

People Biodiversity Register (PBR): General Details

Name of the Panchayat Samiti: Karloop

Taluk: Marh

District: Jammu

State/UT: J&K

Geographical Area of the Panchayat Samiti: 734.19 Hectares

Population under the Panchayat Samiti: 3772

Male: 1965

Female: 1807

Habitat and Topography: Plain

Climate (Rainfall, Temperature and weather patterns): Sub-Tropical Climate 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(COM)

Details of Biodiversity Management Committee (BMC) of the Panchayat (One elected Chairperson and six persons nominated local body ; not less than one third to be women and not less than 18% belonging to SC/ST)**1) Name of the Chairperson:** Harjeet Singh**Age:** 54 years**Gender:** Male**Address:** Karloop**Area of specialization:** Sarpanch**2) Name:** Susheela Devi**Age:** 36 years**Gender:** Female**Address:** Karloop**Area of specialization:** Social Worker**3) Name:** Rajinder Kour**Age:** 58 years**Gender:** Female**Address:** Karloop**Area of specialization:** Social Worker**4) Name:** Javed Ahmed**Age:** 35**Gender:** Male**Address:** Karloop**Area of Specialization:** Social Worker**5) Name:** Satpaul**Age:** 55 years**Gender:** Male**Address:** Karloop**Area of specialization:** Social Worker**6) Name:** Mohan Lal**Age:** 64 years**Gender:** Male**Address:** Karloop**Area of specialization:** Social Worker**7) Name:** Ravi Kant**Age:** 48**Gender:** Male**Address:** Karloop**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:

Age:

Gender:

Address:

Area of Specialization:

Location from which the person accesses biological material:

Perception of the practitioner on the resource status:

Medicinal use:

2) Name:

Age:

Gender:

Address:

Area of Specialization:

Location from which the person accesses biological material:

Perception of the practitioner on the resource status:

Medicinal use:

3) Name:

Age:

Gender:

Address:

Area of specialization:

Location from which the person accesses biological material:

Perception of the practitioner on the resource status:

Medicinal Use:

List of individuals perceived by the villagers to possess Traditional Knowledge (TK) related to biodiversity in agriculture, fisheries, and forestry**1) Name:** Dwarka Nath**Age:** 72**Gender:** Male**Address:** Karloop**Area of specialization:** Progressive Farmer**2) Name:** Shatter Gun**Age:** 66**Gender:** Male**Address:** Karloop**Area of specialization:** Progressive Farmer**3) Name:** Shiv Ram**Age:** 70**Gender:** Male**Address:** Karloop**Area of specialization:** Progressive Farmer**4)Name:** S. Jaswant Singh**Age:** 60**Gender:** Male**Address:** Karloop**Area of specialization:** Progressive Farmer**5) Name:** Darshan Singh**Age:** 65**Gender:** Male**Address:** Karloop**Area of Specialization:** Progressive Farmer

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

1) **Contact Person:** Agriculture Department.

Name and Address: BC Guja- 9419158228

2) **Contact Person:** Education Department

Name and Address: Doli Mohan- 7298144814

3) **Contact Person:** Animal Husbandry

Name and Address: Surinder Kumar- 8803625208, Badyal Brahmana

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 lying Areas		Plenty	Plenty	Basmati 370 is world wide known for its aroma	Food & Fodder	Lowered risk of heart disease, , Provides energy fragrance and taste, high in fiber, vitamins, and minerals	Good source of Vitamin B and antioxidants, Vitamin B1, B6, Magnesium, Phosphorous, Selenium, Manganese, Carbohydrates, Protein	Kharif (May to October)	Farmers / Department/ Private Suppliers	Farmers
			Plenty			Plenty	Medium tall Coarse Grains							
Mash	<i>Vigna mungo</i>	Mhaa	PU-19	Warm / Humid of Sub tropical region		Normal	Rare	High yielding Variety	Food	Source of Vegetable Protein	-	Summer/ Kharif	Farmers / Department/ Private Suppliers	Farmers
			Utra			Normal	Rare							
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 Plancee areas		Normal	Normal	Bulbs Cash Crop	Vegetables	Vegetable	Staple Vegetable food	Rabi	Farmers / Department/ Private Suppliers	Farmers
Mustard	<i>Brassica juncea/ Brassica compestris</i>	Sarson	Pusa Bold/ KOS -1	Cool & dry		Normal	Normal	Matures in 145-150 days with 40-42 % oil content	oil for Food	Source of energy	vegetable Oil extracted from seeds used in cooking	Rabi	Farmers / Department/ Private Suppliers	Farmers

