

People Biodiversity Register (PBR): General Details

Name of the Panchayat Samiti: Halqa

Taluk: Marh

District: Jammu

State/UT: J&K

Geographical Area of the Panchayat Samiti: 388.51 Hectares

Population under the Panchayat Samiti: 3725

Male: 1939

Female: 1786

Habitat and Topography: Plain

Climate (Rainfall, Temperature and weather patterns): Sub-Tropical Climatic Zone/Irrigated Sub-Tropical Zone

Land Use (Nine fold classification available with village records): Agriculture + Vegetables + Animal Husbandry + Horticulture

Date, Month and Year of PBR Preparation: 27/10/2020

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

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

1) Name of the Chairperson: Pooja Rani

Age: 37 years

Gender: Female

Address: Halqa

Area of specialization: Social Worker and Sarpanch

2) Name: Kamla Devi

Age: 39 years

Gender: Female

Address: Halqa

Area of specialization: Social Worker

3) Name: Sushma Devi

Age: 41 years

Gender: Female

Address: Halqa

Area of specialization: Social Worker

4) Name: Tilak Raj

Age: 55 years

Gender: Male

Address: Halqa

Area of specialization: Social Worker

5) Name: Vikram Singh

Age: 49 years

Gender: Male

Address: Halqa

Area of specialization: Social Worker

6) Name: Laju Ram

Age: 45 years

Gender: Male

Address: Halqa

Area of specialization: Social Worker

7) Name: Rajendra Singh

Age: 55 years

Gender: Male

Address: Halqa

Area of specialization: Social Worker

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:

Age:

Gender:

Address:

Area of Specialization:

Location from which the person accesses biological material:

Perception of the practitioner on the resource status:

Medicinal use:

2) Name:

Age:

Gender:

Address:

Area of specialization:

Location from which the person accesses biological material:

Perception of the practitioner on the resource status:

Medicinal Use:

Annexure 3

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

1) Name: Kartar Chand

Age: 60

Gender: Male

Address: Halqa

Area of specialization: Progressive Farmer

2) Name: Kuldeep Raj

Age: 56

Gender: Male

Address: Halqa

Area of specialization: Progressive Farmer

3) Name: Raj Dev Singh

Age: 54

Gender: Male

Address: Halqa

Area of specialization: Progressive Farmer

4) Name: Lalu Ram

Age: 38

Gender: Male

Address: Halqa

Area of specialization: Progressive Farmer

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

1) **Contact Person:** Agri. Dept.

Name and Address: B C Guja, 9419158228

2) **Contact Person:** Education Dept.

Name and Address: Bharti Kumari, Patoli Mangotian- 9796813221

3) **Contact Person:**

Name and Address:

4) **Contact Person:**

Name and Address:

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

Annexure 5**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	Description of the variety	Landscape / Habitat	Approx. Area sown(ha)	Local status		Special features	Uses	Associated TK	Other details	Cropping Season	Source of Seeds / Plants	Community / Known. Holder
						Past	Present							
Rice	<i>Oryza sativa</i>	Dhan/ Munji	B-370(Fine & Long duration)	Planes / Low laying Areas		Plenty	Plenty	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)			Plenty	Plenty	Medium tall Coarse Grains						
Wheat	<i>Triticum aestivum</i>	Kanak	HD2967,PBW644	Cool Climate during early part of its growth		Plenty	Plenty	High yielding Variety	Food & Fodder	Source of Energy	Suitable for Chappati/Bread making	Rabi	Farmers / Department/ Private Suppliers	Farmers
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
Onion	<i>Allium cepa</i>	Gamd	nasik Red. Red Coral, Monsanto And Local Spp.	local Planee areas		Abundant	Abundant	Bulbs Cash Crop	Vegetables	Vegetable	Staple Vegetable food	Rabi	Farmers / Department/ Private Suppliers	
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
Gobhi Sarson	<i>Brassica napus</i>	Gobhi Saria	GSL-1,DGS-1 ,Local	Cool & dry		Normal	Abundant	Annual Herb,yellow flowers bearing Pods	oil for Food,leaves used as vegetable	Source of energy i,calciam,copper,potassium	vegetable Oil extracted from seeds used in cooking	Rabi	Farmers / Department/ Private Suppliers	Farmers

