

## Peoples' Biodiversity Register (PBR): General Details

**Name of the Panchayat Samiti:** Bhalwal Lower

**Taluk/Tehsil:** Bhalwal

**District:** Jammu

**State/UT:** Jammu And Kashmir

**Geographical Area of the panchayat Samiti:** 950 Hactares

**Population Of the Panchayat samiti...Total** 18000

**Male=** 9700

**Female =** 8300

**Habitat and Topography:** Kandi and Plains

**Climate (Rainfall, Temperature and other weather patterns):** Humid, Sub -Tropical Climate

**Land Use (Nine fold classification available with village records):** Agriculture

**Date, Month and Year of PBR preparation:** 31/10/2019

**Management Regime:** Reserve Forest (RF)/Joint Forest Management(JGM)/Protected Areas(PA)/ Community Owned and Managed Forest(COM) 576 Ha Area Protected by Forest

## Annexure 1

**Details of Biodiversity Management Committee (BMC) of the panchayat (One elected Chairperson and six persons nominated by the local body; not less than one third to be women and not less than 18% belonging to SC/ST)**

**1) Name of the Chairperson:** Pallvi Varma

**Age:** 37

**Gender:** Female

**Address:** Mishriwala

**Area of specialization:**

**2) Name:** Rimpay

**Age:** 33

**Gender:** Female

**Address:** Mishriwala

**Area of specialization:**

**3) Name:** Renu Bala

**Age:** 25

**Gender:** Female

**Address:** Mishriwala

**Area of specialization:**

**4) Name:** Ankit Sharma

**Age:** 24

**Gender:** Male

**Address:** Mishriwala

**Area of specialization:**

**5) Name:** Rattan Singh

**Age:** 90

**Gender:** Male

**Address:** Mishriwala

**Area of specialization:**

**6) Name:** Sushil Sharma

**Age:** 35

**Gender:** Male

**Address:** Mishriwala

**Area of specialization:**

**7) Name:**

**Age:**

**Gender:**

**Address:**

**Area of specialization:**

## Annexure 2

### List of Vaid, hakims and traditional health care (human and livestock) practitioners residing and or using biological resources occurring within the jurisdiction of the village

1) Name: Phangu Ram

Age: 70

Gender: Male

Address: Pakhiyan

Area of Specialization: Orthopaedic

Location from which the person accesses biological material:

Perception of the practitioner on the resource status:

Medicinal use:

2) Name:

Age:

Gender:

Address:

Area of Specialization:

Location from which the person accesses biological material:

Perception of the practitioner on the resource status:

Medicinal use:

3) Name:

Age:

Gender:

Address:

Area of Specialization:

Location from which the person accesses biological material:

Perception of the practitioner on the resource status:

Medicinal use:

**Annexure 3**

**List of individuals perceived by the villagers to possess Traditional Knowledge (TK) related to biodiversity in agriculture, fisheries, and forestry**

**1) Name:**

**Age:**

**Gender:**

**Address:**

**Area of specialization:**

**2) Name:**

**Age:**

**Gender:**

**Address:**

**Area of specialization:**

**3) Name:**

**Age:**

**Gender:**

**Address:**

**Area of specialization:**

**4) Name:**

**Age:**

**Gender:**

**Address:**

**Area of specialization:**

**Annexure 4**

**Details of schools, colleges, departments, universities, government institutions, non-governmental biodiversity in agriculture, fisheries, and forestry**

1) **Contact Person :**

**Name and Address: Rohit Varma Mishriwala**

2) **Contact Person**

**Name and Address:**

3) **Contact Person**

**Name and Address:**

4) **Contact Person**

**Name and Address:**

**You may add names of more institutions / NGO / Individuals, etc. if necessary.**

**Annexure 5****Details of access to biological resources and traditional knowledge granted, details of the collection fee imposed and details of the benefits derived and the mode of their sharing**

<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>
<b>S No</b>	<b>Name and address of the person/ institution/ company/ others</b>	<b>Local and Scientific Name of the biological material accessed and quantity</b>	<b>Date and resolution of the BMC and endorsement by the panchayat</b>	<b>Details of collection fee imposed</b>	<b>Anticipated mode of sharing benefits or quantum of benefits shared</b>
	Nil	Nil	Nil	Nil	Nil

*End of Part I*

**Part II**

**PBR - Formats  
AGROBIODIVERSITY**

**Format 1 Crop Plants**

1	2	3	4	5	6	7		8	9	10	11	12	13	14
S.No	Crop	Scientific Name	Local Name	Description of the variety	Landscape / Habitat	Local status		Special features	Uses	Associated TK	Other details	Cropping Season	Source of Seeds / Plants	Community / Known Holder
						Past	Present							
1	Rice	<i>Oryza sativa</i>	Dhan/ Munji	B-370(Fine & Long duration)	Planes / Low laying Areas	Normal	Normal	Basmati 370 is world wise known for its aroma	Food & Fodder	Provides energy fragrance and taste	-	Kharif (May to October)	Farmers / Department / Private Suppliers	Farmers
				Basmati 1121/(Coarse K39 K434 Rattana & Long duration)		Normal	Normal	Medium tall Coarse Grains						
2	Maize	<i>Zea mays</i>	Maka	Dekalb double	Sub tropical / Upland	Rare	Plenty	Tall, high yielding with yellow in colour)	Food & Fodder	Provides energy	-	Kharif (May to October)	Farmers / Department / Private Suppliers	Farmers
				K-517		Plenty	Rare	Average tall with yellow in colour						
				Ujala		Normal	Plenty							
				K-612		Plenty	Normal							
				Pro Agro-4794		Plenty	Normal	Tall, high yielding with yellow in colour)						
3	Moong	<i>Vigna radiata</i>	Moong	PDM-54	Hot / Humid of Sub tropical region	Normal	Rare	Medium	Food	Source of Vegetable Protein	Also suitable for green Manuring	Summer/ Kharif	Farmers / Department / Private Suppliers	Farmers
				SML-668		Normal	Plenty	High yielding Variety						
				IPM-0203		Normal	Rare	Excessive vegetative growth						
4	Mash	<i>Vigna mungo</i>	Mhaa	PU-19	Warm / Humid of Sub tropical region	Normal	Normal	High yielding Variety	Food	Source of Vegetable Protein	-	Summer/ Kharif	Farmers / Department / Private Suppliers	Farmers
				Utra		Normal	Normal							

5	Bajra	<i>Pennisetum americanum</i>	Bajra	Local Variety	Warm / Humid climate under Sandy loam Soil	Normal	Normal	Tall & low Yielding variety	Food & Fodder	Source of Energy	-	Kharif (May to October)	Farmers / Department / Private Suppliers	Farmers
				MHB-110		Normal	Normal							
6	Wheat	<i>Triticum aestivum</i>	Kanak	HD2967,PBW644	Cool Climate during early part of its growth	Plenty	Plenty	High yielding Variety	Food & Fodder	Source of Energy	Suitable for Chappati/Bread making	Rabi	Farmers / Department / Private Suppliers	Farmers
7	Lentil	<i>Lens esculantum</i>	Masar	PL406	Cool & dry	Normal	Normal	High yielding Variety	Food	Source of Protein/ Energy	Improve soil fertility	Rabi	Farmers / Department / Private Suppliers	Farmers
8	Chick-pea	<i>Cicer arietinum</i>	Chana	GNG-469/C 235	Cool & dry	Normal	Normal	High yielding Variety	Food	Source of Protein/ Energy	Improve soil fertility	Rabi	Farmers / Department / Private Suppliers	Farmers
9	Peas	<i>Pisum sativum</i>	Matar	Rachna	Cool & dry	Normal	Normal	Early maturing & High yielding	Food	Source of Protein/ Energy	Used as Vegetable	Rabi	Farmers / Department / Private Suppliers	Farmers
10	Onion	<i>Allium cepa</i>	Gamd	nasik Red. Red Coral, Monsanto And Local Spp.	local Planee areas	Abundant	Abundant	Bulbs Cash Crop	Vegetables	Vegetable	Staple Vegetable food	Rabi	Farmers / Department / Private Suppliers	
11	Mustard	<i>Brassica juncea/ Brassica compestris</i>	Sarson	Pusa Bold/ KOS -1	Cool & dry	Normal	Normal	Matures in 145-150 days with 40-42 % oil content	oil for Food	Source of energy i	vegetable Oil extracted from seeds used in cooking	Rabi	Farmers / Department / Private Suppliers	Farmers



