

Peoples' Biodiversity Register (PBR): General Details

Name of the Panchayat Samiti: Bhalwal Upper A

Taluk/Tehsil: Bhalwal

District: Jammu

State/UT: Jammu And Kashmir

Geographical Area of the panchayat Samiti: 8 sqkm

Population Of the Panchayat samiti...Total. 8000

Male= 5000 **Female =** 3000

Habitat and Topography: Kandi Area

Climate (Rainfall, Temperature and other weather patterns): Subtropical with moderate rainfall

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

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

Management Regime: Reserve Forest (RF)/Joint Forest Management(JFM)/Protected Areas(PA)/ Community Owned and Managed Forest(COM):-

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: Raj Dev Singh Jamwal

Age: 48

Gender: Male

Address: Bhalwal

Area of specialization:

2) Name: Sardha Sharma

Age: 45

Gender: Female

Address: Bhalwal

Area of specialization:

3) Name : Sonia

Age: 46

Gender: Female

Address: Bhalwal

Area of specialization:

4) Name: Mohd Hussan

Age: 64

Gender: Male

Address: Bhalwal

Area of specialization:

5) Name: Swran Singh Jamwal

Age: 66

Gender: Male

Address: Bhalwal

Area of specialization:

6) Name: Rattan Lal Abrol

Age: 64

Gender: Male

Address: Bhalwal

Area of specialization:

7) Name: Purshotam Dass Sharma

Age: 69

Gender: Male

Address : Bhalwal

Area of specialization:

Annexure 2

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

1) Name: Nil

Age:

Gender:

Address:

Area of Specialization:

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: Mangaal singh

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**

No	Name and address of the person/ institution/ company/ others	Local and Scientific Name of the biological material accessed and quantity	Date and resolution of the BMC and endorsement by the panchayat	Details of collection fee imposed	Anticipated mode of sharing benefits or quantum of benefits shared
	Nil	Nil	Nil	Nil	Nil

End of Part I

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	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)						
2	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						
3	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							
4	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							
5	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
6	Lentil	<i>Lens esculenta</i>	Masar	PL406	Cool & dry	Normal	Normal	High yielding Variety	Food	Source of Protein/Energy	Improve soil fertility	Rabi	Farmers / Department/ Private Suppliers	Farmers
7	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

8	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
9	Onion	<i>Allium cepa</i>	Ganday	nasik Red. Red Coral, Monsanto And Local Spp.	local Planee areas	Abundant	Abundant	Bulbs Cash Crop	Vegetab gles	Vegetable	Staple Vegetable food	Rabi	Farmers / Department/ Private Suppliers	
10	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	vegetable Oil extracted from seeds used in cooking	Rabi	Farmers / Department/ Private Suppliers	Farmers
11	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 calcium,copper, potassium	vegetable Oil extracted from seeds used in cooking	Rabi	Farmers / Department/ Private Suppliers	Farmers
12	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,industrial & domestic use	Rabi	Farmers / Department/ Private Suppliers	Farmers
13	Potato	<i>Solanum tuberosum</i>	Aaloo	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,chi ps etc	-	High carbohydrate,provide high energy value	Rabi	Farmers / Department/ Private Suppliers	Farmers
14	Toria	<i>Brassica campestris L. var. 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 calcium,copper, potassium	vegetable Oil extracted from seeds used in cooking	Between Kharif & Rabi season	Farmers / Department/ Private Suppliers	Farmers
15	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	religious and medicinal value	June - Oct.	Farmers / Department/ Private Suppliers	Farmers
16	Chilli	<i>Capsicum spp</i>	Mirchi	Pusa Jawala, CH-1	Tropica/sub tropicall vegetable,grows well warm humid conditions	Rare	Rare	Pungency and flavor	Used as spice ,medicinal value	-	Contains good amount of vitamin A&C	winter season	Farmers / Department/ Private Suppliers	Farmers
17	Tomato	<i>Solanum lycopersicum</i>	Tamater	Pusa rubi,Pusa early dwarf, Manisha Plus/local	Warm season crop	Rare	Rare	Stems are woody and weak, and tend to vine over other types of plants.	Used as vegetable ,salad, soup,Souce	rich source of Ascorbic acid	Tomatoes are also packed with vitamins A and C, calcium, potassium.	Rabi	Farmers / Department/ Private Suppliers	Farmers
18	Okra	<i>Abelmoschus esculentus</i>	Bindi	Varsha uphar, Arka Anamika	Tropica/sub tropicall vegetablHot and humid climate	Rare	Rare	Tender green fruit used as vegetable	Mainly vegetable	Source of Fiber	Contains dieta fibers,protein and carbohydratesry	Summer/ Kharif	Farmers / Department/ Private Suppliers	Farmers
19	Cucumber	<i>Cucumis sativus</i>	Kheera	Kheera local,JL	Grows in all climatoic conditions,Tropical,Su b tropical &temprate	Rare	Rare	climbing 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