Gobhi Sarson	<i>Brassica napus</i>	Gobhi Saria	GSL-1,DGS-1,Local	Cool & dry		Normal	Rare	Annual Herb,yellow flowers bearing Pods	oil for Food,leaves used as vegetable	Source of energy, calcium, copper, potassium	vegetable Oil extracted from seeds used in cooking	Rabi	Farmers / Department/ Privaate Suppliers	Farmers
Potato	<i>Solanum tuberosum</i>	Aalo	Kufri Sindhuri,Kufri Badsha, local	Potato is an herbaceous annual,requires cool weather,mostly rainfed conditions		Normal	Normal	Tubers are round to ovoid, creamish white to light red in colour with shallow eyes	Under ground tubers are used as vegetable,chips etc	Good Source of Fibre, prevent heart disease, full of antioxidants	High carbohydrate,provide high n energy value	Rabi	Farmers / Department/ Privaate Suppliers	Farmers
Sugarcane	<i>Saccharum officinarum</i>	Ganna	COJ-64,COJ-81	Sub Tropical		Rare	Rare	Long duration crop for Nine months	Food	Source of energy in the shape of Gur/Sugar	Sugar cane Juice used as prefered drink for instant source of energy during summer besides beating heat	Spring season	Farmers / Department/ Privaate Suppliers	Farmers
Chilli	<i>Capsicum spp</i>	Mirchi	Pusa Jawala, CH-1	Tropica/sub tropical vegetable,grows well warm humid conditions		Normal	Rare	Pungency and flavor	Used as spice ,medicinal value	Improve Skin regime, Pain Reliever, Digestive and ulcer preventative	Contains good ammount of vitamin A&C	winter season	Farmers / Department/ Privaate Suppliers	Farmers
Tomato	<i>Solanum lycopersicum</i>	Tamater	Pusa rubi,Pusa early dwarf, Manisha Plus/local	Warm season crop		Normal	Normal	Stems are woody and weak, and tend to vine over other types of plants.	Used as vegetable ,sala d, soup,Souce	rich source of Ascorbic acid	Tomatoes are also packed with vitamins A and C, calcium, potassium.	Rabi	Farmers / Department/ Privaate Suppliers	Farmers
Okra	<i>Abelmoschus esculentus</i>	Bindi	Varsha uphar, Arka Anamika	Tropica/sub tropical vegetableHot and humid climate		Normal	Normal	Tender green fruit used as vegetable	Mainly vegetable	Source of Fiber	Contains dieta fibers,protein and carbohydratesry	Summer/ Kharif	Farmers / Department/ Privaate Suppliers	Farmers

Cucumber	<i>Cucumis sativus</i>	Kheera	Kheera local, JL	Grows in all climatic conditions, Tropical, Sub tropical & temperate		Normal	Normal	Limbing annual bearing elongated thick cylindrical fruit	Mainly used as salad	-	It also used as antipyretic and causing cooling effect	Summer/ Kharif	Farmers / Department/ Private Suppliers	Farmers
Bottle gourd	<i>Lagenaria siceraria</i>	Lokki	PSPL/Punjab Long	Summer & rainy season crop		Normal	Normal	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		Normal	Normal	Herbaceous climbing annual with ridged stems	Vegetable and medicinal value	-	Used for maintaining low sugar level	Summer/ kharif	Farmers / Department/ Private Suppliers	Farmers
Beans	<i>Phaseolus Spp.</i>	Phaliya	Contender	Cool weather crop/Sandy/loamy soil		Normal	Normal	Tender green pods are used as vegetable	Mainly vegetable	Source of energy in the shape of Gur/Sugar	High value protein, Vitamins B1, B2, B6 and Manganese	Summer season	Farmers / Department/ Private Suppliers	Farmers
Cauliflower	<i>Brassica oleraceae var. botrytis</i>	Fol gobi	Pusa snow ball, Pusa Katki, local Girja	Both sub tropical & intermediate		Normal	Normal	White and tender head, curd formed from shortened flower part	Curd Mainly used as vegetable	-	Also good source of protein, carbohydrate, phosphorus & iron	Rabi	Farmers / Department/ Private Suppliers	Farmers
Cabbage	<i>Brassica oleraceae var. capitata</i>	Band gobi	Golden Acre, Pride of India, Green Flesh	Both sub tropical & intermediate		Normal	Normal	Round head with light to dark green colour	Head Mainly used as vegetable, salad	-	Also good source of protein, carbohydrate, phosphorus & iron	Rabi	Farmers / Department/ Private Suppliers	Farmers
Knol khol	<i>Brassica oleraceae var. gongyloides</i>	Kadam	White vienna, Purple vienna	cool & moist climate/sub tropical		Abundant	Normal	Swollen stem, green/purple with long and broad leaves	Swollen stem and leaves are consumed as vegetable	-	-	Rabi	Farmers / Department/ Private Suppliers	Farmers
Spanich	<i>Beta vulgaris</i>	Palak	All Green, Delta	Cool season Crop, thrives well on well drained loam soils		Abundant	Normal	Tender green leaves & root used as Vegetable	Tender green leaves used as leafy Vegetable	-	Vitamins A and C, fiber, folic acid, and other nutrients	Rabi	Farmers / Department/ Private Suppliers	Farmers