12	Gobhi Sarson	<i>Brassica napus</i>	Gobhi Saria	GSL-1,DGS-1,Local	Cool & dry	Normal	Abundant	Annual Herb,yellow flowers bearing Pods	oil for Food,leaves used as vegetable	Source of energy i,calciam,copper,potassium	vegetable Oil extracted from seeds used in cooking	Rabi	Farmers / Department / Privaate Suppliers	Farmers
13	Linseed	<i>Linum usitatissimum</i>	Alsi	LC 54	Cool & dry	Normal	Normal	Medium duration	Food & fiber	Source of energy in the shape of Oil	Medicinal,i ndustrial & domestic use	Rabi	Farmers / Department / Privaate Suppliers	Farmers
14	Potato	<i>Solanum tuberosum</i>	Aalo	Kufri Sindhuri,Kufri Badsha, local	Potato is an herbaceous annual,requires cool weather,mostly rainfed conditions	Abundant	Abundant	Tubers are round to ovoid, creamish white to light red in colour with shallow eyes	Under ground tubers are used as vegetable,chips etc	-	High carbohydrate,provide high n energy value	Rabi	Farmers / Department / Privaate Suppliers	Farmers
15	Toria	<i>Brassica j. rape cv. Toria</i>	Toria	RSPT-1,RSPT-2,Local var.	Cool & dry with bright sunshine	Normal	Normal	Short durationAnnual Herb	oil for prepration of Food	Source of energy i, calciam, copper, potassium	vegetable Oil extracted from seeds used in cooking	Between Kharif & Rabi season	Farmers / Department / Privaate Suppliers	Farmers
16	Sesame	<i>Sesamum indicum</i>	Til	Punjab Til No.1/local	Warm / Humid of Sub tropical region	Normal	Normal	Medium Yielding	Food	Source of Vegetable oil	Religiuos and medicinal value	June - Oct.	Farmers / Department / Privaate Suppliers	Farmers

17	Sugarcane	<i>Saccharum officinarum</i>	Ganna	COJ-64,COJ-81	Sub Tropical	Rare	Rare	Long duration crop for Nine months	Food	Source of energy in the shape of Gur/Sugar	Sugar cane Juice used as preferred drink for instant source of energy during summer besides beating heat	Spring season	Farmers / Department / Private Suppliers	Farmers
18	Chilli	<i>Capsicum spp</i>	Mirchi	Pusa Jawala, CH-1	Tropical/sub tropical vegetable, grows well in warm humid conditions	Abundant	Abundant	Pungency and flavor	Used as spice, medicinal value	-	Contains good amount of vitamin A&C	winter season	Farmers / Department / Private Suppliers	Farmers
19	Tomato	<i>Solanum lycopersicum</i>	Tamater	Pusa rubi, Pusa early dwarf, Manisha Plus/local	Warm season crop	Abundant	Abundant	Stems are woody and weak, and tend to vine over other types of plants.	Used as vegetable, salad, soup, Sauce	rich source of Ascorbic acid	Tomatoes are also packed with vitamins A and C, calcium, potassium.	Rabi	Farmers / Department / Private Suppliers	Farmers
20	Okra	<i>Abelmoschus esculentus</i>	Bindi	Varsha uphar, Arka Anamika	Tropical/sub tropical vegetable, Hot and humid climate	Abundant	Abundant	Tender green fruit used as vegetable	Mainly vegetable	Source of Fiber	Contains dietary fibers, protein and carbohydrates	Summer/ Kharif	Farmers / Department / Private Suppliers	Farmers

21	Cucumber	<i>Cucumis sativus</i>	Kheera	Kheera local, JL	Grows in all climatic conditions, Tropical, Subtropical & temperate	Abundant	Abundant	Limbing annual bearing elongated thick cylindrical fruit	Mainly used as salad	-	It also used as antipyretic and causing cooling effect	Summer/ Kharif	Farmers / Department / Private Suppliers	Farmers
22	Bottle gourd	<i>Lagenaria siceraria</i>	Lokki	PSPL/Punjab Long	Summer & rainy season crop	Abundant	Abundant	Vines vigorous, profusely branched	Subzis, curries and gravies.	-	It also contains essential vitamins and minerals	Summer/ kharif	Farmers / Department / Private Suppliers	Farmers
23	Bitter gourd	<i>Momordica charantia</i>	karela	Pusa Domausmi/Kundan	Warm and Humid climate	Abundant	Abundant	Herbaceous climbing annual with ridged stems	Vegetable and medicinal value	-	Used for maintaining low sugar level	Summer/ kharif	Farmers / Department / Private Suppliers	Farmers
24	Beans	<i>Phaseolus Spp.</i>	Phaliya	Contender	Cool weather crop/Sandy/loamy soil	Abundant	Abundant	Tender green pods are used as vegetable	Mainly vegetable	Source of energy in the shape of Gur/Sugar	High value protein, Vitamin B1, B2 < B6 and Manganese	Summer season	Farmers / Department / Private Suppliers	Farmers
25	Cauliflower	<i>Brassica oleracea var. botrytis</i>	Fol gobi	Pusa snow ball, Pusa Katki, local Girja	Both subtropical & intermediate	Abundant	Abundant	White and tender head, curd formed from shortened flower part	Curd Mainly used as vegetable	-	Also good source of protein, carbohydrate, phosphorus & iron	Rabi	Farmers / Department / Private Suppliers	Farmers

26	Cabbage	<i>Brassica oleraceae var. capitata</i>	Band gobi	Golden Acre, Pride of India, Green Flesh	Both sub tropical & intermedia te	Abundant	Abundant	Round head with light to dark green colour	Head Mainly used as vegetable, salad	-	Also good source of protein, carbohydrate, phosphorus & iron	Rabi	Farmers / Department / Private Suppliers	Farmers
27	Knol khol	<i>Brassica oleraceae var. gongyloides</i>	Kadam	White vienna, Purple vienna	cool & moist climate/ sub tropical	Abundant	Abundant	Swollen stem, green/purple with long and broad leaves	Swollen stem and leaves are consumed as vegetable	-	-	Rabi	Farmers / Department / Private Suppliers	Farmers
28	Spanich	<i>Spinacea oleracea</i>	Palak	All Green, Delta	Cool season Crop, thrives well on well drained loam soils	Abundant	Abundant	Tender green leaves & root used as Vegetable	Tender green leaves used as leafy Vegetable	-	Vitamins A and C, fiber, folic acid, and other nutrients	Rabi	Farmers / Department / Private Suppliers	Farmers
29	Radish	<i>Raphanus sativus</i>	Mulli	Japanes White, Koren Etc	Cool season Crop, thrives well on well drained Sandy loam soils	Abundant	Abundant	Tender green leaves & roots used as Vegetable	Modified Roots are used as Vegetable & Salad	-	Full of vitamin A, C, E, B6, potassium, and other minerals,	Rabi	Farmers / Department / Private Suppliers	Farmers
30	Carrot	<i>Daucus carota</i>	Gajer	Pusa Kesar, local	Cool & moist climate/ sub tropical & intermedite	Abundant	Abundant	Modified Root is eatable	Root is used as Vegetable, Salad, Juice, Sweet Dish, Preserve etc.	-	Good source of carotene, lutein, and zeaxanthin. Vit A, C, B6, Folic acid	Rabi	Farmers / Department / Private Suppliers	Farmers

31	Turnip	<i>Brassica rapa</i>	Gunglu /Shalgam	PTWG/Local	Cool &moist climate/sub tropical&int ermedite	Abundant	Abundant	Modified Root is eatable	Root is used as Vegetable , Salad,.	-	Good source of Vit.C,Diatr y Fiber &Potasium	Rabi	Farmers / Department / Privaate Suppliers	Farmers
32	Exocitic Vegetables	<i>Broccoli// Chinese Cabbage / Capsicum etc.</i>		Prevelent Hybrid varieties	Cool &moist climate/sub tropical&int ermedite	Rare	Abundant	All Plants Carats and Fruits are eadable Ric Source of antioxidants	Salad and Vegetable		Ric Source of Multivitimi ns, Minierals and Antioxident s	Rabi	Farmers / Department / Privaate Suppliers	Farmers



