

People Biodiversity Register (PBR): General Details

Name of the Panchayat Samiti: Bhabore

Taluk: Ghat

District: Doda

State: J&K UT

Geographical Area of the Panchayat Samiti: 286.1 hac.

Population under the Panchayat Samiti: 2040

Male: 990

Female: 1050

Habitat and Topography: Partially hilly partially plain

Climate (Rainfall, Temperature and weather patterns): Temperate

Land Use (Nine fold classification available with village records): Agriculture/Non- Agriculture

Date, Month and Year of PBR Preparation: 11/2019 as per BMC (Register not available)

Management Regime: Reserve Forest (RF)/Joint Forest Management(JGM)/Protected Areas(PA)/ Community Owned and Managed Forest(COM):- Community owned and managed forest open forest.

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: Mohd sadeeq S/o Mohd. Ashraf

Age: 32

Gender: Male

Address: Bhabore

Area of specialization: Agriculturist (PRI/ Sarpanch)

2) Name: Mohinder Singh S/o Madan Singh

Age: 38 years

Gender: Male

Address: Bhabore

Area of specialization: Agriculturist (PRI Member)

3) Name: Mohd Ashraf S/o Gh. Mohd

Age: 39 years

Gender: Male

Address: Bhabore

Area of specialization: Agriculturist

4) Name: Bipan Lal S/o Man chand

Age: 40 years

Gender: Male

Address: Bhabore

Area of specialization: Agriculturist (PRI Member)

5) Name: Zaheer Abbas S/o Ab. Rashid

Age: 37 years

Gender: Male

Address: Bhabore

Area of specialization: Agriculturist

6) Name: Sandeep Kumar S/o Suran Chand (Changed)

Age: 31

Gender: Male

Address: Bhabore

Area of specialization: Agriculturist

7) Name: Gul Shobar D/o Ab. Rashid

Age: 28

Gender: Female

Address: Bhabore

Area of specialization: Agriculturist

Annexure-2

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: Smt. Bimla Devi Wo Madan Singh

Age: 58 years

Gender: Female

Address: Baboor

Area of specialization: Dai

Location from which the person accesses biological material: Baboor

Perception of the practitioner on the resource status:

Medicinal Use:

2) Name: Raj Devi W/o Lt Man Singh

Age: 66 years

Gender: Female

Address: Baboor

Area of specialization: Dai / Hakim

Location from which the person accesses biological material: Baboor

Perception of the practitioner on the resource status:

Medicinal Use:

3)Name: Mohd. Akbar S/o Alimdu

Age: 65 years

Gender: Male

Address: Baboor

Area of specialization:

Location from which the person accesses biological material: Baboor & Adoininig areas

Perception of the practitioner on the resource status:

Medicinal Use:

4)Name: Gulab Din S/o Amira Shah

Age: 65 years

Gender: Male

Address: Baboor

Area of specialization: Hakim

Location from which the person accesses biological material: Baboor & Adoininig areas

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 of the Chairperson: Mohd Isaaq (Edu)

Age: 47

Gender: Male

Address: Bhabore

Area of specialization: Agriculture

2) Name of the Chairperson: Mohd. Sadeeq S/o Mohd. Ashraf (PRI / Sarpanch)

Age: 27 years

Gender: Female

Address: Baboor

Area of specialization:

3)Name of the Chairperson:

Age:

Gender:

Address:

Area of specialization:

4)Name of the Chairperson:

Age:

Gender:

Address:

Area of specialization:

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: 9797461517

Name and Address: Sanjay Kumar S/o Brij Lal R/o Baboor

2) Contact Person: N/A

Name and Address: Jia Ram S/o Mangal Sain R/o Baboor, Agriculture

3) Contact Person: 9596928653

Name and Address: Bringal S/o Roopar R/o Baboor

4) Contact Person: Ab. Rashid S/o Gh. Mohd. R/o Baboor

Name and Address: 9622283732

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	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, Rashi 4794, Bio-9621, DMH-7314, Bio-9220	Hilly, temperate and Intermediate	21205 Ha	Local varieties	Improved Varieties	April sown, local variety dentless, corn and floor sweet in taste	Kharif	Major food item, used as floor feeding to poultry and cattle	Local variety Plandri, shown before 15 April, harvering when leaves turn pale	-	Household kept seed, Department of agriculture, Private seed dealers	Generally aged farmers of rural communities posses TK pertinent to cultivation and management
Wheat	<i>Triticumaestivum</i>	Kanak, gandham	HS-240, VL 804, HS 507	Hilly, temperate and Intermediate	5663 Ha	Local varieties	Improved Varieties	Late maturity	Rabi	Grains used as food, straw used as dry fodder, premature crop used as fodder	-	-	Seed selected from previous year's crop, Department of agriculture	Local farming communities
Barley	<i>Hordeumvulgare</i>	Joo	Local Barley, Ratna, Sonu	Hilly, temperate and Intermediate	3450 Ha	Local varieties	Improved Varieties	Most efficient under rainfed conditions	Rabi	Grains used as cattle feed. Besides green crop used as fodder	Used for making local drinks consumed during summers	-	Seeds saved from previous year's crop, from fellow farmers or relatives	Generally aged farmers of rural communities possess TK pertinent to cultivation and management