Radish	<i>Raphanus sativus</i>	Mulli	Japanes White Koren Etc	Cool season Crop, thrives well on well drained Sandy loam soils		Abundant	Normal	Tender green leaves & roots used as Vegetable	Modified Roots are used as Vegetabke & 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&intermedite	Nil	Abundant	Normal	Modified Root is eatable	Root is used as Vegetable ,Salad,.	Nil	Good source of Vit.C,Dietry 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>	Nil	Prevelent Hybrid varieties	Cool & moist climate/sub tropical&intermedite	Nil	Rare	Normal	All Plants Carats and Fruits are cadable Ric Source of antioxidants	Salad and Vegetable	Nil	Ric Source of Multivitamins, Minierals 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 markt / own use	Community /Knowledge Holder
					Past	Present						
Mango	<i>Mangifera indica</i>	Aam	Desi, Dusheri, Malta	Plains/Low lying areas	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/Low lying areas	Normal	Rare	Nurseries	Through Out Year	Fruit, Pickle, Squashes etc		Own Use	
Litchi	<i>Litchi chinensis</i>	Litchi	Culcatta, Dehradun	Plains/Low lying areas	Normal	Rare	Nurseries	Jul - Aug	Fruit		Own Use	
Guava	<i>Psidium guajava</i>	Amrood	Local, L49 etc.	Plains/Low lying areas	Normal	Rare	Nurseries	Jul - Aug	Fruit		Own Use	
Ber	<i>Ziziphus mauritiana</i>	Ber	Gola, Varanasi	Tree, Regular Bearing	Normal	Normal	Local	Jul - Aug	Fruit		Own Use	
Jamun	<i>Syzygium cumini</i>	Jamun	Local Selection	Plains/Low lying areas	Normal	Normal	Nurseries, Local Raised, Wild	Jul - Aug	Fruit		Marketing, Own Use	

Pomegranate	<i>Punica granatum</i>	Anaar, Druni	Ganesh, Kandhari, Local	Plains/Low lying areas	Rare	Rare	Nurseries, Local Raised, Wild	May - Aug	Fruit, Anardana		Own Use	
Peach	<i>Prunus persica</i>	Aaroo	July Elberta, Quetta	Plains/Low lying areas	Rare	Rare	Nurseries	Jun - Jul	Fruit		Own Use	
Strawberry	<i>Fragaria × ananassa</i>	Strawberry	Chandler	Plains/Low lying areas	Rare	Rare	Nurseries	Mar - Apr	Fruit		Marketing	
Papaya	<i>Carica papaya</i>	Papita	Local	Plains/Low lying areas	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	Nil	Nil	Farmers
3	Lamb's quarters	<i>Chenopodium album</i>	Bathua/ Kanh/Wild Spinach	Wheat, Pea, Potato	Annual herb	Agri. Land	Abundant	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	Normal	Fodder & Animals	Physical, Mechanical, Chemical	Nil	Nil	Farmers
5	Bur Clover	<i>Medicago denticulata</i>	Maina	Wheat Grass Peas	Perennial herbaceous legume	Agri. Land	Abundant	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	Normal	Fodder & forage	Mechanical, Chemical	Source for High quality protein	Nil	Farmers
7	Meadow Pea	<i>Lathyrus aphaca</i>	Matri	Wheat Grass Peas, mustard	annual	Agri. Land	Abundant	Normal	Fodder	Mechanical, Chemical	Nil	Nil	Farmers
8	Canada Thistle	<i>Cirsium arvense</i>	Leh	Wheat gram, Barley	Perennial	Agri. & wasteLand	Abundant	Normal	Nil	Mechanical, Chemical	Nil	Nil	Farmers
9	Bang	<i>Cannabis indica</i>	Bang	Kharif Crops	Perennial	Agri. & wasteLand	Abundant	Normal	Nil	Mechanical, Chemical	Nil	Nil	Farmers

