

## People Biodiversity Register (PBR): General Details

**Name of the Panchayat Samiti:** Buttla

**Taluk:** Bhaderwah

**District:** Doda

**State:** J&K UT

**Geographical Area of the Panchayat Samiti:** 329.5 Hac.

**Population under the Panchayat Samiti:** 2000

**Male:** 1100

**Female:** 900

**Habitat and Topography:** Hilly area

**Climate (Rainfall, Temperature and weather patterns):** Temperate area with Moderate rainfall

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

**Date, Month and Year of PBR Preparation:** 11/12/2020

**Management Regime:** Reserve Forest (RF)/Joint Forest Management(JGM)/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:** Parveen Kumar

**Age:** 48

**Gender:** Male

**Address:** Buttla

**Area of specialization:** Sarpanch

**2) Name:** Shikma Devi

**Age:** 38

**Gender:** Male

**Address:** Buttla

**Area of specialization:** House wife

**3) Name:-** Nisar Ahmed

**Age:** 61

**Gender:** Male

**Address:** Buttla

**Area of specialization:** PDD Ex-Serviceman

**4)Name:** Satish Kumar

**Age:** 42

**Gender:** Male

**Address:** Barai

**Area of specialization:** Farmer

**5)Name:** Surjeet Singh

**Age:** 51

**Gender:** Male

**Address:** Buttla

**Area of specialization:** EX. Man BSF

**6)Name:** Kalshana Devi

**Age:** 30

**Gender:** Female

**Address:** Haddal

**Area of specialization:** Panch

**7)Name:** Bir Singh

**Age:** 35

**Gender:** Male

**Address:** Haddal

**Area of specialization:** Social worker

**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:** Sardar Singh

**Age:** 60 yrs

**Gender:** Male

**Address:** Buttla (Saheri)

**Area of specialization:** (T.H)

**Location from which the person accesses biological material:** Forest

**Perception of the practitioner on the resource status:** satisfactory

**Medicinal Use:**

**3)Name:** Bod raj

**Age:** 60

**Gender:** Male

**Address:** Bhutla

**Area of specialization:** Vaid

**Location from which the person accesses biological material:** Forest

**Perception of the practitioner on the resource status:** satisfactory

**Medicinal Use:**

**3)Name:** Desraj

**Age:** 80

**Gender:** male

**Address:** Bhutla

**Area of specialization:** Vaid

**Location from which the person accesses biological material:** Forest

**Perception of the practitioner on the resource status:** satisfactory

**Medicinal Use:**

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

**1) Name of the Chairperson:** Rishi Kumar

**Age:** 49

**Gender:** Male

**Address:** Haddal

**Area of specialization:** Fisheries

**2) Name of the Chairperson:** Rattan Singh

**Age:**

**Gender:** Male

**Address:** Buttla

**Area of specialization:** Agriculture

**3)Name of the Chairperson:** Man Singh

**Age:** 82

**Gender:** Male

**Address:** Bharai

**Area of specialization:** Forest

**4)Name of the Chairperson:** Bodraj

**Age:** 60

**Gender:** male

**Address:** Bhutla

**Area of specialization:** Forestry

**Annexure 4**

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

**1) Contact Person:**

**Name and Address:** Kartar Singh UPS Butla

**2) Contact Person:**

**Name and Address:** Mustaq Ahmed GPS Butla

**3) Contact Person:**

**Name and Address:** Kishore Kumar UPS Haddal

**4) Contact Person:**

**Name and Address:** Rajesh kumar GPS bhutla

**5) Contact Person:**

**Name and Address:** Ashok kumar GPS Bhutla

## 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

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

*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	Scientific Name	Local Name	Variety	Landscape / Habitat	Approx Area Sown	Local Status		Special features	Cropping Season	Uses	Associated TK	Other Details	Source of Seeds / Plants	Community /Knowledge Holder
						Past	Present							
Maize	<i>Zea mays</i>	Kookri	Plandri, Rashi4794, Bio-9621, Bio-9220	Hilly temperate and intermediate		Local	Improved varieties	April sown, local variety dentles, corn & flour sweet in taste	Kharif	Major food item, used as flour, feed to cattle, poultry etc.	Local variety plandri sown before 15 <sup>th</sup> april.	NA	HH kept seed, Deptt. Of agriculture, private seed dealers	Local/ Aged farmers of rural communities possess TK
Barley	<i>Hordeum vulgare</i>	Joo	Local barley, ratna, sonu	Hilly, temperate and intermediate		Local varieties	Improved varieties	Most efficient under rainfall conditions	Rabi	Grains used as cattle feed besides, green crop used as fodder.	NA	NA	Self, Agriculture Department	Local/ Aged farmers of rural communities possess TK
Brown Mustard	<i>Brassica juncea</i>	Sarsoon	Local, KS-101, KOS-1	Temperate and intermediate		Local varieties and low production	Improved varieties and high production	Crop severely affected by the snowfall during the month of dec-feb	Rabi	Green leaves used as vegetables and seeds used for extracting oil used in cooking and for other relevant purposes		NA	Farm saved seed, from peer groups of farmers, from deptt. Of agriculture and other relevant sources	Cultivation and management practices among the farming communities across the district.

Rice	<i>oryza sativa</i>	chawal	local DOUG rice ,china1007, china988	Hilly temperate and intermediate		local varieties	Improved varieties and high production	high yield production	khariief	staple food	energy rich	NA	HH kept seed, Deptt. Of agriculture, private seed dealers	Farmer of the areas
Tomato	<i>Lycopersicon esculentum</i>	Rotawanghun	cherry tomato, roma SS-1	Mid/ temperate hills		Local varieties	Improved varieties and high production	NA	July-September	as vegetable and jam	Rich in vitamin C and Lycopene	NA	Seed being traditionally cultivated and focussed locally	Local/ Aged farmers of rural communities possess TK
Kale	<i>Brassica oleracea</i>	Haak	G.M Dari, Khanyari	Hilly temperate and intermediate		Plenty	plenty	high yield production	Khariief and Rabi crop	Ass vegetable	Rich in fibre	Suitable for all areas	HH kept seed, Deptt. Of agriculture, private seed dealers	Local/ Aged farmers of rural communities possess TK
Bottlegouard	<i>Lagenaria siceraria</i>	Aul	Local variety	Hilly temperate and intermediate		Plenty	plenty	high yield production	Khariief	As vegetable	good for health	Suitable for all areas	HH kept seed, Deptt. Of agriculture, private seed dealers	Local/ Aged farmers of rural communities possess TK
Potato	<i>Solanum tubersum</i>	Aalu	Pahadi aalu	Hilly temperate and intermediate		Plenty	plenty	high yield prodcution	khariief	as vegetable and chips	rich in proteins and carbohydrates	suitable for almost plain areas	HH kept seed, Deptt. Of agriculture, private seed dealers	Local/ Aged farmers of rural communities possess TK