### Format 03 Fodder Crop/ Species

1	2	3	4	5		6	7		8	9	10	11	12
S. No.	Plant	Scientific Name	Local Name	Habit	Area (Approx.) Rabi/ Kharif	Landscape/ Habitat	Local Status		Part Used	Associated TK	Other details(mode of use)	Sources of Seeds and Plants	Community Kn. Holders
							Past	Present					
1	Barseem	<i>Trifolium alexandrium</i>	Chhatala	Annual		Sub Humid & moderately cool	Abundant	Abundant	Entire Plant	Nutritious & palatable fodder, Source of energy for animals	Fodder	Farmers / Department/ Private Suppliers	Farmers
2	Oats	<i>Avena spp.</i>	Javi	Annual		Cool & moist climate	Abundant	Abundant	Above ground part of plant	Nutritious & palatable fodder,	Fodder		Farmers
3	Sorghum	<i>Sorghum spp.</i>	cherri	Annual		Warm & humid	Abundant	Abundant	Above ground part of plant	Source of energy	Fodder	Farmers / Department/ Private Suppliers	Farmers
4	Maize	<i>Zea mays</i>	Makki	Annual		Warm & humid	Abundant	Abundant	Above ground part of plant	Source of energy	Food & fodder		Farmers
5	Bajra	<i>Pennisetium americanum</i>	Bajra	Annual		Warm & humid	Abundant	Normal	Above ground part of plant	Source of energy	Food & fodder	Farmers / Department/ Private Suppliers	Farmers
6	Cowpea	<i>Vigna unguiculata</i>	Rongi	Annual		Warm & humid	Abundant	Normal	Above ground part of plant	Kharif Legume with high protein	Fodder		Farmers

### Format 04 Weeds

1	2	3	4	5	6	7	8		9	10	11	12	13
S. No.	Plant	Scientific Name	Local Name	Affected Crop	Habit	Landscape/ Habitat	Local Status		Uses if any	Management options	Associated TK	Other details	Community Kn. Holders
							Past	Present					
1	Pig Weed	<i>Amaranthus viridis</i>	Jangli Choulai	Rice, Maize & sugarcane	Annual herb	Agri. Land	Normal	Normal	Eaten as boiled green veg	Physical, Mechanical, Chemical	Rich Source of protein & amino acid	Also Used as medicinal herb	Farmers
2	Lamb's quarters	<i>Chenopodium album</i>	Bathua/ Kanh/Wild Spinach	Wheat, Pea, Potato	Annual herb	Agri. Land	Normal	Normal	Eaten as boiled green veg	Physical, Mechanical, Chemical	Rich Source of protein, Vit. A, Calcium, Phosphorous & potash	Annual feed & fermentation of Beverages	Farmers
3	Nut Grass	<i>Cyperus rotundus</i>	Dilla/Motha	Paddy, maize, sugarcane, vegetable	Perennial	Agri. & Non Agri. Land	Abundant	Abundant	Fodder & Animals	Physical, Mechanical, Chemical	Nil	Traditionally used as medicine	Farmers
4	Barnyard Grass	<i>Echinochloa crusgalli</i>	Swank	Paddy	Annual	Agri. Land	Abundant	Abundant	Fodder & Animals	Physical, Mechanical, Chemical	Nil	Nil	Farmers
5	Carrot grass	<i>Parthenum hysterophorus</i>	Congress Grass	Gardens & sugarcane ratoon crops & other crops	Annual	Agri. Land	Abundant	Abundant	Nil	Physical, Mechanical, Chemical	Abnoxious weed difficult to manage		Farmers
6	Bur Clover	<i>Medicago denticulata</i>	Maina	Wheat Grass Peas	Perennial herbaceous legume	Agri. Land	Normal	Normal	Fodder, vegetable & green manure	Mechanical, Chemical	Nil	Improves Soil fertility	Farmers



7	Canary Grass	<i>Phalaris minor</i>	Sitti/gilli danda	Wheat Grass Peas, mustard	annual	Agri. Land	Abundant	Abundant	Fodder & forage	Mechanical, Chemical	Source for High quality protein	Agri. Land	Farmers
8	Meadow Pea	<i>Lathyrus aphaca</i>	Matri	Wheat Grass Peas, mustard	annual	Agri. Land	Normal	Normal	Fodder	Mechanical, Chemical	Nil	Agri. Land	Farmers
9	Canada Thistle	<i>Cirsium arvense</i>	Leh	Wheat gram, Barley	Perennial	Agri. & wasteLand	Normal	Normal		Mechanical, Chemical	Nil	Agri. Land	Farmers
10	Bang	<i>Cannabis indica</i>	Bang	Kharif Crops	Perennial	Agri. & wasteLand	Normal	Normal		Mechanical, Chemical	Nil	Agri. Land	Farmers
11	Nilibuti	<i>Ageratum conyzoides</i>	Nilibuti	Rabi Crops	Perennial	Agri. & wasteLand	Normal	Normal		Mechanical, Chemical	Nil	Agri. & wasteLand	Farmers
12	Dub Grass	<i>Cynodon dactylon</i>	Dub Grass	Rabi/ Kharif	Perennial	Agri. & wasteLand	Abudant	Abudant	Fooder	Mechanical, Chemical	Nil	Agri. & wasteLand	Farmers
13	Wild oats	<i>Avena fatua</i>	Jangli Javi	Oats	Annual herb	Sub Tropical	Rare	Rare	Fodder	Above ground parts	-	Nutratve Fodder for Animals	Farmers
14	Wild Rice	<i>Echinochloa colonum</i>	Swanki	Paddy	Annual herb	Sub Tropical	Rare	Rare	Fodder	Above ground parts	-	Nutratve Fodder for Animals	Farmers

15	Jhonson Grass	<i>Sorghum helepense</i>	Beru grass	Sorghum	Perinneal	Sub Tropical	Rare	Rare	Fodder	Above ground parts	-	Nutrative Fodder for Animals	Farmers
16	wild onion	<i>Allium humale</i>	Jangli payas	Onion	Annual herb	Temprate/sub tropical	Rare	Rare	Food and medicine	All parts used	-	-	Farmers

### Format 05 Pests of Crops

1	2	3	4	5	6	7	8	9	10	11
S. No.	Insect /Animal	Scientific Name	Local Name	Habit	Habitat	Time/Season of Attack	Management Mechanism	Associated TK	Other details	Community Kn. Holders
1	Mustard aphid	<i>Lipaphis erysimi</i>	aphid	Sucking pest	Attacks mustard & other cucurbit crops	Dec-March	Timely sowing of crop & Chemical, Biological & Mechanical	-	Major threat to oil seed crops of Rabi	Farmers
2	Termite	<i>Microtermis obesi/ Odontoremes obesus</i>	Telle	Chewing & biting	Wheat & other crops	Nov-May	Cultural & Chemical measures	-	Major threat to unirrigated crops	Farmers
3	Blister beetle	<i>Mylabris spp.</i>	Ghuri	Chewing & biting	Attacks Maize, Bhindi & Pulses	June-Oct	Mechanical& Chemical measures	-	Insectivorous feed on grasshopper	Farmers
4	Cereal leaf Beetle	<i>Oulma melanopus</i>		Chewing & biting	Attacks Maize	Aug-Sep	Chemical measures	-	Most recent occurrence	Farmers
5	Red Pumpkin Beetle	<i>Raphidopalpa foveicellis</i>	Lal Kaddu Beetle	Chewing & biting	Cucurbits	March-Oct	Chemical measures	-	Most common in fields of Cucurbits	Farmers
6	Cucurbits fruit fly	<i>Bactrocera cucurbitae</i>	Melon fly	Chewing & biting	Attacks Pumpkin, cucumber & gourds	Throughout the year	Mechanical & Chemical, Pheronon trap	-	Danger to all cucumber crops	Farmers
7	Maize stem Borer	<i>Chilo partellus</i>	Sundi /Tana-shedak	Chewing & biting	Attacks Maize, sorghum , Bajra & sugarcane	July to sept	Mechanical& Chemical measures	-	Causes dead hearts in young plants	Farmers

