toward sustainable harvesting, usufruct rights and community control over resources is still a dream that needs longer intervention with community and policy makers.

**3. Describe major changes in your organization's formal structure and / or decision – making mechanism.**

This year we have initiated a major change in the organization structure to include the stakeholders in the decision making process, both formally and informally. The Managing Committee, the decision making body is represented by four women. The General Body elected four women for the managing committee. The membership of the General Body has also increased with more women representing from NTFP collectors. We are gradually helping the women from forest dwelling communities to be part of the organization.

**4. If your organization is a membership organization, indicate the total number of members as well as the number of those who have paid for their membership. Specify for men and women. What is the increase or decrease in membership compared to the beginning of the contract?**

- Total number of members is thirty two. All the members have paid the membership charges. There are ten men and twenty two women members. There is a increase in membership. During beginning of contract it was twenty five, now it is thirty two.

**5. Describe the type and frequency of meeting of the Board and General Assembly.**

- Managing Committee meeting takes place once in four months and General Body meeting takes place once a year.

**6. Indicate the changes that occurred during the reporting period in the number and composition (M/F) of staff members at management level.**

- Two staff members have left and three has been newly appointed. Now total staff members are ten. Five men and four women members.

## C. Results

7. Give a summary of the activities that have been implemented and the output (results of activities) that have been realized during the reporting period ; including those which were not financed by Hivos.

- Summary of the Activities and Results.

<i>Objectives</i>	<i>Activity</i>	<i>Result</i>
Enterprise development for species like <i>Garcinia gummigutta, spp., phoenix spp., Cannarirum strictum</i>	<ul style="list-style-type: none"> <li>• Exposure visits</li> <li>• Training</li> <li>• Marketing</li> <li>• Processing</li> </ul>	<ul style="list-style-type: none"> <li>• Income generation</li> <li>• Skill developed</li> <li>• Market for the product</li> <li>• Expeller installed</li> </ul>
Resource mapping and resource assessment of species	<ul style="list-style-type: none"> <li>• Resource Mapping</li> <li>• Honnavar division</li> </ul>	<ul style="list-style-type: none"> <li>• Identified places Which has non timber forest resources, discussed with local people about the problem and identified the place which required intervention like awareness program, training, nurseries, value addition, and marketing facility etc.</li> </ul>
Domestication, develop packages of practice for priority NTFP species	<ul style="list-style-type: none"> <li>• Exposure visits established</li> <li>• Nurseries Training in grafting &amp; germination techniques.</li> </ul>	<ul style="list-style-type: none"> <li>• 26000 NTFP Plants raised ready for distribution</li> <li>• Good demand from community.</li> <li>• Women got skill in grafting.</li> </ul>
Nursery and cultivation techniques, awareness programs, press meetings & workshops, publication	<ul style="list-style-type: none"> <li>• Workshops</li> <li>• Awareness</li> <li>• Program</li> <li>• Meeting</li> <li>• Publications.</li> </ul>	<ul style="list-style-type: none"> <li>• Workshops on sustainable harvesting techniques resulted. In stopping cinamon leaf extraction</li> <li>• Poster on ten species done and distributed.</li> </ul>

## **PRAKRUTI**

### **ANNUAL REPORT FOR 2007-2008**

*Prakruti* is a non-governmental organisation (NGO) registered in 1991. It is based in *Sirsi*, a small town in Western Ghat region in south India. The main objective of *Prakruti* is to work towards evolving an ecologically sound and sustainable development strategy in the tropical forest region of Western Ghats. The following activities were undertaken during the period April 2007 to March 2008. The audited accounts and balance sheet is available on written request. We thank numerous organisations and villagers who have provided support and guidance to successfully carry forward the work on issues of evolving sustainable development strategy in tropical forest region of Western Ghats. We also thank funding organisations for providing financial support to conduct activities of our organisation. Following are the major activities undertaken during the reporting period.

#### **I. Western Ghats**

Prakruti is actively working on conservation of Western Ghats. We published a booklet on the status of the Western Ghats "Paradise lost..... Almost". This booklet was launched in various places in Western Ghats and in Delhi. The main purpose is to create the awareness on the issue of Western Ghats among the people and the media. The report was shared with forest officials, academics and common people interested in conservation of the region. This is part of the larger process of state level meetings in numerous states culminating in the Regional Meeting to build strategy for

conservation of Western Ghats. We are attempting to revive Save Western Ghats campaign. The emphasis is on building grass root movement to create awareness among larger community and civil society.

## **II. Non Timber Forest Products (NTFPs)**

The Non-Timber Forest Produce (NTFP) is one of the major resources of tropical forest that provides livelihood opportunities for forest dwellers. NTFPs are being viewed as the backbone of generating cash income to rural people, as well as, contributing to household food and nutritional security. Studies promoting use of NTFPs as a means to improve livelihood of the indigenous people are being pursued globally. We are working with forest communities to enhance their livelihood opportunities and the natural resource, as well as, to establish sustainable harvesting practices. The following are the areas in which our organisation has worked with NTFPs:

**a. Policy Work:** Prakruti is actively involved in a dialogue with Policy Makers and Civil Society Organisations to change the policy of NTFP. It is based on the premise that, for sustainable use of the resources, there needs to be favourable policy changes towards conservation of the resource, as well as, the NTFP collectors should get the usufruct rights over the resource. The Programme Director of Prakruti participated in a NTFP policy meeting held in Jabalpur in January 2008. He shared his experiences with the participants on the issue of developing sustainable harvesting practices of a number of NTFP species in Uttara Kannada. He also interacted with the officials from several parts of the country as well as other NGOs. An effort was made towards favourable NTFP policy and the need to incorporate the conservation of natural forests as one of the basic needs in the forest policy.

The people in Anshi National Park, Uttara Kannada are struggling to eke out a living in the tropical forests. Because they have very little land holdings for growing agriculture crops, they depend heavily on collection and sale of NTFPs. However, in recent years the region has been declared as Anshi National Park. Legally, the villagers living in the national park as well as on the borders cannot collect the NTFPs. This is a threat to the livelihood of the about 15000 people. In order to elicit people's response to this question, a meeting was organized by Prakruti and Federation of Voluntary Organisations of North Kanara in Anshi to discuss the issue and share the experiences of the people. About two hundred people, both men and women, participated in this workshop held in the forest region. They showed how the wildlife and the villagers co-existed for several decades without any problem. Despite the fact that the collection of NTFPs constitutes these people's major livelihood source, they no longer have legal rights to collect; to survive they will now have to do it as thieves. They feel that once the Anshi National Park comes into existence, they will be forced to move out of the region in the name of the protection of wildlife. They were vehemently opposed to the idea and said that despite any amount of compensation they are not willing to be uprooted from their ancestral land. They showed how they can take part in conservation effort and be part of the National Park without disturbing the ecology of the region. The Forest Department has neither given any legal notice nor shown the official letter of declaration of the National Park. In order to resolve this uncertainty, the workshop decided to write to the government seeking their official position on the National Park.

**b. Nurseries:** Prakruti was motivated to begin NTFP oriented nurseries in observation of a decreasing availability of NTFP species in the wild (i.e. Cinnamon, Baldoop, etc). Prior to this initiative, no organization, not even the Forest Department, has focused on replenishing the naturally available stock of NTFP species in the forests of Uttara Kannada District. The only concern was for the extraction and marketing of these species which was surpassing the resources' ability to regenerate them. So, in order to both maintain the collection of NTFPs as a sustainable livelihood option and to secure the biodiversity of the natural forests, we began establishing NTFP nurseries. The objectives of the nurseries are to propagate useful/rare NTFP species, experiment with less known species, work to improve collecting/planting techniques, and graft superior species, all with the intention to distribute back to the NTFP collecting communities for semi-cultivation and replenishment of the wild stock. Ideally the current nurseries are just the foundation to a larger project of promoting the construction of nurseries within the NTFP collecting communities themselves. Presently there are NTFP nurseries at the following locations: two in the Karoor Village (est. 2007) with different NTFP varieties each, one in Manjavalli (est. 2005) with up to 10,000 varieties, one in Amchimane (est. 2007) with up to 20,000 varieties and, finally, one in Navangeri (est. 2007) with up to 50,000 varieties.

**c. Workshops:** In order for Prakruti to share experience on NTFPs, we attended and designed workshops based around the issue of NTFPs. The following are a brief description of workshops:

**i. Community Based Enterprise Development Workshop:** Our team members attended this workshop on community based enterprise development in Kalimantan, Indonesia, as part of the

Exchange Programme of NTFP in South East Asia. We are engaged in enterprise development and value-addition of NTFPs. The workshop sessions focused on the sharing experiences of the different countries represented from Indonesia, Philippines, Malaysia, India, who are involved in community based enterprise development.

- ii. Mahime:** A workshop was conducted near Gersoppa, Mahime Village by Prakruti with the help of V.F.C. and NTFP collectors participated in the meeting. The main objectives of the workshop was to create awareness on sustainable harvesting of NTFPs and to motive people to take up quality processing and value-addition in both their production and marketing of forest produce. The villagers shared their concern for unsustainable harvesting and showed interest in planting/domesticating the NTFP species currently being grown in our nurseries.
- iii. Mensi:** A workshop was conducted in Mensi, Mavinjaddi , with the help of Resource persons form Forestry College, Sirsi, for NTFP collectors. The main objectives of the workshop were to discuss raising NTFP nurseries, domestication, sustainable harvesting, processing, value-addition and marketing.
- iv. Exposure Visits:** A series of exposure visits for the NTFP collectors were organised to understand the issues related to NTFPs. The visits involved: exposure to nurseries, as well as, other farms where NTFP domestication is taking place. The objective of these visits is to offer practical information on how to create a NTFP nursery, exchange information on cultivation

aspects and do hands-on demonstrations of techniques, especially grafting of NTFP species. It is an attempt to motivate the collectors to get interested in enhancing the resource base.



### **III. Resource Mapping**

To further understand the distribution, availability, harvest, and marketing details of NTFP species in the Uttara Kannada district, we are working on resource mapping for four forest divisions. Remote Sensing and Geographic Information Systems were used for the resource mapping of these NTFP species in four forest divisions in Uttara Kannada district. This will help in assessing the availability of the NTFP resource and developing the sustainable harvesting practices for the forest produce.

### **IV Appropriate Technology**

With concern for both the ecology of the Western Ghats and the socio-economic situation of the forest dwelling communities, we have initiated programmes to focus on the implementation of appropriate technology. These community-based and small-scale technologies have allowed for more efficiency, less usage of raw materials and/or greater return. These

technologies have reduced the pressure on the forests. The following are the appropriate technologies established during this year:

**Rind Dryers:** To save precious wood, we established community dryers at different places where NTFP availability is high and processing is done. This processing unit helps in reducing the wood consumed and the quality of the product is enhanced. Thus it is of double benefit for the people and the ecology, especially the tropical forests.

**Oil Expellers:** During its workshops and meetings with NTFP collectors, Prakruti received many requests for oil expellers. The reason behind the request is because extracting the butter from *garcinia gummigutta* (Uppage) or *garcinia indica* (Murugalu) by hand is quite difficult. The only other option is the cumbersome task of taking the seed to Sirsi which is far away, expensive and can only be done during the month of October. Based on these requests, we established expellers. Initially two expellers have been established in Mattigatta and Gonsar villagers in collaboration with their cooperative society and women's Self Help Group (SHG).

