

## People Biodiversity Register (PBR): General Details

**Name of the Panchayat Samiti:** Mairamandrian

**Taluk:** Maira Mandrian

**District:** Jammu

**State / UT:** J&K

**Geographical Area of the Panchayat Samiti:** 5000 Kanal (Approx)

**Population under the Panchayat Samiti:** 4500 Approx

**Male:** 60%

**Female:** 40%

**Habitat and Topography:**

**Climate (Rainfall, Temperature and weather patterns):**

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

**Date, Month and Year of PBR Preparation:** 30/11/2019

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

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

**1)Name of the Chairperson:** Tarlochan Dutt

**Age:** 70 years

**Gender:** Male

**Address:** Mandrian

**Area of specialization:**

**2) Name:** Sushma Devi

**Age:** 33 years

**Gender:** Female

**Address:** Mandrian

**Area of specialization:**

**3) Name:-** Tripta Devi

**Age:** 40 years

**Gender:** Female

**Address:** Rehani

**Area of specialization:**

**4)Name:** Shakti Kumar

**Age:** 42 years

**Gender:** Male

**Address:** Maira Mandrian

**Area of specialization:**

**5)Name:** Thoru Ram

**Age:** 58 years

**Gender:** Male

**Address:** Rehani

**Area of specialization:**

**6)Name:** Sain Dass

**Age:** 64 years

**Gender:** Male

**Address:** Mandrian

**Area of specialization:**

**7)Name:** Manga Ram

**Age:**

**Gender:**

**Address:**

**Area of specialization:** Vlw

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

**1)Name:** Puran Chand

**Age:** 78 years

**Gender:** Male

**Address:** Mandrian

**Area of specialization:** Physician

**Location from which the person accesses biological material:** Maira Mandrian

**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:**

**List of individuals perceived by the villagers to possess Traditional Knowledge (TK) related to biodiversity in agriculture, fishery and forestry****1) Name of the Chairperson:** Madan Lal**Age:** 52 years**Gender:** Male**Address:** Rehani**Area of specialization:** Agriculture**2) Name of the Chairperson:** Nasib Singh**Age:** 85 yrs**Gender:** Male**Address:** Maira**Area of specialization:** Agriculture**3) Name of the Chairperson:** Durga Dass**Age:** 90**Gender:** Male**Address:** Mandrian**Area of specialization:** Agriculture**4) Name of the Chairperson:****Age:****Gender:****Address:****Area of specialization:**

**Details of schools, colleges, departments, universities, government institutions, non-governmental organization and individuals preparation of the PBR**

**1) Contact Person:** Puran Chand

**Name and Address:** Maira Mandrian

**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**

**Agriculture Deptt., Forest Deptt., Fisheries Deptt.**

## Annexure 5

**Detail of access to biological resources and traditional knowledge granted, details of the collection fee imposed and details of the benefit derived and the mode of their sharing**

1	2	3		4	5	6
S.No	Name and address of the Person/Institute/company others	Local and Scientific Name of the biological material Accessed and quantity		Date and resolution of the BMC and endorsement by the Panchayat	Detail of collection fee imposed	Anticipated mode of sharing benefits or quantum of benefits shared
		Arjun	<i>Terminalia arjuna</i>	8/21/2020	Nil	Nil
		Amla	<i>Emblica officinalis</i>			
		Harad	<i>Terminalia chebula</i>			
		Behra	<i>Terminalia bellirica</i>			
		Sukchain	<i>Pongamia pinnata</i>			
		Jamun	<i>Syzygium cini</i>			

*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
Crop	Local Name	Scientific Name	Variety	Landscape /Habitat	Approx Area Sown	Local Status		Special features	Uses	Associated TK	Other Details	Cropping Season	Source of Seeds / Plants	Community /Knowledge Holder
						Past	Present							
1	Rice	<i>Oryza sativa</i>	Dhan/ Munji	B-370(Fine & Long duration)	Planes / Low laying Areas	Normal	Rare	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	Rare	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	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,PBW 644	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	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
7	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
8	Onion	<i>Allium cepa</i>	Gamd	nasik Red, Red Coral, Monsanto And Local Spp.	local Planee areas	Abundant	Rare	Bulbs Cash Crop	Vegetables	Vegetable	Staple Vegetable food	Rabi	Farmers / Department / Private Suppliers	
9	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
10	Gobhi Sarson	<i>Brassica napus</i>	<b>Gobhi Saria</b>	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,coper,potassium	vegetable Oil extracted from seeds used in cooking	Rabi	Farmers / Department / Private Suppliers	Farmers

