CEPF SMALL GRANT FINAL PROJECT COMPLETION REPORT

Organization Legal Name:	
Project Title:	Identifying critical areas for a landscape level wildlife corridor in Uttara Kannada District (northern part of Malnad-Kodagu corridor to Sahyadri - Konkan corridor) of Central Western Ghats
Date of Report:	31 st January 2011
Report Author and Contact Information	Balachandra Hegde, Lakshmi Venkatesh Complex, TVStation Road, Chowkimath, Sirsi, Uttara Kannada, Karnataka. PIN- 581 402, Tel: 09448774778

CEPF Region: Western Ghats

Strategic Direction:1 - Enable action by diverse communities and partnerships to ensure conservation of key biodiversity areas and enhance connectivity in the corridors

Grant Amount: \$ 9900 (Used amount, \$ 8406)

Project Dates: 1st Sept 2009 to 31st Jan 2011

Implementation Partners for this Project (please explain the level of involvement for each partner):

Implementation of the project activities were done with support from Sahyadri Wildlife and Forest Conservation Trust (SWIFT) and Jagruti Foundation/SWIFT implemented the the project while, Jagruti foundation took administrative responsibility.

Conservation Impacts

Please explain/describe how your project has contributed to the implementation of the CEPF ecosystem profile.

Area between Sharavathi Wildlife Sanctuary and Dandeli Anshi Tiger Reserve, was one of the longest non protected areas in central Western Ghats. Through this study we have identified priority areas for conservation within this landscape. These identified conservation priority areas are now declared as three conservation reserves namely Aghanashini-Lion Tailed Macaque Conservation Reserve (ALTM CR), Bedthi Conservation Reserve (BCR), Shalmala Riparian Ecosystem Conservation Reserve, through government order FEE 147FWL 2011 and FEE 141 FWL 2011 dated 13-06-2011, by government of Karnataka. Aghanashini LTM Conservation Reserve consists 299.52 sq km with 5 conservation priority areas and Bedthi Conservation Reserve consists of about 4.89 sq km along 15.6 km stretch of Shalmala river a tributary of Bedthi river.

Hence, about 361.72 sq km have been added to protected area network in Western Ghats.

Conservation Reserve is a new category of protected area equivalent to **IUCN category VI**. This protected area encourages community participation in conservation. These protected areas are first of its kind in Western Ghats. So this is a new beginning for new type of conservation in Western Ghats.

Please summarize the overall results/impact of your project against the expected results detailed in the approved proposal.

Results were more than expected. Identification of priority areas was planned through the project. However, proposals were developed to declare the areas including priority locations into Conservation Reserve and submitted to Karnataka forest department and Western Ghats Task Force.

Please provide the following information where relevant:

Hectares Protected:

ALTM CR: 29952 ha. SRE CR: 489 ha. BV CR: 5707 ha.

Species Conserved: Endemic species Lion Tailed Macaque, Great Hornbill, Malabar Pied Hornbill, and several endemic plant species like *Myristica fatua, Gymnacanthera canarica, Syzigium travencoricum, Semecarpus katlekansis, Pinanga diksonii*, etc.

Corridors Created: Corridors were protected for globally important species like Tiger, Elephant, Great India Hornbill, Malabar pied hornbill etc

Describe the success or challenges of the project toward achieving its short-term and long-term impact objectives.

The corridor was protected for long term conservation. New type of conservation initiative has been started.

Were there any unexpected impacts (positive or negative)?

This success would not have been possible without the support of Western Ghats Task Force and Karnataka Forest Department. Also with support of other conservation partners and fellow CEPF grantees is greatly acknowledged.

Lessons Learned

Describe any lessons learned during the design and implementation of the project, as well as any related to organizational development and capacity building. Consider lessons that would inform projects designed or implemented by your organization or others, as well as lessons that might be considered by the global conservation community.

Multi-disciplinary landscape level approach is important in developing long term sustainable conservation strategies in landscapes. There is need to convey the conservation message in the language that common man, political leaders and managers of forests can understand. Research publications need to reach managers and conservation leaders. This is an ideal example where research reached to conservation managers and got success. For example, for the same landscape, there were series of scientific peer reviewed publications. However none of them reached the conservation managers and politicians who take decisions. This project used ecology with social and economic assessment of the landscape and conveyed the message effectively to respective audience.

Project Design Process: (aspects of the project design that contributed to its success/shortcomings)

Project used multi-disciplinary approach which included social and economic assessment of landscape along with ecological prioritization. Also the study assessed the threat to landscape for prioritization. Involvement with local forest officers, politicians and local people helped in conveying the conservation importance to larger audience.

Project Implementation: (aspects of the project execution that contributed to its success/shortcomings)

Coordination with different stakeholders was the key factor in success.

Other lessons learned relevant to conservation community:

Though there were several studies and international peer reviewed publications about conservation importance of the area, there are hardly any efforts by local people to put those information in the manner that decision takers can use. This project used multidisciplinary approach for collecting information and compiled those information using ecological, ethical and economical perspectives.

ADDITIONAL FUNDING

Provide details of any additional donors who supported this project and any funding secured for the project as a result of the CEPF grant or success of the project.

Donor	Type of Funding*	Amount	Notes
Western Ghats	В	40,000.00	This amount was given for
Task Force,		(INR)	preparing proposal to
Karnataka Forest			declare to Conservation
Department			Reserves.

*Additional funding should be reported using the following categories:

- A Project co-financing (Other donors contribute to the direct costs of this CEPF project)
- **B** Grantee and Partner leveraging (Other donors contribute to your organization or a partner organization as a direct result of successes with this CEPF project.)
- **C** Regional/Portfolio leveraging (Other donors make large investments in a region because of CEPF investment or successes related to this project.)

Sustainability/Replicability

Summarize the success or challenge in achieving planned sustainability or replicability of project components or results.

Project can be replicated easily in other locations. There are already efforts being started on this direction in different parts of Western Ghats. CEPF-ATREE supported funding also for such activities.

Summarize any unplanned sustainability or replicability achieved.

It was planned to declare smaller areas as Conservation reserve. But in the process, Aghanashini Conservation reserve and Lion Tailed Macaque Conservation reserves were joined and declared as one Conservation Reserve. It happened because of the field of visit of senior officers and seeing the importance themselves.

Safeguard Policy Assessment

Provide a summary of the implementation of any required action toward the environmental and social safeguard policies within the project.

Posters and pamphlets describing the project details were prepared and distributed among local people for better understanding of the issue.

Performance Tracking Report Addendum										
CEPF Global Targets										
(Enter Grant Term)										
Provide a numerical amount and brief description of the results achieved by your grant. Please respond to only those questions that are relevant to your project.										
Project Results	Is this question relevant?	If yes, provide your numerical response for results achieved during the annual period.	Provide your numerical response for project from inception of CEPF support to date.	Describe the principal results achieved from 1 st Sept 2009 to 31 st Jan 2011. (Attach annexes if necessary)						
1. Did your project strengthen management of a protected area guided by a sustainable management plan? Please indicate number of hectares improved.	No yet			Please also include name of the protected area(s). If more than one, please include the number of hectares strengthened for each one.						
2. How many hectares of new and/or expanded protected areas did your project help establish through a legal declaration or community agreement?	Yes	36572 ha	36572 ha	Aghanashini LTM Conservation Bedthi Conservation Reserve Shalmala Riparian Conservation Reserve						
3. Did your project strengthen biodiversity conservation and/or natural resources management inside a key biodiversity area identified in the CEPF ecosystem profile? If so, please indicate how many hectares.	No									
4. Did your project effectively introduce or strengthen biodiversity conservation in management practices outside protected areas? If so, please indicate how many hectares.	No									
5. If your project promotes the sustainable use of natural resources, how many local communities accrued tangible socioeconomic benefits? Please complete Table 1below.	No									

If you answered yes to question 5, please complete the following table.

Table 1. Socioeconomic Benefits to Target Communities																					
Please complete this table if your project provided concrete socioeconomic benefits to local communities. List the name of each community in column one. In the subsequent columns under Community Characteristics and Nature of Socioeconomic Benefit, place an X in all relevant boxes. In the bottom row, provide the totals of the Xs for each column.																					
	С	om	mun	ity (Chai	racte	eristic	s		Nature of Socioeconomic Benefit											
				s			e		Increased	Inco	ome du	ie to:	able	ater	other ng, .c.			c DU,	lı ntal	- n- ce.	
Name of Community	Small landowners	Subsistence economy	Indigenous/ ethnic peoples	Pastoralists/nomadic people	Recent migrants	Urban communities	Communities falling below t poverty rate	Other	Adoption of sustainable natural resources management practices	Ecotourism revenues	Park management activities	Payment for environmental services	Increased food security du to the adoption of sustains fishing, hunting, or agricultural practices	More secure access to wa resources	Improved tenure in land or o natural resource due to titlin reduction of colonization, et	Reduced risk of natural disasters (fires, landslides flooding, etc)	More secure sources of energy	Increased access to public services, such as educatic health, or credit	Improved use of traditiona knowledge for environmer management	More participatory decision making due to strengthene civil society and governan	Other
Total																					
If you marked "Other", please p	rovi	de d	letai	l on	the	nat	ure of	the	Commun	ity C	Chara	cterist	ic and So	cioec	onomic	Benefit	:				

Additional Comments/Recommendations

Supporting field based activists is more important for conservation impacts. Research projects should be more than just publications of scientific peer or good report. It should result in field conservation.

Information Sharing and CEPF Policy

CEPF is committed to transparent operations and to helping civil society groups share experiences, lessons learned, and results. Final project completion reports are made available on our Web site, www.cepf.net, and publicized in our newsletter and other communications.

Please include your full contact details below:

Name: Balachandra Hegde Organization name: Mailing address: Laskmi Venkatesh, TV Station Road, Chowkimath, Sirsi, (Uttara Kannada)- 581 401 Tel: 09448774778 Fax: E-mail: blhegde@gmail.com

List of Appendices:

- 1) Technical Report
- 2) Aghanashini CR Notification
- 3) Bedthi CR Notification
- 4) Shalmala CR Notification

Identifying critical areas for a landscape level wildlife corridor in Uttara Kannada District (northern part of Malnad-Kodagu corridor to Sahyadri - Konkan corridor) of Central Western Ghats

By:

Balachandra Hegde

2012

Report submitted to

CEPF ATREE Western Ghats Small Grants programme





Abstract:

The study uses landscape ecology approach combining ecology with inputs from social and economic approaches, for conservation in the field.

The study assesses conservation priority areas in the Uttara Kannada district in Western Ghats, India. Baseline data was collected following gridding of the entire area into smaller sampling units of 5X5 km grids. Priority regions are identified using indicators like endemic *taxa*, corridor connectivity and threats.

Landscape level corridor was identified using these priorities. .

Key words: Landscape Ecology, Conservation Reserves, Western Ghats, India.

Organisation of Chapters:

Report is organised in five chapters. First chapter explains about the background, study site and rationale for the work. Second chapter deals with ecology, i.e., identification of conservation priority areas in a landscape. Third chapter deals with social and ethical aspects of conservation among local communities living in prioritised conservation region. It also identifies the priority areas based on community perspective. Fourth chapter deals with economic aspects namely, cost effectiveness and prioritisation with respect to economic aspects of conservation. Final chapter deals with discussion and output of the work.

Contents

Abstract:	ii
CHAPTER 1	1
INTRODUCTION:	1
Greifswald Approach of strong sustainability:	2
Study Site:	4
Uttara Kannada district:	6
Ecological history:	10
Rationale:	11
Development v/s Environment: a long debate in the region	11
Bedthi Aghanashini Conservation movement:	11
CHAPTER 2	16
IDENTIFICATION OF CONSERVATION PRIORITY AREAS	
Introduction:	
Landscape level conservation approach:	17
Landscape level conservation approach:	17
Landscape level conservation approach: Objectives: Research design:	17
Landscape level conservation approach: Objectives: Research design: Results:	17
Landscape level conservation approach: Objectives: Research design: Prioritisation of grids:	17
Landscape level conservation approach: Objectives: Research design: Results: Prioritisation of grids: Fragmentation:	17
Landscape level conservation approach: Objectives: Research design: Prioritisation of grids: Fragmentation: Corridor connectivity:	
Landscape level conservation approach: Objectives: Research design: Prioritisation of grids: Fragmentation: Corridor connectivity: Endangered species:	17
Landscape level conservation approach: Objectives: Research design: Prioritisation of grids: Fragmentation: Corridor connectivity: Endangered species: Priority/Key/Umbrella species:	17
Landscape level conservation approach: Objectives: Research design: Results: Prioritisation of grids: Fragmentation: Corridor connectivity: Endangered species: Priority/Key/Umbrella species: Special ecosystems:	17
Landscape level conservation approach: Objectives: Research design: Prioritisation of grids: Fragmentation: Corridor connectivity: Endangered species: Priority/Key/Umbrella species: Special ecosystems: Threat Index.	
Landscape level conservation approach: Objectives: Research design: Results: Prioritisation of grids: Fragmentation: Corridor connectivity: Endangered species: Priority/Key/Umbrella species: Special ecosystems: Threat Index. Priority Grids:	17
Landscape level conservation approach: Objectives: Research design: Results: Prioritisation of grids: Fragmentation: Corridor connectivity: Endangered species: Priority/Key/Umbrella species: Special ecosystems: Threat Index. Priority Grids: Grid to ground	
Landscape level conservation approach: Objectives: Research design: Results: Prioritisation of grids: Fragmentation: Corridor connectivity: Endangered species: Priority/Key/Umbrella species: Special ecosystems: Threat Index. Priority Grids: Grid to ground Conservation priorities and river valley:	
Landscape level conservation approach: Objectives: Research design: Results: Prioritisation of grids: Fragmentation: Corridor connectivity: Endangered species: Priority/Key/Umbrella species: Special ecosystems: Threat Index. Priority Grids: Grid to ground . Conservation priorities and river valley: From Theory to implementation:	17

Aghanashini–LTM Conservation Reserve:	34
Hornbill Conservation Reserve:	35
Conclusions:	35
CHAPTER 3	
LANDSCAPE HISTORY AND ENVIRONMENTAL ETHICS	
Introduction:	
Materials and Methods:	
Study area:	
Methodology:	
Results	40
Cultural Practices for sustainability:	40
Resource Mapping:	42
Changing faces of traditions:	48
Discussion:	50
Changing traditions with respect to sacredness of nature:	
References:	56
CHAPTER 4	
REACHING BEYOND ECOLOGICAL BOUNDARIES	
Materials and Methods:	63
Results:	63
References:	66
CHAPTER 5	
FROM SQUARES IN PAPER TO POLYGONS ON FIELD	
References:	70

List of Figures:

Chapter 1:	
Figure 1: Greifswald approach for landscape ecology and Nature Conservation	2
Figure 2 : Western Ghats in Karnataka state, India	4
Figure 3 : Location of Uttara Kannada district	6
Figure 4 : Population distribution in Uttara Kannada	7
Figure 5 : Geographical features of Uttara Kannada	9
Figure 6 :Land use type in Uttara Kannada	12
Chapter 2:	
Figure 1: 5x5 km grids	18
Figure 2: Forest cover	19
Figure 3: Fragmentation	21
Figure 4: Corridor Connectivity	22
Figure 5: Presence of endangered species	22
Figure 6 : Presence of priority/key/umbrella species	23
Figure 7: Presence of special ecosystems	23
Figure 8 : Proposed projects that can create negative impact of biodiversity	24
Figure 9: Threat Index for each grid	25
Figure 10: Priority grids by adding all values	26
Figure 11: Conservation Priority Locations in Uttara Kannada District	28
Figure 12: Myristica swamps in Uttara Kannada district	30
Figure 13: Conservation Reserves of Uttara Kannada district	32
Figure 14 : Bedthi Conservation Reserve	33
Figure 15 : Aghanashini Conservation Reserve	34
Figure 16 : Hornbill Conservation Reserve	35
Chapter 3:	
Figure 1: Resource Map drawn by community	43
Figure 3 : Seasonality of collection	45
Figure 2: Changing pattern of NTFP collection	45
Figure 4: Distance travelled by communities for collecting NTFP collection	46
Figure 5: Employment from collection of forest resources	47
Figure 7: People following sustainable harvesting practices	48
Figure 6: No of respondents to questionnaire	48
Figure 8: Reasons for decrease in sustainable harvesting practices	49
Chapter 4:	
Figure 1: Cost of Development for roads to remote villages in the grids	63
Figure 2: Ecological priority and cost of development in spatial scale	64
Figure 3: Ecological priority index v/s Cost of Development	65
Chapter 5:	

Figure 1: Location of newly declared Conservation Reserves in Uttara Kannada district 69

List of Tables

Chapter 1:	
Table 1: Urban and Rural Population in Uttara Kannada	8
Table 2: Population distribution and forest cover in Uttara Kannada district	8
Table 3: Landuse pattern in Uttara Kannada	12
Chapter 2	
Table 2.1 List of criteria used for identifying conservation priority	20
Table 2.2: The major hot spot areas identified in Uttara Kannada	27
Chapter 3	
Table 1: Quantity of NTFPs collected per year in one village, Nilkund	44
Chapter 4	
Table 1: Details of newly declared Conservation Reserves	69

Identifying critical areas for a landscape level wildlife corridor in Uttara Kannada District of Central Western Ghats

Chapter 1

Introduction:

In the light of increasing demand for resources by growing human population, especially in tropical countries, conservation of tropical forests is becoming a major challenge (Myers, Mittermeier et al. 2000).

In countries like India, with over 1.2 billion people share the landscape, implementing the concept of 'Sustainable Development' (WCED 1987), is even more challenging. Concept of strong sustainability considers Constant Natural Capital Rule (CNCR) as a centrepiece (Ott, 2008). So, ensuring the Constant Natural Capital and biodiversity in human dominated landscape requires in the context of social and economic change is important in concept of strong sustainability.

The German geographer and botanist Carl Troll (1939) coined the term "landscape ecology" and defined it later as "the study of the main complex causal relationships between the life communities and their environment in a given section of a landscape". Landscape is defined as a complex of abiotic, biotic and human components (Bastian and Steinhardt 2002). Today, a general consensus seems to have emerged that landscape ecology is not simply an academic discipline, but rather a highly interdisciplinary field of study (Wu and Hobbs 2002).

A landscape ecology approach to conservation of species demands an integration of ecological concepts. It starts with the realization that patches of habitats are interacting. All habitats are "open" and exchange energy, mineral nutrients and species. It thus makes the landscape mosaic a more important unit for study and management than individual, isolated habitat patches (Noss 1983). The landscape approach further teaches us to respect every 'useless' fragment in any landscape. For instance, corridors of trees along highways, hedgerows along cultivated areas, a channel, etc., can all aid the movement of species and thus make far apart patches interactive.

Landscape approach recommends dealing with an ecological mosaic of patches with continuously varying degrees of connectedness and recognises the importance of matrix and corridors to terrestrial habitat island dynamics (Noss 1983). Managing a landscape also calls for assigning priorities to the *elements* (species or communities) involved. While some elements can exist only in large patches of habitats, many can thrive in the fragments. It is therefore essential to treat these separately instead of complicating the management plans by an equal emphasis on preserving all elements in a landscape. The landscape approach aims at preserving: (i) maximum species diversity, (ii) representativeness and (iii) species of high conservation value.

Ethical values and obligations provide reasons and justification for action. Many conservationists believe that we have an ethical obligation to act as stewards for the other species with which we share this planet.

Landscape Ecology Approach:

Landscape ecology approach is based on three pillars Ecology, Economics and Ethics or social affairs (Ott 2009). Landscape ecology is an interdisciplinary field that aims to understand and improve the relationship between spatial pattern and ecological processes on a range of scales (Cumming 2011)(Wu and Hobbs 2007). Greifswald approach mainly draws on strong sustainability (Ott 2008) in Landscape ecology approach.

A 'theory of strong sustainability': the Greifswald-approach: The Greifswald-approach to sustainability has been developed by the ethicist Konrad Ott and the economist Ralf Döring at the University of Greifswald, Germany. (Ott, 2001, 2004; Ott and Döring, 2004, 2006).



The management of natural resources worldwide has largely been driven by two divergent and influential approaches: sustainable use and preservationist. The conservation community in India, as in other regions of the tropics stands polarised between two forceful conservation paradigms; preservationist and sustainable use (Rangarajan 1995, 2001, Saberwal et al, 2001). Preservationism is the most common approach to conservation – entails the earmarking of state administered 'wildlife reserves' within which extractive human activity is either greatly restricted, or completely halted using coercive means (Saberwal, et al, 2001). On the other hand, there is a growing popularity about sustainable use paradigm also (Gadgil and Guha, 1992). However, given the severe mismatch between size of India's natural resource base and huge number of its claimant's for its use, levels of conflicts around India's protected areas relatively low, compared to any other country with comparable ecological and social challenges (Karanth, 2003). Undoubtedly, the major underlying reason is the traditional readiness of Indian people (Saberwal et al, 2001)

Study Site:

Western Ghats: A global biodiversity hotspot:

Western Ghats is a one of the global biodiversity hotspots (Myers, Mittermeier et al. 2000; Myers 2003). Western Ghats are the hill range which runs along the western coast of southern Indian peninsula. This hill range covers as area of approximately 160000 km² with an elevation range from 300- 2700 m and latitudinal extent of 12° (8° N - 20° N)(Das, Krishnaswamy et al. 2006).

The presence of these hills creates major precipitation gradients that strongly influence regional climate, hydrology and the distribution of vegetation types and endemic plants (Pascal, 1988; Gadgil and Meher-Homji, 1990). A latitudinal gradient in duration of the dry



season, determined by the rapid advance and gradual withdrawal of the southwest monsoons, is characterized by a decrease in the number of dry days from north to south. longitudinal rainfall A gradient is also generated, rainfall where decreases rapidly from west to east, in some instances from over 7000mm to 4000mm within 15 km (Gadgil, 1996; Ramesh et al., 1997). This decrease also varies across latitude, with the transition being more rapid at higher latitudes (Ramesh et al., 1997). Additionally, a temperature elevation gradient gives rise

Figure 2 : Western Ghats in Karnataka state, India

to structural and floristic differences in forests

at higher altitudes (Ramesh et al., 1997). In general, the mean temperature of the coldest month ranges from 25 C at sea level to 11C at 2400m (Daniels, 2001).

Variation in the degree of endemism in the Western Ghats is affected by these latitudinal and temperature gradients, with a greater number of endemics found in the southern parts of the Western Ghats, which have a shorter dry season and higher elevations (Ramesh et al., 1997), with plant species diversity and endemism increasing from east to west (Ramesh et al., 1997; Gadgil, 1996).

The study area comprises the major portion of the Western Ghats and Sri Lanka biodiversity hotspot (Myers et al., 2000). The Western Ghats contains more than 30% of all plant and vertebrate species found in India, in less than 6% of India's landmass. It is estimated that there are four thousand species of flowering plants known from the Western Ghats and 1500 of these are endemic (Nair and Daniel, 1986).

The Western Ghats are one of the most complex and patchy landscapes in India. As a result of the topography and climatic gradient, the natural habitats vary from wet montane grasslands through a range of forests to dry rocky scrub. All these are interspersed with streams and marshes forming a natural mosaic of patches and corridors. Further interference by humans has fragmented the entire landscape creating several newer habitats including a variety of exotic species and considerably reducing the original extent of the natural habitats. Thus it is almost impossible to find homogeneous patches of habitats, especially evergreen forests, larger than a few square kilometres anywhere on the Western Ghats today.

The study area is a part of Western Ghats and Sri Lanka biodiversity hotspot (Myers et al., 2000). The major forest types are moist deciduous forests, evergreen and dry deciduous forests. The evergreen forests contain the highest number of endemics. Levels of endemism within this forest type are not uniform as there are many localized centres of endemism and speciation (Blasco, 1970; Nair and Daniel, 1986). The dry forest types, though poor in plant endemism and diversity (Daniels, 2001), provide crucial habitats for wide ranging animals such as tigers (*Panthera tigris*) and the Asian elephant (*Elephas maximus*) (Sukumar, 1989; Wikramanayake et al., 1999). The Western Ghats supports a diverse fauna. Among the vertebrates, the largest number of known species is among birds (508 species), followed by fishes (218), reptiles (157), mammals (137), and amphibians (126). The highest rate of

endemism is to be found among amphibians (78% of all Western Ghats species) followed by reptiles (62%), fish (53%), mammals (12%), and birds (4%) (Das, Krishnaswamy et al. 2006).



Figure 3 : Location of Uttara Kannada district

Uttara Kannada district:

Uttara Kannada District lies in central part of Western Ghats. It is a district of Karnataka state in Southern India. Uttara Kannada district has the highest forest cover (81 % of district area) and one of lowest population density (140 km⁻²) in Western Ghats of South India (Census of India, 2011). This district has a diversity of topographical features like coasts, hills and plains and harbours nearly all the major forest types found across the Western Ghats region. Over 3,000 plant species and over 403 species of birds (Daniels *et al.* 1992) have been reported from this district(Daniels 1996).

The district has reportedly one of the highest densities of hornbills in the Western Ghats. Predators such as the tiger (*Pantheratigris*), leopard and wild dog, and their large mammalian prey such as gaur *Bos gaurus*, spotted deer *Axis axis* and sambar *Cervus unicolor* are widespread.