#### **IV. Value-addition and Marketing**

Prakruti has taken up the following value-addition projects with the indigenous communities, especially with the women: 1) processing and packing honey, 2) making beeswax candles, 3) production of candles from *garcinia* butter, 4) mixing both beeswax and Garcinia butter to make candles, 5) mixing candles with powdered Raldoop to add aroma, 6) making nelli candy, 7) nelli chyavanprash (Ayurvedic tonic), 8) nelli morabba (jam), 9) making packets (100 gm and 50gm) of Garcinia butter and Raldoop, and 10) weaving of date palm mats. These add value to products, and are sold for a higher price, helping forest dwellers to earn cash. They do not sell their raw materials but add value at the source, enhancing the value of the

produce and get economic return. The finished products were sold through the SHG marketing chain, through Ayurvedic manufacturing units or through the organisation itself. The market response to these products has been very good and all products manufactured by the women have been sold out.

#### **V. Honey Bees**

After successfully launching of the Save Honey Bees Campaign to conserve the indigenous honey bees *apis cerana indica* in the Western Ghats, we have initiated programmes to motivate people into bee keeping activity, especially among women and youths. The training programmes include homestead bee keeping with bee boxes and teaching them the management skills. We have also involved people from the forest dwelling tribes to enhance the quality of the honey from the wild forest through right kind of processing techniques.

#### **VI. Home Garden & Seed Keepers' Collective**

We are implementing a project to conserve the seed diversity of the region known as the *Malnad Home Garden & Seed Keepers' Collective*. It continues to be a modest effort to document and increase the diversity of species grown in the home gardens of Uttara Kannada district, Karnataka.

**Seed Workshop:** The workshop was held at Vanalli village where we have a strong group of home gardeners. About 50 people participated from various villages including the coasta region. Our resource person was *Mr. Krishna Kumar* an active member of *Sahaja Samrudhi, Bangalore* which mobilises organic farmers and arranges for the marketing of their produce.

While we have worked towards conservation of traditional varieties of seeds, our skill share and training workshops have always been on value addition of garden produce. We have long felt the need to hone our skills in seed saving, methods of maintaining varietal purity, seed storage, and testing seed quality for exchange and sale. Hence this workshop was organised

**Organic colours for the Indian festival of Holi :** Starting from a modest 200 kgs., 4 years ago, the Sonda, a group of women, have produced nearly 2 tons of vegetable colours this year! The festival of Holi is celebrated in Northern and Western India where people throw colour on each other to celebrate the coming of spring. Our effort is to see how people can be made aware of the dangers of toxic chemical colours and use harmless ones made of vegetables and flowers.



**8. Report on the number of men and the number of women that have been reached, directly and indirectly, in relation to what was indicated in your proposal and / or work plan. Provide information that relates to the indicators for outreach that have been agreed upon in the contract, if applicable.**

8	Activities	Direct outreach		Indirect Outreach	
		Women	Men	Women	Men
A	Value addition			30	12
	Exposure visits	40	5		
	Training	12	Nil	20	Nil
	Processing (Expected)	548	150	400	300
B.	Resource Mapping	500	200	1000	2000
C.	Nursery & Domestication				
	Exposure visit	100	20	200	50
	Training grafting	45	5	Nil	Nil
	Nursery	32	6	150	50
	Cultivation (expected)	300	200	1000	700
D.	Workshop				
	<del>Administration</del>	275	150	700	300
	Meeting Publication				

**9. What progress has been made during the reporting period towards the achievement of the objectives of the proposal contract? In what way have the outputs contributed to the realization of those objectives? Provide information that relates to the effect indicators agreed upon in the contract.**

**Specify for men and women. In addition to the information related to the indicators examples of results in the form of stories or observed changes are also welcome.**

- One of the main objectives of the programme was empowering women through enterprise development. The establishment of oil expeller & decorticator had been suggested by women's group during the workshops and meetings.

As per their request and the effort by the organisation and assistance from Hivos, this unit has been established. But because of remoteness of the area and forest, electricity connection was difficult to get. But women members from the group repeatedly made representations to electricity department and got connection. Now the expeller is ready for serving women to extract the oil from Garcinia seeds. Thanks to Hivos, because of this expeller the villagers have also got additional benefit of a flour mill to the same electric motor established by co operative society.

Because of training and exposure visits women are producing quality products like pure honey, pure Garcinia butter, finished wild date palm mats, Kokam juice, Amla candies etc which is getting premium price in the market.

Prakruti is trying to sell this product locally to known customers and one shop run by federation of SHGs. One woman Mahadevi from Karoor kept account of the sold product and during this year she got Rs 9,800 through various products and she is very happy to give the credit to the project of Hivos. Otherwise she would not have got this money in her hand at all. Like this lot of women is getting income from selling the value added products.

Because of training in wild date palm weaving the women are skilled in making finished product and feel very confident. Though this is in initial stage they are anxious in getting full pledged training in producing fine articles from wild date palm leaves.

There is clear shift in economic activity which was with only men, now to women get the financial benefits directly and there is imbalance in the relationship.

**10. If an internal or external evaluation took place, who initiated it and how was it organized? What were the main conclusions and recommendations? Specify if and in what way the outcome of these evaluations will affect the organization's policy or programmes.**

- An external evaluation was initiated by the Managing Committee.
- The evaluation has raised pertinent questions about the project and these suggestions will be incorporated in the next phase.

( A copy of the Evaluation Report is enclosed with this report)

**11. If an evaluation took place during the previous reporting period, what steps has the organization taken in response to the observations / recommendations?**

- The Managing Committee is deliberating on the observations of the evaluation and drawing up strategies for incorporating the observations in the implementation of the project.

### **Reflections**

**12. Analyze the results as described above. Did the planned strategies work out as expected, and if not, why not? Were there unexpected opportunities the organization could profit from, and how? Explain major variances, positive or negative, from the proposal referred to in the contract letter and / or the relevant work – plan: what has caused them?**

- We have attempted to work according to the strategies mentioned in contract letter.

Variance: The staff turn over in the middle of the project have led to delay in implementation. This variance is due to non availability of trained human resources to carry out the project. Despite this short coming we have managed to continue the work according to redrafted work schedule. We are confident that with the extension for the project, we will be able to complete the project as well as contribute in a constructive way to change the policies of natural resource management.

**13. Describe any changes (positive or negative) in the organization's relationship with other actors in the same sector of activities (locally, nationally or internationally) and in the relationship with local and/or national authorities (if applicable). Comment on each of these changes in so far as they have influenced the level of achievement of (expected) results.**

- Organizations / other actors / National / International Agencies. World Bank and Asian Development Bank are implementing various development projects in the region. In fact these projects are making public dependent on aid, raising high hopes. They do not have continuity as well as there is no coherence in the numerous policies of these international funding agencies.

The JBIC (Japanese Bank for International co operation) is implementing Rs 700 crore Forestry Project in Karnataka. Unfortunately, there is no involvement of local communities in this programme.

**14. What is your overall assessment of the progress made this year, in view of your organization's longer – term objectives? What did your organization learn from this strategic analysis of results? How will this affect next year's / future activities?**

- The overall assessment of the progress made during the year is in tune with the long term objective of sustainable use of natural resources with providing livelihood opportunities for forest dwellers, especially women from weaker sections of society. This will strengthen our commitment towards these groups as well as to progress towards our mission of sustainable use of natural resources in the tropical forests. Some of the learning's are :
  - The opportunities for providing livelihood through collection of NTFP are very high.
  - People willing to learn skills in value addition to NTFP, which enhances quality of produce as well as increase in cash income.
  - Forest dwellers are willing to adopt sustainable harvesting practices to conserve the dwindling resource base.
  - The modern tools of GIS (Geographical Information Service) can help us towards better management practices towards Natural Resource Management.

**15. How has the quality of your organization improved? Provide information on activities and results relating to the indicators for the improvement of organization quality in the contract (if any)**

- Lot of learning process has happened during this period. The Managing Committee and staff members learnt numerous lessons in implementing women oriented project. Due to experience, interaction, some training (outside the country and out of state) has helped to enhance the quality of the organization. Handling the enterprise development training, raising exclusive NTFP nurseries were the skilled job and implemented with totally Sidelined community of women was a challenging task and up to an extent achieved this.

**16. How did the internal planning and reflection process function during the reporting period (i.e. who was involved and in what way)?**

- The internal reflection and planning process functioned through following activities :
  - Critical review by peer – groups
  - External evaluation

**17. How did organization monitor performance of the programme(s) and how was this information used? Please provide examples.**

- Continuous interaction with forest dwelling community. Weekly meetings conducted with the field staff and took the feed back of each and every programme.
- Establishing Nurseries at proper place, selection of priority species for Nursery, establishing expeller at proper place after discussion with collectors.
- The requirement of training in relevant to the stakeholders, wild date palm leaf weaving, kokam juice making, Grafting technique etc.
- Also prior care had been taken to reach the women's group, that too eligible women group. (NTFP Collectors).

**18. What are your experiences with the indicators that have been agreed upon to monitor the organization's progress towards the objectives of the contract? Is there a need to replace or add one or more indicators? Please explain.**

- They are fine and we feel that it meets up to the need of measuring the performances of the project.

**19. Has the organization shared progress information with the beneficiaries and other stakeholder of the programme? If so, how; if not, why not?**

- Yes
- Shared the progress with the beneficiaries during the exposure visits, meetings, workshops. We helped to compare the quality of the product between the groups, the income generated from a group to another group. The beneficiaries shared the progress of nurseries, seedling quality etc within each other during the visits.

- Other stake holders like forest department staff shared the progress made in the nurseries, i.e., exclusive NTFP, rare NTFP like Canarium, Grafting of wild pickle mango etc.
- Traders shared Prakruti's experience in quality of the products like honey, kokam and Honey wax, kokam butter Candle making.

#### E. Relationship with HIVOS

20. If you received non – financial support from Hivos during the reporting year, please indicate if you were satisfied with this support, and why (not)?

- We have not received any non financial support from HIVOS during the year. Thus, we are not able to comment on the issue.
- We received a copy of the policy paper on tribals and Hivos which was very weak on the aspect of forest dwellers collecting the NTFP. We pointed out this lacuna to the Hivos staff but there was no feed back from them about the necessary changes.