8	Grasshopper	<i>Hygro blasses Negro / Hieroglyphus nigropletus</i>	Tidi	Maize and Paddy	Maize, Paddy, Jojr Bajra	July to sept	Mechanical& Chemical measures	-	Eats leaves	Farmers
9	Rice Gandhi Bug	<i>Leptocorzia varcornis</i>	Gandi Bug	Paddy	Paddy at miliking stage	July to Oct.	Mechanical& Chemical measures	-	Pierce the grains at miliking stage	Farmers
10	<i>Syzygium cimini</i>	<i>Spodoptera Frugiperda</i>	Caterpillar	All Crops	Defoliaties Major crops	Through the year	Mechanical& Chemical measures	-	Defoliates all crops	Farmers
11	Leaf Floder	<i>Cnaphalocrocis meddialis</i>	Ctter Pillers	Feeds on leavs abd stem	Attacts on Paddy Leaves	June to Oct.	Mechanical& Chemical measures	-	Major threats	Farmers
12	Stem Borer	<i>Tryporza incrtules</i>	Tana shedat/ Catter pillers	Bores into stem results into dead heart	Crops Plants	June to Oct.	Mechanical& Chemical measures	-	Major threats	Farmers
13	Cut worm	<i>Agrotis ipsilon</i>	Ludi	Cuts stem and leaves	Wheat sorguham maize and other	Throughout the year	Mechanical& Chemical measures	-	Major threats	Farmers
14	White Fly	<i>Aleyrodidae</i>		Suks the shap of plants	Sobin Bhindi and all pulses crops	April to Oct.	Chemical measures	-	Major threats	Farmers
15	Field rats	<i>Ratus meltada</i>	Chouha	Nocturnal in habit	Attacks all crops	Throughout the year	Mechanical& Chemical measures	-	Lives in burrows opening hidden in bushes	Farmers
16	Monkey	<i>Rhesus macaque</i>	Bander	Attacks agriculture crops	Forest & human habitat	Throughout the year	Traps & chemosterlization	-	Cause extensive damage to almost all crops,attacks humans	general public/ Farmers



### Format 7: Peoplescape

1	2	3	4	5	6	7	8	9	10	11
<b>Community &amp; Population</b>	<b>Families &amp; Major Occupation</b>	<b>Sub-Occupation</b>	<b>Depending Landscape</b>	<b>Major resources accessed and seasons of access</b>	<b>Landscape management practices</b>	<b>Resource management practices</b>	<b>Cast/ Tribe</b>	<b>Social condition</b>	<b>Nature of inhabitants</b>	<b>No. of HHs</b>
SC,St & General 1437	-	-	-	-	-	-	SC	Middle Class, BPL	-	335

Major occupation may be farming. Sub-occupations could be fishing, collection of NTFP animal husbandry, artisans, services  
 Examples of depending landscapes are agriculture landscape, rivers, forest etc.  
 Major resources accessed could be agriculture resources of different nature, fish, birds, water, mud, and etc  
 How the community manages the landscapes they use for satisfying different needs, their strategies and perception  
 How the community manages the resources they access for satisfying different needs, their strategies and perception, conflicts etc

**Format 8: Landscape**

1			2	3	4	5	6	7	8	9	10	11	12
Major Landscapes			Sub - Landscapes	Features and approx. Area	Ownership	General flora	General fauna	User groups	Management practices	General uses	Associated TK	Other details	Community accessed
Agricultural land	Pond	Fallow Land											
Plains & Kandi areas			Plains	hilly as well as	Private ,state lands,	Broad leaved mainly	Domestic animals, wildlife such as porcupine, jackal etc.	Public,as well as pvt,and Govt also		Plantation and agriculture			
			Hillocks	plain terrain with gentle slope	Private ,state lands,	Broad leaved and conifers	Domestic animals, wildlife such as porcupine, jackal etc.	Public,as well as pvt,and Govt also		Plantation and agriculture			

Provide a brief description of landscapes such as forests, plantations, cultivated land, estuary, pond, lake or other elements

### Format 9: Waterscape

1	2	3	4	5	6	7	8	9	10	11	12	13
Waterscape element type	Sub- type	Features and approx area	Ownership	General flora	General fauna	Major uses	User groups	Management practices	General uses	Associated TK	Other details	Community accessed
Ponds			Private land	kamal, Baryan,	Frogs , fishes, Torotoise, snakes, snail,	Cattles, washing cloths, irrigation, Drinking etc	public					
Tube well			Private land		Frogs , fishes, Torotoise, snakes, snail,	Cattles, washing cloths, irrigation, Drinking etc	public					
Hand pumps			Private		Frogs , fishes, Torotoise, snakes, snail,	Cattles, washing cloths, irrigation, Drinking etc	public					

Examples: Ponds, Streams, Rivers, Lake, Canal, Tubewell, Dug well etc.,



### Format 10 Soil Type

1	2	3	4	5	6	7	8	9	10
S.No.	Soil	Type	Colour	Features	Soil management	Plants/Crop Suitable	Flora and Fauna	Associated TK	Other Information
1	Sandy Loam	Type B	Soft Dark	Large particle size, Water drains Rapedily	Add compost, humus, Green Manuring, Decomposed manure etc improves soil quality for better plant growth	Beans, Tomato, Potato, Cucumber, onion, eggplants, carrot, Spinach etc.	Succulants like cacti, Lambs ear, etc.	-	Genrally not suitable for plants which need lot of water
2	Clay Loam	Type A	Light yellow to raddish colour	Small particles size, Texture dense and compact, retains water and nutrition	Provide good drainage, add organic manure in the form of compost or humus	Plants/Crop Suitable	Ornamental Plants/ grasses, plants with evergreen leaves, colourful Berries	-	Soil is good for wild varieties of crops, however drainage is a problem

**Format 11 Fruit trees**

1	2	3	4	5	6	7		8	9	10	11	12	13
Plants	Scientific Name	Local Name	Variety	Habit	Landscape / Habitat	Local Status		Source of Plants / Seeds	Seasons of Fruiting	Uses (Usages)	Associated TK	Others Details Market / Own Use	Community / Know Holder
						Past	Present						
Mango	<i>Mangifera indica</i>	Aam	Desi, Dusheri, Malta	Alternate Bearing	Plains	Plenty	Plenty	Nurseries	Jun-Aug	Fruit, Pickle, Preserves		Marketing, Own Use	
Citrus Fruit	<i>Citrus spp.</i>	Khatti, Galgal, Nimbu, Santra, Kinnoo etc.	Local Selection, Kagzi Lime etc.	Tree, Regular Bearing	Plains, mid hills	Plenty	Plenty	Nurseries	Through Out Year	Fruit, Pickle, Squashes etc		Marketing, Own Use	
Litchi	<i>Litchi chinensis</i>	Litchi	Culcatta, Dehradun	Tree, Regular Bearing	Plains	Plenty	Plenty	Nurseries	Jul - Aug	Fruit		Marketing	
Guava	<i>Psidium guajava</i>	Amrood	Local, L49 etc.	Tree, Regular Bearing	Plains, Lower Hills	Plenty	Plenty	Nurseries	Jul - Aug	Fruit		Marketing, Own Use	
Grapes	<i>Vitis vinifera</i>	Angoor	Local Dakh, Perlette	Vine, Regular Bearing	Plains, Mid Hills	Rare	Plenty	Nurseries	Jul - Aug	Fruit			
Aonla	<i>Phyllanthus emblica</i>	Ambla	Local Selection, NA-7	Tree, Regular Bearing	Plains	Plenty	Plenty	Nurseries, Local Collections	Nov.- Dec	Pickling Preserve etc		Marketing, Own Use	

Ber	<i>Ziziphus mauritiana lamk</i>	Ber	Gola, Varanasi	Tree, Regular Bearing	Plains	Plenty	Plenty	Local	Jul - Aug	Fruit		Own Use	
Jamun	<i>Syzygium cumini</i>	Jamun	Local Selection	Tree, Regular Bearing	Plains	Rare	Rare	Nurseries, Local Raised	Jul - Aug	Fruit		Own Use	
Pomegranate	<i>Punica granatum</i>	Anaar, Druni	Ganesh, Kandhari, Local	Tree, Regular Bearing, Shrub	Plains, Mid hills	Rare	Rare	Nurseries, Local Raised, Wild	May - Aug	Fruit, Anardana		Own Use	
Pear	<i>Pyrus spp.</i>	Nakh	Pathar Nakh, China Pear	Tree, Regular Bearing	Plains, mid hills	Rare	Rare	Nurseries	Aug - Sep	Fruit		Own Use	
Peach	<i>Prunus persica</i>	Aaroo	July Elberta, Quetta	Tree, Regular Bearing	Plains, mid hills	Rare	Plenty	Nurseries	Jun - Jul	Fruit		Marketing, Own Use	
Strawberry	<i>Fragaria × ananassa</i>	Strawberry	Chandler	Runner, Annual	Plains, mid hills	Rare	Plenty	Nurseries	Mar - Apr	Fruit		Marketing	
Karonda	<i>Carissa carandas</i>	Garnay	Local	Shrub	Hills/ Plains	Rare	Rare	Wild, Local	Jun - Aug	Fruit		Marketing, Own Use	
Papaya	<i>Carica papaya</i>	Papita	Local	Tree	Plains	Rare	Plenty	Nurseries, Locally Raised	Aug - Oct	Fruit		Own Use	