20	Bottle gourd	<i>Lagenaria siceraria</i>	Lokki	PSPL/Punjab Long	Summer & rainy season crop	Rare	Rare	Vines vigorous, profusely branched	Subzis, curries and gravies.	-	It also contains essential vitamins and minerals	Summer/kharif	Farmers / Department/ Private Suppliers	Farmers
21	Bitter gourd	<i>Momordica charantia</i>	karela	Pusa Domausmi/Kundan	Warm and Humid climate	Rare	Rare	Herbaceous climbing annual with ridged stems	Vegetable and medicinal value	-	Used for maintaining low suger level	Summer/kharif	Farmers / Department/ Private Suppliers	Farmers
22	Beans	<i>Phaseolus Spp.</i>	Phaliya	Contender	Cool weather crop/Sandy/loamy soil	Rare	Rare	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
23	Spinach	<i>Spinacia oleracea</i>	Palak	All Green, Delta	Cool season Crop, thrives well on well drained loam soils	Rare	Rare	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
24	Turnip	<i>Brassica rapa</i>	Gunglu /Shalgam	PTWG/Local	Cool & moist climate/sub tropical & intermedite	Rare	Rare	Modified Root is eatable	Root is used as Vegetable, Salad,	-	Good source of Vit.C, Dietary Fiber & Potasium	Rabi	Farmers / Department/ private Suppliers	Farmers
25	Exocitic Vegetables	<i>Broccoli// Chinese Cabbage / Capsicum etc.</i>		Prevalent Hybrid varieties	Cool & moist climate/sub tropical & intermedite	Rare	Rare	All Plants Carbs and Fruits are eatable Ric Source of antioxidants	Salad and Vegetable		Rich Source of Multivitamins, Minerals and Antioxidants	Rabi	Farmers / Department/ Private Suppliers	Farmers
26	Horse gram legume	<i>Macrotyloma uniflorum</i>	kulth	Prevalent hybrid varieties	Cold & dry climate	Abundant	Abundant	Seeds are used as pulses	Pulses		Rich source of carbohydrates, proteins and fibres	Kharif	Farmers / Department/ Private Suppliers	Farmers
27	Pigeon pea	<i>Cajanus cajan</i>	Taangr	Prevalent hybrid varieties	Cold & dry climate	Abundant	Abundant	Seeds are used as pulses	Pulses		Rich source of K, protein and iron	Kharif	Farmers / Department/ Private Suppliers	Farmers

Format 2: Fruit Plants

1	2	3	4	5	6		7	8	9	10	11	12
Plant	Scientific Name	Local Name	Variety	Landscape / Habitat	Local Status		Source of Seeds/Plants	Season of Fruiting	Associated TK	Uses	Other details market / own use	Community / Knowledge holder
					Past	Present						
nil	nil	nil	nil	nil	nil		nil	nil	nil	nil	nil	nil