11	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>	Aalo	Kufri Sindhuri, Kufri Badsha, local	Potato is an herbaceous annual, requires cool weather, mostly rainfed conditions	Abundant	Normal	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 energy value	Rabi	Farmers / Department / Private Suppliers	Farmers
14	Toria	<i>Brassica j. rape cv. Toria</i>	Toria	RSPT-1, RSPT-2, Local var.	Cool & dry with bright sunshine	Normal	Normal	Short duration Annual Herb	oil for preparation 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	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	Juice used as preferred drink for instant source of energy during summer besides	Spring season	Farmers / Department / Private Suppliers	Farmers

17	Chilli	<i>Capsicum spp</i>	Mirchi	Pusa Jawala, CH-1	Tropica/sub tropical vegetable, grows well warm humid conditions	Abundant	Rare	Pungency and flavor	Used as spice ,medicinal value	-	Contains good amount of vitamin A&C	winter season	Farmers / Department / Private Suppliers	Farmers
18	Tomato	<i>Solanum lycopersicum</i>	Tamater	Pusa rubi,Pusa early dwarf, Manisha Plus/local	Warm season crop	Abundant	Normal	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	<b>Tomatoes</b> are also packed with vitamins A and C, calcium, potassium.	Rabi	Farmers / Department / Private Suppliers	Farmers
19	Okra	<i>Abelmoschus esculentus</i>	Bindi	Varsha uphar, Arka Anamika	Tropica/sub tropical vegetable,Hot and humid climate	Abundant	Normal	Tender green fruit used as vegetable	Mainly vegetable	Source of Fiber	Contains dietary fibers,protein and carbohydrate	Summer/ Kharif	Farmers / Department / Private Suppliers	Farmers
20	Cucumber	<i>Cucumis sativus</i>	Kheera	Kheera local,JL	Grows in all climatic conditions,Tropical,Sub tropical &temperate	Abundant	Normal	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
21	Bottle gourd	<i>Lagenaria siceraria</i>	Lokki	PSPL/Punjab Long	Summer &rainy season crop	Abundant	Normal	Vines vigorous, profusly branched	Subzis, curries and gravies.	-	It also contains essential vitamins and minerals	Summer/ kharif	Farmers / Department / Private Suppliers	Farmers

22	Bitter gourd	<i>Momordica charantia</i>	karela	Pusa Domausmi/Kundan	Warm and Humid climate	Abundant	Normal	Herbaceous climbing annual with ridged stems	Vegetable and medicinal value	-	Used for maintaining low sugar level	Summer/kharif	Farmers / Department / Private Suppliers	Farmers
23	Beans	<i>Phaseolus Spp.</i>	Phaliya	Contender	Cool weather crop/Sandy/loamy soil	Abundant	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
24	Knol khol	<i>Brassica oleracea var. gongyloides</i>	Kadam	White vienna, Purple vienna	cool & moist climate/sub tropical	Abundant	Normal	Swollen stem, green/purple with long and broad leaves	Swollen stem and leaves are consumed as vegetable	-	-	Rabi	Farmers / Department / Private Suppliers	Farmers
25	Spanich	<i>Spinacea oleracea</i>	Palak	All Green, Delta	Cool season Crop, thrives well on well drained loam soils	Abundant	Normal	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
26	Radish	<i>Raphanus sativus</i>	Mulli	Japanese White, Koren Etc	Cool season Crop, thrives well on well drained Sandy loam soils	Abundant	Normal	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

27	Carrot	<i>Daucus carota</i>	Gajer	Pusa Kesar,local	Cool &moist climate/ sub tropical& intermedite	Abundant	Nil	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 / Privaate Suppliers	Farmers
----	--------	----------------------	-------	------------------	--	----------	-----	--------------------------	--	---	--	------	---	---------