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
Potato	<i>Solanum tuberosum</i>	Aalo	Kufri Sindhuri, Kufri Badsha, local	Potato is an herbaceous annual, requires cool weather, mostly rainfed conditions		Abundant	Abundant	Tubers are round to ovoid, creamish white to light red in colour with shallow eyes	Under ground tubers are used as vegetable, chips etc	-	High carbohydrate, provide high n energy value	Rabi	Farmers / Department/ Private Suppliers	Farmers
Toria	<i>Brassica jrape 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 i, calcium, copper, potassium	vegetable Oil extracted from seeds used in cooking	Between Kharif & Rabi season	Farmers / Department/ Private Suppliers	Farmers
Chilli	<i>Capsicum spp</i>	Mirchi	Pusa Jawala, CH-1	Tropica/sub tropical vegetable, grows well warm humid conditions		Normal	Normal	Pungency and flavor	Used as spice, medicinal value	-	Contains good amount of vitamin A&C	winter season	Farmers / Department/ Private Suppliers	Farmers
Tomato	<i>Solanum lycopersicum</i>	Tamater	Pusa rubi, Pusa early dwarf, Manisha Plus/local	Warm season crop		Abundant	Abundant	Stems are woody and weak, and tend to vine over other types of plants.	Used as vegetable, salad, soup, Souce	rich source of Ascorbic acid	Tomatoes are also packed with vitamins A and C, calcium, potassium.	Rabi	Farmers / Department/ Private Suppliers	Farmers
Okra	<i>Abelmoschus esculentus</i>	Bindi	Varsha uphar, Arka Anamika	Tropica/sub tropical vegetable Hot and humid climate		Abundant	Abundant	Tender green fruit used as vegetable	Mainly vegetable	Source of Fiber	Contains dietary fibers, protein and carbohydrates	Summer/ Kharif	Farmers / Department/ Private Suppliers	Farmers
Cucumber	<i>Cucumis sativus</i>	Kheera	Kheera local, JL	Grows in all climatic conditions, Tropical, Sub tropical & temperate		Abundant	Abundant	Limbing annual bearing elongated thick cylindrical fruit	Mainly used as salad	-	It also used as antipyretic and causing cooling effect	Summer/ Kharif	Farmers / Department/ Private Suppliers	Farmers
Bottle gourd	<i>Lagenaria siceraria</i>	Lokki	PSPL/Punjab Long	Summer & rainy season crop		Abundant	Abundant	Vines vigorous, profusely branched	Subzis, curries and gravies.	-	It also contains essential vitamins and minerals	Summer/ kharif	Farmers / Department/ Private Suppliers	Farmers