Rajmash	<i>Phaseolus vulgaris</i>	Rajmaa	Vaspa, Local Varieties,	Temperate	4500 Ha	Local varieties	Improved Varieties	Sown majorily as an intercrop/ Mixed crop with maize	Kharif	Green beans used as vegetables, pods used as vegetables and grains used as pulse	Local varieties of Rajmash. Every village has its own local strain. Bhaderwahi rajmash has distinct aroma on cooking	-	Seed saved from the previous year's crop	Farmers of Entire Bhaderwah region. Calls for protection as Geographical Indication
Black gram	<i>Vignamungo</i>	Kaali dhal	Local, PU-19, PU-31, Shekher-3	Temperate and intermediate	850 Ha	Local varieties	Improved Varieties	-	Kharif	Used as pulse in human diet	Local varieties has distinct taste and get cooked in less time	-	Farm saved seed, Department of agriculture or private seed dealers	Local seed possessed by the farming community of the district
Horse gram	<i>Macrotylomauniflorum</i>	Kulthi	Local,	Temperate and intermediate	250 Ha	Local varieties	Improved Varieties	-	Rabi	Used as pulse in human diet	Consumed during winters and is reported to have medicinal importance	-	Farm saved seed	Farming community of the district
Cowpea	<i>Vignauniculata</i>	Roongi or roong	Local, C-1, C-152, PS-42	Temperate and intermediate zones	Mixed crop with maize in about 250 Ha	Local varieties	Improved Varieties	Grown as a mixed crop with maize	Kharif	Green pods used as vegetable, seeds used as pulse in diet	Local varieties being preserved by the farmers for quite along time	-	Seed saved by the farmers from the previous year's crop	Cultivation and management practices among the farming communities across the District
Brown Mustard	<i>Brassica juncea</i>	Saroon	Local, KS-101, KOS-1	Temperate and intermediate zones		Local varieties, low production	Improved Varieties, high production	Crop severely affected by the snowfall during the months of dec-feb	Rabi	Green leaves used as vegetable and seeds used for extracting oil used in cooking and for other relevant purposes	Mustard cake used for treatment of various ailments in cattle		Farm saved seed, from peer groups of farmers, from department of agriculture and other relevant sources	Cultivation and management practices among the farming communities across the District

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 x domestica Borkh.</i>	Sabe	Red Delcious, Golden Delocious, Maharaji, American etc.	Tree, regular bearing	temperate hills	rare	Plenty	Nurseries	Aug- Oct.	fruit, value addition		Maketing , own use
Pear	<i>Pyrus spp.</i>	Nakh	Patharnakh, China pear	Tree, regular bearing	Mid hill	Plenty	Plenty	Nurseries	Aug-Sept	fruit		own use
Peach	<i>Prunus persica(L.) Batsch.</i>	Aaroo	July Elberta, Quetta	Tree, regular bearing	mid hill	Rare	Rare	Nurseries	June-july	fruit		Maketing , own use
Apricot	<i>Prunus armeniaca</i>	Khubani, Sadi	local apricot, Bebco	Tree, regular bearing	Mid hills	Plenty	Plenty	Nurseries	June-july	fruit		own use
Walnut	<i>Juglans regia</i>	Akrote	Paper shelled, Thin shelled, hard shelled medium shelled	Tree, regular bearing	Temperate hills	Plenty	Plenty	Nurseries, locally raised	sept-oct	dry fruit		Maketing , own use
Strawberry	<i>Fragara x ananassa duch.</i>	Strawberry	chandler	Runner, annual	plain mid hills	Rare	Rare	Nurseries.	March-April	fruit		Marketing
Pecannut	<i>Carya illinoensis</i>	Pecan	western shell	Tree, regular bearing	Mid/temperate hills	Rare	Rare	Nurseries	Sept-Oct	Dry Fruit		Marketing

Plum	<i>Prunus salicina</i>	Aaloo Bukhara	santa rosa, Allo Bukhara	Tree, regular bearing	Mid Hills	Rare	Rare	Nurseries, locally raised	July-august	fruit		Marketing , own use
Persimmon	<i>Diospyrus</i>	Amlook	Local	Tree, regular bearing	Mid/temperate hills	Rare	Rare	locally raised	July-august	fruit		Marketing
Olive	<i>Olea europea</i>	Khao, jaiton	Local, Carotina	Tree, regular bearing	Mid/temperate hills	Rare	Rare	Govt. Nurseries	August-October	fruit		Marketing
Pomegranate	<i>Punica granatum</i>	Anar, Druni	Ganesh, Kandhari, Local	Tree, shrub, regular bearing	plains, mid hills	Rare	Rare	Nurseries, locally raised, wild	May-August	fruit, anardana		own use