**Format 12: Medicinal Plants (Herbs, Shrubs, Trees etc.)**

1	2	3	4	5	6	7		8	9	10	11	12
Plant Type	Local Name	Scientific Name	Variety	Landscape/ Habitat	Source of plant/seeds	Local status		Uses (usage)	Part used	Associated TK	Other details market/own	Community/ Know.
						Past	Present					
Herbs	Dudlu	<i>Taraxacum officinale</i>		Temperate area	Root	Rare	Rare	nil	Leaves	N.A	N.A	Generally, held by community
Herbs	Tarad	<i>Dioscorea belophylla</i>		Lower shiwalik	Seed	Abundant	Abundant	nil	Root	N.A	N.A	Generally, held by community
Herbs	Jungli putna	<i>Mentha arvensis</i>		Lower shiwalik /Temperate area	Root	Abundant	Abundant	nil	Leaves	N.A	N.A	Generally, held by community
Shrubs	Trimuru	<i>Zanthoxylum aurmatum</i>		Lower shiwalik	Seed	Rare	Rare	nil	Fruit	N.A	N.A	Generally, held by community
Shrubs	brankad	<i>Adhatoda vesica</i>		Lower shiwalik	Seed	Abundant	Abundant	nil		N.A	N.A	Generally, held by community
Shrubs	Drainkdu	<i>Murraya koenigii</i>		Sub-Tropical area	Seed	Rare	Abundant	nil	Fruit	N.A	N.A	Generally, held by community
Shrubs	Dussa	<i>Colebrookia oppositifolia</i>		Lower shiwalik	Seed	Rare	Rare	nil	Flower	N.A	N.A	Generally, held by community
Shrubs	Thor/Shuu	<i>Euphorbia royleana</i>		Lower shiwalik	Seed	Abundant	Abundant	nil	Leaves	N.A	N.A	Generally, held by community
Shrubs	Bareyan	<i>Acorus calamus</i>		Lower shiwalik	Seed	Rare	Rare	nil	Leaves	N.A	N.A	Generally, held by community
Shrubs	Bhang	<i>Canabis sativa</i>		Lower shiwalik	Seed	Abundant	Abundant	nil		N.A	N.A	Generally, held by community

Tree	Amla	<i>Phyllanthus emblica</i>		Lower shiwalik	Seed	Abundant	Abundant	nil	Leaves/Fruit	N.A	N.A	Generally, held by community
Tree	Bair	<i>Ziziphus xylocarpa</i>		Lower shiwalik	Seed	Abundant	Abundant	nil	Stem	N.A	N.A	Generally, held by community
Tree	Bheda	<i>Terminalia bellerica</i>		Lower shiwalik	Seed	Rare	Abundant	nil	Fruit	N.A	N.A	Generally, held by community
Tree	Bill-Patre	<i>Aegle mermelos</i>		Sub-Tropical area	Seed	Abundant	Abundant	nil	Root	N.A	N.A	Generally, held by community
Tree	Drankh	<i>Melia azadirach</i>		Lower shiwalik	Seed	Abundant	Abundant	nil	Leaves	N.A	N.A	Generally, held by community
Tree	Harad	<i>Terminalia chebula</i>		Lower shiwalik	Seed	Abundant	Abundant	Good for digestion	Stem/Fruit	N.A	N.A	Generally, held by community
Tree	Jaman	<i>Syzygium cumini</i>		Lower shiwalik	Seed	Abundant	Abundant	maintains sugar level in human body	Leaves/Fruit	N.A	N.A	Generally, held by community
Tree	Kakad-Singhi	<i>Pistacia khinjuk</i>		Lower shiwalik	Seed	Rare	Rare	nil	Leaves/Fruit	N.A	N.A	Generally, held by community
Tree	Karal	<i>Bauhinia variegata</i>		Lower shiwalik	Seed	Abundant	Abundant	nil	Leaves/Flower	N.A	N.A	Generally, held by community
Tree	Khair	<i>Acacia catechu</i>		Lower shiwalik	Seed	Abundant	Abundant	nil	Leaves/Stem	N.A	N.A	Generally, held by community
Tree	Kringal	<i>Casia fistula</i>		Lower shiwalik	Seed	Abundant	Abundant	nil	Fruit	N.A	N.A	Generally, held by community
Tree	Lusada	<i>Cordia dichotoma</i>		Lower shiwalik	Seed	Rare	Abundant	nil	Leaves/Fruit	N.A	N.A	Generally, held by community
Tree	Mango	<i>Mangifera indica</i>		Lower shiwalik	Seed	Abundant	Abundant	nil	Stem/Fruit	N.A	N.A	Generally, held by community

Tree	Retha	<i>Sapindus mukorossii</i>		Lower shiwalik	Seed	Rare	Rare	nil	Fruit	N.A	N.A	Generally, held by community
Tree	Rumbal	<i>Ficus racemosa</i>		Lower shiwalik	Seed	Rare	Abundant	nil	Leaves	N.A	N.A	Generally, held by community
Tree	Sree	<i>Albizzia lebbeck</i>		Lower shiwalik	Seed	Abundant	Abundant	nil	Leaves/Stem	N.A	N.A	Generally, held by community
Tree	Talli	<i>Dalbergia sissoo</i>		Lower shiwalik	Seed	Abundant	Abundant	nil	Stem	N.A	N.A	Generally, held by community
Tree	Trimbal	<i>Ficus auriculata</i>		Lower shiwalik	Seed	Abundant	Abundant	nil	Leaves/Fruit	N.A	N.A	Generally, held by community
Tree	Tuni	<i>Toona ciliata</i>		Lower shiwalik	Seed	Abundant	Abundant	nil	Stem	N.A	N.A	Generally, held by community
Tree	Arjun	<i>Terminalia arjuna</i>		Lower shiwalik	Seed	Abundant	Abundant	nil	Leaves/Bark	N.A	N.A	Generally, held by community
Tree	Bheda	<i>Terminalia bellerica</i>		Lower shiwalik	Seed	Abundant	Abundant	nil	Leaves/Bark	N.A	N.A	Generally, held by community
Tree	Amla	<i>Emblica officinalis</i>		Lower shiwalik	Seed	Abundant	Abundant	nil	Leaves/Bark	N.A	N.A	Generally, held by community
Tree	Neem	<i>Azadirachta indica</i>		Lower shiwalik	Seed	Abundant	Abundant	nil	Leaves/Bark	N.A	N.A	Generally, held by community
tree	Khair	<i>Accacia catechu</i>		Lower shiwalik	Seed	Abundant	Abundant	nil	Leaves/Bark	N.A	N.A	Generally, held by community
Shrubs	Bhang	<i>Cannabis sativa</i>		Lower shiwalik	Seed	Abundant	Abundant	nil	Leaves/Bark	N.A	N.A	Generally, held by community

Note uses: Food/ Veterinary Medicine,/ Human Medicine (Sub-divisions like for children, women etc),/ Agricultural Purpose (Bio-pesticide) Other details: Propagation methods, / Harvesting period,/ Cultivated or collected from wild or both,/ Perennial/annual/seasonal

**Format 13: Ornamental Plants/ Trees/Climbers etc.**

1	2	3	4	5	6	7	8	9	10
Plant Type	Local Name	Scientific Name	Variety	Source of plant/seeds	Commercial/ non-commercial	Uses	Associated TK	Other details	Community/ Know. holder
Tree	kringal	<i>Casia fistula</i>		Flower Fruit	Non-Commercial	N.A	N.A	N.A	Generally, held by community
Tree	Gandera	<i>Nerium oleander</i>		Seed	Non-Commercial	N.A	N.A	N.A	Generally, held by community
Tree	Thub	<i>Erythrina indica</i>		Seed	Non-Commercial	N.A	N.A	N.A	Generally, held by community
Tree	Badah	<i>Salix alba</i>		Seed	Non-Commercial	N.A	N.A	N.A	Generally, held by community
Climber	Kareer	<i>Rosa acicularis</i>		Seed	Non-Commercial	N.A	N.A	N.A	Generally, held by community