Bitter gourd	<i>Momordica charantia</i>	karela	Pusa Domausmi/Kundan	Warm and Humid climate		Abundant	Abundant	Herbaceous climbing annual with ridged stems	Vegetable and medicinal value	-	Used for maintaining low suger level	Summer/kharif	Farmers / Department/ Privaate Suppliers	Farmers
Beans	<i>Phaseolus Spp.</i>	Phaliya	Contender	Cool weather crop/Sandy/loamy soil		Abundant	Abundant	Tender green pods are used as vegetable	Mainly vegetable	Source of energy in the shape of Gur/Sugar	High vale protein,VitamineB1,B2<B6 and Maganese	Summer season	Farmers / Department/ Privaate Suppliers	Farmers
Cauliflower	<i>Brassica oleraceae var.botrytis</i>	Fol gobi	Pusa snow ball,Pusa Katki,local Girja	Both sub tropical &intermediate		Abundant	Abundant	White and tender head ,curdformed from shortened flower part	Curd Mainly used as vegetable	-	Also good source of protein,carbohydrate,phasphorus& iron	Rabi	Farmers / Department/ Privaate Suppliers	Farmers
Cabbage	<i>Brassica oleraceae var.capitata</i>	Band gobi	Golden Acre,Pride of India,Green Flesh	Both sub tropical &intermediate		Abundant	Abundant	Round head withlight to dark green colour	Head Mainly used as vegetable,salad	-	Also good source of protein,carbohydrate,phasphorus& iron	Rabi	Farmers / Department/ Privaate Suppliers	Farmers
Knol khol	<i>Brassica oleraceae var.gongyloides</i>	Kadam	White vienna,Purple vienna	cool &moist climate/sub tropical		Abundant	Abundant	Swollen stem ,grren/purple with long and broad leaves	Swollen stem and leaves are consumed as vegetable	-	-	Rabi	Farmers / Department/ Privaate Suppliers	Farmers
Spanich	<i>Beta vulgaris</i>	Palak	All Green,Delta	Cool season Crop, thrives well on well drained loam soils		Abundant	Abundant	Tender green leaves & root used as Vegetable	Tender green leaves used as leafy Vegetable	-	Vitamins A and C, fiber, folic acid, and other nutrients	Rabi	Farmers / Department/ Privaate Suppliers	Farmers
Radish	<i>Raphanus sativus</i>	Mulli	Japanes White Koren Etc	Cool season Crop, thrives well on well drained Sandy loam soils		Abundant	Abundant	Tender green leaves &roots used as Vegetable	Modified Roots are used as Vegetable & Salad	-	Full of vitamin A, C, E, B6, potassium, and other minerals,	Rabi	Farmers / Department/ Privaate Suppliers	Farmers
Turnip	<i>Brassica rapa</i>	Gunglu /Shalgam	PTWG/Local	Cool &moist climate/sub tropical&intermediate		Abundant	Abundant	Modified Root is eatable	Root is used as Vegetable ,Salad,.	-	Good source of Vit.C,Diatry Fiber &Potasium	Rabi	Farmers / Department/ Privaate Suppliers	Farmers
Exocitic Vegetables (Brocoli/ Chinese cabbage/ Capsicum etc)	<i>Brassica oleracea var. italica/ Brassica oleracea var. capitata/ Capsicum</i>		Prevelent Hybrid varieties	Cool &moist climate/sub tropical&intermediate		Rare	Normal	All Plants Carats and Fruits are cadable Ric Source of antioxidants	Salad and Vegetable		Ric Source of Multivitamins, Minerals and Antioxidents	Rabi	Farmers / Department/ Privaate Suppliers	Farmers

Format-2 : Fruit Plants												
1	2	3	4	5	6		7	8	9	10	11	12
Plant	Scientific Name	Local Name	Variety	Landscape /Habitat	Local Status		Source of Seeds / Plants	Season of fruiting	Associated TK	Uses	Other Details market / own use	Community /Knowledge Holder
					Past	Present						
Mango	<i>Mangifera indica</i>	Aam	Desi, Dusheri, Malta	Plains/Sub-Tropical	Plenty	Plenty	Nurseries	Jun-Aug	Fruit, Pickle, Preserves		Marketing, Own Use	
Citrus Fruit	<i>Citrus spp.</i>	Khatti, Galgal, Nimbu, Santra, Kinnoo etc.	Local Selection, Kagzi Lime etc.	Plains/Sub-Tropical	Normal	Normal	Nurseries	Through Out Year	Fruit, Pickle, Squashes etc		Marketing, Own Use	
Litchi	<i>Litchi chinensis</i>	Litchi	Culcatta, Dehradun	Plains/Sub-Tropical	Normal	Normal	Nurseries	Jul - Aug	Fruit		Marketing	
Guava	<i>Psidium guajava</i>	Amrood	Local, L49 etc.	Plains/Sub-Tropical	Normal	Normal	Nurseries	Jul - Aug	Fruit		Marketing, Own Use	
Grapes	<i>Vitis vinifera</i>	Anjoor	Local Dakh, Perlette	Plains/Sub-Tropical	Rare	Rare	Nurseries	Jul - Aug	Fruit			
Amla	<i>Phyllanthus emblica</i>	Ambla	Local Selection, NA-7	Plains/Sub-Tropical	Normal	Normal	Nurseries, Local Collections	Nov.- Dec	Pickling Preserve etc		Marketing, Own Use	
Jamun	<i>Syzygium cumini</i>	Jamun	Local Selection	Plains/Sub-Tropical	Plenty	Plenty	Nurseries, Local Raised	Jul - Aug	Fruit		Own Use	