Format 3:-Fodder Crops / Species

1	2	3	4	5		6	7	8	9
Plant	Scientific Name	Local Name	Landscape /Habitat	Local Status		Source of Seeds / Plants	Associated TK	Part Used	Other Details
				Past	Present				
Oats	Avena sativa	Ghaas	Temperate and intermediate	2350 Ha	Local varieties	Seed saved from previous year's crop, department of agriculture or private seed stores	Stored in locally made indigenous structure called tye-	Shoot areas	
Berseem (Egyptian clover)	Trifoliumalexandrinum	Ghaas	Irrigated areas Temperate	Minor 150 Ha	-	Private seed dealers	-	Shoot areas	
Tree	Acacia nilotica	Kikar							
Tree	Drankh	Melia azedarach							

Tree	Kahu	<i>Olea cuspidata Wallich ex G. Don</i>							
Trees	Safeda	<i>Eucalyptus spp.</i>							
	Tooth	<i>Morus alba</i>							
	Alrus								
	Sisoo								
	Baras								

10
Community /Knowledge Holder
Stored in locally mode indigenous structure called tye-
-

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	Source of Seeds / Plants	Community /Knowledge Holder
						Past	Present					
Maize	<i>Ipomea spp.</i>	Zeharbael	7-8 species of ipomea weed affect the maize crop at different stages from sowing to maturity	Temperate and intermediate areas of the District	25000 Ha	No weed management	Weed management on scientific lines being followed by the farmers	Fast growing weed, grows as vines and affects maize crop badly	Kharif (in maize crop)	-	Natural shedding of seed in the crop	No TK associated with either knowledge or management of Ipomea weed
Maize	<i>Cyprus rotundus</i>	dheloo	-	Temperate and intermediate areas of the District	22000 Ha	No weed management	Weed management on scientific lines being followed by the farmers	-	Kharif (in maize crop)	-	Through underground corms transferred through different sources	No TK associated with either knowledge or management of Ipomea weed
Maize	<i>Brachiariamutica</i>	Ghass	Para grass	Temperate and intermediate areas of the District	23000 Ha	No weed management	Weed management on scientific lines being followed by the farmers		Kharif (in maize crop)	-	Natural shedding of seed in the crop	No TK associated with either knowledge or management of Ipomea weed
Mash	<i>Cyprus esceluntus</i>	Ghass	-	Temperate and intermediate areas of the District	36000 Ha	No weed management	Weed management on scientific lines being followed by the farmers		Kharif (in mash and maize crops)	-	Natural shedding of seed in the crop	No TK associated with either knowledge or management of Ipomea weed

Paddy	<i>Ipomeeaqatica</i>			Temperate and intermediate areas of the District	1200 Ha	No weed management	Weed management on scientific lines being followed by the farmers		Kharif (Majorily paddy)	-	Natural shedding of seed in the crop	No TK associated with either knowledge or management of Ipomea weed
Paddy	<i>Celosia argentina</i>	Neeli	Cocks comb	Temperate and intermediate areas of the District	800 Ha	No weed management	Weed management on scientific lines being followed by the farmers		Kharif (Paddy)	-	Natural shedding of seed in the crop	No TK associated with either knowledge or management of Ipomea weed
All crops	<i>SaolanumXanthocar pum</i>	Janglipatha	Wild eggplant	Temperate and intermediate areas of the District	1350 Ha	No weed management	Weed management on scientific lines being followed by the farmers		All seasons	-	Natural shedding of seed in the crop	No TK associated with either knowledge or management of Ipomea weed
Paddy	<i>Eichhorniacrassepe s</i>	Pannijadi	Water hyacinth	Temperate and intermediate areas of the District	1250 Ha	No weed management	Weed management on scientific lines being followed by the farmers		Kharif (paddy)	-	Natural shedding of seed in the crop	No TK associated with either knowledge or management of Ipomea weed
All crops	<i>Viciahirsua</i>	-	Chingarisak	Temperate and intermediate areas of the District	14000 Ha	No weed management	Weed management on scientific lines being followed by the farmers		All seasons	-	Natural shedding of seed in the crop	No TK associated with either knowledge or management of Ipomea weed
All crops	<i>Cardiospermumhali cacabum</i>	-	Lataphatkari	Temperate and intermediate areas of the District	26000 Ha	No weed management	Weed management on scientific lines being followed by the farmers		All seasons	-	Natural shedding of seed in the crop	No TK associated with either knowledge or management of Ipomea weed
All crops	<i>Rumexcrispus</i>	Janglipalak		Temperate and intermediate areas of the District	17500 Ha	No weed management	Weed management on scientific lines being followed by the farmers		Spring season	-	Natural shedding of seed in the crop	No TK associated with either knowledge or management of Ipomea weed

All crops	<i>Setariaglauca</i>	Shitta	Foxtail	Temperate and intermediate areas of the District	15600 Ha	No weed management	Weed management on scientific lines being followed by the farmers		Kharif	-	Natural shedding of seed in the crop	No TK associated with either knowledge or management of Ipomea weed
All fields	<i>Partheniumhysperophorus</i>	Chittaka		Temperate and intermediate areas of the District	200 Ha	No weed management	Weed management on scientific lines being followed by the farmers		Kharif and rabi	-	Natural shedding of seed in the crop	No TK associated with either knowledge or management of Ipomea weed