**Format 14: Timber Plants / Trees**

1	2	3	4	5		6	7	8	9	10
Plant Type	Local Name	Scientific Name	Habitat	Local status		Wild/ home-garden	Other uses (multi)	Associated TK	Other details	Community/ Know. holder
				Past	Present					
Trees	Kiker	<i>Acacia nilotica</i>	Lower shiwalik	Rare	Rare	Wild	own	nil	nil	Generally, held by community
Trees	Mangoo	<i>Mangifera indica</i>	Lower shiwalik	Abundant	Abundant	Wild/ home-garden	own	nil	nil	Generally, held by community
Trees	Safeda	<i>Eucalyptus spp.</i>	Lower shiwalik	Rare	Abundant	Wild	commercial	nil	nil	Generally, held by community
Trees	Sree	<i>Albizia lebbeck</i>	Lower shiwalik	Abundant	Abundant	Wild	own	nil	nil	Generally, held by community
Trees	Talli	<i>Dalbergia sissoo</i>	Lower shiwalik	Abundant	Abundant	Wild	own	nil	nil	Generally, held by community
Trees	Tuni	<i>Toona ciliata</i>	Lower shiwalik	Abundant	Abundant	Wild	own	nil	nil	Generally, held by community
Trees	Popular	<i>Populus ciliata</i>	Lower shiwalik	Rare	Abundant	Wild	own	nil	nil	Generally, held by community
Trees	chir	<i>Pinus roxburghii</i>	Lower shiwalik	Rare	Rare	Wild	own	nil	nil	Generally, held by community
Trees	Jammun	<i>Syzygium cumini</i>	Lower shiwalik	Rare	Abundant	Wild	own	nil	nil	Generally, held by community



### FORMAT 15: DOMESTICATED ANIMALS

1	2	3	4	5	6	7		8	9	10	11	12
Animal Type	Local Name	Scientific Name	Breed (local/Hybrid)	Features	Method of keeping	Local Status		Uses	Associated TK	Commercial rearing	Other Detail	Community know holders
						Past	Present					
Cattle	Gau	<i>Bos indicus</i>	ND	Low yield	stall feeding	Abundant	Decrease	Dairy	Nil	No	Milk	All
Cattle	Jersy Gau	<i>Bos taurus</i>	CB Jersy	Dished face	stall feeding / semi intensive	Very few	Increase	Dairy	Nil	yes	Milk	All
Cattle	Amrecan Gau	<i>Bos taurus</i>	CB HF	Black and white spot	stall feeding / semi intensive	Very few	Increased	Dairy	Nil	Yes	Milk	All
Buffalo	Manj	<i>Bubalus bubalis</i>	Local	Low yield	stall feeding	Abundant	Decreased	Dairy	Nil	No	Milk	All
Buffalo	Punjabi Mais	<i>Bubalus bubalis</i>	Murrah /Graded	Black color body	stall feeding / semi intensive	Very few	Increased	Dairy	Nil	Yes	Milk	All
Horse	ghoda	<i>Equus caballus</i>	Local	Red color body	Backyard	Abundant	Decrease	Pack/ Cart	Nil	No	Pack/ Cart	All
Mule	khacchar	<i>E.assinus xE caballus</i>	Local	Black	Backyard	Abundant	Decrease	Pack/ Cart	Nil	No	Pack/ Cart	All
Poultry	Kukkar	<i>Galus domesticus</i>	Local	Enriched meat flavor	Backyard	Abundant	Decrease	Egg ,meat	Nil	No	Egg ,meat	All

Poultry	Syzygium cimini	<i>Galus domesticus</i>	Chabro	good egger	Backyard	few	Increased	Egg,meat	Nil	No	Egg ,meat	All
Poultry	Broiler	<i>Galus domesticus</i>	Hybrid	white color , fast growing	deep litter	few	Increased	meat	Nil	Yes	Meat	All
Poultry	Chakore	<i>Alectoris chukar</i>	Local	black and white stripes ,beak is short, strong, and orange in color	Backyard	few	Decrease	Egg,meat	Nil	Yes	Egg, Meat	All
Poultry	Parrot	<i>Psittaciformes</i>	Local	parrot green in colour with red beak	Backyard	few	Decrease	decorative	Nil	No	Nil	All
Poultry	Pigeon	<i>Columbidae</i>	Local	white color , fast growing	Backyard	few	Decrease	decorative	Nil	No	nil	All
Dog	Kutta	<i>canis familiaris</i>	Local	Nil	Pet ,Stray	Abundant	Abundant	Nil	Nil	No	Nil	All / stray
Cat	Billi	<i>felis catus</i>	Local	Grey /white color	Pet ,Stray	Abundant	Abundant	pet	Nil	No	Nil	All / stray
Rabbit	Khargosh	<i>Oryctolagus cuniculus</i>	White gaint	white	Pet ,wild	few	few	Pet	Nil	No	Nil	All / wild
Pig	Suar	<i>sus scrofa domesticus</i>	Yorkshir e cross	white	Domesticated	few	Increased	Meat	Nil	Yes	Nil	Sikh /Christians/ SCcommunity
Elephant	Haathi	<i>Loxodonta</i>	Asian elephant	Grey in colour	Pet ,wild	few	few	religious faith	Nil	No	Nil	All

**Format 16: Culture Fisheries**

1	2	3	4	5	6	7		8	9	10	11	12
Fish Type	Local name	Scientific Name	Variety	Features	Waterscape (Pond/bheri/ talao)	Local status		Uses	Associated TK	Commercial rearing	Other details	Community Know. Holders
						Past	Present					
Carp	Rohu	<i>Labeo rohita</i>	Indian Major Carp	Large Silver coloured fish, arched head	Pond	Available	Availabe	Own & Commercial use	Use as food as a good source of protein	Yes	-	25%
Carp	Catla	<i>Catla catla</i>	Indian Major Carp	large & broad head,grey scales,protruding lower jaw	Pond	Available	Availabe	Own & Commercial use	Use as food as a good source of protein	Yes	-	25%
Carp	Mrigal	<i>Cirrhinus mrigala</i>	Indian Major Carp	cycloid scales, mouth broad ,pharyngel teeth in 3 rows	Pond	Available	Availabe	Own & Commercial use	Use as food as a good source of protein	Yes	-	25%
Carp	Grass carp	<i>Ctenopharyngodo n idella</i>	Exortic Carp	Wide & scaleless head,terminal mouth,protracted upper jaw	Pond	Available	Availabe	Own & Commercial use	Use as food as a good source of protein	Yes	-	25%
Carp	Common Carp	<i>Cyprinus Carpio</i>	Exortic Carp	Have long dorsal fin,have small barbels,mouth opens in an accordion like fashion	Pond	Available	Availabe	Own & Commercial use	Use as food as a good source of protein	Yes	-	25%

Minor Carp	Mooree	<i>Channa spp</i>	Local	Snakehead fish, Air Breathing Fish	Pond	Available	Available	Own & Commercial use	Used as food as source of protein	-	-	25%
Minor Carp	Sole	<i>Channa marulius</i>	Local	Snakehead fish, Air Breathing Fish	Pond	Available	Available	Own & Commercial use	Used as food as source of protein	-	-	25%



