

CENTRE FOR ECOLOGICAL SCIENCES
INDIAN INSTITUTE OF SCIENCEFIELD STATION, VIVEKNAGAR, KUMTA 581 343, INDIATelephone:91-08386-223426, 09342470560(Dr.Prakash Mesta)
cestvr@ces.iisc.ernet.in, mdschandra@yahoo.com,
prakashhonavar@gmail.comWeb URL :http:// ces.iisc.ernet.in/energy/

DR. T. V. RAMACHANDRA/DR. M. D. SUBASH CHANDRAN

CES/TVR/CCP/8504/2011

"MY VILLAGE BIODIVERSITY DOCUMENTATION"

Instruction to Participants

- 1. The students are advised to take guidance from teachers.
- 2. The student and teachers may contact our office for clearing doubts.
- 3. Only one student or two should work on the selected village.
- 4. An institution may select as many villages which their students can handle.
- 5. The students are advised to use their vacation and holidays for the study.
- 6. **Submission of the entry form** with the letter indicating name of the students and villages chosen 4 July 2011
- 7. Study reports should be sent to our office by end of 31 August-2011.
- 8. All students who submit good reports will be invited for taluk level presentation of reports in September 2011.
- 9. Students selected in the taluk level can rework and improve their reports and submit final reports before October 2011.
- 10. Final presentations will be held during October 2011 and classwise **Young Ecologists Award** will be given at the conference (**Conference on Uttara Kannada's Biodiversity** at Sirsi, Uttara Kannada district)
- 11. All reports should be sent to **Kumta address:**

Completed study reports to be sent to: Dr. M.D. Subash Chandran CES, Field Station (Indian Institute of Science) Vivek Nagar, Kumta-581 343

For more information contact:

Dr. Prakash Mesta Phone: 08386 223426 Mobile: 9342470560 e-mail: prakashhonavar@gmail.com, prakash_honavar@ces.iisc.ernet.in

Organised by

Dr. T. V. Ramachandra Energy and Wetland Reserch Group Centre For Ecological Sciences Indian Institute of Science, Banglore-12 E-Mail: <u>cestvr@ces.iisc.ernet.in</u> Phone: 080-22933099; 23600985



CENTENNIN

MY VILLAGE BIODIVERSITY DOCUMENTATION FORMAT

(Village means revenue village)

Village name :	Student's names (Class
Panchayat name :	1.	
Taluk :	2.	
Name of school Address of school with phone no. & email:	Name of guide teacher	
	Phone no :	

* Note: 1. Only one or two students to study one village

2. Use extra sheets for writing if necessary

1) FOREST TYPES OF VILLAGE

	Forest types	Yes	No
a)	Evergreen forest		
b)	Semievergreen forest		
c)	Deciduous forest		
d)	Scrub		
e)	Mangrove vegetation (only for coastal taluks)		
f)	Savanna (grassland with trees)		

2) LANDSCAPE ELEMENTS OF THE VILLAGE

	Landscape elements		Yes	No		
a)	Bena (grassland) :	51				
b)	Rocky places (Name & localities)	Rock types (write loc	al names)			
i						
ii	CINTENNIN					
iii						
iv						
c)	No. of stone quarries :					
	Type of stone in the quarry :			_		
d)	No. of soil quarries :					
	Types of soil :					
e)	No. of sand quarries Describe where					
	Sand extraction from sea shore if any. Why san					
f)	Mining details (record if any metal ore is removed from the village):					