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
Paddy	Leaf folder	<i>Cnaphalocrocis medinalis</i>	Patta modak	Paddy fields	Tillering stage/Rainy season (monsoon)	Dragging rope across the field, light traps, spraying chloropyrifos, cypermethrin, or Cartap hydrochloride to kill the larvae	Clipping of upper portion of seedlings is considered very effective management		Traditional
	Stem borer	<i>Scirpophaga incertulas</i>	Tanna shedak	Paddy fields	July to September	Soil solarisation in May or June.	ETL 5% Dead heart		
						1. Apply granules of Cartap Hydrochloride 4G @ 1.25 kg/kanal or Carbofuran 3G @ 1kg/kanal granules in 5-7.5 cm standing water & do not drain or irrigate the field for 72 hrs of application. 2. Or spray Cartap hydrochloride 50 SP @ 1gm/ lt water or Chloropyriphos 20 EC @ 2.5 ml/ lt water at ETL 5% Dead hearts			
Rice Hispa	<i>Dicladispa armigera</i>	kida	Paddy fields	July to September	Removal of weeds, Clipping of the leaf tips containing larva mines, In situations of high hispa incidence, skip nitrogen fertilizer top-dressing		Top- dressing after the pest management measures can		

Paddy						Spray crop with Chlorophyriphs 20 EC @ 2ml/lit or Quinophos 25 EC @ 1.5 ml per litre of water.		enhance recovery	
	Brown Plant Hopper	<i>Nilaparvata lugens</i>		Paddy fields	July to September	Remove weeds(co-host), install straw bundles to conserve predatory spiders, delay application of nitrogen fertilizer, Spray Imidachloropid 200 SL @ 3ml per 10 liter water or Acephate 75 WP @ 50 gm per kanal.			
	Grass hopper	<i>Hieroglyphus banian</i>	Tidda	Polyphagous	June to October	Scrap the bunds, Apply Methyl parathion 2% dust or malathion 5% @1.25 kg per kanal on the bunds. Spray Chloropyriphos 25 EC @ 2.4 ml or Malathion 50 EC @ 3.7 ml per liter of water.			
Paddy	Thread worm	<i>Strongyloides stercoralis</i>	Viscal	Low lying areas/paddy fields	July to October	Deep ploughing 2 to 3 times Crop rotation, Soil application with neem cake @ 100-120 kg/ ha Soil Application of Cartap Hydrochloride 4G @ 1.25kg/kanal or Carbofuran 3G @ 1kg/kanal or Chloroprifos 10G @ 500 gm/ kanal			
						Application of / lt water or Neem oil @ 3ml/ lt water at regular interval.			

Wheat	Aphids	<i>Sitobin avenae/Rhopalosiphum padi</i>	tella	Polyphagous	February to April	Release 1st instar larvae of green lacewing (Chrysoperlacarnea) @ 4000/acre.		
						Spray crop with Imidacloprid 200SL @ 0.3 ml / litre of water or dimethoate 30% EC @ 1.5ml/ litre of water followed by neem oil @ 3 ml or NSKE @ 5ml / Lt water.		
	Pink stem borer	<i>Sesamia inferns</i>	ludi	Polyphagous/ debris	Nov to feb	Field sanitation and continuously remove and destroy the affected plants and stubbles.		
						Deep ploughing, crop rotation. Soil solarisation in May or June. Use <i>Trichogrammaspp.</i> , <i>Chrysoperlacarnea</i> and coccinellids cards. Application of Cartap Hydrochloride 4G @ 1.25kg/kanal or Carbofuran 3G @ 1kg/kanal in whorls of plants. Spray Cypermethrin 10% EC @ 1 ml Lt water or Cartap hydrochloride 50 SP @ 1gm/ Lt water or or Oxydemeton – methyl 25% EC @ 1000 ml/ha at ETL 5% Dead hearts.		
	Termites	<i>Odontotermis obesus</i>	Sink	Polyphagous/ sandy loam soils.	October to April	Thiamethoxam 30% FS @ 1.32 Kg per 40 Kg seeds or Chlorpyrifos 20% EC @ 3 – 4 ml/Kg seed and 0.8-1.2 l/acre as soil application		Avoid un-decomposed FYM
	Stem Borer	<i>Chilo partellus</i>	ludi	Polyphagous	Kharif	Field sanitation and continuously remove and destroy the affected plants and stubbles completely.		
						Deep ploughing, follow crop rotation.		

Wheat	Grass hopper					Use <i>Trichogramma</i> spp., Chrysoperla carnea and coccinellids cards. Application of Cartap Hydrochloride 4G @ 1.25kg/kanal or Carbofuran 3G @ 1kg/kanal in whorls of infested plants. Spray Cypermethrin 10% EC @ 1 ml lt water or Cartap hydrochloride 50 SP @ 1gm/ lt water at ETL 5% Dead hearts.			
Wheat		<i>Hieroglyphus banian</i>	Tidda	Polyphagous	March to May	Scrap the bunds, Apply Methyl parathion 2% dust or malathion 5% @ 1.25 kg per kanal on the bunds. Spray Chloropyriphos 25 EC @ 2.4 ml or Malathion 50 EC @ 3.7 ml per liter of water.			
	Cereal Leaf Beetle	<i>Oulema melanopus</i>		Kharif	Kharif	Eradicate/destroy the weeds Field sanitation Deep summer ploughing,		Schedule spray application only when approx 50% of eggs are hatched as the chemicals are mostly effective against larval stage then eggs or adult stage.	
						Destroy the eggs manually if possible.			
						Spray Chloropyriphos 50% + Cypermethrin 5% EC @ 2.5 ml/lit water or chloropyriphos 20EC @ 2.5 ml/lit water or cypermethrin 10 % EC @ 1ml per lit water or Thiamethoxam 12.6 % or acetamiprid 20 SP @ 1gm / lit water or spinosad @ 1gm/ lit water.			
						Weeds eradication, Setting up light traps for adults @ 1/acre.			