Format 03 Fodder Crop/ Species

1	2	3	4	5	6	7	8		9	10	11	12	13
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	Oats	<i>Avena spp.</i>	Javi	Annual		Cool & moist climate	Abundant	Abundant	Above ground part of plant	Nutritious & palatable fodder,	Fodder		Farmers
2	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
3	Maize	<i>Zea mays</i>	Makki	Annual		Warm & humid	Abundant	Abundant	Above ground part of plant	Source of energy	Food & fodder		Farmers
4	Bajra	<i>Pennisetum americanum</i>	Bajra	Annual		Warm & humid	Abundant	Normal	Above ground part of plant	Source of energy	Food & fodder	Farmers / Department/ Private Suppliers	Farmers
5	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/Chalari	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/ Kanah/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	Carrot grass	<i>Parthenium 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
5	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
6	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
7	Meadow Pea	<i>Lathyrus aphaca</i>	Matri	Wheat Grass Peas, mustard	annual	Agri. Land	Normal	Normal	Fodder	Mechanical, Chemical	Nil	Agri. Land	Farmers

8	Canada Thistle	<i>Cirsium arvense</i>	Leh	Wheat gram, Barley	Perennial	Agri. & wasteLand	Normal	Normal		Mechanical, Chemical	Nil	Agri. Land	Farmers
9	Bang	<i>Cannabis indica</i>	Bang/Pang	Kharif Crops	Perennial	Agri. & wasteLand	Normal	Normal		Mechanical, Chemical	Nil	Agri. Land	Farmers
10	chickweed	<i>Ageratum conyzoides</i>	Nilibuti	Rabi Crops	Perennial	Agri. & wasteLand	Normal	Normal		Mechanical, Chemical	Nil	Agri. & wasteLand	Farmers
11	Dub Grass	<i>Cynodon dactylon</i>	Dub Grass/Khbb1	Rabi/ Kharif	Perennial	Agri. & wasteLand	Abundant	Abundant	Fodder	Mechanical, Chemical	Nil	Agri. & wasteLand	Farmers
12	Wild oats	<i>Avena fatua</i>	Jangli Javi	Oats	Annual herb	Sub Tropical	Rare	Rare	Fodder	Above ground parts	-	Nutritive Fodder for Animals	Farmers
13	Wild Rice	<i>Echinochloa colonum</i>	Swanki	Paddy	Annual herb	Sub Tropical	Rare	Rare	Fodder	Above ground parts	-	Nutritive Fodder for Animals	Farmers
14	Jhonson Grass	<i>Sorghum halepense</i>	Beru grass	Sorghum	Perinneal	Sub Tropical	Rare	Rare	Fodder	Above ground parts	-	Nutritive Fodder for Animals	Farmers
15	wild onion	<i>Allium humaie</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>Microtermes obesi/ Odontotermes 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>	Ghori	Chewing & biting	Attacks Maize, Bhindi & Pulses	June-Oct	Mechanical& Chemical measures	-	Insectivorous feed on grasshopper	Farmers
4	Cereal leaf Beetle	<i>Oulema melanopus</i>		Chewing & biting	Attacks Maize	Aug-Sep	Chemical measures	-	Most recent occurrence	Farmers
5	Red Pumpkin Beetle	<i>Raphidopalpa foveicollis</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, pheromone 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/tridda	Maize and Paddy	Maize, Paddy, Jojr Bajra	July to sept	Mechanical& Chemical measures	-	Eats leaves	Farmers
10	Army worm	<i>Spodoptera Frugiperda</i>	Caterpillar	All Crops	defoliates Major crops	Through the year	Mechanical& Chemical measures	-	Defoliates all crops	Farmers
11	Leaf Floder	<i>Cnaphalocrocis medinalis</i>	Caterpillars	Feeds on leaves and stem	Attack on Paddy Leaves	June to Oct.	Mechanical& Chemical measures	-	Major threats	Farmers
12	Stem Borer	<i>Scirpophaga incertulas</i>	Tana shedat/ caterpillars	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 sorghum 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>Rattus argentiventer</i>	Chouha/Chua	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
Community & Population	Families & Major Occupation	Sub- Occupation	Depending Landscape	Major resouces accessed and seasons of access	Landscape management practices	Resource management practices	Cast/ Tribe	Social condition	Nature of inhabitants	No. of HHs
SC,St & General 8000	Labour & Farming	Animal Husbandry	Agricultural Landscape	-	-	-	SC	Middle Class, BPL	-	