Frenchbeans	<i>Phaseolus vulgaris</i>	frashbean	pahadibbeans	Hilly temperate and intermediate		local varieties	Improved varieties and high production	high yield production	may to october	As vegetable	rich in iron and magnese	Suitable for all areas	HH kept seed, Deptt. Of agriculture, private seed dealers	Local/ Aged farmers of rural communities possess TK
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**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 markt / own use	Community /Knowledge Holder
					Past	Present						
Apple	<i>Malus domestica, borkh</i>	Saib	Red Delicious, Golden Delicious, Maharaji, American etc.	Tree, regular bearing	Plenty	Plenty	Plenty	Nurseries	NA	Fruit, Economy Generation	Marketing, Own use	department of horticulture
Pear	<i>Pyrus spp.</i>	Nakh	Patharnakh, China pear	Tree, regular bearing	Plenty	Plenty	Plenty	Nurseries	NA	Fruit, Economy Generation	Marketing, Own use	department of horticulture
Peach	<i>Prunus persica</i>	Aaroo	July Elberta, Quetta	Tree, regular bearing	Plenty	Rare	Rare	Nurseries	NA	Fruit	Marketing, Own use	department of horticulture
Apricot	<i>Prunus armeniaca</i>	Khubani, Sadi	Local apricot, Bebcu	Tree, regular bearing	Plenty	Plenty	Plenty	Nurseries	NA	Fruit	Own Use	department of horticulture
Walnut	<i>Juglans regia</i>	Akhrot	Paper/Thin Shelled, Hard & Medium Shelled	Tree, regular bearing	Plenty	Average	Plenty	Nurseries& Locally raised	NA	Dry-fruit, Economy generation	Marketing, Own use	department of horticulture
Plum	<i>Prunus salicina</i>	Aaloo Bukhara	Santa rosa. Aloo Bukhara	Tree, regular bearing	Plenty	Average	Rare	Nurseries& Locally raised	NA	Fruit	Own use	department of horticulture
Pecannut	<i>Carya illinoensis</i>	Pecan	Western shell	Mid/temperate hills	Plenty	Average	Nurseries	Sept-Oct	NA	Dry Fruit	Marketing, Own use	department of horticulture
Plum	<i>Prunus salicina</i>	Aaloo Bukhara	Santa rosa, Allo Bukhara	Mid Hills	Plenty	Average	Nurseries, locally raised	July-august	NA	Fruit	Own use	department of horticulture

Persimmon	<i>Diospyros</i>	Amlook	Local	Mid/temperate hills	Plenty	Average	Locally raised	July-august	NA	Fruit	Marketing, Own use	department of horticulture
Quince	<i>Cydonia oblonga</i>	Bhai	Local	Mid/temperate hills	Plenty	Average	locally raised	July-September	NA	Fruit, Seed	own use, Marketing	department of horticulture
Grapes	<i>Vitis vinifera</i>	Dasch	local	Mid/ temperate	Average	Average	raised,govt nur	July to september	NA	Fruit	own use, Marketing	department of horticulture
Pomegranate	<i>Punica granatum</i>	anaar	anaar	Mid/temperate hills	average	average	locally raised	July-September	NA	Fruit	own use, Marketing	department of horticulture
cherry	<i>Prunus avium</i>	cherry	local	Mid/temperate hills	average	average	Nurseries& Locally raised	may july	NA	Fruit	Marketing, Own use	department of horticulture

### Format 3:-Fodder Crops / Species

1	2	3	4	5		6	7	8	9	10
Plant	Scientific Name	Local Name	Landscape /Habitat	Local Status		Source of Seeds / Plants	Associated TK	Part Used	Other Details	Community /Knowledge Holder
				Past	Present					
Oats	<i>Avena sativa</i>	Ghaas	Temperate/ Intermediate	Local varieties	Improved varieties	Self	Stored in locally made indigenous structure called "Tye"	Crop	NA	NA
Berseem (Egyptian Clover)	<i>Trifolium alexandrinum</i>	Gjaas	Irrigated areas	NA	Improved varieties	Self	NA	Crop	NA	NA
Milkweed	<i>Euphorbia thymifolia</i>	Dudli	Temperate/ Intermediate	local varieties	local varieties	self	NA	crop	containing milky fluid like substance	local farmers of rural community
Sorghum	<i>Sorghum bicolor</i>	charri	Temperate/ Intermediate	local varieties	local varieties	self	NA	crop		local farmers of rural community
Crowfoot grass	<i>Dactyloctenium australe</i>	Beran	Temperate/ Intermediate	local varieties	Improved varieties	self	NA	Crop	containg lots of fibre	local farmers of rural community
Jhonson grass	<i>Sorghum halepense</i>	Bray	Temperate/ Intermediate	local varieties	Improved varieties	self	NA	crop	associated with maize crop	local farmers of rural community
lambs quarters	<i>Chemopodium album</i>	kunah	Temperate/ Intermediate	local varieties	Improved varieties	self	NA	crop	associated with maize crop	local farmers of rural community
Tall buckweed	<i>Fagopyrum cymosum</i>	Fafra	Temperate/ Intermediate	local varieties	Improved varieties	self	NA	crop	associated with maize crop	local farmers of rural community
Grasses	<i>Rhododendron</i>	ghass	Temperate/ Intermediate	local varieties	local varieties	self	NA	Whole	Medicinal use	Medicinal use
Dub grasses	<i>Cynodon dactylon</i>	Dub grasses	Temperate/ Intermediate	local varieties	local varieties	self	NA	Whole	use as a fodder	local farmers of rural community
Loonder grass	<i>Themeda anathera</i>	ghass	Temperate/ Intermediate	local varieties	local varieties	self	NA	Whole	used in broom making and use as a fodder	local farmers of rural community

**Format-4 : Weeds**

1	2	3	4	5	6	7		8	9	10	11	12
Plant	Scientific Name	Local Name	Affected Crop	Impact	Landscape /Habitat	Local Status		Uses if any	Management Options	Associated TK	Other Details like exotic	Community /Knowledge Holder
						Past	Present					
Ipomoea	<i>Ipomea spp</i>	Zeharbael	Maize	Destroys the plant	Temperate and Intermediate	No weed management	Scientific based weed management	Nil	Proper and timely removal	Nil	NA	NA
Ipomoea	<i>Ipomoea aquatica</i>	Ghaas	paddy	Destroys the plant	Temperate and Intermediate	No weed management	Scientific based weed management	Nil	Proper and timely removal	Nil	NA	NA
Celosia	<i>Celosia argentina</i>	Neeli	Paddy	Destroys the plant	Temperate and Intermediate	No weed management	Scientific based weed management	Nil	Proper and timely removal	Nil	NA	NA
Mash	<i>Cyprus esceluntus</i>	Ghaas	-		Temperate and intermediate areas of the District	No weed management	Weed management on scientific lines being followed by the farmers	-	-	-	-	No TK associated with either knowledge or management of Ipomea weed
Water clover	<i>Marsilia quadrifolia</i>	Ham, Aaw	Paddy	Affect crop yield	Temperate and Intermediate	plenty	Weed management on scientific lines being followed by the farmers	nil	weedicide Butachlore	competes with main crop	NA	local farmers

Dub grass	<i>Cynodon dactylon</i>	Dramun	vegetables	Affect crop yield	Temperate and Intermediate	Average	Weed management on scientific lines being followed by the farmers	nil	using weedicide	competes with main crop	NA	local farmers
Johnson grass	<i>Sorghum halepense</i>	Bray	Maize	Affect crop yield	Temperate/ Intermediate	average	Weed management on scientific lines being followed by the farmers	nil	hand picking			local farmers of rural community
Milk weed	<i>Euphorbia thymifolia</i>	Dudli	maize	Affect crop yield	Temperate/ Intermediate	Average	Weed management on scientific lines being followed by the farmers	nil	using weedicide or hand picking	competes with main crop	NA	local farmers of rural community
Bang	<i>Cannabis indica</i>	bang	khariief crops	Affect crop yield	agricultural land and wasteland	average	average	nil	mechanical and chemical	competes with main crop	NA	local farmers of rural community
Shrub	<i>Urtica dioica</i>	soi	Local/wild	Affect crop yield	Temperate and Intermediate	Average	average	nil	mechanical and chemical	competes with main crop	NA	local farmers of rural community