**Format 3:-Fodder Crops / 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	Maize	<i>Zea mays</i>	Makki	Annual		Warm & humid	Abundant	Abundant	Above ground part of plant	Source of energy	Food & fodder		Farmers
2	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
3	Cowpea	<i>Vigna unguiculata</i>	Rongi	Annual		Warm & humid	Abundant	Normal	Above ground part of plant	Kharif Legume with high protein	Fodder		Farmers

**Format-4 : 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	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
2	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
3	Bang	<i>Cannabis indica</i>	Bang	Kharif Crops	Perennial	Agri. & wasteLand	Normal	Normal		Mechanical, Chemical	Nil	Agri. Land	Farmers
4	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
5	Nut Grass	<i>Cyprus 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
6	Barnyard Grass	<i>Echinochloa crusgalli</i>	Swank	Paddy	Annual	Agri. Land	Abundant	Abundant	Fodder & Animals	Physical, Mechanical, Chemical	Nil	Nil	Farmers



7	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
8	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
9	Meadow Pea	<i>Lathyrus aphaca</i>	Matri	Wheat Grass Peas, mustard	annual	Agri. Land	Normal	Normal	Fodder	Mechanical, Chemical	Nil	Agri. Land	Farmers
10	Canada Thistle	<i>Cirsium arvense</i>	Leh	Wheat gram, Barley	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	-	Nutrativ Fodder for Animals	Farmers
14	Wild Rice	<i>Echinochloa colonum</i>	Swanki	Paddy	Annual herb	Sub Tropical	Rare	Rare	Fodder	Above ground parts	-	Nutrativ Fodder for Animals	Farmers
15	Jhonson Grass	<i>Sorghum helepense</i>	Beru grass	Sorghum	Perinneal	Sub Tropical	Rare	Rare	Fodder	Above ground parts	-	Nutrativ Fodder for Animals	Farmers
16	wild onion	<i>Allium humaie</i>	Jangli payas	Onion	Annual herb	Temprate/ sub tropical	Rare	Rare	Food and medicine	All parts used	-	-	Farmers

**Format-5: Pests of Crops**

1	2	3	4	5	6	7	8	9	10
Host	Insect /Animals	Scientific Name	Local Name	Habitat	Time / Season of Attack	Management mechanism	Associated TK	Other Details	Community /Knowledge Holder
Litchi	Insects	<i>Gatesclarkeana erotias</i>	Fruit Nut birer	Orchard/Field	At pea stage	Pesticides, Basin Making Ploughing			
Mango	Insects	<i>Amritous atkinsoni</i>	Tella	Field/orchard	Feb-April	Pesticide Prunning	Discourge HDP		
Mango	Insects	<i>Drosicha magiferae</i>	Mealey Bug	Orchard	Feb Onwards	Pesticide, Basin Making	Hand Picking		
Amla	Insects	<i>Phyllanthus emblica</i>	Gall Maker	Orchard/Field	Feb Onwards	Pesticides Prunning	Destroy infected Shoots		
Citus	Insects	<i>Paapilio ledmoteus</i>	Caterpillar	Orchard/Field	April- May & Aug.- Oct.	Pesticides, Other Cultural Methods	Smoking Bagging Dispose Off		
Citus	Insects	<i>Euodocina fullonia</i>	Sucking Moth	Orchard/Field	Maturity Stage	Pesticides Orchard Sanitization			
Guava	Insects	<i>Bactrocera dorsalis</i>	Fruit Fly	Orchard/Field	Maturity Stage	Pesticides, Fruit Fly trape			

**Format 6: Markets for Domesticated animals**

1	2	3	4	5	6	7	8	9
Name of the market & location	Weekly (D)/ Fortnightly (D) / Monthly (D) / Biannual (M) / Annual (M) [1]	Types of animals bought and sold [2]	Types and Average Number of animals transacted in a day	Places from which animals are brought	Places to which the animals are sold / transported	Name and location of fish market	Types of fishes sold	Source of fish

Note: [1] (D) – day; (M) – month;

[2] Types of animals may include: Poultry / Sheep / Goats / Cattle / Ducks / Pigs / Donkeys / Mules / Horses / Camels / Others (Specify)