10	Nilibuti	<i>Ageratum conyzoides</i>	Nilibuti	Rabi Crops	Perennial	Agri. & wasteLand	Abundant	Normal	Nil	Mechanical, Chemical	Nil	Nil	Farmers
11	Dub Grass	<i>Cynodon dactylon</i>	Dub Grass	Rabi/ Kharif	Perennial	Agri. & wasteLand	Abudant	Normal	Fooder	Mechanical, Chemical	Nil	Nil	Farmers
12	Wild oats	<i>Avena fatua</i>	Jangli Javi	Oats	Annual herb	Agri. & waste Land	Normal	Rare	Fodder	Above ground parts	Nil	Nutrative Fodder for Animals	Farmers
13	Wild Rice	<i>Echinochloa colonum</i>	Swanki	Paddy	Annual herb	Agri.Land	Normal	Rare	Fodder	Above ground parts	Nil	Nutrative Fodder for Animals	Farmers
14	Jhonson Grass	<i>Sorghum helepense</i>	Beru grass	Sorghum	Perinneal	Agri. Land	Normal	Rare	Fodder	Above ground parts	Nil	Nutrative 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	Nil	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	Nil	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	Nil	Insectivorous feed on grasshopper	Farmers
4	Cereal leaf Beetle	<i>Oulma melanopus</i>	Nil	Chewing & biting	Attacks Maize	Aug-Sep	Chemical measures	Nil	Most recent occurrence	Farmers
5	Red Pumpkin Beetle	<i>Raphidopalpa foveicellis</i>	Lal Kaddu Beetle	Chewing & biting	Cucurbits	March-Oct	Chemical measures	Nil	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	Nil	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	Nil	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	Nil	Eats leaves	Farmers
9	Rice Gandi Bug	<i>Leptocorzia varcornis</i>	Gandi Bug	Paddy	Paddy at miliking stage	July to Oct.	Mechanical& Chemical measures	Nil	Pierce the grains at miliking stage	Farmers
10	Army worm	<i>Spodoptera Frugiperda</i>	Caterpillar	All Crops	Defoliaties Major crops	Through the year	Mechanical& Chemical measures	Nil	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	Nil	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	Nil	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	Nil	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	Nil	Major threats	Farmers
15	Field rats	<i>Ratus melta</i>	Chouha	Nocturnal in habit	Attacks all crops	Throughout the year	Mechanical& Chemical measures	Nil	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
3772	Farming - Agriculture & Horticulture	-	Agricultural	Wheat (Winters), Rice (Summer)	Mulching, Watering, Staking, Fertilization, Weed Control	Stripcropping, Grassed Waterways	SC,ST	Middle Class	Permanent Settlers	718

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, Channels, Khuls, Distributories etc.	Crop Cultivation	Available for Farming	Nil	Every Community
Grazing Land			Non-cultivated	Lush Green	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 coarse 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	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	Normal	Normal	Nurseries	throughout year		Fruit, picking Squashes etc.	Marketing, own use	
Litchi	<i>Litchi</i>	<i>Litchi chinensis</i>	Calcutta Dehradun	plains	Normal	Normal	Nurseries	June- August		fruit	Marketing	
Guava	<i>Amrood</i>	<i>Psidium guajava</i>	Local, Allahabadi, Safaida	plains	Normal	Normal	Nurseries	June- August		fruit	Marketing, own use	
Grapes	<i>Angoor</i>	<i>Vitis vinifera</i>	Local Dakh perlette	plains	Rare	Rare	Nurseries	June- August		fruit	Own use	
Aonia	<i>Ambla</i>	<i>Phyllanthus emblica</i>	local selection NA-7	Plains	Rare	Rare	Nurseries local collection	Nov- Dec.		picking, fruit juices	Marketing, own use	
Jamun	<i>Jamun</i>	<i>Syzygium cumini</i>	local selection	plains	plenty	Plenty	Nurseries, local raised	July- August		fruit	Marketing, Own use	
Pomegranate	<i>Anar, Druni</i>	<i>Punica granatum</i>	Ganesh, Kandhari local	plains	Rare	Rare	Nurseries, local raised, wild	May- August		fruit, anardana	Own use	
pear	<i>Nakh</i>	<i>Pyrus app</i>	Patharmakh, china pear	plains	Rare	Rare	Nurseries	August-Sept		fruit	Own use	