### 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
	Leaf folder	<i>Cnaphalocracis</i>	Patta Modak	Paddy fields	Tillering stage/ monsoon	Dragging rope across the field, light traps, spraying chloropyryfos, cypermethrin or cartap hydrochloride to kill the larvae	Clipping of upper portion of seedlings	NA	NA
Paddy	Stem Borer	<i>Scirpophaga incertulas</i>	Tanna shedak	Paddy fields	July to September	Soil solarisation in May or June. Cartap hydrochloride 4G @1.25kg/Kanal or carbofuran 3G @1Kg/Kanal`	NA	ETL 5% dead heart	NA
	Aphids	<i>Sitobin avenae</i>	Tella	Polyphagous	Feb-April	Proper spray of insecticides	NA	NA	NA
	Pink stem borer	<i>Sesamia inferns</i>	Ludi	Polyphagous/ debris	Nov-feb	Field sanitisation and continuous removal and destruction of infected plants	NA	NA	NA
Wheat	Termites	<i>Odontotermis</i>	Sink	Polyphagous/ sandy and loamy soils	Kharif	Field sanitisation and continuous removal and destruction of infected plants	NA	NA	NA
	Stem borer	<i>Chilo partellus</i>	Ludi	Polyphagous	Kharif	Field sanitisation and continuous removal and destruction of infected plants	NA	NA	NA

Maize	Corn worm	<i>Helicoverpa armigera</i>	Sundi	Maize cobs	Kharif	Field sanitation and continuous removal and destruction of infected plants. Installing pheromone traps @ 6-10/acre	NA	NA	NA
Tomato	fruit borer	<i>Helicoverpa zea</i>	corn earworms	leaves ,shoots ,buds and flower	may -september	spray dimethoate	causes fungal and bacterial infection		local farmers of rural community
vegetables	leaf borer	<i>Spodoptera exigua</i>	pediye	attack on leaves	Kharif	Proper spray of insecticides	Reduces crop yield	NA	local farmers of rural community
Bottleguard	fruitfly	<i>Dacus cucurbitae</i>	stem rot	pulp of the fruits	july to october	Dusting with some repellents	causes fungal and bacterial infection	NA	local farmers of rural community
Rajma	watery soft rot	<i>Sclerotinia sclerotiorum</i>	Dhoru	stem, leaves and pods	july to october		Reduces crop yield	NA	local farmers of rural community
Potato	white grab	<i>Holotrichia species</i>	keed	root and tubers	march= nov	drench the soil with chloropyriphas	Reduces crop yield	NA	local farmers of rural community
Maize	Armyworm	<i>Spodoptera frugiperda</i>	Tokka	upper part of maize	Kharif	Proper spray of insecticides	Reduces crop yield	NA	local farmers of rural community
Rice	Grasshopper	<i>Oxya japonica</i>	titt	upper part	khariief	Proper spray of insecticides	Reduces crop yield	NA	local farmers of rural community



**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
NA	NA	NA	NA	NA	NA	NA	NA	NA



### Format 8: Landscape

1			2	3	4		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											
Cultivated			Cultivated	Fertile land 69ha	Private	Plants, Herbs	Rodents, insects	Villagers	Crop Rotation, Terracing	Cultivation	Used for farming	Nil	Low income communities
Non-Cultivated Land			Non-Irrigated Land	Less fertile 47ha	Govt. as well as private	Marshy, Swampy plants	Insects and Amphibians	Villagers	Crop Rotation, Terracing	Cultivation	Available for farming	Nil	Low income communities
Forest Land			Forest Land	Forests 67ha	Govt. Land	Deodar, Pine, Spruce etc.	Wild animals, Insects	Villagers	Afforestation, Closers	Firewood, timber, medicinal plants etc.	NA	Nil	Every Community
Irrigated land			Irrigated land	Fertile land 79ha	Private land	Rice, Vegetables flowers etc.	Amphibians, Insects	Zamindars	Canals, Channels, Khuls, Distributories etc	Crop Cultivation	Available for farming	Nil	Every Community
Grazing Land			Non-Cultivated	Lush green 31.5ha	Govt. Land	Plants, Herbs	Rodents, insects	Villagers	Nil	Animal grazing	NA	Nil	Every Community

**Format-9: Waterscape**

1	2	3	4	5	6	7	8	9	10	11	12	13
<b>Waterscape</b>	<b>Sub-type</b>	<b>Features and Approx. area</b>	<b>Ownership</b>	<b>General flora</b>	<b>General fauna</b>	<b>Major Uses</b>	<b>User group</b>	<b>Management practices</b>	<b>General uses</b>	<b>Associated TK</b>	<b>Other details</b>	<b>Community accessed</b>
Canals	Khuls	Irrigational khuls	Govt./ Panchayat	Crop like fruits, vegetables and flowers	Frog, tadpole	Irrigation	Locals	De-silting, timely repairs	Irrigation	Na	Na	General public of Panchayat
Nallah	Nallah	From glacier or spring	Govt./ Panchayat	Crop like fruits, vegetables and flowers	Frog, tadpole	Irrigation, drinking water, daily use	Locals	Nallah-bunding, Check-dams etc	Irrigation	Na	Na	General public of Panchayat
River	Stream	Fresh water	Govt./ panchayat	Bryophytes, ferns	Amphibians, Snow trout	Drinking water, irrigation, daily use etc.	Locals	Check-Dams, Strengthening of river banks	Drinking, HH activities, irrigation	Na	Na	General public of Panchayat

**Format-10: Soil Type**

1	2	3	4	5	6	7	8
Soil Type	Color & Texture	Features	Soil Management	Plants / crop suitable	Flora and Fauna	Associated TK	Other information
Black soil	black in colour and clayey in nature	highly fertile and rich in calcium carbonate and poor in nitrogen and phosphorous, highly retentive of moisture	NA	wheat, maize, tomatoes, green chillies etc	both	NA	NA
Laterite soil	red or rusty in colour and coarser in texture	acidic in texture and unsuitable for cultivation	NA	less fertile, potatoes and fruits	both	NA	NA
clay soil	partially off white or yellowish in colour and clayey in texture	sticky, low permeability, rich in calcium, iron, magnesium	NA	wheat, vegetables	both	NA	NA
Alluvial soil	light grey or ash grey	fertile soil and rich in potash and lime	NA	pulses, vegetables, fruits etc	both	NA	NA

**Format 11: Fruit Trees**

1	2	3	4	5	6	7		8	9	10	11	12	13
Plant	Scientific Name	Local Name	Variety	Habit	Landscape / Habitat	Local Status		Source of Seeds / Plants	Season of fruiting	Associated TK	Uses	Other Details market / own use	Community / Knowledge Holder
						Past	Present						
Apple	<i>Malus domestica</i>	Saib	Red Delicious, Golden Delicious, Maharaji, American etc.	Tree, regular bearing	Temperate Hills	Rare	Plenty	Nurseries	Aug-Oct	Fruit, Economy Generation	rich in vitamins and other nutrients	Marketing, Own use	Department of horticulture
Pear	<i>Pyrus spp.</i>	Nakh	Patharnakh, China pear	Tree, regular bearing	Mid Hills	Plenty	Plenty	Nurseries	Aug-Sep	Fruit, Economy Generation	rich in vitamins and other nutrients	Marketing, Own use	Department of horticulture
Peach	<i>Prunus persica</i>	Aaroo	July Elberta, Quetta	Tree, regular bearing	Mid Hills	Average	Rare	Nurseries	June-July	Fruit	rich in vitamins and other nutrients	Marketing, Own use	Department of horticulture
Apricot	<i>Prunus armeniaca</i>	Khubani, Sadi	Local apricot, Bebcu	Tree, regular bearing	Mid Hills	Plenty	Plenty	Nurseries	June-July	Fruit	rich in vitamins and other nutrients	Own Use	Department of horticulture
Walnut	<i>Juglans regia</i>	Akhrot	Paper/Thin Shelled, Hard & Medium Shelled	Tree, regular bearing	Temperate Hills	Plenty	Plenty	Nurseries & Locally raised	Sept-Oct	Dry-fruit, Economy generation		Marketing, Own use	Department of horticulture
Plum	<i>Prunus salicina</i>	Aaloo Bukhara	Santa rosa. Aloo Bukhara	Tree, regular bearing	Mid Hills	Plenty	Rare	Nurseries & Locally raised	July-Aug	Fruit		Own use	Department of horticulture

