

## Peoples Bio diversity Register (PBR) : General Details

**Name of the Panchayat Samity:** Purmandal

**Taluk:** Purmandal

**District:** Samba

**State:** J&K

**Geographical area of the Panchayat Samity:** 935.19 Ha

**Population under the Panchayat Samity**

**Total:** 2152      **Male:**1127      **Female:**1031

**Habitat and topography:** Hilly Topography

**Climate(Rainfall, Temperature and other weather patterns):** Sub tropical Climate

**Land use(Nine fold classification available with village records**

**D:M:Y of preparation of the preparation of PBR:** 21/10/2020

**Management Regime :** Reserve forests(RF)/Joint forest Management (JFM)/Protected Areas(PA) Community owned and Managed forests:Joint forest Management (JFM)

## Annexure 1

**Details of Biodeversty 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:** Joginder Pal Sharma (Sarpanch Purmandal)

**Age :** 48 years

**Gender:** Male

**Adress:** Sangar

**Area of specialization:** NIL

**2) Name :** Pooja sharma (Panch Purmandal)

**Age :-** 35 years

**Gender:** Female

**Adress:** W.No. 2

**Area of specialization:** NIL

**3) Name:-** Kamlesh Kumari (Panch Purmandal)

**Age :** 42 years

**Gender :** Female

**Address:** W.No. 5

**Area of specialization:** NIL

**4) Name:** Rinku Kumar (Naib Sarpanch Purmandal)

**Age :** 35 years

**Gender:** Male

**Address:-** W.No.9

**Area of specialization:** NIL

**5) Name :** Gulam Hussian

**Age :** 65 years

**Gender:** Male

**Address:** W.No. 8

**Area of specialization:** NIL

**6) Name :** Ram Lal (Panch Purmandal)

**Age :** 51 years

**Gender :** Male

**Address:** W.no. 6

**Area of specialization:** NIL

**7) Name :-** Shashi Pal Verma (Panch Ward No.: 6 Purmandal )

**Age :-** 41 years

**Gender :** Male

**Address :** W.No. 1

**Area of specialization:** NIL

**8) Name :-** Suresh Kumar (Panch)

**Age :-** 41 years

**Gender :** Male

**Address :** W.No. 1

**Area of specialization:** NIL

**Annexure 2**

**List of vaid/Hakims and traditional healthcare (Human and livestock) practitioners residing and or using biological resources during within the jurisdiction of the village**

1) **Name of the Chairperson** : Nil

**Age:** Nil

**Gender:** Nil

**Address:** Nil

**Area of specialization:** Nil

2) **Name** : Nil

**Age:** Nil

**Gender:** Nil

**Address:** Nil

**Area of specialization:** Nil

### 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 : Moti Ram s/o Kirpa Ram

Age: 63

Gender: Male

Address : VPO Purmandal

Area of specialization: Progressive Farmer

2) Name : Ghulam Hussain s/o Fazil Din

Age: 60

Gender: Male

Address: Sangar (Purmandal)

Area of specialization:

3) Name:

Age:

Gender:

Address:

Area of specialization:

4) Name:

Age:

Gender:

Address:

Area of specialization:

**Annexure 4**

**Details of schools, colleges, departments, universities, govt. institutions, non-governmental organization and individual involved in the preparation of PBR**

1) **Contact Person :**

**Name and Address :**

2) **Contact Person :**

**Name and Address :**

3) **Contact Person :**

**Name and Address :**

4) **Contact Person :**

**Name and Address :**

**You may add more names of 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**

<b>S.No.</b>	<b>Name &amp; address of the person/Institute/company others</b>	<b>Local and Scientific Name of the biological material Accessed and quantity</b>	<b>Date and resolution of the BMC and endorsement by the Panchayat</b>	<b>detail of collection fee imposed</b>	<b>Anticipated mode of sharing benefits or quantum of benefits shared</b>

*End of Part I*

**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 shown	Local Status		Special features	Cropping season	Uses	Associated TK	Other details	Source of Seeds/Plants	Community/ Knowledge Holder
						Past	Present							
Rice	<i>Oryza sativa</i>	Dhan, Munji	PR-113	Suitable for Sub Tropical areas . Matures in 135 -140 day approx.	02 Ha	Abundant	Abundant	Dwarf High Yielding variety	June - Oct	Food Fodder		Suitable for Cultivation in Low land , Mid HillsAreas, Hot & Humid Climate	Agri Deptt. / Private Agencies	
	<i>Oryza sativa</i>	Dhan, Munji	Pusa - 1121	Suitable for Sub-tropical areas		Abundant	Abundant	Exception kernel elongation and volume expansion more than 4 times after cooking	June-Oct	Food Fodder	Easy digestibility	Suitable for typical water logged area where crop remains submerged	Agri Deptt. / Private Agencies	
	<i>Oryza sativa</i>	Dhan, Munji	Jaya	Plant Height 140-145 cm		Abundant	Abundant	Dwarf High Yielding variety	June - Oct	Food Fodder			Agri Deptt. / Private Agencies	
	<i>Oryza sativa</i>	Dhan, Munji	Begumi	160-165 cm		Abundant	Rare	Tall in height , sweet in taste , High starch Content	June - Oct	Food Fodder	More Nutritive Value	Suitable for Plain & Mid Hills	Local	Pahari community

Maize	<i>Zea mays</i>	Makk, kukri, challi, Buhtta, jobawr	Double Dekalb Yellow	Mostly warm weather Plant	122 Ha	Abundant	Abundant	High yeilding Variety	July to Oct. kharif season crop	Grain, Fodder	Raw material used in industries producing starch oil, Pahramceuticals, Cosmetics and Paper	Suitable of Plain & Mid Hills	Agri. Deptt. / Private Agencies
	<i>Zea mays</i>	Makk, kukri, challi, Buhtta, jobawr	KH-517	Mostly warm weather Plant		Abundant	Abundant	Lodging resistant	July to Oct. kharif season crop	Grain, Fodder	Fodder is of good quality, remains green and fresh for long time	Suitable of Plain & Mid Hills	Agri. Deptt. / Private Agencies
pulses	<i>Vigna mungo</i>	Maa/ Mash	T-9	Suitable of Plain & Mid Hills	5.5Ha	Abundant	Abundant	High yeilding Variety	June- Aug kharif season crop	Dhal, Papad, wadi, Nutritive fodder for milch animals	hight Protein contents	Can be used as green manuring crops	Agri. Deptt. / Private Agencies
	<i>Vigna radiata</i>	Moong	ML 131 ,ML181, PDM 54	Suitable of Plain & Mid Hills thrives best under hot and humid climate		Abundant	Abundant	High yeilding Variety	June- Aug kharif season crop	Dhal, Papad, wadi, Nutritive fodder for milch animals	hight Protein contents	Can be used as green manuring crops	Agri. Deptt. / Private Agencies



Til (OILSEED)	<i>Seasamum indicum</i>	til	Punjab til -1	Suitable of Kandi areas & Mid Hills	3Ha	Abundant	Abundant	High yeilding Varity	June- Oct	Oil,	high oil content	White seed Variety . Matures in 80-85 days . Plant hight 1.3-1.6 mtr.	Agri. Deptt.	
Okra	<i>Abelmoschus esculentus Moench</i>	Bhindi	Pusa A-4	Suitable for Plain & Mid Hills	3.5 Ha	Abundant	Abundant	High yield Variety	Feb- March June- July (rainy season)	Food	Rich source of fibre	YVM and aphids , dark green fruit , size 12-15 cm long and first picking starts in 45	Agri. Deptt. / Private Agencies	
Bottle Gourd	<i>Lagenaria siceraria</i>	Loki, Tumbdi	Pusa Summer prolific long	Sub-tropical and intermediate		Abundant	Abundant	The fruits are long, the skin colour is llowish green	Spring & Summer	Vegetables, raita, soup & Juice	it can grow in all types of soils	It can tolerate cold climate but not frost	Agri. Deptt. / Private Agencies	
Brinjal	<i>Solanum Melongena</i>	Baingan	janak ,pusa purple long	Mostly warm weather Plant		Abundant	Abundant	fruits are both round and long depending upon variety. Colour of fruit is dark purple , light purple .	it requires a long growing season with average day and night temperature	food	sandy loam soil is preffered. Silt loams and clay loams are also suitable.	it cannot tolerate frost	Agri. Deptt. / Private Agencies	
Wheat	<i>Triticum aestivum</i>	Kanak	HD-2967	150-155 cm	128 Ha	Abundant	Abundant	Dwarf High Yielding variety	Nov- Apr.	Food Fodder	Moderatley resistant to yellow rust	Suitable for Plain & Mid Hills	Agri Deptt. / Private Agencies	
	<i>Triticum aestivum</i>	Kanak	Raj -3077	135-140 cm		Abundant	Abundant	Dwarf High Yielding variety	Nov- Apr.	Food Fodder	late sown variety suitable for kndi areas	Suitable for Plain & Mid Hills	Agri Deptt. / Private Agencies	

	<i>Triticum aestivum</i>	Kanak	PBW-644	Tropical / Subtropical zones			New Variety	Drought resistant	Nov- Apr.	Food Fodder	Early sown variety for more Fodder	Suitable for Plain & Mid Hills	Agri Deptt. / Private Agencies
Chickpea (pulse)	<i>Cicer arietinum</i>	Chana / Gram	C-235	Kandi Areas / Irrigated	5Ha	Abundant	Abundant	Highly stable variety, seeds are small and yellowish brown	Rabi	for human consumption and animal feed	rich source of protien and energy	Thrives best on well drained sandy or light soils.	Agri. Deptt. / Private Agencies
peas(pulse)	<i>pisum sativum</i>	matar	T-163	Suitable of Kandi areas		Abundant	Abundant	high yielding variety .	rabi	for human consumption as vegetable as well as pulse	rich source of protien and energy	Thrives best on well drained loamy soils.	Agri. Deptt. / Private Agencies
mustard (OILSEED)	<i>brassica rapa</i>	sarson	pusa bold, RH-30	sub tropical plains/ kandi area	3Ha	Abundant	Abundant	high yielding varieties .	Rabi season crop sowing time 2nd fortnight Oct to 1st week Nov.	Oil,	rich source of oil	Thrives best on well drained loamy soils.crop duration 90-95days	Agri. Deptt. / Private Agencies
Tomato	<i>Solanum lycopersicum</i>	Tamatar,	Kashi (DVRT-2)	Plant are Green, Fruit are red , spherical medium to large sized	3 Ha	Abundant	Abundant	First harvest at 70-75 days after transplanting . Resistant to TLCV.	Transplanting Jan to Mid Feb	Food	Resistant to TLCV.	Suitable of Plain & Mid Hills	Agri. Deptt. / Private Agencies