Peach	<i>Aaroo</i>	<i>Prunus persica</i>	July Elberta, quetta	plains	Rare	Rare	Nurseries	June-July		fruit	own use	
Strawberry	<i>Strawberry</i>	<i>Fragaria x ananassa</i>	chandler	plains	Rare	Rare	Nurseries	March-April		fruit	Marketing	
Karonda	<i>gernay</i>	<i>Carissa carandas</i>	local	plains	Rare	Rare	Nurseries, wild	June-August		fruit	own use	
Papaya	<i>Papita</i>	<i>Carica papaya</i>	local	plains	Rare	Rare	Nurseries, locally raised	August-October		fruit	own use	

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

1	2	3	4	5	6		7	8	9	10	11	12
Plant Type	Local Name	Scientific Name	Variety	Landscape/ Habitat	Local Status		Source of plant/seeds	Season of Fruiting	Uses (usage)	Associated TK	Other details market/own use	Community/ Know. holder
					Past	Present						
Herbs	Tarad	<i>Dioscorea belophylla</i>		Sub-Tropical area	Rare	Rare	Seed			N.A	N.A	Generally, held by community
Herbs	Jungli putna	<i>Mentha arvensis</i>		Sub-Tropical area	Normal	Normal	Root			N.A	N.A	Generally, held by community
Shrubs	brankad	<i>Adhatoda vesica</i>		Sub-Tropical area	Normal	Normal	Seed			N.A	N.A	Generally, held by community
Shrubs	Drainkdu	<i>Murraya koenigii</i>		Sub-Tropical area	Abundant	Abundant	Seed			N.A	N.A	Generally, held by community
Shrubs	Bhang	<i>Cannabis sativa</i>		Sub-Tropical area	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 azedarach</i>		Sub-Tropical area	Abundant	Abundant	Seed			N.A	N.A	Generally, held by community
Tree	Jaman	<i>Syzygium cumini</i>		Sub-Tropical area	Abundant	Abundant	Seed			N.A	N.A	Generally, held by community
Tree	Mangoo	<i>Mangifera indica</i>		Sub-Tropical area	Abundant	Abundant	Seed			N.A	N.A	Generally, held by community
Tree	Rumbal	<i>Ficus racemosa</i>		Sub-Tropical area	Abundant	Abundant	Seed			N.A	N.A	Generally, held by community
Tree	Sree	<i>Albizia lebeck</i>		Sub-Tropical area	Abundant	Abundant	Seed			N.A	N.A	Generally, held by community
Tree	Talli	<i>Dalbergia sissoo</i>		Sub-Tropical area	Abundant	Abundant	Seed			N.A	N.A	Generally, held by community
Tree	Amla	<i>Phyllanthus emblica</i>		Sub-Tropical area	Normal	Normal	Seed			N.A	N.A	Generally, held by community
Tree	Neem	<i>Azadiracta indica</i>		Sub-Tropical area	Normal	Normal	Seed			N.A	N.A	Generally, held by community
Shrubs	Bhang	<i>Cannabis sativa</i>		Sub-Tropical area	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
	Jersy Gau	<i>Bos taurus</i>	CB Jersy	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

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/T alao)	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>Albizzia lebeck</i>	Tree	Northern/Sub-Tropical	Good	Moderate	Commercial/ own use	Timber/ Firewood	-	-	-
Tree	Krangal	<i>Cassia fistula</i>	Tree	Northern/Sub-Tropical	Good	Moderate	Commercial/ own use	Timber/ Firewood	-	-	-
Tree	Ber	<i>Ziziphus jujuba</i>	Tree	Northern/Sub-Tropical	Good	Moderate	Commercial/ own use	Fruit	-	-	-
Tree	Plash	<i>Butea monosperma</i>	Tree	Northern/Sub-Tropical	Good	Moderate	Commercial/ own use	Timber/ Firewood	-	-	-
Tree	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	-	-	-
Grass	Bamboo	<i>Dendrocalamus strictus</i>	Grass	Northern/Sub-Tropical	Good	Moderate	Commercial/own use	Sticks	-	-	-
Herbs	Bhang	<i>Cannabis sativa</i>	herbs	Northern/Sub-Tropical	Good	Moderate	Commercial/own use	Leaves	-	-	-
Shrub	Jojra	<i>Pupalia lappacea</i>	Shrubs	Northern/Sub-Tropical	Good	Moderate	Commercial/own use	-	-	-	-
Shrub	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/Sacred Fig	<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	Brenker	<i>Adhatoda vasica</i>	Shrub	Medicinal	Good
2	Bhang	<i>Cannabis sativa</i>	Shrub	Medicinal	Good
3	Aakh	<i>Ipomea carnea</i>	Shrub	Medicinal/Soil binder	Good
4	pansar	<i>Wendlandia heynei</i>	Shrub	Firewood	Good