3) WATERSCAPE ELEMENTS OF THE VILLAGE

	Waterscape elements			Water availability ()										
a)	Name of the river, if any:		J	F	М	Α	М	J	J	Α	S	Α	Ν	D
b)	Stream names:													
	Name of perennial streams if	any:												
	i) ii)				ii	i)_								
c)	i)ii) Name of perennial springs if a	any:												
d)	Waterfalls: Name(Height): i													
e)	Name of any dam in the villa													
f)	Names or numbers of check d	ams:												
g)	Backwater areas:													
h)	Swampy places if any with lo	cal name:												
i)	Ponds and Lakes													
	Name	Area in acres			No	o. of	mo	nths	s wit	h wa	ater	()		
			J	F	М	A	М	J	J	Α	s	Α	Ν	D
		<0/	J	F	Μ	Α	М	J	J	Α	S	Α	Ν	D
		alahh	J	F	М	A	М	J	J	Α	s	Α	Ν	D
			J	F	М	A	М	J	J	Α	s	Α	Ν	D
			J	F	М	A	М	J	J	Α	S	Α	Ν	D
		ANT REAL	J	F	M	Α	M	J	J	Α	s	Α	Ν	D
			J	F	М	A	М	J	J	Α	S	Α	Ν	D

*Use extra sheets for writing if necessary

4) **PLANT DIVERSITY OF THE VILLAGE**

A) Medicinal plants

i) Medicinal plants of the village and utilisation of plants by village people

		Availabili	ity	Parts used for	Unon
Plant name	High	Med	Less	medicine	Uses

ii) Medicinal plants collection and trade

List medicinal	plants that are grown	by villagers in their own	gardens/farms for sale
	Printer and Brown	by thingers in their other	Survey and the servey of servey

	Medicinal plants	Agency/name of	Demand				
Name of farmer	grown for sale	purchasers	good	moderate	poor		

*Use extra sheets for writing if necessary

iii) List of medicinal plants collected from the village/forest for sale

Madisinal plants Agangy/parse of			Demand		
collected for sale	purchasers	good	moderat e	poor	
(alat	satian	9			
Call	and an og				
-	Medicinal plants collected for sale	collected for sale purchasers	collected for sale purchasers good	Medicinal plants collected for sale Agency/name of purchasers good moderat e	

*Use extra sheets for writing if necessary

B) Uses of non-cultivated plants for food

Plant name	Av	ailabili	ty	Part used for	Times
	High	Med	Less	food	Uses
	1	1			
	C				
		CF	NTEN	NINL	

*Use extra sheets for writing if necessary

C) Non-cultivated plants that are used for other purposes than food

Plant name	A	vailabil	lity	Part used	Uses			
	High	Med	Less	rat useu	Uses			
1		1	1					

D) Rare types of forest trees present in the village

Forest tree local name	Location name

*Use extra sheets for writing if necessary

E) Road side trees

List planted roadsid trees by surveying one km of village main road

Trees Species	Nos
Chalabb orth	an
	12
*Use extra sheets for writing if necessary	

F) Forest products

i) Collection of forest produce

(Interview persons who collect forest produce; list the products that are regularly collected from the forests)

Names of forest produce collectors	List of products collected	Uses of products for own use/sale

*Use extra sheets for writing if necessary

ii) Do contractors collect forest produce (name products collected)

*Use extra sheets for writing if necessary

iii) Do local societies collect forest produce

(name society, products collected etc. - Attach details from Societies' annual report)

Name of society	Products collected	Annual Income

*Use extra sheets for writing if necessary

G) Agriculture

i) Names of crop plants and their varieties

(Note: Please note down varieties of rice, sugarcane, ragi, jowar, other millets, black gram (uddu), pacha hesaru (green gram), cow pea (alsandi); ground nut (senga), etc.)

Name of crop	Names of varieties	Farmer's name & address	Area (Acres-Gunta)
		Menhk	
	C		

*Use extra sheets for writing if necessary

CENTENNIN

ii) Special characters of crop varieties (please give importance to traditional varieties)

Note: Special characters: Please note down special characters as explained by the farmer. For eg: Crop name :Rice; Variety name: Bantwala: Special characters: 3.5 months duration, tall (5 ft); red rice, yield approx. 8quintals/acre; tasty; soft straw liked by cattle – Please ask farmer to describe the varieties.

Crop name	Variety	Farmer interviewed	Special characters

*Use extra sheets for writing if necessary

 iii) Traditional storage methods of agricultural products
(Explain what are the important methods of storage of foodgrains and pulses etc. without damage or insect attack.)