#### ➤ Overview of Income Sources during reporting period

	Source	Rs	Percentage of income
1	CORDAID (NTFP) The Netherlands.	11,54,245.00	32 %
2	HIVOS The Netherlands	5,82,705.00	16 %
3	UNDP	4,47,489.00	13 %
4	K.G.I. U.S.A	38,376.00	1 %
5	Misereor Germany	2,20,580.00	7 %
6	CORDAID (Western ghats) The Netherlands	3,11,250.00	8 %
7	N C. IUCN Netherlands	5,14,440.00	15 %
8	Both Ends , The Netherlands	1,84,544.00	5 %
9	Bank deposit Interest State Bank of India Sirsi	32,576.00	0.90 %
10	Local donations	1,07,300.00	2 %
	Total	35,93,505.00	100 %

➤ **Allocation of Income**

Manpower	36 %
Value addition	22 %
Workshop / training	15 %
Nursery	12 %
Communication & Administration	5 %
Publication / report	5 %
Travel	10 %

➤ **Note:** *during the reporting period no major investment has been done on any fixed assets like purchase of land, building or vehicles etc.*

• List of Reports / Publication

*bold.*

1. Paradise Lost – Almost (Book)
2. UNDP ----- Poster
3. Gender & NTFP ----- Report
4. NTFP ----- Posters.

- a) *Garcinia gummigutta* (Uppage)
- b) *Ailanthus tryphysa* (Halmaddi)
- c) *Canarium Strictum* (Raldhoop)
- d) *Vateria indica* (Saldhoop)
- e) *Mangifera indica* (Wild mango)
- f) *Phyllanthus emblica* (Amla)
- g) *Garcinia indica* (Kokam)
- h) *Cinnamon malbatrum* (Dalchini)
- i) *Phoenix sylvestris* (Wild date Palm)
- j) *Myristica Malabarica* (Wild Nut meg)

Midterm Appraisal

**Empowerment of Women  
Through NTFP based Enterprise Development  
Hivos Project**

By Dr Sudhirendar Sharma, Ecological Foundation, Delhi



2008  
Prakruti  
Sirsi

## Overview

The project 'Empowerment of Women through NTFP based enterprise development', being executed by Prakruti under a grants-in-aid from Hivos, has been under implementation since 2006 in four forest dwellers villages of Sirsi taluka in Uttara Kannada district viz., Karoor, Mattigatta, Gonsar and Shirsgaon. While the first three villages have mixed population of ethnic groups, Shirsgaon is distinct as it has a significant number of Siddi village, 11 households amidst a total of 27 households. The Siddi are of African origin that had moved to this part some four centuries ago. Though they are culturally integrated, their social status remains non-descript as they have not been accorded a 'tribal' status.

## Gender Dimension

Within a given community in Uttara Kannada, men and women play distinct role in NTFP collection, processing and marketing. While marketing is clearly a men's domain, women's share in collection and processing follow a distinct trend. Wild date palm and amla are exclusively collected and processed by women; in the case of *Garcinia* spp. and *Artocarpus lakoocha* women share equal time and effort in collection and processing. However, honey and *Canarium* spp., are in men's domain. It does offer division of labour within a household.

Village	Household	Men (%)	Women (%)	Women Group/Members
Karoor	32	48	52	Bharteshwar Women
Mattigatta	110	48	52	Group/19
Gonsar	40	48	52	Van Suma/15
Shirsgaon	27	46	54	Stree Sangha/20 Stree Shakti Sangha/16

While women do play a significant role in households' sustenance around NTFPs, the reins are essentially in men's hands. From collection to processing, men play a major role while women contribute significantly to processing of the harvest. However, the project has focussed its attention on amplification of women's role in decision-making such that they become part of the economic chain of NTFP transaction. Not only has this approach been projected to provide incentives to women but create a spin off effect towards enhancing women's contribution towards family's well-being, notably, health and education of children. Consequently, the project interventions have been routed through women groups to empower them. These are still early days to assess the impact but there are perceptible changes in the manner in which women have gone about exercising their newfound confidence, for example in value-addition and processing of NTFPs. Crucial, however, is to observe how this subtle but significant power shift is absorbed in the male-dominated households!

### **Enterprising Gains**

By taking the enterprise route, the project has strategically introduced sustainable harvesting techniques vis-à-vis improvement in processing for value-addition in the end product. Oil extraction in the case of *Garcinia*

*gummigata* has been introduced; quality and value in *Garcinia indica* juice has been enhanced; honey harvesting and processing has been significantly improved to fetch better price in the market; and better product quality and diversity has been achieved in the case of wild date palm mats.

By ensuring better return from improved processing, the project has been able to inculcate sustainable harvesting techniques. While harvesting ripe *Garcinia* (as opposed to unripe one) has sunk into community's minds, extracting gums and resins without damaging the tree has been effectively communicated. Similarly, honey harvesting without adverse impact on the beehive has been accepted at the community level. On an average, the project interventions have led to 15-20 per cent increase in incomes. Interestingly, however, there is a slow trickle down of the improved cash flow amongst women. The sale proceeds from mats is being collected by women!

### **Missing Link**

The project has made significant progress in terms of taking the gender route in promoting sustainable harvesting and in developing economic enterprises around NTFP. However, it raises some of the critical aspects which may have got unnoticed while designing the project in the first place. From a future project(s) point of view, these should offer interesting insights:

1. Though by targeting households that sustain on NTFPs the project has fulfilled its obligation towards forest dwellers both from survival as well as from NTFP conservation viewpoint, the fact that another section of households within the same village have already *exited* from forest-dependence may influence the forest-dwellers to exit the system once

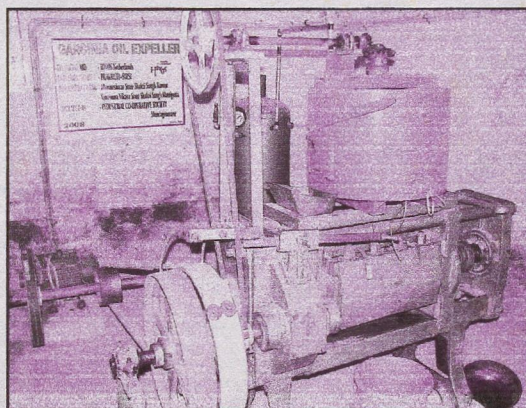
they reach a critical level in household economics. Mapping and projecting such changes could offer critical insights on forest conservation vis-à-vis NTFP development.

2. The fact that the project focuses almost exclusively on commercial NTFPs leaves the entire world of non-commercial NTFPs unattended. Ignoring non-commercial NTFPs (eg., edible, medicinal) and diverting women's attention (as 58 % women are engaged in non-commercial NTFP collection & processing) towards commercial NTFPs may have irreversible impact on non-commercial NTFPs. Integrating non-commercial with commercial NTFPs at the programmatic level holds relevance in maintaining species diversity as well as their social cohesion.
3. It will be relevant to hold PRA amongst groups within the community to get a better sense of the perceived transformation and its internalisation. It can throw interesting insights on how indeed the shift in power dynamics at the household and at community level is being received by various sections.

## Program Assessment Matrix

Activities	Indicators	Progress
Enterprise development for species like <i>Garcinia gummigutta</i> , <i>Cinnamomum</i> spp., <i>Phoenix</i> spp., <i>Canarium strictum</i>	Income levels of collectors in at least 15 groups increases at the end of 2 years. To collect baseline information to monitor the same.	<ul style="list-style-type: none"> <li>• Honey rate has increased by 20 per cent for communities in Karoor and Shirsgaon.</li> <li>• Wild date palm mats fetch better price for small size in Karoor and Shirsgaon. Earlier it fetched Rs 1/sq.ft but with value addition the price has gone to Rs 6/sq.ft.</li> <li>• <i>Canarium</i> spp. has sown 100 per cent increase from a low of Rs 30/kg.</li> <li>• Processed amla, as candies, is sold at Rs 50/kg. Earlier, it was not marketed.</li> <li>• Honey wax fetches 40 per cent high, from a low of Rs 60/kg.</li> <li>• <i>Garcinia indica</i> syrup has been marketed for the first time at Rs 60/litre.</li> <li>• Group wise income increase is being computed.</li> </ul>
Resource mapping and resource assessment of species	Community management plan based on the resource mapping and assessment in 2 forest division developed leading to better management practices	<ul style="list-style-type: none"> <li>• Resource mapping through GIS developed for two forest division viz., Sirsi and Honnavar.</li> <li>• 300 plots in each of the two forest divisions have been enumerated to assess the NTFP resource.</li> <li>• Community management plan for 4 NTFP species developed in consultation with the community.</li> <li>• Enumeration helped in understanding diversity and density of species; and in getting need for processing equipment. .</li> </ul>
Domestication, develop packages of practice for priority NTFP species	Develop sustainable harvest techniques for at least 10 priority species and initiate value addition for 5 species	<ul style="list-style-type: none"> <li>• Exposure-cum-training on sustainable harvest techniques in Cinnamon, Gums, Resins, <i>Garcinia gummigata</i>, <i>G. indica</i>, wild mango, wild date palm, amla and honey.</li> <li>• Value addition in honey, <i>G. indica</i>, <i>Canarium</i>, and wild date palm.</li> </ul>

<p>Nursery and cultivation techniques, awareness programs, press/media coverage, meetings &amp; workshops, publication</p>	<p>Reduce pressure on wild by establishing nurseries (25,000 saplings) for at least 10 priority species.</p>	<ul style="list-style-type: none"> <li>• Five nurseries: a nursery at <b>Amchimane</b>, 20,000 plants, 15 species viz., wild mango, <i>Artocarpus lakoocha</i>, <i>Acacia sp.</i>, soap berry, <i>Ochrocarpus longifolius</i>, wild date palm, <i>Pomgamia pinnata</i>, <i>Buchanania lazan</i>, <i>Elaegnus latofolia</i>, Ashoka, Rampatre, Indian gooseberry, <i>Garcinia gummigatta</i>, <i>G. indica</i>: two nurseries at <b>Karoor</b>, 1,000 plants each, 5 species viz., rampatre, soap berry, cinnamon, <i>Garcinia</i> and wild mango and a nursery at <b>Navangere</b>, 4,000 plants, three species viz., wild mango, jack fruit and <i>G. gummigata</i>.</li> </ul>
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- **Dr Sudhirendar Sharma** is a development analyst, based in Delhi. He is consultant to organizations including DFID and government bodies like IFAD. He has extensively worked on water issues and water shed development. He has done evaluation studies for numerous organizations on different activities. His interest on Non Timber Forest Produce is a result of his association with Western Ghats.

Hivos ltr Jan 2010

Dear Pandurang, dear Mableswar,

Greetings for 2010!

First of all thank you for organizing my visit to Prakruti in December last year. It was certainly very useful for me to have a good understanding of the area, context and issues within which Prakruti's work is located. The field visits and interactions with the communities were very enriching and the commute itself pointed towards the challenges of working in such a remote area. I also appreciated the openness and the eagerness of the staff members with which the discussions and the visits were conducted. I am sharing some of my observations, most of which we already discussed during my visit very briefly that may require follow up. Please feel free to correct or point out to anything that you do not necessarily agree.

**Community Mobilisation:** The interaction with the women's self help groups and the cooperative executives left me with an impression that there is a lot of enthusiasm within the groups to respond to suggestions and take up new activities. Given the fact that agriculture provides limited income opportunities for the people of Karoor and neighboring villages apart from the honey and handicraft activities that provides much needed supplementary income, the possibility of getting enrolled in NREGA should be seriously explored. The lead for taking the initiative on NREGA, like with many other activities, should preferably be with the leadership of the community groups.

**Nurseries:** I felt most of the nurseries that we visited left much room for improvement both in terms of conceptualization and implementation. The purpose of the nurseries were said to be several- from conservation of endangered species/ propagation of economic species, income generation for the women, medicinal/ nutritional security. While the objectives are themselves quite relevant and important, the design could be improved keeping scale and ownership issues in mind. In terms of successful examples of this you may get in touch with FRLHT on their kitchen herbal garden KHG programme (Mr Hariram Murthy) or with Mr G V Hegde of BAIF who I believe has settled down in Sirsi now. Also, the forest nursery could act as a good resource for training and also planting material if possible.