Knol khol	<i>Brassica oleracea</i>	Kadam	Purple Vienna	Cool & moist climate		Abundant	Abundant	Matures in 70-75 days. Knobs are purplish & fleshy greenish white.	mainly as a winter crop.	As vegetable pickles.	Rich in fibre.	For early crop sandy or sandy loam soils & for late crop clay loam & silty soils are preferred.	Agri. Deptt. / Private Agencies	
Radish	<i>Raphanus sativus</i>	Mooli	Japanese White	Plain and mid hills					Ending Nov-January	Vegetable, Salad & Fodder	Flesh is snow white, crisp, solid and mildly pungent	It matures in 65 to 70 days	Agri. Deptt. / Private Agencies	

**Format-2: Fruit Plants**

1	2	3	4	5	6	7		8	9	10	11	12	13
S. No.	Plant	Scientific Name	Local Name	Variety	Landscape/ Habitat	Local status		Source of Seeds/ Plants	Season of Fruiting	Associated TK	Uses (usages)	Other details market/ own use	Community/ knowledge holder
						Past	Present						
1	Woody Tree	<i>Mangifera indica</i>	Amb	Wild, Dashehari, Malda, Amrapali, Mallika, Langra, Swarn Rekha, Chausa, Fazli, Totapuri, Ramkila, Baramasim etc.	Sub-tropical	Good	Good	Seedling trees, grafted plants.	March to August	Record vailable in old books.	Sucking, table, processing	Own uses and sold in market	Popular in local population.
2	Woody Tree	<i>Pidium guajava</i>	Amrood	Wild, Allahbad, Sardar, Lalit, Arka Amulaya, Sheveta, Punjab Pink	Sub-tropical	Good	Good	Seedling trees, grafted/ layered.	March to August, Dec. To January	Introduced by traders and domesticated locally.	Table and processing.	Own uses and sold in market	Popular in local population.
3	Climber	<i>Vitis vinifera</i>	Angoor	Wild, Perlet, Beauty Seedless	Sub-tropical	Good	Good	Cuttings	Feb. To June	Introduced by traders and domesticated locally.	Table and processing.	Own uses and sold in market	Popular in local population.
4	Woody Tree	<i>Emblica officinalis</i>	Amla	wild, Banarsi, Neelam, NA 7.	Sub-tropical	Good	Good	Seedling trees, grafted plants.	March to Nov.	Record vailable in old books.	Processing	Own uses and sold in market	Popular in local population.
5	Woody Tree	<i>Citrus sinensis</i>	Mosammi	Mosambi, Jaffa, Red Blood	Sub-tropical	Good	Good	Grafted Plants	March to Jan.	Record vailable in old books.	Table and processing.	Own uses and sold in market	Popular in local population.

6	Woody Tree	<i>Citrus reticulata</i>	Sangtra	Kinnow, Sangtra	Sub-tropical	Good	Good	Grafted Plants	March to Jan.	Record vailable in old books.	Table and processing.	Own uses and sold in market	Popular in local population.
7	Woody Tree	<i>Citrus aurantifolia</i>	Nimboo	Wild, Kagzi, Italian, Eureka	Sub-tropical	Good	Good	Grafted Plants	March to Oct.	Record vailable in old books.	Processing.	Own uses and sold in market	Popular in local population.
8	Woody Tree	<i>Citrus limon</i>	Galgal	Wild	Sub-tropical	Good	Good	Seedling andn Grafted Plants	March to Sept.	Record vailable in old books.	Processing.	Own uses and sold in market	Popular in local population.
9	Woody Tree	<i>Citrus medica</i>	Kimb	Wild	Sub-tropical	Good	Good	Seedling trees	March to Sept.	Record vailable in old books.	Processing.	Own uses and sold in market	Popular in local population.
10	Woody Tree	<i>Citrus jambhiri</i>	Jamiri	Wild	Sub-tropical	Good	Good	Seedling trees	March to Oct.	Record vailable in old books.	Processing, root stock	Own uses and sold in market	Popular in local population.
11	Woody Tree	<i>Citrus limettoides</i>	Mithoo	Wild	Sub-tropical	Good	Good	Seedling trees	March to Sept.	Record vailable in old books.	Table and processing.	Own uses and sold in market	Popular in local population.
12	Woody Tree	<i>Citrus tangerina</i>	Narangi	Wild	Sub-tropical	Good	Good	Grafted Plants	March to Dec.	Record vailable in old books.	Ornamental and processing.	Own uses	Popular in local population.
13	Woody Tree	<i>Zizyphus mauritiana</i>	Ber	Umran, Katha, Seb	Sub-tropical	Good	Good	Grafted Plants	March to Nov.	Record vailable in old books.	Table purposes	Own uses and sold in market	Popular in local population.
14	Woody Tree	<i>Zizyphus jujuba</i>	Phowari Ber	Wild	Sub-tropical	Good	Good	Seedlings	March to Nov.	Record vailable in old books.	Table purposes	Own uses and sold in market	Popular in local population.
15	Bush	<i>Grewia subinaequalis</i>	Phalsa	Wild	Sub-tropical	Good	Good	Seedlings and Cuttings	March to July	Record vailable in old books.	Processing	Own uses and sold in market	Popular in local population.
16	Woody Tree	<i>Syzygium cumini</i>	Jamun	Wild	Sub-tropical	Good	Good	Seedlings and Grafted	March to July	Record vailable in old books.	Processing	Own uses and sold in market	Popular in local population.

17	Woody Tree	<i>Punica granatum</i>	Anar	Wild, Ganesh, Kandhari,	Sub-tropical	Good	Good	Cuttings	March to July	Record available in old books.	Table purposes and processing	Own uses and sold in market	Popular in local population.
18	Woody Tree	<i>Cordia myxa</i>	Lasooda	Wild	Sub-tropical	Good	Good	Seedlings	March to June	Record available in old books.	Processing purposes	Own uses and sold in market	Popular in local population.
19	Bush	<i>Carissa carandas</i>	Gerna	Wild	Sub-tropical	Good	Good	Seedlings	March to July	Record available in old books.	Table purposes and processing	Own uses and sold in market	Popular in local population.
20	Woody Tree	<i>Aegle marmalos</i>	Bill	Wild	Sub-tropical	Good	Good	Seedlings	March to July	Record available in old books.	Table purposes and processing	Own uses and sold in market	Popular in local population.
21	Woody Tree	<i>Prunus saliciana</i>	Aloocha	Kala Amritsari, Alucha	Sub-tropical	Good	Good	Grafted Plants	Feb. to June	Introduced by traders and domesticated locally.	Table purposes and processing	Own uses and sold in market	Popular in local population.
22	Woody Tree	<i>Morus alba</i>	Shahtoot	Wild, China	Sub-tropical	Good	Good	Cuttings	March to July	Introduced by traders and domesticated locally.	Table purposes, leaves for rearing Silkworms.	Own uses and sold in market	Popular in local population.
23	Woody Tree	<i>Ficus carica</i>	Fakhwari	Wild	Sub-tropical	Good	Good	Seedlings	March to July	Introduced by traders and domesticated locally.	Table purposes.	Own uses and sold in market	Popular in local population.
24	Woody Tree	<i>Atrocarpus lakoocha</i>	Dew	Wild	Sub-tropical	Good	Good	Seedlings	March to July	Record available in old books.	Pickle Purposes.	Own uses and sold in market	Popular in local population.



### Format 3: Fodder Crops / Species

1	2	3	4	5		6	7	8	9	10
Plant	Scientific Name	Local Name	Landscape / Habitat	Local Status		Source of Plants / Seeds	Associated TK	Part used	Other details	Community / Knowledge holder
				Past	Present					
Sorghum	<i>Sorghum bicolor</i>	Jowar	Warm climate crop	Plenty	Plenty	Agri. Deptt. /Private	It has resistance to desiccation and tolerate to water logging condition .	Whole plant	Soil with clay loam texture having good water retention capacity are best suitable for its cultivation	
Pearl Millet	<i>Pennisetum typhoides</i>	Bajra	tropical /sub-tropical climate	Plenty	Plenty	Agri. Deptt. /Private	High tillering crop	Whole plant	It is quick growing , disease and frost resistant	
Berseem	<i>Trifolium alexandrinum</i>	Berseem	winter forage.	Plenty	Plenty	Agri. Deptt. /Private	It is rich in Calcium and phosphorus	Part used whole plant. Repeated cuts can be taken .	Improves physical condition of soil . It can be grown in all types of soil except very light sandy soil	



**FORMAT: 4 Weeds ( Sub Tropical)**

1	2	3	4	5	6	7		8	9	10	11	12
Plant	Scientific Name	Local name	Affected Crop	Impact	Landscape / Habitat	Local status		Uses if any	Management Options	Associated TK	Other details	Community / Knowledge Holder
						Past	Present					
Shol	Local	Shol	Paddy	Broad leaf and consumed the nutrients of the plants and reduces the production	floating on the water	Plenty	Plenty	Nil	Drying of paddy field as a result leaves dry	-	Hady and wider adoptability, multiply very fast	Pahari Community
Shama	Local	Shama	Paddy	compete with nutritions, light and space with Paddy crop and reduces the production	Tall growing just like paddy	Plenty	Plenty	Nil	Use of weedicide	-	-	-
Dhoob	<i>Cynodon dactylon</i>	Dhoob	Maize	Weed emerg with the germination with Maize seed and grow along with plants till the early growth period and cause sever crop weed compitation.	Grows with Maize crop	Plenty	Plenty		1). 2-3 Weeding follwed by earthingup. 2). pre emergence appliation Atrazine @ 1-1.25 Kg / per ha of 50% WP		Losses caused by Weeds are more during early stage than in later stages.	
Bathua	<i>Chenopodium sp</i>	Baathu	Wheat	Broad leaf and consumed the nutrients of the plants and reduces the production	Germination in the field after 20 days	Plenty	Plenty	Nil	1.Use of weedicide		Hady and wider adoptability, multiply very fast	

Sitti	<i>Phalaris minor</i>	Sitti, Gehoon ka mama, Gulli Danda	Wheat	Compete with nutritions, light and space with wheat crop and reduces the production Narrow Leav Weed	Grows with Wheat crop	Plenty	Plenty	Nil	1. Use of Weedicides metribuzinie @200Gms/ha dissolved in 500-600 l of water		Hady and wider adoptability, multiply very fast	
Chauli	<i>Amaranthus viridis</i>	Chaulai	Sesame	Compete with nutritions, light and space with wheat crop and reduces the production.	grows with the sesame crop	Plenty	Plenty	eaten as a green leafy vegetable in parts of india	Alachlor (1.0) or Thiobencarb(2.0).	In rainfed conditions herbicide use is very limited due to low yield, which may not compensate for the cost of the herbicide.	Hady and wider adoptability, multiply very fast	
Dhoob	<i>Cynodon Doctylon</i>	Dhoob, Bermuda Grass	Sesame	Compete with nutritions, light and space with wheat crop and reduces the production Narrow Leav Weed	grows with the sesame crop	Plenty	Plenty	Nil	Alachlor (1.0) or Thiobencarb(2.0).		Hady and wider adoptability, multiply very fast	
Jangli Pudina	<i>Agerantum conyzoides</i>	Goat weed , Jangli pudina	Mustard	Broad leaf and consumed the nutrients of the plants and reduces the production	grows with mustard crop	Plenty	Plenty	Nil	.Use of weedicide		90-100 cm tall hairy herbaceous unpleasant smell	
Krishna Neel	<i>Anagallis Arvensis</i>	Blue Pimpernel	Mustard	Compete with nutritions, light and space with wheat crop and reduces the production.	grows with mustard crop	Plenty	Plenty	Nil	.Use of weedicide		Hady and wider adoptability, multiply very fast 10- 30 cms tall	