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

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											
Kandi area			Cultivated land,forests,plantations	hilly	Private ,state lands,	Broad leaved mainly	Domestic animals, wildlife such Cow,buffalo,goat 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 vulture 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, Tortoise, snakes, snail,	Cattles, washing cloths, irrigation, Drinking etc	public					
Tube well			Private land		Frogs , fishes, Tortoise, 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	Wheat, pulses, oil seeds etc	Ornamental Plants/ grasses, plants with evergreen leaves, colourful Berries	-	Soil is good for wild varieties of crops, however drainage is a problem
3	Mountainous		Yellow brown to light orange	poorly developed relatively infertile	Provide good drainage, add decomposed manure to improve soil quality.	Wheat, Barley etc			Soil is not suitable for water intensive crops

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	Local people
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	Local people
Guava	<i>Psidium guajava</i>	Amrood	Local, L49 etc.	Tree, Regular Bearing	Plains, Lower Hills	Plenty	Plenty	Nurseries	Jul - Aug	Fruit		Marketing, Own Use	Local people
Grapes	<i>Vitis vinifera</i>	Angoor	Local Dakh, Perlette	Vine, Regular Bearing	Plains, Mid Hills	Rare	Plenty	Nurseries	Jul - Aug	Fruit			Local people
Amla	<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	Local people
Ber	<i>Ziziphus mauritiana</i>	Ber	Gola, Varanasi	Tree, Regular Bearing	Plains	Plenty	Plenty	Local	Jul - Aug	Fruit		Own Use	Local people
Jamun	<i>Syzygium cumini</i>	Jamun	Local Selection	Tree, Regular Bearing	Plains	Rare	Rare	Nurseries, Local Raised	Jul - Aug	Fruit		Own Use	Local people
Pear	<i>Pyrus spp.</i>	Nakh	Pathar Nakh, China Pear	Tree, Regular Bearing	Plains, mid hills	Rare	Rare	Nurseries	Aug - Sep	Fruit		Own Use	Local people
Peach	<i>Prunus persica</i>	Aaroo	July Elberta, Quetta	Tree, Regular Bearing	Plains, mid hills	Rare	Plenty	Nurseries	Jun - Jul	Fruit		Marketing, Own Use	Local people
Karonda	<i>Carissa carandas</i>	Garnay	Local	Shrub	Hills/ Plains	Rare	Rare	Wild, Local	Jun - Aug	Fruit		Marketing, Own Use	Local people

Papaya	<i>Carica papaya</i>	Papita	Local	Tree	Plains	Rare	Plenty	Nurseries, Locally Raised	Aug - Oct	Fruit		Own Use	Local people
Banana	<i>Musa paradisiaca</i>	kela	Local	Tree	plain/hilly	Rare	Rare	Locally raised	Jun - Sep	Fruit		Own use	Local people
Loquat	<i>Eriobotrya japonica</i>	lgaath	Local	Tree	plain/hilly	Rare	Rare	Locally raised	Sep- Jan	Fruit		Own use	Local people