Persimmon	<i>Diospyros</i>	Amlook	Local	Tree, regular bearing	Mid/temperate hills	Rare	Rare	Locally raised	July-august	fruit		Marketing	Department of horticulture
Fig	<i>Ficus carica</i>	Anjeer	local	Tree, regular bearing	Mid/temperate hills	Average	average	Nurseries	Aug-Oct	fruit		Marketing, own use	Department of horticulture
		Tanchi	local	Tree, regular bearing	Mid/temperate hills	Average	average	Nurseries	July-august	fruit		Own use	Department of horticulture
almond	<i>Prunus amygdalus</i>	badam	local	Tree, regular bearing	Mid Hills	Plenty	Average	locally raised or department of agriculture	July to sept	dry fruit economy generation		own use	Department of horticulture
cherry	<i>Prunus avium</i>	cherry	local	Tree, regular bearing	Temperate Hills	average	average	Nurseries & Locally raised	may July	Fruit		Marketing, Own use	Department of horticulture

**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	Location Status		Uses (usage)	Part used	Associated TK	Other details market/own use	Community know Holders
						Past	Present					
Herb	Tamatar	<i>Solanum lycopersicum</i>	Local	Temperate	Cultivated	Available	Available	To reduce heart diseases, kidney stones and gall bladder stones	Fruit	Cure heart and stone diseases	Fruit	Local people
Herb	Dhaniya	<i>Coriandrum sativum</i>	Local	Temperate	Cultivated	Available	Available	Used for loss of appetite, tooth aches	Seeds	Cure pain	Seeds	Local people
Herb	Pudina	<i>Mentha spicata</i>	Local/wild	Temperate	Cultivated/ naturally grown	available	Available	To cure infection	Leaf	Cure infection	both	Local people
Herb	Pyaz	<i>Allium cepa</i>	Temperate	Cultivated	Available	Available	Available	Roots	To relive cough and cold	Extract	both	Local people
Herb	Lahsun	<i>Allium sativum</i>	Local	Temperate	Cultivated	Available	Available	To cure wounds	Whole plant	Used for wounds	As such	Local people
Herb	Green Chilly	<i>Capsicum annuum</i>	Local	Temperate	Cultivated	Available	Available	To improve immune system	Entire	Improve eye site	Fruit	Local people



Herb	Neg chetri	<i>Trillium govonianum</i>	Local/wild	Temperate	Cultivated/ naturally grown	Plenty	Average	Anti inflammatory remedy ,	Whole plant	available	marketing and own use	naturally / rural farmers
Herb	Zakhm e hayat	<i>Bergenia ciliata</i>	Local/wild	Temperate	Cultivated/ naturally grown	Available	Available	Wound healing, vomiting ,fever, coughand pulmonary infections	leaves	available	marketing and own use	naturally / rural farmers
Herb	chooray	<i>Angelica glauca</i>	Local/wild	Temperate	Cultivated/ naturally grown	Available	Available	dysentery, stomach troubles , infantile atrophy,menorrhagi a andrinderpest	stems	available	marketing and own use	naturally / rural farmers
Herb	Gucchi	<i>Helvella esculenta</i>	Local/wild	Temperate	Cultivated/ naturally grown	Available	Available	Various medicinal purpose like diabetes	whole plant	available	marketing and own use	naturally / rural farmers
Herb	pitpapda	<i>Fumeria parviflora</i>	Local/wild	Temperate	Cultivated/ naturally grown	Available	Available	treatment of fever, gastristis, diarrhea etc	whole plant	available	marketing and own use	naturally / rural farmers
Herb	Patreesh	<i>Aconitum heterophyllum</i>	Local/wild	Temperate	Cultivated/ naturally grown	Available	Available	used against diarrhoea , general weakness and fever	roots	available	marketing and own use	naturally / rural farmers
Herb	Ceski	<i>Artemesia absinthium</i>	Local/wild	Temperate	Cultivated/ naturally grown	Available	Available	remedy for indigestion, gastric pains, antiseptic etc	stem and leaves	available	marketing and own use	naturally / rural farmers
Herb	Bethri dhoop	<i>Juniperus communis</i>	Local/wild	Temperate	Cultivated/ naturally grown	Available	Available	curing asthma, against swellings, stimulant and diuretic	flower fruits	available	marketing and own use	naturally / rural farmers
Shrub	Kuth	<i>Sassurea costus</i>	Local/wild	Temperate	Cultivated/ naturally grown	Available	Available	dysentery,dental trouble, heart problems etc	leaves/ roots	available	marketing and own use	naturally / rural farmers

Herb	jungli straberry	<i>Fragaria nubicola</i>	wild	Temperate	naturally grown	available	average	Stomach disorders	fruit	available	marketing and own use	naturally / rural farmers
Herb	Haand dandelian	<i>Taraxacum officinalis</i>	wild	Temperate	seeds	rare	rare	treatment of skin ,indigestion, jaundice etc	Leaves	available	marketing and own use	naturally / rural farmers
Herb	Banfsha	<i>Violas serpens</i>	Local/wild	Temperate	Cultivated/ naturally grown	Available	Available	cough and cold	whole plant	available	marketing and own use	naturally / rural farmers
Herb	Dramun	<i>Cynodon dactylon</i>	Local/wild	Temperate	Cultivated/ naturally grown	Available	Available	used for cough	Stem/ leaves	available	marketing and own use	naturally / rural farmers
Shrub	Datura	<i>Datura stramonium</i>	Local/wild	Temperate	Cultivated/ naturally grown	Available	Available	medicine	Seeds	available	marketing and own use	naturally / rural farmers
Shrub	Soi	<i>Urtica dioica</i>	Local/wild	Temperate	Cultivated/ naturally grown	Available	Average	Rehumitides	Leaves/ stem	available	marketing and own use	naturally / rural farmers
Herb	Bhang	<i>Cannabis sativa</i>	Local/wild	Temperate	naturally grown	Available	Available	treatment of pain , loss of appetite , insomania , depression etc	Leaves/ stem	available	marketing and own use	naturally / rural farmers
Herb	Kaudh	<i>Picrorhiza kurroa</i>	Local/wild	Temperate	Cultivated/ naturally grown	Available	Available	Pain reliever		available	marketing and own use	naturally / rural farmers
Herb	Kishmay	<i>Berberis lycium</i>	Local/wild	Temperate	Cultivated/ naturally grown	Available	Available	Jaundice		available	marketing and own use	naturally / rural farmers

Herb	Teevnd	<i>Viburnum grandiflorum</i>	wild	Temperate	naturally grown	plenty	average	cough and anticold	flowers /seeds	available	marketing and own use	naturally / rural farmers
Herb	Baryan	<i>Acorus calamus</i>	Local/wild	swampy marshy areas	naturally grown	plenty	average	treatment of gout	rhizome/ lowe part	available	marketing	naturally / rural farmers
herb	Malzudi	<i>Ainsiaea apterea</i>	wild	Temperate	naturally grown	plenty	average	used to treat stomach ache and urinary disease	stem leaves	available	marketing and own use	naturally / rural farmers