Pomegranate	<i>Punica granatum</i>	Anaar, Druni	Ganesh, Kandhari, Local	Plains/Sub- Tropical	Rare	Rare	Nurseries, Local Raised, Wild	May - Aug	Fruit, Anardana		Own Use	
Pear	<i>Pyrus spp.</i>	Nakh	Pathar Nakh, China Pear	Plains/Sub- Tropical	Rare	Rare	Nurseries	Aug - Sep	Fruit		Own Use	
Peach	<i>Prunus persica</i>	Aaroo	July Elberta, Quetta	Plains/Sub- Tropical	Rare	Rare	Nurseries	Jun - Jul	Fruit		Marketing, Own Use	
Strawberry	<i>Fragaria × ananassa</i>	Strawberry	Chandler	Plains/Sub- Tropical	Rare	Rare	Nurseries	Mar - Apr	Fruit		Marketing	
Papaya	<i>Carica papaya</i>	Papita	Local	Plains/Sub- Tropical	Rare	Rare	Nurseries, Locally Raised	Aug - Oct	Fruit		Own Use	

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	Barnyard Grass	<i>Echinochloa crusgalli</i>	Swank	Paddy	Annual	Agri. Land	Abundant	Abundant	Fodder & Animals	Physical, Mechanical, Chemical	Nil	Nil	Farmers
2	Carrot grass	<i>Parthenium hysterophorus</i>	Congress Grass	Gardens & sugarcane ratoon crops & other crops	Annual	Agri. Land	Abundant	Abundant	Nil	Physical, Mechanical, Chemical	Abnoxious weed difficult to manage		Farmers
3	Lamb's quarters	<i>Chenopodium album</i>	Bathua/ Kanh/Wild Spinach	Wheat, Pea, Potato	Annual herb	Agri. Land	Normal	Normal	Eaten as boiled green veg	Physical, Mechanical, Chemical	Rich Source of protein, Vit. A, Calcium, Phosphorous & potash	Annual feed & fermentation of Beverages	Farmers
4	Nut Grass	<i>Cyperus rotundus</i>	Dilla/Motha	Paddy, maize, sugarcane, vegetable	Perennial	Agri. & Non Agri. Land	Abundant	Abundant	Fodder & Animals	Physical, Mechanical, Chemical	Nil	Traditionally used as medicine	Farmers
5	Bur Clover	<i>Medicago denticulata</i>	Maina	Wheat Grass Peas	Perennial herbaceous legume	Agri. Land	Normal	Normal	Fodder, vegetable & green manure	Mechanical, Chemical	Nil	Improves Soil fertility	Farmers
6	Canary Grass	<i>Phalaris minor</i>	Sitti/gilli danda	Wheat Grass Peas, mustard	annual	Agri. Land	Abundant	Abundant	Fodder & forage	Mechanical, Chemical	Source for High quality protein	Agri. Land	Farmers
7	Meadow Pea	<i>Lathyrus aphaca</i>	Matri	Wheat Grass Peas, mustard	annual	Agri. Land	Normal	Normal	Fodder	Mechanical, Chemical	Nil	Agri. Land	Farmers
8	Canada Thistle	<i>Cirsium arvense</i>	Leh	Wheat gram, Barley	Perennial	Agri. & wasteLand	Normal	Normal		Mechanical, Chemical	Nil	Agri. Land	Farmers
9	Bang	<i>Cannabis indica</i>	Bang	Kharif Crops	Perennial	Agri. & wasteLand	Normal	Normal	Medicinal	Mechanical, Chemical	Nil	Agri. Land	Farmers