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

1	2	3	4	5	6	7		8	9	10	11
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
						Past	Present				
Herbs	Dudlu	<i>Taraxacum officinale</i>		Temperate area	Root	Rare	Rare	nil	Leaves	N.A	N.A
Herbs	Tarad	<i>Dioscorea bulbifera</i>		Lower shiwalik	Seed	Abundant	Abundant	nil	Root	N.A	N.A
Herbs	Jungli putna	<i>Mentha arvensis</i>		Lower shiwalik /Temperate area	Root	Abundant	Abundant	nil	Leaves	N.A	N.A
Shrubs	Trimuru	<i>Zanthoxylum armatum</i>		Lower shiwalik	Seed	Rare	Rare	nil	Fruit	N.A	N.A
Shrubs	brankad	<i>Adhatoda vasica</i>		Lower shiwalik	Seed	Abundant	Abundant	Used in treatment of indigestion,skin diseases,excessive bleeding etc		N.A	N.A
Shrubs	Drinkdu	<i>Murraya koenigii</i>		Sub-Tropical area	Seed	Rare	Abundant	nil	Fruit	N.A	N.A
Shrubs	Dussa	<i>Colebrookea oppositifolia</i>		Lower shiwalik	Seed	Rare	Rare	leaves are applied on painful joints & swelling	Flower	N.A	N.A
Shrubs	Thor/Shuu	<i>Euphorbia royleana</i>		Lower shiwalik	Seed	Abundant	Abundant	Used for treatment of loose motions,ear pain,paralysis	Leaves	N.A	N.A
Shrubs	Bareyan	<i>Acorus calamus</i>		Lower shiwalik	Seed	Rare	Rare	nil	Leaves	N.A	N.A
Tree	Bair	<i>Ziziphus xylocarpa</i>		Lower shiwalik	Seed	Abundant	Abundant	nil	Stem	N.A	N.A

Tree	Bill-Patre	<i>Aegle marmelos</i>		Sub-Tropical area	Seed	Abundant	Abundant	nil	Root	N.A	N.A
Tree	Drankh	<i>Melia azedarach</i>		Lower shiwalik	Seed	Abundant	Abundant	nil	Leaves	N.A	N.A
Tree	Harad	<i>Terminalia chebula</i>		Lower shiwalik	Seed	Abundant	Abundant	Good for digestion	Stem/Fruit	N.A	N.A
Tree	Jaman	<i>Syzygium cumini</i>		Lower shiwalik	Seed	Abundant	Abundant	maintains sugar level in human body	Leaves/Fruit	N.A	N.A
Tree	Kakad-Singhi	<i>Pistacia khinjuk</i>		Lower shiwalik	Seed	Rare	Rare	bark is useful in skin diseases & ulcers	Leaves/Fruit	N.A	N.A
Tree	Kalyaad	<i>Bauhinia variegata</i>		Lower shiwalik	Seed	Abundant	Abundant	nil	Leaves/Flower	N.A	N.A
Tree	Kringal	<i>Casia fistula</i>		Lower shiwalik	Seed	Abundant	Abundant	nil	Fruit	N.A	N.A
Tree	Lasura	<i>Cordia dichotoma</i>		Lower shiwalik	Seed	Rare	Abundant	Fruits are used in cholera & dysentery	Leaves/Fruit	N.A	N.A
Tree	Amb	<i>Mangifera indica</i>		Lower shiwalik	Seed	Abundant	Abundant	nil	Stem/Fruit	N.A	N.A
Tree	Retha	<i>Sapindus mukorossii</i>		Lower shiwalik	Seed	Rare	Rare	nil	Fruit	N.A	N.A
Tree	Rumbal	<i>Ficus racemosa</i>		Lower shiwalik	Seed	Rare	Abundant	nil	Leaves	N.A	N.A
Tree	Sree	<i>Albizia lebbek</i>		Lower shiwalik	Seed	Abundant	Abundant	nil	Leaves/Stem	N.A	N.A
Tree	Talli	<i>Dalbergia sissoo</i>		Lower shiwalik	Seed	Abundant	Abundant	used in sore throat	Stem	N.A	N.A
Tree	Trimbal	<i>Ficus auriculata</i>		Lower shiwalik	Seed	Abundant	Abundant	nil	Leaves/Fruit	N.A	N.A