### Format 7: Peoplescape

1	2	3	4	5	6	7	8	9	10	11
Community & Population	Families & Major occupation	Sub-occupation	Depending Landscape	Major resources accessed and seasons of access	Landscape management practices	Resource management practices	Cast / Tribe	Social condition	Nature of inhabitants	No. of HHs
4500							SC/ ST/ General/ Christian			

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

<b>Format 8: Landscape</b>													
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	Forest land, 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	Forest land, 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	-	-	-
Shivalik areas			Hills	Hills with gentle slopes	Forest land, 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 11: Fruit Trees**

1	2	3	4	6	7		8	9	10	11	12	13
Plant	Local Name	Scientific Name	Variety	Landscape / Habitat	Local Status		Source of Seeds / Plants	Season of fruiting	Associated TK	Uses	Other Details markt / own use	Community / Knowledge Holder
					Past	Present						
Mango	<i>Aam</i>	<i>Mangifera indica</i>	Desi, Dushari , Malta	Plains	plenty	plenty	Nurseries	June- August		Fruit,Picking, Preserves	Marketing, own use	
Citrus Fruits	<i>Khatti, Mosambi, santra, Nimbu,</i>	<i>Citrus spp</i>	Local,Kagzi lime, Italian limeHill lemon etc	plains,mid hills	plenty	plenty	Nurseries	throughout year		Fruit, picking Squashes etc.	Marketing, own use	
Litchi	<i>Litchi</i>	<i>Litchi chinensis</i>	Calcutta Dehradun	plains	plenty	rare	Nurseries	June- August		fruit	Marketing	
Guava	<i>Amrood</i>	<i>Psidium guajava</i>	Local, Allahabadi, Safaida	plains lower hills	plenty	Normal	Nurseries	June- August		fruit	Marketing, own use	
Aonia	<i>Ambla</i>	<i>Emblica officinalis</i> <i>Syn Phyllanthus emblica</i>	local selection NA-7	Plains mid hills	plenty	plenty	Nurseries local collection	Nov- Dec.		picking, fruit juices	Marketing, own use	
Ber	<i>ber</i>	<i>Zizyphus mauritiana lamk</i>	Gola Banarasi	Plains	plenty	Normal	local raised	July- August		fruit	Own use	
Jamun	<i>Jamun</i>	<i>Syzygium cumini</i>	local selection	plains	rare	Normal	Nurseries, local raised	July- August		fruit	Own use	



Pomegranate	<i>Anar, Druni</i>	<i>Punica granatum</i>	Ganesh, Kandhari local	plains	rare	rare	Nurseries, local raised, wild	May- August		fruit, anardana	Own use	
pear	<i>Nakh</i>	<i>Pyrus app</i>	Patharmakh, china pear	plains mid hills	rare	rare	Nurseries	August-Sept		fruit	Own use	
Peach	<i>Aaroo</i>	<i>Prunus persica (L) Batsch</i>	July Elberta, quetta	plains mid hills	rare	plenty	Nurseries	June-July		fruit	Marketing, own use	
Strawberry	<i>Strawberry</i>	<i>Fragaria x ananassa Duch</i>	chandler	plains mid hills	rare	plenty	Nurseries	March-April		fruit	Marketing	
Karonda	<i>gernay</i>	<i>Carissa carandas</i>	local	plains/hills	rare	rare	Nurseries, wild	June-August		fruit	Marketing,own use	
Papaya	<i>Papita</i>	<i>Carica papaya</i>	local	plains	rare	Normal	Nurseries, locally raised	August- October		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	Local Status		Source of plant/seeds	Season of Fruiting	Uses (usage)	Associated TK	Other details market/own use	Community/ Know. holder
					Past	Present						
Herbs	Dudlu	<i>Taraxacum officinale</i>		Temperate area	Rare	Rare	Root			N.A	N.A	Generally, held by community
Herbs	Tarad	<i>Dioscorea belophylla</i>		Lower shiwalik	Abundant	Abundant	Seed			N.A	N.A	Generally, held by community
Herbs	Jungli putna	<i>Mentha arvensis</i>		Lower shiwalik/Temperate area	Abundant	Abundant	Root			N.A	N.A	Generally, held by community
Shrubs	Trimuru	<i>Zanthoxylum armatum</i>		Lower shiwalik	Rare	Rare	Seed			N.A	N.A	Generally, held by community
Shrubs	brankad	<i>Adhatoda vesica</i>		Lower shiwalik	Abundant	Abundant	Seed			N.A	N.A	Generally, held by community
Shrubs	Drainkdu	<i>Murraya koenigii</i>		Sub-Tropical area	Rare	Normal	Seed			N.A	N.A	Generally, held by community
Shrubs	Dussa	<i>Colebrookia oppositifolia</i>		Lower shiwalik	Rare	Rare	Seed			N.A	N.A	Generally, held by community
Shrubs	Thor/Shuu	<i>Euphorbia royleana</i>		Lower shiwalik	Abundant	Rare	Seed			N.A	N.A	Generally, held by community
Shrubs	Bareyan	<i>Acorus calamus</i>		Lower shiwalik	Rare	Rare	Seed			N.A	N.A	Generally, held by community