Besides its biological diversity, the region also has extremely important hydrological values mainly because of the large forested catchments from which major rivers like Kali, Bedthi, Aghanashini, and Sharavathi, originate. The forest and grassland ecosystems maintain and regulate flow, enhance ground water recharge, reduce sedimentation of the reservoirs and maintain surface and ground-water quality. These services support the livelihoods of millions of people living downstream in Karnataka. (Daniels, Hegde et al. 1991)

Population distribution: Uttara Kannada is district with lowest population density in South India. With over 14, 36847 of population, Uttara Kannada, about 74 % of people live in villages spread in the whole districts (Census of India. 2011)



Name	Rural	Urban	Grand Total	% Rural	% Urban
Ankola	75411	26138	101549	74%	26%
Bhatkal	107196	42142	149338	72%	28%
Haliyal	80350	25501	105851	76%	24%
Honavar	142507	17824	160331	89%	11%
Karwar	72852	75038	147890	49%	51%
Kumta	111327	34499	145826	76%	24%
Mundgod	74565	16173	90738	82%	18%
Siddapur	86820	14050	100870	86%	14%
Sirsi	110215	65335	175550	63%	37%
Supa	48914	0	48914	100%	0%
Yellapur	55574	17923	73497	76%	24%
Grand Total	965731	334623	1300354	74%	26%

Table 1: Urban and Rural Population in Uttara Kannada

Forest Cover and Fragmentation: Uttara Kannada is one of the highest forested districts in South India. Geographically about 81 % of the district is administered as forest. (Census of India, 2001)

Tab	le 2:	Popu	lation	distril	bution	and	forest	cover	in	Uttara	Kannada	district
-----	-------	------	--------	---------	--------	-----	--------	-------	----	--------	---------	----------

	Area						
	sq	Population	Population	No of	Uninhabited		
Taluk	kms	2001	density	villages	villages	Forest	%forest
Ankola	918.2	101549	110.60	86	1	754.324	82.15%
Bhakal	348.9	149338	428.03	61	0	253.95	72.79%
Haliyal	847.4	105851	124.91	133	22	590.995	69.74%
Honnavar	754.8	160331	212.42	94	2	574.167	76.07%
Karwar	732.1	147890	202.01	58	6	528.087	72.13%
Kumta	582	145826	250.56	119	8	391.876	67.33%
Mundagod	668.1	90738	135.81	94	6	511.674	76.59%
Siddapur	859.3	100870	117.39	196	0	622.746	72.47%
Sirsi	1320.1	175550	132.98	227	4	1032.27	78.20%
Joida							
(Supa)	1890.3	48914	25.88	141	24	1606.09	84.96%
Yelapur	1302.1	73497	56.44	127	0	1134.3	87.11%
		1300354					

River system:

Uttara Kanada has four major river basins namely, Kali, Bedthi, Aghanashini and Sharavathi. All these rivers are west flowing rivers. Kali originates at Kushavali in Joida taluk flows about 185 kms and joins sea near Karwar. Catchment of Kali is about 4800 sq kms.

River Bedti originates in Dharwad district. it flows downstream and joins Shalmala with another stream from Hubli and then flows westward for about 161km to merge with Arabian sea. It has a catchment area of about 3878sq.km.

River Aghanashini having catchment of about 1390.52 sq.km traverses westward for about



Figure 5 : Geographical features of Uttara Kannada

121km from the origin at Manjguni of Uttara Kannada itself and confluences with Arabian Sea at Tadri.

River Sharavathi originates near Ambuthirtha of Shimoga district, traverses for about 132km and confluences at Honnavar to the Arabian Sea. The catchment area of this river is about 3005 sq.km. The magnificent, Jog falls, is situated in the course of this river.

About 325000 people dependent on Ahanashini catchment, followed by about 300000 people on Kali river, 27500 people on Bedthi catchment and about 17500 people on Sharavathi catchment. About 275000 people live on other catchments like

Varada, Dhama, Venkaaura and Hattikeri halla. (Census of India, 2001)

Besides other small rivers like Venkatapura and Hattikeri hlla are the two other small west flowing rivers. Varda and Dharma are the two rivers which make the tributary of Krishna are the two east flowing rivers in the Uttara Kannada.

Kali and Sharavathi rivers have six and three big dams. They are utilised for power generations. However, Bedthi and Aghanashini are natural flowing rivers without any major dams or mega projects. Uttara Kannada vegetation is divided into 5 broad zones by Daniels

et.al.(1989) namely, Coastal zone, Northern evergreen zone, Southern evergreen zone, Moist deciduous zone and Dry deciduous zone.

Ecological history:

These regions were colonized by agricultural communities only after the introduction of iron in India around 1000 BC (Bhat, 1979). Agriculturists and pastoralists who colonized this region between 1000 BC and 300 AD (Bhat, 1979), in the special ecological situation of the west coast, evolved a combination of rice cultivation in the estuaries and valleys with growing of millets in the slash-and-burn style along the hill slopes. This was supplemented by hunting, fishing and gathering of forest produce and, to limited extent, pastoralism. The natural resources were largely controlled by the village communities with several regulations to ensure sustainable utilization (Gadgil and Iyer, 1989).

Francis Buchannan travelled the region as emissary of Lord Wellesley, after the region was taken under the control of British Empire, during 1801. He made a detailed account of the agriculture system in the region. He also examined earlier records and noted that shifting cultivation was being practiced in many parts of the district. (Buchanan, 1801)

Shifting cultivation was practiced extensively in the region. Colonial government tried to stop this practice of shifting cultivation. Since 1863 continuous efforts have been made to put a stop to shifting cultivation and the area has been fallen from 7785 in 1863-64 to 844 acres in 1878-78.(Campbell 1887)

British occupied the landscape after Tippu Sultan lost the war against them during 1801 AD. This has led to large-scale of systematic exploitation of forest resources, which had a tumultuous effect on the conservation ethics of the local people. Most of the extensive forests of the country, teeming with wildlife, were taken over by the government during early 19th century and exploited commercially. The reserved forests were meant to meet the needs of the urban, industrial and military sectors, and the protected forests those of the rural population. (Working plans of forest department, Campbell, 1887). In Uttara Kannada, except for the continuing the protection of some of the erstwhile sacred groves or *kans*, bulk of the reserved forests were intended to be gradually converted to teak after extraction of marketable hardwoods. The protected forests, often the degraded areas closer to habitations, suffered from the 'tragedy of the commons' due to unregulated exploitations by the people

themselves, as communities were deprived of power to keep others outside or to regulate harvests by their own members. This affected even the sacred *kan* forests. The colonial trend of forest exploitation continued almost unabated late into the 20th century, even after Indian independence, completely disrupting the community based conservation systems (Gadgil and Chandran, 1988; Chandran and Hughes, 2000).

Rationale:

Development v/s Environment: a long debate in the region.

Western Ghats, being a biodiversity hotspot, is also a source of rich natural resources. Many rivers and streams originate in this hill landscape. This allows scope for extraction of natural resources. Streams and rivers flowing through ridges of Western Ghats hill range offers scope for construction of hydro power projects. These hydro-power projects in midst of tropical forests has led to fragmentation and cause damage to biodiversity of the region. During the 80's when several of these projects were proposed, local people started to oppose these projects. Since last decades the district is known for its struggle against environmental destructive projects (Karan 1994).

Bedthi Aghanashini Conservation movement:

Bedthi and Aghanashini are the two small west flowing rivers valleys in Uttara Kannada district. Both of them have less than two hundred kilometres of length. However, these rive supports about a million of people with diverse tropical forests and agricultural ecosystems.

Magod has a major name in environment movement of Uttara Kannada. It is the symbol of victory for environmental activists of the district as well as nation. The battle began in late 70's when the Mysore Power Corporation (now Karnataka Power Corporation(KPC) announced the dam , the Bedthi after obtaining necessary sanctions from planning Commission a and the ministry of finance. This project, had it come through, would have affected forests and people of Yellapur, Sirsi and Mundagod taliks of Uttara Kannada district. It was vigorously opposed by local people.

The Totagars Cooperative Society, environmental activists, organised seminar at Sirsi in 1981 to re-evaluate the economic and ecological viability of the project. At the seminar ecologists, economists, geologists, health experts, and a number of knowledgeable and concerned environmentalist arrived at the conclusion that the feasibility report submitted by KPC, to the planning commission on the basis of which the project was sanctioned was grossly in error, - ecological and economic costs had been under estimated in relation to proposed benefits. After these, government has decided to stop the project.

The Bedthi movement started a debate about the ecological impacts of the developmental projects at national level (Karanth, 1994). As a result it was made mandatory to have an Environment Impact Assessment for every project.

This work tried to find long lasting out the solution for this age old problem of conservation and development in the region over last three decades, by identifying the priority areas

Land use in Uttara Kannada District	Area in Km ²	Percentage
Settlements	139.16	1.31
Water bodies	179.94	1.69
Teak Plantations	1284.54	12.07
Exotic plantation	798.18	7.5
Evergreen forest	4325.28	40.66
Deciduous forest	842.78	7.92
Open /barren land	591.63	5.56
Areca/coconut/cashew	806.85	7.58
Agriculture/fallow land	1023.17	9.62
Scrub savannas/grasslands	580.31	5.45
Sand/Oyster/Dry river bed/prawn culture/salt		
pans	66.71	0.63
Total	10638.55	99.99

Table 3:	Landuse	pattern	in Uttara	Kannada
10010 01	Lanaabe	pattern		



The ridgeline of Western Ghats supports diversity of plant species. There are several endemic and endangered species in the region. Also, this region is acting as a corridor between the northern part of Western Ghats with Southern Western Ghats.

Although the region has extensive forest cover, fragmentation by reservoirs, agriculture and other developmental projects is wide spared. Besides there are several development projects proposed in the district, which will destroy the forest cover further.

The recent report by the National Tiger Conservation Authority (NTCA) reported the region supports one of highest population of tigers in Western Ghats complex. (Jhala et al, 2008). Besides, area between the Sharavathi valley, Dandeli, Mahadayi valley is the longest non protected region in Western Ghats of Karnataka. There are also several last remaining '*Myristica swamps*' in the region. The northern most and safest range of Lion Tailed Macaque is within this region. (Kumara et al, 2007). An analysis done using secondary data and topographical maps shows that, there are hardly few grids of 5x5 Kms area without fragmentation.

Hence there is a need to identify and conserve the some of the forests in this region.

References:

Carroll, C., R. F. Noss, et al. (2001). "Carnivores as focal species for conservation planning in the Rocky Mountain region." <u>Ecological Applications</u>**11**(4): 961-980.

Bastian, O. and U. Steinhardt, Eds. (2002). <u>Development and Perspectives of Landscape</u> <u>Ecology</u>, Kluwer Academic Publishers.

Campbell, J. M. (1887). Gazeteer of Uttara Kannada District.

Colwell, R. K. and J. A. Coddington (1994). "Estimating terrestrial biodiversity through extrapolation." <u>Philosophical Transactions of the Royal Society of London Series B-Biological Sciences</u>**345**(1311): 101-118.

Cumming, G. S. (2011). "Spatial resilience: integrating landscape ecology, resilience, and sustainability." <u>Landscape Ecology</u>**26**(7): 899-909.

Daniels, R. J. R. (1996). "Landscape ecology and conservation of birds in the Western Ghats, South India." <u>Ibis</u>138(1): 64-69.

Daniels, R. J. R., M. Hegde, et al. (1991). "Assigning conservation value – a case study from India.." <u>Conservation Biology</u>5(4): 464-475.

Das, A., J. Krishnaswamy, et al. (2006). "Prioritisation of conservation areas in the Western Ghats, India." <u>Biological Conservation</u>**133**(1): 16-31.

Gadgil, M. 1992. Conserving biodiversity as if people matter: a case study from India. *Ambio* 21:266–270.

Hobbs, R. J. and D. A. Norton (1996). "Towards a conceptual framework for restoration ecology." <u>Restoration Ecology</u>4(2): 93-110.

IUCN/UNEP/WWF 1991. Caring for the Earth: A Strategy for Sustainable Living. IUCN/UNEP/WWF, Gland.

Jones-Walters, L. and I. Mulder (2009). "Valuing nature: The economics of biodiversity." Journal for Nature Conservation17(4): 245-247.

Karan, P. P. (1994). "Environmental movements in India." <u>Geographical Review</u>84(1): 32-41.

Karanth, K. U., A. M. Gopalaswamy, et al. (2011). "Monitoring carnivore populations at the landscape scale: occupancy modelling of tigers from sign surveys." <u>Journal of Applied Ecology</u>**48**(4): 1048-1056.

Kothari, A., S. Suri, and N. Singh. 1995. Conservation in India: a new direction.*Econ. Polit. Weekly* 30:2755–2766.

Kramer, R., C. van Schaik, and J. Johnson. 1997. Last Stand: Protected Areas and the Defense of Tropical Biodiversity. Oxford University Press, Oxford.

Lindenmayer, D., R. J. Hobbs, et al. (2008). "A checklist for ecological management of landscapes for conservation." <u>Ecology Letters</u>**11**(1): 78-91.

Margules, C. R. and R. L. Pressey (2000). "Systematic conservation planning." <u>Nature</u>405(6783): 243-253.

Myers, N. (1990). "The biodiversity challenge: expanded hot-spots analysis." <u>The Environmentalist</u>**10**(4): 243-256.

Myers, N. (2003). "Biodiversity hotspots revisited." Bioscience53(10): 916-917.

Myers, N., R. A. Mittermeier, et al. (2000). "Biodiversity hotspots for conservation priorities." <u>Nature</u>**403**(6772): 853-858.

Ott, K. (2009). "Guidelines for a Strong Sustainability - A Proposal for Embedding the Three-Pillar Concept." <u>Gaia-Ecological Perspectives for Science and Society</u>**18**(1): 25-28.

Schumaker, N. H. (1996). "Using landscape indices to predict habitat connectivity." <u>Ecology</u>77(4): 1210-1225.

Chapter 2

Identification of Conservation Priority Areas

Introduction:

It is highly important to identify the priority areas for conservation (Myers 1988; Myers, Mittermeier et al. 2000; Pimm, Ayres et al. 2001; Myers 2003) to save threatened species and habitats (Wikramanayake, Dinerstein et al. 1998; Ranganathan, Chan et al. 2008; Walston, Robinson et al. 2010) of the Western Ghats in Indian tropical rain forest. Most of these efforts are done on global level (Myers, Mittermeier et al. 2000), or on a large landscape scale (Das, Krishnaswamy et al. 2006)

This study presents a fine scale prioritisation effort for a smaller portion of tropical biodiversity hotspot in Western Ghats in India. It represents the exercise based on the principles of systematic conservation planning (Margules and Pressey 2000) for a tropical hotspot with local conservation threats. While a considerable amount of work has already been done on identifying areas of conservation value in the Western Ghats, (Gadgil and Meher-Homji, 1986; Karanth, 1986, 1992; Rodgers and Panwar, 1988; Daniels et al., 1991; Ramesh et al., 1997), most studies do not set explicit conservation targets, and lack a replicable and scalable approach that is applicable to the entire hotspot. (Das, Krishnaswamy et al. 2006).

However, we have attempted to identify the conservation areas in a comparatively smaller landscape in central Western Ghats of India.

Landscape level conservation approach:

Though Uttara Kannada district is the highest forested district in Karnataka, the forests are heavily fragmented. Historically these forests were used as corridors by large mammals as apart of their migration routes and habitat dwelling. Elephants used to migrate from Shimoga district to parts of Dandeli. There are records of tigers in all parts of the Uttara Kannada (Campbell 1887)..

In order to preserve the integrity of these forests corridors should be conserved. There were two major corridors in Uttara Kannada. One is through the deciduous forests on eastern side of the district. And other is through the ridgeline of the district. The forest type in ridge line can be categorised as of evergreen and semi evergreen type.

Though the deciduous corridor is more important for migration of large mammals, it is heavily degraded and fragmented. The only corridor remaining is of evergreen type. Even this corridor is fragmented and is heavily 'bottle necked' in some parts. There is a need to protect these bottle neck forests in Western Ghats.

Prioritising within the landscape:

Threats to ecosystem in a landscape vary in different scales. Since the threats are on a varied scale, the solution has to address all the strata of the problem. Such differential approach is necessary to address the conservation issues in human dominated landscape like the Western Ghats. The investigation prioritises the land scape using 5km x 5km grids. It assesses each grid for its ecological importance as well as threat index. Its working methodology is explained in the following paragraph. Each of these priority grids were further assessed using detailed field survey and questionnaire survey.

Objectives:

- Identification and prioritisation of important conservation areas in Uttara Kannada district.
- Preparing the documents for declaring these areas with existing Indian legal provisions, like Conservation Reserves, Sanctuary, Heritage Site, according to its priority.

Research design:

The district was gridded into 5x5 km grids. Prioritisation of each grid was done using following criteria:

- 1. Population pressure
- 2. Forest Cover
- 3. Existing conservation status
- 4. Fragmentation
- 5. Corridor connectivity
- 6. Endangered species
- 7. Priority/Key/Umbrella species
- 8. Special ecosystems
- 9. Threat Index with respect to habitat destruction.



Figure 7: 5x5 km grids

Population: The Uttara Kannada District is one of the lowest populated districts in South India. According 2011 census of India records, 1,436, 842 live in 10,291 sq km of geographical area. The population density of the district is 140 people/sq km. (Census of India, 2011).

Forest Cover: Forest cover of each of these grids was analysed using the available satellite image. The study used satellite image from Thursday, October, 22, 2009, from Landsat. The image was processed using GRASS and trial version of ERDAS 7.2 software.

The grids with less than 50% of forest cover were deleted from the analysis. Out of 443 grids only 231 grids have forest cover above 50%. Of these 87 grids have above 80 % forest cover and about 144 grids have forest cover between 50 and 80 %.

Existing conservation status: About 1100 km² of the district has already been declared as Tiger Reserve. Tiger reserve is IUCN- I & II category protected area. Hence, we deleted the grids within this region from analysis.

With exclusion of these grids, we left with 75 grids. Each of the grids is given ranking with respect to ecological importance.

Fragmentation: Percentage of forest cover



in each grid was calculated. Research team visited each of these 75 grids and collected data about ecological importance. Google earth image is also used to compare the fragmentation. Ranking was given to each grid according the values explained in Table 2.1.

Corridor Connectivity: Connectivity of a grid with larger landscape is important for landscape species like tiger (*Panther tigris*) (Karanth et all, 2010). Each forest grid with respect to connectivity with larger landscape was analysed. Accordingly priority value is given. If the grid is connected on two sides, value 1 was given. If it is connected in all four sides, higher value 3 is given.

Endangered Species: Existing studies, secondary data were used for this ranking. IUCN red list and priority species identified by CEPF study was used for this ranking. List of plat species is added in appendix 1.

Umbrella Species/Key Species: Globally threatened species like Tiger (Panther tigris), Asiatic elephant (Elephas maximus), endemic Lion Tailed Macaque (Macaca silensus), two species of

hornbills, viz., Great Hornbill (*Buceros bicornis*), Malabar Pied hornbill (*Anthracoceros coronatus*) were considered for ranking.

Special Ecosystems: Special Ecosystems and habitats like fresh water swamps were identified as conservation priority for their unique habitat requirements and species composition. Another important special ecosystem is natural grass lands. Above 800-1000 mts elevation, most of hills have natural grass lands. These grasslands support unique species restricted to these grasslands (Subhash Chandran, 2010). Other ecosystems considered are mangrove forests in coastal line.

Threat Index: Each of these grids are also assess for threat index. Threat index was calculated using already proposed or possible activities that can be implemented in the region, which are detrimental to environment and flora and fauna. Considering the long history of environmental movements in the region and its associated implications, we have long records of such proposed and possible activities. Large scale hydroelectric projects submerging large tracts of forests, thermal power projects, new roads through forests, large tourism projects and township developments are considered as threat to forest. Each of the grids was given the value of threat index based on such projects.

We prioritised these 75 grids using criteria given in the Table 2.1.

Identifying the priority grids: Values given to each of these grids based on the criteria given in Table 1 are added together linearly to get the conservation priority area. Standard deviation method was used to classify categories of grids.

s.n.	Index	Low (1)	Medium (2)	High (3)
1	Fragmentation	Below 60% forest	60-80%	Above 80%
	Corridor convexity	Connected less than 2		
2		sides	3 sides	all sides
	Endangered Species		Habitat supports; but	
3		No	no records	Yes
	Umbrella /Priority		At least one of the	More than one
4	Species	No	species	species
	Special Ecosystems		Habitat is there; But	
5		Nil	degraded.	Yes
6	Threat Index	No projects proposed		Already
		until now	Chances of projects	proposed

 Table 2.1 List of criteria used for identifying conservation priority

Results:

Prioritisation of grids: Out of 435 grids, 75 grids are selected for prioritisation. These grids are predominantly forested, less populated and non protected grids. We further prioritised these grids based on following criteria. The investigation prioritises all these 75 grids using data collected by field visits by investigating personnel's.

Fragmentation: During the field visits it was observed that though the forest cover was showing higher, the region was fragmented. . These fragmentations were not recognised during the satellite image analysis as these contain a multi layered tree based cropping systems, covering small patches within the forest area. Though they are homogeneous to neighbouring forests their





function as connectivity are debatable. Conversely, there are patches of grass land which are acting as good corridors are also considered. Based on this observation, we found that only 21 of 75 priority grids have least fragmentation. 47 grids fragmented moderately, where as 7 grids are fragmented heavily.
Corridor connectivity: Of the 75 grids, 25 grids are connected to other grids in all direction. 37 grids are partially connected and 13 grids are connected only in less than two directions. Hence 62 grids are suitable as landscape corridor for landscape species like Tiger and Elephants.



Figure 10: Corridor Connectivity

Endangered species: Of the 75 grids 18 grids support confirmed records of more than one endangered species. 34 grids support at least one of the endangered species. Habitats of 23 grids are suitable for endangered species but with no confirmed records in the grid.



Figure 11: Presence of endangered species

Priority/Key/Umbrella species: Key species Tiger, Lion Tailed Macaque, Elephant, Great Hornbill and Malabar Pied Hornbill are considered as key species or landscape species. Of the 75 grids, 21 grids support more than two of these key species. 34 grids support at least one species. About 20 grids have no confirmed records of these species.

Figure 12 : Presence of priority/key/umbrella species





Special ecosystems: 17 of 75 grids have special ecosystems freshwater swamps, natural grasslands, or mangroves. Another 17 grids have the habitats but they are degraded. About 41 grids do not have any such special ecosystems.

Myristica swamps: *Myristica* swamp is any freshwater swamp where any one or both of the exclusive swamp growing trees of the family Myristicaceae namely *Gymnacranthera canaria* or *Myristica fatua* var. *magnifica* are present. These swamp species may occur in association with some other, usually evergreen trees having varied degrees of flood tolerance. (Chandran et all, 2001)

Figure 13: Presence of special ecosystems

Threat Index: The region is under pressure from developmental projects from last three decades which is resulting to be detrimental to tropical forests and hence its biodiversity. Several such projects are proposed in the district over last two decades. Map below shows the number of such projects proposed. Besides, there are proposal to build new roads, railway lines, power lines across forest patches. Agricultural expansion is also one of the major threats that can result in habitat fragmentation. Species like Lion tailed macaque are sensitive to these kinds of fragmentation events. (Kumara et all, 2011).



Figure 14 : Proposed projects that can create negative impact of biodiversity

Threat index was calculated based on these threats. Out of 75 grids 24 grids face severe problem of these kind of threat. 12 grids are having moderate threats. 39 grids do not have any major threats in near future.



Figure 15: Threat Index for each grid

Priority Grids: Based on all these different criteria we calculated the overall conservation value of these grids. By adding all these values we found that 17 grids are most priority grids. These grids support most endangered species, and also face severe threat.



Figure 16: Priority grids by adding all values

Grid to ground:

The investigation uses these priority grids to identify the conservation priority locations on the ground based on the geographical features. Following locations were found to be conservation priority locations.

S. No.	Places	Ecological Importance	Geographical and other importance	River Valley
1	Devimane Ghat	Evergreen Forest	Corridor	Aghanashini
2	Dodmane Ghat	Good evergreen forest , Northern most point of Lion Tailed Macaque		Aghanashini
3	Karikanammana Gudda	Dipterocarpus indicus	Religious place	Sharavathi
4	Kathalekan	Myristica Swamp, Lioned tailed macaque, Semecarpus kathlekanensis, Endemic amphibians	Hotspot within the hotspot	Sharavathi
5	Magod	Deciduous forests, Great Indian and Malabar pied Hornbills	Tourist place, water fals	Bedthi
6	Nilkund Ghat/ Bhimana gudda	Good Evergreen Forest, <i>Embelia</i> ribes, <i>Dopterocarpus indicus</i>	Corridor	Aghanashini
7	Muktihole	Lion Tailed Macaques,	Comparatively undisturbed forest	Muktihole (Sharavathi)
8	Tengina mudi	Evergreen forests		Bedthi
9	Unchalli falls	Myristica swamps,	Tourist place, water fals	Aghanashini
10	Yan	Evergreen forest, Lime stone formations	Trekking place, religious place	Aghanashini

Table 2.2: The major hot spot areas identified in Uttara Kannada

Conservation priorities and river valley:

Aghanashini river Valley: Though Aghanashini is one of the small river, supports maximum number of livelihoods in Uttara Kannada district. Population living in Siddapur, Kumta and part of Sirsi taluk are dependent on Aghanashini River.

Approximately about 3,25,000 people living in he Aghanashini catchment. Major hot spots of conservation importance in this region are:

- Bennehole falls
- Bhimanagudda (Nilkund Ghat)

- Unchalli Falls
- Dodmane Ghat



Figure 17: Conservation Priority Locations in Uttara Kannada District

About 260 sq Kms of these forests are the only link between the northern Western Ghats with southern part. Cooks flora, published during 1903, one of the oldest flora of region mentions about 60 plants species exclusively found in Nilkund Ghats region from the whole of western India. The region now also supports rich plant diversity also.

Besides this region is supports rich diversity of plants and birds. The amphibian diversity of this vale is yet to be explored. There are several myristica swamps in this region also. (See figure)

The vegetation of Aghanashini – Sharavathi Valley is finest example of *Persea –Holigarna-Diospyrous* series of evergreen forests which is not represented in any other nature reserves (Gadgil & Meher Homji, 1986).

Sharavathi River Valley: River basin has rich biodiversity. Studies conducted by IISc, Bangalore recorded, about 215 species of flora, 140 species of birds, 134 species of butterflies, 126 species of beetles, 84 species of ants, 143 species of lichens, 216 species of phytoplankton, 39 species of zooplanktons, 51 species of fishes, were recorded (Ramachandra & Subhaschandran, 2004)

Katlekan: with newly discovered, endemic, *Semecarpus kathalekanensis* (Swaminath, 2000). is endemic to this part. The important swamp species *Gymnacranthera canaria* or *Myristica fatua* var. *magnifica* are fund in this area. The survey by IISc, resulted in 15 species of mammals, 59 species of birds, 22 species of reptiles (including snakes), 29 species of amphibians, 16 species of fishes, 109 species of butterflies and six species of damselflies.

Muktihole: Mulkti hole is tributary of Sharavathi River. Catchment of this river supports endangered species like Lion Tailed Macaques. There are several locations of Myristica swamps. Encroachments and new roads are major threat to this landscape. The region is one of the inaccessible forests in region.