10	Nilibuti	<i>Ageratum conyzoides</i>	Nilibuti	Rabi Crops	Perennial	Agri. & wasteLand	Normal	Normal		Mechanical, Chemical	Nil	Agri. & wasteLand	Farmers
11	Wild oats	<i>Avena fatua</i>	Jangli Javi	Oats	Annual herb	Sub Tropical	Rare	Rare	Fodder	Above ground parts	-	Nutrativ Fodder for Animals	Farmers
12	Wild Rice	<i>Echinochloa colonum</i>	Swanki	Paddy	Annual herb	Sub Tropical	Rare	Rare	Fodder	Above ground parts	-	Nutrativ Fodder for Animals	Farmers

Format-5: Pests of Crops

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

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

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
THERE IS NO ORGANISED MARKET IN THE MUNICIPALITY FOR ANY OF THE SPECIES OF ANIMALS LISTED IN FORMAT 15								

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
3725	Farming, Agriculture, Horticulture	Nil	Agricultural	Wheat (Winters), Rice (Summer)	Mulching, Watering, Staking, Fertilization, Weed Control	Stripped Cropping, Grassed Waterways	General, ST,SC, OBC	Middle Class	Permanent Settlers	763

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

Format 8: Landscape

1			2	3	4	5	6	7	8	9	10	11	12
Major Landscapes			Sub - Landscapes	Features and approx. area	Ownership	General flora	General fauna	User groups	Management practices	General uses	Associated TK	Other details	Community accessed
Agricultural land	Pond	Fallow land											
Cultivated			Cultivated	Fertile Land	Private	Trees, Plants, Herbs, Shrubs	Rodents, Insects	Villagers/Locals	Crop Rotation, Terracing	Cultivation	Used for Farming	Nil	Low Income Communities
Non- Cultivated Land			Non-Irrigated Land	Less Fertile	Govt./ Private	Marshy/Swampy Plants	Insects and Amphibians	Villagers/Locals	Crop Rotation, Terracing	Cultivation	Available for Farming	Nil	Low Income Communities
Irrigated Land			Irrigated Land	Fertile Land	Private Land	Rice, Vegetables, Flowers etc.	Amphibians, Insects	Zamindars	Canals, Channel, Khuls, Distributories etc.	Crop cultivation	Available for Farming	Nil	Every Community
Grazing Land			Non-Cultivated	Lush Grteen	Govt. Land	Plants/Herbs	Rodents, Insects	Villagers/Locals	Nil	Animal Grazing	NA	Nil	Every Community

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

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
Sandy loam	Moderately course Sand-65%, Silt-20%, Clay-15%	N-low, P-medium, K-medium	NA	Wheat, Maize, Pulses, Vegetables and Fruits such, Potatoes, Cucumber, Beans, Spinach, Tomatoes, Carrots, Watermelons, Radishes	Both	NA	Organic carbon 0.35-0.44 (low) Gritty--leaves smear on hand, does not ribbon--breaks into small pieces
Loamy Sand	Coarse to very coarse Sand-82%, Silt-10%, Clay-8%	N-low, P-medium, K-high	NA	Wheat, Maize, Millets, Pulses, Vegetables and Fruits such as Potatoes, Cucumber, Beans, Spinach, Tomatoes, Carrots, Watermelon, Radishes	Both	NA	Organic carbon 0.45-0.55 (low) Gritty--does not ribbon or leave a stained smear on hand
Clay Loam	Moderately fine Sand-34%, Clay-33%, Silt-33%	N-low, P-medium, K-medium	NA	Paddy, Wheat, Maize, Pulses, Oil seeds, Sugarcane Cruciferous vegetables such as broccoli and cabbage and other vegetables and Fruits such as tomatoes, green beans, cucumbers, Onions, Cauliflower, Potatoes, Peas, Beans, Carrots, Pumpkins, Radishes,	Both	NA	Organic carbon 0.40-0.50 (low) Forms ribbon; clays form longer ribbons than clay loams. Clay loam feels gritty
Silty clay loam	Moderately fine Silt-52%, Clay-35%, Sand-13%	N-low, P-medium, K-medium	NA	Paddy, Wheat, Maize, Pulses, Oil seeds, Sugarcane Cruciferous vegetables such as broccoli and cabbage and other vegetables and Fruits such as tomatoes, green beans, cucumbers, Onions, Cauliflower, Potatoes, Peas, Beans, Carrots, Pumpkins, Radishes	Both	NA	Organic carbon 0.42-0.50 (low) Forms ribbon; clays form longer ribbons than clay loams