Shrubs	Bhang	<i>Canabis sativa</i>		Lower shiwalik	Abundant	Normal	Seed			N.A	N.A	Generally, held by community
Tree	Amla	<i>Phyllanthus emblica</i>		Lower shiwalik	Abundant	Abundant	Seed			N.A	N.A	Generally, held by community
Tree	Bair	<i>Ziziphus xylocarpa</i>		Lower shiwalik	Abundant	Abundant	Seed			N.A	N.A	Generally, held by community
Tree	Bheda	<i>Terminalia bellerica</i>		Lower shiwalik	Rare	Abundant	Seed			N.A	N.A	Generally, held by community
Tree	Bill-Patre	<i>Aegle mermelos</i>		Sub-Tropical area	Abundant	Abundant	Seed			N.A	N.A	Generally, held by community
Tree	Drankh	<i>Melia azadirach</i>		Lower shiwalik	Abundant	Abundant	Seed			N.A	N.A	Generally, held by community
Tree	Harad	<i>Terminalia chebula</i>		Lower shiwalik	Abundant	Abundant	Seed			N.A	N.A	Generally, held by community
Tree	Jaman	<i>Syzygium cumini</i>		Lower shiwalik	Abundant	Normal	Seed			N.A	N.A	Generally, held by community
Tree	Kakad-Singhi	<i>Pistacia khinjuk</i>		Lower shiwalik	Rare	Rare	Seed			N.A	N.A	Generally, held by community
Tree	Karal	<i>Bauhinia variegata</i>		Lower shiwalik	Rare	Rare	Seed			N.A	N.A	Generally, held by community
Tree	Khair	<i>Acacia catechu</i>		Lower shiwalik	Abundant	Abundant	Seed			N.A	N.A	Generally, held by community
Tree	Kringal	<i>Casia fistula</i>		Lower shiwalik	Abundant	Abundant	Seed			N.A	N.A	Generally, held by community
Tree	Lusada	<i>Cordia dichotoma</i>		Lower shiwalik	Abundant	Normal	Seed			N.A	N.A	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 details including products and Services	Community Know.Holders
						Past	Present					
Cattle	Gau	<i>Bos indicus</i>	ND	Low yield	stall feeding	Abundant	Decrease	Dairy	Nil	No	Milk	All
	Jersy Gau	<i>Bos taurus</i>	CB Jersy	Dished face	stall feeding / semi intensive	Very few	Increase	Dairy	Nil	yes	Milk	All
Buffalo	Manj	<i>Bubalus bubalis</i>	Local	Low yield	stall feeding	Abundant	Decreased	Dairy	Nil	No	Milk	All
	Parrot	<i>Psittaciformes</i>	Local	parrot green in colour with red beak	Backyard	few	Decrease	decorative	Nil	No	Nil	All
	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	Wild	few	Increased	Meat	Nil	Yes	Nil	Sikh /Chrisitians/SCc ommunity



**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	-	30%
	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	-	30%
	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	-	30%
	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	-	30%

Note: Other details include mode of catching fish, time of availability, breeding time, feeds and etc