Karikanammana gudda: The hill station in Honnavar Taluk, near Chandavar Areangadi, is best evergreen forests. The sacred grove near karkanammana gudda harbours the best stand of *Dipterocarpus indicus* trees in Uttara Kannada.



Figure 18: Myristica swamps in Uttara Kannada district

Lion Tailed Macaque: The region between Sharavathi and Aghanashini supporting largest group of Lion Tailed Macaque in Western Ghats (Kumara et all, 2008). Lion Tailed Macaques are endemic Western Ghats- i.e., found nowhere else in the world.

Yana and Devimane Ghat: Forests of Yana and Demane ghat makes covers about forests. . The lime stone formation and its associated forests are unique to this place. There are two major lime stone formations called as Mohini and Bhairaveshvara peaks. They are about 90 and 120 mts height respectively.

The lime stone outcrops support huge colonies. Some of the last remaining stands of palm *Carypha umbraculifera* are around these forests and it will be worthwhile to constitute small nature reserve in this locality.

Tengina mudi and Bili halla Valley: Bili halla, a tributary of Bedthi river is rich in biodiversity and is one of the less studied forests in Uttara Kanada. The region has rare and endemic palm species - Shree Tale or Tali pot palm (*Corypha umbraculifera*). It is an endemic species to Uttara Kanada district, Udupi, Mangalore and Andaman Island areas. It is fan palm with large palmate trees up to 5 meters in diameter. The palm grows up to 25 meters height and bears the largest inflorescence of any

plant consisting of one to several million small flowers borne on a branched stalk that forms the top of the trunk. The palm is monocarpic, flowering only once when it is 30 to 80 year old. A single palm tree produces more than 250 kilograms of seeds and dies after fruiting.

Historically, the palm leaves were written upon various South East Asian cultures using an iron stylus to create palm leaf manuscripts. The leaves are used for thatching, to make traditional umbrellas, for fencing and the seeds were exported to Arab countries for ornamental purposes. The inner part of the stem was eaten by forest dwelling communities even today. This forest range connects to the forests of Magod and Bedthi valley.

Magod:

Magod is within Yellapur Forest Division. Southern part of the river Bedthi is within Sirsi Forest Division. The forests integrates between semi evergreen and evergreen where *Hopea* and *Myristica* mingle with Holigarrna, Terminalia, and Dillenia. Giant Artocarpus hirsute and Diospyros buxifolia tower over Cinnamomum, Litsea, and Aparosa., while undergrowth are the waxy blooms of Psychotria and the delicate flowers of Strobilanthus and Melostoma. Wild Pepper (Piper nigrim) scrambles up most trees trunks. Lot of orchids found on the trees. The fishtail palm (Caryota urens) emerges with fruit laden clusters.

The terrain is undulating sloping down towards the river. Northern part of the Bedthi river is mainly deciduous type while the southern part is semi evergreen. There are bamboo thickets in eastern plains. The area receives about 25000 mm rainfall.

There are records of wildlife like barking deer, sambar, and chittal. Gaur also found in the region. Malabar giant squirrel,

The adjacent valley the Kali river valley is already declared as Dandeli Anshi Tiger Reserve. The research identifies some of the priority areas for long term conservation and identification of higher legal conservation.

Physical boundary of the area is assessed using the secondary data like survey of India topo sheets, working plans of Karnataka Forest Department, Sirsi, Honnavar and Yellapur Divisions. Efforts were also made to define the boundary using the Google earth images also.



Figure 19: Conservation Reserves of Uttara Kannada district

From Theory to implementation:

Through these exercise the research identifies areas for conservation. Based on the geographical features, the study team developed conservation strategies for these areas.

Once such priority areas are identified, existing legal framework was analysed for legal protection. "Conservation reserve" a newly added category of protected within 36 A of Indian Wildlife protection Act, amended during 2006 was found suitable for conservation of landscape and species, after series meetings with stakeholders and consultation with experts. Demarcation of boundary of conservation reserve was done so as to include many priority areas into one. Based on this study, three conservation reserves are proposed. They are Bedthi Conservation Reserve, Aghanashini LTM Conservation Reserve and Hornbill Conservation Reserve.

Bedthi Conservation Reserve:

Bedthi conservation reserve includes conservation priority areas like Bedthi valley, and Bili halla valley. Total proposed area is about 57.07 km².



Figure 20 : Bedthi Conservation Reserve

Aghanashini-LTM Conservation Reserve:

The region between Aghanashini River and Sharavathi valley was included in the Aghanashini Conservation Reserve. Nilkund Ghat, Unchalli Falls, Katlekan and Muktihole valley are all included I this conservation reserve. This region is a priority habitat for globally endangered, Lion Tailed Macaques, which are endemic Western Ghats.

Proposed area of Conservation Reserve is 299.02 km²



Figure 21 : Aghanashini Conservation Reserve

Hornbill Conservation Reserve:

Hornbill Conservation Reserve consists of area along Kali River from Ganeshgudi to Kulgi village of Dandeli Anshi Tiger Reserve. This reserve protects the habitat of all four species of hornbills, and connects the corridor with Dandeli Anshi Tiger Reserve. Area of the Conservation Reserve is 52.50 km².



Figure 22 : Hornbill Conservation Reserve

Conclusions:

- There is an urgent need to provide better legal protection to these conservation priority areas for long term conservation goals.
- Three Conservation reserves will cover most of these conservation priority areas.
- Wildlife corridors will be secured.
- · Habitats of major priority species and key species will be protected.
- By declaring 4 % of the district as Conservation Reserve, major conservation goals can be achieved.

Literature cited:

- Bastian, O. and U. Steinhardt, Eds. (2002). <u>Development and Perspectives of Landscape Ecology</u>, Kluwer Academic Publishers.
- Campbell, J. M. (1887). Gazeteer of Uttara Kannada District.
- Chambers, R. (1994). "THE ORIGINS AND PRACTICE OF PARTICIPATORY RURAL APPRAISAL." <u>World</u> <u>Development</u> **22**(7): 953-969.
- Chambers, R. (1994). "PARTICIPATORY RURAL APPRAISAL (PRA) ANALYSIS OF EXPERIENCE." <u>World</u> <u>Development</u> 22(9): 1253-1268.
- Cumming, G. S. (2011). "Spatial resilience: integrating landscape ecology, resilience, and sustainability." <u>Landscape Ecology</u> **26**(7): 899-909.
- Daniels, R. J. R. (1996). "Landscape ecology and conservation of birds in the Western Ghats, South India." Ibis **138**(1): 64-69.
- Daniels, R. J. R., M. Hegde, et al. (1991). "ASSIGNING CONSERVATION VALUE A CASE-STUDY FROM INDIA." <u>Conservation Biology</u> 5(4): 464-475.
- Das, A., J. Krishnaswamy, et al. (2006). "Prioritisation of conservation areas in the Western Ghats, India." <u>Biological Conservation</u> **133**(1): 16-31.
- Karan, P. P. (1994). "ENVIRONMENTAL MOVEMENTS IN INDIA." Geographical Review 84(1): 32-41.
- Kesby, M. (2000). "Participatory diagramming: deploying qualitative methods through an action research epistemology." <u>Area</u> **32**(4): 423-435.
- Kumara, H. N., R. Sasi, et al. (2011). "Distribution, abundance and conservation of primates in the Highwavy Mountains of Western Ghats, Tamil Nadu, India and conservation prospects for lion-tailed macaques." <u>Current Science</u> **100**(7): 1063-1067.
- Margules, C. R. and R. L. Pressey (2000). "Systematic conservation planning." <u>Nature</u> 405(6783): 243-253.
- Myers, N. (1988). "Threatened biotas: "hot spots" in tropical forests." <u>The Environmentalist</u> **8**(3): 187-208.
- Myers, N. (2003). "Biodiversity hotspots revisited." Bioscience 53(10): 916-917.
- Myers, N., R. A. Mittermeier, et al. (2000). "Biodiversity hotspots for conservation priorities." <u>Nature</u> **403**(6772): 853-858.
- Ott, K. (2009). "Guidelines for a Strong Sustainability A Proposal for Embedding the Three-Pillar Concept." <u>Gaia-Ecological Perspectives for Science and Society</u> **18**(1): 25-28.
- Pimm, S. L., M. Ayres, et al. (2001). "Environment Can we defy nature's end?" <u>Science</u> 293(5538): 2207-2208.
- Ranganathan, J., K. M. A. Chan, et al. (2008). "Where can tigers persist in the future? A landscapescale, density-based population model for the Indian subcontinent." <u>Biological Conservation</u> 141(1): 67-77.
- Sala, O. E., F. S. Chapin, et al. (2000). "Biodiversity Global biodiversity scenarios for the year 2100." Science 287(5459): 1770-1774.
- Walston, J., J. G. Robinson, et al. (2010). "Bringing the tiger back from the brink-the six percent solution." PLoS biology 8(9).
- Wikramanayake, E. D., E. Dinerstein, et al. (1998). "An ecology-based method for defining priorities for large mammal conservation: The tiger as case study." <u>Conservation Biology</u> **12**(4): 865-878.

Website links:

CES, (http://www.ces.iisc.ernet.in/biodiversity/sahyadri_enews/newsletter/issue23/Article1/art4.htm) accessed on 15th July, 2011.



Chapter 3

Landscape history and environmental ethics

Introduction:

Prioritising conservation areas using the ecological indicators help in identifying the conservation locations (Myers 2003). However, it may not ensure the implementation in field. Conservationists in recent years view local peoples support for conservation of a landscape as an important element of biodiversity conservation. Participation of local communities in conservation is important for long sustainability of a conservation landscape (Sala, Chapin et al. 2000).

Conservation in human dominated landscapes often requires consensus from different stakeholders(Sala, Chapin et al. 2000). Consensus between ecologists, managers, environmental activists, and local communities need to be taken in consideration. It is important to involve the local communities in conservation.

Ecological science, as a discipline, has had an unfortunately limited impact on environmental policy (Kumara, Sasi et al. 2011). Greifswald approach, which includes ethics, social science, and economics with ecology, reduces these limitations to a great extent.

This section discusses landscape history, local traditions and conservation behaviour of local communities in the area of interest. Also, this study would like to assess changes in attitude towards nature by different communities living in the landscape. This section investigates the implications of interactions of different cultures in a landscape, by analysing the landscape history and past and pertaining traditions. This paper explores how various traditions are practiced by individual communities around the year, and its interaction with other local communities.

This study is done in the villages located inside the high priority grids identified and explained in Chapter 2. So, this exercise is step forward in identifying the exact boundaries of protected areas from the perspective of the locals.

Materials and Methods:

Study area:

The study area comprises three major indigenous tribal communities namely, Kunbis, Goulis Khare vokkals and Havyaks. All these communities migrated here from different regions bringing different cultures to this landscape. It is interesting to study how these different cultures are influencing each other and also how these cultures react to the human wildlife interaction. This paper investigates such interactions and formulates various parameters for understanding these interactions.

Methodology: The method used is known as Participatory Rural Appraisal (PRA) method for identifying the relations between forest dependent communities and ecosystems. PRA is "a family of approaches and methods to enable rural people to share, enhance, and analyze their knowledge of life and conditions, to plan and to act."(Chambers 1994).

PRA methods were becoming popular among wide range of activities. PRA offers scope for learning from the villagers, (reversal of learning), it helps learn rapidly and progressively, offsetting the biases, optimising tradeoffs, and triangulating the information collected. (Chambers 1994).

The investigation uses Participatory diagramming methods (Chambers 1994; Kesby 2000)

1. Informal mapping (sketch maps drawn on site);

2. Participatory Diagramming (seasonal calendars, flow diagrams, Venn or *chapatti* diagrams);

3. Innovation assessment (scoring and ranking different actions).

The exact details of PRA worked as explained below. A heterogenic group of villagers including women, youths, aged person, were asked to assemble on a pre determined day. Villagers were asked to draw the map of their village and its surroundings. Then they were asked to draw location of maximum availability of forest resources, crop damage, water sources and deities belonging to traditional systems and corresponding rituals. Also, information about changes in historical changes in forest areas, availability of resources, etc was gathered. Inflow and outflow NTFP resources from the villages were also collected during this exercise. With this exercise a complex relation between the forest and villagers

starts to demystify. Finally, suggestions for conservation of forest around villages were gathered from villagers perspective was noted. If they wished to set aside some areas for strict conservation, as they normally did, the area proposed by them is also marked on the same map.

At the end of the meeting one of the members was asked to describe each of the proposed maps for triangulating information for better accuracy. This helped in reconfirming and modifying the information, wherever necessary.

We also used semi-structured interviews and questionnaire survey methods for quantitative data. PRA was done at seven villages to collect data about the traditional knowledge, landscape history and changes in their cultural practices over the years.

The investigation uses 179 questionnaires. Efforts were made to collect data from all sections of society and all age group and gender. Secondary data was collected using literatures and government official documents like gazetteers.

Results:

Cultural Practices for sustainability: Communities:

Kunbi: Kunbis are communities basically hunter gatherers, practicing slash and burn agriculture system. They came to this landscape from neighbouring state of Goa. When Portuguese occupied Goaan land, these communities migrated to this forested landscape sometime around 16th century. The practice of slash and burn agriculture was practiced until recently in small scale locally called as *'kumri'* cultivation(Campbell 1887). Officially it was banned in the beginning of 20th century by British colonial rulers. However, later it was allowed to practice in 15 year cycle of cutting and burning. It was completely banned, on records, since 1985. However, cases of small scale incidents are reported occasionally.

Kunbis are traditionally hunter gathers practicing shifting cultivation. Collection of Non Timber Forest Products(NTFP) contributes about 35 % of their annual family income. They

collect about 75 types of NTFPs of which about 12 are sold to market for income (Hegde, 2001). Two types of honey, namely, *Apis cerana* and *Apis nidica* are collected from wild. The person who finds the honey colony in the forests puts a mark by worshiping the tree, below the tree. Once it is marked, nobody else will collect from the hive. In case of other NTFPs, like *Artocarpus lacoocha*, from which fruits are collected and are used for culinary uses, they have different traditional ceremony. Once fruits are ripened, all villagers joined together and the community leader, called as "Mirashi" will perform "*pooja*" (worship). These types of practices reduce the unnecessary competition for resource extraction. Hence, "tragedy of common" is avoided.

They have unique practices for hunting. Each village have marked different areas for their hunting. It has been agreed by each villager. Also, eating meat products is strictly banned certain week days and also selected months of a year. This "no hunting season" of month interestingly coincides with breeding season of most of the wildlife. If any hunter hunts as pregnant wildlife the village has to stop eating wildlife for next one season. This is a punishment for the whole village for hunting a pregnant wildlife.

Certain parts of forests are treated as "sacred". No hunting or cutting is allowed in such regions. In some villages, "anthills" are worshipped as god.

Gauli: Goulis are pastoralists. They were traditionally nomadic communities. They keep buffalos for milk production. They migrated from northern part of the landscape, when their homeland is occupied by Mughals. They depend on grasslands of the ecosystems.

Gaulis' think cattle as mother and Tigers as God. Whenever a cattle is preyed by a tiger, they think, it the act of punishment from god for their sin they acted. A retaliatory killing of predators like Tiger is hardly found. They worship "*Vittal*".

Havyaka Brahmans: Havyaks are priest community. Originally they were brought by *kadamba* dynasty during 4th century. After the trade with Europe started, the price for the spices started to increase. These spices, which were growing in natural forests was started to cultivate more systematically by these communities. These spice gardens got higher attention during the colonial period due to its price.

The valleys of forests are cultivated for growing these spices along with betel nut.

Havyaks are from *vedic* traditions. They are economically better off and are well educated compared to other communities. They are influential on other communities. These changing faces are seen in many other communities.

Khare Vokkals: Khare vokkals are cultivating paddy in patches inside tropical forests. Although they eat meat and hut they have cultural restrictions on their hunting practices. They never hunt large mammals like Gaur (Bos gaurus). Also, they never hunt any monkey species. That is one of the main reason that we still have large number of Lion tailed Macaques, in Uttara Kannada, comparatively other parts of Western Ghats.

Resource Mapping:

Resource use diversification: Resource uses by each of community are different. Kubis live in semi deciduous forests ad Goulis live in deciduous forests. And Havyaks live in valley of tropical evergreen forests. Havyaks cultivate spices like Pepper, cardamom, Nutmeg, and others with betel nut trees. Whereas Kunbis cultivate paddy in relatively dry valleys. They harvest rice only once in a year. Gaulis' depend on animal husbandry for their livelihood. They use the grass lands for cattle grazing.

The community collects 142 NTFPs from the forests. However, only 49 NTFPs are collected regularly by villagers at present and of these only 11 NTFPs are sold. *Uppage (Garcinia gummi-gatta)* rinds, *Dalchinni (Cinnamom sp)*, are only sold outsiders. Nine other commercial NTFPs are partially used for household consumption.

Agriculture is totally dependent on forest resources. Agricultural implements are prepared using small timber collected from the forest. Farmers are using wooden ploughs usually made up of Halasu (Jackfruit, *Artocarpus hirsuta*), Hebbalsu (*Artocarpus lacoocha*), and Honne (Terminalia sp) trees. Yoke is prepared by Shivane (*Gmelia sp*) tree. Leveller is prepared by Baine (*Caryota urens*) tree.

Fencing poles are made from Baine (*Caryota urens*), bamboo, and from some other trees. Fibres are made from more than six types of climbers and barks of certain trees. Cane (*Calamus sp.*) is collected for making handicrafts and articles like baskets, (*butti, kanaja,* *chabbe, mankri*, are local names depending on the shape and size). These are sold to landholders, in neighbouring villagers. Prices of these products vary from Rs 25 to 200 depending on the size.

Farmers depend on forests for manure, as main source of organic input to agriculture land. Dry leaves, green leaves and rotten leaves along the streams and in forests are collected in different seasons. Fodder is collected to feed the cattle, to cover the sides of the trenches in areca garden as well as to prepare compost/organic manure.

Cattle are allowed to graze in the forest and *gomals grassland reserved for grazing*). Cattle feed was never brought from the market. Mats are prepared from the Vaate (*Ochlandra* sp.) reeds and from bamboo to be used in various agriculture purposes. Kukkarasana balli (a climber vine) is also used to make mats. Baskets of various sizes are made mainly from canes and sometimes by locally available climbers to use it for various agriculture purposes like storing food grains. Mats prepared by Ichalu (*Phenix sylvestris*) are used for household purposes. Leaves of plants *like Phenix sylvestris* are used in preparing brooms.

Over six varieties of plats are used as bio pesticides to control several diseases and other food crops. However, these practices are gradually replacing by the use of chemicals. Preserving food grains: Paddy is stored in bamboo mats or in "*moode*" (a sort of container artistically woven from paddy straw and cane). Leaves of a plant are placed with the paddy to preserve it from the attack of pests. Rice and



Figure 23: Resource Map drawn by community

other food grains are stored with Dalchinni (Cinnamon sp) cleaves. Jute and plastic bags have replaced these practices.

Only few items are purchased from the market to be used in food preparations. Major requirements of vegetables and food grains are obtained from agriculture and from the forest. About 21 NTFPs are used for edible purpose regularly.

Medicinal plants: Villagers depend on traditional medicines to cure common ailments. Almost all those interviewed knew at least some plants as medicine for some ailments. **Commercial NTFP :** Following NTFPs are collected by villagers for commercial purpose.

Approximate quantity and income details of NTFP marketed outside during

Product	Quantity	Income (Rs)
Uppage	12000 kgs	780000
Murugalu	2500 kgs	75000
Seege	1500 kgs	11250
Vaatekayi	100 kgs	3500
Ramaptre	150 kgs	16500
Cane	1000 nos	2500
Suragi	35 kgs	2450
Honey	65 kgs	3250
Antwal	400 kgs	3200
Dalchinni moggu	10 kgs	750
Hedahagala patre	250 kgs	20000

Table 3: Quantity of NTFPs collected per year in one village, Nilkund

Changes in availability over the years and reasons for the same.:

The bark of Kachu (*Acacia catechu*) tree was boiled in water to extract Kachu (an additive in *pan masala.*) A small-scale industry to extract kachu was present in the village about 20 years ago. Extensive debarking of the tree and unscientific method of harvesting resulted in extinction of this species from this region. As a result of over -exploitation of Kachu trees, this species can be hardly seen in the village; it is endangered.

Collection of *Uppage* (*Garcinia gummigatta*) rind started about 25 years ago. Before that villagers did not use the rind. However, as the price increased, more and more villagers started to collect *Uppage* from the region.



Figure 24 : Seasonality of collection

Nowadays, even the villagers of neighbouring villages have started to come in groups of five to ten persons and stay in the forest for a week. They harvest the fruits as much as possible without caring for the quality of product. In the process of collection, they cut the trees and



Figure 25: Changing pattern of NTFP collection

branches of trees and collect unripe fruits. Earlier only seeds of *Uppage* were used in households to extract oil. But nowadays rinds are collected as a commercial NTFP.

Changing trend in collection pattern: Trend of collection pattern is changing among communities (Figure 2). Collection pattern of edible, non-edible and medicinal NTFPs are decreasing and at the same time collection for commercial uses are increasing. People are seeing the forest for more commercial uses than traditional uses like medicine, food and non commercial uses.

About 25 years ago, Rattan, Cinnamon leaves, Cinnamon bark, and resins were given to contractors to extract the products. Contractors collected this destructively, and that resulted in reduction of a number of species in the natural forest.



Figure 26: Distance travelled in km by communities for collecting NTFP collection

The forest department has given the contract for logging in the surrounding forests of the village about 25 years ago. Villagers opine that the contractors have collected not only the dead and fallen trees but also several green trees. They established roads inside the forests to transport the timber. Also, in the process of cutting the dead trees, some other trees including NTFP species were damaged and destroyed. This has decreased the availability of NTFP. Most of the communities travel about 5 km around their house inside the forest for collecting forest resources. Collection of forest resources also provides considerable employment for local people. About 45 days in a year to 85 days in a year by different communities.



Figure 27: Employment from collection of forest resources

Tradition of worshipping nature: Most of the villages have sacred groves. Natural sacred forests have been centres of local worship and local cultures. Majority of the deities of the groves are local deities. Basically father deity or mother deity known by different names in different places as well as spirits and animals such as serpent, tiger, peacock etc. They do not find any reference in the ancient Hindu scriptures of the *Vedic* period.

Tiger is worshipped by all communities. Idols of tiger can be found in most of the villages. *Nas* is the name of a spirit for Kunbis. Choudamma is a goddess of water for Khare vokkals. Beerappa is a god for hunting.

Changing faces of traditions:

We did a questionnaire survey with 179 people. Out these 83 were youths, 55 women. 9



were old women and 32 old men above 60 years.

Results of the questionnaire survey shows some interesting scenario of changing face of traditions. "Are these traditions are still followed by all communities?"

94 % (N=30) aged people said they still follow the traditional sustainable

harvesting systems. Whereas young

generation is about 78% (N=65) said they no longer interested in old traditions. About 70% of women still follow the traditional systems.



Figure 29: People following sustainable harvesting practices



We asked the reason for reduction in traditional systems. About 84% (N=48) of youths feel

Figure 30: Reasons for decrease in sustainable harvesting practices

that they livelihood issue is more important than traditional tradition beleifs. They want to earn money to improve their livelihood. Education is also changing the openion of youths. They no longer interested in traditiponal systems.

In the course of evolution of the Hindu religion many of these deities have been absorbed into mainstream *Vedic* cultures, Shaivism, Vaishnavism and Shaktism. The animal deities also have often been linked to Hindu gods as *vahanas* (vehicles). Thus the bull became the *vahana* of Shiva, peacock of Subrhamanya, the eagle (Garuda) of Vishnu, the tiger/lion of Parvati/Durga and so on. The serpent cult became associated with both Shaivism and Vaishnavism. Such absorption of local cults into the Hindu mainstream, while paving the way for cultural unification of the people resulted in the growth of temple centred worship. These changes started gradually eroding the biodiversity and ecosystem value of natural sacred sites.

For example, an anthill has been worshipped by Kunbi communities at a village called Diggi, a village situated about 40 km deep inside the forests. Anthill of about 10 mts height is worshipped as goddess of forests known as "*Gavaladevi*". There are much folklores about this goddess. The whole forest region around this anthill was sacred.

However, some of the community members decided to construct a temple to this goddess, which eventually killed the anthill itself. Anthill which was growing earlier every year is now abandoned.

In case of many sacred groves, idols are installed below a prominent tree within a sacred grove. Later, these trees with idols are only left, in many cases. Because of this, area of a sacred grove diminished to single trees instead of worshipping a landscape.

Discussion:

Changing traditions with respect to sacredness of nature:

Gadgil and Guha (1992) argue that the belief systems, religions, and myths of hunter gatherer societies and the stable agricultural societies that tend to emphasize conservation themes and the wise use of natural resources because these groups have learned over time to live within the constraints of a fixed resource base. In contrast, the beliefs of pastoralists and rapidly expanding agricultural and industrial societies emphasize the rapid consumption and destruction of natural resources as a way of maximizing growth and asserting control over other groups. These groups move to new localities when the resources of any one place are exhausted. The rituals found in many ancient religions that involve burning wood and sacrificing animals are seen by Gadgil and Guha as an attempt to dominate and subdue the natural world. Modern industrial states represent the extreme development of cultures of excessive and wasteful consumption, in which resources are taken to urban centres in ever-widening circles of resource depletion.