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 market / own use	Community /Knowledge Holder
					Past	Present						
Mango	<i>Aam</i>	<i>Mangifera indica</i>	Desi, Dushari , Malta	Plains, Sub-Tropical	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, Sub-Tropical	Normal	Normal	Nurseries	throughout year		Fruit, picking Squashes etc.	Marketing, own use	
Litchi	<i>Litchi</i>	<i>Litchi chinensis</i>	Calcutta Dehradun	Plains, Sub-Tropical	Normal	Normal	Nurseries	June- August		fruit	Marketing	
Guava	<i>Amrood</i>	<i>Psidium guajava</i>	Local, Allahabadi, Safaida	Plains, Sub-Tropical	Rare	Rare	Nurseries	June- August		fruit	Marketing, own use	
Grapes	<i>Angoor</i>	<i>Vitis vinifera</i>	Local Dakh perlette	Plains, Sub-Tropical	Normal	Normal	Nurseries	June- August		fruit	Own Use	
Amla	<i>Ambla</i>	<i>Phyllanthus emblica</i>	local selection NA-7	Plains, Sub-Tropical	Normal	Normal	Nurseries local collection	Nov- Dec.		picking, fruit juices	Marketing, own use	
Jamun	<i>Jamun</i>	<i>Syzygium cumini</i>	local selection	Plains, Sub-Tropical	Plenty	Plenty	Nurseries, local raised	July- August		fruit	Marketing, Own use	
Pomegranate	<i>Anar, Druni</i>	<i>Punica granatum</i>	Ganesh, Kandhari local	Plains, Sub-Tropical	Rare	Rare	Nurseries, local raised, wild	May- August		fruit, anardana	Own use	
pear	<i>Nakh</i>	<i>Pyrus app</i>	Patharmakh, china pear	Plains, Sub-Tropical	Rare	Rare	Nurseries	August-Sept		fruit	Own use	
Peach	<i>Aaroo</i>	<i>Prunus persica</i>	July Elberta, quetta	Plains, Sub-Tropical	Normal	Normal	Nurseries	June-July		fruit	Marketing, own use	
Strawberry	<i>Strawberry</i>	<i>Fragaria x ananassa</i>	chandler	Plains, Sub-Tropical	Rare	Rare	Nurseries	March-April		fruit	Marketing	
Papaya	<i>Papita</i>	<i>Carica papaya</i>	local	Plains, Sub-Tropical	Rare	Normal	Nurseries, locally raised	August-October		fruit	Marketing, 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	Tarad	<i>Dioscorea belophylla</i>		Lower shiwalik	Abundant	Abundant	Seed			N.A	N.A	Generally, held by community
Herbs	Jungli pudna	<i>Mentha arvensis</i>		Lower shiwalik/Temperate area	Abundant	Abundant	Root			N.A	N.A	Generally, held by community
Shrubs	Trimuru	<i>Zanthoxylum aurmatum</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	Abundant	Seed			N.A	N.A	Generally, held by community
Shrubs	Bhang	<i>Canabis sativa</i>		Lower shiwalik	Abundant	Abundant	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	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	Jaman	<i>Syzygium cumini</i>		Lower shiwalik	Abundant	Abundant	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	Mangoo	<i>Mangifera indica</i>		Lower shiwalik	Abundant	Abundant	Seed			N.A	N.A	Generally, held by community
Tree	Rumbal	<i>Ficus racemosa</i>		Lower shiwalik	Abundant	Abundant	Seed			N.A	N.A	Generally, held by community
Tree	Sree	<i>Albizia lebbek</i>		Lower shiwalik	Abundant	Abundant	Seed			N.A	N.A	Generally, held by community
Tree	Talli	<i>Dalbergia sissoo</i>		Lower shiwalik	Abundant	Abundant	Seed			N.A	N.A	Generally, held by community
Tree	Trimbal	<i>Ficus auriculata</i>		Lower shiwalik	Abundant	Abundant	Seed			N.A	N.A	Generally, held by community
Tree	Tuni	<i>Toona ciliata</i>		Lower shiwalik	Abundant	Abundant	Seed			N.A	N.A	Generally, held by community
Tree	Arjun	<i>Terminalia arjuna</i>		Lower shiwalik	Rare	Rare	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	Neem	<i>Azadirachta indica</i>		Lower shiwalik	Abundant	Abundant	Seed			N.A	N.A	Generally, held by community
tree	Khair	<i>Accacia catechu</i>		Lower shiwalik	Abundant	Abundant	Seed			N.A	N.A	Generally, held by community
Shrubs	Bhang	<i>Cannabis sativa</i>		Lower shiwalik	Abundant	Abundant	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
	Jersey Gau	<i>Bos taurus</i>	CB Jersey	Dished face	stall feeding / semi intensive	Very few	Increase	Dairy	Nil	yes	Milk	All
	Amrecan Gau	<i>Bos taurus</i>	CB HF	Black and white spot	stall feeding / semi intensive	Very few	Increased	Dairy	Nil	Yes	Milk	All
Buffalo	Manj	<i>Bubalus bubalis</i>	Local	Low yield	stall feeding	Abundant	Decreased	Dairy	Nil	No	Milk	All
	Punjabi Mais	<i>Bubalus bubalis</i>	Murrah /Graded	Black color body	stall feeding / semi intensive	Very few	Increased	Dairy	Nil	Yes	Milk	All
Horse	ghoda	<i>Equus caballus</i>	Local	Red color body	Backyard	Abundant	Decrease	Pack/ Cart	Nil	No	Pack/ Cart	All
	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