**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					
Tree	Walnut	<i>Juglans regia</i>	Temperate	Least	Plenty	Wild , home	Furniture, tooth cleaner	NA	unknown	Department of horticulture and local people
Tree	Banj	<i>Quercus incana</i>	Temperate	Plenty	Plenty	Wild	Firewood	NA	Unknown	Department of horticulture and local people
Tree	Apricot	<i>Prunusar meniaca</i>	Temperate	Least	Plenty	Wild, home	Furniture, firewood	NA	Unknown	Department of horticulture and local people
Tree	Peach	<i>Prunus persica</i>	temperate	Least	Plenty	Wild, home	Firewood	NA	Unknown	Department of horticulture and local people
Tree	Keth	<i>Pyrus pashia</i>	Temperate	Plenty	Least	Wild	Firewood	NA	Unknown	Department of horticulture and local people
Tree	Rubinkul	<i>Robinia s.</i>	Temperate	Plenty	least	wild/ home-garden	Furniture, firewood	NA	Unknown	Department of horticulture and local people
Tree	Drek	<i>Melia azedarach</i>	Temperate	Plenty	Average	wild	Furniture, firewood	NA	Unknown	Department of horticulture and local people
Tree	Moru oak	<i>Quercus floribunda</i>	Temperate	Plenty	Average	wild	Furniture, firewood	NA	Strongest wood	Department of horticulture and local people

Tree	Fur	<i>Abies pindrow</i>	Temperate	Plenty	Average	wild	Furniture, firewood	NA	Unknown	Department of horticulture and local people
perinnial	Kail	<i>Pinus wallichiana</i>	Temperate	Plenty	Average	wild	Furniture, firewood	NA	Unknown	Department of horticulture and local people
perinnial	Tulkul	<i>Morus nigra</i>	Temperate	Plenty	Average	wild/ home-garden	fodder for silk worm and Firewood	NA	Unknown	Department of horticulture and local people
perinnial	Devdar	<i>Cedrus deodara</i>	Temperate	Plenty	Average	wild	Furniture, firewood	NA	Strongest wood	Department of horticulture and local people
perinnial	Kikar	<i>Robinia pseudoacacia</i>	Temperate	Plenty	Average	wild	fodder for animals and firewood	NA	Unknown	Department of horticulture and local people
Tree	Chinar	<i>Platanus orientalis</i>	Temperate	Plenty	least	wild/ home-garden	Furniture, firewood	NA	Unknown	Department of horticulture and local people
Tree	Shisham	<i>Dalbergia sissoo</i>	Temperate	Plenty	Average	wild/ home-garden	Furniture, firewood	NA	Unknown	Department of horticulture and local people
Tree	Kharsoo	<i>Quercus semicarpifolia</i>	Temperate	Plenty	Plenty	Wild	Firewood		unknown	Department of horticulture and local people
Tree	Khau	<i>Olea cuspidata</i>	Temperate	Plenty	Least	Wild	Firewood	NA	unknown	Department of horticulture and local people

### 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					
Fresh Water Fish	Carp Fish	<i>Cyprinus carpio</i>	European	Dorsal fin based long with 17-22 branched rays	Snow fed stream	Plenty	Abundant	Food	Nil	No	n/a	Mehigirs & Deptt. Of fisheries
Cold Water	Desi Gad	<i>Schizothorax</i>	Indigenous	Elongated tube form with short snout barbules, lower lip folded	Snow fed stream	Plenty	Abundant	Food	Nil	No	N/a	Mehigirs & Deptt. of fisheries
Cold Water Fish	Rainbow Trout	<i>Oncorhynchus mykiss</i>	Indigenous	Body elongated with small scales and adipose fin	Snow fed stream, colder region	n/a	In govt. farms, Pvt. Ponds	Food	Nil	Yes	N/a	Mehigirs & Deptt. of fisheries

### 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	Deshi Baschi	<i>Bos indicus</i>	Local	Humped	Free Range & Stall Feeding	Abundant	Decreased	Female for Milk & Male for Draught Purpose	Nil	Nil	Ghee , Curd, Butter, Desi Klari, Paneer	All
	Jersey	<i>Bos taurus</i>	Jr. CB	Dished Face		Very Few	Increased					All
	Doraghi	<i>Bos taurus</i>	Hf CB	B/W Spotted		Very Few	Increased					All
Buffalo	Bhain	<i>Bubales bubalis</i>	Desi/ Local	N.D.	Free Range & Stall Feeding	Very Few	Very Few	Female for Milk & Male for Breeding Purpose	Nil	Nil	Ghee , Curd, Butter, Desi Klari, Paneer	Gujjar
Equine	Khacchar	<i>Equus Cabballus</i>	N.D	Height Less than 9 Hands	Intensive	Abundant	Decreased	Draught purpose	Nil	Nil	Riding Purpose	All
	Ghoda											
Canine	Kuttar	<i>Canis familiaris</i>	Local	N.D.	Stray	Abundant	Abundant	Guarding Purpose	Nil	Nil	Nil	Non specific
Feline	Balai	<i>Felis catus</i>	N.D.	Grey coloured	Stray	Abundant	Abundant	To kill rats	Nil	Nil	Nil	Non specific



Poultry	Kukkar	<i>Gallus domesticus</i>	Desi/ Local	Enriched Meat Flavour	Intensive, Free range, Backyard	Abundant	Decreased	Egg/Meat	Nil	Nil	Nil	All
	Farmi Kukkar		Chabro Cross	Good Egg Yelder		Very Few	Increased					All
<b>Goat</b>	Bakri	<i>Capra hircus</i>	Kaghani (bakarwali)	Large size/ more weight	Flock rearing	Rare	Plenty	Mutton, manure	Nil	Yes	Mutton, wool, manure, hides	Locals, nomads
Yak	Yak	<i>Bos grunniens</i>	lLocal	Large size/ more weight	Free Range & Stall Feeding	Avevrage	Decreased	used for ploughing and threshing	nil	nil	agricultural purposes	Locals, nomads



**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	Deodar	<i>Cedrus deodara</i>	Tree	Forest , temperate	Dense	Less dense	Commercial, own use	Whole plant	Furniture, roofing	Furniture	local farmers of rural community
Tree	Kail	<i>Pinus wallichiana</i>	Tree	Forest , temperate	Dense	Less dense	Commercial, own use	Whole plant	Furniture, roofing	Furniture	local farmers of rural community
Shrubs	Kemel	<i>Barberries</i>	Shrubs	Forest , temperate	Dense	Dense	Commercial, own use	Roots and leaves	Medicinal use	Medicinal	local farmers of rural community
Herbs	Datura	<i>Datura stramonium</i>	Herb	Forest , temperate	Dense	Dense	Commercial, own use	seeds	Medicinal use	Medicinal	local farmers of rural community
Grasses	Ghass	<i>Rhododendron</i>	Grass	Forest	Dense	Dense	own use	Whole	Medicinal use	Medicinal use	local farmers of rural community
Mushroom	Guchhies	<i>Morchella spp.</i>	Mushroom	Temperate	Available	Available	Commercial, own use	Whole plant	Medicinal use	Used in medicines preparation	local farmers of rural community
Tree	Rubinkul	<i>Robinia sp</i>	Temperate	Temperate	Plenty	least	Furniture, firewood	Whole plant	Firewood	Furniture	local farmers of rural community
Tree	Drek	<i>Melia azedarach</i>	Temperate	Temperate	Plenty	Average	Furniture, firewood	Whole plant	furniture, firewood	Furniture	local farmers of rural community
Tree	Moru oak	<i>Quercus floribunda</i>	Temperate	Temperate	Plenty	Average	Commercial, own use	Whole plant	Strongest wood	Furniture	local farmers of rural community