After colonisation, the groves became part of the reserve forests in Uttara Kannada. A number of groves were attached to arecanut gardens as leaf manure forests during the British time itself. A forest working plan of 1966 included over 4000 hectares of sacred *kans* for timber exploitation in Sirsi and Siddapur taluks of Uttara Kannada (Subash Chandran and Gadgil, 1993a)

Ecologists in recent years have started appreciating the resource management systems of traditional societies, which are based on simple rules of thumb, in many ways parallel the modern ecosystem approach. Such societies in diverse parts of the world, including India, have often co evolved with their environment, modifying nature but actively maintaining it in a diverse and productive state. Such indigenous ecosystem approaches which enshrine in

them a pool of human experiences spanning many millennia and many cultures have suffered severe setbacks under the more recent systems of exploitative management often called scientific elaborated largely by colonial rulers. (Gadgil and Berks, 1991)

Kumri cultivation was carried with considerable caution and in accordance with certain traditional landuse plans which brought the community to equilibrium with environment. Accordingly, in every village a sizeable portion of forest from few hectares to several hundred hectares was strictly conserved as sacred grove which also functioned as 'safety forest' performing a multiplicity of functions including conservation of biodiversity and guarding of watershed. Such blocks of forests known as *kan* in Uttara Kannada and adjoining districts, or *devarakaadu* and several names. (Subhash Chandran, 1996)

Buchanan in 1801 observed that in Uttara Kannada district degraded and secondary forested intercepted with patches of lofty evergreens in which wild pepper was often growing. He further stated that "forests are property of gods of villages in which they are situated and trees ought not to be cut without having leave from the Gouda or headman of village who here is priest to the temple of village God. (Buchanan, 1801)

The oral tradition and practices of the peasants of Uttara Kannada, in many ways, reflect the cosmo centric vision of man. Major incursions into their lives began with the arrival of Brahmins. Yet the major impact was with European colonialism — the Portuguese becoming the masters of Goa in the sixteenth century and the British domination in the nineteenth century. Before these incursions, the peasants, including the Havyak Brahmin, lived in coherence with their ecosystems, modifying nature in several ways to secure niches of existence for them and, at the same time, making efforts to maintain the balance with its elements. The district is rich in the wreckage of the lofty oral traditions, which, in many ways, are in agreement with modern ecological principles, reflecting the Cosmo centric vision of the peasants. We also find many peasant groups, even today, inhabiting some of the interior villages, clinging on to the ruins of their age-old traditions. According to the philosophical tradition, it is generally held that the reality of the subtler planes is responsible for the grosser planes, and, that, at a higher level of understanding, the distinction between the gross and the subtle gets obliterated.

The peasant who lives in the microcosm of his ecosystem is linked to several other ecosystems with material circulation and energy flow between them and all of them together

form the biosphere. Indeed, according to the modern landscape approach, the peasant is not merely part of an ecosystem but of several ecosystems forming a landscape. Landscape is defined as 'a wide area where a cluster of interacting stands or ecosystems is represented in similar forms'. No ecosystem within a landscape is an island (Janzen, 1984). All ecosystems are 'open' and exchange energy, mineral nutrients and organisms (Noss, 1983).

In the traditional land use system of Uttara Kannada, the peasants, while clearing natural forests for cultivation, conserved substantial patches of them as inviolable reserves called *kans*. These *kans* often merge with ordinary forests (*adavi* or *kadu*), shifting cultivation (*hakkal*) fallows in different stages of vegetational succession, grazing lands (*bena*), cultivation sites (*gadde* or *bailu*), garden (*totta*), water bodies like *kere*, *halla*, *hole* etc. Such a mosaic landscape accounted for the high diversity of plant and animal life for which Uttara Kannada is famous. Daniels (1989), in agreement with the principles of modern landscape ecology (Forman and Godron, 1986), recommends for the conservation of the birds of Uttara Kannada a landscape approach which 'ensures that the most valuable birds and also the gamma diversity of birds is maintained in the district'. Thus we find in the traditional landscape management, linkages between ecosystems ideal for conservation of maximum diversity.

The modern alternative agricultural systems, based on ecological principles of sustainability and stability are surprisingly similar to the traditional landscape management system of the peasants of Uttara Kannada.

To the peasant, nature is itself spiritualized. In his world, woods, trees, soil, water, cliffs and caves are animated with spirits. Yet he has to clear forests, work with soil and tame waterbodies as well as hunt animals. The peasant communities, while clearing forests for cultivation or for pastures take care to leave substantial portions of the primeval forests untouched as sacred groves-cum-safety forests. Often known as *kans* or *bana*, these forests conserve biodiversity, protect the watershed, increase the heterogeneity of the landscape and supply many non-wood produce to the community which can be safely taken without affecting the forests in a major way.

Subhashchandran and Gadgil (2003) studied several of the sacred groves in an area with the least influence of Brahminism. Many of these groves have vacant spots as worshipping

places, where the devotees make offerings to deities and stick tridents to fulfil their vows or make sacrifices of fowl or goat to propitiate them. The deities may be sometimes represented by anthills or crude stones. Of late icons with human forms are replacing the older ones, as the wild spirits are getting linked with the gods of the Hindu pantheon. The spirits permeating the sacred groves may be male or female. The common male spirits are Bhutappa and Jatakappa. The common female spirit is Choudi or Choudamma. There may be other male spirits like Betedevaru (hunter's god), Birappa (hero), Masti, Rachamma, etc. There is hardly any difference in the concept of the people between these several male spirits as well as female spirits. In a sense the male and female spirits are comparable to the Purusha and *Prakriti* of the ancient texts of India. In their original forms, retained even today, in many of the kans or bana the male and female spirits, especially Bhutappa or Jatakappa and Choudamma have no icons, though elsewhere, and more so outside Uttara Kannada, these deities have been identified with gods and goddesses of the Hindu pantheon. These deities permeate the entire sacred groves. The appellations *appa* and *amma* applied to the male and female spirits signify that to the peasants these spirits are guardians of fields, cattle, water resources, forests and people. It seems that these spirits of the village communities have been unfairly treated as evil spirits or *shudradevatas* in the texts on Indian religion, mainly because they are to be propitiated by animal sacrifices and are notorious for spreading diseases. However, for the peasants of many villages of Uttara Kannada, the sacred groves are temples. They worship the spirits who favour them if they go in the right path shown by the ancestors or do harm if they deviate. It should be noted that the deviations meriting such divine wrath include cutting of trees especially within the groves, untimely hunting, killing of wrong species of animals which may be totemic or sacred ones, as most of these wrong-doings have adverse environmental consequences.

The village landscape is dotted with several sacred trees with or without deities underneath them. For instance, the *ficus* tree, wherever it occurs, is sacred to the people. Many times the tree itself is permeated with the Holy Spirit. Recently, biologists have recognized the value of ficus sp. as a keystone plant resources of the tropical forests, fruiting at crucial times when most other trees do not bear fruits and thereby supporting many birds and animals (Terebogh, 1986).

The sacred groves, many of them as they exist today in Uttara Kannada, after over 150 years of forest-management by the state, have reduced to small vegetational islands. According to

Mac Arthur and Wilson (1963) small or remote islands and islands with uniform topography have fewer species than large or complex islands or islands nearer the source of colonization. The new arrivals are virtually balanced by the extinction of older species within the islands. There is strong evidence to state that the Uttara Kannada peasants, with their Cosmo centric outlook and spiritualization of nature, were able to modify the landscape in such a fashion so as to overcome the isolation effect of islands. The sacred groves were often continuos with ordinary forests, shifting cultivation fallows in different stages of vegetational succession, grazing lands and several other natural and man-made habitats which provided continuity for complex cycling of matter and flow of energy. The sacred groves of Uttara Kannada, their attenuated form of the present-day notwithstanding, continue to be the best centres of biodiversity, sheltering rare species and even helping in the restoration of natural vegetation in the surroundings.

In their view of the ecosystem, all social activities impinge directly or indirectly on ecological processes and are themselves affected by those same processes. Fauna, including man, vegetation, soil structure and micro-climate are intricately linked and mutually interdependent (Ellen, 1932). The traditional peasants of Uttara Kannada basically held such an outlook in his interaction with nature and were conscious in keeping the balance of the eco-system.

It may be observed that the concept of *Choudamma* in Uttara Kannada, as it exists in many interior villages unaffected by *Brahminism*, is more related to this creative faculty (Subhash Chandran, 1991)

Bhattacharya (1975) is more specific in this matter. He considers aboriginal, tribal, non-Aryan genesis of the Mother-power who lives in the mountains, valleys, dales and caves. "In the *Sakti* temples of the South India preponderance and importance of tribes as chief participants is cleverly kept under cover by *Brahminical* interests. This cover is easily supplied by legendary tales about the Great Mother assuming many forms." In the more populated areas of Uttara Kannada, temples were erected to house this newly-evolved mother goddess. In the whole of Kerala, Bhagavati temples appeared presumably replacing the groves, a process which is infilterating into the remotest villages of Uttara Kannada. This is the repetition of the process started during the epic period and it has had a significant influence on man's approach to the elements. Similar transformations have taken place for the male spirit also. Williams (1883) points to the classical male deity, Ayenar, of South India. He is a very popular village god, who guards the fields, crops and herds of the peasantry and drives away their enemies the devils and fiends. Ayenar was always associated with groves of trees. He was also known as Sasta. Thus we find that Ayenar's concept role are similar to the roles of the *Bhutas* of Uttara Kannada. Just like Ayenar is addressed as Ayenar-*appan* (father), the *Bhutas* are known as Bhutappa to the peasantry. The popular deity of Kerala, Aiyappa, is also known as Sasta. Most of the Aiyappa temples are situated in groves or dense forests, e.g., the famous Aiyappa of Sabarimala forests. It is significant that this Aiyappa has been accepted in the Hindu pantheon as one of the sons of Shiva. (Subhash Chandran, 2003)

With the evolution of the Hindu gods and the arrival of the "Popular Hinduism" in a big way, the masses became more estranged from the elements, as represented by nature itself. The sacredness of the plant kingdom itself got reduced to a few symbols like the *peepal* tree and *tulsi* plant and of animal kingdom to the holy cow or monkey (Subhash Chandran 2003). The elaborate ritualism prescribed by the scriptures and blindly practised by the priests symbolized the Hindu culture and outlook, and narrowed down the Cosmo centric vision.

The peasants of Uttara Kannada, isolated as they were through several centuries in denselyforested hilly terrain of torrential rains and ferocious wild animals, have suddenly woken up to the 'development of' the rest of India. As modern ecology grapples to trace its links with the elements and marvels at the discovery of the amazing resource management systems of the traditional people (Gadgil and Berkes, 1991), the simple life-style of the peasants of Uttara Kannada, is rapidly transforming into an anthropocentric one and losing its millenniaold links with the primary elements.

References:

J.M. Campbell, 1887, Gazetteer of Uttara Kannada,

Gadgil Madhav and F Berks, 1991 Traditional Resource Management Systems resource management and Optimisation.

Altieri, M.A. and Anderson, K., 1986. An ecological basis for the development of alternative agricultural system for small farmers in Third World. In *American Journal for Alternative Agriculture*. Vol. 1, No. 1, Institute for Alternative Agriculture.

Bhat, P.G., 1979. Pre-history of Coastal Karnataka. In *The Quarterly Journal of the Mythic Society*. Vol. 70, January-June, 1979, Nos. 1-2; 86-96.

Bhowmick, S., 1984. Brahmanisation in border Bengal : A case study in Western Midnapur. In *Man in India*, Vol. 64, No. 1.

Buchanan, F.D., 1870. A Journey from Madras through the countries of Mysore, Canara and Malabar. Vol. 2. Higginbothams and Co., Madras.

Daniels, R.J.R., 1989. A Conservation Strategy for the Birds of Uttara Kannada District, Ph.D. thesis, C.E.S., Indian Institute of Science, Bangalore.

Elden, R., 1982. *Environment, Subsistence and System: The Ecology of Small Scale Social Formations*. Cambridge University Press.

Forman, R.T.T. and Godron, M., 1986. *Landscape Ecology*, John Wiley and Sons, New York.

Gadgil, M. and Berkes, F., 1991. Traditional resource management systems. In *Resource Management and Optimization* 18 (3-4), 127-41.

Gadgil, M. and Iyer, P., 1989. On the diversification of common property resource use by the Indian society. In: F. Berkes (Ed.) *Common Property Resources: Ecology and Community Based Sustainable Development*. Belhaven Press, London.

Gadgil, M. and Subash Chandran, M.D., 1989. On the history of Uttara Kannada forests. In *Changing Tropical Forests*, Dargavel, J., Dixon, K. and Semple, N. (eds.) Australian National University, Canberra 47-58.

Gadgil M and M.D. Subash Chandran, 1989. 'Environmental Impact of Forest Based Industries on the Evergreen Forests of Uttara Kannada District: A Case Study. Department of Ecology and Environment, Government of Karnataka

Hegde Balachandra and Gubbi Sanjay: Conservation status of Anshi National Park and Dandeli Wildlife Sanctuary, Oryx 38(3), 250-256, 2004

Hegde Balachandra: "Conservation status of Dandeli Wildlife Division, Uttara Kannada, India. Report Submitted to Karnataka Forest Department, Karnataka, India. 2002.

Hegde Balachandra: "Status of NTFP extraction in Anshi National Park. Report submitted to Wildlife Conservation Society- India Program. 2002.

Hegde Balachandra: Non- timber forest Products; an inexhaustible resource? Results from the preliminary study in Uttara Kannada district, Karnataka. In tropical ecosystems: Structure, Diversity and Human Welfare (supplement).Proceedings of the International conference on tropical Ecosystems. Edited by Ganeshaiah *et. al.*, Published by ATREE, Bangalore. 2001. pp 13-15

Hegde Pandurang, Hegde Narasimha and Hegde Balachandra: "Documentation and dissemination of knowledge on wild food (uncultivated) species used by people in the tropical forest regions of Uttara Kannada district, Karnataka, India". Report submitted to IDRC, 2003

Janzen, D.H., 1983. No park is an island : increase in interference from outside as parksize decreases. In *Oikos*, 41: 402-10.

Mac Arthur, R. and Wilson, E.O., 1963. An equilibrium theory of insular zoogeography. In *Evolution*, 17: 373-87.

Morab, S.G., 1980. Chamundesvari temple as pilgrim centre. In *Man in India*, 60; nos. 1-2; 98-101.

Noss, R.F., 1983. A regional landscape approach to maintain diversity. In *Bioscience* 33, 700-06.

Pandey, R.B., 1949. *Hindu Samskaras: A Socio-religious study of the Hindu Sacraments*. Vikrama Publications, Banaras.

Radhakrishnan, S., 1949. *The Hindu View of Life* (8th impression). George Allen & Unwin Ltd. New York.

Sandra, B. and Lugo, E., 1990. Tropical secondary forests. In *Biological Abstracts*, 89; no. 10 Ref. 103832.
Saraswati, B.N., 1986. Thinking about Tradition. In Man in India, 66; no. 3 : 199-219.

Sauer, C.O., 1955. The agency of man on the earth. In Williams (ed.) *Man's Role in Changing the face of the Earth*, 49-69.

Seuffert, O., 1991. Ecomorphodynamics and soil erosion. In *Applied Geography and Development*, 38: 7-21.

Sharma, O.P., 1975. Dynamic Indianism, O.P. Sharma, Chandigarh.

Subash Chandran, M.D. and Gadgil, M., 1991 (a) Kans-safety forests of Uttara Kannada IUFRO : Forest History Group meeting on "Peasant Forestry" 2-5 September 1991, Freiburg, Germany.

Subhash Chandran M D and Madhav Gadgil: 1998: "Sacred groves and Sacred trees of Uttara Kannada, in Baidyanath Saraswathi, ed "Lifestyle and Ecology" Indira Gadhi National Centre for Arts, New Delhi, 85-138.

Subash Chandran, M.D. and Gadgil, M., 1991 (b). State forestry and decline of food resources in tropical forests of Uttara Kannada in Southern India. Symposium on "Food and Nutrition in the Tropical Forest" 10-13 September, 1991. UNESCO-CNRS Paris.

Terebogh, J., 1986. Keystone plant resources in the tropical forest. In: M.E. Soule (ed.) *Conservation Biology: The Science of Scarcity and Diversity.*

Campbell, J. M. (1887). Gazeteer of Uttara Kannada District.

- Chambers, R. (1994). "The origins and practice of Participatory Rural Appraisal (PRA)." <u>World Development</u> **22**(7): 953-969.
- Chambers, R. (1994). "Participatory Rural Appraisal (PRA) Analysis of Experience." <u>World Development</u> **22**(9): 1253-1268.
- Kesby, M. (2000). "Participatory diagramming: deploying qualitative methods through an action research epistemology." <u>Area</u> **32**(4): 423-435.

Kumara, H. N., R. Sasi, et al. (2011). "Distribution, abundance and conservation of primates in the Highwavy Mountains of Western Ghats, Tamil Nadu, India and conservation prospects for lion-tailed macaques." <u>Current Science</u> 100(7): 1063-1067.

Myers, N. (2003). "Biodiversity hotspots revisited." Bioscience 53(10): 916-917.

Sala, O. E., F. S. Chapin, et al. (2000). "Biodiversity - Global biodiversity scenarios for the year 2100." <u>Science</u> 287(5459): 1770-1774.



Chapter 4

Reaching beyond ecological boundaries

While ecological and ethical grounds can be advanced to justify biodiversity conservation, it is primarily economic forces which is driving down much of the worlds biological resources and biodiversity (Jones-Walters and Mulder 2009). As it is discussed in chapter 3, long lasted ethical values are also in downhill, after the economic forces. At the same time, conservation budgets are limited and inadequate to conserve the world's biodiversity and there is increasing pressure for prudent investment. Prioritisation is (Brooks, Mittermeier et al. 2006).

Securing the habitats for long term sustainability of landscape species like Tigers and elephants in human dominated landscapes, like western hats is challenging. Meta population dynamics of these species (Karanth and DeFries 2010), suggests for protecting source sites for effective source-sink dynamics (Karanth, Gopalaswamy et al. 2011)

The Economics of Ecosystems and Biodiversity (TEEB) study is a major international initiative to draw attention to the global economic benefits of biodiversity, to highlight the growing costs of biodiversity loss and ecosystem degradation and to draw together expertise from the fields of science, economics and policy to enable practical actions moving forward. TEEB seeks to show that economics can be a powerful instrument in biodiversity policy, both by supporting decision processes and by forging discourses between science, economics and governing structures. The legitimate and effective use of economic instruments in biodiversity conservation depends on applying and interpreting them appropriately, taking into account the ecological, economic and political challenges associated with valuing biodiversity and nature's services to society (Ring, Hansjuergens et al. 2010).

Biodiversity conservation in tropical forests faces major problem from economic development. Funds being limited programs for biodiversity conservation have to compete with other development programs for funding and hence economic valuation will be helpful in assessing the benefits of biodiversity conservation. It is also effective since it speaks the economic language to which policy makers listen. Policies for conserving biodiversity, therefore, depend upon the perceived costs and benefits of biodiversity conservation. This

necessitates a comparative assessment of the benefits of biodiversity conservation vis-à-vis the benefits foregone from alternate uses. In the context of tropical forests, which are the most important ecosystem type from the viewpoint of global biodiversity, this involves a comparison of the benefits of biodiversity conservation vis-à-vis the alternate land use options of tropical forests, such as for agriculture, animal husbandry, tourism, recreation, etc. Contingent valuation method, travel cost method, hedonic pricing and multi-criteria analysis have been widely used to value environmental goods and services (Ninan and Sathyapalan 2005).

At the same time providing economic value to all ecosystem services is also debated. (Naidoo 2008). Economic valuation methods also have obstacles namely, lack of biophysical data, and ethical, technical concerns(Dickson, Campbell et al. 2005).

In countries like India, poorest districts and biodiversity rich forested areas are interlinked. The Tiger task force, which was constituted by Government of India puts in "The protection of the tiger is inseparable from the protection of the forests it roams in. But the protection of these forests is itself inseparable from the fortunes of people who, in India, inhabit forest areas". Often conservation budget is also limited(Narain, Panwar et al. 2005). There is a need to balance between the conservation and development.

Millennium Development Goals, asks to halve, extreme poverty and hunger,(..), and ensure environmental sustainability by the year 2015. Goal 7 specifies to integrate sustainable development and reduce biodiversity loss. In tropical region, several villages are located in deep inside the forests without any proper access to facilities like health and education. Road is one of the most important major problem to gain access and improve other facilities like health and education.

There are two options to provide basic facilities and achieve Millennium Development Goals in these types of remote locations; either to provide basic facilities where they are, or relocate them outside the area.

Relocation of people from the forest area is highly debated (Cernea and Schmidt-Soltau 2006; Karanth 2007; Schmidt-Soltau and Brockington 2007). However, at the same time

species like tiger need larger undisturbed landscapes.(Karanth 2007; Karanth and DeFries 2010) (Karanth, Gopalaswamy et al. 2011).

This research tries to address the issue of development v/s environment conservation using the cost effectiveness method.

Specifically research tried to find out the answers to following specific question taking good all season roads as a proxy for achieving Millennium Development Goals (MDG).

Ideally, other indicators like health, education, electricity, etc should also be included. However, due to lack of data availability, we could not able to collect such information. Though, taking road as proxy has limitations, this is one of the strongest indicators. If road is good, the village can be approachable at any season, other facilities like, health and education can be reached by mobile services. Government already started such programs in certain remote parts of the country. However, if there is no all season road, they cannot reach the location. Every government needs to provide basic facilities to these people living in remote location.

Research Question:

How can we use cost effectiveness method to identify and implement conservation in priority areas?

Materials and Methods:

The research used road as proxy for achieving millennium development goals, because even though health facilities and education are available, it is difficult to access those facilities without a road or transportation. The research identified some villages which are located

about 40 km deep inside the forest without road. The villagers are using footpath to reach hospital. Though few schools are started in those villages, often teachers are not ready to work in those remote villages.

For each of the grid, distance from the main road is calculated using the geo referenced map. Expenses for developing the al season road to these villages are collected from corresponding government department. This data is correlated ecological priority values calculated from Chapter 2.



Figure 31: Cost of Development for roads to remote villages in the grids

The most conservation priority grids which are also expensive

achieving MDG are identified from this analysis.

Results: Of the 75 grids, 5 grids are requiring expenses larger than 20 million Indian rupees. About 10 grids require about 15-20 million Indian rupees for development. Though some of the grids are located near the roads, they require heavy expenses for bridges for river or lack even a basic road at all.

for



Figure 32: Ecological priority and cost of development in spatial scale

Spatial distribution of grids with cost of development and ecological value shows that six of the conservation priority grids identified in Chapter two also have the villages which require higher amount of money for development.

Analysis of ecological priority Index v/s cost of development shows that two grids of ecologically important are also economically expensive for development. These grids have conservation priority species and at the same time are located in remote places. Such areas were considered for declaration of Conservation Reserves.



Figure 33: Ecological priority index v/s Cost of Development

Conclusion: This method will help to decision makers to prioritise locations for implementation of conservation.

References:

- Brooks, T. M., R. A. Mittermeier, et al. (2006). "Global biodiversity conservation priorities." <u>Science</u> **313**(5783): 58-61.
- Campbell, J. M. (1887). Gazeteer of Uttara Kannada District.
- Cernea, M. M. and K. Schmidt-Soltau (2006). "Poverty risks and national parks: Policy issues in conservation and resettlement." World Development **34**(10): 1808-1830.
- Chambers, R. (1994). "THE ORIGINS AND PRACTICE OF PARTICIPATORY RURAL APPRAISAL." <u>World</u> Development **22**(7): 953-969.
- Chambers, R. (1994). "PARTICIPATORY RURAL APPRAISAL (PRA) ANALYSIS OF EXPERIENCE." <u>World</u> <u>Development</u> 22(9): 1253-1268.
- Das, A., J. Krishnaswamy, et al. (2006). "Prioritisation of conservation areas in the Western Ghats, India." <u>Biological Conservation</u> **133**(1): 16-31.
- Dickson, R., A. Campbell, et al. (2005). Making economic valuatio work for biodiversity conservation. B. D. A. C. Departmet of Eviroment and Heritage, Australian Government:
- Jones-Walters, L. and I. Mulder (2009). "Valuing nature: The economics of biodiversity." Journal for Nature Conservation 17(4): 245-247.
- Karanth, K. K. (2007). "Making resettlement work: The case of India's Bhadra wildlife sanctuary." <u>Biological Conservation</u> 139(3-4): 315-324.
- Karanth, K. K. and R. DeFries (2010). "Conservation and management in human-dominated landscapes: Case studies from India." <u>Biological Conservation</u> 143(12): 2865-2869.
- Karanth, K. U., A. M. Gopalaswamy, et al. (2011). "Monitoring carnivore populations at the landscape scale: occupancy modelling of tigers from sign surveys." <u>Journal of Applied Ecology</u> 48(4): 1048-1056.
- Kesby, M. (2000). "Participatory diagramming: deploying qualitative methods through an action research epistemology." <u>Area</u> 32(4): 423-435.
- Kumara, H. N., R. Sasi, et al. (2011). "Distribution, abundance and conservation of primates in the Highwavy Mountains of Western Ghats, Tamil Nadu, India and conservation prospects for lion-tailed macaques." <u>Current Science</u> **100**(7): 1063-1067.
- Margules, C. R. and R. L. Pressey (2000). "Systematic conservation planning." <u>Nature</u> 405(6783): 243-253.
- Myers, N. (1988). "Threatened biotas: "hot spots" in tropical forests." <u>The Environmentalist</u> **8**(3): 187-208.
- Myers, N. (2003). "Biodiversity hotspots revisited." <u>Bioscience</u> 53(10): 916-917.
- Myers, N., R. A. Mittermeier, et al. (2000). "Biodiversity hotspots for conservation priorities." <u>Nature</u> **403**(6772): 853-858.
- Naidoo, R. (2008). The Role of Economic Valuation in the Conservation of Tropical Nature. <u>Economics</u> and Conservation in the Tropics: A Strategic Dialogue.
- Narain, S., H. S. Panwar, et al. (2005). Joining the dots: The report of the tiger task force. Project Tiger, Ministry of Environment and Forest, New Delhi.
- Naveh, Z. (2002). Development and status of Landscape Ecology- Foreword. <u>Development and</u> <u>Perspectives of Landscape Ecology</u>. O. Bastian and U. Steinhardt, Kluwer Academic Publishers: XXi-XXVii.
- Ninan, K. N. and J. Sathyapalan (2005). "The economics of biodiversity conservation: a study of a coffee growing region in the Western Ghats of India." <u>Ecological Economics</u> **55**(1): 61-72.
- Ott, K. (2002). Landscape ethics and sustainability. <u>Development and Perspectives of Landscape</u> <u>Ecology</u>. O. B. a. U. Steinhardt. Germany, Kluwer Academic Publisher: 307-325.
- Pimm, S. L., M. Ayres, et al. (2001). "Environment Can we defy nature's end?" <u>Science</u> 293(5538): 2207-2208.