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					
There is no culture Fisheries taken up in this panchayat												

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>Phyllanthus emblica</i>	Tree	Northern/Sub-Tropical	Good	Moderate	Commercial/ own use	Fruit	Food processing	-	-
Tree	Siris	<i>Albizia lebbek</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	Plash	<i>Butea monosperma</i>	Tree	Northern/Sub-Tropical	Good	Moderate	Commercial/ own use	Timber/ Firewood	-	-	-
Tree	Jamun	<i>Syzygium cumini</i>	Tree	Northern/Sub-Tropical	Good	Moderate	Commercial/ own use	Timber/ Firewood	-	-	-
Tree	Amb	<i>Mangifera indica</i>	Tree	Northern/Sub-Tropical	Good	Moderate	Commercial/ own use	Fruit	-	-	-
Tree	Kiker	<i>Acacia nilotica</i>	Tree	Northern/Sub-Tropical	Good	Moderate	Commercial/ own use	Timber/ Firewood	-	-	-
Tree	Sagwan	<i>Tectona grandis</i>	Tree	Northern/Sub-Tropical	Good	Moderate	Commercial/ own use	Timber/ Firewood	-	-	-
Tree	Safeda	<i>Eucalyptus</i>	Tree	Northern/Sub-Tropical	Good	Moderate	Commercial/ own use	Timber/ Firewood	-	-	-