Satyanashi	<i>Argemone Mexicana</i>	krishnaneel	Mustard	Compete with nutritions, light and space with wheat crop and reduces the production.	commonly found in the waste lands. But also grow along mustard	Plenty	rare	1.used in Ayurveda medicinal properties 2. used for reclamation of alkaline soils. Satyanashi oil is famous for termite control	use of glyphosate is recommended pre emergence		Hady and wider adoptability, multiply very fast	
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**FORMAT: 5 Pests of Crop ( Sub Tropical)**

1	2	3	4	5	6	7	8	9	10
Host	Insect / Animal	Scientific Name	Local name	Habitat	Time / Season of Attack	Management Mechanism	Associate TK	Other details	Community / Knowledge Holder
Paddy	Grasshopper	<i>Hieroglyphus niogrorepletus</i>	Tidda , Raja da Gorha ,	Polyphagus	June to Novemeber	1.Destroy eggs by cleaning bunds 2. Spray the bunds with Malathion 5 % D @ 25 Kg / Ha	Both nymphs and Adults feed on the leaves , they devour the young shoots and newly farm ear heads.	Adults are like locust but smaller in size	
Paddy	Rice Hispa	<i>Dicladispa armigera</i>	Neela tittu	Appeaqr in all varieties of rice	July -Sep	1. Clip the affected tips of leaves before transplanting	Quinalphos 25EC 1 litre per ha in 750 ltr of water	The grubs this pest mine into the leaves and adults are external feeders.	
Wheat	Field Rats	<i>Bandicota sp.</i> <i>Tatera sp.</i>	Chua, Kees,	Burrow in soil. Rats are found in nearly all areas of Earth which are inhabited by human beings.	Through out the year	1. Poison baiting 2. Bund trimming to minimize harborage 3. Use indigenous traps	They cause have loss to standing wheat crop and harvested crop in stores.	Domestic rats differ from wild rats in many ways. They are calmer and less likely to bite, they can tolerate greater crowding, they breed earlier and produce more offspring; and their brains, livers, kidneys, adrenal glands, and hearts are smaller	
	Termites	<i>Microtermes obesi</i>	seenak, seonk, white ant,	Generally appears at wet places, lives in nests made under ground	Through out the year	1. Destroy termitaria in an around field 2. Never use raw FYM 3. For termites control in standing crop, dilute 4l of chlorpyrifos 20EC in 5l of water and mix in 50 kg of sand thoroughly . Boradcast this treated soil in the infested areas.	These are Social insect that lives under gound in colonies.	The damage plant dry up completely and are easily pulled out	

Cole Crops	Cabbage Butterfly	<i>Pieris brassicae</i>	Titli	The large white butterfly's habitat consists of large, open spaces, as well as farms and vegetable gardens, because of the availability of its food source.	Oct onwards	1. Release of <i>Trichogramma chilonis</i> @50000 adults/ha per release (6 times) at weekly interval in Mid January 2. Do not spray the crop near harvesting			
Cucurbits	Fruit fly	<i>Bactrocera cucurbitae</i>	Titli	Fruit flies are of concern both as nuisance pests and as serious contaminators of food.	After Summer Rains when Humidity is high.	1. Install methyl eugenol traps @ 5-100/Ha. 2. Spray Malathion @ 1ml +10 Grms gur/ ltr of water at evening hours when fruits flies are congregated on the leave surface.	Female fruit flies lay their eggs on the surface of rotting fruits and vegetables. Each female may lay as many as 500 eggs. These eggs hatch into larvae which molt twice before becoming fully grown.	Adults may be dull yellowish, brownish yellow, or brownish black in color and range from 1/10 to 1/5 inch long. Most species have red eyes. Larvae are very small (ranging from 1/10 to 1/5 inch long), dirty white, and maggot-shaped. They can be recognized by the stalked posterior spiracles on the last abdominal segment.	
Brinjal	Brinjal Fruit & Shoot Borer	<i>Leucinodes orbonalis</i>		Tropics & Sub tropics	Rainy Season	1. Regular clipping of infested shoots and fruits and destroy them 2. Installation of Pheromone traps @ 100/Ha. 3. Spary Cypermethrin @ 1ml/Ltr. Of water	Caterpillars bore into the shoots and fruits. The hole remains plugged with black excreta		
Sesame	Hairy Caterpillars, Leaf rollers, Pod borer, Aphids, White fly			Sub Tropics	kharif Season	dust the crop with chloropyriphos 1.5%D or lindane 1.3%D @ 1.25KG/Kanal or carbyl 50% WP 75g/kanal	All these insects suck the cell sap of the crop from leaves and pods. Also spread yellow mosaic virus (white fly)		

Mustard	Mustard Aphids	<i>Lipaphis erysimi</i>	Tella, Keeda		Mostly in late sown crop . Mostly during mid Jan	A.cultural control (i) Early sowing of crop by first fortnight of october. (ii) Use recommended dose of fertilizer B. Biological control. (i) Conserve potential bio control agents like parasitoids, Ladybird beetles. C. Chemical control (i) Combination of chloropyriphos + acitamiprid 0.05% is highly effective. (ii) .Spray Chloropyriphos 20 EC or imidacloprid @0.5ml/lt water.	These insects attack tender growth if the plants especially new shoots , young leaves , flowers and pods.		
	Mustard Sawfly	<i>athalia lugens proxima</i>	Makhi		Rabi Season	Spray crop with carbyl 50 WP@1.5kg/ha.	The larve attack young crop , bite holes and skeletonize leaves completely such plants do not bear seeds		
	Hairy Catterpillar		luhri		rabi season	collect and destroy cogregating caterpillars spray the crop 0.03% quinalphos 20 EC@1.25L of water/ ha	they feed on leaves, ypung shoots and green pods		
	Blister Beetal	<i>mylabris pustulatus</i>	kida		comes at flowering stage	use of thiodicarb 0.09% can control the pest	Mainly feed on the reproductive parts of the plants. Yield is redused.		
	Leaf roller	<i>syllepta derogata</i>	kida			Spray Quinalphos 25EC (2ml/lt of water or carbyl 4gm/lt water to control	larve feed on the okra leaves and in severe infestation the whole plant gets defoliated		

Okra	Whitefly	<i>bemisia tabaci</i>	makhi	habitat consists of farms and vegetable gardens, because of the availability of its food source.	comes during the vegetative stage of the crop	4-5 Foliar spray of Imidacloprid 0.02% OR DIMETHOATE 0.05% at an interval of 10 days.	The milky minute white fly sucks the sap from the leaves. The affected leaves curl and dry. The plant shows stunted growth	These flies are also responsible for transmitting the yellow vein mosaic virus (YVMV).	
	Fruit and Shoot Borer	<i>earias vittela</i>	luhri	Occurs through out the country	Occurs during the humid conditions especially after the rainfall	Spray quinalphos 25EC(2ml/lit of water or carbaryl 4gm/lit water to control	Adult female lays eggs on the leaves, floral buds and tender fruits. Small brown caterpillar bore into the shoots and later on they bore into the fruits.		
	Mealy Bug	<i>phenacoccus solenopsis</i>				spray quinalphos 25EC or 625g of Thiodicarb 75WP in 500 lit of water.	both nymph and adults suck the sap of the leaves , flowers , buds,fruit of the plant.	This is very destructive insect and needs to be controlled in its early stages of growth	
Tomato	Fruit borer	<i>helioverpa armigera</i>	kida , luhri	Habitat consists of farms and vegetable gardens, because of the availability of its food source.	they appear the flowering stage of the crop.	Spray of Endosulfan (0.07%) or Dichlorvos (0.1%) should be sprayed to control the insect.	Damage starts from flowering .Eggs are laid on young leaves which are damaged by young larvae. Later they migrate to developing fruits. They bore the fruit with half of the body outside the fruit.	One larva feeds on many fruits.causing 5-50% losses.	
	Serpentine leaf minor	<i>liriomyza trifolli</i>	kida	this has become a common problem now a days	appear at vegetative stage of the crop	spray the azadiractin (neem oil)5ml/lit of water. Repeat after fortnight. Or spray triazophos (0.05%)	the larvae mine the leaves especially the basal leaves.	If more sprays are given due to mortality of natural enemies. Pest increases. Application of granular insecticide increases the incidence.	

Gram	Cut Worm	<i>Agrotis ipsilon</i>	Luhri	Occurs through out the country but especially Hilly areas	July onward.	<ol style="list-style-type: none"> <li>1. Install light traps @2/Ha</li> <li>2. Install Pheromones traps @40/Ha to attract to kill the male moths</li> <li>3. Chlorpyrifos 30EC@3ml/of water</li> </ol>	Larva cut the seedling at the ground level .	They live in soil during the day and feed at night . The caterpillar are in grey in colour	
	Termites	<i>Microtermes obesi</i>	seenak, seonk, white ant,	Generally appears at wet places, lives in nests made under ground	Through out the year	<ol style="list-style-type: none"> <li>1. Destroy termitaria in an around field</li> <li>2. Never use raw FYM</li> <li>3. For termites control in standing crop, dilute 4l of chlorpyrifos 20EC in 5l of water and mix in 50 kg of sand thoroughly. Broadcast this treated soil in the infested areas.</li> </ol>	These are Social insect that lives under gound in colonies.	The damage plant dry up completely and are easily pulled out	





**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
1706	246 Farming (Agriculture)	1 Animal Husbandary 2.Collection of NTFP 3. Fishing	Agriculture landscape	Land, water, labour, capital , improved agriculture inputs and biodiversity for sustaining the profitability of agriculture, maintaining livelihoods and social well-being in rural communities. Seasons : KHARIF AND RABI	By following the Agronomic practices : That farmers incorporate to improve soil quality, enhance water usage, manage crops and better fertilizer management as a way of improving agricultural practices.	1.Tillage practices and reconsolidation 2. Plant and Crop rotation 3.Irrigation management 4. Proper use of maure and fertilizer 5. IPM				