Agricultural product	Traditional storage/preservation methods
	- Means
	CENTENNIN

*Use extra sheets for writing if necessary

iv) Model agriculturists in the village

Names	Why he/she is considered model?	

v) Seed treatment

Name of farmer	Name of crops	Seed storage method	Seed treatment before planting	Name of substances/chemicals used for seed storage/treatment

*Use extra sheets for writing if necessary

H) Horticulture

i) Horticultural crop and their varieties

(Note: Please note down varieties of coconut, arecanut, pepper, betel leaf, mango, jack fruit, banana, citrus, vegetables, leafy vegetables, chillies, local flowers, kokam, onions, tubers, ginger, cardamom)

	5 · 3 · 1 · 2 ·	
	TA	
	1least.	
C		
1	neets	

* Please use extra sheets

ii) Special characters of horticultural crop varieties

Note: Please note down special characters as explained by the farmer

1 2121

Crop name	Variety	Farmer interviewed	Special characters

*Use extra sheets for writing if necessary

iii) Traditional methods of processing and storage of horticultural products

(Explain what are the important methods of processing and storage of horticultural products without damage or insect attack.).

Horticultural products	Traditional storage/preservation methods
	Means

*Use extra sheets for writing if necessary

CENTENNIN

iv) Information about home gardens for growing vegetables

(collect information form a cluster of ten families – poor and rich and representing different communities)

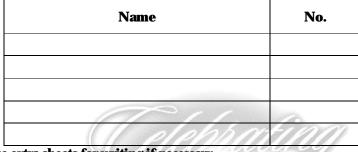
Person interviewed	Home garden Present/absent	Vegetables grown	Write reasons why home garden is not there for the family

v) Model horticulturists in the village

Names	Why he/she is considered model?

*Use extra sheets for writing if necessary

vi) Fruit trees grown in the school campus



*Use extra sheets for writing if necessary

vii) Methods for ripening of fruits

Name of farmers	Crops	Fruit ripening methods you apply
		locist

dis Mag

*Use extra sheets for writing if necessary CENTENNIN

viii) Fruits storage/preservation/ processing methods (making pickles, jams, drying, salting etc)

Name of farmers/other persons	Crops	Fruits storage/preservation/processing methods	Purpose (for own use/sale)
Use ovtra sheets for writing if			

I) Model Farms

i. Write names of the farmers who have model farms. Model farms combine many of the following features described under a/b/c/d etc. (whatever is applicable).

Names of the farmers								Fea	tur	es						
	a	b	C	d	e	f	g	h	i	j	K	l	m	n	0	р

- a. Water conservation methods adopted
- b. Soil conservation methods adopted
- c. Animal husbandry is part of the system
- d. Bee keeping is part of system
- e. Gobar gas is used
- f. Vermi-compost is made
- g. Preparation of bio-pesticides; pesticides are not used for rice crops and vegetables
- h. Solar lamps; solar drier; improved stoves like Astra Ole
- i. Bettaland has more than 100 trees per acre; trees belong to at least 15 species/acre; at least 40 trees per acre are not lopped for leaves or branches cut for fuel.
- j. No fuelwood is purchased from outside
- k. No fulewood is collected from forest
- 1. Crop rotation is practiced in rice fields (mention what crops are grown after rice is harvested)
- m. List fodder crops grown in the farm (including grasses, shrubs and trees)
- n. At least one traditional rice variety is grown (mention name:.....)
- o. Poultry is part of farming system
- p. Fish farming is part of the system (name fishes in the pond.....)

J) Village environment management

i) People's participation in environment management

	Environment management	Yes	No
a)	Village Forest Committee (VFC) is present in the village		
	VFC is active/inactive/ moderately active (tick right choice)		
b)	Biodiversity Management Committee (BMC) is formed in the Panchayat :		
	BMC is active / inactive (tick right choice)		
c)	Peoples' Biodiversity Register (PBR) is prepared for the Panchayat		
d)	Meetings conducted on environmental awareness in the village/panchayat during last two years (give details if any):		
e)	The village has a Farmers' Union		
f)	The Farmers Union meets regularly to discuss about farming systems/ problems etc		

ii) List names of farmers who do fully organic farming

Name of farmer	Crops grown without use of chemicals	For own use/sale

(without use of chemical pesticides and fertilizers) for any crops

*Use extra sheets for writing if necessary

iii) List farmers who use biopesticides

Name of farmer	Стор	Disease/insect	Describe bioipesticide used
		3	
		white	

hhatti

*Use extra sheets for writing if necessary

CENTENNIAL

iv) What biopesticides are used by you?