Maize	Corn worm	<i>Helicoverpa armigera</i>	sundi	Maize cobs	Kharif	Installing pheromone traps @ 6-10/acre.			
						Spray NSKE 5% against eggs and first instar larvae.			
						Spray crop with BT (<i>Bacillus thuringiensis</i>) @ 1 kg/ hectare or NPV formulations @ 250 LE in 500 lt water for hectare .			
						Spray crop with spinosad @ 1gm/ litre or or Malathion 50 EC @ 1ml per litre of water or Quinalphos 25 EC @ 2ml/lt water.			
Paddy	Cut worm	<i>Agrotis.spp</i>	toka	Maize Field	Kharif	Setting up light traps for adults @ 1/acre.			
						Installing pheromone traps @ 6- 10/acre			
						1. Spray NSKE 5% against eggs and first instar larvae.			
						2. Spray crop with BT (<i>Bacillus thuringiensis</i>) @ 1 kg/ hectare or NPV formulations @ 250 LE in 500 lt water for hectare .			
						3. Apply Chloropyriphos at 2.5ml per litre water or Chlorantraniliprole 18.5 SC 0.3 ml per liter water.			
Brinjal	Red Spider mites	<i>Tetranychus urticae</i>	juan	Polyphagous	Feb to May	Field sanitation, clipping of infested leaves and destroying it completely. Grow trap crops, Conserve predators Spray Diafenthion 50 WP@ 1.25gm/lt water or Ethion 50% EC @ 1ml/ lt water or Dicofol 18.5 EC @ 2 ml/lt water or wetable sulphur 80 % wp@3gm/lt water or Kelthane @ 1ml/lt water followed by NSKE @ 10 ml / lt water.	Avoid dusty conditions		
					September to December				

	Fruit and shoot borer	<i>Leucinodes ornonalis</i>	Fal shedak	Polyphagous	February to may Aug to November	Field sanitation, Clipping off of infested shoots, Trichogramma cards, Spray of NPV, neem oil, Spray of chlorantraniliprole 18.5 SC			
	Hadda Beetle	<i>Henosepilachna vigintioctopunctata</i>	Fal shedak	Polyphagous	March to October	Collect and destroy the infested leaves with grubs and egg masses. Regular hoeing of the soil beds. Spray neem oil @ 5ml/ly wate.			
						Spray cypermethrin 25% EC@ 60-80 ml in 200 l of water/acre or Quinalphos 20% SG @ 600-700 ml in 300-400 . Ogesyrt of Frlysmryhtin1% + Triazophos 35% EC @ 400-5-- ml in 200 L of water / acre.			
						Repeat the spray after 7 days interval alternate with neem oil after picking fruits			
Okra	Fruit Borer	<i>Helicoverpa armigera</i>	Fal shedak	Polyphagous	February to may Aug to November	Spray crop with chlorantraniliprole 18.5 % SC @ 80 ml/ 200 -300 lit of water per Acre and neem oil @ 5ml lt water			
Okara	Leaf hopper	<i>Amrasca biguttula Ishida</i>		Polyphagous	April -june	Conserve predators, Spray azadirachtin 5% W/W neem extract concentrate @ 80 ml in 160 l of water/acre . Spray acetamiprid 20% SP @ 30 g in 200-240 l of water/acre or imidacloprid 17.8% SL @ 40 ml in 200 l of water/acre or malathion 50% EC @ 400 ml in 200-400 l of water/acre or			

						cyperamethrin 25 % @			
						2ml/ lt water.			
Okara	Red Spider mites	Red Spider mites	juan	Polyphagous	Feb to May	Field sanitation, clipping of infested leaves and destroying it completely. Grow trap crops, Conserve predators Spray Diafenthion 50 WP@ 1.25gm/lt water or Ethion 50% EC @ 1ml/ lt water or Dicofol 18.5 EC @ 2 ml/lt water or wetable sulphur 80 % wp@3gm/lt water or Kelthane @ 1ml/lt water followed by NSKE @ 10 ml / lt water.			
					September to December				

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
Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	

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 8: Landscape

Format 8: Landscape													
1			2	3	4	5	6	7	8	9	10	11	12
Major Landscapes			Sub - Landscapes	Features and approx. area	Ownership	General flora	General fauna	User groups	Management practices	General uses	Associated TK	Other details	Community accessed
Agricultural land	Pond	Fallow land											
Nil			Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil

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

Format 11: Fruit Trees

1	2	3	4	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	Usage	Associated TK	Other Details markt / own use	Community / Knowledge Holder
						Past	Present						
Apple	<i>Malus x domestica Borkh.</i>	Sabe	Red Delcious, Golden Delocious, Maharaji, American etc.	Tree, regular bearing	temperate hills	Rare	Plenty	Nurseries	Aug- Oct.	fruit, value addition		Maketing , own use	
Pear	<i>Pyrus spp.</i>	Nakh	Patharnakh, China pear	Tree, regular bearing	Mid hill	Plenty	Plenty	Nurseries	Aug-Sept	fruit		own use	
Peach	<i>Prunus persica(L.) Batsch.</i>	Aaroo	July Elberta, Quetta	Tree, regular bearing	mid hill	Rare	Rare	Nurseries	June-july	fruit		Maketing , own use	
Apricot	<i>Prunus armeniaca</i>	Khubani, Sadi	local apricot, Bebco	Tree, regular bearing	Mid hills	Plenty	Plenty	Nurseries	June-july	fruit		own use	
Walnut	<i>Juglans regia</i>	Akrote	Paper shelled, Thin shelled, hard shelled medium shelled	Tree, regular bearing	Temperate hills	Plenty	Plenty	Nurseries, locally raised	sept-oct	dry fruit		Maketing , own use	
Strawberry	<i>Fragara x ananassa Duch.</i>	Strawberry	chandler	Runner, annual	plain mid hills	Rare	Rare	Nurseries.	March-April	fruit		Marketing	
Pecannut	<i>Carya illinoensis</i>	Pecan	western shell	Tree, regular bearing	Mid/temperate hills	Rare	Rare	Nurseries	Sept-Oct	Dry Fruit		Marketing	

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	Pyaz	<i>Allium cepa</i>	local	Temperate	Cultivated	available	Available	To cure cold and cough	Roots	To relive cough and cold	Extract	
Herb	Lahsun	<i>Allium sativum</i>	local	Temperate	Cultivated	available	Available	Medicinal use to heal wounds	Whole plant	Used for wounds	As such	
Herb	Pudina	<i>Mentha spicata</i>	Local/wild	Temperate	Cultivated/ naturally grown	available	Available	To cure infection	Leaf	Cure infection		
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	
Herb	Dhaniya	<i>Coriandrum sativum</i>	local	Temperate	Cultivated	Available	Available	Used for loss of appetite, tooth aches	Seeds	Cure pain	Seeds	
Herb	Guchi	<i>Morchella vulgaris</i>						Medicinal use				
Shrubs	Rasound	<i>Berberis lycum</i>						Medicinal Use	Roots	N.A	Commercial/ Own	Generally, held by community

	Akhrot	<i>Juglans regia</i>						Generally, held by community				
	Timbru	<i>Zanthoxylum armatum</i>										
	Trimbal	<i>Ficus auriculata</i>										
	Jungli Pudina	<i>Mentha arvensis L</i>										
	Kandeli											
Tree	Kainth	<i>Pyrus pashia</i>						Leaves, fruits	Leaves are used for staining purposes and fruits are edible	Traditional Medicines	-	Self observed
Tree	Draink	<i>Melia azedarach</i>						Antioxidant, antianalgesic, antidiabetic	Leaves and Seed	Own use	-	Self observed
	Sonf	<i>Foeniculum vulgare</i>										
Herb	Banafsha	<i>Viola odorata</i>						Throat problem, Cold, cough	Flower			

Format 13: Ornamental Plants/ Trees/Climbers etc.

1	2	3	4	5	6	7	8	9	10
Plant Type	Local name	Scientific name	Variety	Source of plant/seeds	Commercial/ non-commercial	Uses	Associated TK	Other details	Community/ Know. holder
Ornamental plants	Fig	<i>Ficus carica</i>	-	Fellow land	Non- commercial	Ornamental	Used in traditional medicine	Foliage for milch animals	Horticulturist/ Forest officials/ floriculturists.
Ornamental tree	Bottle brush	<i>Calistemom lanciolatus</i>	-	Gardens /lawns	Non- commercial	Ornamental/ landscaping	Different parts in diarrhea	Flowers in june	Floriculturist /forest officials
Ornamental tree	Golden privet	<i>Ligustrum vulgare</i>	-	Gardens /lawns	Non- commercial	Ornamental/ landscaping	Different parts in diarrhea	Flowers in june	Floriculturist /forest officials
Ornamental tree	Oleander	<i>Nerium indica</i>	-	Gardens /lawns	Non- commercial	Ornamental/ landscaping	Different parts in diarrhea	Flowers in june	Floriculturist /forest officials
Ornamental tree	Rose HT	<i>Rosa spp.</i>	-	Gardens /lawns	Non- commercial	Ornamental/ landscaping	Rose petals used as anti-septic etc.	Flowers in june	Floriculturist /forest officials
Ornamental tree	Rose creeper	<i>Rosa spp.</i>	-	Gardens /lawns	Non- commercial	Ornamental/ landscaping	Rose petals used as anti-septic etc.	Flowers in june	Floriculturist /forest officials
Creeper	Pot marigold	<i>Callendulla officinalis</i>	-	Gardens/lawns	Non- commercial	Ornamental/ landscaping	Thrives in poorest soils etc	Flowers beautiful	Floriculturist /forest officials