**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											
Plains & Kandi areas			Plains	hilly as well as	Forest land, Private, state lands,	Broad leaved mainly	Domestic animals, wildlife such as porcupine, jackal etc.	Public, as well as pvt, and Govt also		Plantation and agriculture			
			Hillocks	plain terrain with gentle slope	Forest land, Private, state lands,	Broad leaved and conifers	Domestic animals, wildlife such as porcupine, jackal etc.	Public, as well as pvt, and Govt also		Plantation and agriculture			
Shivalik areas			Hills	Hills with gentle slopes	Forest land, Private, state lands,	Broad leaved and conifers	Domestic animals, wildlife such as porcupine, jackal etc.	Public, as well as pvt, and Govt also		Plantation and agriculture			

### Format 9: Waterscape

1	2	3	4	5	6	7	8	9	10	11	12	13
Waterscape element type	Sub- type	Features and approx area	Ownership	General flora	General fauna	Major uses	User groups	Management practices	General uses	Associated TK	Other details	Community accessed
Ponds			Forest land and Private land	kamal,Baryan,	Frogs , fishes, Torotoise, snakes, snail,	Cattles, washing cloths, irrigation, Drinking etc	public					
Streams			Forest land and Private land		Frogs , fishes, Torotoise, snakes, snail,	Cattles, washing cloths, irrigation, Drinking etc	public					
Tube well			Forest land and Private land		Frogs , fishes, Torotoise, snakes, snail,	Cattles, washing cloths, irrigation, Drinking etc	public					
Dug wells			Private		Frogs , fishes, Torotoise, snakes, snail,	Cattles, washing cloths, irrigation, Drinking etc	public					
Canals			Private		Snakes		public					
Hand pumps			Private		Frogs , fishes, Torotoise, snakes, snail,	Cattles, washing cloths, irrigation, Drinking etc	public					
Bowlis			Private		Frogs , fishes, Torotoise, snakes, snail,	Cattles, washing cloths, irrigation, Drinking etc	public					

**Format 10: Soil type**

<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>
<b>Soil Type</b>	<b>Color &amp; texture</b>	<b>Features</b>	<b>Soil Management</b>	<b>Plants / Crop Suitable</b>	<b>Flora and Fauna</b>	<b>Associate TK</b>	<b>Other Information</b>
Lithosols	Gravelly loam to Gravelly silty Loam	pH 7.1-7.8, Occur on steep slopes in the forest hills of 400-600 mtrs. 33-38% Water Holding Capacity	Use of Organic matter	Maize & Fodder Crops	-	-	-
Alluvial Soils	Loamy Soils	pH 7.0-7.7, Organic Carbon 0.28-0.61%	Use of Organic matter	Wheat, Vegetables	-	-	-

**Format-11: Fruit Trees**

1	2	3	4	5	6	7		8	9	10	11	12
S. No.	Plant Type	Local Name	Scientific Name	Variety	Landscape/ Habitat	Local status		Source of Seeds/ Plants	Season of Fruiting	Uses (usages)	Associated TK	Other details market/ own use
						Past	Present					
1	Woody Tree	Amb	<i>Mangifera indica</i>	Local, Dashehari, Malda, Amrapali, Mallika, Langra, Swarn Rekha, Chausa, Fazli, Totapuri, Ramkila, Baramasi.	Sub-tropical	Good	Good	Seedling trees, grafted plants.	March to August	Sucking, table, processing	Record available in old books.	Own uses and sold in market
2	Woody Tree	Lychee	<i>litchi chinensis</i>	Dehradun, Calcutti, Seedless, Rose Scented	Sub-tropical	Good	Good	Layered plants.	March to July	Table and processing	Introduced by traders and domesticated locally.	Own uses and sold in market
3	Woody Tree	Amrood	<i>Pidium guajava</i>	Local, Allahbad, Sardar, Lalit, Arka Amulaya, Sheveta, Punjab Pink	Sub-tropical	Good	Good	Seedling trees, grafted/ layered.	March to August, Dec. To January	Table and processing.	Introduced by traders and domesticated locally.	Own uses and sold in market
4	Climber	Angoor	<i>Vitis vinifera</i>	Local, Perllet, Beauty Seedless	Sub-tropical	Good	Good	Cuttings	Feb. To June	Table and processing.	Introduced by traders and domesticated locally.	Own uses and sold in market
5	Woody Tree	Amla	<i>Emblica officinalis</i>	Local, Banarsi, Neelam, NA 7.	Sub-tropical	Good	Good	Seedling trees, grafted plants.	March to Nov.	Processing	Record available in old books.	Own uses and sold in market
6	Woody Tree	Mosammi	<i>Citrus sinensis</i>	Mosambi, Jaffa, Red Blood	Sub-tropical	Good	Good	Grafted Plants	March to Jan.	Table and processing.	Record available in old books.	Own uses and sold in market

7	Woody Tree	Sangtra	<i>Citrus reticulata</i>	Kinnow, Sangtra	Sub-tropical	Good	Good	Grafted Plants	March to Jan.	Table and processing.	Record available in old books.	Own uses and sold in market
8	Woody Tree	Nimboo	<i>Citrus aurantifolia</i>	Local, Kagzi, Italian, Eureka	Sub-tropical	Good	Good	Grafted Plants	March to Oct.	Processing.	Record available in old books.	Own uses and sold in market
9	Woody Tree	Galgal	<i>Citrus limon</i>	Local	Sub-tropical	Good	Good	Seedling andn Grafted Plants	March to Sept.	Processing.	Record available in old books.	Own uses and sold in market
10	Woody Tree	Kimb	<i>Citrus medica</i>	Local	Sub-tropical	Good	Good	Seedling trees	March to Sept.	Processing.	Record available in old books.	Own uses and sold in market
11	Woody Tree	Jamiri	<i>Citrus jambhiri</i>	Local	Sub-tropical	Good	Good	Seedling trees	March to Oct.	Processing, root stock	Record available in old books.	Own uses and sold in market
12	Woody Tree	Mithoo	<i>Citrus limettoides</i>	Local	Sub-tropical	Good	Good	Seedling trees	March to Sept.	Table and processing.	Record available in old books.	Own uses and sold in market
13	Woody Tree	Kumquat	<i>Citrus x floridana</i>	Local	Sub-tropical	Good	Good	Grafted Plants	March to Jan..	Processing.	Record available in old books.	Own uses and sold in market
14	Woody Tree	Narangi	<i>Citrus tangerina</i>	Local	Sub-tropical	Good	Good	Grafted Plants	March to Dec.	Ornamental and processing.	Record available in old books.	Own uses
15	Woody Tree	Ber	<i>Zizyphus mauritiana</i>	Umran, Katha, Seb	Sub-tropical	Good	Good	Grafted Plants	March to Nov.	Table purposes	Record available in old books.	Own uses and sold in market
16	Woody Tree	Phowari Ber	<i>Zizyphus jujuba</i>	Local	Sub-tropical	Good	Good	Seedlings	March to Nov.	Table purposes	Record available in old books.	Own uses and sold in market
17	Bush	Phalsa	<i>Grewia subinaequalis</i>	Local	Sub-tropical	Good	Good	Seedlings and Cuttings	March to July	Processing	Record available in old books.	Own uses and sold in market

18	Woody Tree	Jamun	<i>Syzygium cumini</i>	Local	Sub-tropical	Good	Good	Seedlings and Grafted	March to July	Processing	Record available in old books.	Own uses and sold in market
19	Woody Tree	Anar	<i>Punica granatum</i>	Local, Ganesh, Kandhari,	Sub-tropical	Good	Good	Cuttings	March to July	Table purposes and processing	Record available in old books.	Own uses and sold in market
20	Woody Tree	Lasooda	<i>Cordia myxa</i>	Local	Sub-tropical	Good	Good	Seedlings	March to June	Processing purposes	Record available in old books.	Own uses and sold in market
21	Bush	Gerna	<i>Carissa carandas</i>	Local	Sub-tropical	Good	Good	Seedlings	March to July	Table purposes and processing	Record available in old books.	Own uses and sold in market
22	Woody Tree	Bill	<i>Aegle marmalos</i>	Local	Sub-tropical	Good	Good	Seedlings	March to July	Table purposes and processing	Record available in old books.	Own uses and sold in market
23	Woody Tree	Seb	<i>Malus X domestica</i>	Summer apple	Sub-tropical	...	Good	Grafted Plants	Feb. to June	Table purposes and processing	Introduced by traders and domesticated locally.	Own uses and sold in market
24	Woody Tree	Nakh	<i>Pyrus communis</i>	Pathar Nakh	Sub-tropical	Good	Good	Grafted Plants	Feb. to June	Table purposes and processing	Introduced by traders and domesticated locally.	Own uses and sold in market
25	Woody Tree	Aru	<i>Prunus persica</i>	Local, Sun Red, Florida Sun	Sub-tropical	Good	Good	Grafted Plants	Feb. to June	Table purposes and processing	Introduced by traders and domesticated locally.	Own uses and sold in market
26	Woody Tree	Aloocha	<i>Prunus saliciana</i>	Kala Amritsari, Alucha	Sub-tropical	Good	Good	Grafted Plants	Feb. to June	Table purposes and processing	Introduced by traders and domesticated locally.	Own uses and sold in market



27	Herb	Strawberry	<i>Fragaria x ananassa</i>	Chandler	Sub-tropical	Good	Good	Plant Runners	Mach to May	Table purposes and processing	Introduced by traders and domesticated locally.	Own uses and sold in market
28	Woody Tree	Shahtoot	<i>Morus alba</i>	Local, China	Sub-tropical	Good	Good	Cuttings	March to July	Table purposes, rearing Silkworms.	Introduced by traders and domesticated locally.	Own uses and sold in market
29	Woody Tree	Fig	<i>Ficus carica</i>	Local	Sub-tropical	Good	Good	Seedlings	March to July	Table purposes.	Introduced by traders and domesticated locally.	Own uses and sold in market
30	Woody Tree	Dew	<i>Atrocarpus lakoocha</i>	Local	Sub-tropical	Good	Good	Seedlings	March to July	Pickle Purposes.	Record available in old books.	Own uses and sold in market
31	Woody Tree	Jackfruit	<i>Atrocarpus heterophyllus</i>	Local	Sub-tropical	Good	Good	Seedlings	March to July	Pickle Purposes.	Record available in old books.	Own uses and sold in market
32	Soft Tree	Papita	<i>Carica papaya</i>	Local Red Lady, Pusa Nana	Sub-tropical	Good	Good	Seedlings and hybrids	March to Nov.	Table purposes.	Record available in old books.	Own uses and sold in market