Crops	When you apply bio- pesticides?	How bio-pesticides are prepared by you	Expenses if any/gunta /acre
		Crops apply bio-	Crops apply bio-

v) Manuring/application of fertilizers

Name of farmer	Name of crops	Name manures used	Expenses per gunta/acre	Name fertilizers used	Expenses per gunta/acre

vi) Name chemical pesticides/fungicides used

Name of farmers	Crops	Names of pesticide/fungicides used	Purpose	Expenses/ gunta/acre
	1	P/1. 10		
		Tehbatta	11	

5) COOPERATIVE

i) Cooperative Societies

Notes on tribal co-operatives in the village/panchayat (eg. Siddi co-operative society for forest produce collection) Notes on other co-operative societies in the village

ans

Co-operative societies	Main activities
CENTENNIN	

*Use extra sheets for writing if necessary

ii) Name Self Help Groups/Sthree-Shakti groups in the village and list their activities

Name self help group	Туре

6) COMMUNITY HEALTH

Visit a cluster of ten families representing different communities and list the health problems

Name of person interviewed	Health problems	Any remarks on treatment

*Use extra sheets for writing if necessary

7) ANIMAL DIVERSITY

A) Wild Life

Name	NUMBERS		C	Changes in numbers		
Trame	Common	Moderate	Rare	Increasing	Decreasing	No change
Mammals (incl	uding bats) 🦷	1 al	265	ntin	71	_
				MAAN		
D*_1_			SMA			
Birds						
	-		Charles St			
			100			
Reptiles (inclue	ling snakes & t	urtles)		10*	-	
	8 u u					
	-		1-/-			
			//PA	YAX.		
		60				
Fishes	r			· · · · · ·		
		C	ENTERIN	1.81		
			UNTEND			
Insects (includi	ng huttorfligg	honovihoos)				
msects (metual		a noneybees)				
				<u> </u>		
Other animals		1		1 1		

B) Knowledge on wild animals

Name of person	G	Seasons	sons Where Numbers	Numbers		
interviewed	Species	present	present?	low	moderate	high

Note:

- Seasons present : Rainy season, cold season, summer season or throughout the year
- Where present: Habitat to be mentioned such as forest, scrub, field, garden, river bank, river, pond etc

C) Crop damage from wild life

Interview farmers on what damages are done to crops by wild animals in the village (write names of farmers interviewed and details of animals which create problem and the extent of damages they suffer)

*Use extra sheets for writing if necessary

D) Attack on humans by wild animals

Any details on attack on humans by wild animals (including snake bites, attack on domestic animals) may be mentioned – number of cases during the last two years

*Use extra sheets for writing if necessary

E) Write the names of plants that wild animals/birds feed upon

Name of persons interviewed	Name of wild animal/bird	Plant/plant parts used as food
CF	NTENNINL	

F) Name wild animals that seasonally visit the village

Persons interviewed	Animals which visit the village	Seasons of visit (months)	Any reasons why they come?

G) Hunting

- i. Do people hunt in the village or outside? : yes/no
- ii. Which communities customarily hunt?
- iii. What are the animals/birds normally hunted within village?
- iv. What are the names of animals/birds hunted from outside the village?
- v. How far do the hunters go for hunting? Name places and distances from the village you are surveying
- vi. Do outsiders enter the village for hunting?
- vii. From where do outsiders come for hunting?
- viii. Why do people hunt?
- ix. For food (mention names of animals/birds)
- x. For medicine (mention animals/birds)

CENTENNIN

- xi. For sale of meat/other products (mention animals/birds)
- xii. As part of their hunting tradition hunting is compulsory for the community (mention names of communities which perform traditional hunting)
- xiii. What are the restrictions on hunting followed by local people themselves?