Tree	Bel	<i>Aegle marmelos</i>	Tree	Northern/Sub-Tropical	Good	Moderate	Commercial/own use	Leaves/ Fruit	-	-	-
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	Gandila	<i>Nerium indicum</i>	Shrubs	Northern/Sub-Tropical	Good	Moderate	Commercial/own use	Flower	-	-	-
Shrub	Pansar	<i>Wendlandia heynei</i>	Shrubs	Northern/Sub-Tropical	Good	Moderate	Commercial/own use	-	-	-	-
Herbs	congress Grass	<i>Parthenium hysterophrous</i>	herbs	Northern/Sub-Tropical	Good	Moderate	-	-	-	-	-
Tree	Badh	<i>Ficus religiosa</i>	Tree	Northern/Sub-Tropical	Good	Moderate	-	-	-	-	-
Tree	Phulai	<i>Acacia modesta</i>	Tree	Northern/Sub-Tropical	Good	Moderate	Commercial/own use	Timber/ Firewood	-	-	-
Climber	Tarad	<i>Dioscorea belophylla</i>	Climber	Northern/Sub-Tropical	Good	Moderate	Commercial/own use	Roots			
Climber	Jungli bitter melon	<i>Momordica charantia</i>	Climber	Northern/Sub-Tropical	Good	Moderate	Commercial/own use	Fruit			
Climber	Purple yam	<i>Dioscorea alata</i>	Climber	Northern/Sub-Tropical	Good	Moderate	-				
Climber	Striped cucumber	<i>Diplocyclos palmatus</i>	Climber	Northern/Sub-Tropical	Good	Moderate	-				

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	Daduni	<i>Punica grantum</i>	Shrub	Live Hedge fencing	Good
2	Brenker	<i>Adhatoda vasica</i>	Shrub	-	Good
3	Kanner/Lal Gandila	<i>Nerium indicum</i>	Shrub		Good
4	Bhang	<i>Cannabis sativa</i>	Shrub	Medicinal	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	-	-	-	
Lotus	<i>Nelumbo nucifera</i>		Edible, with rhizome ,seeds, and leaves have been used as folk medicine, ayurveda and oriental medicine		Good	Good	-	-	-	
Water Spinach	<i>Ipomoea aquaticum</i>		It contains abundant quantities of water, iron, vitaminC, Vitamin A and other nutrients		Good	Good	-	-	-	
Watercress	<i>Nasturtium officinale</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 abudnat quantities of water, iron, vitaminC, Vitamin A and other nutrients	-
3	Watercress	<i>Nasturtium officinale</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 24: Ornamental Plants

1	2	3	4	5	6	7	8
Local Name	<i>Scientific Name</i>	Variety	Habitat	Commercial/non-commercial uses	Associated Tk	Any other detail	Community knowledge holder
Bougainvillea	<i>Bougainvillea glabra</i>	Shrub	Northern/ Sub-Tropical	-	-	-	-
Gulmohar	<i>Delonix regia</i>	Tree	Northern/ Sub-Tropical	-	-	-	-

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				
Sagwan	<i>Tectona grandis</i>	Northern/Sub-Tropical	Good	Moderate	Commercial/ own use	Timber/ Firewood	-	-
Safeda	<i>Eucalyptus</i>	Northern/Sub-Tropical	Good	Moderate	Commercial/ own use	Timber/ Firewood	-	-
Tunu	<i>Toona ciliata</i>	Northern/Sub-Tropical	Good	Moderate	Commercial/ own use	Timber/ Firewood	-	-
Jamun	<i>Syzygium cumini</i>	Northern/Sub-Tropical	Good	Moderate	Commercial/ own use	Timber/ Firewood	-	-

Format 28: Wild 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	Squirrels	<i>Sciuridae</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 insects	Grasshopper	<i>Caelifera</i>	Northern/ Sub-Tropical	-	-	Good	Good	-	-	-	
wild insects	butterfly	<i>Rhopalocera</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	Snake	<i>Serpentes</i>	Northern/ Sub-Tropical	-	-	Good	Good	-	-	-	

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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.)

Format 31: Any other information of local importance

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

End of Part II