**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	Local status		Uses (usage)	Part used	Associated TK	Other details market/own	Community/ Know.
						Past	Present					
Herbs	Dudlu	<i>Taraxacum officinale</i>		Temperate area	Root	Rare	Rare	nil	Leaves	N.A	N.A	Generally, held by community
Herbs	Tarad	<i>Dioscorea belophylla</i>		Lower shiwalik	Seed	Abundant	Abundant	nil	Root	N.A	N.A	Generally, held by community
Herbs	Jungli putna	<i>Mentha arvensis</i>		Lower shiwalik/Temperate area	Root	Abundant	Abundant	nil	Leaves	N.A	N.A	Generally, held by community
Shrubs	Trimuru	<i>Zanthoxylum aurmatum</i>		Lower shiwalik	Seed	Rare	Rare	nil	Fruit	N.A	N.A	Generally, held by community
Shrubs	brankad	<i>Adha toda vesica</i>		Lower shiwalik	Seed	Abundant	Abundant	nil		N.A	N.A	Generally, held by community
Shrubs	Drinkdu	<i>Murraya koenigii</i>		Sub-Tropical area	Seed	Rare	Rare	nil	Fruit	N.A	N.A	Generally, held by community
Shrubs	Dussa	<i>Colebrookia oppositifolia</i>		Lower shiwalik	Seed	Abundant	Abundant	nil	Flower	N.A	N.A	Generally, held by community
Shrubs	Thor/Shuu	<i>Euphorbia royleana</i>		Lower shiwalik	Seed	Abundant	Abundant	nil	Leaves	N.A	N.A	Generally, held by community
Shrubs	Bareyan	<i>Acorus calamus</i>		Lower shiwalik	Seed	Rare	Rare	nil	Leaves	N.A	N.A	Generally, held by community
Shrubs	Bhang	<i>Canabis sativa</i>		Lower shiwalik	Seed	Abundant	Abundant	nil		N.A	N.A	Generally, held by community

Tree	Amla	<i>Phyllanthus emblica</i>		Lower shivalik	Seed	Abundant	Abundant	nil	Leaves/Fruit	N.A	N.A	Generally, held by community
Tree	Bair	<i>Ziziphus xylocarpa</i>		Lower shivalik	Seed	Rare	Rare	nil	Stem	N.A	N.A	Generally, held by community
Tree	Bheda	<i>Terminalia bellerica</i>		Lower shivalik	Seed	Rare	Abundant	nil	Fruit	N.A	N.A	Generally, held by community
Tree	Bill-Patre	<i>Angle mermelos</i>		Sub-Tropical area	Seed	Abundant	Abundant	nil	Root	N.A	N.A	Generally, held by community
Tree	Drankh	<i>Melia azedarach</i>		Lower shivalik	Seed	Abundant	Abundant	nil	Leaves	N.A	N.A	Generally, held by community
Tree	Harad	<i>Terminalia chebula</i>		Lower shivalik	Seed	Abundant	Abundant	Good for digestion	Stem/Fruit	N.A	N.A	Generally, held by community
Tree	Jaman	<i>Syzygium cumini</i>		Lower shivalik	Seed	Abundant	Abundant	maintains sugar level in human body	Leaves/Fruit	N.A	N.A	Generally, held by community
Tree	Kakad-Singhi	<i>Pistacia khinjuk</i>		Lower shivalik	Seed	Abundant	Abundant	nil	Leaves/Fruit	N.A	N.A	Generally, held by community
Tree	Karal	<i>Bauhinia variegata</i>		Lower shivalik	Seed	Rare	Rare	nil	Leaves/ Flower	N.A	N.A	Generally, held by community
Tree	Khair	<i>Acacia catechu</i>		Lower shivalik	Seed	Abundant	Abundant	nil	Leaves/Stem	N.A	N.A	Generally, held by community
Tree	Kringal	<i>Casia fistula</i>		Lower shivalik	Seed	Rare	Rare	nil	Fruit	N.A	N.A	Generally, held by community
Tree	Lusada	<i>Cordia dichotoma</i>		Lower shivalik	Seed	Rare	Rare	nil	Leaves/Fruit	N.A	N.A	Generally, held by community
Tree	Mangoo	<i>Mangifera Indica</i>		Lower shivalik	Seed	Abundant	Abundant	nil	Stem/Fruit	N.A	N.A	Generally, held by community

Tree	Retha	<i>Sapindus Mukorossii</i>		Lower shiwalik	Seed	Rare	Rare	nil	Fruit	N.A	N.A	Generally, held by community
Tree	Rumbal	<i>Ficus racemosa</i>		Lower shiwalik	Seed	Rare	Rare	nil	Leaves	N.A	N.A	Generally, held by community
Tree	Sree	<i>Albizia lebeck</i>		Lower shiwalik	Seed	Abundant	Abundant	nil	Leaves/Stem	N.A	N.A	Generally, held by community
Tree	Talli	<i>Dalbergia sissoo</i>		Lower shiwalik	Seed	Abundant	Abundant	nil	Stem	N.A	N.A	Generally, held by community
Tree	Trimbal	<i>Ficus auriculata</i>		Lower shiwalik	Seed	Rare	Rare	nil	Leaves/Fruit	N.A	N.A	Generally, held by community
Tree	Tuni	<i>Toona ciliata</i>		Lower shiwalik	Seed	Abundant	Abundant	nil	Stem	N.A	N.A	Generally, held by community
Tree	Arjun	<i>Terminalia arjuna</i>		Lower shiwalik	Seed	Rare	Rare	nil	Leaves/Bark	N.A	N.A	Generally, held by community
Tree	Bheda			Lower shiwalik	Seed	Rare	Rare	nil	Leaves/Bark	N.A	N.A	Generally, held by community
Tree	Amla	<i>Amblica officinales</i>		Lower shiwalik	Seed	Rare	Rare	nil	Leaves/Bark	N.A	N.A	Generally, held by community
Tree	Neem	<i>Azadirecta indica</i>		Lower shiwalik	Seed	Rare	Rare	nil	Leaves/Bark	N.A	N.A	Generally, held by community
tree	Khair	<i>Accacia catechu</i>		Lower shiwalik	Seed	Rare	Rare	nil	Leaves/Bark	N.A	N.A	Generally, held by community
Shrubs	Bhang	<i>Cannabis sativum</i>		Lower shiwalik	Seed	Rare	Rare	nil	Leaves/Bark	N.A	N.A	Generally, held by community

**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/ Knowledge Holder
Ornamental Tree	Kachnar	<i>Bauhinia Variegata</i>		Nurseries/Forest	Non commercial	Ornamental /Landscaping	Used for Dysentery, Diarrhoea	Pink flowers in Summer	Floriculturists/ Nurserymen/ Gardeners
Bushes/ Shrubs	Nerium	<i>Nerium Oleander</i>		Nurseries	Non commercial	Ornamental /Landscaping	Epiplepsy, cancer	Avenue plantation	Floriculturists/ Nurserymen/ Gardeners
Bushes/ Shrubs	Kaner	<i>Thevetia Peruviana</i>		Nurseries	Non commercial	Ornamental /Landscaping	Fevers	Flower most of the year	Floriculturists/ Nurserymen/ Gardeners
Bushes/ Shrubs	Bottle Brush	<i>Callistemmon spp.</i>		Nurseries	Non commercial	Ornamental /Landscaping	Theraputic uses	Foilage and flowers	Floriculturists/ Nurserymen/ Gardeners
Bushes/ shrubs	Bogan Bael	<i>B.Sp &amp; hybrids</i>		Nurseries	Non commercial	Ornamental /Landscaping	Antidiabetic, antiinflammatory	Multicoloured flowers	Floriculturists/ Nurserymen/ Gardeners
Bushes/ Shrubs	Hibiscus	<i>Hibiscus Rosasinensis</i>		Nurseries	Non commercial	Ornamental /Landscaping	Used in fever, constipation	Flower throughout the year	Floriculturists/ Nurserymen/ Gardeners
Bushes/ Shrubs	Motia	<i>Jasminum sambac</i>		Nurseries	Non commercial	Ornamental /Landscaping	Used in Hepatitis, dysentery	Flower throughout the year	Floriculturists/ Nurserymen/ Gardeners

Herbs Seasonals	Guldopahar	<i>Portulaca Grandiflora</i>		Nurseries	Non commercial	Ornamental/ Landscaping	Antioxidant, antibacterial	Summer annual flower	Floriculturists/ Nurserymen/ Gardeners
Pot Plants	Agave	<i>Agave angustifolia</i>		Nurseries	Non commercial	Ornamental/ Landscaping	Traditional medicines	Succulent	Floriculturists/ Nurserymen/ Gardeners
Pot Plants	Thur	<i>Cactus spp</i>		Nurseries	Non commercial	Ornamental/ Landscaping	Folk medicines	Thorny succulents	Floriculturists/ Nurserymen/ Gardeners

**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					
Trees	Kiker	<i>Acacia nilotica</i>	Lower shivalik	Rare	Rare	Wild	own	nil	nil	Generally, held by community
Trees	Mangoo	<i>Mangifera indica</i>	Lower shivalik	Abundant	Abundant	Wild/ Home-Garden	own	nil	nil	Generally, held by community
Trees	Safeda	<i>Eucalyptus spp.</i>	Lower shivalik	Rare	Abundant	Wild	commercial	nil	nil	Generally, held by community
Trees	Sree	<i>Albizzia lebbeck</i>	Lower shivalik	Abundant	Abundant	Wild	own	nil	nil	Generally, held by community
Trees	Talli	<i>Dalbergia sissoo</i>	Lower shivalik	Abundant	Abundant	Wild	own	nil	nil	Generally, held by community
Trees	Tuni	<i>Toona ciliata</i>	Lower shivalik	Abundant	Abundant	Wild	own	nil	nil	Generally, held by community
Trees	Popular	<i>Populus ciliata</i>	Lower shivalik	Rare	Abundant	Wild	own	nil	nil	Generally, held by community
Trees	Jammun	<i>Syzygium cumini</i>	Lower shivalik	Rare	Abundant	Wild	own	nil	nil	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/ High breed)	Feature	Method of keeping	Local status		Uses	Associated TK	Commercial rearing	Other details including products and servicing	Community Knowledge Holders
						Past	Present					
Cattle	Ghan,	<i>Bos indicus</i>	Non descript	Low yield	backyard	Abundent	Decresed	dairy	NIL	No	Milk	All
	Jursy Ghan,	<i>Bos taurus</i>	CV Jersey	Dished force	backyard/ commercial	Few	Increased	dairy	NIL	Yes	Milk	All
	Austrilian Ghan	<i>Bos taurus</i>	CV HF	Black and white spotted	backyard/ commercial	Few	Increased	dairy	NIL	Yes	Milk	All
Buffallo	Manj	<i>Bubalis</i>	Local	Low yield	backyard/ commercial	Abundent	Decresed	dairy	-	No	Milk	Gujjar community
	Punjabi Main	<i>Bubalis</i>	murrrah	Sickle shaped horns	backyard/ commercial	Few	increased	dairy	-	Yes	Milk	all
Horse	Ghora	<i>Eqaus coballus</i>	Local	red coloured body	backyard/ commercial	Abundent	Decresed	pack purpose	-	No	Pack	Bakarwals
Poultry	Kukar	<i>Golus domesticus</i>	Local	meat	backyard/ commercial	Abundent	Decresed	meat	-	No	Egg &MEAT	all
	Farmi Kukar	<i>Golus domesticus</i>	chabro	good eggs	backyard/ commercial	Few	increased	meat/eggs	-	No	Egg &MEAT	all
	Broiler	<i>Golus domesticus</i>	hybrid	white colour	deep Litter	few	increased	meat	-	Yes	meat	all