H) Livestock

i. INFORMATION ON CATTLE, GOATS AND SHEEP OF THE VILLAGE

- 1. Cattle census : Attach livestock statistics of the village as available from the Panchayat veterinary officer or other sources (mention the sources) and year of statistics (include cattle, buffloe,oat, sheep nos.)
- 2. Interview some families on cattle nos and fill the following tables

Name of cattle keepers	Cows breed	Total
	1.	
	2	
	3.	
	Bulls/bullocks breed	
	1	
	2	
	3	

*Use extra sheets for writing if necessary

ii. Interview some families on buffalo nos and fill the following table

Name of buffalo keepers	Buffalo breed (female)	Total
	1.	
	2	
	3.	
	Buffalo breed (male)	
C	1	
	2 NTENNIN	
	3	

*Use extra sheets for writing if necessary

iii. Interview some families and fill the table on Goats diversity

Name of persons	Goat breeds	Numbers

iv.	Interview some	families and	fill the	table on s	sheep diversity

Name of persons	Sheep breeds	Numbers

v. Details regarding Poultry farmers

Name of farmers	Chicken varieties	Numbers
	Jobs atina	
	100 million	

vi. Fodder availability

	Names of cattle keepers interviewed	Grass & leaves produced in own farm/fields qty/day/month/yr	Grass purchased from outside qty	Straw available from own fields	Straw purchased from outside
-			Tean		
		0			
-		CF	NTENNIN		

and the second

vii. Do you sell grass and straw- if so answer the following

Names of farmer interviewed	Grass sold annually (qty)	Straw sold annually (qty)

Names of cattle keeper interviewed	Places from where grass is purchased (villages & taluks)	Places from where straw is purchased (villages & taluks)

viii. The places from where straw/grass is purchased from outside (include in the study also small farmers and landless having cattle)

ix. Milk production (include in the study small farmers and landless also; conduct as many interviews)

Names of milk producers interviewed	Average milk production/day (ltɪs) (tick right figure)		
	< 1 lit/ 1-2 / 2-4 / 4-8/ 8-16/ >16/		
	< 1 lit/ 1-2 / 2-4 / 4-8/ 8-16/ >16/		
	< 1 lit/ 1-2 / 2-4 / 4-8/ 8-16/ >16/		
	< 1 lit/ 1-2 / 2-4 / 4-8/ 8-16/ >16/		
	< 1 lit/ 1-2 / 2-4 / 4-8/ 8-16/ >16/		

x. Milk processing/marketing (tick whatever is applicable)

uses					
Name of milk producers interviewed	Milk used for home	Milk sold to dairy	Milk sold to villagers		
CEN	TENNIN				
	milk producers interviewed	milk used for bome	Name of milk producers interviewed Milk used for home dairy		

xi. Production of cattle dung

Name of cattle keeper	No. of cattle	Total no of baskets of dung/day

Names of cattle keepers	Total dung used for own lands (in baskets/carts)	Total dung sold to others in baskets/carts	Do you have gobar gas plant (mention capacity)	Gobar gas for cooking (Y/N)	Gobar gas for lighting (Y/N)

xii. Uses of cattle dung (how much dung used daily for gobar gas)

xiii. Problems faced by cattle keepers

(Write the names of persons interviewed and list their problems)

xiv. What are the needs/recommendations of cattle keepers regarding fodder, milk marketing, gobar gas etc. (Write names of persons interviewed and state their recommendations)

I)Honey production

i. Honey production from the forest

Name of persons interviewed	Names of honey bee types in the village	How much honey is collected in a year	Quantity of honey sold	Months of honey collection
	CENTENN	11		

*Use extra sheets for writing if necessary

ii. Honey production by apiculture

Names of persons	No. of boxes	Annual production of honey	Qty sold

- iii. List types of honey available in the village (soapnut honey, mango honey etc.) (List names of persons who provides the information)
- iv. What are the plants which are very useful for increasing honey production? (List names of persons who provides the information)

v. What are your recommendations for increasing honey production in the village? (List names of persons who provides the recommendations)

vi. List people who received training in honey production and processing? (add note on who gave training) State And

Ŷ.