- Ranganathan, J., K. M. A. Chan, et al. (2008). "Where can tigers persist in the future? A landscapescale, density-based population model for the Indian subcontinent." <u>Biological Conservation</u> **141**(1): 67-77.
- Ring, I., B. Hansjuergens, et al. (2010). "Challenges in framing the economics of ecosystems and biodiversity: the TEEB initiative." <u>Current Opinion in Environmental Sustainability</u> 2(1-2): 15-26.
- Sala, O. E., F. S. Chapin, et al. (2000). "Biodiversity Global biodiversity scenarios for the year 2100." Science 287(5459): 1770-1774.
- Schmidt-Soltau, K. and D. Brockington (2007). "Protected areas and resettlement: What scope for voluntary relocation?" <u>World Development</u> **35**(12): 2182-2202.
- Walston, J., J. G. Robinson, et al. (2010). "Bringing the tiger back from the brink-the six percent solution." <u>PLoS biology</u> **8**(9).
- Wikramanayake, E. D., E. Dinerstein, et al. (1998). "An ecology-based method for defining priorities for large mammal conservation: The tiger as case study." <u>Conservation Biology</u> **12**(4): 865-878.

Chapter 5

From squares in paper to polygons on field

"German landscape ecology was most probably first environmentally oriented metadiscipline, transcending beyond the narrow borders of the natural sciences." (Naveh 2002).

From the perspective of a scientific ecological observer, landscapes are complex and 'netted' hybrid unities of natural and cultural environments. They are based on geological formations, shaped by climatic factors, filled with biotic communities, and mostly, modified by human action. These different perspectives are like lenses according to which landscapes are perceived, valued, and judged. They are not layers of hierarchy. They must be distinguished analytically but they will be combined in several ways. (Ott 2002)

Field based conservation requires multi disciplinary approach. Conservation problems are multi dimensional and hence solutions have to be multidimensional as well. Field based conservation involved consensus of multi stakeholders. To address this multi pronged problem, meta-disciplinary landscape ecology is important for field based conservation. This work provided example for such an approach.

Based on the study the research team developed proposals to declare the areas as Conservation Reserves according to Indian, Wildlife Protection Act. This Conservation Reserve Category is recently added category to Indian Wildlife Protection Act, 1972, amended during 2006. This category is equivalent to IUCN IV category, which promotes conservation of landscape with people participation.

Based on the results of the project three Conservation Reserves were proposed to government.

Government accepted the proposal and declared officially. On 21st of July, 2011, Government of Karnataka state in India, notified in its official Gazette (GOK, 2011). Thus about 409.09 sq km added to network of Protected Areas, as a result of this work.

	Name	Area in sq km	Conservation Priority Species	Priority locations
1	Aghanashini-LTM Conservation Reserve	299.52	LTM, Myristica swamps Semecarpus katlekanesis	Unchalli Falls Katlekan Mukti hole
2	Bedthi Conservation Reserve	57.07	Hornbills Coscinium fenestratum	Magod Falls Jenukallugudda Bilihalla valley Konki kote
3	Hornbill Conservation Reserve	52.50	Hornbills	Kali river

Table 7: Details of newly declared Conservation Reserves



Figure 34: Location of newly declared Conservation Reserves in Uttara Kannada district

References:

- Naveh, Z. (2002). Development and status of Landscape Ecology- Foreword. <u>Development and</u> <u>Perspectives of Landscape Ecology</u>. O. Bastian and U. Steinhardt, Kluwer Academic Publishers: XXi-XXVii.
- Ott, K. (2002). Landscape ethics and sustainability. <u>Development and Perspectives of Landscape</u> <u>Ecology</u>. O. B. a. U. Steinhardt. Germany, Kluwer Academic Publisher: 307-325.

Acknowledgements

This work would not have been possible without the support many agencies, professionals, academics, colleagues, friends and family members. Over these years, I have been benefitted by knowledge from many of those people who helped, encouraged and motivated me.

My sincere thanks to CEPF-ATREE Small Grants and Western Ghats Task Force, Karnataka Forest Department and others who funded me over the years for field based conservation work. My sincere thanks to Jack Tordoff, Grant director CEPF, Jagadish Krishna swamy, Bhaskar Acharya of ATREE, for encouraging me for this work.

I would like to thanks Karnataka Forest Department for providing permission to work in the field. My sincere thanks go to Deputy Conservator of Forest Shri Manojkumar, for his valuable discussions and encouragement during this work. I would like to thank Mr Anant Hegde, Ashisar who supported my effort and helped to realise the work in conservation. My thanks to Mr. Narasimha Hegde and all my friends of Life Trust, and Sahyadri Wildlife and Forest Conservation Trust, Sirsi, India for the support over the years.

My heartily gratitude goes towards my supervisor during my Masters study at University of Greifswald, Germany Prof. Dr. Konrad Ott, who encouraged me to take up interdisciplinary research. My sincere thanks to Prof. Dr.Michael Manthey, Dr. Tiemo Timmermann, Prof. Dr. Volker Beckmann, Dr Rafael Zeigler for his encouragement and discussion the approach.

My sincere thanks to Dr Ullass Karanth, Wildlife Conservation Society, M.D.Madhusudan, Sanjay Gubbi, NCF, Mysore, for their encouragement during the work.

Thanks to all those villagers who responded to questions and educated me about the forest resources and its uses.

I would like to thank my mother and wife for their continuous encouragement, love and tolerance during the study period. At last, most importantly, regards to my daughter Vanya, who is always curious to know the work that her father is doing.

Appendix –III

Photographic illustrations



Figure 35: Myristica swamps; Endangered Special Ecosystem



Figure 36: Great Hornbill (*Buceros bicornis*): Key Species



Figure 37: Lion-tailed macaque (Macaca silenus)



Figure 38: Natural grasslands



Figure 39: Tiger God: Tiger is worshipped by local community



Figure 40: Balachandra Hegde, with communities



Figure 41: Landscape view of Aghanashini LTM Conservation Reserve

FOREST, ECOLOGY AND ENVIRONMENT SECRETARIAT

NOTIFICATION

No: FEE 141 FWL 2011, Bangalore, Dated: 13-06-2011

Whereas the Government of Karnataka in exercise of powers conferred under section 36 (A) of Wildlife (Protection) Act, 1972 (Central Act, of 1972) amended on 2006, intends to declare the area, the situation and limits of which are specified in the schedule to this Notification to the extent of 299.52 Sq. Kms, as "Aghanashini Lion Tailed Macaque Conservation Reserve" for protection, propagation and development of flora fauna and to protect the important habitats like fresh water swamps, with species like *Myristica fatua, Gymnacranthara canrica, Sizygium travancoricum, Semecarpus kathlekanensis, Dipterocarpus indicus, Ochronuclea missions* and sacred groves, Lion Tailed Macaque , *Phylatus neelanetrunsus, Pinanga dicksonii* corridor western Ghats of Karnataka.

The Aghanashini Conservation Reserve does not include any Revenue villages, Patta lands, Hakkals and Betta lands, leased lands on the date of publication of this Notification. The various rights as notified in the Village Forest Record statements of the respective reserve forests will continue.

The detailed description of reserved forests constituting the Aghanashini Lion Tailed Macaque Conservation Reserve is as contained in the Annexure-II.

Now, therefore, in exercise of the powers conferred under section 36 (A) of the Wildlife (Protection) Act, 1972, (Central Act, 53 of 1972) amended on 2006, the Government of Karnataka hereby declares the area specified in the schedule as "Aghanashini Lion Tailed Macaque Conservation reserve".

SCHEDULE :

Name of the District:	Uttara Kannada
Taluk:	Sirsi, Siddapur, Honnavar and Kumta
Area:	299.52 Sq Kms

(Excluding revenue villages, leased lands, patta lands, revenue lands, hakkal lands and betta lands on the date of publications)

ANNEXURE-I

Boundary Description:

The boundary of proposed conservation reserve starts from the trijunction point of Honnavar, Sirsi and Sagar Division on left bank of river Sharavathi on a place called Ambepal gudda, Block IHF CL (old XXVIII). The eastern boundary of the proposed reserve is Honavar Sirsi Division boundary which runs up to the end of the Block IHF CL in the South.

Along the block boundary it runs in the westward direction upto Kangal ghat gudda and then it runs along northward direction and crosses Sharavathi River, near Mastimane and then joins Bangalore – Honnavar Road and follows the road upto Sulekeri turn and then follows the block boundary in the westward direction until it reaches block ICF CL XXV-A at Mahime gudda and follows block boundary of ICF CL XXV-A passes through Hosani village and reaches southern boundary of ICF CL XXIV-B near Yelkodige.

Then the boundary runs along the block western boundary of block, ICF-CLXXIV-B and then follows 200 mts contour line upto Gundabal village. Then the boundary runs in northward direction along the western boundary of ICF CL XXIV A and passes through block ICF CL XXIII A along 100 MSL contour line until it reaches ICF CL XXIII-B at Tulsani in Salkod village.

From that point it follows 200 mts MSL contour line along Tulsani in Salkod village. It joins block boundary of ICF CL XXIII-B near Medankeri (Salkod village). The border runs along the Block boundary of ICF CL XXIII-B towards west upto Kanakki (Salkod Village). The border runs towards west all along the contour line at the height of 200 mts MSL, until crosses the road to Karikanamma Temple from Areangadi. Then it follows the boundary of Karikanamma Devarakadu until it joins the block boundary of ICF-CLXXIII-B towards north side. In the north side it follows the compartment boundary of ICF-CLXXIII-B up to IHF-CXLVII passing through Kaltegudda (676 MSL) along Kumta-Honnavar Range border. Then it follows northern side of the IHF-CXLVII block boundary towards northern side until reaches Medini-Shevemane road at 400 MSL contour towards eastern side of Tudguni gudda. Then the border runs northward direction along 100 MSL contour line in SHF block XXVII, and reaches Aghanashini river. Then it follows Aghanashini river along the stream upto the point where Bennehole joins Aghaashini river. Then the Border runs along the Morse Village towards southern and eastern side (along the village). Then it follows the western boundary of compartment IHF CXLVI (A), until reaches Sirsi – Honnavar Division boundary near at trijunction of Sirsi-Kumta- Siddapur Taluks.

In Sirsi Division boundary starts from above mentioned tri-junction and follows Bugudi stream until it reaches Bennehole and then follows Bennehole along the compartment boundaries of VIII-XLVII-13 until it reaches Sirsi –Siddapura Taluka boundary and the follows the same boundary until it reaches Chennasara hamlet of Hallibail village and follows easter boundaries of

ಭಾಗ – ೪ಎ

ಕರ್ನಾಟಕ ರಾಜ್ಯಪತ್ರ, ಗುರುವಾರ, ಜುಲೈ ೧೪, ೨೦೧೧

compartments LXX- and LXX-9 and LXX-1 until it reaches Nilkund – Devimane road. Then the boundary follows the Nilkund-Devimane- Hukli road until it reaches Aghanashini river valley near LXIX-6. Then the boundary follows 500 mts MSL contour line along the northern boundary of Aghanashini river until it reaches Unchalli Falls. From Unchalli Falls, boundary follows eastern boundary of compartment LXVIII-7 and follows again the ridgeline of Aghanashini river valley towards west until it reaches Dodmane Kumta Road. Then boundary follows the eastern boundary of block compartments mentioned Annexure –II, until it reaches Bangalore-Honnavar Road near Hejni village and crosses the road and reaches Sharavathi river and then follows westwards until it reaches the initial point.

The details of each blocks, compartments were given in Annexure-II

ANNEXURE-II SI. District Range Taluka Village Compartments Area in Ha No. (Division) Nos 1 2 3 4 5 6 7 1 Uttara Janmane Sirsi Hosur VIII-XLVII-13 310.4 305.94 Bugudi LVII-5 LXX-6 263.05 Kannada (Sirsi) Siddapur Hallibail LXX-7 287.33 LXX-8 335.89 LXX-5 388.5 Mulgund LXX-4 440.3 Nilkund LXX-1 250.01 Hukkali LXIX-8 326.99 Shivalmane LXIX-7 338.32 Unchalli LXIX-6 395.79 LXIX-4 381.62 LXIX-1 244.43 Kyadagi Naigar (Sirsi) LXVIII-3 353.7 Gajagini Ilimane LXVIII-4 308.78 LXVIII-5 420.07 Honnekomba LXVIII-6 222.58 LXVIII-7 289.76 Nirgod, Hrdgar(Sungal) LXVII-6 303.92 LXVII-7 302.30 Nirgod. LXVII-8 482.39 Kodigar. LXVII-9 254.14 Nirgod pt, Kodigar, Surgod, pt LXVII-4A 127.88 Siddapur Hejni, Kudgund(p), Malmane (p) (Sirsi) Malemani LXVII-5B 106.83 Malemane LXVII-6B 106.02 Suttalmane, Vajgod, Danmar LXVII-7 217.72 LXVII-10 199.91 Danmav, Talekeri (Danmav) LXVII-11 Talekeri Danmav 326.99 LXV-4 Malemane (p) Hejni (p) 412.78 LXV-5 280.04 Malemane Kumta Kumta Morse 1-CXLVII 203.97 (Honnavar) 2-CXLVII 255.77 SHF-10-XXVII 231.49 ೧೨೦೪

ಕರ್ನಾಟಕ ರಾಜ್ಯಪತ್ರ, ಗುರುವಾರ, ಜುಲೈ ೧೪, ೨೦೧೧

ಭಾಗ – ೪ಎ

SI.	District	Range	Taluka	Village	Compartments	Area in Ha
No.		(Division)			Nos	
1	2	3	4	5	6	7
					SHF-11-XXVII	242.82
					SHF-12-XXVII	208.01
					SHF-13-XXVII	213.68
					SHF-14-XXVII	244.44
					SHF-15-XXVII	241.2
					SHF-16-XXVII	202.35
				Soppinahosalli	SHF-9-XXVII	246.86
				Medini	IHF-1-CXLVI	370.7
					IHF-2-CXLVI	241.2
					IHF-3-CXLVI	246.05
					IHF-4-CXLVI	284.9
					IHF-5-CXLVI	372.32
					IHF-6-CXLVI	119.79
				Medini-Mudnalli	IHF-1-CXLVII	203.97
					IHF-2-CXLVII	255.77
					IHF-3-CXLVII	349.66
					IHF-4-CXLVII	160.26
					IHF-5-CXLVII	298.66
					IHF-6-CXLVII	325.37
				Jankadkal, Hirebail, Hosgod	IHF-1-CXLVIII	499.39
					IHF-2-CXLVIII	412.79
					IHF-3-CXLVIII	215.3
					IHF-4-CXLVIII	377.18
					IHF-5-CXLVIII	386.89
				Hosgod, Neelkod, Salkod	ICF-CLXXIII-B	1341
					Karikanu	
				Neelkod, Salkod	Devarakadu area	116
				Gundbal Salkod	ICF-CLXXIII-A	759.5
				Jankadkal	ICF-CLXXIV-A	2274.9
				Mahime, Jankadakal, Tumbolli	ICF-CLXXIV-B	1905
				Mahime-Saralgi	ICF-CLXXV-A	2493.65
				Mahime	ICF-CLXXV-B	183.57
				Jankadkal, Mahime, Dhanmao,	IHF-CL	
				Kabbinahakkal, Nagarabastikeri		4483.21
					Total	29952.00

By order and in the name of the Governor of Karnataka,

A.P. RAMAKRISHNA

Under Secretary to Government,

Forest, Ecology & Environment Department.

PR-647





ಭಾಗ – ೪ಎ

ರಾಜ್ಯದ ವಿಧೇಯಕಗಳ ಮತ್ತು ಅವುಗಳ ಮೇಲೆ ಪರಿಶೀಲನಾ ಸಮಿತಿಯ ವರದಿಗಳು, ರಾಜ್ಯದ ಅಧಿನಿಯಮಗಳು ಮತ್ತು ಅಧ್ಯಾದೇಶಗಳು, ಕೇಂದ್ರದ ಮತ್ತು ರಾಜ್ಯದ ಶಾಸನಗಳ ಮೇರೆಗೆ ರಾಜ್ಯ ಸರ್ಕಾರವು ಹೊರಡಿಸಿದ ಸಾಮಾನ್ಯ ಶಾಸನಬದ್ಧ ನಿಯಮಗಳು ಮತ್ತು ರಾಜ್ಯಾಂಗದ ಮೇರೆಗೆ ರಾಜ್ಯಪಾಲರು ಮಾಡಿದ ನಿಯಮಗಳು, ಹಾಗೂ ಕರ್ನಾಟಕ ಉಚ್ಚ ನ್ಯಾಯಾಲಯವು ಮಾಡಿದ ನಿಯಮಗಳು.

FOREST, ECOLOGY AND ENVIRONMENT SECRETARIAT NOTIFICATION

No: FEE 147 FWL 2011, Bangalore, Dated: 13-06-2011

Whereas the Government of Karnataka in exercise of powers conferred under section 36 (A) of Wildlife (Protection) Act, 1972 (Central Act, 1972) amended on 2006, intends to declare the area, the situation and limits of which are specified in the schedule to this Notification to the extent of 57.307 Sq. Kms, as "Bedthi Conservation Reserve" for protection, propagation and development of flora, fauna and to protect the important corridor western Ghats of Karnataka.

The Bedthi Conservation Reserve does not include any Revenue villages, Patta lands, Hakkals and Betta lands, leased lands, on the date of publication of this notification. The various rights as notified in the Village Forest Record statements of the respective reserve forests will continue.

The detailed description of reserved forests constituting the Bedthi Conservation Reserve is as contained in the Annexure-II

Now, therefore, in exercise of the powers conferred under section 36 (A) of the Wildlife (Protection) Act, 1972, (Central Act, 53 of 1972) amended on 2006, the Government of Karnataka hereby declares the area specified in the schedule as "Bedthi Conservation reserve"

SCHEDULE:

Name of the District:	Uttara Kannada
Taluk:	Sirsi, Yellapur and Ankola
Area:	57.307Sq Kms

(Excluding revenue villages, leased lands, patta lands, Revenue lands, Hakkal lands and Betta lands on the date of Publications)

ANNEXURE-I

Boundary Description:

The boundary of proposed additional forest area to be included in "Bedthi Conservation Reserve" starts at the point at the Magod Falls and follows northern boundaries compartment XXIX-28 and turns southwards along eastern boundary of compartment XXIX-27, XXIX-20 and XXIX-19 and follows the until it reaches Shalmala river at XIV-LII-2 and follows southwards along Shalmala river until it reaches Shivagaga falls and follows the compartment boundary of XIV-LII-1 and follows northwards along compartment boundaries of XIV-LII-3 along ridgeline, ridgeline of Bedthi river valley along southern ridge of Bedthi river, Konki kote, until it reaches Bili halla valley. From Bili halla it follows Compartment no's. XIV-LII-3, XII-GHF-18-A, XII-GHF-17(P), XII-GHF-16(P), XII-GHF-20, XII-GHF-29, and XV-LIII-3. From Bili halla, where it joins Bedthi, it follows the northern boundary of ridgeline, passes through, Jenukallu gudda, until it reaches Magod Falls.

Details of each Compartments included in Conservation reserve are given in Anexure-II

SI.	District	Range (Division)	Taluka	Village	Compartments	Area Ha
No.					Nos	
1	2	3	4	5	6	7
1	Uttara	Idagundi	Yellapur	Kelase	XII-28(GHF)	363.092
2	Kannada	(Yellapur)			XII-27(GHF)	234.89
3					XII-26(GHF)	341.08
4					XII-25(GHF)	246.7
5		Manchikeri		Harigadde	XXIX-19	441.172
6				Kampli	XXIX-20	320.358
7				Kampli	XXIX-27	333.554
8					XXIX-28	291.162
9		Hulekal	Sirsi	Sonagimane	XIV-LII-1	286.68
10					XIV-LII-2	419.11
11					XIV-LII-3	667.05
12		(Sirsi)			XII-GHF-18-A	118.76
13					XII-GHF-17(P)	155.16
14					XII-GHF-16(P)	140.04
15					XII-GHF-20	222.85
16					XII-GHF-29	161.25
17					XV-LIII-3	155.07
18					XV-LIII-6	332.68
19					XV-LIII-7	351.42
20		Ramanguli	Ankola		XII (GHF)-18	69.3
21		(Karwar)			XII (GHF)-17	79.4

ANNEXURE-II Bedthi Conservation Reserve: Compartment details:

5730.778

By order and in the name of the Governor of Karnataka,

A.P. RAMAKRISHNA

Under Secretary to Government,

Forest, Ecology & Environment Department.

PR-648

ಸಂಪಟ ೧೪೭ ಬೆಂಗಳೂರು, ಗುರುವಾರ, ಜುಲೈ ೫, ೨೦೧೨ (ಆಪಾಢ ೧೪, ಶಕ ವರ್ಷ ೧೯೩೪) ಸಂಚಿಕೆ ೨೭

WPP-47

ಭಾಗ – ೪ಎ

ರಾಜ್ಯದ ವಿಧೇಯಕಗಳ ಮತ್ತು ಅವುಗಳ ಮೇಲೆ ಪರಿಶೀಲನಾ ಸಮಿತಿಯ ವರದಿಗಳು, ರಾಜ್ಯದ ಅಧಿನಿಯಮಗಳು ಮತ್ತು ಅಧ್ಯಾದೇಶಗಳು, ಕೇಂದ್ರದ ಮತ್ತು ರಾಜ್ಯದ ಶಾಸನಗಳ ಮೇರೆಗೆ ರಾಜ್ಯ ಸರ್ಕಾರವು ಹೊರಡಿಸಿದ ಸಾಮಾನ್ಯ ಶಾಸನಬದ್ಧ ನಿಯಮಗಳು ಮತ್ತು ರಾಜ್ಯಾಂಗದ ಮೇರೆಗೆ ರಾಜ್ಯಪಾಲರು ಮಾಡಿದ ನಿಯಮಗಳು, ಹಾಗೂ ಕರ್ನಾಟಕ ಉಚ್ಚ ನ್ಯಾಯಾಲಯವು ಮಾಡಿದ ನಿಯಮಗಳು

ಶಿಕ್ಷಣ ಸಚಿವಾಲಯ

ಅಧಿಸೂಚನೆ

ಸಂಖ್ಯೆ. ಇಡಿ 39 ಎಲ್ಐಬಿ 2012, ಬೆಂಗಳೂರು, ದಿನಾಂಕ: 24.05.2012

ಕರ್ನಾಟಕ ಸಾರ್ವಜನಿಕ ಗ್ರಂಥಾಲಯಗಳು ಅಧಿನಿಯಮ 1965ರ ಕರ್ನಾಟಕ 10ನೇ ಅಧಿನಿಯಮ ಪ್ರಕರಣ 17(ಎ) ರಿಂದ 17(ಹೆಚ್) ಮತ್ತು 17(2) ರಲ್ಲಿನ ಪ್ರದತ್ತವಾದ ಅಧಿಕಾರದನ್ವಯ ಹಾಸನ ನಗರ ಗ್ರಂಥಾಲಯ ಪ್ರಾಧಿಕಾರಕ್ಕೆ ಈ ಕೆಳಕಂಡ ಸದಸ್ಯರನ್ನು ನಾಮಕರಣ ಮಾಡಿ ಆದೇಶಿಸಿದೆ.