Dog	Kutta	<i>Canis familiares</i>	Local	-	Stray	Abudent	Abudent	-	-	No	-	Stray
	Bakarwali Kutta	<i>canis familiares</i>	Bakarwali	Black/Brown colour	Household	Abudent	Abudent	Companion	-	No.	-	Bakarwals
Piegon	Kabootar	<i>Kolumbia Libia domestic</i>	Local	ring around neck	caged	rare	rare	sports and meat	-	No.	-	-
Bsmint Sheep	Bhed	<i>Ovis</i>	Ramboulet	white colour,	migratory	-	-	Muttan	-	Yes	Mannure used traditionally agriculture fields	Local
		<i>Aries</i>	Cross Breed	White face and long tail	Stationery	-	-	Wool	-	Available		Non local
Sheep	-do-	-do-	non descript	Mixed colour long face short tail	Stationery	-	-	-do-	-	-do-	-do-	-do-
Goat	Bakri	<i>Caprahircus</i>	Beetal	Long ears, Romen Nose and red and black colour mostly	-do-			Milk, Chaobon		-do-	Hair and heights used tarditionally make that backdrum ectm	-do-
Goat	-do-	-do-	Kaghani	Long hair short eras cured hornes mostly light grey clour	Migratory			-do-	-	-do-	-do-	-do-





**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					
Trees	Aaran	<i>Prunus persica</i>	Trees	Lower shiwalik	Rare	Rare	own	Fruit	nil	nil	Generally, held by community
Trees	Amla	<i>Phyllanthus emblica</i>	Trees	Lower shiwalik	Rare	Rare	own	Fruit	posses medicinal properties	nil	Generally, held by community
Trees	Baadh	<i>Ficus religiosa</i>	Trees	Lower shiwalik	Rare	Rare	own	Leaves	nil	nil	Generally, held by community
Trees	Bair	<i>Ziziphus xylocarpa</i>	Trees	Lower shiwalik	Rare	Rare	own	Leaves/Fruit	nil	nil	Generally, held by community
Trees	Bheda	<i>Terminalia bellerica</i>	Trees	Lower shiwalik	Rare	Rare	own	Leaves/Fruit	nil	nil	Generally, held by community
Trees	Bill-Patre	<i>Angle mermelos</i>	Trees	Lower shiwalik	Rare	Rare	own	Fruit	posses medicinal properties	nil	Generally, held by community
Trees	Cambel	<i>Lannea coromandelica</i>	Trees	Lower shiwalik	Abundant	Abundant	own	Leaves/Stem	nil	nil	Generally, held by community
Trees	Charmood	<i>Ehretia laevis</i>	Trees	Lower shiwalik	Rare	Rare	own	Leaves	nil	nil	Generally, held by community
Trees	Cheundi	<i>Xylosma longifolium</i>	Trees	Lower shiwalik	Abundant	Abundant	own	Leaves/Stem	nil	nil	Generally, held by community
Trees	Chilla	<i>Casearia tomentosa</i>	Trees	Lower shiwalik	Rare	Rare	own	Leaves	nil	nil	Generally, held by community
Trees	Dhaman	<i>Grewia optiva</i>	Trees	Lower shiwalik	Abundant	Abundant	own	Leaves/Stem/Bark	nil	nil	Generally, held by community
Trees	Drankh	<i>Melia azedarach</i>	Trees	Lower shiwalik	Abundant	Rare	own	Leaves/Stem	nil	nil	Generally, held by community
Trees	Fakwara	<i>Ficus palmata</i>	Trees	Lower shiwalik	Abundant	Abundant	own	Leaves/Fruit	nil	nil	Generally, held by community

Trees	Galdey	<i>Rhamnua triquetra</i>	Trees	Lower shiwalik	Rare	Rare	own	Leaves	nil	nil	Generally, held by community
Trees	Guvava	<i>Psidium guajava</i>	Trees	Lower shiwalik	Abundant	Abundant	own	Leaves/Fruit	posses medicinal properties	nil	Generally, held by community
Trees	Harad	<i>Terminalia chebula</i>	Trees	Lower shiwalik	Abundant	Abundant	own	Stem/Fruit	Good for digestion	nil	Generally, held by community
Trees	Jaman	<i>Syzygium cumini</i>	Trees	Lower shiwalik	Abundant	Abundant	own	Leaves/Fruit	maintains sugar level in human body	nil	Generally, held by community
Trees	Kainth	<i>Pyrus paschia</i>	Trees	Lower shiwalik	Rare	Rare	own	Leaves	nil	nil	Generally, held by community
Trees	Kakad-Singhi	<i>Pistacia khinjuk</i>	Trees	Lower shiwalik	Abundant	Abundant	own	Leaves/Fruit	nil	nil	Generally, held by community
Trees	Kakuya	<i>Flacourtia indica</i>	Trees	Lower shiwalik	Abundant	Abundant	own	Leaves	nil	nil	Generally, held by community
Trees	Kamla	<i>Malotus philippensis</i>	Trees	Lower shiwalik	Rare	Rare	own	Leaves	nil	nil	Generally, held by community
Trees	Karal	<i>Bauhinia variegata</i>	Trees	Lower shiwalik	Rare	Rare	own	Leaves/Flower	nil	nil	Generally, held by community
Trees	Khair	<i>Acacia catechu</i>	Trees	Lower shiwalik	Abundant	Abundant	own	Leaves/Stem	nil	nil	Generally, held by community
Trees	Khajur	<i>Phoenix Sylvestris</i>	Trees	Lower shiwalik	Rare	Rare	own	Leaves	nil	nil	Generally, held by community
Trees	Kiker	<i>Acacia Nilotica</i>	Trees	Lower shiwalik	Abundant	Abundant	own	Leaves	nil	nil	Generally, held by community
Trees	Kringal	<i>Casia fistula</i>	Trees	Lower shiwalik	Rare	Rare	own	Fruit	nil	nil	Generally, held by community
Trees	Laana	<i>Ficus hispida</i>	Trees	Lower shiwalik	Abundant	Abundant	own	Leaves	nil	nil	Generally, held by community
Trees	Laseni	<i>Leucaena leucocephala</i>	Trees	Lower shiwalik	Rare	Abundant	own	Leaves	nil	nil	Generally, held by community
Trees	Lusada	<i>Cordia dichotoma</i>	Trees	Lower shiwalik	Rare	Rare	own	Leaves/Fruit	nil	nil	Generally, held by community
Trees	Mangoo	<i>Mangifera Indica</i>	Trees	Lower shiwalik	Abundant		own	Stem/Fruit	nil	nil	Generally, held by community
Trees	Ola	<i>Albizzia chinensis</i>	Trees	Lower shiwalik	Rare	Rare	own	Leaves	nil	nil	Generally, held by community

Trees	Pansra	<i>Wendlandia heynei</i>	Trees	Lower shiwalik	Rare	Abundant	own	Stem	nil	nil	Generally, held by community
Trees	Prag	<i>Alnus nitida</i>	Trees	Lower shiwalik	Abundant	Abundant	own	Stem	nil	nil	Generally, held by community
Trees	Retha	<i>Sapindus Mukorossii</i>	Trees	Lower shiwalik	Rare	Rare	own	Fruit	nil	nil	Generally, held by community
Trees	Rumbal	<i>Ficus racemosa</i>	Trees	Lower shiwalik	Rare	Rare	commercial	Leaves	nil	nil	Generally, held by community
Trees	Safeda	<i>Eucalyptus spp.</i>	Trees	Lower shiwalik	Rare	Abundant	own	Stem	nil	nil	Generally, held by community
Trees	Sree	<i>Albizzia lebbeck</i>	Trees	Lower shiwalik	Abundant	Abundant	commercial	Leaves/Stem	nil	nil	Generally, held by community
Trees	Simbal	<i>Bombax ceiba</i>	Trees	Lower shiwalik	Abundant	Abundant	own	Leaves/Stem	nil	nil	Generally, held by community
Trees	Talli	<i>Dalbergia sissoo</i>	Trees	Lower shiwalik	Abundant	Abundant	own	Stem	nil	nil	Generally, held by community
Trees	Tooth	<i>Morus alba</i>	Trees	Lower shiwalik	Abundant	Abundant	own	Leaves/Fruit	nil	nil	Generally, held by community
Trees	Trimbal	<i>Ficus auriculata</i>	Trees	Lower shiwalik	Rare	Rare	own	Leaves/Fruit	nil	nil	Generally, held by community
Trees	Tuni	<i>Toona ciliata</i>	Trees	Lower shiwalik	Abundant	Abundant	own	Stem	nil	nil	Generally, held by community
Trees	Badoo	<i>Ficus Banglensis</i>	Trees	Lower shiwalik	Rare	Rare	own	Leaves	nil	nil	Generally, held by community
Trees	Popular	<i>Populus ciliata</i>	Trees	Lower shiwalik	Abundant	Abundant	own	Leaves/Stem	nil	nil	Generally, held by community
Trees	Arjun	<i>Terminalia arjuna</i>	Trees	Lower shiwalik	Rare	Rare	own	Leaves/Bark	nil	nil	Generally, held by community
Trees	Chuntar	<i>Bischofia javanica</i>	Trees	Lower shiwalik	Rare	Rare	own	Leaves	nil	nil	Generally, held by community
Shurbs	Trimuru	<i>Zantho xylum aurmatum</i>	Shurbs	Lower shiwalik	Rare	Rare	own	Fruit	nil	nil	Generally, held by community
Shurbs	Kimb	<i>Citrus karna</i>	Shurbs	Lower shiwalik	Rare	Abundant	own	Fruit	nil	nil	Generally, held by community
Shurbs	Gandera	<i>Thevetia peruviana</i>	Shurbs	Lower shiwalik	Abundant	Abundant	own		nil	nil	Generally, held by community
Shurbs	Anardana	<i>Punica granatum</i>	Shurbs	Sub-Tropical area	Rare	Rare	own	Fruit	nil	nil	Generally, held by community

