



## CENTRE FOR ECOLOGICAL SCIENCES

INDIAN INSTITUTE OF SCIENCE

FIELD STATION, VIVEKNAGAR, KUMTA 581 343, INDIA

Telephone: 91-08386-223426, 09342470560 (Dr. Prakash Mesta)  
 E Mail: cestvr@ces.iisc.ernet.in, mdschandra@yahoo.com,  
 prakashhonavar@gmail.com  
 Web URL : <http://ces.iisc.ernet.in/energy/>

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

CES/TVR/CCP/100504/2016

### “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 5 September 2016
7. Study reports should be sent to our office by end of 31 August-2016.
8. All students who submit good reports will be invited for taluk level presentation of reports in September /15<sup>th</sup> October 2016.
9. Students selected in the taluk level can rework and improve their reports and submit final reports before October 2016.
10. Final presentations will be held during Lake 2016 and classwise **Young Ecologists Award** will be given at the conference
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)**

**Siddana Bavi Raod, Gandhi Nagar, Kumta-581 343**

For more information contact:

**Dr. Prakash Mesta, Phone: 08386 223426, Mobile: 9342470560**

**e-mail: [prakashhonavar@gmail.com](mailto:prakashhonavar@gmail.com), [prakash\\_honavar@ces.iisc.ernet.in](mailto:prakash_honavar@ces.iisc.ernet.in)**

*Organised by*

**Energy and Wetland Reserch Group  
 Centre For Ecological Sciences  
 Indian Institute of Science, Bangalore-12  
 E-Mail: [cestvr@ces.iisc.ernet.in](mailto:cestvr@ces.iisc.ernet.in)  
 Phone: 080-22933099; 23600985**

**MY VILLAGE BIODIVERSITY DOCUMENTATION FORMAT**

(Note: Village means revenue village)

<b>Village name :</b>	<b>Student's names</b>	<b>Class</b>
<b>Panchayat name :</b>	1.	
<b>Taluk :</b>	2.	
<b>Name of school Address of school with phone no. &amp; email :</b>	<b>Name of guide teacher</b>	
	<b>Phone no :</b>	

- \* **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) :		
b)	<b>Rocky places (Name &amp; localities)</b>	<b>Rock types (write local names)</b>	
i			
ii			
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 sand is removed from sea shore?		
f)	Mining details (record if any metal ore is removed from the village):		

\* Use extra sheets for writing if necessary

### 3) WATERSCAPE ELEMENTS OF THE VILLAGE

Waterscape elements		Water availability (✓)												
a)	Name of the river, if any:	J	F	M	A	M	J	J	A	S	A	N	D	
b)	Stream names: _____ Name of perennial streams if any: i) _____ ii) _____ iii) _____													
c)	Name of perennial springs if any: _____													
d)	Waterfalls: Name(Height): i) _____ ii) _____													
e)	Name of any dam in the village:													
f)	Names or numbers of check dams:													
g)	Backwater areas:													
h)	Swampy places if any with local name:													
i)	<b>Ponds and Lakes</b>													
	Name	Area in acres	No. of months with water (✓)											
			J	F	M	A	M	J	J	A	S	A	N	D
			J	F	M	A	M	J	J	A	S	A	N	D
			J	F	M	A	M	J	J	A	S	A	N	D
			J	F	M	A	M	J	J	A	S	A	N	D
			J	F	M	A	M	J	J	A	S	A	N	D
			J	F	M	A	M	J	J	A	S	A	N	D
			J	F	M	A	M	J	J	A	S	A	N	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

Plant name	Availability			Parts used for medicine	Uses
	High	Med	Less		

\*Use extra sheets for writing if necessary

**ii) Medicinal plants collection and trade**

List medicinal plants that are grown by villagers in their own gardens/farms for sale

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

\*Use extra sheets for writing if necessary

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

Name of collector	Medicinal plants collected for sale	Agency/name of purchasers	Demand		
			good	moderate	poor

\*Use extra sheets for writing if necessary

**B) Uses of non-cultivated plants for food**

Plant name	Availability			Part used for food	Uses
	High	Med	Less		

\*Use extra sheets for writing if necessary

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

Plant name	Availability			Part used	Uses
	High	Med	Less		

\*Use extra sheets for writing if necessary

**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

\*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)**

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

\*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)

\*Use extra sheets for writing if necessary

### 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. 8 quintals/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

\*Use extra sheets for writing if necessary

### iv) Model agriculturists in the village

Names	Why he/she is considered model?