	ಪ್ರಕರಣ	ವಿವರ	ಪದನಾಮ
17(1) (ఎ)	ಮುನಿಸಿಪಲ್ ಕಾರ್ಪೋರೇಷನ್ನಿನ ಮೇಯರ್ರವರು ಅಥವಾ ನಗರ ಪಾಲಿಕೆ ಸಭೆಯ ಅಥವಾ ನಗರದ ಬೇರೆ ನಗರ ಪಾಲಿಕೆ ಸಂಸ್ಥೆಯವರು ಪ್ರಾಧಿಕಾರ ವರ್ಗದ ಅಧಿಕಾರ ಪ್ರಯುಕ್ತ ಸಭಾಪತಿಯಾಗಿರತಕ್ಕುದು;	ಅಧ್ಯಕ್ಷರು ನಗರ ಸಭೆ ಹಾಸನ	ಅಧ್ಯಕ್ಷರು
17(1) (ඪ)	ರಾಜ್ಯ ಸರ್ಕಾರದವರಿಂದ ಅಧಿಕಾರ ಪ್ರಯುಕ್ತ (ಎಕ್ಸ್– ಅಫಿಷಿಯೋ) ನೇಮಕ ಮಾಡಲ್ಪಟ್ಟ ನಗರದ ಮೊದಲ ದರ್ಜೆ ಕಾಲೇಜು ಒಂದರ ಪ್ರಿನ್ಸಿಪಾಲರು, (ಇವರು ಪ್ರಾಧಿಕಾರ ವರ್ಗದ ಉಪ ಸಭಾಪತಿಯಾಗಿ (ವೈಸ್– ಚೇರ್ಮನರಾಗಿ) ಇರತಕ್ಕುದು ;	ಪ್ರಿನ್ಸಿಪಾಲರು, ಸರ್ಕಾರಿ ವಿಜ್ಞಾನ ಕಾಲೇಜು, ಹಾಸನ	ಉಪಾಧ್ಯಕ್ಷರು
17(1) (や)	ನಗರದ ನಗರಪಾಲಿಕೆ ನಿಗಮದಿಂದ (ಮುನಿಸಿಪಲ್ ಕಾರ್ಪೋರೇಷನ್), ನಗರ ಪಾಲಿಕೆ ಸಭೆಯಿಂದ ಅಥವಾ ಇತರ ನಗರಪಾಲಿಕೆ ಸಂಸ್ಥೆಯಿಂದ ಅದರ ಸದಸ್ಯರುಗಳ ಪೈಕಿಯಿಂದ ಚುನಾಯಿಸಲ್ಪಡುವ ಇಬ್ಬರು ವ್ಯಕ್ತಿಗಳು ;	 ಶ್ರೀಮತಿ ಆರ್. ಅಂಬಿಕಾ ರವಿ ಶಂಕರ್ ಕೋಂ ರವಿ ಶಂಕರ್ ನಗರ ಸಭಾ ಸದಸ್ಯರು, 4ನೇ ಬ್ಲಾಕ್, ಕುವೆಂಪುನಗರ, ಹಾಸನ. 	ಸದಸ್ಯರು

ಕರ್ನಾಟಕ ರಾಜ್ಯಪತ್ರ, ಗುರುವಾರ, ಜುಲೈ ೫, ೨೦೧೨

	ಪ್ರಕರಣ	ವಿವರ	ಪದನಾಮ
		 ಶ್ರೀಮತಿ ನೇತ್ರಾವತಿ ಗಿರೀಶ್, ನಗರ ಸಭಾ ಸದಸ್ಯರು, ಪಾರ್ಕ್ ರಸ್ತೆ, ಉತ್ತರ ಬಡಾವಣೆ, ಹಾಸನ. 	ಸದಸ್ಯರು
17(1) (@)	ನಗರ ಸಹಾಯ ಪೋಷಿತ ಮಸ್ತಕ ಭಂಡಾರಗಳ ಸಂಬಂಧವಾದ ಆಡಳಿತ ಸಂಸ್ಥೆಗಳ ಸದಸ್ಯರುಗಳ ರಾಜ್ಯ ಸರ್ಕಾರದವರಿಂದ ನಾಮ ನಿರ್ದೇಶನ ಮಾಡಲ್ಪಟ್ಟ ಒಬ್ಬ ವ್ಯಕ್ತಿ ;	ಘೋಷಿತ ಪುಸ್ತಕ ಭಂಡಾರ ಯಾವುದೂ ಇರುವುದಿಲ್ಲ.	
17(1) (තු)	ರಾಜ್ಯ ಸರ್ಕಾರದವರಿಂದ ಅಧಿಕಾರ ಪ್ರಯುಕ್ತ ನಾಮ ನಿರ್ದೇಶನ ಮಾಡಲ್ಪಟ್ಟ ನಗರದಲ್ಲಿನ ಒಂದು ಹೈಸ್ಕೂಲಿನ ಮುಖ್ಯೋಪಾಧ್ಯಾಯರು ;	ಪ್ರಾಚಾರ್ಯರು, ಬಾಲಕರ ಸರ್ಕಾರಿ ಪದವಿ ಮೂರ್ವ ಕಾಲೇಜು, ಆರ್.ಸಿ. ರಸ್ತೆ, ಹಾಸನ.	ಸದಸ್ಯರು
17 (1) (ఎಫ್)	ಮೈಸೂರು ಮಸ್ತಕ ಭಂಡಾರ ಸಂಘದ ನಗರ ಶಾಖೆ ಯಾವುದಾದರೂ ಇದ್ದರೆ, ಅದರ ಸಮಿತಿಯಿಂದ ನಾಮ ನಿರ್ದೇಶನ ಮಾಡಲ್ಪಟ್ಟ ಒಬ್ಬ ವ್ಯಕ್ತಿ ;	– ಅಸ್ತಿತ್ವದಲ್ಲಿರುವುದಿಲ್ಲ. –	
17(1) (සී)	ನಗರದಲ್ಲಿ ಅಧಿಕಾರ ವ್ಯಾಪ್ತಿಯು ರಾಜ್ಯ ಸರ್ಕಾರದವರಿಂದ ಅಧಿಕಾರ ಪ್ರಯುಕ್ತ ನಾಮ ನಿರ್ದೇಶನ ಮಾಡಲ್ಪಟ್ಟ ವಿದ್ಯಾಭ್ಯಾಸ ಇಲಾಖೆಯ ಸಭಾಧಿಕಾರಿ ;	ಕ್ಷೇತ್ರ ಶಿಕ್ಷಣಾಧಿಕಾರಿಗಳು ಹಾಸನ ತಾಲ್ಲೂಕು, ಹಾಸನ.	ಸದಸ್ಯರು
17 (1) (ಹೆಚ್)	ಸಾಮಾನ್ಯವಾಗಿ ನಗರದಲ್ಲೇ ವಾಸ ವಾಗಿರುವ ವ್ಯಕ್ತಿಗಳ ಪೈಕಿ ರಾಜ್ಯ ಸರ್ಕಾರದವರಿಂದ ನಾಮ ನಿರ್ದೇಶನ ಮಾಡಲ್ಪಟ್ಟ ಇಬ್ಬರು ವ್ಯಕ್ತಿಗಳು ಇರತಕ್ಕುದು ;	 ಪ್ರೊ. ಬಿ.ಎನ್. ರಾಮಸ್ವಾಮಿ, " ಅನುಗ್ರಹ" 3ನೇ ಅಡ್ಡರಸ್ತೆ, ಉದಯಗಿರಿ ಬಡಾವಣೆ, ಹಾಸನ. 2) ಶ್ರೀ ಹೆಚ್.ಬಿ. ರಮೇಶ್ ಶ್ರೀ ಭೀಮು ತೆಲುಗರ ಬೀದಿ, ಹಾಸನ 	ಸದಸ್ಯರು ಸದಸ್ಯರು
17 (2)	ನಗರದ ಮುಖ್ಯ ಮಸ್ತಕ ಭಂಡಾರಾಧಿಕಾರಿಯು ನಗರದ ಮಸ್ತಕ ಭಂಡಾರ ಪ್ರಾಧಿಕಾರ ವರ್ಗದ ಮತ್ತು ಸದರಿ ಪ್ರಾಧಿಕಾರ ವರ್ಗದ ಸಮಿತಿಗಳ ಅಧಿಕಾರ ಪ್ರಯುಕ್ತ ಕಾರ್ಯದರ್ಶಿಯಾಗಿರತಕ್ಕುದು.	ಮುಖ್ಯ ಗ್ರಂಥಾಲಯಾಧಿಕಾರಿಗಳು ನಗರ ಕೇಂದ್ರ ಗ್ರಂಥಾಲಯ ಹಾಸನ	ಸದಸ್ಯರು ಹಾಗೂ ಪದನಿಮಿತ್ತ ಕಾರ್ಯದರ್ಶಿಗಳು

ಕರ್ನಾಟಕ ರಾಜ್ಯಪಾಲರ ಆಜ್ಞಾನುಸಾರ ಮತ್ತು ಅವರ ಹೆಸರಿನಲ್ಲಿ

ಎಸ್.ಬಿ.ಪಟಗಾರ್

ಸರ್ಕಾರದ ಅಧೀನ ಕಾರ್ಯದರ್ಶಿ

ಶಿಕ್ಷಣ ಇಲಾಖೆ (ಸಾಮಾನ್ಯ)

ಶಿಕ್ಷಣ ಸಚಿವಾಲಯ

ಅಧಿಸೂಚನೆ

ಸಂಖ್ಯೆ. ಇಡಿ 331 ಎಲ್ಐಬಿ 2012 ಬೆಂಗಳೂರು, ದಿನಾಂಕ: 25.05.2012

ಕರ್ನಾಟಕ ಸಾರ್ವಜನಿಕ ಗ್ರಂಥಾಲಯಗಳು ಅಧಿನಿಯಮ 1965ರ ಕರ್ನಾಟಕ 10ನೇ ಅಧಿನಿಯಮ ಪ್ರಕರಣ 18 ರಲ್ಲಿನ ಪ್ರದತ್ತವಾದ ಅಧಿಕಾರದನ್ವಯ ಶಿವಮೊಗ್ಗ ಜಿಲ್ಲಾ ಗ್ರಂಥಾಲಯ ಪ್ರಾಧಿಕಾರಕ್ಕೆ ಈ ಕೆಳಕಂಡ ಸದಸ್ಯರನ್ನು ನಾಮಕರಣ ಮಾಡಿ ಆದೇಶಿಸಿದೆ.

	ಪ್ರಕರಣ	ವಿವರ	ಪದನಾಮ
18(1) (ఎ)	ಜಿಲ್ಲೆಯ ಡೆಮ್ಯಟಿ ಕಮೀಷನರವರು, ಇವರು ಅಧಿಕಾರ ಪ್ರಯುಕ್ತ ಸದರಿ ಪ್ರಾಧಿಕಾರ ವರ್ಗದ ಸಭಾಪತಿಯಾಗಿ (ಚೇರ್ಮನರಾಗಿ) ಇರತಕ್ಕುದು ;	ಜಿಲ್ಲಾಧಿಕಾರಿಗಳು, ಶಿವಮೊಗ್ಗ ಜಿಲ್ಲೆ, ಶಿವಮೊಗ್ಗ.	ಅಧ್ಯಕ್ಷರು
18(1) (ಬಿ)	ಜಿಲ್ಲಾ ವಿದ್ಯಾಧಿಕಾರಿ ಅಥವಾ ಜಿಲ್ಲೆಯ ಎಜ್ಯುಕೇಷನಲ್ ಇನ್ ಸ್ಪೆಕ್ಷರು	ಉಪ ನಿರ್ದೇಶಕರು, ಸಾರ್ವಜನಿಕ ಶಿಕ್ಷಣ ಇಲಾಖೆ, ಶಿವಮೊಗ್ಗ	ಸದಸ್ಯರು
18(1) (や)	ಜಿಲ್ಲಾ ಅಭಿವೃದ್ಧಿ ಸಭೆಯಿಂದ ಅದರ ಸದಸ್ಯರ ಪೈಕಿ ಚುನಾಯಿತರಾದ ಇಬ್ಬರು ವ್ಯಕ್ತಿಗಳು ;	 ಶ್ರೀಮತಿ ಹೇಮಪಾವನಿ ಜಿಲ್ಲಾ ಪಂಚಾಯತ್ ಸದಸ್ಯರು. ಆನವೇರಿ ಕ್ಷೇತ್ರ, ಭದ್ರಾವತಿ ತಾ : ಶಿವಮೊಗ್ಗ ಜಿಲ್ಲೆ. ಶ್ರೀ ಬಂಗಾರಿ ನಾಯ್ಕ ಜಿಲ್ಲಾ ಪಂಚಾಯತ್ ಸದಸ್ಯರು ಕಪ್ಪನಹಳ್ಳಿ ಕ್ಷೇತ್ರ, ಶಿಕಾರಿಪುರ ತಾ : ಶಿವಮೊಗ್ಗ ಜಿಲ್ಲೆ. 	ಸದಸ್ಯರು ಸದಸ್ಯರು
18(1) (@)	ಐವತ್ತು ಸಾವಿರಕ್ಕಿಂತ ಕಡಿಮೆ ಯಾಗಿಲ್ಲದ ಜನಸಂಖ್ಯೆಯುಳ್ಳ ಒಂದು ನಗರ ಪಾಲಿಕೆ ಪ್ರದೇಶದ ಮೇಲೆ ಅಧಿಕಾರ ವ್ಯಾಪ್ತಿಯುಳ್ಳದ್ದಾಗಿದ್ದು ಒಂದು ನಗರ ಮಸ್ತಕ ಭಂಡಾರ ಪ್ರಾಧಿಕಾರ ವರ್ಗವು ಸ್ಥಾಪಿತವಾಗಿರುವ ಪ್ರದೇಶದ ಹೊರತು ಬೇರೆ ಜಿಲ್ಲೆಯಲ್ಲಿ ಇರುವ ಪ್ರತಿ ನಗರ ಪಾಲಿಕೆ ಸಭೆ ಯಿಂದ ಅಥವಾ ಇತರ ನಗರ ಪಾಲಿಕೆ ಸಂಸ್ಥೆಯಿಂದ ಅವುಗಳ ಸದಸ್ಯರುಗಳ ಪೈಕಿ ಚುನಾಯಿಸಲ್ಪಟ್ಟ ವ್ಯಕ್ತಿ ;	ಶ್ರೀ ಬಿ.ಎಸ್. ಕುಮಾರ್ ನಗರಸಭಾ ಸದಸ್ಯರು, ವಾರ್ಡ್ ನಂ.2, ಜೆ.ಪಿ.ನಗರ, ಕತ್ತಲೆ ಬಜಾರ್, ಸಾಗರ.	ಸದಸ್ಯರು
18(1) (තු)	ಐವತ್ತು ಸಾವಿರಕ್ಕಿಂತ ಕಡಿಮೆ ಜನ–ಸಂಖ್ಯೆಯುಳ್ಳ ಒಂದು ನಗರ ಪಾಲಿಕೆ ಪ್ರದೇಶದ ಮೇಲೆ ಅಧಿಕಾರ ವ್ಯಾಪ್ತಿ–ಯುಳ್ಳದ್ದಾಗಿದ್ದು ಜಿಲ್ಲೆಯಲ್ಲಿ ಇರುವ ನಗರ ಪಾಲಿಕೆ ಸಭೆಗಳ ಅಥವಾ ಇತರ ನಗರ ಪಾಲಿಕೆ ಸಂಸ್ಥೆಗಳ ಸದಸ್ಯರುಗಳ ಪೈಕಿ ರಾಜ್ಯ ಸರ್ಕಾರದವರಿಂದ ನಾಮ ನಿರ್ದೇಶನ ಮಾಡಲ್ಪಟ್ಟ ಇಬ್ಬರು ವ್ಯಕ್ತಿಗಳು ;	 ಶ್ರೀಮತಿ ಸುಜಾತ ಉಡುಪ, ಸದಸ್ಯರು, ಪಟ್ಟಣ ಪಂಚಾಯತ್, ಹೊಸನಗರ, ಶಿವಮೊಗ್ಗ ಜಿಲ್ಲೆ. ಶ್ರೀ ರಾಜು ಎಂ. ಸದಸ್ಯರು, ಪಟ್ಟಣ ಪಂಚಾಯತಿ, ಜೋಗ– ಕಾರ್ಗಲ್, ತಾ. ಸಾಗರ, ಶಿವಮೊಗ್ಗ ಜಿಲ್ಲೆ. 	ಸದಸ್ಯರು

ಕರ್ನಾಟಕ ರಾಜ್ಯಪತ್ರ, ಗುರುವಾರ, ಜುಲೈ ೫, ೨೦೧೨

	ಪ್ರಕರಣ	ವಿವರ	ಪದನಾಮ
18 (1) (ఎఫౌ)	ಮೈಸೂರು ಮಸ್ತಕ ಭಂಡಾರ ಸಂಘದ ಜಿಲ್ಲಾ ಶಾಖೆಯ ಕೌನ್ಸಿಲ್ ಯಾವುದಾದರೂ ಇದ್ದರೆ, ಅದರಿಂದ ನಾಮ ನಿರ್ದೇಶನ ಮಾಡಲ್ಪಟ್ಟ ಇಬ್ಬರು ವ್ಯಕ್ತಿಗಳು ;	ಶ್ರೀಮತಿ ಡಾ : ಪದ್ಮಮ್ಮ ಎಸ್. ಉಪನ್ಯಾಸಕರು, ಕುವೆಂಪು ವಿಶ್ವವಿದ್ಯಾಲಯ, ಶಂಕರಘಟ್ಟ, ಶಿವಮೊಗ್ಗ ಜಿಲ್ಲೆ.	ಸದಸ್ಯರು
18(1) (ಜಿ)	ರಾಜ್ಯ ಸರ್ಕಾರದವರಿಂದ ಜಿಲ್ಲೆಯಲ್ಲಿನ ತಾಲ್ಲೂಕು ಅಭಿವೃದ್ಧಿ ಮಂಡಳಿಗಳ ಸದಸ್ಯರುಗಳ ಪೈಕಿಯಿಂದ ನಾಮ ನಿರ್ದೇಶನ ಮಾಡಲ್ಪಟ್ಟ ಒಬ್ಬ ವ್ಯಕ್ತಿ ;	ಶ್ರೀ ನಂಜುಂಡೇಗೌಡ, ತಾಲ್ಲೂಕು ಪಂಚಾಯತ್ ಸದಸ್ಯರು, ಭದ್ರಾವತಿ	ಸದಸ್ಯರು
18(1) (ಹೆಚ್)	ಜಿಲ್ಲೆಯಲ್ಲಿನ ಗ್ರಾಮ ಪಂಚಾಯತಿಗಳ ಹಾಗೂ ಟೌನು ಪಂಚಾಯತಿಗಳ ಸದಸ್ಯರುಗಳ ಪೈಕಿಯಿಂದ ರಾಜ್ಯ ಸರ್ಕಾರದವರಿಂದ ನಾಮ ನಿರ್ದೇಶನ ಮಾಡಲ್ಪಟ್ಟ ಇಬ್ಬರು ವ್ಯಕ್ತಿಗಳು ;	 ಶ್ರೀಮತಿ ಸಾಕಮ್ಮ ಕೋಂ ಮನೋಹರ, ಗ್ರಾಮ ಪಂಚಾಯಿತಿ, ಹರತಾಳು, ಹೊಸನಗರ ತಾ. ಶ್ರೀ ಎಂ.ಬಿ. ಮನೋಹರ, ಗ್ರಾಮ ಪಂಚಾಯಿತಿ ಸದಸ್ಯರು, ತಾವರೆಘಟ್ಟ, ಭದ್ರಾವತಿ ತಾ, 	ಸದಸ್ಯರು ಸದಸ್ಯರು
18(1) (ಐ)	ಜಿಲ್ಲೆಯಲ್ಲಿನ ಸಹಾಯ ಪೋಷಿತ ಮಸ್ತಕ ಭಂಡಾರಗಳ ಸಂಬಂಧವಾದ ಆಡಳಿತ ಸಂಸ್ಥೆಗಳ ಸದಸ್ಯರುಗಳ ಪೈಕಿಯಲ್ಲಿ ರಾಜ್ಯ ಸರ್ಕಾರದವರಿಂದ ನಾಮ ನಿರ್ದೇಶನ ಮಾಡಲ್ಪಟ್ಟ ಇಬ್ಬರು ವ್ಯಕ್ತಿಗಳು ;	 ಕಾರ್ಯದರ್ಶಿ, ಕರ್ನಾಟಕ ಸಂಘ (4), ಶಿವಮೊಗ್ಗ. ಕಾರ್ಯದರ್ಶಿ, ಸಮುದಾಯ ಗ್ರಂಥಾಲಯ ಮತ್ತು ಉಚಿತ ವಾಚನಾಲಯ, ಶೇಡ್ತಿಕೆರೆ, ಸಾಗರ ತಾ. 	ಸದಸ್ಯರು ಸದಸ್ಯರು
18(1) (ಜೆ)	ರಾಜ್ಯ ಸರ್ಕಾರದವರಿಂದ ಅಧಿಕಾರ ಪ್ರಯುಕ್ತ ನಾಮ ನಿರ್ದೇಶನ ಮಾಡಲ್ಪಟ್ಟ ಜಿಲ್ಲೆಯಲ್ಲಿನ ಒಂದು ಮೊದಲನೆಯ ದರ್ಜೆಯ ಕಾಲೇಜಿನ ಒಬ್ಬರು ಪ್ರಿನ್ನಿಪಾಲರು ;	 ಪ್ರಾಂಶುಪಾಲರು, ಸರ್ಕಾರಿ ಪ್ರಥಮ ದರ್ಜೆ ಕಾಲೇಜು, ಶಿವಮೊಗ್ಗ. 	ಸದಸ್ಯರು
18(1) (ਤੇ)	ರಾಜ್ಯ ಸರ್ಕಾರದವರಿಂದ ಅಧಿಕಾರ ಪ್ರಯುಕ್ತ ನಾಮ ನಿರ್ದೇಶನ ಮಾಡಲ್ಪಟ್ಟ ಜಿಲ್ಲೆಯಲ್ಲಿನ ಒಂದು ಹೈಸ್ಕೂಲಿನ ಒಬ್ಬ ಮುಖ್ಯೋಪಾಧ್ಯಾಯರು ;	ಪ್ರಾಂಶುಪಾಲರು, ಸರ್ಕಾರಿ ಬಾಲಿಕಾ ಪ್ರೌಢಶಾಲೆ, ಬಿ.ಹೆಚ್.ರಸ್ತೆ, ಶಿವಮೊಗ್ಗ.	ಸದಸ್ಯರು
18 (1) (ಎಲ್)	ರಾಜ್ಯ ಸರ್ಕಾರದವರಿಂದ ಅಧಿಕಾರ ಪ್ರಯುಕ್ತ ನಾಮ ನಿರ್ದೇಶನ ಮಾಡಲ್ಪಟ್ಟ ಜಿಲ್ಲೆಯಲ್ಲಿನ ಅಥವಾ ಅದರ ಒಂದು ಭಾಗದಲ್ಲಿ ಅಧಿಕಾರ ವ್ಯಾಪ್ತಿ ಹೊಂದಿ–ರುವ ವಿದ್ಯಾಭ್ಯಾಸ ಇಲಾಖೆಯ ಒಬ್ಬ ಪದಾಧಿಕಾರಿ ;	ಕ್ಷೇತ್ರ ಶಿಕ್ಷಣಾಧಿಕಾರಿಗಳು, ಸಾರ್ವಜನಿಕ ಶಿಕ್ಷಣ ಇಲಾಖೆ ಶಿವಮೊಗ್ಗ .	ಸದಸ್ಯರು
18(1) (ఎం)	ಸಾಮಾನ್ಯವಾಗಿ ಜಿಲ್ಲೆಯಲ್ಲಿ ವಾಸ ವಾಗಿರುವ ವ್ಯಕ್ತಿಗಳ ಪೈಕಿ ರಾಜ್ಯ ಸರ್ಕಾರದವರಿಂದ ನಾಮ ನಿರ್ದೇಶನ ಮಾಡಲ್ಪಟ್ಟ ಮೂವರು ವ್ಯಕ್ತಿಗಳು ಇರತಕ್ಕುದು ;	 ಶ್ರೀಮತಿ ಶಾರದಾ ಆರ್. ಕೋಂ.ಶ್ರೀಧರಮೂರ್ತಿ, ನಂ.98, ಆಶ್ರಯ ಬಡಾವಣೆ, 'ಎ' ಬ್ಲಾಕ್, 128 ಬೊಮ್ಮನಕಟ್ಟಿ, ಶಿವಮೊಗ್ಗ. ಶ್ರೀ ಸಂಪತ್ರರಾಜ್ ಭಾಟಿಯಾ, 	ಸದಸ್ಯರು
		ಚನ್ನಗಿರಿ ರಸ್ತೆ ಕ್ರಾಸ್ ರೋಡ್, ಸರ್ಕಾರಿ ಆಸ್ಪತ್ರೆ ಎದುರು, ಭದ್ರಾವತಿ. 3) ಶ್ರೀ ಹೆಚ್.ಆರ್.ನಾರಾಯಣಮೂರ್ತಿ, ನಿವೃತ್ತ ಗ್ರಂಥಪಾಲಕರು ಬಾಳೇಬೈಲು, ತೀಥಹಳ್ಳಿ, ಶಿವಮೊಗ್ಗ	ಸದಸ್ಯರು

ಕರ್ನಾಟಕ ರಾಜ್ಯಪತ್ರ, ಗುರುವಾರ, ಜುಲೈ ೫, ೨೦೧೨

	ಪ್ರಕರಣ	ವಿವರ	ಪದನಾಮ
18 (2)	ಜಿಲ್ಲಾ ಪುಸ್ತಕ ಭಂಡಾರದ ಪ್ರಾಧಿಕಾರ ವರ್ಗದ ಉಪಸಭಾಪತಿಯವರ (ವೈಸ್ ಚೇರ್ಮನ್ನರು) ಸದಸ್ಯರಿಂದ ಅವರ ಪೈಕಿಯಿಂದಲೇ ಚುನಾಯಿಸಲ್ಪಡತಕ್ಕುದು.	ಉಪಾಧ್ಯಕ್ಷರು, ಜಿಲ್ಲಾ ಗ್ರಂಥಾಲಯ ಪ್ರಾಧಿಕಾರ, ಶಿವಮೊಗ್ಗ.	ಉಪಾಧ್ಯಕ್ಷರು,
18 (3)	ಜಿಲ್ಲೆಯ ಮುಖ್ಯ ಮಸ್ತಕ ಭಂಡಾರಾಧಿಕಾರಿಯು ಅಧಿಕಾರ ಪ್ರಯುಕ್ತ ಜಿಲ್ಲಾ ಮಸ್ತಕ ಭಂಡಾರ ಪ್ರಾಧಿಕಾರ ವರ್ಗದ ಮತ್ತು ಸದರಿ ಪ್ರಾಧಿಕಾರ ವರ್ಗದ ಸಮಿತಿಗಳ ಕಾರ್ಯದರ್ಶಿಯಾಗಿರತಕ್ಕುದು.	ಉಪ ನಿರ್ದೇಶಕರು, ಜಿಲ್ಲಾ ಕೇಂದ್ರ ಗ್ರಂಥಾಲಯ, ಶಿವಮೊಗ್ಗ	ಸದಸ್ಯರು ಹಾಗೂ ಪದನಿಮಿತ್ತ ಕಾರ್ಯದರ್ಶಿ

ಕರ್ನಾಟಕ ರಾಜ್ಯಪಾಲರ ಆಜ್ಞಾನುಸಾರ ಮತ್ತು ಅವರ ಹೆಸರಿನಲ್ಲಿ

(ಎಸ್.ಬಿ.ಪಟಗಾರ್)

ಸರ್ಕಾರದ ಅಧೀನ ಕಾರ್ಯದರ್ಶಿ

ಶಿಕ್ಷಣ ಇಲಾಖೆ (ಸಾಮಾನ್ಯ)

ಪಿ.ಆರ್. 415

FOREST, ECOLOGY AND ENVIRONMENT SECRETARIAT

NOTIFICATION

No: FEE 143 FWL 2012 Bangalore, dated: 15-05-2012.

The tenure of the State Board for Wildlife constituted in the earlier Notifications according to the powers conferred by subsection (1) of the section 6 of Wildlife (Protection) (Amendment) Act, 2002 is extended for a period of one year with retrospective effect from 04-03-2012 consisting of following members, namely:-

a.	Hon'ble Chief Minister	 Chair person
b.	Hon'ble Minister for Forests	 Vice Chair person
C.	Sri. Anil Kumble,	 Co-vice Chair person
d.	The following members of State Legislative Assembly	 Members
	1. Sri. M.P. Kumaraswamy, MLA., Mudigere	
	2. Sri. Appachchuranjan, MLA., Madikeri	
e.	The heads of the following Non-Government Organisations	 Members
	1. Janadhwani Vedike, Field Marshal Cariappa Road, Somavarapet	
	2. Vrukshalaksha Andolana Seva Trust, Sagara	
	3. Nature Conservation Foundation, Mysore	
f.	The following eminent Conservationists, Ecologists and Environmentalists:	 Members
	1. K.B. Girish Ganapati, Keregundi Estate, Devapura Post, Gonikoppa.	
	2. Sanjay Gubbi, Tumkur.	
	3. Girija Shankar, Chikkamagalur.	
	4. Dr. Rohini Balakrishnan, CES, IISc, Bangalore.	
	5. Vijaykumar, Hotel Apurva Complex, Park Road, Hassan.	