Shurbs	brankad	<i>Adha toda vesica</i>	Shurbs	Lower shiwalik	Abundant	Abundant	own	Flower	nil	nil	Generally, held by community
Shurbs	Drainkdu	<i>Murraya koenigii</i>	Shurbs	Lower shiwalik	Abundant	Abundant	own	Leaves	nil	nil	Generally, held by community
Shurbs	Dussa	<i>Colebrookia oppositifolia</i>	Shurbs	Lower shiwalik	Rare	Rare	own	Leaves	nil	nil	Generally, held by community
Shurbs	Akk	<i>Ipomea fistulosa</i>	Shurbs	Lower shiwalik	Abundant	Abundant	own		nil	nil	Generally, held by community
Shurbs	Garna	<i>Carissa opaca</i>	Shurbs	Lower shiwalik	Abundant	Abundant	own	Leaves/Fruit	nil	nil	Generally, held by community
Shurbs	Thor/Shuu	<i>Euphorbia royleana</i>	Shurbs	Lower shiwalik	Rare	Rare	own	Stem	nil	nil	Generally, held by community
Shurbs	Aakhe	<i>Rubus ellipticus</i>	Shurbs	Lower shiwalik	Rare	Abundant	own	Fruit	nil	nil	Generally, held by community
Shurbs	Bareyan	<i>Acorus calamus</i>	Shurbs	Sub-Tropical area	Abundant	Abundant	own	Root	nil	nil	Generally, held by community
Shurbs	Bhang	<i>Canabis sativia</i>	Shurbs	Lower shiwalik	Abundant	Abundant	own	Leaves	nil	nil	Generally, held by community
Herbs	Dudlu	<i>Taraxacum officinale</i>	Herbs	Temperate area	Rare	Rare	own	Leaves	nil	nil	Generally, held by community
Herbs	Brahmi Bhutti	<i>Centella asiatica</i>	Herbs	Lower shiwalik	Rare	Rare	own	Leaves	nil	nil	Generally, held by community
Herbs	Tarad	<i>Dioscorea belophylla</i>	Herbs	Lower shiwalik	Abundant	Abundant	own	Root	nil	nil	Generally, held by community
Herbs	Jungli putna	<i>Mentha arvensis</i>	Herbs	Lower shiwalik/Temperate area	Abundant	Abundant	own	Leaves	nil	nil	Generally, held by community
Herbs	Banfsha	<i>Viola odorata</i>	Herbs	Lower shiwalik/Temperate area	Abundant	Abundant	own	Flower	nil	nil	Generally, held by community
Grass	Bamboo	<i>Dendrocalamus strictus</i>	Grass	Lower shiwalik	Abundant	Abundant	own	Leaves	nil	nil	Generally, held by community
Grass	Drub/Khabbal	<i>Cyanodon dactylon</i>	Grass	Lower shiwalik	Abundant	Abundant	own	Leaves	nil	nil	Generally, held by community
Grass	Monja	<i>Saccharum benghalense</i>	Grass	Temperate area	Rare	Rare	own	Stem	nil	nil	Generally, held by community
Grass	Kai/Kaana	<i>Saccharum spontaneum</i>	Grass	Lower shiwalik	Abundant	Abundant	own	Leaves/Stem	nil	nil	Generally, held by community

Climbers	Mlungar	<i>Bouhania vahllai</i>	Climbers	Lower shiwalik	Rare	Rare	own	Leaves	nil	nil	Generally, held by community
Climbers	Galoj	<i>Tinospora cordi</i>	Climbers	Lower shiwalik	Abundant	Abundant	own	Stem	nil	nil	Generally, held by community



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

1	2	3	4	5	6
Sl. No.	Local Name	Scientific Name	Variety	Importance (as economic, social, cultural etc.)	Status
1	Amla	<i>Phyllanthus emblica</i>		economic/cultural	Abundant
2	Bair	<i>Ziziphus xylocarpa</i>		economic/cultural	Rare
3	Bheda	<i>Terminalia bellerica</i>		economic	Rare
4	Bill-Patre	<i>Angle mermelos</i>		Social/Culture	Rare
5	Drankh	<i>Melia azedarach</i>		economic	Abundant
6	Harad	<i>Terminalia chebula</i>		economic/cultural	Abundant
7	Jaman	<i>Syzygium cumini</i>		economic/cultural	Abundant
8	Kakad-Singhi	<i>Pistacia khinjuk</i>		economic	Abundant
9	Karal	<i>Bauhinia variegata</i>		economic	Abundant
10	Khair	<i>Acacia catechu</i>		economic	Abundant
11	Kringal	<i>Casia fistula</i>		social	Abundant
12	Lusada	<i>Cordia dichotoma</i>		economic	Rare
13	Mangoo	<i>Mangifera indica</i>		economic/cultural	Abundant
14	Retha	<i>Sapindus mukorossii</i>		economic	Rare

15	Rumbal	<i>Ficus racemosa</i>		economic	Rare
16	Sree	<i>Albizzia lebbeck</i>		economic	Abundant
17	Talli	<i>Dalbergia sissoo</i>		economic	Abundant
18	Trimbal	<i>Ficus auriculata</i>		economic	Abundant
19	Trimuru	<i>Zantho xylum aurmatum</i>		economic	Rare
20	Tuni	<i>Toona ciliata</i>		economic	Rare
21	Arjun	<i>Terminalia arjuna</i>		economic	Abundant
22	Anardana	<i>Punica granatum</i>		economic	Abundant
23	brankad	<i>Adha toda vesica</i>		economic	Rare
24	Drainkdu	<i>Murraya koenigii</i>		economic	Abundant
25	Dussa	<i>Colebrookia oppositifolia</i>		economic	Abundant
26	Dudlu	<i>Taraxacum officinale</i>		economic	Abundant
27	Thor/Shuu	<i>Euphorbia royleana</i>		economic	Rare
28	Bareyan	<i>Acorus calamus</i>		economic	Rare
29	Bhang	<i>Canabis sativia</i>		economic	Abundant
30	Brahmi Bhutti	<i>Centella asiatica</i>		Medicinal	Abundant
31	Tarad	<i>Dioscorea belophylla</i>		economic	Abundant
32	Jungli putna	<i>Mentha arvensis</i>		Medicinal	Abundant
33	Galoi	<i>Tinospora cordifolia</i>		Medicinal	Abundant

34	Banfsha	<i>Viola odorata</i>		Medicinal	Abundant
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**Format 21 : Wild Aquatic Plant Species of Importance**

<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>
<b>S.No.</b>	<b>Local Name</b>	<b>Scientific Name</b>	<b>Variety</b>	<b>Features</b>	<b>Habitat</b>
Nil	Nil	Nil	Nil	Nil	Nil

### Format 22: Wild Plants of Medicinal Importance

1	2	3	4	5	6		7	8	9	10	11
Plant (Herb, Shrub, Tree)	Local Name	Scientific Name	Variety	Landscape / Habitat	Local Status		Associated TK	Uses (usage)	Part used	Other details market/ own use	Community/ Knowledge Holder
					Past	Present					
Herbs	Dudlu	<i>Taraxacum officinale</i>	Herbs	Temperate area	Rare	Rare	own	nil	Leaves	nil	Generally, held by community
Herbs	Brahmi Bhutti	<i>Centella asiatica</i>	Herbs	Lower shiwalik	Rare	Rare	own	nil	Leaves	nil	Generally, held by community
Herbs	Tarad	<i>Dioscorea belophylla</i>	Herbs	Lower shiwalik	Abundant	Abundant	own	nil	Root	nil	Generally, held by community
Herbs	Jungli putna	<i>Mentha arvensis</i>	Herbs	Lower shiwalik/Temperate area	Abundant	Abundant	own	nil	Leaves	nil	Generally, held by community
Herbs	Banfsha	<i>Viola odorata</i>	Herbs	Lower shiwalik/Temperate area	Abundant	Abundant	own	nil	Flower	nil	Generally, held by community
Shrubs	Trimuru	<i>Zantho Xylum Aurmatum</i>	Shrubs	Lower shiwalik	Rare	Rare	own	nil	Fruit	nil	Generally, held by community
Shrubs	Anardana	<i>Punica granatum</i>	Shrubs	Lower shiwalik	Rare	Abundant	own	nil	Fruit	nil	Generally, held by community
Shrubs	brankad	<i>Adha toda vesica</i>	Shrubs	Lower shiwalik	Abundant	Abundant	own	nil		nil	Generally, held by community
Shrubs	Drinkdu	<i>Murraya koenigii</i>	Shrubs	Sub-Tropical area	Rare	Rare	own	nil	Fruit	nil	Generally, held by community
Shrubs	Dussa	<i>Colebrookia oppositifolia</i>	Shrubs	Lower shiwalik	Abundant	Abundant	own	nil	Flower	nil	Generally, held by community
Shrubs	Thor/Shuu	<i>Euphorbia royleana</i>	Shrubs	Lower shiwalik	Abundant	Abundant	own	nil	Leaves	nil	Generally, held by community
Shrubs	Bareyan	<i>Acorus calamus</i>	Shrubs	Lower shiwalik	Rare	Rare	own	nil	Leaves	nil	Generally, held by community
Shrubs	Bhang	<i>Canabis sativia</i>	Shrubs	Lower shiwalik	Abundant	Abundant	own	nil	leaves	nil	Generally, held by community

Tree	Amla	<i>Phyllanthus emblica</i>	Tree	Lower shiwalik	Abundant	Abundant	own	nil	Leaves	nil	Generally, held by community
Tree	Bair	<i>Ziziphus xylocarpa</i>	Tree	Lower shiwalik	Rare	Rare	own	nil	Stem	nil	Generally, held by community
Tree	Bheda	<i>Terminalia bellerica</i>	Tree	Lower shiwalik	Rare	Abundant	own	nil	Fruit	nil	Generally, held by community
Tree	Bill-Patre	<i>Angle mermelos</i>	Tree	Sub-Tropical area	Abundant	Abundant	own	nil	Root	nil	Generally, held by community
Tree	Drankh	<i>Melia azedarach</i>	Tree	Lower shiwalik	Abundant	Abundant	own	nil	Leaves	nil	Generally, held by community
Tree	Harad	<i>Terminalia chebula</i>	Tree	Lower shiwalik	Abundant	Abundant	own	Good for digestion	Stem/Fruit	nil	Generally, held by community
Tree	Jaman	<i>Syzygium cumini</i>	Tree	Lower shiwalik	Abundant	Abundant	own	maintains sugar level in human body	Leaves/ Fruit	nil	Generally, held by community
Tree	Kakad-Singhi	<i>Pistacia khinjuk</i>	Tree	Lower shiwalik	Abundant	Abundant	own	nil	Leaves/ Fruit	nil	Generally, held by community
Tree	Karal	<i>Bauhinia variegata</i>	Tree	Lower shiwalik	Rare	Rare	own	nil	Leaves/ Flower	nil	Generally, held by community
Tree	Khair	<i>Acacia catechu</i>	Tree	Lower shiwalik	Abundant	Abundant	own	nil	Leaves/Stem	nil	Generally, held by community
Tree	Kringal	<i>Casia fistula</i>	Tree	Lower shiwalik	Rare	Rare	own	nil	Fruit	nil	Generally, held by community
Tree	Lusada	<i>Cordia dichotoma</i>	Tree	Lower shiwalik	Rare	Rare	own	nil	Leaves/Fruit	nil	Generally, held by community
Tree	Mangoo	<i>Mangifera Indica</i>	Tree	Lower shiwalik	Abundant	Abundant	own	nil	Stem/Fruit	nil	Generally, held by community
Tree	Retha	<i>Sapindus Mukorossii</i>	Tree	Lower shiwalik	Rare	Rare	own	nil	Fruit	nil	Generally, held by community
Tree	Rumbal	<i>Ficus racemosa</i>	Tree	Lower shiwalik	Rare	Rare	commercial	nil	Leaves	nil	Generally, held by community
Tree	Sree	<i>Albizzia lebbeck</i>	Tree	Lower shiwalik	Abundant	Abundant	commercial	nil	Leaves/Stem	nil	Generally, held by community
Tree	Talli	<i>Dalbergia sissoo</i>	Tree	Lower shiwalik	Abundant	Abundant	own	nil	Stem	nil	Generally, held by community
Tree	Trimbal	<i>Ficus auriculata</i>	Tree	Lower shiwalik	Rare	Rare	own	nil	Leaves/Fruit	nil	Generally, held by community