Tree	Fur	<i>Abies pindrow</i>	Temperate	Temperate	Plenty	Average	Furniture, firewood	Whole plant	Furniture, roofing	Furniture	local farmers of rural community
perinnial	Kikar	<i>Robinia pseudoacacia</i>	Temperate	Temperate	Plenty	Average	, own use	Whole plant	Firewood	fodder for animals and firewood	local farmers of rural community
Tree	Chinar	<i>Platanus orientalis</i>	Temperate	Temperate	Plenty	least	Commercial, own use	Whole plant	Furniture, roofing	Furniture, firewood	local farmers of rural community
Tree	Shisham	<i>Dalbergia sissoo</i>	Temperate	Temperate	Plenty	Average	Commercial, own use	Whole plant	Furniture, roofing	Furniture, firewood	local farmers of rural community
Herb	Neg chetri	<i>Trillium govianum</i>	Local/wild	Temperate	Available	Available	Commercial, own use	Whole plant	Anti inflammatory remedy ,	Medicinal use	local farmers of rural community
Herb	Zakhm e hayat	<i>Bergenia ciliata</i>	Local/wild	Temperate	Available	Available	Commercial, own use	leaves	Wound healing, vomiting ,fever, coughand pulmonary infections	Medicinal use	local farmers of rural community
Herb	chooray	<i>Angelica glauca</i>	Local/wild	Temperate	Available	Available	Commercial, own use	stems	dysentery, stomach troubles , infantile atrophy,menorrhagia andrinderpest	Medicinal use	local farmers of rural community
Herb	pitpapda	<i>Fumeria parviflora</i>	Local/wild	Temperate	Available	Available	Commercial, own use	whole plant	treatment of fever, gastritis, diarrhea etc	Medicinal use	local farmers of rural community
Herb	Patreesh	<i>Aconitum heterophyllum</i>	Local/wild	Temperate	Available	Available	Commercial, own use	roots	used against diarrhoea , general weakness and fever	Medicinal use	local farmers of rural community

Herb	Ceski	<i>Artemesia absinthium</i>	Local/wild	Temperate	Available	Available	Commercial, own use	leaves/ stems	remedy for indigestion, gastric pains, antiseptic etc	Medicinal use	local farmers of rural community
Herb	Bethri dhoop	<i>Juniperus communis</i>	Local/wild	Temperate	Available	Available	Commercial, own use	flower fruits	curing asthama, against swellings, stimulant and diuretic	Medicinal use	local farmers of rural community
Shrub	Kuth	<i>Sassurea costus</i>	Local/wild	Temperate	Available	Available	Commercial, own use	leaves/ roots	dysentery, dental trouble, heart problems etc	Medicinal use	local farmers of rural community
Herb	jungli straberry	<i>Fragaria nubicola</i>	wild	Temperate	available	average	Commercial, own use	fruit	Stomach disorders	Medicinal use	local farmers of rural community
Herb	Haand dandelian	<i>Taraxacum officinalis</i>	wild	Temperate	rare	rare	Commercial, own use	Leaves	treatment of skin ,indigestion, jaundice etc	Medicinal use	local farmers of rural community
Herb	Banfsha	<i>Violas serpens</i>	Local/wild	Temperate	Available	Available	Commercial, own use	whole plant	cough and cold	Medicinal use	local farmers of rural community
Herb	Dramun	<i>Cynodon dactylon</i>	Local/wild	Temperate	Available	Available	Commercial, own use	Stem/ leaves	used for cough	Medicinal use	local farmers of rural community
Shrub	Datura	<i>Datura stramonium</i>	Local/wild	Temperate	Available	Available	Commercial, own use	Seeds	medicine	Medicinal use	local farmers of rural community
Shrub	Soi	<i>Urtica dioica</i>	Local/wild	Temperate	Available	Average	Commercial, own use	Leaves/ stem	Rehumitides	Medicinal use	local farmers of rural community
Herb	Bhang	<i>Cannabis sativa</i>	Local/wild	Temperate	Available	Available	Commercial, own use	Leaves/ stem	treatment of pain , loss of appetite , insomania , depresssion etc	Medicinal use	local farmers of rural community
Herb	Teevnd	<i>Viburnum grandiflorum</i>	Herb	Temperate/ Intermediate	Available	Available	Commercial, own use	flowers /seeds	cough and anticold	Medicinal use	local farmers of rural community

Grass	Oats	<i>Avena sativa</i>	Herb	Irrigated areas	Local varieties	Improved varieties	own use	Leaves/ stem	Fodder	NA	local farmers of rural community
Grass	Berseem (Egyptian Clover)	<i>Trifolium alexandrinum</i>	Herb	Temperate/ Intermediate	NA	Improved varieties	own use	Leaves/ stem	Fodder	NA	local farmers of rural community
Grass	Milkweed	<i>Euphorbia thymifolia</i>	Herb	Temperate/ Intermediate	local varieties	local varieties	own use	Leaves/ stem	Fodder	NA	local farmers of rural community
Grass	Charri	<i>Sorghum bicolor</i>	Herb	Temperate/ Intermediate	local varieties	local varieties	own use	Leaves/ stem	Fodder	NA	local farmers of rural community
Grass	Berea grass	<i>Dactyloctenium australe</i>	Herb	Temperate/ Intermediate	local varieties	Improved varieties	own use	Leaves/ stem	Fodder	NA	local farmers of rural community
Grass	Bray grass	<i>Sorghum halepense</i>	Herb	Temperate/ Intermediate	local varieties	Improved varieties	own use	Leaves/ stem	Fodder	NA	local farmers of rural community

**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	Akhroot	<i>Juglans regia</i>	wild	Economically important as farmer fetches good price, socially important for different cuisines, improves good cholesterol	Plenty
2	Bhang	<i>Cannabis sativa</i>	wild	Commercial extraction banned, given to animals to improve their health	Plenty
4	GuchiMashroom	<i>Morchella esculenta</i>	wild	Dried and sold which fetches Rs.10000-15000 per Kg used in making pulao (cuisine), as aphrodisiac in medicine	rare
5	Kasrod	<i>Diplazium</i>	wild	Used as vegetable, collected by locals and sold	average
6	kundi	<i>Peziza violacea</i>	wild	Used as vegetable, collected by locals and sold	average
7	Bankakri	<i>Podophyllum hexandrum</i>	wild	Used as vegetable, collected by locals and sold	average
8	Bhang	<i>Cannabis sativa</i>	wild	medicinal use	Plenty
9	Bathappad	<i>Boletus edulis</i>	wild	Used as vegetable, collected by locals and sold	average
10	kulmosh	<i>Viburnum cotinifolium</i>	wild	fruits	average
11	cauliflower fungus/ kakho	<i>Spariss crispa</i>	wild	mushroom	average
12	Pendak	<i>Crataegus songarica</i>	wild	fruits	average

13	Faagu	<i>Ficus palmata</i>	wild/ local	fruits	average
14	Timru	<i>Zanthoxylum armatum</i>	wild	used as a flavouring agent , spice and medicinal use also	average
15	Chukru	<i>Oxyria digyna</i>	wild	Used as vegetable, collected by locals and sold	Plenty
16	Fafra	<i>Fagopyrum cymosum</i>	wild	Used as vegetable, collected by locals and sold	Plenty
17	shedi(bakar)	<i>Sparrasis radiata</i>	wild	Used as vegetable, collected by locals and sold	average
18	Bhrami	<i>Taxus baccata</i>	Wild Plant	Medicinal Plant and used to cure cancer	average



**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				
Fish	<i>Schizothorax</i>	Natural	Small size	Water, Temperate	Available	available	Food.	Widely distributed	All time	Mehigirs & Deptt. of fisheries
carp fish	<i>Cyprinus carpio</i>	<i>European</i>	Dorsal fin based long with 17-22 branched rays	Snow fed stream	Plenty	Abundant	Food.	Widely distributed	nil	Mehigirs & Deptt. of fisheries
Rainbow Trout	<i>Oncorhynchus mykiss</i>	Indigenous	Body elongated with small scales and adipose fin	Snow fed stream, colder region	NA	In govt. farms, Pvt. Ponds	Food	nil	Nil	Mehigirs & Deptt. of fisheries