**Income generating activities:** The bee keeping, Garcinia juice making, the handicrafts all appeared to have a lot of potential in terms substantially augmenting the livelihood sources of the community members. The raw material costs seemed to be quite low except for their own labour. Ensuring product quality and consistency could be improved which could be a pre-requisite for bulk marketing while marketing itself remains a huge bottleneck. As discussed I spoke with Mr Srikantha Shenoy from IDF that markets similar products in Bangalore and he said that IDF would be quite willing to explore linkages with the groups of Prakruti for assisting in improving product quality as well as for marketing. If you think this to be a proposition worth exploring please feel free to get in touch with IDF at the address given below. (You will also find the details in the latest issue of LEISA India that also features your article).

Mr. Srikantha Shenoy  
Executive Trustee  
**Initiatives for Development Foundation (IDF)**  
'Usha', 141/A, 25th Cross, Rajajinagar, 2nd Block  
**Bangalore 560010**

Ph. No. **23131382** / Fax.No.**41285558**

Fax. No. [info@idfdevelopment.org](mailto:info@idfdevelopment.org); [idfbangalore@gmail.com](mailto:idfbangalore@gmail.com)/ Website: [www.idfdevelopment.org](http://www.idfdevelopment.org)

**Marketing structure:** Given the fact the commercial operations are currently being done by Prakruti that from a legal point of view alone may not be a wise thing to do quite apart from the fact that it may come in the way of creating ownership among the community groups. It is good to know that Prakruti is already exploring a separate legal structure for the producer groups and the possibility

and merits of linking these groups with the larger cooperative could be explored. I understand that the producers in some sense are already members of the larger cooperative but I am not sure whether their interests would be adequately represented in the cooperative that is possibly dominated by large farmers.

Follow up on the RFMS: It was very encouraging to know the steps that are taken to follow up meticulously on the recommendations of the RFMS report and also to know that the exercise has been useful for Prakruti to strengthen its systems of financial management. There are some pending issues that require attention and in that sense it would be important to firm up the support sought from the Mr Kamat or any other qualified person. Specifically, the issue of mixing of local and foreign funds and the opening up of separate accounts for individual donors needs to be addressed promptly. Do let us know if Hivos could assist Prakruti in this regard in anyway. It would be useful if Prakruti also develops an organisation manual that codifies all organisational procedures that would enhance the transparency of the organisation further.

Follow up of the project: As discussed given the rather uncertain funding climate in which Hivos operates and Hivos' own thinking on 'programme approach' for supporting activities in future it would be important for Prakruti to engage with other donors and civil society actors to secure its funding base for the future.

That is all for now from my side. Thank you once again, especially to Mableswar for the insights that he shared and for his patience. Do let me know if I have missed out anything or point out errors that are factually incorrect.

Best Regards,

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Bishwadeep Ghose  
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## ದಾಲ್ವಿನ್ನಿ ನಾಶ ಅಧ್ಯಯನ

### ಪೀಠಿಕೆ

ದಾಲ್ವಿನ್ನಿ, ಕಿರು ಅರಣ್ಯ ಉತ್ಪತ್ತಿಗಳಲ್ಲಿ ಪ್ರಮುಖವಾದುದು. ಕೆಲವೊಂದು ರೈತರು ತಮ್ಮ ಜಮೀನಿನಲ್ಲಿ ಇದನ್ನು ಬೆಳೆದರೂ ಸಹ ನೈಸರ್ಗಿಕ ಅರಣ್ಯಗಳಿಂದ ಸಂಗ್ರಹಿಸಿ ಮಾರಾಟವಾಗುವುದೇ ಹೆಚ್ಚು. ಇದರ ತೊಗಟೆ ಮತ್ತು ಎಲೆಯನ್ನು ಸಂಬಾರ ವಸ್ತುವಾಗಿ ಬಳಸುತ್ತಿದ್ದು ದಾಲ್ವಿನ್ನಿಯ ಐದು ಪ್ರಭೇದಗಳು ನಮ್ಮಲ್ಲಿಯ ಕಾಡುಗಳಲ್ಲಿ ಸಾಮಾನ್ಯವಾಗಿ ಕಾಣಿಸುತ್ತದೆ.

### ಅಧ್ಯಯನದ ಉದ್ದೇಶ:

- ಒಂದು ಹಳ್ಳಿಯ ಸುತ್ತಮುತ್ತ ಕಾಡಿನಲ್ಲಿರುವ ದಾಲ್ವಿನ್ನಿ ಮರಗಳ ಸಂಖ್ಯೆ ತಿಳಿದುಕೊಳ್ಳುವುದು, ಮರಗಳ, ಗಿಡಗಳ ಪರಿಸ್ಥಿತಿ ಅಧ್ಯಯನ
- ದಾಲ್ವಿನ್ನಿ ಪ್ರಭೇದದ ಪುನರುತ್ಪಾದನೆ ಸ್ಥಿತಿ ತಿಳಿದುಕೊಳ್ಳುವುದು.
- ದಾಲ್ವಿನ್ನಿ ಎಲೆ ಮತ್ತು ಮೊಗ್ಗು ಸಂಗ್ರಹದಿಂದ ದಾಲ್ವಿನ್ನಿ ತಳಿಯ ಮೇಲಾದ ಪರಿಣಾಮ ಕುರಿತು ಅಧ್ಯಯನ ಮತ್ತು ವಿಶ್ಲೇಷಣೆ ಮಾಡುವುದು.

### ಸಾಮಾನ್ಯ ಮಾಹಿತಿ:

#### ಹಳ್ಳಿಯ ಹೆಸರು: ತೆಪ್ಪಿಗೆ:

ಪೋಸ್ಟ್: ಸಾಲ್ಕಣಿ, ತಾಲೂಕು: ಶಿರಸಿ, ಹುಲೇಕಲ್ ಅರಣ್ಯ ವಲಯ: ಶಿರಸಿ ಅರಣ್ಯ ವಿಭಾಗ

ಜಿ.ಪಿ.ಎಸ್ ಮಾಹಿತಿ: N14° 37.985' E. 074°41.139'

ಸಮುದ್ರಮಟ್ಟದಿಂದ ಎತ್ತರ: 550ಮೀಟರ್

ಅರಣ್ಯ: ನಿತ್ಯ ಹರಿದ್ವರ್ಣದ ಕಾಡು ಮತ್ತು ಎಲೆ ಉದುರಿಸುವ ಕಾಡುಗಳ ಮಿಶ್ರಣ ಇಲ್ಲಿದ್ದು ಜನವಸತಿಯ ಸಮೀಪದಲ್ಲಿ ಕಾಡು ಇದೆ. ಒಣ ಎಲೆ ಸಂಗ್ರಹ, ಉರುವಲು ಕಟ್ಟಿಗೆ ಸಂಗ್ರಹ, ಕಿರುಅರಣ್ಯ ಉತ್ಪತ್ತಿ ಸಂಗ್ರಹ ಮತ್ತು ಸತ್ತ ಒಣ ಮರಗಳ ನಾಟಾ ಸಂಗ್ರಹ ಮಾಡಿರುತ್ತಾರೆ. ಕೆಲವೊಂದು ಪ್ರದೇಶಗಳಲ್ಲಿ ಹೆಚ್ಚಿನ ಪ್ರಮಾಣದಲ್ಲಿ ಅರಣ್ಯ ನಾಶವಾಗಿದ್ದು ಕಂಡು ಬಂದಿರುತ್ತಿದೆ. ಕೆಲವೊಂದು ಪ್ರದೇಶಗಳಲ್ಲಿ ಕಡಿಮೆ ಹಾನಿ ಆಗಿರುವುದು ಕಂಡುಬರುತ್ತದೆ. 10 ಡಿಗ್ರಿ ಇಳಿಜಾರು ಭೂಮಿ ಕಂಡುಬರುತ್ತದೆ. ಊರಿನ ಸುತ್ತ ಕಾಯಿಟ್ಟ ಅರಣ್ಯ ಪ್ರದೇಶದ ವಿಸ್ತೀರ್ಣ-250 ಹೆಕ್ಟೇರ್.

#### ಹಳ್ಳಿಯ ಹೆಸರು: ಹಾಸಣಗಿ:

ಪೋಸ್ಟ್: ಕಡಬಾಳ, ತಾಲೂಕು: ಶಿರಸಿ, ಹುಲೇಕಲ್ ಅರಣ್ಯ ವಲಯ: ಶಿರಸಿ ಅರಣ್ಯ ವಿಭಾಗ

ಜಿ.ಪಿ.ಎಸ್ ಮಾಹಿತಿ: N14° 39.691' E074°41.462'

ಸಮುದ್ರಮಟ್ಟದಿಂದ ಎತ್ತರ: 550ಮೀಟರ್

ಅರಣ್ಯ: ನಿತ್ಯ ಹರಿದ್ವರ್ಣದ ಕಾಡು ಮತ್ತು ಎಲೆ ಉದುರಿಸುವ ಕಾಡುಗಳ ಮಿಶ್ರಣ ಇಲ್ಲಿದ್ದು ಜನವಸತಿಯ ಸಮೀಪದಲ್ಲಿ ಕಾಡು ಇದೆ. ಒಣ ಎಲೆ ಸಂಗ್ರಹ, ಉರುವಲು ಕಟ್ಟಿಗೆ ಸಂಗ್ರಹ, ಕಿರುಅರಣ್ಯ ಉತ್ಪತ್ತಿ ಸಂಗ್ರಹ ಮತ್ತು ಸತ್ತ ಒಣ ಮರಗಳ ನಾಟಾ ಸಂಗ್ರಹ ಮಾಡಿರುತ್ತಾರೆ. ಕೆಲವೊಂದು ಪ್ರದೇಶಗಳಲ್ಲಿ ಹೆಚ್ಚಿನ ಪ್ರಮಾಣದಲ್ಲಿ ಅರಣ್ಯ ನಾಶವಾಗಿದ್ದು ಕಂಡು ಬಂದಿರುತ್ತಿದೆ. ಕೆಲವೊಂದು ಪ್ರದೇಶಗಳಲ್ಲಿ ಕಡಿಮೆ ಹಾನಿ ಆಗಿರುವುದು ಕಂಡುಬರುತ್ತದೆ. 10 ರಿಂದ 15 ಡಿಗ್ರಿ ಇಳಿಜಾರು ಭೂಮಿ ಕಂಡುಬರುತ್ತದೆ. ಊರಿನ ಸುತ್ತ ಕಾಯಿಟ್ಟ ಅರಣ್ಯ ಪ್ರದೇಶದ ವಿಸ್ತೀರ್ಣ-350 ಹೆಕ್ಟೇರ್.