1. alabation

vii. What are the medicinal uses of honey?

8) ENERGY SOURCES

A) Availability and uses of plant fuel

	No. of	Plant	Sources of fuel			
Names of persons interviewed	members in the family	nbers fuel used the in	Agricultural waste used (specify type and qty)	Firewood/leaves from own land (specify type and qty)	Firewood/leave s from forest (specify type and qty)	

B) Recommendations by plant fuel users

(Name some users and write their recommendations)

C) List names of Astra-ole/improved cook stoves (not gas stoves) users in the village

Names	Type of stove used	Advantages	Problems faced

D) List names of people using solar lighting (try to get complete information on all users)

Names	Year of installation	Are you satisfied with the product	Problems faced
	<u>elen</u>		
	- Bala		

E) List names and addresses of people using solar water heaters

(try to get complete information on all users)

Names	Year of installation	Are you satisfied with the product	Problems faced
	CENTER	18131	

F) No. of families having cooking gas in the village (LPG)

G) Names and addresses of people using power from micro-hydel

9) KNOWLEDGEABLE INDIVIDUALS (people with traditional knowledge)

Note: Village may have several people having knowledge in herbal medicines (*naativaidyaru*), special knowledge in agriculture, in preparation of bio-pesticides, grafting plants like mangoes, identification of plants and animals etc.

Name & address	Subject	Knowledge
Subbaray Bhat, Muroor	Agriculture	Treating of plant diseases
Devu Mukri	Naativaidya	Skin diseases of cattle
Dinga karvi	Fishing	Fish breeding areas

*Use extra sheets for writing if necessary

10) Details on artisans of the village

(give details of people in carpentry, blacksmiths, ornaments making, wood carving, stone carving, pot making, shoe making, making of idols such as Ganapati using soil etc.)

Name	Sector (carpentry, wood carving etc.)	Remarks
	100	201
		20

*Use extra sheets for writing if necessary

FNTENNIAL

11) Details on fishing communities

Note: Interview five fishermen in the village

Name	Mention the villages adjacent to his fishing grounds					Мо	de o	f Fisl	hing				
Fishing area ()	_	Но	ook	N	let		awl net	n	rsei er et		Mult trav	i day vler	7
Sea		No of days of fishing ()											
Estuary	Month	J	F	Μ	Α	Μ	J	J	Α	S	Α	Ν	D
river	No. of fishing days												
Backwater	Average												
Pond	Income/day												
others	No. of family members depending on you												

12) DETAILS ON SACRED FORESTS OF THE VILLAGE

(provide details on natural areas of worship such as jatakabana, hulidevarakanu, chowdibana, kapribana etc. or others)

Name of the bana	Name of the deity	Area (acres- gunta)	Ownersh ip Private/c ommunit y/govt	V	Water sources in or near devarabana*(a*()					
				J	F	м	A	М	J	J	A	s	A	N	D

Note: A sacred forest should have minimum five trees

*Water sources: If water sources such as springs, streams, ponds, wells etc if any in or near the sacred groves

*Use extra sheets for writing if necessary

13) MAKE A LIST SOME WILD PLANTS IN THE DEVARAKADU

	Name of the bana	plants
a)	100	20
b)		
c)		
d)		
*I se evt	ra sheets for writing if necessary	

*Use extra sheets for writing if

14) MAKE A LIST OF ANIMAL DIVERSITY OF DEVARAKADU

	Name of the bana	animals
a)		
b)		
c)		、
d)		

*Use extra sheets for writing if necessary

- 15) VILLAGE STATISTICS (collect details from village accountant's office from Adarshatakta) - attach separate sheet
- **16)** Village Map (collect details from village accountant's office from *Adarshatakta*) attach sheet