**WILD BIODIVERSITY FORMAT 18: Trees, Shrubs, Herbs, Tubers, Grasses, Climbers etc**

1	2	3	4	5	6		7	8	9	10	11
Plant Type	Local Name	Scientific Name	Habit	Habitat	Local status		Commercial/ own use	Part collected	Associated TK	Other details	Community Knowledge Holder
					Past	Present					
Tree	Shisham	<i>Dalbergia sisoo</i>	Tree	Northern/ Sub-Tropical	Good	Moderate	Commercial/ own use	Stem, Timber	-	-	-
Tree	Khair	<i>Acacia catechu</i>	Tree	Northern/ Sub-Tropical	Good	Moderate	Commercial/ own use	Timber/ Firewood	Katha	-	-
Tree	Amla	<i>Emblica officinalis</i>	Tree	Northern/ Sub-Tropical	Good	Moderate	Commercial/ own use	Fruit	Food processing	-	-
Tree	Siris	<i>Albizzia lebbek</i>	Tree	Northern/ Sub-Tropical	Good	Moderate	Commercial/ own use	Timber/ Firewood	-	-	-
Tree	Chir	<i>Pinus roxburghii</i>	Tree	Northern/ Sub-Tropical	Good	Moderate	Commercial/ own use	Timber/ Firewood	Resin	-	-
Tree	Lecunia	<i>Leucaena leucocephala</i>	Tree	Northern/ Sub-Tropical	Good	Moderate	Commercial/ own use	Timber/ Firewood	-	-	-
Tree	Simbal	<i>Bombax cebia</i>	Tree	Northern/ Sub-Tropical	Good	Moderate	Commercial/ own use	Timber/ Firewood	-	-	-
Tree	Kamila	<i>Mallotus philippensis</i>	Tree	Northern/ Sub-Tropical	Good	Moderate	Commercial/ own use	Timber/ Firewood	-	-	-
Tree	Krangal	<i>Cassia fistula</i>	Tree	Northern/ Sub-Tropical	Good	Moderate	Commercial/ own use	Timber/ Firewood	-	-	-
Tree	Ber	<i>Ziziphus jujuba</i>	Tree	Northern/ Sub-Tropical	Good	Moderate	Commercial/ own use	Fruit	-	-	-
Tree	Plash	<i>Butea monosperma</i>	Tree	Northern/ Sub-Tropical	Good	Moderate	Commercial/ own use	Timber/ Firewood	-	-	-
Tree	Arjun	<i>Terminalia arjuna</i>	Tree	Northern/ Sub-Tropical	Good	Moderate	Commercial/ own use	Timber/ Firewood	-	-	-
Tree	Jamun	<i>Syzygium cumini</i>	Tree	Northern/ Sub-Tropical	Good	Moderate	Commercial/ own use	Timber/ Firewood	-	-	-
Tree	Santha	<i>Dodonaea viscosa</i>	Shrubs	Northern/ Sub-Tropical	Good	Moderate	Commercial/ own use	Timber/ Firewood	-	-	-

Tree	Amb	<i>Mangifera indica</i>	Tree	Northern/ Sub-Tropical	Good	Moderate	Commercial/ own use	Fruit	-	-	-
Tree	Kiker	<i>Acacia nilotica</i>	Tree	Northern/ Sub-Tropical	Good	Moderate	Commercial/ own use	Timber/ Firewood	-	-	-
Tree	Sagwan	<i>Tectona grandis</i>	Tree	Northern/ Sub-Tropical	Good	Moderate	Commercial/ own use	Timber/ Firewood	-	-	-
Tree	Safeda	<i>Eucalyptus</i>	Tree	Northern/ Sub-Tropical	Good	Moderate	Commercial/ own use	Timber/ Firewood	-	-	-
Tree	Bel	<i>Aegle marmelos</i>	Tree	Northern/ Sub-Tropical	Good	Moderate	Commercial/ own use	Leaves/ Fruit	-	-	-
Tree	kakoa	<i>Flacourtia indica</i>	Tree	Northern/ Sub-Tropical	Good	Moderate	Commercial/ own use	Fruit	-	-	-
Grass	Bamboo	<i>Dendrocalamus strictus</i>	Grass	Northern/ Sub-Tropical	Good	Moderate	Commercial/ own use	Sticks	-	-	-
Herbs	Bhang	<i>Cannabis sativa</i>	herbs	Northern/ Sub-Tropical	Good	Moderate	Commercial/ own use	Leaves	-	-	-
Shrub	Jojra	<i>Pupalia lappacea</i>	Shrubs	Northern/ Sub-Tropical	Good	Moderate	Commercial/ own use	-	-	-	-
Shrub	Garna	<i>Carissa spinarum</i>	Shrubs	Northern/ Sub-Tropical	Good	Moderate	Commercial/ own use	Fruit	-	-	-
Shrub	Panjphuli	<i>Lantana camara</i>	Shrubs	Northern/ Sub-Tropical	Good	Moderate	Commercial/ own use	-	-	-	-
Shrub	Gandila	<i>Nerium indicum</i>	Shrubs	Northern/ Sub-Tropical	Good	Moderate	Commercial/ own use	Flower	-	-	-
Shrub	Pansar	<i>Wendlandia heynei</i>	Shrubs	Northern/ Sub-Tropical	Good	Moderate	Commercial/ own use	-	-	-	-
Herbs	congress Grass	<i>Parthenium hysterophrous</i>	herbs	Northern/ Sub-Tropical	Good	Moderate	-	-	-	-	-
Tree	Badh	<i>Ficus religiosa</i>	Tree	Northern/ Sub-Tropical	Good	Moderate	-	-	-	-	-
Tree	Phulai	<i>Acacia modesta</i>	Tree	Northern/ Sub-Tropical	Good	Moderate	Commercial/ own use	Timber/ Firewood	-	-	-
Climber	Tarad	<i>Dioscorea belophylla</i>	Climber	Northern/ Sub-Tropical	Good	Moderate	Commercial/ own use	Roots			
Climber	Jungli bitter melon	<i>Momordica charantia</i>	Climber	Northern/ Sub-Tropical	Good	Moderate	Commercial/ own use	Fruit			
Climber	Purple yam	<i>Dioscorea alata</i>	Climber	Northern/ Sub-Tropical	Good	Moderate	-				

Climber	Striped cucumber	<i>Diplocyclos palmatus</i>	Climber	Northern/ Sub-Tropical	Good	Moderate	-					
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**Format 19: Wild Plant Species of Importance**

1	2	3	4	5	6
Sl.No	Local Name	Scientific Name	Variety	Importance(as economic,social,cultural etc.)	Status
1	Santha	<i>Dodonaea viscosa</i>	Shrub	Firewood	Good
2	Kanner/Lal Gandila	<i>Nerium indicum</i>	Shrub		Good
3	Daduni	<i>Punica grantum</i>	Shrub	Live Hedge fencing	Good
4	Brenker	<i>Adhatoda vasica</i>	Shrub	-	Good
5	Bhang	<i>Cannabis sativa</i>	Shrub	Medicinal	Good
6	Aakh	<i>Ipomea cornea</i>	Shrub	Soil binder	Good
7	pansar	<i>Wendlandia heynei</i>	Shrub	Firewood	Good

### Format 20: Aquatic Biodiversity

1	2	3	4	5	6		7	8	9
Local Name	Scientific Name	Variety	Features	Habitat	Local Status		Associated TK	Other details	Community/ Knowledge Holder
					Past	Present			
Snail	<i>Gastropoda</i>		Land snails have a strong muscular foot, they use mucus to enable them to crawl over rough surfaces and to keep their soft bodies from drying out.		Good	Good			
Carp	<i>Cyprinus carpio</i>		Dorsal fin base long with 17-22 branched rays and a strong toothed spine in front, pharyngeal teeth 5:5 teeth with flattened crowns.		Good	Good			
Brown trout	<i>Salmo trutta</i>		An average length of 40-80 cm with a maximum length of 140 cm the spawning behaviour of brown trout is similar to that of the closely related Atlantic salmon.		Good	Good			
Turtle	<i>Testudines</i>		Turtles spend most of their lives in water, they are adapted for aquatic life, freshwater turtles live in ponds and lakes, and they climb out of the water onto logs or rocks to bask in the warm sun		Good	Good			
Sago pondweed	<i>Potamogeton pectinatus</i>		is a perennial at a fast rate, it is in flower from May to September. The species is hermaphrodite (has both male and female organs) and is pollinated by water. It is noted for attracting wildlife.		Good	Good			
Lotus	<i>Nelumbo nucifera</i>		edible, with rhizome, seeds, and leaves have been used as folk medicine, Ayurveda and oriental medicine		Good	Good			

Water Spinach	<i>Ipomoea aquaticum</i>		it contains abundant quantities of water, iron, vitamin C, Vitamin A and other nutrients		Good	Good			
Watercress	<i>Rorippa nasturtium - aquaticum</i>		It contains a plethora of antioxidants, which may lower your risk of heart disease and several types of cancer it's also a good source of minerals that protect your bones		Good	Good			