**ಹಳ್ಳಿಯ ಹೆಸರು: ಕುದ್ರಗೋಡ:**

ಪೋಸ್ಟ್: ಸಾಲ್ಕೂರಿ, ತಾಲೂಕು: ಶಿರಸಿ, ಹುಲೇಕಲ್ ಅರಣ್ಯ ವಲಯ: ಶಿರಸಿ ಅರಣ್ಯ ವಿಭಾಗ

ಜಿ.ಪಿ.ಎಸ್ ಮಾಹಿತಿ: N14° 40.691' E074°41.462'

ಸಮುದ್ರಮಟ್ಟದಿಂದ ಎತ್ತರ: 550ಮೀಟರ್

**ಅರಣ್ಯ:** ನಿತ್ಯ ಹರಿದ್ವರ್ಣದ ಕಾಡು ಮತ್ತು ಎಲೆ ಉದುರಿಸುವ ಕಾಡುಗಳ ಮಿಶ್ರಣ ಇಲ್ಲಿದ್ದು ಜನವಸತಿಯ ಸಮೀಪದಲ್ಲಿ ಕಾಡು ಇದೆ. ಒಣ ಎಲೆ ಸಂಗ್ರಹ, ಉರುವಲು ಕಟ್ಟಿಗೆ ಸಂಗ್ರಹ, ಕಿರುಅರಣ್ಯ ಉತ್ಪತ್ತಿ ಸಂಗ್ರಹ ಮತ್ತು ಸತ್ತ ಒಣ ಮರಗಳ ನಾಟಾ ಸಂಗ್ರಹ ಮಾಡಿರುತ್ತಾರೆ. ಕೆಲವೊಂದು ಪ್ರದೇಶಗಳಲ್ಲಿ ಹೆಚ್ಚಿನ ಪ್ರಮಾಣದಲ್ಲಿ ಅರಣ್ಯ ನಾಶವಾಗಿದ್ದು ಕಂಡು ಬಂದಿರುತ್ತಿದೆ. ಕೆಲವೊಂದು ಪ್ರದೇಶಗಳಲ್ಲಿ ಕಡಿಮೆ ಹಾನಿ ಆಗಿರುವುದು ಕಂಡುಬರುತ್ತದೆ. 20 ಡಿಗ್ರಿ ಇಳಿಜಾರು ಭೂಮಿ ಕಂಡುಬರುತ್ತದೆ. ಊರಿನ ಸುತ್ತ ಕಾಯಿಟ್ಟ ಅರಣ್ಯ ಪ್ರದೇಶದ ವಿಸ್ತೀರ್ಣ-350 ಹೆಕ್ಟೇರ.

**ಹಳ್ಳಿಯ ಹೆಸರು: ಶಿರಸಗಾಂವ್:**

ಪೋಸ್ಟ್: ಕಕ್ಕಳ್ಳಿ, ತಾಲೂಕು: ಶಿರಸಿ, ಹುಲೇಕಲ್ ಅರಣ್ಯ ವಲಯ: ಶಿರಸಿ ಅರಣ್ಯ ವಿಭಾಗ

ಜಿ.ಪಿ.ಎಸ್ ಮಾಹಿತಿ: N14° 45.889' E074°39.919'

ಸಮುದ್ರಮಟ್ಟದಿಂದ ಎತ್ತರ: 450ಮೀಟರ್

**ಅರಣ್ಯ:** ನಿತ್ಯ ಹರಿದ್ವರ್ಣದ ಕಾಡು ಇಲ್ಲಿದ್ದು ಜನವಸತಿಯ ಸಮೀಪದಲ್ಲಿ ಇದೆ. ಒಣ ಎಲೆ ಸಂಗ್ರಹ, ಉರುವಲು ಕಟ್ಟಿಗೆ ಸಂಗ್ರಹ, ಕಿರುಅರಣ್ಯ ಉತ್ಪತ್ತಿ ಸಂಗ್ರಹ ಮತ್ತು ಸತ್ತ ಒಣ ಮರಗಳ ನಾಟಾ ಸಂಗ್ರಹ ಮಾಡಿರುತ್ತಾರೆ. 30 ರಿಂದ 35 ಡಿಗ್ರಿ ಇಳಿಜಾರು ಭೂಮಿ ಕಂಡುಬರುತ್ತದೆ. ಊರಿನ ಸುತ್ತ ಕಾಯಿಟ್ಟ ಅರಣ್ಯ ಪ್ರದೇಶದ ವಿಸ್ತೀರ್ಣ-300 ಹೆಕ್ಟೇರ.

**ದಾಲ್ಚಿನ್ನಿ ಸಂಗ್ರಹದ ಇತಿಹಾಸ:**

ಅಧ್ಯಯನ ನಡೆಸಿದ ಎಲ್ಲಾ ಹಳ್ಳಿಗಳಲ್ಲಿ ಕಳೆದ 30-40 ವರ್ಷಗಳಿಂದ ದಾಲ್ಚಿನ್ನಿ ಎಲೆ ಮತ್ತು ಮೊಗ್ಗಿನ ಸಂಗ್ರಹ ನಡೆದಿದೆ. ಜನವರಿ ತಿಂಗಳಿಂದ ಎಪ್ರಿಲ್ ತಿಂಗಳಿನವರೆಗೆ ಸಂಗ್ರಹಿಸಲಾಗುತ್ತದೆ. ಅರಣ್ಯ ಇಲಾಖೆ ಈ ಸಂಗ್ರಹ ಕಾರ್ಯವನ್ನು ಗುತ್ತಿಗೆ ಆಧಾರದಲ್ಲಿ ಎರಡು ವರ್ಷಗಳ ಅವಧಿಗೆ ನೀಡುತ್ತದೆ. ಗುತ್ತಿಗೆದಾರರು ಸ್ಥಳೀಯರನ್ನು ಕೂಲಿಗೆ ನಿಯಮಿಸಿಕೊಂಡು ಎಲೆ ಮತ್ತು ಮೊಗ್ಗನ್ನು ಸಂಗ್ರಹಿಸುವ ವಿಧಾನ ಜಾರಿಯಲ್ಲಿದೆ. ಗುತ್ತಿಗೆ ನೀಡಿದ ಅವಧಿಯಲ್ಲಿ ಎಲೆಗಳ ಅತಿಯಾದ ಸಂಗ್ರಹ ನಡೆಯುವುದು ಮತ್ತು ಮರಗಳ ನಾಶ ಕಂಡುಬಂದಿದೆ.

ಅಧ್ಯಯನದ ಸಂದರ್ಭದಲ್ಲಿ ತಿಳಿದು ಬಂದ ಸಂಗತಿಯೆಂದರೆ ಗುತ್ತಿಗೆದಾರರು ಹತ್ತರಿಂದ ಹದಿನೈದು ಜನ ಹಳ್ಳಿಯ ಸಮೀಪ ವಸತಿ ಮಾಡಿ ಹಳ್ಳಿಗರಿಂದ ದಿನಾಲೂ ಎಲೆ ಸಂಗ್ರಹಿಸಿ ಒಣಗಿಸುತ್ತಾರೆ. 2004-05 ರಲ್ಲಿ ಆಗತಾನೇ ಕೊಯ್ಲು ಹಸಿ ಎಲೆಗೆ ಕಿಲೋಗೆ 2 ರೂಪಾಯಿ ಮತ್ತು ಒಣ ಎಲೆಗೆ 5 ರಿಂದ 6 ರೂಪಾಯಿ ನೀಡಿದ್ದಾರೆ. ಒಬ್ಬ ವ್ಯಕ್ತಿ ಸರಾಸರಿ 150ಕಿಲೋದಿಂದ 200 ಕಿಲೋವರೆಗೆ ದಿನಕ್ಕೆ ಸಂಗ್ರಹಿಸುತ್ತಾರೆ. ಒಂದು ಮಧ್ಯಮ ಗಾತ್ರದ ಮರ ಸರಾಸರಿ 50 ಕಿಲೋ ಹಸಿ ಎಲೆ ನೀಡುತ್ತದೆ.- 50 ಕಿಲೋಗಿಂತ ಕಡಿಮೆ ಸಂಗ್ರಹಿಸಿದಲ್ಲಿ ಕೂಲಿದರವೂ ಸಿಗುವುದಿಲ್ಲವೆಂಬುದು ಹಳ್ಳಿಗರ ಅಭಿಪ್ರಾಯ.

ಮೊಗ್ಗಿನ ಸಂಗ್ರಹ ಸಹ ಸತತವಾಗಿ ನಡೆಯುತ್ತಿತ್ತು. ಇದರ ಗುತ್ತಿಗೆ ನೀಡದಿದ್ದರೂ ಹಳ್ಳಿಗರು ಕೊಯ್ಲು ಮಾಡಿ ಮಾರುಕಟ್ಟೆಯಲ್ಲಿ ಮಾರುತ್ತಾರೆ. ಇದಕ್ಕೆ ಬೇಡಿಕೆ ಇರುವುದರಿಂದ ಇದನ್ನು ಸಂಗ್ರಹಿಸಿ ಮಾರುತ್ತಾರೆ. ಒಂದು ಮರ 2 ರಿಂದ 3 ಕಿಲೋ ಒಣಗಿಸಿದ ಮೊಗ್ಗನ್ನು ನೀಡುತ್ತದೆ. ಒಂದು ಕಿಲೋಗೆ ರೂ 100 ಮಾರುಕಟ್ಟೆ ದರವಿದೆ. ಇತ್ತೀಚೆಗೆ ಎಲೆ ಸಂಗ್ರಹ ಅವ್ಯಾಹತವಾಗಿ ನಡೆದಿದ್ದರಿಂದ ದಾಲ್ಚಿನ್ನಿ ಮೊಗ್ಗು ಸಿಗದೇ ಇರುತ್ತಿದ್ದು ಮತ್ತೆ ಸಿಗಲು ಬದುಕಿದ ಮರಕ್ಕೆ 10ವರ್ಷ ಬೇಕಾಗಬಹುದು.

ದಾಲ್ಚಿನ್ನಿ ಎಲೆ ಕೊಯ್ಲಿನ ವಿಧಾನ:

ಕತ್ತಿಯಿಂದ ಮರದ ರೆಂಬೆಯನ್ನು ಕತ್ತರಿಸಿ ಕೆಳಗೆ ಬೀಳಿಸಿ ಕೆಳಗೆ ಎಲೆಗಳನ್ನು ರೆಂಬೆಯಿಂದ ಬೇರ್ಪಡಿಸಿ ಗೋಣಿ ಚೀಲಕ್ಕೆ ತುಂಬಿ ಸಾಗಿಸುತ್ತಾರೆ. ಅರಣ್ಯ ಇಲಾಖೆಯ ನಿಯಮಾವಳಿಗಳು ಪೆನ್ಸಿಲ್ ಗಾತ್ರಕ್ಕಿಂತ ದೊಡ್ಡ ರೆಂಬೆ ಕತ್ತರಿಸಬಾರದೆಂದಿದ್ದರೂ ಸಹ ಅದನ್ನು ಪಾಲಿಸದೇ ದೊಡ್ಡ ಗಾತ್ರದ ರೆಂಬೆಗಳನ್ನು ಕತ್ತರಿಸುತ್ತಾರೆ.