Creeper	China aster	<i>Callistephus chinensis</i>	-	Gardens/lawns	Non- commercial	Ornamental/ landscaping	Mass planting in summers	Flowers beautiful	Floriculturist /forest officials
Creeper	Forest daisy	<i>Chrysanthemu morifolium</i>	-	Gardens/lawns	Non- commercial	Ornamental/ landscaping	Good flowers	Flowers beautiful	Floriculturist /forest officials

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	Wood used for furniture	unknown	
Tree	Apricot	<i>Prunus armeniaca</i>	Temperate	Least	plenty	Wild, home	Furniture, firewood	Wood used for furniture	Unknown	
Tree	Peach	<i>Prunus persica</i>	temperate	Least	plenty	Wild, home	Firewood	Wood used for furniture	Unknown	
Tree	Khau	<i>Olea cuspidata</i>	Temperate	Plenty	least	Wild	Firewood	Wood used for furniture	unknown	
Tree	Kainth	<i>Pyrus pashia</i>	Temperate	Plenty	least	Wild	Firewood	Wood used for furniture	Unknown	
Tree	Safeda	<i>Eucalyptus spp.</i>	Temperate	Available	Available	Wild	Furniture	Wood used for furniture	Unknown	

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	Gai	<i>Bos indicus</i>	ND	Cow Yield	Backyard	Abdulant	Dereases	Dairy	Nil	No	Milk	All
	Gai	<i>Bos laurus</i>	CB Jersey	Dished Face	Backyard/ Commercial	Very Few	Increased	Dairy	Nil	No	Milk	All
Buffalo	Manj	<i>Bubales buballss</i>	Local	Low Yield	Backyard	Abdulant	Dereases	Dairy	Nil	No	Milk	Gujjar Community
	Bhains	<i>Bubales buballss</i>	Murrah	Black Cloured Body	Backyard	Very Few	Increased	Dairy	Nil	No	Milk	All
Equine	Horse	<i>Equus caballus</i>	Local	HT Less than 9 hands	Backyard	Less No.	Very Few	Pack Purpose	Nil	No	Pack	Bakerwal
	Mule	-	Local	HT Less than 9 hands	Backyard	Less No.	Increased	Pack Purpose	Nil	No	Local Carrying	All
Poultry	Kukarr	<i>Galus domesticus</i>	Local	Enrich Meat Flavour	Backyard	Abdulant	Dereases	Egg & Meat	Nil	No	Egg & Meat	All
	Farmi Kukarr	<i>Galus domesticus</i>	Chabro	Good Egggar	Backyard	Abdulant	Increased	Egg & Meat	Nil	No	Egg & Meat	All
	Broiler	<i>Galus domesticus</i>	Hybrid	White In Colour	Deep Litter	Abdulant	Increased	Only Meat	Nil	No	Only Meat	All
Canine	Kutta	<i>Canis familiaris</i>	Local	ND	Stray	Abdulant	Abdubdant	Guarding Purpose	Nil	No	Nil	Non Specific

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					
	Pahari fish		Pahari			Yes	Rare			Markets/ Own use		Traditional

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	Chir	<i>Pinus roxburghii</i>		Temperate areas	Dense	Lease dense	commercial , own	Timber/ Firewood	Resin	Roofing, furniture etc	Locals
Plant	Bankakri	<i>Podophyllum hexandrum</i>	Plant				Commercial, own use	Fruit		It has been found to be effective in controlling skin diseases and recently attracted attention for use in certain form of cancer	
Herb	Banafsha	<i>Viola odorata</i>	Herb				Commercial, own use	Flower		Flowers are used in perfumery and are also used medicinally as demulcent and biliousness and lungs troubles	
Shurb	Kalveuth	<i>Prunella vulgaris</i>	Grow Annually				<i>Useful to treat infections & other illnesses, inflammation, protect against cancer, prevent diabetes complications.</i>	Leaves & Flowers			
Tree	Deodar	<i>Cedrus deodara</i>	Tree				Commercial, own use	Whole for different uses		Roofing, furniture etc	

Tree	Kail	<i>Pinus wallichiana</i>	Tree				Commercial, own use	Whole for different uses		Roofing, furniture etc	
Trees	Kainth	<i>Pyrus paschia</i>	Trees				own	Leaves	nil	nil	Generally, held by community
Tree	Draink	<i>Melia azedarach</i>	Tree				Own Use	Leaves/Wood			Self observed
Trees	Trimbal	<i>Ficus auriculata</i>	Trees				own	Leaves/Fruit	nil	nil	Generally, held by community
Shrubs	Rasound	<i>Berberis lycum</i>	Shrubs				Commercial / own use	Root	used for medicinal purposes	N.A	Generally, held by community
Herb	Pudina	<i>Mentha arvensis</i>	Wild				Own use				
Herb	Methi	<i>Trigonella foenum-graecum</i>	Annual plant				Spice	Leaves			
Tree	Apricot	<i>Prunus armeniaca</i>	Temperate				Furniture, firewood	Wood used for furniture	Unknown		
Tree	Dudaya	<i>Wrightia arborea</i>									
	Timbru	<i>Zanthoxylum armatum</i>									
	Kandeli										
Tree	Kahu	<i>Olea cuspidata Wallich ex G. Don</i>	Grow Annually	Forest	Plenty	Rare	<i>bark used for fracture, leave use for treatment of malaria, UTI</i>	Bark,Leaves			