**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	West himalyan alder	<i>Alnus nitida</i>	local	medicinal use of bark of this tree	abundant
2	Duckweed	<i>Spirodela polyrhiza</i>	local	use animals for feedingand also helps in bioremediation	abundant

### 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					
Plant	Bankakri	<i>Podophyllum hexandrum</i>	plant	Temperate	Available	Available	Available	It has been found to be effective in controlling skin diseases and recently attracted attention for use in certain form of cancer	Fruit	own use	local farmers of rural community
Herb	Banafsha	<i>Viola spp.</i>	Herb	Temperate	Available	Available	Available	Flowers are used in perfumery and are also used medicinally as demulcent and biliousness and lungs troubles	Flower	own use /marketing	local farmers of rural community
Climber	Kins	<i>Dioscorea deltoidea</i>	Climber	Temperate	Available	Available	Available	The t yield Diosgenin, which is used to synthesize sex hormones and Corisone, Cortisone is extensively and used in rheumatism and allergic conditions. Propagation of the species is though rhizome.	Tuber	own use	local farmers of rural community

Mushroom	Guchhies	<i>Morchella spp</i>	Mushroom	Temperate	Abundant	rare	available	Used in medicines preparation	Whole plant	own use /marketing	local farmers of rural community
Herb	Kaudh	<i>Picrorhiza kurroa</i>	Herb	Temperate	Available	Available	Available	Used as a Pain reliever		own use /marketing	local farmers of rural community
Herb	Kishmay	<i>Berberies lycium</i>	Herb	Temperate	Available	Available	Available	used to treat Jaundice		own use /marketing	local farmers of rural community
Herb	Teevnd	<i>Viburnum grandiflorum</i>	Herb	Temperate	plenty	average	Available	cough and cold	flowers /seeds	own use /marketing	local farmers of rural community
herb	Malzudi	<i>Ainsiaea apterea</i>	wild	Temperate	naturally grown	plenty	average	used to treat stomach ache and urinary disease	stem leaves	own use /marketing	local farmers of rural community
Herb	Bhang	<i>Cannabis sativa</i>	Herb	Temperate	abundant	abundant	Available	treatment of pain , loss of appetite , insomnia , depression etc	Leaves/ stem	own use /marketing	local farmers of rural community
Herb	Neg chetri	<i>Trillium govanianum</i>	Herb	Temperate	Abundant	average	Available	Anti inflammatory remedy ,	Whole plant	own use /marketing	local farmers of rural community
Herb	Zakhm e hayat	<i>Bergenia ciliata</i>	Herb	Temperate	abundant	abundant	Available	Wound healing, vomiting ,fever, coughand pulmonary infections	leaves	own use /marketing	local farmers of rural community
Herb	chooray	<i>Angelica glauca</i>	Herb	Temperate	abundant	abundant	Available	dysentery, stomach troubles , infantile atrophy,menorrhagia andrinderpest	stems	own use /marketing	local farmers of rural community
Herb	pitpapda	<i>Fumeria parviflora</i>	Herb	Temperate	abundant	average	Available	treatment of fever, gastritis, diarrhea etc	whole plant	own use /marketing	local farmers of rural community
Herb	Patreesh	<i>Aconitum heterophyllum</i>	Herb	Temperate	abundant	average	Available	used against diarrhoea , general weakness and fever	roots	own use /marketing	local farmers of rural community
Herb	Ceski	<i>Artemesia absinthium</i>	Herb	Temperate	abundant	abundant	Available	remedy for indigestion, gastric pains, antiseptic etc		own use /marketing	local farmers of rural community

Herb	Bethri dhoop	<i>Juniperus communis</i>	Herb	Temperate	Available	Available	Available	curing asthma, against swellings, stimulant and diuretic	flower fruits	own use /marketing	local farmers of rural community
Herb	Kuth	<i>Sassurea costus</i>	Herb	Temperate	abundant	Available	Available	dysentery, dental trouble, heart problems etc	leaves/ roots	own use /marketing	local farmers of rural community
Herb	jungli straberry	<i>Fragaria nubicola</i>	Herb	Temperate	abundant	average	Available	Stomach disorders	fruit	own use /marketing	local farmers of rural community
Herb	Haand dandelian	<i>Taraxacum officinale</i>	Herb	Temperate	rare	rare	Available	treatment of skin ,indigestion, jaundice etc	Leaves	own use /marketing	local farmers of rural community
Herb	Dramun	<i>Cynodon dactylon</i>	Herb	Temperate	abundant	abundant	Available	used for cough	Stem/ leaves	own use /marketing	local farmers of rural community
Herb	Datura	<i>Datura stramonium</i>	Herb	Temperate	Available	Available	Available	Used in various medicine	Seeds	own use /marketing	local farmers of rural community
Herb	Soi	<i>Urtica dioica</i>	Herb	Temperate	abundant	Average	Available	Rehumitides	Leaves/ stem	own use /marketing	local farmers of rural community

**Format 23: Wild relatives of Crops**

1	2	3	4	5		6	7	8	9	10
Local Name	Scientific Name	Associated crop	Landscape / Habitat	Local Status		Uses (usage)	Part Used	Associated TK	Other details	Community / Knowledge holder
				Past	Present					
Desiber	<i>Ziziphus</i>	Ber	Temperate	Available	Available	Ber	Temperate	–	–	Farming Community of the area
Juniber	<i>Juniperus communis</i>	Pinophyta	Temperate	Available	Available	pinophyta	Temperate	Food plant of butterflies'	–	–

**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
Rose	<i>Rosa sanctum</i>	Red rose	Low land	Commercial	Ornamental	Not Known	Self observed
Merigold	<i>Targetes erecta</i>	Local	Natural	Both	Ornamental	-	Self observed
Bull bay	<i>Magnolia grandiflora</i>	Local	Natural	Both	Ornamental and medicinal		Self observed
Green spire	<i>Euonymus japonicus</i>	Local	land scape plant	non commercial	Ornamental		Self observed

**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	Part used	Ass.TK	Other details	Community knowledge holder
					Past	Present					
Herb	Pudina	<i>Mentha longifolia</i>	Herbaceous perennial	temperate regions /homegardens	plenty	plenty	herbal uses, beverages etc	leaves	used with vinegar remove dandruff	NA	local farmers
Herb	Baberbeol	<i>Ocimum basicilum</i>	Herbaceous perennial	temperate regions /homegardens	average	average	spice and cosmetic use	seeds	cosmetic use	NA	local farmers
Herb	saunf	<i>Foeniculum vulga</i>	Herbaceous perennial	temperate regions /homegardens	plenty	average	used as a spice and some other medicinal uses	saunf	cooking and chewing	NA	local farmers
Herb	Methi	<i>Trigonella foenum-graecum</i>	Annual plant	temperate regions /homegardens	plenty	average	used in stomach troubles and anaemia	leaves and seeds	cooking	NA	local farmers
Herb	Baryan(sweet flag)	<i>Acorus calamus</i>	Herbaceous perennial	marshy areas	average	average	used to treat stomach ailments, gouts etc	rhizomes and leaves	treat digestive problems	NA	local farmers
Herb	Rohni	<i>Allium sativium</i>	perennial bulbous	temperate regions /homegardens	plenty	plenty	spice	cloves	used as a medicine to treat insect bites	NA	local farmers
Herb	Ajwain	<i>Trachyspermu mammi</i>	Forest	Temperate	Available	Available	Cooking	Seeds	treat digestive problems	NA	local farmers