Tree	Tunu	<i>Toona ciliata</i>		Lower shivalik	Seed	Abundant	Abundant	nil	Stem	N.A	N.A
Tree	Arjun	<i>Terminalia arjuna</i>		Lower shivalik	Seed	Abundant	Abundant	nil	Leaves/Bark	N.A	N.A
Tree	Bheda	<i>Terminalia bellirica</i>		Lower shivalik	Seed	Abundant	Abundant	used in treatment if respiratory conditions like cough	Leaves/Bark	N.A	N.A
Tree	Amla	<i>Emblica officinalis</i>		Lower shivalik	Seed	Abundant	Abundant	Used in treatment if Anaemia,piles,stomach complaints	Leaves/Bark/fruit	N.A	N.A
Tree	Neem	<i>Azadirachta indica</i>		Lower shivalik	Seed	Abundant	Abundant	leaves are antihelminthic,diuretic ,insecticidal	Leaves/Bark	N.A	N.A
tree	Khair	<i>Acacia catechu</i>		Lower shivalik	Seed	Abundant	Abundant	Used for treatment of cold,cough,mouth ulcers,indigestion,diarrhoea	Leaves/Bark	N.A	N.A
Shrubs	Bhang	<i>Cannabis sativa</i>		Lower shivalik	Seed	Abundant	Abundant	leaf juice is useful in dandruff &lice infestations	Leaves/Bark	N.A	N.A

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

Generally, held by community

Generally, held by community

Generally, held by community

Generally, held by community

Generally, held by community

Generally, held by community

Generally, held by community

Generally, held by community

Generally, held by community

Generally, held by community

Generally, held by community

Generally, held by community

Generally, held by community

Generally, held by community

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	Amb	<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>Albizzia 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

FORMAT15: 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
	Jersey Gau	<i>Bos taurus</i>	CB Jersey	Dished face	stall feeding / semi intensive	Very few	Increase	Dairy	Nil	yes	Milk	All
	Amrekan 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
	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>Equus asinus</i> × <i>Equus caballus</i>	Local	Black	Backyard	Abundant	Decrease	Pack/ Cart	Nil	No	Pack/ Cart	All
Poultry	Kukkar	<i>Gallus domesticus</i>	Local	Enriched meat flavor	Backyard	Abundant	Decrease	Egg ,meat	Nil	No	Egg ,meat	All
	Syzygium cimini	<i>Gallus domesticus</i>	Chabro	good egger	Backyard	few	Increased	Egg,meat	Nil	No	Egg ,meat	All
	Broiler	<i>Gallus domesticus</i>	Hybrid	white color , fast growing	deep litter	few	Increased	meat	Nil	Yes	Meat	All

bird	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
	Parrot	<i>Psittacula krameri</i>	Local	parrot green in colour with red beak	Backyard	few	Decrease	decorative	Nil	No	Nil	All
	Pigeon	<i>Columba livia</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
Goat	bakri	<i>Capra hircus</i>		herbaceous ruminant animal	Pet	few	decreased	Dairy/Meat	Milk is very nutritious	yes	Milk	All