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	Available
2	Bhang	<i>Cannabis sativa</i>	Wild	Commercial extraction banned, given to animals to improve their health	Available
3	Wild Pomegranate	<i>Punica grantum</i>	Wild	Used in making chutney	Available
4	Guchi Mashroom	<i>Morchella esculenta</i>	Wild	Dried and sold which fetches Rs.10000-15000 per Kg used in making pulao (cuisine), as aphrodisiac in medicine	Available
5	Kasrod	<i>Diplazium</i>	Wild	Used as vegetable, collected by locals and sold	Available
6	Saloi	<i>Boswellia seerata</i>	Wild	economic, social	Available
7	Shisham	<i>Dalbergia sissoo</i>	Sub Tropical	Available	Available
8	Kau	<i>Olea cuspidata</i>		economic	Rare
9	Kiker	<i>Acacia nilotica</i>			

10	Tuni	<i>Toona ciliata</i>	Tree	Lower shiwalik	Abundant
11	Timbru	<i>Zanthoxylum armatum</i>			
12	Santha	<i>Dodonaea viscosa</i>			

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					
Mammal Carnivore	Chitra	<i>Panthera pardus</i>	Forest		All time	Available	Less	No		Prohibited	Maintains forest ecosystem	
Mammal	Gidh	<i>Cains aureseus</i>	Forest		All time	Available	Less	No		Prohibited	Maintains forest ecosystem	
Mammal	Fakal	<i>vulpes vulpes</i>	Forest		All time	Available	Less	No		Prohibited	Maintains forest ecosystem	
Rodent	Navel	<i>Lepus nigricollis</i>	Forest		All time	Available	Less	No		Prohibited	Maintains forest ecosystem	
Bird	Titar	<i>Frabcikubys francolinus</i>	Forest		Not available	Available	Less	No		Prohibited	Maintains forest ecosystem	
Bird	Chakor	<i>Alectoris graeca</i>	Forest		All time	Available	Less	No		Prohibited	Maintains forest ecosystem	
Bird	Ghugi	<i>Streptopelia decaocto</i>	Forest		All time	Available	Less	No		Prohibited	Maintains forest ecosystem	
Bird	Khukhow	<i>Clamator Jacabinu</i>	Forest		Spring season	Available	Less	No		Prohibited	Maintains forest ecosystem	

Bird	DhikCharak	<i>Picus cholorolophus</i>	Forest		All time	Available	Less	No		Prohibited	Maintains forest ecosystem	
Bird	Kova	<i>Corvus macrorhynchos</i>	Forest		All time	Available	Less	No		Prohibited	Maintains forest ecosystem	
Snake	Surf /sap		Forest /water		summer	Available	Less	No		Prohibited	Maintains forest ecosystem	
Fishes	Machli	<i>Himalayan trout</i>	water		All time	Available	Available	No		Prohibited	Maintains forest ecosystem	
Reptiles	Oriental garden lizard	<i>Calotescf. versicolor</i>	Forest/village		All season	Common	Common		Unknown			Generally, held by community

Format 29: Flora**URBAN BIODIVERSITY**

1	2	3	4	5	6	7
Sr. No.	Local Name	Scientific Name	Type of Plants	Habitat	Flowering Season	Remarks (Rare / Common etc.)
1	Gutta	Tagetes Patula		Terrestrial/Subtropical	Grows round the year	Common
2	Gulab	Rosa spp		Terrestrial/Subtropical	Perennial flower	Common
3	Guldaudi	Chrysanthemum spp.		Terrestrial/Subtropical	Winter flower	Common
4	Panj Tara	Largerstromia indica		Terrestrial, Intermediate	Pink flowers	Common

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.)
1	Black bear	<i>Ursus americanus</i>	Mammal	Forest	Rare
2	Chuha/Rate	<i>Mus booduga</i>	Mammal	Home/forest	Common
3	Wild fox	<i>Vulpes vulpes</i>	Mammal	Home/forest	Common
4	Wild cat	<i>Felis silvestris</i>	Mammal	Home/forest	Common
5	Rats	<i>Terera Indica</i>			
6	Snow leopard	<i>Uncia uncial</i>			
7	Snake	<i>Serpentes</i>			
8	Kankoli	<i>Elaeagnus multiflora</i>			
9	Lizards	<i>Lacertilia</i>			
10	Frog	<i>Anura</i>			

11	Cinereous Tit	<i>Parus cinereus</i>			
12	Butterfly	<i>Rhopalocera</i>			
13	Rai				
14	Bichoo	<i>Typhlochactas mitchelli</i>			
15	Makdi	<i>Araneae</i>			
16	Halo				

Format 31: Any other information of local importance

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

End of Part II