ಅಧ್ಯಯನ ಕೈಗೊಂಡ ತೆಪ್ಪಿಗೆ ಊರಿನಲ್ಲಿ ಪ್ರತಿವರ್ಷ ದಾಲ್ಚಿನ್ನಿ ಎಲೆ ಸಂಗ್ರಹಿಸಲಾಗಿದೆ. ಹಾಸಣಗಿ ಊರಿನಲ್ಲಿ ಸಹ ಎಲ್ಲಾ ಕಡೆ ಸಂಗ್ರಹಿಸಿದರೂ ಸಹ ಇಳಿಜಾರು ಪ್ರದೇಶದಲ್ಲಿ ಕೆಲವು ಮರಗಳಿಂದ ಎಲೆ ಸಂಗ್ರಹಿಸದೇ ಬಿಡಲಾಗಿದೆ.

ಕುದ್ರಗೋಡನಲ್ಲಿ ಗ್ರಾಮ ಅರಣ್ಯ ಸಮೀಪಿ ಸಕ್ರಿಯವಾಗಿರುವುದರಿಂದ ಮರಗಳಿಗೆ ಹಾನಿ ಮಾಡದೇ ಎಲೆ ಸಂಗ್ರಹಿಸಲಾಗಿದೆ. ಹರಾಜು ಪ್ರಕ್ರಿಯೆ ನಡೆದಾಗ ಮಾತ್ರ ಎಲೆ ಸಂಗ್ರಹಿಸಿರುತ್ತಿದ್ದು ದಾಲ್ಚಿನ್ನಿ ಮೊಗ್ಗು ಪ್ರತಿವರ್ಷ ಸಂಗ್ರಹಿಸಿರುತ್ತಾರೆ.

ಶಿರಸಗಾಂ ಹೆಚ್ಚು ಇಳಿಜಾರು ಪ್ರದೇಶವಾಗಿರುವುದರಿಂದ ಹೆಚ್ಚಿನ ಮರಗಳು ಎಲೆ ಸಂಗ್ರಹಿಸದೇ ಹಾಗೆ ಉಳಿದುಕೊಂಡಿದೆ. ಸಂಗ್ರಹಿಸಿದರೂ ತರುವ ಕಷ್ಟದಿಂದಾಗಿ ಇಲ್ಲಿ ಊರಿನಿಂದ ದೂರದ ಮರಗಳು ಕಡಿಯದೇ ಬಿಟ್ಟಿದ್ದಾರೆ.

ಅಧ್ಯಯನ ವಿಧಾನ:

ಅಧ್ಯಯನಕ್ಕಾಗಿ ಒಟ್ಟು ನಾಲ್ಕು ಊರನ್ನು ಆರಿಸಿಕೊಳ್ಳಲಾಗಿದ್ದು ಈ ಊರಿನ ಸುತ್ತಮುತ್ತ ಇರುವ ಕಾಡಿನಲ್ಲಿ ದೊಡ್ಡ ಪ್ರಮಾಣದಲ್ಲಿ ದಾಲ್ಚಿನ್ನಿ ಎಲೆ ಸಂಗ್ರಹ ನಡೆದಿರುತ್ತಿದ್ದು ವಿವಿಧ ಬೌಗೋಳಿಕ ಬಿನ್ನತೆ ಹೊಂದಿರುವುದು ಆಯ್ಕೆಯ ಮಾನದಂಡಗಳಲ್ಲೊಂದು.

ಆರಿಸಿದ ಊರುಗಳಲ್ಲಿ ಸ್ಥಳೀಯ ವ್ಯಕ್ತಿಗಳ ಸಹಾಯದಿಂದ ಇಡೀ ಕಾಡನ್ನು ಜಾಲಾಡಿಸಿ ಪ್ರತಿ ದಾಲ್ಚಿನ್ನಿ ಮರಗಳನ್ನೂ ಭೇಟಿ ಮಾಡಿ ಮರದ ವಿವರಗಳನ್ನು ತೆಗೆದುಕೊಳ್ಳಲಾಯಿತು. ಮರದ ಗಾತ್ರ, ಎತ್ತರ, ಸತ್ತಿದೆಯೋ? ಬದುಕಿದೆಯೋ? ಎಲೆ ಸಂಗ್ರಹಕ್ಕಾಗಿ ಕಡಿದ ಪ್ರಮಾಣ ಎಲ್ಲ ಮಾಹಿತಿಯನ್ನು ದಾಖಲೆ ಮಾಡಿಕೊಳ್ಳಲಾಯಿತು.

ಪುನರುತ್ಪಾದನೆಯ ಅಧ್ಯಯನಕ್ಕಾಗಿ ವಿವಿಧ ಸ್ಥಳಗಳಲ್ಲಿ ಹತ್ತು ಮೀಟರ್ ಉದ್ದ, ಹತ್ತು ಮೀಟರ್ ಅಗಲದ ಸ್ಥಳವನ್ನು ಆಯ್ಕೆ ಮಾಡಿ ಗಿಡದ ಎತ್ತರದ ಆಧಾರದ ಮೇಲೆ ನಾಲ್ಕು ವರ್ಗಗಳನ್ನಾಗಿ ವಿಂಗಡಿಸಲಾಯಿತು.

ಒಂದನೇ ವರ್ಗ - ನಲವತ್ತು ಸೆಂಟಿಮೀಟರಿಗಿಂತ ಕಡಿಮೆ.

ಎರಡನೇ ವರ್ಗ - ನಲವತ್ತರಿಂದ - ನೂರು ಸೆಂಟಿಮೀಟರ್

ಮೂರನೇ ವರ್ಗ - ನೂರು ಸೆಂಟಿಮೀಟರ್ ಎತ್ತರದಿಂದ ಆದರೆ ಹತ್ತು ಸೆಂಟಿಮೀಟರಿಗಿಂತ ಕಡಿಮೆ ಸುತ್ತಳತೆ

ನಾಲ್ಕನೇ ವರ್ಗ - ನೂರು ಸೆಂಟಿಮೀಟರ್ ಎತ್ತರ ಮತ್ತು ಹತ್ತರಿಂದ ಮೂವತ್ತು ಸೆಂಟಿಮೀಟರ್ ಸುತ್ತಳತೆ

## ಪುನರುತ್ಪಾದನೆಯ ಅಧ್ಯಯನ

### ದಾಲ್ಚಿನ್ನಿ

ಹಳ್ಳಿಯ ಹೆಸರು	ಅಧ್ಯಯನ ಮಾಡಿದ ಒಟ್ಟು ಪ್ರದೇಶ(M <sup>2</sup> )	ಪುನರುತ್ಪಾದನೆ ವರ್ಗ				ಪುನರುತ್ಪಾದನೆಯ ಒಟ್ಟು ಸಂಖ್ಯೆ	ಗಿಡಗಳ ಸಂಖ್ಯೆ / 100 M <sup>2</sup>
		I	II	III	IV		
ತೆಪ್ಪಿಗೆ	1875	137	86	18	10	251	13
ಹಾಸಣಗಿ	2800	259	146	30	16	451	16
ಕುದ್ರಗೋಡ	1200	17	4	2	4	27	2

### ಮರಗಳ ಅಧ್ಯಯನ:

ಹಳ್ಳಿಯ ಹೆಸರು	ಅಧ್ಯಯನ ಮಾಡಿದ ಒಟ್ಟು ಮರಗಳ ಸಂಖ್ಯೆ	ಸತ್ತಿದ್ದು	ಕಡಿದ ಪ್ರಮಾಣ (>75%)	ಸೊಪ್ಪು ಸಂಗ್ರಹ ಮಾಡದೆ ಇರುವ ಮರಗಳು
ತೆಪ್ಪಿಗೆ	839	222(26%)	256 (31%)	41(5%)
ಹಾಸಣಗಿ	1545	146 (9%)	262(17%)	286(19%)
ಕುದ್ರಗೋಡ	647	17 (3%)	67(10%)	234 (36%)

### ಪುನರುತ್ಪಾದನೆ:

ತೆಪ್ಪಿಗೆ ಮತ್ತು ಹಾಸಣಗಿಯಲ್ಲಿ ಪುನರುತ್ಪಾದನೆ ಸಮಾನ ಪ್ರಮಾಣದಲ್ಲಿ ಇವೆ. ಕುದ್ರಗೋಡಿನಲ್ಲಿ ಪುನರುತ್ಪಾದನೆ ಕಡಿಮೆ ಇದೆ. ಕಳೆದ 40 ವರ್ಷಗಳಿಂದ ದಾಲ್ಚಿನ್ನಿ ಮೊಗ್ಗನ್ನು ಸಂಗ್ರಹಿಸುತ್ತಿರುವುದರಿಂದ ಪುನರುತ್ಪಾದನೆ ಕಡಿಮೆ ಇರಬಹುದೆಂದು ಅಂದಾಜು ಮಾಡಲಾಗಿದೆ. ಇನ್ನೂ ಹೆಚ್ಚಿನ ಅಧ್ಯಯನ ಕೈಗೊಂಡಲ್ಲಿ ನಿಜವಾದ ಕಾರಣ ತಿಳಿಯಬಹುದು.

### ಮರಗಳ ಅಧ್ಯಯನ ವರದಿ:

ತೆಪ್ಪಿಗೆಯಲ್ಲಿ ತಪ್ಪು ಸಮಯದಲ್ಲಿ ಅಂದರೆ ಎಲೆ ಚಿಗುರುವ ಸಮಯವಾದ ಏಪ್ರಿಲ್ ಮೇನಲ್ಲಿ ಎಲೆ ಸಂಗ್ರಹ ಮಾಡಿದ್ದು ಮತ್ತು ಪ್ರತಿ ವರ್ಷ ಸಂಗ್ರಹ ಮಾಡಿದ್ದರಿಂದ ಹೆಚ್ಚಿನ ಮರಗಳು ಸಾವನ್ನಪ್ಪಿವೆ ಅಥವಾ ಸ್ಥಳೀಯರ ಅಭಿಪ್ರಾಯದಂತೆ ಸಾವಿನಂಚಿನಲ್ಲಿವೆ.

ಹಾಸಣಗಿಯಲ್ಲಿ ಎಲೆ ಸಂಗ್ರಹದ ನಡುವಿನ ಅವಧಿ ಕಡಿಮೆ ಇರುವುದರಿಂದ ಕಡಿಮೆ ಮರಗಳು ಸತ್ತಿವೆ.

ಕುದ್ರಗೋಡಿನಲ್ಲಿ ಒಮ್ಮೆ ಮಾತ್ರ ಎಲೆ ಸಂಗ್ರಹ ನಡೆದಿರುತ್ತಿದ್ದು ಅದು ಸಹ ಗ್ರಾಮ ಅರಣ್ಯ ಸಮಿತಿಯ ಸುಪರ್ದಿಯಲ್ಲಿ ನಡೆದುದರಿಂದ ಕಡಿಮೆ ಮರಗಳು ಸತ್ತಿವೆ. ಮತ್ತೊಂದು ಕಾರಣ ಸಣ್ಣ ಎಲೆಗಳಿರುವ ದಾಲ್ಚಿನ್ನಿ ಮರವನ್ನು ಎಲೆ ಸಂಗ್ರಹಿಸಲು ಲಾಭದಾಯಕವಲ್ಲವೆಂದು ಬಿಟ್ಟಿರುವುದರಿಂದ (*Cinnamom riparium*) ಹೆಚ್ಚಿನ ಮರಗಳು ಬದುಕಿಕೊಂಡಿವೆ.