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/Talli	<i>Dalbergia sisoo</i>	Tree	Northern/ Sub-Tropical	Good	Moderate	Commercial/ own use	Stem, Timber	-	-	Local people
Tree	Khair	<i>Acacia catechu</i>	Tree	Northern/ Sub-Tropical	Good	Moderate	Commercial/ own use	Timber/ Firewood	Katha	-	Local people
Tree	Amla	<i>Emblica officinalis</i>	Tree	Northern/ Sub-Tropical	Good	Moderate	Commercial/ own use	Fruit	Food processing	-	Local people
Tree	Sree	<i>Albizia lebbek</i>	Tree	Northern/ Sub-Tropical	Good	Moderate	Commercial/ own use	Timber/ Firewood	-	-	Local people
Tree	Chir	<i>Pinus roxburghii</i>	Tree	Northern/ Sub-Tropical	Good	Moderate	Commercial/ own use	Timber/ Firewood	Resin	-	Local people
Tree	Lecunia	<i>Leucaena leucocephala</i>	Tree	Northern/ Sub-Tropical	Good	Moderate	Commercial/ own use	Timber/ Firewood	-	-	Local people
Tree	Simbal	<i>Bombax ceiba</i>	Tree	Northern/ Sub-Tropical	Good	Moderate	Commercial/ own use	Timber/ Firewood	-	-	Local people
Tree	Kamila	<i>Mallotus philippensis</i>	Tree	Northern/ Sub-Tropical	Good	Moderate	Commercial/ own use	Timber/ Firewood	-	-	Local people
Tree	Krangal	<i>Casia fistula</i>	Tree	Northern/ Sub-Tropical	Good	Moderate	Commercial/ own use	Timber/ Firewood	-	-	Local people
Tree	Ber	<i>Ziziphus jujuba</i>	Tree	Northern/ Sub-Tropical	Good	Moderate	Commercial/ own use	Fruit	-	-	Local people
Tree	Plash	<i>Butea monosperma</i>	Tree	Northern/ Sub-Tropical	Good	Moderate	Commercial/ own use	Timber/ Firewood	-	-	Local people
Tree	Arjun	<i>Terminalia arjuna</i>	Tree	Northern/ Sub-Tropical	Good	Moderate	Commercial/ own use	Timber/ Firewood	-	-	Local people
Tree	Jamun	<i>Syzygium cumini</i>	Tree	Northern/ Sub-Tropical	Good	Moderate	Commercial/ own use	Timber/ Firewood	-	-	Local people
Tree	Santha	<i>Dodonaea viscosa</i>	Shrubs	Northern/ Sub-Tropical	Good	Moderate	Commercial/ own use	Timber/ Firewood	-	-	Local people

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

Climber	Purple yam	<i>Dioscorea alata</i>	Climber	Northern/ Sub-Tropical	Good	Moderate	-				Local people
Climber	Striped cucumber	<i>Diplocyclos palmatus</i>	Climber	Northern/ Sub-Tropical	Good	Moderate	-				Local people

Format 19: Wild Plant Species of Importance

1	2	3	4	5	6
SI.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 granatum</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 carnea</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			
Juk	<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			
kamal	<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 aquatica</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
SI.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	-	Local people
Tree	Amla	<i>Emblica officinalis</i>	Tree	Northern/Sub-Tropical	Good	Good	Medicinal	Bark/ Fruit	-	Local people
Tree	Harad	<i>Terminalia chebula</i>	Tree	Northern/Sub-Tropical	Good	Good	Medicinal	Bark/ Fruit	-	Local people
Tree	Behra	<i>Terminalia bellerica</i>	Tree	Northern/Sub-Tropical	Good	Good	Medicinal	Bark/ Fruit	-	Local people
Tree	Sukchain	<i>Pongamia pinnata</i>	Tree	Northern/Sub-Tropical	Good	Good	Medicinal	Bark	-	Local people
Tree	Jamun	<i>Syzygium cumini</i>	Tree	Northern/Sub-Tropical	Good	Good	Medicinal	Fruit /seeds	-	Local people

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	Rare	Rare	Spice	leaves			
Tree	curry tree	<i>Murraya koenigii</i>		moist forest and agricultral land	Rare	Rare	Spice	leaves			
Herb	wild Tulsi	<i>Ocimum sanctum</i>		Moist soil	Rare	Rare	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	-	Local people
Shisham/Taali	<i>Dalbergia sissoo</i>	Northern/Sub-Tropical	Good	Moderate	Commercial/ own use	Timber/ Firewood	-	Local people
Ber	<i>Ziziphus jujuba</i>	Northern/Sub-Tropical	Good	Moderate	Commercial/ own use	Timber/ Firewood	-	Local people
Sagwan	<i>Tectona grandis</i>	Northern/Sub-Tropical	Good	Moderate	Commercial/ own use	Timber/ Firewood	-	Local people
Safeda	<i>Eucalyptus</i>	Northern/Sub-Tropical	Good	Moderate	Commercial/ own use	Timber/ Firewood	-	Local people
Simbal	<i>Bombax ceiba</i>	Northern/Sub-Tropical	Good	Moderate	Commercial/ own use	Timber/ Firewood	-	Local people
Tunu	<i>Toona ciliata</i>	Northern/Sub-Tropical	Good	Moderate	Commercial/ own use	Timber/ Firewood	-	Local people
Jamun	<i>Syzygium cumini</i>	Northern/Sub-Tropical	Good	Moderate	Commercial/ own use	Timber/ Firewood	-	Local people