**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>Embllica officinalis</i>	Tree	Northern/Sub-Tropical	Good	Moderate	Commercial/ own use	Fruit	Food processing	-	-
Tree	Siris	<i>Albizzia lebeck</i>	Tree	Northern/Sub-Tropical	Good	Moderate	Commercial/ own use	Timber/ Firewood	-	-	-
Tree	Chir	<i>Pinus roxburghii</i>	Tree	Northern/Sub-Tropical	Good	Nil	Commercial/ own use	Timber/ Firewood	Resin	-	-
Tree	Lecunia	<i>Leucaena lencocephala</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	Normal	Commercial/ own use	Timber/ Firewood	-	-	-

Tree	Arjun	<i>Terminalia arjuna</i>	Tree	Northern/Sub-Tropical	Good	Rare	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	Rare	Commercial/own use	Timber/Firewood	-	-	-
Tree	Sagwan	<i>Tectona grandis</i>	Tree	Northern/Sub-Tropical	Good	Rare	Commercial/own use	Timber/Firewood	-	-	-
Tree	Safeda	<i>Eucalyptus</i>	Tree	Northern/Sub-Tropical	Good	Rare	Commercial/own use	Timber/Firewood	-	-	-
Tree	Bel	<i>Aegle marmelos</i>	Tree	Northern/Sub-Tropical	Good	Rare	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	Normal	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	-	-	-

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	-				

**Format 19: Wild Plant Species of Importance**

1	2	3	4	5	6
S.No.	Local Name	Scientific Name	Variety	Importance (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 carnea</i>	Shrub	Soil binder	Good

**Format 20: Aquatic Biodiversity**

1	2	3	4	5	6		7	8	9	10
Local name	Scientific name	Variety	Features	Habitat	Local Status		Uses	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	Rare	-	-	-	
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	Rare	-	-	-	
Water Spinach	<i>Ipomoea aquaticum</i>		It contains abudnat quantities of water, iron, vitaminC, 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
S.No.	Local Name	Scientific Name	Variety	Importance (economic,social,cultural etc.)	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	11
Plant(herb, shrub,tree)	Local Name	Scientific Name	Variety	Landscape/habitat	Local status		Associated TK	Uses	Part used	Other details market/own use	c.knowledge holder
					Past	Present					
Tree	Arjun	<i>Terminalia arjuna</i>	Tree	Northern/Sub-Tropical	Good	Rare		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	Rare		Medicinal	Bark/ Fruit	-	
Tree	Behra	<i>Terminalia bellirica</i>	Tree	Northern/Sub-Tropical	Good	Rare		Medicinal	Bark/ Fruit	-	
Tree	Sukchain	<i>Pongamia pinnata</i>	Tree	Northern/Sub-Tropical	Good	Rare		Medicinal	Bark	-	
Tree	Jamun	<i>Syzygium cumini</i>	Tree	Northern/Sub-Tropical	Good	Normal		Medicinal	Fruit /seeds	-	







**Format 26: Timber Plants**

1	2	3	4		5	6	7	8
Local Name	Scientific Name	Habitat	Local Status		Other uses, if any	Associated Tk	Any other detail	Community knowledge holder
			Past	Present				
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	Rare	Commercial/ own use	Timber/ Firewood	-	-
Safeda	<i>Eucalyptus</i>	Northern/Sub-Tropical	Good	Rare	Commercial/ own use	Timber/ Firewood	-	-
Simbal	<i>Bombax ceiba</i>	Northern/Sub-Tropical	Good	Moderate	Commercial/ own use	Timber/ Firewood	-	-
Tunu	<i>Toona ciliata</i>	Northern/Sub-Tropical	Good	Moderate	Commercial/ own use	Timber/ Firewood	-	-
Jamun	<i>Syzygium cimini</i>	Northern/Sub-Tropical	Good	Moderate	Commercial/ own use	Timber/ Firewood	-	-







**Format 28: Wild Animals (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	Ass. TK	Other details	Community/ Knowledge Holder
						Past	Present				
Wild Animal	Leopad	<i>Panthera pardus</i>	Northern/ Sub-Tropical	-	Winter	Good	Rare	-	-	-	
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	Grasshooper	<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>Testudinidae</i>	Northern/ Sub-Tropical	-	-	Good	Good	-	-	-	
Reptiles	Snake	<i>Serpentes</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**

1	2	3
Sr. No.	Information of local importance	Remarks

*End of Part II*