ನಂ.ಬಿ3/ಎಂಎಫ್‌ಪಿ/ಸಿಆರ್-9/04-05

ಅರಣ್ಯ ಸಂರಕ್ಷಣಾಧಿಕಾರಿಗಳ ಕಚೇರಿ,  
ಕೆನರಾ ವೃತ್ತ, ಶಿರಸಿ  
ದಿನಾಂಕ: 28/1/2005

ಉಪ ಅರಣ್ಯ ಸಂರಕ್ಷಣಾಧಿಕಾರಿ,  
ಹೊನ್ನಾವರ ಕಾರವಾರ ಮತ್ತು ಹಳಿಯಾಳ ಇವರಿಗೆ,

ವಿಷಯ:- 2004-06ನೇ ಸಾಲಿಗೆ ದಾಲ್ಚಿನ್ನಿ ಎಲೆಗಳ ಟೆಂಡರ್-ಕಂ-ಹರಾಜು ಮಾಡಲು  
ಅನುಮತಿ ನೀಡುವ ಬಗ್ಗೆ.

ಉಲ್ಲೇಖ:- ಈ ಕಾರ್ಯಾಲಯದ ಸಮ ಸಂಖ್ಯೆ: ದಿ:- 19/10/2004

ಉಲ್ಲೇಖಿತ ಪತ್ರದಲ್ಲಿ, ವಿಭಾಗಗಳಲ್ಲಿ 2004-06 ನೇ ಸಾಲಿಗಾಗಿ ದಾಲ್ಚಿನ್ನಿ ಎಲೆಗಳ ಟೆಂಡರ್-ಕಂ-ಹರಾಜು ಮಾಡಲು ಅನುಮತಿಯನ್ನು ನೀಡಲಾಗಿದೆ. ಕೆಲ ವಿಭಾಗಗಳಲ್ಲಿ ಈಗಾಗಲೇ ಹರಾಜು ಪ್ರಕ್ರಿಯೆ ಕೈಗೊಂಡು ಕರಾರುನಾಮೆ ಕೂಡ ಮಾಡಲಾಗಿದೆ. ದಾಲ್ಚಿನ್ನಿ ಎಲೆಗಳನ್ನು ಸಂಗ್ರಹಿಸುವಾಗ ಕ್ರಮಬದ್ಧವಾಗಿ ಹಾಗೂ ತಾಂತ್ರಿಕತೆಯ ಬಳಕೆ ಮಾಡದೆ ರೆಂಬೆ ಕೊಂಬೆಗಳನ್ನು ಕಡಿದು ಮುಂದಿನ ಬೆಳವಣಿಗೆಗೆ ಹಾಗೂ ಪುನರುತ್ಪಾದನೆಗೆ ಅಡ್ಡಿಯಾಗಿರುವುದಾಗಿ, ಪತ್ರಿಕಾ ಮಾಧ್ಯಮ, ಪರಿಸರ ಸಂಘಟನೆ ಹಾಗೂ ಗ್ರಾಮ ಅರಣ್ಯ ಸಮಿತಿಯ ಸದಸ್ಯರು ದೂರಿಕೊಂಡಿರುವ ಹಿನ್ನೆಲೆಯಲ್ಲಿ, ಟೆಂಡರ್ ಪ್ರಕ್ರಿಯೆ ಕೈಗೊಂಡು ಈಗಾಗಲೇ ಸಂಬಂಧಿಸಿದ ಮತ್ತೆದಾರರಿಂದ ಕರಾರುನಾಮೆ ಮಾಡಿಕೊಂಡಿದ್ದಲ್ಲಿ ಮಾತ್ರ ಗುತ್ತಿಗೆಯನ್ನು ಮುಂದುವರಿಸಲು ಬಿಡಬೇಕು. ಇದು ಕಾನೂನು ಮತ್ತು ವ್ಯಾಜ್ಯವನ್ನು ಸುಗಮವಾಗಿ ನೋಡಿಕೊಂಡು ಹೋಗಲು ಸಾಧ್ಯವಾಗುತ್ತದೆ. ಆದರೆ ಟೆಂಡರ್ ಪ್ರಕ್ರಿಯೆ ಕೈಗೊಂಡಾಗ್ಯೂ ಕರಾರುನಾಮೆ ಪಡೆಯದೇ ಇದ್ದಲ್ಲಿ ಅಂತಹ ಘಟಕವನ್ನು ರದ್ದುಪಡಿಸುವುದು.

ನೀವು ಟೆಂಡರ್ ಪೂರ್ವದಲ್ಲಿ ಅಥವಾ ಕರಾರುನಾಮೆಯ ಸಮಯದಲ್ಲಿ ಹಲವು ಶರತ್ತುಗಳನ್ನು ಮತ್ತು ನಿಬಂಧನೆಗಳನ್ನು ವಿಧಿಸಿದ್ದಾಗ್ಯೂ ದಿನಾಂಕ:- 24/1/2005 ರಂದು ಪರಿಸರ ಸಂಘಟನೆ ಪತ್ರಿಕಾ ಮತ್ತು ದೂರದರ್ಶನ ಮಾಧ್ಯಮ ಹಾಗೂ ಇತರ ಸಂಘಟನೆಗಳೊಳಗೊಂಡು ನಡೆದ ಕಾರ್ಯಾಗಾರದಲ್ಲಿ ಚರ್ಚಿಸಿದಂತೆ ಹಾಗೂ ಈ ನಿಟ್ಟಿನಲ್ಲಿ ಉಪ ಅರಣ್ಯ ಸಂರಕ್ಷಣಾಧಿಕಾರಿ, ಶಿರಸಿ ರವರು ಶಿಫಾರಸ್ಸು ಮಾಡಿದ ಈ ಕೆಳಗಿನ ಹೆಚ್ಚುವರಿ ಶರತ್ತುಗಳನ್ನು ವಿಧಿಸುವುದರೊಂದಿಗೆ ಪರಿವಣಿ ಕರಾರುನಾಮೆ ಮಾಡಿಕೊಂಡು ಕ್ರಮಬದ್ಧವಾಗಿ ಹಾಗೂ ತಾಂತ್ರಿಕತೆಯನ್ನು ಅಳವಡಿಸಿ, ದಾಲ್ಚಿನ್ನಿ ಗಿಡಗಳಿಗೆ ಧಕ್ಕೆಯಾಗದಂತೆ ಕಟ್ಟಿಚ್ಚರ ವಹಿಸುವಂತೆ, ಗುತ್ತಿಗೆದಾರರು ಹಾಗೂ ಸಿಬ್ಬಂದಿಗಳಿಗೆ ನಿರ್ದೇಶಿಸಿ ದಾಲ್ಚಿನ್ನಿ ಸಂಗ್ರಹಣೆಗೆ ಮುಂದುವರಿಸಲು ಸೂಚಿಸಿದೆ.

ಹೆಚ್ಚುವರಿ ನಿಬಂಧನೆಗಳು:

1. Retention Crown: Atleast 50% of the Crown of the tree from the topside should be retained.
2. Girth class restrictions: Trees of only 60 Cm's and above of girth at breast height should be harvested.
3. Leading shoot/ branch should be retained at all times
4. Thick side branches should not be lopped

ಅರಣ್ಯ ಸಂರಕ್ಷಣಾಧಿಕಾರಿ,  
ಕೆನರಾ ವೃತ್ತ, ಶಿರಸಿ.

Field Notes: Uttara Kannada (Karnataka) and Srisailem Tiger Reserve (Andhra Pradesh): November 2009

Madhu, Kodaikanal.

*Karnataka*

Fibre

Every time in am in Uttara Kannada I am struck by the lushness of the vegetation, the lowland rainforest species, the occasional tree shooting up abruptly to 40 metres, and the twining rattan that accentuates the "wild feeling". This visit was during the season when paddy was about to be harvested; fields were ripe with green-golden grain, the farmers none too happy with the few unexpected showers we had.

In Shirisgaon the Siddhi people were occupied with producing banana fibre, for an outlet in Bangalore that fashions bags and other articles from it. The fibre production is from the common banana stem (after drying it), using a simple charka of a cycle wheel. Another fibre/stem that was being worked into small baskets and trays was of *Ichnocarpus frutescens*, karehambu or gowriballi in Kannada (kalidudhi in Hindi, paravalli in Tamil). Most of the Siddhi people depend a lot on NTFPs (*Cannarium resin*, *Garcinia gummigata*, *Garcinia indica*) and have a small nursery in the village of about 10-15 species, mainly for planting around their homes and common lands.

*Working on banana fibre in Shirisgaon*



At Kharur, a large spread out village with only 32 families, there are 3 SHGs. Here the population is mainly Khare Vokhaliga and they have made amla candy, kokum juice, kokum butter, mats of phoenix grass; they are also working with banana fibre and kharehambu fibre as in Shirisgaon. During the last year, the SHGs together earned a total of Rs

90,000/- through their sales. The third village, Kudregod, approachable only on extremely bad roads but, perhaps because of this, retained a certain "pristine" quality that was perceptible. Incidentally, this is one of the few villages from where the Appiko movement was launched more than 25 years ago!

In all the villages there were small nurseries of a variety of species: *Sapindus*, *Cannarium*, *Garcinia*, *Mammea*, *Cinnamon*, *Myrstica*, wild mango, amla, etc. Almost all of them are managed by women - some of the nurseries need more regular attention in

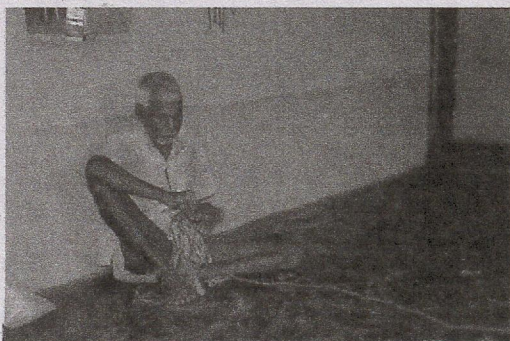
watering and weeding - and there was much interest in seeds/seed collection among the people. What really surprised me were the cuttings of *Helicteres isora* (yedamuri or kavargi in Kannada, marorphali in Hindi, valampiri in Tamil) that I noticed in the Kudregod nursery. On enquiry, I was told that it was for fibre - of a beautiful white silken quality - that lasts for years. Unfortunately, the plant was found about 10 kms from the village and the people usually walked there each year to harvest it; this woman had taken the initiative to grow it in the nursery and plant it within the village! *Helicteres* is quite wide spread in India but usually sought after for its screw-like fruit, apparently for their use in intestinal complaints. From literature I gather that the best fibre is obtained from plants that are 1.5-2 years old and that the stalks can be harvested annually from the regenerated shoots.



Nursery in Kudregod

In the various villages that I visited I came across people working with several plant fibres: *Helicteres isora*, *Ichnocarpus frutescens*, banana, *Careya arborea*, *Ficus* sp., and *Phoenix* grass. Resource persons from Bhadkal, Sirsi and Bangalore had come to teach and explain about some of these fibres to the people of about 6-10 village SHGs. Over a period of three days these resource persons, each a specialist of some of the plant fibres, had worked closely with the people. Though the products produced at present are not perfect - this will happen in a few months - the enthusiasm is obvious: in all the homes that I visited/stayed in the people were occupied with fibre!