**Format 21: Wild Aquatic Plant Species of Importance**

1	2	3	4	5	6
Sl.No	Local Name	Scientific Name	Variety	Importance	Trends
1	Lotus	<i>Nelumbo nucifera</i>		edible, with rhizome ,seeds, and leaves have been used as folk medicine, ayurveda and oriental medicine	
2	Water Spinach	<i>Ipomoea aquaticum</i>		it contains abundant quantities of water, iron, vitaminC, Vitamin A and other nutrients	
3	Watercress	<i>Rorippa nasturtium - aquaticum</i>		It contains a plethora of antioxidants, which may lower your risk of heart disease and several types of cancer it's also a good source of minerals that protect your bones	

### Format 22: Wild Plants of Medicinal Importance

1	2	3	4	5	6		7	8	9	10
Plant (Herb,Shrub, Tree)	Local Name	Scientific Name	Variety	Landscape/ Habitat	Local Status		Uses (usage)	Part used	Other details market/own use	Community/Knowledge Holder
					Past	Present				
Tree	Arjun	<i>Terminalia arjuna</i>	Tree	Northern/Sub-Tropical	Good	Good	Medicinal	Bark	-	-
Tree	Amla	<i>Emblica officinalis</i>	Tree	Northern/Sub-Tropical	Good	Good	Medicinal	Bark/ Fruit	-	-
Tree	Harad	<i>Terminalia chebula</i>	Tree	Northern/Sub-Tropical	Good	Good	Medicinal	Bark/ Fruit	-	-
Tree	Behra	<i>Terminalia bellerica</i>	Tree	Northern/Sub-Tropical	Good	Good	Medicinal	Bark/ Fruit	-	-
Tree	Sukchain	<i>Pongamia pinnata</i>	Tree	Northern/Sub-Tropical	Good	Good	Medicinal	Bark	-	-
Tree	Jamun	<i>Syzygium cumini</i>	Tree	Northern/Sub-Tropical	Good	Good	Medicinal	Fruit /seeds	-	-



**Format 24: Ornamental Plants**

1	2	3	4	5	6	7	8
Local Name	Scientific Name	Variety	Habitat	Commercial/Non-Commercial Uses	Associated TK	Any other Detail	Community/Knowledge Holder
Gandila	<i>Nerium indicum</i>	Shrub	Northern/ Sub-Tropical	-	-	-	-
Panjtara	<i>Tara spinosa</i>	Shrub	Northern/ Sub-Tropical	-	-	-	-
Bougainvillea	<i>Bougainvillea glabra</i>	Shrub	Northern/ Sub-Tropical	-	-	-	-
Gulmohar	<i>Delonix regia</i>	Tree	Northern/ Sub-Tropical	-	-	-	-

**Format 25:Fumigate/Chewing Plants**

1	2	3	4	5	6		7	8	9	10	11
Plant (Herb,Shrub, Tree)	Local Name	Scientific Name	Variety	Habitat	Local Status		Uses (Usage)	Part used	Associated TK	Other details(mode of use)	Community /Knowledge holder
					Past	Present					
Herb	Pudina	<i>Mentha spp.</i>		Homestead, agricultural land	Abudant	abudant	Spice	leaves			
Tree	curry tree	<i>Murraya koenigii</i>		moist forest and agricultral land	Abudant	abudant	Spice	leaves			
Herb	wild Tulsi	<i>Ocimum sanctum</i>		Moist soil	Abudant	abudant	Medicinal	leaves			



**Format26: Timber Plants**

1	2	3	4		5	6	7	8
Local Name	Scientific Name	Habitat	Local Status		Other Uses ,if any	Associated TK	Other Details	Community /Knowledge holder
			Past	Present				
Chir	<i>Pinus roxburghii</i>	Northern/Sub-Tropical	Good	Moderate	Commercial/ own use	Timber/ Firewood	-	-
Shisham	<i>Dalbergia sissoo</i>	Northern/Sub-Tropical	Good	Moderate	Commercial/ own use	Timber/ Firewood	-	-
Ber	<i>Ziziphus jujuba</i>	Northern/Sub-Tropical	Good	Moderate	Commercial/ own use	Timber/ Firewood	-	-
Sagwan	<i>Tectona grandis</i>	Northern/Sub-Tropical	Good	Moderate	Commercial/ own use	Timber/ Firewood	-	-
Safeda	<i>Eucalyptus</i>	Northern/Sub-Tropical	Good	Moderate	Commercial/ own use	Timber/ Firewood	-	-
Simbal	<i>Bombax ceiba</i>	Northern/Sub-Tropical	Good	Moderate	Commercial/ own use	Timber/ Firewood	-	-
Tunu	<i>Cidrela toona</i>	Northern/Sub-Tropical	Good	Moderate	Commercial/ own use	Timber/ Firewood	-	-
Jamun	<i>Syzygium cumini</i>	Northern/Sub-Tropical	Good	Moderate	Commercial/ own use	Timber/ Firewood	-	-





**Format 28: Wild Animal (Mammals,Birds,Reptiles,Amphibia,Insects,others)**

1	2	3	4	5	6	7		8	9	10	11
Animal Type	Local Name	Scientific Name	Habitat	Description	Season when seen	Local status		Uses ,if any	Associated TK	Other Details	Community Knowledge Holder
						Past	Present				
Wild Animal	Leopad	<i>Panthera Pardus</i>	Northern/ Sub-Tropical	-	Winter	Good	Good	-	-	-	-
Wild Animal	Squirrels	<i>Sciuridae</i>	Northern/ Sub-Tropical	-	-	Good	Good	-	-	-	-
Wild Animal	Boar	<i>Sus scofra</i>	Northern/ Sub-Tropical	-	-	Good	Good	-	-	-	-
Wild Animal	Indian Hare	<i>lepus nigricollis</i>	Northern/ Sub-Tropical	-	-	Good	Good	-	-	-	-
Wild Animal	Monkey	<i>Cercopithecidae</i>	Northern/ Sub-Tropical	-	-	Good	Good	-	-	-	-
Wild Bird	Red jungle fowl	<i>Gallus gallus</i>	Northern/ Sub-Tropical	-	-	Good	Good	-	-	-	-
Wild bird	Rose ringed parakeet	<i>Psittaculidae</i>	Northern/ Sub-Tropical	-	-	Good	Good	-	-	-	-
Wild Animal	Fox	<i>Vulpes</i>	Northern/ Sub-Tropical	-	-	Good	Good	-	-	-	-

Wild Animal	Porcupine	<i>Erethizon dorsatum</i>	Northern/ Sub-Tropical	-	-	Good	Good	-	-	-	-
wild insects	Grasshopper	<i>Parallelus</i>	Northern/ Sub-Tropical	-	-	Good	Good	-	-	-	-
wild insects	butterfly	<i>Chorthippus brunneus</i>	Northern/ Sub-Tropical	-	-	Good	Good	-	-	-	-
wild insects	bees	<i>Apis mellifera</i>	Northern/ Sub-Tropical	-	-	Good	Good	-	-	-	-
wild insects	ants	<i>Brachymyrmex patagonicus</i>	Northern/ Sub-Tropical	-	-	Good	Good	-	-	-	-
wild insects	Bumble bee	<i>Bombus</i>	Northern/ Sub-Tropical	-	-	Good	Good	-	-	-	-
Amphibia	Frog	<i>Euphlyctis cyanophlyctis</i>	Northern/ Sub-Tropical	-	-	Good	Good	-	-	-	-
Reptiles	Tortoises	<i>Testudines</i>	Northern/ Sub-Tropical	-	-	Good	Good	-	-	-	-
Reptiles	Snake	<i>Natrix</i>	Northern/ Sub-Tropical	-	-	Good	Good	-	-	-	-

## URBAN BIODIVERSITY

### Format 29: Flora

1	2	3	4	5	6	7
Sr. No.	Local Name	Scientific Name	Type of Plants	Habitat	Flowering Season	Remarks (Rare / Common etc.)

Note: Separate format should be used for road side plantation / Parks and Gardens / Housing estate / Commercial buildings/ other institutional areas, Private club premises and also for Aquatic (water) habitat and Terrestrial (land) habitat



**Format 31: Any other information of local importance**

<b>1</b>	<b>2</b>	<b>3</b>
<b>Sr. No.</b>	<b>Information of local importance</b>	<b>Remarks</b>
	none	

*End of Part II*