Format 20: Aquatic Biodiversity

1	2	3	4	5	6		7	8	9	10
Local name	Scientific name	Variety	Features	Habitat	Local Status		Uses	Associated TK	Other details	Community knowledge holder
					Past	Present				
Snail	<i>Gastropoda</i>		Land snails have a strong muscular foot, they use mucus to enable them to crawl over rough surfaces and to keep their soft bodies from drying out.		Good	Good	-	-	-	
Carp	<i>Cyprinus carpio</i>		Dorsal fin base long with 17-22 branched rays and a strong toothed spine in front, pharyngeal teeth 5:5 teeth with flattened crowns.		Rare	Rare	-	-	-	
Sago pondweed	<i>Potamogeton pectinatus</i>		Is a perennial at a fast rate, it is in flower from may to september. The species is hermaphrodite (has both male and female organs) and is pollinated by water. It is noted for attracting wildlife.		Good	Good	-	-	-	
Lotus	<i>Nelumbo nucifera</i>		Edible, with rhizome ,seeds, and leaves have been used as folk medicine, ayurveda and oriental medicine		Good	Rare	-	-	-	
Water Spinach	<i>Ipomoea aquaticum</i>		It contains 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 abundant quantities of water, iron, vitamin C, Vitamin A and other nutrients	-
3	Watercress	<i>Rorippa nasturtium - aquaticum</i>	-	It contains a plethora of antioxidants, which may lower your risk of heart disease and several types of cancer it's also a good source of minerals that protect your bones	-

Format 22: Wild Plants of Medicinal Importance

1	2	3	4	5	6		7	8	9	10	11
Plant(herb, shrub, tree)	Local Name	<i>Scientific Name</i>	Variety	Landscape/habitat	Local status		Associated TK	Uses	Part used	Other details market/own use	c.knowledge holder
					Past	Present					
Tree	Indian Gooseberry/ Amla	<i>Phyllanthus Emblica</i>	Tree	Northern/Sub-Tropical	Good	Good	Immunomodulatory, anti-inflammatory, antiulcer, anticancer	Medicinal	Bark/ Fruit	Market/Own Use	Locals
Tree	Java Plum/Jamun	<i>Syzygium cumini</i>	Tree	Northern/Sub-Tropical	Good	Good	Treatment of sore throat, bronchitis, asthma, thirst, dysentery and ulcers	Medicinal	Fruit /seeds	Market/Own Use	Locals
Herb	Turmeric/Haldi	<i>Curcuma longa</i>	Herb	Northern/Sub-Tropical	Normal	Normal	Improve heart health and prevent against Alzheimer's and cancer, Anti inflammatory and antioxidant, Improve symptoms of depression and arthritis	Medicinal	Stem part	Own Use	Locals
Plant	Garlic/ Thoom	<i>Allium sativum</i>	Plant	Northern/Sub-Tropical	Normal	Normal	Reduce High Blood pressure, Reduce cholesterol levels, Prevention of cancer, Prevent Alzheimer's and Dementia	Medicinal	Garlic plant's bulb	Market/Own Use	Locals
Plant	Ginger/Adrak	<i>Zingiber officinale</i>	Plant	Northern/Sub-Tropical	Normal	Normal	Medicine for treating nausea, dysentery, heartburn, flatulence, diarrhea, loss of appetite, infections, cough and bronchitis	Medicinal	Ginger Root	Market/Own Use	Locals

Format 24: Ornamental Plants

1	2	3	4	5	6	7	8
Local Name	Scientific Name	Variety	Habitat	Commercial/non-commercial uses	Associated Tk	Any other detail	Community knowledge holder
Gandila	<i>Nerium indicum</i>	Shrub	Northern/ Sub-Tropical	Non-Commercial	Snake bites, ulcers, cardiac diseases, asthma, joint pains, leprosy, cancer etc.	-	Locals

Format 26: Timber Plants

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

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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