Suggestion: Off hand, I can think of several other fibres used by adivasi people all over India: *Bauhinia vahlii*, sabai grass, coconut husk, *Sida* sp., *Sterculia villosa*, *Derris scandens*, *Hemidesmus indicus*, and *Grewia rothii*, to name a few. It would be a good idea to have *Prakruti* take up the task of holding some kind of "Fibre Desk" from which all the partners within the network can benefit. Several of these fibres can be grown in the nurseries from cuttings and our expertise could be developed in this new direction too.

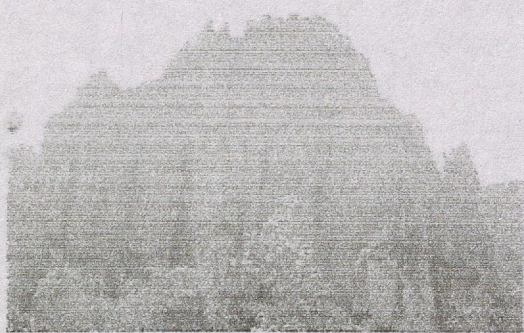


Fibre with *Ficus* sp. in Kharur

#### Yana

Appiko had organised a day of campaign against the plastic and littering at Yana, where some black spectacular rocks jut out of the earth, and which has unfortunately

...ನಮ್ಮ ಅನುಭವವು. There is a Shiva temple here that attracts pilgrims. The wonderful forest surrounding the temple, especially near the road, gets littered by picnickers who leave behind the symbols of their warped civilization. The idea was to invite the Forest Department officials - the concerned Conservator and DFO could not attend - students and local panchayat members to create an awareness and to practically clear the space of the garbage. Fortunately one senior FD official attended and participated fully in the event which was covered by the local media. The students as well as some well-wishers of Prakruti were keen and helped collect several bags of garbage from the area in the few hours that we spent there.



*The main rock at Yana*

Suggestion: The Yana cleaning/awareness programme should take up a long-term view of such situations elsewhere in the state. As the tourist presence is there to stay one could think of ways in which a behavioural code is in place. Also, the vast forest around Yana most likely concerns some interesting/rare species; a few university-level botanists along with

local adivasi people could document the flora and draw attention to the biological importance of the place. Perhaps the FD could be drawn in to support such a project!

#### NTFP plots/betta lands

Since the British times areca nut and spice farmers had been granted 3 acres of *betta* lands for every acre they cultivated. *Betta* lands were essentially forests (usually without water and therefore not suitable for areca nut) which could be used for collecting leaf manure and fodder by the owners. However, these lands could not be sold; nor could the trees be felled. There have been several instances of contractors clearing trees on *betta* lands illegally or other forms of misuse of these now degraded forest patches that stand out as one drives through Uttara Kannada.

I visited two specific *betta* areas where their owners had tried certain experiments: a) in Tannirhole, a farmer had left his *betta* area untouched and managed the forest to promote the harvest of NTFPs (*Garcinia*, jackfruit, soapnut, etc.) and had realized a large income in addition to the spices he grew, and b) in Bharimane, where a farmer had planted various additional crops to supplement the yield from *Garcinia* (sapota, lemons, mango, etc.) but had been faced with the problem of "scorching" despite the well mulched plants and much care.

As *betta* lands have no clear ownership or management plans they are abused: trees lopped almost fully leaving only the crown leaves intact, over-grazing, no efforts at soil and water conservation.

Suggestion: As *betta* lands constitute a large proportion of the region it might be an idea to work on a management plan for these lands. This could involve replanting,

upgrading of species, establishing nurseries, and documentation of the yields after a few years. It could be a pilot effort for a 10 acre plot, monitored by an NGO, as developed demonstration plots (6)



Former happy with pumpkin harvest

#### Cinnamon

Visited Teppagi reserve forest area to survey a forest tract that had been worked by cinnamon-leaf contractors; this was a fraction of the 400 acre areas of reserve forest. After a 10 year gap (during which time leaf buds were harvested, not the leaves!), auctions were opened for cinnamon leaf extraction in 2004 for a 2 year period. Despite protests from Prakruti the FD handed over forest areas around villages for cinnamon leaf harvest. In the Teppagi forest, the limited area surveyed in the 400 acre tract yielded 600 plus cinnamon trees of which at least 50% are dead; most of the rest are in bad shape, some are definitely dying.



Result of over exploitation of cinnamon leaves

Other observations made were as follows:

- a. A preliminary walk-look showed that the seedlings/saplings were between 1-3 years; after this age group there were no plants less than 25-30 years. Which could mean that even the leaf bud harvest (during the years when the auction of leaves did not happen was detrimental to reproduction),
- b. A few small trees were also felled; larger dead trees were being chopped for fuel,
- c. The forest area is otherwise quite good with good diversity.

The situation is apparently quite the same in all the tracts where cinnamon has been auctioned. The flowering/fruiting times of the various species of cinnamon (*C. zeylanicum*, *C. macrocarpum*) is between November to June, exactly the period when the contractors harvested the leaves/buds! It has been proposed that some intensive surveys be conducted in some of the patches where cinnamon trees have been destroyed. Information needs to be collected about: a. pollinators of cinnamon, b. number of seedlings per unit area, c. birds/animals that eat the fruit, d. Other medicinal plants found in the same forest, and e. Other wild food plants found in the same forest. (The last two sets of information may not be directly

related to the "cinnamon issue" but the survey could use the efforts to document these aspects anyway!)

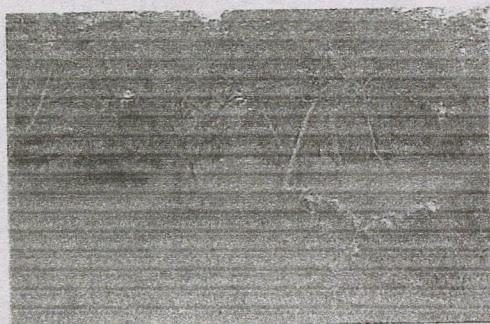
Once we have some relevant data to relate the decline of cinnamon to the over-exploitation of the resource it may be possible to confront the authorities and ask for a blanket ban on the harvest. At present, though there are guidelines for harvesting cinnamon leaves (how and how much to harvest), these have not been followed.

(Many thanks to Mahabaleshwar, Pandurang, Asha and Shyamala, Ganesh, Karmakar, Venkatrama, Geeta, the people of Shirisgaon, Kharur and Kutregod who made my trip more pleasant than I could have wished for!)

Andhra Pradesh

### Hand of God

The Srisailem Tiger Reserve is the largest tiger reserve in India with an area of 3568 sq.km and, together with the Gundla Brahmeswaram WLS (1140 sq.km), which borders it in the south, it will be a 4708 sq.km of continuous forest.

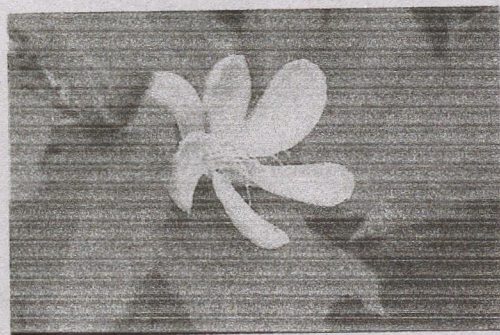


Open forest with grasses

The Nallamala landscape is dry and undulating with trees of *Terminalia tomentosa*, *Anogeissus latifolia*, *Erythrina suberosa*, *Cassia fistula*, several *Acacias* and *Albizzias*, *Bauhinia*, *Cochlospermum gossypium*, *Gardenia latifolia*, *Gardenia gummifera*, various bamboos, etc. At one point there was a pure stand of

*Pterospermum suberifolium* in full bloom, making the entire hill-slope divinely fragrant. I could not help reflect on the inappropriateness of *Pterospermum* belonging to the family *Sterculiaceae*, named after *Sterculia*, the Roman god of privies, *stercus* meaning dung!!

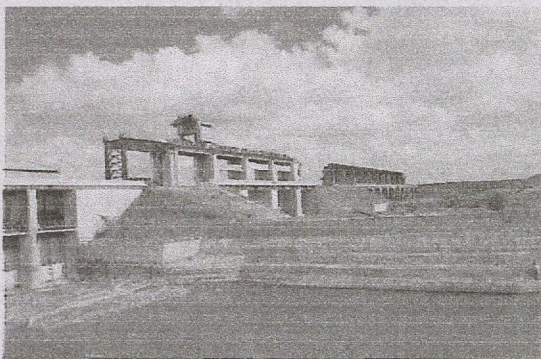
The forest is open with moderate sized trees with an abundance of grass and allowing for a thriving population of herbivores.



*Pterospermum suberifolium*

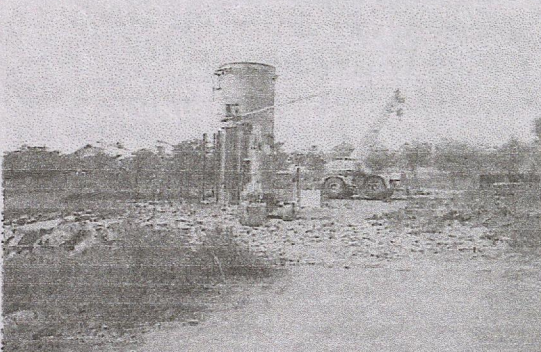
The visit was essentially to look at a project of the Irrigation Department in the core area of the Srisailem Tiger Reserve. The project itself is a tunnel being dug about 3 metres under the (Krishna) river bed and the adjacent hills of the Nallamala forest, for a length of 46 kms, to Nalgonda district. The diameter of the tunnel is 10.2 meters.

The purpose of the project is to bring drinking water to the drier areas of the Rayalaseema region of AP, especially Nalgonda district, that is known to have a high content of fluoride in the little water available; the other districts of the region are Kurnool, Cuddapa and Anantapur, all short of water and therefore far poorer. Much of the Krishna waters - the most dammed river in India - are diverted into this dry zone. As this causes a water deficit in the delta region - the farmers of the Krishna and the Godavari districts are a force to reckon politically - the Polavaram dam was envisaged; the idea was to counter the deficit by linking the Godavari to the Krishna. (I've tried to show the various reservoirs and the canals in the accompanying picture; this is a simplistic version, though!)



*Right bank canal with old and new barrages at Pothareddypadu*

VIKASA had already asked for information about the project under the Right to Information Act and had received a reply (many months later) that permission had been granted for the said project by the MoEF, and that Jayprakash Associates were the construction company that was in charge. The letter also listed a few conditions laid down by the Ministry that had to be adhered to such as a. Monitoring of impact on wildlife, b. noise level of the work to be kept under a certain decibel level, c. no disturbance to the tribal settlement in the area, etc.



*Worksite at the left bank canal in Domalpenta*

We visited Domalpenta where the project site is located. A small township surrounded by a barbed wire fence and manned by ex-army personnel is the headquarters, situated just off the reservoir. Permission to visit the actual worksite was to be requested from the General Manager of the project; on meeting him - he spoke to us quite amicably from his side of the fence, answering all our questions patiently - he refused to let us in. To the various questions that we posed his answers were:

- a. No, there are no vibrations due to the tunnelling, as it is far underground; therefore there are no impacts on wildlife and flora,
- b. There was no pollution,