6. Dr.N.A.Madhyasta, Zoologist, Udupi.

೯೪೯

	7. Anindya Sinha. Professor, National Institute Advanced Studies,	
	IISc Compus, Bangalore.	
	8. Vani Ragavendra Pai, Potoli, Joida Tq.	
	9. M.Jadegowda, Asst. Professor, Forestry College, Ponnampet.	
	10. Prataap Singh Nayak, Beltangadi Tq.	
g.	Additional Chief Secretary/Principal Secretary to the Government, Forest,	 Member
	Environment and Ecology Department, Bangalore.	
h.	Principal Chief Conservator of Forests (Head of Forest Force), Bangalore	 Member
i.	Principal Secretary/Secretary to Government,Social Welfare Department, Bangalore.	 Member
j.	Managing Director, Karnataka State Tourism Development Corporation Ltd., Bangalore.	 Member
k.	Inspector General of Police, Forest Cell, Bangalore.	 Member
I.	A representative of the Armed forces not below the rank of Brigadier as nominated by the Central Government.	 Member
m.	Director, Animal Husbandry and Veterinary Services, Bangalore.	 Member
n.	Director, Department of Fisheries, Bangalore	 Member
0.	An Officer as nominated by the Director, Wildlife Preservation, New Delhi.	 Member
Ρ	A representative of the Director, Wildlife Institute of India, Deharadun.	 Member
q.	A representative of the Director, Zoological Survey of India, Kolkata.	 Member
r.	A representative of the Director, Botanical Survey of India, Kolkata.	 Member
s.	Member Secretary, Karnataka State Legal Services Authority, Bangalore.	 Member
t.	Member Secretary, High Court Legal Services Committee, Bangalore.	 Member
u.	Madhusudan R. Naik, Senior Counsel	 Member
v.	Dr. C.H.Basappanavar, Conservator of Forests (Retd), Bangalore.	 Member
w.	Principal Chief Conservator of Forests (Wildlife) and Chief Wildlife Warden, Karnataka, Bangalore.	 Member Secretary

By order and in the name of the Governor of Karnataka,

UMADEVI

Under Secretary to Government,

Forest, Ecology and Environment Department.

P.R. 388

FOREST, ECOLOGY AND ENVIRONMENT SECRETARIAT

NOTIFICATION

No: FEE 255 FWL 2011 Bangalore, dated: 22-05-2012.

Whereas the Government of Karnataka in exercise of powers conferred under Section 36 A of Wildlife (Protection) Act, 1972 (Central Act, 53 of 1972) (amended in 2006) has decided to declare the area, the situation and limits which are specified in the schedule to an extent of 4.89 Sq.Kms. as **"Shalmala Riparian Eco-system Conservation Reserve"** for the purpose of protection, propagation and development of flora and fauna and to protect the important corridor western Ghats of Karnataka.

Also, during the meeting of State Board for Wildlife held on 26-07-2011, it is resolved to declare Shalmala (Sahasralinga) River side as "Shalmala Riparian Eco-system Conservation Reserve".

The "Shalmala Riparian Eco-system Conservation Reserve" does not include any Revenue villages, Patta lands, Hakkals and Betta lands, leased lands on the date of publication of this Notification. The various rights as notified in the Village Forest Record statements of the respective Reserve Forests will continue.

The detailed description of Reserved Forests constituting the "Shalmala Riparian Eco-system Conservation Reserve" is as in the Annexure - I.

Now, therefore, in exercise of the powers conferred under Section 36-A of the Wildlife (Protection) Act, 1972, (Central Act 53 of 1972) (amended in 2006) the Government of Karnataka hereby declares that the area specified in the Schedule shall be called as **"Shalmala Riparian Eco-system Conservation Reserve"**.

SCHEDULE:

Name of the District	:	Uttara Kannada
Taluk	:	Sirsi, Siddapur and Kumta
Area	:	4.89 Sq. Kms
		(Excluding revenue villages, leased lands, patta lands, Revenue lands, Hakkal lands, and Betta lands on the date of Publication of this Notification)

ANNEXURE - I

Boundary Description:

The boundary of proposed additional Forest areas to be included in "Shalmala Riparian Eco-system Conservation Reserve" starts at point at the Sahasralinga and follows the river Shalmala until it reaches Ganeshpal. The riparian forest of 100 metres on either side of river will be declared as "Shalmala Riparian Eco-system Conservation Reserve".

Details of the Survey Nos. of Forest areas included in Shalmala Riparian

Eco-system Conservation Reserve are as below:

Left side of the river				Right side of the river			
Village	Sy. No.	Forest Area		Village	Sy. No.	Forest	Area
Sonda		Acres	Guntas	Hulgol		Acres	Guntas
	177	150	0		64A	25	0
	341	29	29		64B	20	0
					106	24	2
Mathadkaval	246	1	38	Chavatti	18	135	0
	247	4	8		19	3	9
	248	2	15	Tarehalli	174	105	0
	171	10	27		172	11	2
	172	24	24	Elehalli	49	100	0

ಕರ್ನಾಟಕ ರಾಜ್ಯಪತ್ರ, ಗುರುವಾರ, ಜುಲೈ ೫, ೨೦೧೨

Left side of the river				Right side of the river			
Village	Sy. No. Forest Area		Village	Sy. No.	Forest	Area	
	176	25	0		42	0	18
	35	45	0		28	70	0
	83	60	0		15	90	0
Mogadde	67	100	0		20	3	35
	68	125	0		22	2	15
Kodanagadde	155	30	0				
Sonagiamane	139	10	0				
Sub-Total		615	141			588	81
Total	250.525Hacters				238.77H	lacters	
Grand Total:	489.30 Hacters or 4.89 Sq. Kms.						

By order and in the name of the Governor of Karnataka,

UMADEVI

Under Secretary to Government,

Forest, Ecology and Environment Department.

ಕಂದಾಯ ಸಚಿವಾಲಯ

ಅಧಿಸೂಚನೆ

ಸಂಖ್ಯೆ: ಕಂಇ 53 ಮುಆಬಿ 2012, ಬೆಂಗಳೂರು, ದಿನಾಂಕ: 26ನೇ ಮೇ, 2012.

ಕರ್ನಾಟಕ ಹಿಂದೂ ಧಾರ್ಮಿಕ ಸಂಸ್ಥೆಗಳು ಮತ್ತು ಧರ್ಮಾದಾಯ ದತ್ತಿಗಳ ಅಧಿನಿಯಮ (1997)ರ ಕಲಂ 23(ಎ)ರ ಅಡಿ ಪ್ರದತ್ತವಾದ ಅಧಿಕಾರ ಚಲಾಯಿಸಿ ಹಾಸನ ಜಿಲ್ಲೆ, ಹೊಳೆನರಸೀಪುರ ತಾಲ್ಲೂಕು, ಕಸಬಾ ಹೋಬಳಿ ಗುಂಜೇವು ಗ್ರಾಮದ ಶ್ರೀ ಆಂಜನೇಯಸ್ವಾಮಿ ದೇವಾಲಯವನ್ನು ಅಧಿಸೂಚಿತ ಧಾರ್ಮಿಕ ಸಂಸ್ಥೆಗಳ ಪಟ್ಟಿಗೆ ಸೇರಿಸಲು ಆದೇಶಿಸಿದೆ.

ಕರ್ನಾಟಕ ರಾಜ್ಯಪಾಲರ ಆದೇಶಾನುಸಾರ ಮತ್ತು ಅವರ ಹೆಸರಿನಲ್ಲಿ,

ಟಿ. ನಾರಾಯಣಪ್ಪ,

ಪೀಠಾಧಿಕಾರಿ,

ಕಂದಾಯ ಇಲಾಖೆ (ಮುಜರಾಯಿ).

ಪಿ.ಆರ್. 443

P.R. 441

ಕಂದಾಯ ಸಚಿವಾಲಯ

ಅಧಿಸೂಚನೆ

ಸಂಖ್ಯೆ: ಕಂಇ 57 ಮುಆಬಿ 2012, ಬೆಂಗಳೂರು, ದಿನಾಂಕ: 26ನೇ ಮೇ, 2012.

ಕರ್ನಾಟಕ ಹಿಂದೂ ಧಾರ್ಮಿಕ ಸಂಸ್ಥೆಗಳು ಮತ್ತು ಧರ್ಮಾದಾಯ ದತ್ತಿಗಳ ಅಧಿನಿಯಮ (1997)ರ ಕಲಂ 23(ಎ)ರ ಅಡಿ ಪ್ರದತ್ತವಾದ ಅಧಿಕಾರ ಚಲಾಯಿಸಿ ಉತ್ತರ ಕನ್ನಡ ಜಿಲ್ಲೆ, ಕಾರವಾರ ತಾಲ್ಲೂಕು, ಬಾಡ ಗ್ರಾಮದ ಶ್ರೀ ಮಹಾದೇವ (ವಿನಾಯಕ) ದೇವಸ್ಥಾನವನ್ನು ಅಧಿಸೂಚಿತ ಧಾರ್ಮಿಕ ಸಂಸ್ಥೆಗಳ ಪಟ್ಟಿಗೆ ಸೇರಿಸಲು ಆದೇಶಿಸಿದೆ.

ಯಿ). ಕರ್ನಾಟಕ ರಾಜ್ಯಪಾಲರ ಆದೇಶಾನುಸಾರ ಮತ್ತು ಅವರ ಹೆಸರಿನಲ್ಲಿ,

ಟಿ. ನಾರಾಯಣಪ್ಪ,

ಪೀಠಾಧಿಕಾರಿ, ಕಂದಾಯ ಇಲಾಖೆ (ಮುಜರಾಯಿ)

REVENUE SECRETARIAT

NOTIFICATION

NO. RD 30 BHUDAPU 2011, Bangalore, Dated: 8th June, 2012.

In exercise of the powers conferred by section 5 of the Karnataka Land Revenue Act, 1964 (Karnataka Act 12 of 1964) and taking into consideration the factors specified in clauses (i) to (iv) of rule 3 of the Karnataka Land Revenue Rules, 1966 such as the population, area of the village, the demand under land revenue in the village and other head of account and having regard to the administrative convenience, the Government of Karnataka proposes to issue a notification to alter the limits of villages of Shivapura, Krishnarajanagar Taluk, Mysore District as specified in the schedule.

Now, therefore, in exercise of the powers conferred by section 6 of the said Act, notice is hereby given for the information of all the persons likely to be affected thereby that the proposal will be taken into consideration after thirty days from the date of publication of the notification in the official Gazette.

Any objection or suggestion which may be received by the State Government from any person with respect to the said proposal before the expiry of the period specified above will be considered by the State Government. Objections or suggestions may be addressed to the Deputy Commissioner, Mysore District.

SCHEDULE-I

Lands bearing Survey numbers specified in the column (3) of the schedule below shall be excluded from the limits of the village specified in column (4), thereof and shall be included in the limits of the village specified in column (2), namely:-

SI.No.	Name of the village	Survey	Name of the village
	Hamlet Taluk and District	No.	Hamlet Taluk and District
1	2	3	4
1	Shivapura Village,	11	Marchahalli Village,
	Krishnarajanagar Taluk,	12	Krishnaraja nagar Taluk,
	Mysore District	204	Mysore District
		376	
		378	
		379	

SCHEDULE-II

Land bearing Survey numbers specified in the column (3) of the schedule below shall be excluded from the limits of the village specified in column (4), thereof and shall be included in the limits of the village specified in column (2), namely:-

SI.No.	Name of the village	Survey	Name of the village
	Hamlet Taluk and District	No.	Hamlet Taluk and District
1	2	3	4
1	Marchahalli Village,	51	Shivapura Village,
	Krishnarajanagar Taluk,	52	Krishnaraja nagar Taluk,
	Mysore District	93	Mysore District

The proposal specified above shall come into effect from such date as the State Government may specify by Notification

proposed to be issued under Section 5 of the Karnataka Land Revenue Act, 1964 (Karnataka Act No.12 of 1964).

By Order and in the Name of the Governor of Karnataka

SHAMBHULINGAIAH,

Under Secretary to Government,

Revenue Department (SSLR).

P.R.445

AGRICULTURE SECRETARIAT

NOTIFICATION

NO. AGD 39 ANE 2011, Bangalore, Dated: 29TH May, 2012.

Whereas the draft of the Karnataka Agriculture Services (Recruitment) (Amendment) Rules, 2012 was published as required by clause (a) of sub section (2) of section (3) of the Karnataka State Civil Services Act, 1978 (Karnataka Act 14 of 1990) in notification No. AGD 39 ANE 2011 dated : 28-03-2012, in part IV-A of the Karnataka Gazette (Extra Ordinary No.255) dated : 31st March 2012 inviting objections and suggestions from persons likely to be affected thereby within fifteen days from the date of its publication of the draft in the Official Gazette.

Whereas the said Gazette was made available to the public on 31-03-2012.

And, whereas the no objections and suggestions have been received by the State Government within the period specified above.

Now, therefore, in exercise of the powers conferred by sub section (1) of section 3 read with section (8) of the Karnataka State Civil Services Act, 1978 (Karnataka Act 14 of 1990), the Government of Karnataka hereby make the following rules, further to amend the Karnataka Agriculture Services (Recruitment) Rules, 1999, namely:-

RULES

1.Title of Commencement.- (1) These rules may be called the Karnataka Agriculture Services (Recruitment) (Amendment) Rules, 2012.

(2) They shall come into force from the date of their publication in the Official Gazette.

2. Amendment of Schedule.- In the Karnataka Agriculture Services (Recruitment) Rules, 1999, in the schedule in the entries relating to the category of post of "Administrative Officer" at Serial No. 14, in Column (4) and (5), for the words " Assistant Administrative Officer " the words " Administrative Assistant " Shall be substituted.

By Order and in the Name of the Governor of Karnataka

MANJUNATH PATIL

Under Secretary to Government, Department of Agriculture (Services)

PERSONNEL AND ADMINISTRATIVE REFORMS SECRETARIAT

NOTIFICATION

NO. DPAR 20 SMR 2012, Bangalore, Dated: 04th June, 2012.

In exercise of the powers conferred by clause (ff) of rule 3 of the Karnataka Government Servants` (Medical Attendance) Rules 1963, the Government of Karnataka hereby adds the following item after item 300 of Schedule I to the said rules, namely:-

(301) Drishti Speciality Eye Clinic, 280/2, 4th Main Behind Vishveshwaraiah Park, P.J.Extension, Davanagere- 577 002.

By Order and in the Name of the Governor of Karnataka

D. NAGESH PHATAK,

Under Secretary to Government,

Department of Personnel and Administrative Reforms

(Service Rules-2).

ಸಿಬ್ಬಂದಿ ಮತ್ತು ಆಡಳಿತ ಸುಧಾರಣಾ ಸಚಿವಾಲಯ

ಅಧಿಸೂಚನೆ

ಸಂಖ್ಯೆ: ಸಿಆಸುಇ 20 ಎಸ್ಎಂಆರ್ 2012, ಬೆಂಗಳೂರು, ದಿನಾಂಕ: 04ನೇ ಜೂನ್, 2012.

ಕರ್ನಾಟಕ ಸರ್ಕಾರಿ ನೌಕರರ (ವೈದ್ಯಕೀಯ ಹಾಜರಾತಿ) ನಿಯಮಗಳು 1963 ರ ನಿಯಮ 3 ರ ಖಂಡ (ಎಫ್ಎಫ್)ನ ಮೂಲಕ ಪ್ರದತ್ತವಾದ ಅಧಿಕಾರಗಳನ್ನು ಚಲಾಯಿಸಿ, ಕರ್ನಾಟಕ ಸರ್ಕಾರವು ಸದರಿ ನಿಯಮಗಳ ಷೆಡ್ಯೂಲ್–I ರ ಐಟಂ 300 ರ ನಂತರ ಈ ಕೆಳಕಂಡ ಐಟಂನ್ನು ಸೇರ್ಪಡೆಗೊಳಿಸಿದೆ :-

(301) ದೃಷ್ಟಿ ಸ್ಪೆಷಾಲಿಟಿ ನೇತ್ರ ಚಿಕಿತ್ಸಾಲಯ, 280/2, 4ನೇ ಮೇನ್ ವಿಶ್ವೇಶ್ವರಯ್ಯ ಪಾರ್ಕ್ ಹಿಂಭಾಗ, ಪಿ.ಜೆ.ಎಕ್ಸ್ಟೆನ್ಷನ್, ದಾವಣಗೆರೆ–577 002.

ಕರ್ನಾಟಕ ರಾಜ್ಯಪಾಲರ ಆದೇಶಾನುಸಾರ ಮತ್ತು ಅವರ ಹೆಸರಿನಲ್ಲಿ,

ಡಿ. ನಾಗೇಶ್ ಪಾಟಕ್,

ಸರ್ಕಾರದ ಅಧೀನ ಕಾರ್ಯದರ್ಶಿ,

ಸಿಬ್ಬಂದಿ ಮತ್ತು ಆಡಳಿತ ಸುಧಾರಣೆ ಇಲಾಖೆ

(ಸೇವಾ ನಿಯಮಗಳು-2).

ಪಿ.ಆರ್. 447

ಮಾಹಿತಿ ತಂತ್ರಜ್ಞಾನ, ಜೈವಿಕ ತಂತ್ರಜ್ಞಾನ ಹಾಗೂ ವಿಜ್ಞಾನ ಮತ್ತು ತಂತ್ರಜ್ಞಾನ ಸಚಿವಾಲಯ

ತಿದ್ದುಪಡಿ

ಸಂಖ್ಯೆ: ಐಟಿಡಿ 112 ಎಡಿಎಂ 2011, ಬೆಂಗಳೂರು, ದಿನಾಂಕ: 08ನೇ ಜೂನ್, 2012.

ಸರ್ಕಾರದ ಅಧಿಸೂಚನೆ ಸಂಖ್ಯೆ : ಐಟಿಡಿ 112 ಎಡಿಎಂ 2011 ದಿನಾಂಕ: 22–05–2012ರಲ್ಲಿನ ವೆಬ್ ಸೈಟ್ ಸಂಖ್ಯೆ : www.bangaloreitbt.in ಇದರ ಬದಲಿಗೆ <u>http://www.karnataka.gov.in/bangaloreitbt</u> ಎಂದು ಓದಿಕೊಳ್ಳತಕ್ಕದ್ದು.

ಕರ್ನಾಟಕ ರಾಜ್ಯಪಾಲರ ಆದೇಶಾನುಸಾರ ಮತ್ತು ಅವರ ಹೆಸರಿನಲ್ಲಿ,

ಇ.ರಾಮಕೃಷ್ಣಪ್ಪ,

ಸರ್ಕಾರದ ಅಧೀನ ಕಾರ್ಯದರ್ಶಿ,

ಮಾಹಿತಿ ತಂತ್ರಜ್ಞಾನ, ಜೈವಿಕ ತಂತ್ರಜ್ಞಾನ

ಹಾಗೂ ವಿಜ್ಞಾನ ಮತ್ತು ತಂತ್ರಜ್ಞಾನ ಇಲಾಖೆ.

ಪಿ.ಆರ್. 449

ಮಹಿಳಾ ಮತ್ತು ಮಕ್ಕಳ ಅಭಿವೃದ್ಧಿ ಸಚಿವಾಲಯ

ಅಧಿಸೂಚನೆ

ಸಂಖ್ಯೆ: ಮಮಇ 23 ರಾಮಆ 2012 ಬೆಂಗಳೂರು, ದಿನಾಂಕ: 06ನೇ ಜೂನ್, 2012.

ಬಾಲಭವನ ಸೊಸೈಟಿ, ಬೆಂಗಳೂರು ಇದರ ನಿಯಮಾವಳಿ ಮತ್ತು ನಿಬಂಧನೆ ನಿಯಮ 11ರ ಪ್ರಕಾರ ಪ್ರದತ್ತವಾದ ಅಧಿಕಾರವನ್ನು ಚಲಾಯಿಸಿ ಸರ್ಕಾರವು ಬಾಲಭವನ ಸೊಸೈಟಿ, ಬೆಂಗಳೂರು ಇದರ ಆಡಳಿತ ಮಂಡಳಿಗೆ ಈ ಕೆಳಗೆ ಸೂಚಿಸಿರುವ ಸದಸ್ಯರುಗಳನ್ನು ತಕ್ಷಣದಿಂದ ಜಾರಿಗೆ ಬರುವಂತೆ ಮತ್ತು ಮುಂದಿನ ಆದೇಶದವರೆಗೆ ನಾಮನಿರ್ದೇಶನ ಮಾಡಿದೆ.

ಕ್ರಮ ಸಂಖ್ಯೆ	ಹೆಸರು ಮತ್ತು ವಿಳಾಸ
1	ಕು: ಸುವರ್ಣಾ, ರವೀಂದ್ರ ಪ್ರಾಥಮಿಕ ಮತ್ತು ಪ್ರೌಢ ಶಾಲೆ, ಚನ್ನಬಸವ ನಗರ, ಕುಂಬರವಾಡಾ ರಸ್ತೆ, ಬೀದರ್–585 403.
2	ಶ್ರೀಮತಿ ಸೌಮ್ಯ, 111, 1ನೇ ಮಹಡಿ, 5ನೇ ಅಡ್ಡರಸ್ತೆ, ಬಾಲಾಜಿನಗರ, ಉತ್ತರಹಳ್ಳಿ ಬೆಂಗಳೂರು–61

ಭಾಗ	_	೪ಎ
-----	---	----

ಕ್ರಮ ಸಂಖ್ಯೆ	ಹೆಸರು ಮತ್ತು ವಿಳಾಸ
3	ಶ್ರೀ. ಶಿವಣ್ಣ, ನಂ.112, ಪಿಬ್ಲ್ಯೂಡಿ ಕಾಲೋನಿ, ಕೆ.ಎಸ್.ಆರ್.ಟಿ.ಸಿ. ಬಸ್ ನಿಲ್ದಾಣದ ಹತ್ತಿರ, ಶಿವಮೊಗ್ಗ–577 202.
4	ಶ್ರೀಮತಿ ಹೇಮಾ ಶೇಖರ್, ನಂ.3, ಮಲ್ಲಿಗೆ ಅಪಾರ್ಟ್ಮೆಂಟ್, 2ನೇ 'ಡಿ' ಮುಖ್ಯರಸ್ತೆ, 6ನೇ ಬ್ಲಾಕ್, ಜಯನಗರ, ಬೆಂಗಳೂರು–82.
5	ಶ್ರೀಮತಿ ಹೀರಾಬಾಯಿ, ನಂ.328, 31ನೇ ಬ್ಲಾಕ್, ಜೀವನ ಸುರಭಿ ಕಾಲೋನಿ, 25ನೇ ಮುಖ್ಯರಸ್ತೆ. 10ನೇ ಬಿ ಅಡ್ಡರಸ್ತೆ, ಜೆ.ಪಿ.ನಗರ, 1ನೇ ಹಂತ ಬೆಂಗಳೂರು–78.
6	ವಿಶೇಷ ಆಹ್ವಾನಿತರು
	ಶ್ರೀ ಫಾ. ಎಡ್ವರ್ಡ್ ಥಾಮಸ್, ಎಕ್ಸಿಕ್ಯೂಟಿವ್ ಡೈರೆಕ್ಟರ್, ಬಾಸ್ಕೋ, #242, 4ನೇ ಮುಖ್ಯರಸ್ತೆ. ಚಾಮರಾಜಪೇಟೆ, ಬೆಂಗಳೂರು–560 018.

ಕರ್ನಾಟಕ ರಾಜ್ಯಪಾಲರ ಆಜ್ಞಾನುಸಾರ ಮತ್ತು ಅವರ ಹೆಸರಿನಲ್ಲಿ,

ಬಿ.ಕಮಲಮ್ಮ,

ಸರ್ಕಾರದ ಅಧೀನ ಕಾರ್ಯದರ್ಶಿ–2

ಮಹಿಳಾ ಮತ್ತು ಮಕ್ಕಳ ಅಭಿವೃದ್ಧಿ ಇಲಾಖೆ.

ಪಿ.ಆರ್. 450

ಆರ್ಥಿಕ ಸಚಿವಾಲಯ

ಅಧಿಸೂಚನೆ

ಸಂಖೈ: ಆಇ 487 ವೆಚ್ಚ -12/12 ಬೆಂಗಳೂರು, ದಿನಾಂಕ: 06ನೇ ಜೂನ್, 2012.

ನೆಮ್ಮದಿ ಕೇಂದ್ರಗಳು ಹಾಗೂ ತಾಲ್ಲೂಕು ಹಿಂಬದಿ ಕಛೇರಿಗಳ ಕಾರ್ಯನಿರ್ವಹಣೆಯನ್ನು ಮಧ್ಯಂತರ ವ್ಯವಸ್ಥೆಯನ್ನಾಗಿ ಒಂದು ವರ್ಷದ ಅವಧಿಗೆ ಅಥವಾ ಪರ್ಯಾಯ ವ್ಯವಸ್ಥೆ ಜಾರಿಯಾಗುವವರೆಗೆ ಇವುಗಳಲ್ಲಿ ಯಾವುದು ಮೊದಲೋ ಅಲ್ಲಿಯವರೆಗೆ ಮೆ:ಮೈಷೋರ್ ಐಟಿ ಸಲ್ಯೂಷನ್ಸ್ ಪ್ರೈವೇಟ್ ಲಿಮಿಟೆಡ್., ಇವರಿಗೆ ನೇರವಾಗಿ ವಹಿಸಲು ಕರ್ನಾಟಕ ಸಾರ್ವಜನಿಕ ಸಂಗ್ರಹಣೆಗಳಲ್ಲಿ ಪಾರದರ್ಶಕತೆ ಅಧಿನಿಯಮ–1999ರ ಕಲಂ 4(ಜಿ) ರಡಿ ಪ್ರದತ್ತವಾದ ಅಧಿಕಾರ ಚಲಾಯಿಸಿ, ಸಿ.ಆ.ಸು.ಇ (ಇ–ಆಡಳಿತ) ಗೆ ಪಾರದರ್ಶಕತೆ ಕಾಯ್ಗೆಯಿಂದ ವಿನಾಯಿತಿ ನೀಡಿದೆ.

ಉತ್ತಮ ಗುಣಮಟ್ಟದ ಸೇವೆಯನ್ನು ಸಮಂಜಸದರದಲ್ಲಿ ಸಂಗ್ರಹಿಸುವುದನ್ನು ಸಿ.ಆ.ಸು.ಇ (ಇ–ಆಡಳಿತ) ಇಲಾಖೆಯು ದೃಢಪಡಿಸಿಕೊಳ್ಳುವುದು.