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/Chitra	<i>Panthera Pardus</i>	Northern/ Sub-Tropical	Skin colour varies between individuals from pale yellowish to dark golden with dark spots	Winter	Good	Good	-	-	-	local people
Wild Animal	Squirrels/Galadchua	<i>Sciurus linnaes</i>	Northern/ Sub-Tropical	pests of mostly fruit plants	-	Good	Good	-	-	-	local people
Wild Animal	Boar	<i>Sus scofra</i>	Northern/ Sub-Tropical	-	-	Good	Good	-	-	-	local people
Wild Animal	Indian Hare	<i>Lepus nigricollis</i>	Northern/ Sub-Tropical	-	-	Good	Good	-	-	-	local people
Wild Animal	Monkey/Bander	<i>Cercopithecidae</i>	Northern/ Sub-Tropical	Arboreal,Agricultural pests,cause extensive damage to commercial & subsistence crops	-	Good	Good	-	-	-	local people
Wild Bird	Red jungle fowl	<i>Gallus gallus</i>	Northern/ Sub-Tropical	-	-	Good	Good	-	-	-	local people
Wild bird	Rose ringed parakeet	<i>Psittacula krameri</i>	Northern/ Sub-Tropical	-	-	Good	Good	-	-	-	local people
Wild Animal	Fox/lombdi	<i>Vulpes</i>	Northern/ Sub-Tropical	-	-	Good	Good	-	-	-	local people
Wild Animal	Porcupine	<i>Erethizon dorsatum</i>	Northern/ Sub-Tropical	-	-	Good	Good	-	-	-	local people

wild insects	Grasshopper/Tridda	<i>Chorthippus brunneus</i>	Northern/ Sub-Tropical	pests of crop plants	-	Good	Good	-	-	-	local people
wild insects	butterfly	<i>Danaus plexippus</i>	Northern/ Sub-Tropical	Adult butterflies have large bright colored wings & conspicuous fluttering flight	-	Good	Good	-	-	-	local people
wild insects	bees/Por	<i>Apis mellifera</i>	Northern/ Sub-Tropical	Bees are winged insects ,known for their role in pollination	-	Good	Good	-	-	-	local people
wild insects	ants/Keediyaa	<i>Brachymyrmex patagonicus</i>	Northern/ Sub-Tropical	Common insects but have some unique capabilities	-	Good	Good	-	-	-	local people
wild insects	Bumble bee	<i>Bombus</i>	Northern/ Sub-Tropical	-	-	Good	Good	-	-	-	local people
Amphibia	Frog/didu	<i>Euphlyctis cyanophlyctis</i>	Northern/ Sub-Tropical	Typically lay eggs in water.Egg hatch into aquatic larva called Tadpoles	-	Good	Good	-	-	-	local people
Reptiles	Tortoises	<i>Lissemys punctata</i>	Northern/ Sub-Tropical	-	-	Good	Good	-	-	-	local people
Reptiles	Snake/Sap	<i>Natrix</i>	Northern/ Sub-Tropical	-	-	Good	Good	-	-	-	local people
Birds	Gtaary	<i>Passer domesticus</i>	Northern/ Sub-Tropical	Strongly associated with human habitation	Throughout the year	Good	decreasing				Local people
Birds	Kaa	<i>Corvus splendens</i>	Northern/ Sub-Tropical	Primarily a scavenger feeding on left over rubbish from humans	Throughout the year	Good	decreasing				local people

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

1	2	3
Sr. No.	Information of local importance	Remarks
	none	

End of Part II