### Format 26: Timber Plants

1	2	3	4	5	6	7	8
Local Name	Scientific Name	Habitat	Local	Other uses, if any	Associated Tk	Any other detail	Community knowledge holder
Deodar	<i>Cedrus deodara</i>	Terrestrial temperate	Forest, Temperate	Dense	NA	Commercial, own use	Forestry
Fir	<i>Abies pindrow</i>	Terrestrial temperate	Forest, Temperate	Dense	NA	Commercial, own use	Forestry
Kail	<i>Pinus wallichiana</i>	Terrestrial temperate	Forest, Temperate	Dense	NA	Commercial, own use	Forestry
Walnut	<i>Juglans regia</i>	Terrestrial temperate	Forest, Temperate	Furniture, tooth cleaner	NA	Commercial, own use	local people
Banj	<i>Quercus incana</i>	Terrestrial temperate	Forest, Temperate	Furniture, roofing	NA	Commercial, own use	local people
Apricot	<i>Prunusar meniaca</i>	Terrestrial temperate	Forest, Temperate	Furniture, roofing	NA	Commercial, own use	local people
Peach	<i>Prunus persica</i>	Terrestrial temperate	Forest, Temperate	Furniture, roofing	NA	Commercial, own use	local people
Keth	<i>Pyru spashia</i>	Terrestrial temperate	Forest, Temperate	Furniture, roofing	NA	Commercial, own use	local people
Rubinkul	<i>Robinia sp</i>	Terrestrial temperate	Forest, Temperate	Furniture, roofing	NA	Commercial, own use	local people
Drek	<i>Melia azedarach</i>	Terrestrial temperate	Forest, Temperate	,firewood , furniture	NA	Commercial, own use	local people
Moru oak	<i>Quercus floribunda</i>	Terrestrial temperate	Forest, Temperate	furniture, roofing ,ploughing equipment etc	NA	Commercial, own use	Forestry
Kikar	<i>Robinia pseudoacacia</i>	Terrestrial temperate	Forest, Temperate	use for fodder ,firewood	NA	Commercial, own use	Forestry
Chinar	<i>Plantanus orientalis</i>	Terrestrial temperate	Forest, Temperate	Furniture, roofing	NA	Commercial, own use	Forestry
Shisham	<i>Dalbergia sissoo</i>	Terrestrial temperate	Forest, Temperate	Furniture, roofing	NA	Commercial, own use	Forestry
Teak	<i>Tectona granis</i>	Terrestrial temperate	Forest, Temperate	furniture, roofing etc	NA	Commercial, own use	Forestry
Tulkul	<i>Morus nigra</i>	Terrestrial temperate	Forest, Temperate	firewood , fodder for silkworm etc.	NA	Commercial, own use	local people
Spruce	<i>Picea smithiana</i>	Tree	Forest, Temperate	Dense	Less dense	Commercial, own use	Forestry
Chir	<i>Pinus roxburghii</i>	dense	Least dense	Roofing, furniture etc		Whole for different uses	Forestry





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

1	2	3	4	5	6	7		8	9	10	11	12
Animal Type	Local Name	Scientific Name	Habitat	Description	Season when seen	Local status		uses if any	Ass. TK	Mode of hunting	Other details	Community/ Knowledge Holder
						Past	Present					
Mammals	Chitra	<i>Panthera pardus</i>	Forest	Endangered	Winter season	Least	More	_	_	Weapon	endangered	_
Mammal	Bhalu	<i>Ursus americanus</i>	Forest	_	summer	Least	More	_	_	Weapon	_	_
Mammal	Fox	<i>Vulpes vulpis</i>	Forest	_	All season	More	More	_	_	Weapon	_	_
Mammal	Monkey	<i>Macaque</i>	Forest	_	All season	More	More	_	_	Weapon	_	_
Birds	Neel	<i>Monal phesant</i>	forest	Endangered	All season	Least	Least	_	_	Weapon	Endangered	_
Birds	Gid	<i>Gyps africanus</i>	Forest	Critically Endangered	All season	Least	Least	_	_	Weapon	Critically Endangered	_
Birds	Chakore	<i>Pheasant</i>	Forest	Endangered	All season	Least	Least	_	_	Weapon	Endangered	_
Birds	kabutar	<i>Columba livia</i>	Forest	_	All season	More	More	_	_	Weapon	_	_
Reptile	Saanf	<i>Ptyas mucosa</i>	Forest	_	summer	More	More	_		Stick	_	_
Reptile	Saanf	<i>Lycodon Mackinmoni</i>	Forest	_	Summer	More	More	_	_	Stick	_	_
Lizards	chipkali	<i>Hemidactylus brookii</i>	Forest/Local	_	Summer	More	More	_	_	Stick	-	_
Aquatic	Fish	<i>Trout</i>	Pond / Nalla	_	all	More	More	_	_	Hook n Net	_	_
Bird	Iel	<i>Gyps himayensis</i>	Forest		All time	Average	Less	No		Prohibited	Maintains forest ecosystem	Self-observed

Bird	Khukhow	<i>Clamator Jacobinu</i>	Forest		Spring season	Available	Less	No		Prohibited	Maintains forest ecosystem	Self-observed
Bird	DhikCharak	<i>Picus cholorolophus</i>	Forest		All time	Available	Less	No		Prohibited	Maintains forest ecosystem	Self-observed
Bird	Kova	<i>Corvus smacrorhynchos</i>	Forest		All time	Available	Less	No		Prohibited	Maintains forest ecosystem	Self-observed
Snake	Surf /samp	<i>Serpentes</i>	Forest /water		All time	Available	Less	No		Prohibited	Maintains forest ecosystem	Self-observed
Fishes	Machli	<i>Himaliyan trout</i>	Water		All time	Available	Available	No		Prohibited	Maintains forest ecosystem	Self-observed
Bird	Myna	<i>Acridotheres tristis</i>	Forest		all time	common	common	No		Prohibited	Maintains forest ecosystem	Self-observed
Insect	Tuller	<i>Apis melifera</i>	Temperate region	Dark brown colour body	Spring and summer	common	common	extraction of honey		NA	pollinating agent	Self-observed
Insect	Mohh	<i>Aedes spp</i>	Temperate region	white marking on their legs and body	summer	common	common	Na		NA	body parasite of human and animals	Self-observed
Insect	spider	<i>Araneus mitificus</i>	Temperate region	males are smaller and less colourful than females	all time	common	common	Na		NA	NA	Self-observed
Insect	Bomsin	<i>Pheretima posthuma</i>	Temperate region	individual are hermaphrodite with segmented bodies	during summers	common	common	Na		Na	known as farmers friends	Self-observed
Insect	Raeii	<i>Tapinoma sessile</i>	nests in open soil ,under stones etc	small sized insects with varied body	during summers	common	common	NA		NA	Strongly attracted to sweet substances	Self-observed
Insect	Tcharr	<i>Cimex lectularius</i>	Temperate region	Adult cimex are light brown in colour ,flat oval	during summers	common	common	NA		na	nuisance pest	Self-observed
Amphibian	Meinn	<i>Rana tigrina</i>	semi aquatic	solitary and nocturnal in nature	during spring to autumn	average	Less	NA		NA		Self-observed

## 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 30: Fauna**

1	2	3	4	5	6
Sr. No.	Local Name	Scientific Name	Type of Animals (Mammals / Birds / Fish / Insect etc.)	Habitat	Remarks (Rare / Common etc.)

<b>Format 31: Any other information of local importance</b>		
<b>1</b>	<b>2</b>	<b>3</b>
<b>Sr. No.</b>	<b>Information of local importance</b>	<b>Remarks</b>

*End of Part II*