\*Use extra sheets for writing if necessary

### 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)

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

\* Please use extra sheets

### ii) Special characters of horticultural crop varieties

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

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

\*Use extra sheets for writing if necessary

**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**

Name	No.

\*Use extra sheets for writing if necessary

**vii) Methods for ripening of fruits**

Name of farmers	Crops	Fruit ripening methods you apply

\*Use extra sheets for writing if necessary

**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 extra sheets for writing if necessary

**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	Features															
	a	b	c	d	e	f	g	h	i	j	K	l	m	n	o	p

- Water conservation methods adopted
- Soil conservation methods adopted
- Animal husbandry is part of the system
- Bee keeping is part of system
- Gobar gas is used
- Vermi-compost is made
- Preparation of bio-pesticides; pesticides are not used for rice crops and vegetables
- Solar lamps; solar drier; improved stoves like Astra Ole
- 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.
- No fuelwood is purchased from outside
- No fulewood is collected from forest
- Crop rotation is practiced in rice fields (mention what crops are grown after rice is harvested)
- List fodder crops grown in the farm (including grasses, shrubs and trees)
- At least one traditional rice variety is grown (mention name:.....)
- Poultry is part of farming system
- 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)	<b>Village Forest Committee (VFC)</b> is present in the village		
	<b>VFC</b> is active/inactive/ moderately active (tick right choice)		
b)	<b>Biodiversity Management Committee (BMC)</b> is formed in the Panchayat :		
	<b>BMC</b> is active / inactive (tick right choice)		
c)	<b>Peoples' Biodiversity Register (PBR)</b> 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**  
(without use of chemical pesticides and fertilizers) for any crops

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

\*Use extra sheets for writing if necessary

- iii) **List farmers who use biopesticides**

Name of farmer	Crop	Disease/insect	Describe biopesticide used

\*Use extra sheets for writing if necessary

- iv) **What biopesticides are used by you?**

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

\*Use extra sheets for writing if necessary

**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

**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

Co-operative societies	Main activities

\*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	Type

\*Use extra sheets for writing if necessary

**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			Changes in numbers		
	Common	Moderate	Rare	Increasing	Decreasing	No change
<b>Mammals (including bats)</b>						
<b>Birds</b>						
<b>Reptiles (including snakes &amp; turtles)</b>						
<b>Fishes</b>						
<b>Insects (including butterflies &amp; honeybees)</b>						
<b>Other animals</b>						

\*Use extra sheets for writing if necessary

**B) Knowledge on wild animals**

Name of person interviewed	Species	Seasons present	Where present?	Numbers		
				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

**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)

---

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, bufflo, 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)	
	1	
	2	
	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 sheep diversity

Name of persons	Sheep breeds	Numbers

## v. Details regarding Poultry farmers

Name of farmers	Chicken varieties	Numbers

**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

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

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

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

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

**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 (ltrs) (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)**

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

**xi. Production of cattle dung**

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

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

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)

**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

\*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)**

---

---

---

**vii. What are the medicinal uses of honey?**

---

---

---



**8) ENERGY SOURCES****A) Availability and uses of plant fuel**

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

**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

**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

\*Use extra sheets for writing if necessary

### 11) Details on fishing communities

**Note:** Interview five fishermen in the village

Name		Mention the villages adjacent to his fishing grounds	Mode of Fishing												
			Hook		Net		Trawler net		Purseiner net		Multi day trawler				
Fishing area (√)															
Sea			No of days of fishing (√)												
Estuary		Month	J	F	M	A	M	J	J	A	S	A	N	D	
river		No. of fishing days													
Backwater		Average Income/day													
Pond															
others		No. of family members depending on you													

\*Use extra sheets for writing if necessary

### 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)	Ownership Private/community/govt	Water sources in or near devarabana*(✓)											
				J	F	M	A	M	J	J	A	S	A	N	D

[illegible]

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

**13) MAKE A LIST SOME WILD PLANTS IN THE DEVARAKADU**

	Name of the banana	plants
a)		
b)		
c)		
d)		

#### 14) MAKE A LIST OF ANIMAL DIVERSITY OF DEVARAKADU

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

**15) VILLAGE STATISTICS** (collect details from village accountant's office from *Adarshataakta*) – attach separate sheet

\*\*\*\*\*