ಕರ್ನಾಟಕ ರಾಜ್ಯಪಾಲರ ಆಜ್ಜಾನುಸಾರ ಮತ್ತು ಅವರ ಹೆಸರಿನಲ್ಲಿ,

ಕಾಂತ.ಎಸ್,

ಸರ್ಕಾರದ ಅಧೀನ ಕಾರ್ಯದರ್ಶಿ, ಆರ್ಥಿಕ ಇಲಾಖೆ (ಸಂಗ್ರಹಣಾ ಕೋಶ).

ಪಿ.ಆರ್. 451

ಆರ್ಥಿಕ ಸಚಿವಾಲಯ

ಅಧಿಸೂಚನೆ

ಸಂಖ್ಯೆ: ಆಇ 505 ವೆಚ್ಚ -12/12 ಬೆಂಗಳೂರು, ದಿನಾಂಕ: 06ನೇ ಜೂನ್, 2012.

ಸಾಕ್ಷರ ಭಾರತ್ ಕಾರ್ಯಕ್ರಮದ ಮಧ್ಯಂತರ ಮೌಲ್ಯಮಾಪನ ಕಾರ್ಯವನ್ನು ಒಂದು ತಿಂಗಳ ಅವಧಿಯಲ್ಲಿ ಪೂರ್ಣಗೊಳಿಸಲು ರೂ.5.00 ಲಕ್ಷಗಳ ವೆಚ್ಚದಲ್ಲಿ ನೇರವಾಗಿ ISEC ಸಂಸ್ಥೆಗೆ ವಹಿಸಲು ಕರ್ನಾಟಕ ಸಾರ್ವಜನಿಕ ಸಂಗ್ರಹಣೆಗಳಲ್ಲಿ ಪಾರದರ್ಶಕತೆ ಅಧಿನಿಯಮ–1999ರ ಕಲಂ 4(ಜಿ) ರಡಿ ಪ್ರದತ್ತವಾದ ಅಧಿಕಾರ ಚಲಾಯಿಸಿ, ಶಿಕ್ಷಣ ಇಲಾಖೆ(ಪ್ರಾಥಮಿಕ & ಪ್ರೌಢಶಿಕ್ಷಣ)ಗೆ ಪಾರದರ್ಶಕತೆ ಕಾಯ್ದೆಯಿಂದ ವಿನಾಯಿತಿ ನೀಡಿದೆ.

ಉತ್ತಮ ಗುಣಮಟ್ಟದ ಸೇವೆಯನ್ನು ಸಮಂಜಸ ದರದಲ್ಲಿ ಸಂಗ್ರಹಿಸುವುದನ್ನು ಶಿಕ್ಷಣ ಇಲಾಖೆ (ಪ್ರಾಥಮಿಕ ಮತ್ತು ಪ್ರೌಢಶಿಕ್ಷಣ) ಯು ದೃಢಪಡಿಸಿಕೊಳ್ಳುವುದು.

ಕರ್ನಾಟಕ ರಾಜ್ಯಪಾಲರ ಆಜ್ಞಾನುಸಾರ ಮತ್ತು ಅವರ ಹೆಸರಿನಲ್ಲಿ,

ಕಾಂತ.ಎಸ್,

ಸರ್ಕಾರದ ಅಧೀನ ಕಾರ್ಯದರ್ಶಿ,

ಆರ್ಥಿಕ ಇಲಾಖೆ (ಸಂಗ್ರಹಣಾ ಕೋಶ).

ಪಿ.ಆರ್. 452

ಆರ್ಥಿಕ ಸಚಿವಾಲಯ

ಅಧಿಸೂಚನೆ

ಸಂಖ್ಯೆ: ಆಇ 515 ವೆಚ್ಚ -12/12 ಬೆಂಗಳೂರು, ದಿನಾಂಕ: 14ನೇ ಜೂನ್, 2012.

ಶ್ರೀ ಎಂ.ಎ.ಬಾಸಿತ್, ನಿವೃತ್ತ ಹಿರಿಯ ನಿರ್ದೇಶಕರು, ಇವರನ್ನು ಮಾಸಿಕ ಒಟ್ಟು 70,000 ರೂ.ಗಳ ಸಮಾಲೋಚನಾ ಶುಲ್ಕದೊಂದಿಗೆ ಯೋಜನಾ ಇಲಾಖೆಯಲ್ಲಿ ಸಮಾಲೋಚಕರನ್ನಾಗಿ ನೇಮಿಸಲು ಕರ್ನಾಟಕ ಸಾರ್ವಜನಿಕ ಸಂಗ್ರಹಣೆಗಳಲ್ಲಿ ಪಾರದರ್ಶಕತೆ ಅಧಿನಿಯಮ–1999ರ ಕಲಂ 4(ಜಿ) ರಡಿ ಪ್ರದತ್ತವಾದ ಅಧಿಕಾರ ಚಲಾಯಿಸಿ, ಯೋಜನೆ, ಕಾರ್ಯಕ್ರಮ ಸಂಯೋಜನೆ ಮತ್ತು ಸಾಂಖ್ಯಿಕ ಇಲಾಖೆಗೆ ಪಾರದರ್ಶಕತೆ ಕಾಯ್ದೆಯಿಂದ ವಿನಾಯಿತಿ ನೀಡಿದೆ.

ಉತ್ತಮ ಗುಣಮಟ್ಟದ ಸೇವೆಯನ್ನು ಸಮಂಜಸ ದರದಲ್ಲಿ ಸಂಗ್ರಹಿಸುವುದನ್ನು ಯೋಜನೆ, ಕಾರ್ಯಕ್ರಮ ಸಂಯೋಜನೆ ಮತ್ತು ಸಾಂಖ್ಯಿಕ ಇಲಾಖೆಯು ದೃಢಪಡಿಸಿಕೊಳ್ಳುವುದು.

ಕರ್ನಾಟಕ ರಾಜ್ಯಪಾಲರ ಆಜ್ಞಾನುಸಾರ ಮತ್ತು ಅವರ ಹೆಸರಿನಲ್ಲಿ,

ಕಾಂತ.ಎಸ್,

ಸರ್ಕಾರದ ಅಧೀನ ಕಾರ್ಯದರ್ಶಿ,

ಆರ್ಥಿಕ ಇಲಾಖೆ (ಸಂಗ್ರಹಣಾ ಕೋಶ).

ಪಿ.ಆರ್. 453

ಸಿಬ್ಬಂದಿ ಮತ್ತು ಆಡಳಿತ ಸುಧಾರಣೆ ಸಚಿವಾಲಯ

ಅಧಿಸೂಚನೆ

ಸಂಖ್ಯೆ: ಸಿಆಸುಇ 6 ಇಸಂಗ್ರ 2012 (1), ಬೆಂಗಳೂರು, ದಿನಾಂಕ: 08ನೇ ಜೂನ್, 2012.

ಕರ್ನಾಟಕ ಸಾರ್ವಜನಿಕ ಸಂಗ್ರಹಣೆಗಳಲ್ಲಿ ಪಾರದರ್ಶಕತೆ ಅಧಿನಿಯಮ, 1999(2000ದ ಕರ್ನಾಟಕ ಅಧಿನಿಯಮ ಸಂಖ್ಯೆ 29)ರ ಕಲಂ 18–ಎರ ಉಪಕಲಂ (2) ರನ್ವಯ ಪ್ರದತ್ತವಾದ ಅಧಿಕಾರವನ್ನು ಚಲಾಯಿಸಿ ಕರ್ನಾಟಕ ರಾಜ್ಯ ಪೊಲೀಸ್ ಗೃಹ ನಿರ್ಮಾಣ ನಿಗಮ ನಿಯಮಿತ, ಬೆಂಗಳೂರು ಇದರ ₹ 1.00 (ಒಂದು) ಲಕ್ಷಕ್ಕೂ ಮೀರಿದ ಎಲ್ಲಾ ಸಂಗ್ರಹಣೆಗಳನ್ನು ಈ ತಕ್ಷಣದಿಂದ ಜಾರಿಗೆ ಬರುವಂತೆ, ವಿದ್ಯುನ್ಮಾನ ಸಂಗ್ರಹಣೆ ವೇದಿಕೆ ಮೂಲಕ (through e-procurement platform) ಸಂಗ್ರಹಿಸತಕ್ಷದೆಂದು ಕರ್ನಾಟಕ ಸರ್ಕಾರ, ಈ ಮೂಲಕ ಗೊತ್ತುಪಡಿಸುತ್ತದೆ.

ಕರ್ನಾಟಕ ರಾಜ್ಯಪಾಲರ ಆದೇಶಾನುಸಾರ ಮತ್ತು ಅವರ ಹೆಸರಿನಲ್ಲಿ,

ಪ್ರಶಾಂತ್ ಕುಮಾರ್ ಎಸ್.ಬಿ,

ಪೀಠಾಧಿಕಾರಿ-1 (ಪ್ರಭಾರ),

ಸಿಬ್ಬಂದಿ ಮತ್ತು ಆಡಳಿತ ಸುಧಾರಣೆ ಇಲಾಖೆ (ಇ-ಆಡಳಿತ).

PERSONNEL AND ADMINISTRATIVE REFORMS SECRETARIAT

NOTIFICATION

NO. DPAR 6 EPR 2012(1), Bangalore, Dated: 08th June, 2012.

In exercise of the powers conferred by sub-section (2) of section 18A of the Karnataka Transparency in Public Procurements Act, 1999 (Karnataka Act 29 of 2000) the Government of Karnataka hereby specify that the Karnataka State Police Housing Corporation Ltd. Bengaluru shall procure all its procurements the value of which exceeds ₹ 1.00 (One) lakh through e-Procurement platform with immediate effect.

By Order and in the Name of the Governor of Karnataka **PRASHANTHKUMAR. S.B** Desk Officer-1 (I/c) Department of Personnel and Administrative Reforms (e-Governance).

೯೫೭

P.R. 454
ಭಾಗ – ೪ಎ

ಸಿಬ್ಬಂದಿ ಮತ್ತು ಆಡಳಿತ ಸುಧಾರಣೆ ಸಚಿವಾಲಯ

ಅಧಿಸೂಚನೆ

ಸಂಖ್ಯೆ: ಸಿಆಸುಇ 6 ಇಸಂಗ್ರ 2012 (2), ಬೆಂಗಳೂರು, ದಿನಾಂಕ: 08ನೇ ಜೂನ್, 2012.

ಕರ್ನಾಟಕ ಸಾರ್ವಜನಿಕ ಸಂಗ್ರಹಣೆಗಳಲ್ಲಿ ಪಾರದರ್ಶಕತೆ ಅಧಿನಿಯಮ, 1999(2000ದ ಕರ್ನಾಟಕ ಅಧಿನಿಯಮ ಸಂಖ್ಯೆ 29)ರ ಕಲಂ 18-ಎರ ಉಪಕಲಂ (2) ರನ್ವಯ ಪ್ರದತ್ತವಾದ ಅಧಿಕಾರವನ್ನು ಚಲಾಯಿಸಿ ರೇಷ್ಠೆ ಇಲಾಖೆ ಬೆಂಗಳೂರು ಇದರ ₹ 1.00 (ಒಂದು) ಲಕ್ಷಕ್ಕೂ ಮೀರಿದ ಎಲ್ಲಾ ಸಂಗ್ರಹಣೆಗಳನ್ನು ಈ ತಕ್ಷಣದಿಂದ ಜಾರಿಗೆ ಬರುವಂತೆ, ವಿದ್ಯುನ್ಮಾನ ಸಂಗ್ರಹಣೆ ವೇದಿಕೆ ಮೂಲಕ (through e-procurement platform) ಸಂಗ್ರಹಿಸತಕ್ಕದೆಂದು ಕರ್ನಾಟಕ ಸರ್ಕಾರ, ಈ ಮೂಲಕ ಗೊತ್ತುಪಡಿಸುತ್ತದೆ.

ಕರ್ನಾಟಕ ರಾಜ್ಯಪಾಲರ ಆದೇಶಾನುಸಾರ ಮತ್ತು ಅವರ ಹೆಸರಿನಲ್ಲಿ,

ಪ್ರಶಾಂತ್ಕುಮಾರ್ ಎಸ್.ಬಿ,

ಪೀಠಾಧಿಕಾರಿ–1 (ಪ್ರಭಾರ),

ಸಿಬ್ಬಂದಿ ಮತ್ತು ಆಡಳಿತ ಸುಧಾರಣೆ ಇಲಾಖೆ (ಇ-ಆಡಳಿತ).

PERSONNEL AND ADMINISTRATIVE REFORMS SECRETARIAT

NOTIFICATION

NO. DPAR 6 EPR 2012(2), Bangalore, Dated: 08th June, 2012.

In exercise of the powers conferred by sub-section (2) of section 18A of the Karnataka Transparency in Public Procurements Act, 1999 (Karnataka Act 29 of 2000) the Government of Karnataka hereby specify that the Sericulture Department, Bengaluru shall procure all its procurements the value of which exceeds ₹ 1.00 (One) lakh through e-Procurement platform with immediate effect.

> By Order and in the Name of the Governor of Karnataka PRASHANTHKUMAR. S.B

Desk Officer-1 (I/c) Department of Personnel and Administrative Reforms (e-Governance).

P.R. 455

ಆಹಾರ, ನಾಗರೀಕ ಸರಬರಾಜು ಮತ್ತು ಗಾಹಕರ ವ್ಯವಹಾರಗಳ ಸಚಿವಾಲಯ

ಸಂಖ್ಯೆ:ಆನಾಸ 131 ಸಲಫ 2008 ಬೆಂಗಳೂರು, ದಿನಾಂಕ:28.04.2012

ಅಧಿಸೂಚನೆ

ಗ್ರಾಹಕ ರಕ್ಷಣಾ ಅಧಿನಿಯಮ 1986 (1986 ಕೇಂದ್ರ ಅಧಿನಿಯಮ ಸಂಖ್ಯೆ:68)ರ ಕಲಂ 30ರ ಉಪ ಕಲಂ (2)ರ ಅಡಿ ಮತ್ತು ಕರ್ನಾಟಕ ಗಾಹಕರ ರಕ್ಷಣಾ ನಿಯಮಾವಳಿಗಳು, 1988ರ ನಿಯಮ 2ಸಿ ಅಡಿ ಪ್ರದತ್ತವಾಗಿರುವ ಅಧಿಕಾರಗಳನ್ನು ಚಲಾಯಿಸಿ, **"ಹಾವೇರಿ ಜಿಲ್ಲಾ ಗ್ರಾಹಕರ** ರಕ್ಷಣಾ ಪರಿಷತ್ತನ್ನು" ಈ ಕೆಳಕಂಡ ಸದಸ್ಯರುಗಳೊಂದಿಗೆ ಈ ಮೂಲಕ ಸ್ಥಾಪಿಸಿದೆ.

(1)	ಜಿಲ್ಲಾಧಿಕಾರಿಗಳು, ಹಾವೇರಿ ಜಿಲ್ಲೆ, ಹಾವೇರಿ	 ಅಧ್ಯಕ್ಷರು
(2)	ಉಪ ನಿರ್ದೇಶಕರು, ಆಹಾರ, ನಾಗರೀಕ ಸರಬರಾಜು ಮತ್ತು ಗ್ರಾಹಕರ ವ್ಯವಹಾರಗಳ ಇಲಾಖೆ, ಹಾವೇರಿ ಜಿಲ್ಲೆ, ಹಾವೇರಿ .	 ಸದಸ್ಯ ಕಾರ್ಯದರ್ಶಿ
	ಸಕ್ರಿಯ ಗ್ರಾಹಕ ಸಂಸ್ಥೆಗಳು:-	
(3)	ಶ್ರೀ ಹೆಚ್.ಡಿ.ಹೊನ್ನಕ್ಕಳವರ, ಜಿಲ್ಲಾ ಗ್ರಾಹಕರ ರಕ್ಷಣಾಪರಿಷತ್ತಿನ ಸದಸ್ಯರು, ಸಾ:ಚಳಗೇರಿ, ತಾ:ರಾಣಿಬೆನ್ನೂರು, ಹಾವೇರಿ ಜಿಲ್ಲೆ.	 ಸದಸ್ಯರು
(4)	ಶ್ರೀ ಫಕೀರಪ್ಪ ನಾಗಪ್ಪ ಯಲಿಗಾರ, ಅಧ್ಯಕ್ಷರು, ಜನತಾ ಬಜಾರ ಗ್ರಾಹಕರ ಸಂಸ್ಥೆ, ಶಿಗ್ಗಾಂವ, ಹಾವೇರಿ ಜಿಲ್ಲೆ.	 ಸದಸ್ಯರು

	ಮಹಿಳಾ ಸಹಕಾರಿ ಸಂಘ:–			
(5)	ಶ್ರೀಮತಿ ಶಾರದಾ ವೀರಪ್ಪ ಎಲೆ, ಅಧ್ಯಕ್ಷರು, ಶ್ರೀ ಬನಶಂಕರಿ ಮಹಿಳಾ ವಿವಿದೋದ್ದೇಶ ಸಹಕಾರಿ ಸಂಘ, ಶಿಗ್ಗಾಂವ, ಹೊಸ ಬಸ್ಪಾಂಡ್ ರೋಡ್ ಹಿಂದುಗಡೆ, ಶಿಗ್ಗಾಂವ ತಾ:ಶಿಗ್ಗಾಂವ, ಹಾವೇರಿ ಜಿಲ್ಲೆ.			ಸದಸ್ಯರು
	ರೈತ ಸಂಘ ಸಂಸ್ಧೆ:–			
(6)	ಶ್ರೀ ಪ್ರಭುದೇವ ಕರ್ಜಗಿಮಠ, ಅಧ್ಯಕ್ಷರು, ರೈತ ಕಾರ್ಮಿಕ ಸಂಘ, ರಾಣಿಬೆನ್ನೂರು, ಹಾವೇರಿ ಜಿಲ್ಲೆ.			ಸದಸ್ಯರು
(7)	ಶ್ರೀ ರಾಮಣ್ಣ ಬಿ. ಕೆಂಚಳ್ಳೆರ, ಅಧ್ಯಕ್ಷರು, ಹಿರೇಕೆರೂರು ತಾಲ್ಲೂಕು, ರೈತ ಸಂಘ, ಸಾ:ಶಿರಗಂಬಿ, ತಾ:ಹಿರೇಕೆರೂರು, ಹಾವೇರಿ ಜಿಲ್ಲೆ.			ಸದಸ್ಯರು
	ವಾಣಿಜ್ಯ:ವ್ಯಾಪಾರ:–			
(8)	ಶ್ರೀ ಸದಾಶಿವಪ್ಪ. ಮಾಲಿಂಗಪ್ಪ, ಉದಾಸಿ, ವ್ಯಾಪಾರಸ್ಥರು, ಸಮಾಜ ಸೇವಾ ಕಾರ್ಯಕರ್ತರು, ಚಿದಂಬರ ನಗರ, ಹಾನಗಲ್ಲ, ಹುಬ್ಬಳ್ಳಿ ರೋಡ್, ಹಾನಗಲ್, ಹಾವೇರಿ ಜಿಲ್ಲೆ.			ಸದಸ್ಯರು
(9)	ಸ್ತ್ರೀಶಕ್ತಿ ಸಂಸ್ಥೆಯ ಅಧ್ಯಕ್ಷರು:– ಶ್ರೀಮತಿ ಅನ್ನಪೂರ್ಣಮ್ಮ ಅಂಗಡಿ, ಅಧ್ಯಕ್ಷರು, ಸ್ತ್ರೀ ಶಕ್ತಿ ಸಂಘ, ತಾಲ್ಲೂಕು, ಘಟಕ, ಸವಣೂರು, ಹಾವೇರಿ ಜಿಲ್ಲೆ.			ಸದಸ್ಯರು
(10)	ಯುವಜನ ಸಂಘ ಸಂಸ್ಥೆಗಳು:– ಶ್ರೀ ಶಂಕರ ಮಲ್ಲಪ್ಪ ಅಕ್ಕಿ, ಅಧ್ಯಕ್ಷರು, ತಾಲ್ಲೂಕು ಯುವ ಒಕ್ಕೂಟ ಮಲ್ಲೂರ, ತಾ: ಬ್ಯಾಡಗಿ, ಹಾವೇರಿ ಜಿಲ್ಲೆ.			ಸದಸ್ಯರು
	ಸರ್ಕಾರದ ನಾಮ ನಿರ್ದೇಶಿತ ಸದಸ್ಯರು:–			
(11)	ಶ್ರೀ ದತ್ತಾತ್ರೇಯ ಗಂಗಾಧರಪ್ಪ ರಾಯ್ಕರ್, ಸಾ॥ ಗುಂಡಗಟ್ಟೆ, ಹಿರೇಕೆರೂರು ತಾಲ್ಲೂಕು, ಹಾವೇರಿ ಜಿಲ್ಲೆ.			ಸದಸ್ಯರು
(12)	ಶ್ರೀ ಮಲ್ಲಿಕಾರ್ಜುನ ಕಲ್ಲಪ್ಪ ದೊಡ್ಡಮನಿ, ಸಾII ಸೂಡಂಬಿ, ಬ್ಯಾಡಗಿ ತಾಲ್ಲೂಕು, ಹಾವೇರಿ ಜಿಲ್ಲೆ.			ಸದಸ್ಯರು
2. ਚ	೫ ಅಧಿಸೂಚನೆ ಕರ್ನಾಟಕ ರಾಜ್ಯ ಪತದಲ್ಲಿ ಪಕಟವಾದ ದಿನಾಂಕದಿಂದ	ಮೂರು ವರ್ಷಗಳ ಅವಧಿಗೆ	ಅಥವಾ	ಸರ್ಕಾರದ ಮ

2. ಈ ಅಧಿಸೂಚನೆ ಕರ್ನಾಟಕ ರಾಜ್ಯ ಪತ್ರದಲ್ಲಿ ಪ್ರಕಟವಾದ ದಿನಾಂಕದಿಂದ ಮೂರು ವರ್ಷಗಳ ಅವಧಿಗೆ ಅಥವಾ ಸರ್ಕಾರದ ಮುಂದಿನ ಆದೇಶದವರೆಗೆ, ಇವೆರಡರಲ್ಲಿ ಯಾವುದು ಮೊದಲೋ ಅಲ್ಲಿಯವರೆಗೆ ಈ ಜಿಲ್ಲಾ ಗ್ರಾಹಕ ರಕ್ಷಣಾ ಪರಿಷತ್ತು ತನ್ನ ಕಾರ್ಯಾವಧಿಯನ್ನು ಹೊಂದಿರುತ್ತದೆ.

3. ಈ ಪರಿಷತ್ತು ಕರ್ನಾಟಕ ಗ್ರಾಹಕರ ರಕ್ಷಣಾ ನಿಯಮಾವಳಿಗಳು 1988ರ ನಿಯಮ 2ಡಿ ಅಡಿವಿಧಿಸಿರುವ ವಿಧಾನದಂತೆ ಕಾರ್ಯ ನಿರ್ವಹಿಸತಕ್ಕದ್ದು.

ಕರ್ನಾಟಕ ರಾಜ್ಯಪಾಲರ ಆದೇಶಾನುಸಾರ ಮತ್ತು ಅವರ ಹೆಸರಿನಲ್ಲಿ,

ಪಿ.ಆರ್. ಕಲಾವತಿ

ಸರ್ಕಾರದ ಅಧೀನ ಕಾರ್ಯದರ್ಶಿ,

ಆಹಾರ, ನಾಗರೀಕ ಸರಬರಾಜು ಮತ್ತು ಗಾಹಕರ ವ್ಯವಹಾರಗಳ ಇಲಾಖೆ

ಪಿ.ಆರ್. 334

LABOUR SECRETARIAT

No:LD 201 ETI 2011 Bangalore, dated: 20/03/2012.

NOTIFICATION-II

The draft of the following rules further to amend the Karnataka Civil Services (Absorption of persons appointed on contract basis in the category of posts of Craft Instructors/Junior Instructors (Re-designated as junior training officers) in the Department of Employment and Training (Training Wing) (special) Rules 2002, which the Government of Karnataka proposes to make in exercise of the powers conferred by sub-section (1) of Section 3 read with Section 8 of the Karnataka State Civil Services Act, 1978 (Karnataka Act 14 of 1990) is hereby published as required by clause(a) of sub-section (2) of Section 3 of the said Act for the information of persons likely to be affected thereby and notice is hereby given that the said draft will be taken into consideration after fifteen days from the date of its publication in the official Gazette.

Any objection and suggestion which may be received by the State Government from any person with respect to the said draft before the expiry o the period specified above will be considered by the State Government. Objections and suggestions may be addressed to the Secretary to Government, Labour Department, Vikasa Soudha, Bangalore-560001.

DRAFT RULES

1. Title and Commencement:- (1) These rules may be called the Karnataka Civil Services (Absorption of persons appointed on contract basis in the category of posts of Craft Instructors/Junior Instructors (Re-designated as Junior Training Officers) in the Department of Employment and Training (Training Wing) (special) (Amendment) Rules, 2012.

(2) It shall come be deemed to have come into force with effect from 19-7-2004.

Substitution of rule 4: In the Karnataka Civil Services (Absorption of persons appointed on contract basis in the category of posts of Craft Instructors/Junior Instructors (redesignated as Junior Training Officers) in the Department of Employment and Training (Training Wing) into State Civil Services (special) Rules, 2002 for Rule 4, the following shall be substituted namely:-

4. Pay, Pension Leave and Seniority of Person absorbed under these rules:- Not withstanding anything contained in the Karnataka Civil Services Rules:-

- The initial basic pay of the contract Junior Training Officer shall be fixed at the minimum of the pay scale applicable to the category of post to which he is absorbed under rule 3.
- 2) The Services rendered by a person as Junior Training Officer/Craft Instructor/Junior Instructor prior to the date of absorption shall not count for the purposes of leave pension pay, seniority and grant of selection time scale of pay under the KCS (Time Bound Advancement) Rules, 1983 and Karnataka Civil Services (Automatic grant of special promotion to senior scale of pay) Rules, 1991.

By Order and in the name of Governor of Karnataka

J.S. Vishwanathappa Desk Officer, Labour Department, (Employment and Training)

PR - 470