Tree	Tuni	<i>Toona ciliata</i>	Tree	Lower shiwalik	Abundant	Abundant	own	nil	Stem	nil	Generally, held by community
Tree	Arjun	<i>Terminalia arjuna</i>	Tree	Lower shiwalik	Rare	Rare	own	nil	Leaves/Bark	nil	Generally, held by community



**Format 23: Wild relatives of Crops**

1	2	3	4	5	6	7	8	9	10
Local Name	Scientific Name	Associated crop	Landscape / Habitat	Local Status	Uses ( usage)	Part Used	Associated TK	Other details	Community / Know holder
Flai	<i>Acacia Modesta</i>	Kikker	Scattered in forest	Rare	Fodder	leaf/branches	Good for Teeth Healing		Generally, held by community
Jungli putna	<i>Mentha arvensis</i>	Putna	Along the Nalla's	Abundant	Medicinal use	Leaf	Medicinal Properties		Generally, held by community

**Format 24: Ornamental Plants**

1	2	3	4	5	6	7	8
Local Name	Scientific Name	Variety	Habitat	Commercial/Non-commercial	Associated Tk	Other Details	Community/ Knowledge Holder
Kachnar	<i>Bauhinia Variegata</i>		Terrestrial	Non commercial	Used for Dysentry, Diarrhoea	Pink flowers in Summer	Floriculturists/ Nurserymen/Gardeners
			Subtropical				
Nerium	<i>Nerium Oleander</i>		Terrestrial	Non commercial	Epilepsy, cancer	Avenue plantation	Floriculturists/ Nurserymen/Gardeners
			Subtropical				
Kaner	<i>Thevetia Peruviana</i>		Terrestrial	Non commercial	Fevers	Flower most of the year	Floriculturists/ Nurserymen/Gardeners
			Subtropical				
Bottle Brush	<i>Callistemmon spp.</i>		Terrestrial	Non commercial	Theraputic uses	Foilage and flowers	Floriculturists/ Nurserymen/Gardeners
			Subtropical				
Bogan Bael	<i>B.Sp &amp; hybrids</i>		Terrestrial	Non commercial	Antidiabetic, antiinflammatory	Multicoloured flowers	Floriculturists/ Nurserymen/Gardeners
			Subtropical				
Agave	<i>Agave angustifolia</i>		Terrestrial	Non commercial	Traditional medicines	Succulent	Floriculturists/ Nurserymen/Gardeners
			Subtropical				
Thur	<i>Cactus spp</i>		Terrestrial	Non commercial	Folk medicines	Thorny succulents	Floriculturists/ Nurserymen/Gardeners
			Subtropical				

**Format 25: Fumigate / Chewing Plants**

1	2	3	4	5	6		7	8	9	10	11
Plant (Herb, Shrub, Tree)	Local Name	Scientific Name	Variety	Habitat	Local Status		Uses ( usage)	Part used	Associated TK	Other details (mode of use)	Community knowledge holder
					Past	Present					
Shrub	Trimuru	<i>Zanthoxylum aurmatum</i>	-	Forest	Rare	Rare	use for teeth Cleaning/ Medicinal Purpose	Fruit,Branches	-	-	Generally, held by community
	brankad	<i>Adha toda vesica</i>	-	Locally present	Abundant	Abundant	Medicinal purpose	Flower	-	-	Generally, held by community
	Drainkdu	<i>Murraya koenigii</i>	-	Locally present	Abundant	Abundant	Edible	Leaf	-	-	Generally, held by community
	Bana	<i>Vitex negundo</i>	-	Locally present	Rare	Rare	use for teeth Cleaning	Branches	-	-	Generally, held by community
Tree	Flai	<i>Acacia Modesta</i>	-	Forest	Rare	Rare	Medicinal purpose	Branches	-	-	Generally, held by community
	Kiker	<i>Acacia Nilotica</i>	-	Forest	Rare	Rare	use for teeth Cleaning	Branches	-	-	Generally, held by community

**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	Other Details	Community/ Knowledge Holder
			Past	Present				
Bheda	<i>Terminalia bellerica</i>	Lower shiwalik	Rare	Rare	own	nil	nil	Generally, held by community
Bill-Patre	<i>Angle mermelos</i>	Lower shiwalik	Rare	Rare	own	posses medicinal properties	nil	Generally, held by community
Cambel	<i>Lannea coromandelica</i>	Lower shiwalik	Abundant	Abundant	own	nil	nil	Generally, held by community
Cheundi	<i>Xylosma longifolium</i>	Lower shiwalik	Abundant	Abundant	own	nil	nil	Generally, held by community
Dhaman	<i>Grewia optiva</i>	Lower shiwalik	Abundant	Abundant	own	nil	nil	Generally, held by community
Drankh	<i>Melia azedarach</i>	Lower shiwalik	Abundant	Rare	own	nil	nil	Generally, held by community
Harad	<i>Terminalia chebula</i>	Lower shiwalik	Rare	Rare	own	Good for digestion	nil	Generally, held by community
Jaman	<i>Syzygium cumini</i>	Lower shiwalik	Abundant	Abundant	own	maintains sugar level in human body	nil	Generally, held by community
Kainth	<i>Pyrus paschia</i>	Lower shiwalik	Abundant	Abundant	own	nil	nil	Generally, held by community
Kakad-Singhi	<i>Pistacia khinjuk</i>	Lower shiwalik	Rare	Rare	own	nil	nil	Generally, held by community
Kamla	<i>Malotus philippensis</i>	Lower shiwalik	Abundant	Abundant	own	nil	nil	Generally, held by community
Karal	<i>Bauhinia variegata</i>	Lower shiwalik	Abundant	Abundant	own	nil	nil	Generally, held by community

Khair	<i>Acacia catechu</i>	Lower shiwalik	Abundant	Abundant	own	nil	nil	Generally, held by community
Kiker	<i>Acacia Nilotica</i>	Lower shiwalik	Rare	Rare	own	nil	nil	Generally, held by community
Lusada	<i>Cordia dichotoma</i>	Lower shiwalik	Rare	Rare	own	nil	nil	Generally, held by community
Mangoo	<i>Mangifera Indica</i>	Lower shiwalik	Abundant	Abundant	own	nil	nil	Generally, held by community
Ola	<i>Albizzia chinensis</i>	Lower shiwalik	Rare	Rare	own	nil	nil	Generally, held by community
Prag	<i>Alnus nitida</i>	Lower shiwalik	Abundant	Abundant	own	nil	nil	Generally, held by community
Retha	<i>Sapindus Mukorossii</i>	Lower shiwalik	Rare	Rare	own	nil	nil	Generally, held by community
Safeda	<i>Eucalyptus spp.</i>	Lower shiwalik	Rare	Abundant	commercial	nil	nil	Generally, held by community
Sree	<i>Albizzia lebbeck</i>	Lower shiwalik	Abundant	Abundant	own	nil	nil	Generally, held by community
Simbal	<i>Bombax ceiba</i>	Lower shiwalik	Abundant	Abundant	commercial	nil	nil	Generally, held by community
Talli	<i>Dalbergia sissoo</i>	Lower shiwalik	Abundant	Abundant	own	nil	nil	Generally, held by community
Tooth	<i>Morus alba</i>	Lower shiwalik	Rare	Abundant	own	nil	nil	Generally, held by community
Trimbal	<i>Ficus auriculata</i>	Lower shiwalik	Rare	Rare	own	nil	nil	Generally, held by community
Tuni	<i>Toona ciliata</i>	Lower shiwalik	Abundant	Abundant	own	nil	nil	Generally, held by community
Popular	<i>Populus ciliata</i>	Lower shiwalik	Rare	Abundant	own	nil	nil	Generally, held by community
Arjun	<i>Terminalia arjuna</i>	Lower shiwalik	Rare	Abundant	own	nil	nil	Generally, held by community
Chuntar	<i>Bischofia javanica</i>	Lower shiwalik	Rare	Rare	own	nil	nil	Generally, held by community





**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)	Associated TK	Mode of Hunting, collecting (if any)	Other details	Community/ Knowledge Holder
						Past	Present					
Mammals	Chitra	<i>Panthera pardus</i>	Forest	-	Summer Season	-	-	-	-	-	-	Generally, held by community
Mammals	Jungali Billi	<i>Felis chaus</i>	Forest	-	-	-	-	-	-	-	-	Generally, held by community
Mammals	Mangoose	<i>Herpsters aurpunctatus</i>	Forest	-	-	-	-	-	-	-	-	Generally, held by community
Mammals	Jackal	<i>Canis aureus</i>	Forest	-	-	-	-	-	-	-	-	Generally, held by community
Mammals	Indian Fox	<i>Vulpes bengalensis</i>	Forest	-	-	-	-	-	-	-	-	Generally, held by community
Mammals	Five Stripped Palm Squirrel	<i>Funambulus penanti</i>	Forest	-	-	-	-	-	-	-	-	Generally, held by community
Mammals	Field Mouse	<i>Mus boodnga</i>	Forest	-	-	-	-	-	-	-	-	Generally, held by community
Mammals	Indian Porcupine (sahi)	<i>Hustrix indica</i>	Forest	-	-	-	-	-	-	-	-	Generally, held by community
Mammals	Barking Deer (Kakkarah)	<i>Muntiacus moutjak</i>	Forest	-	-	-	-	-	-	-	-	Generally, held by community
Mammals	Musk Deer (Kastura)	<i>Moschus moschiferus</i>	Forest	-	-	-	-	-	-	-	-	Generally, held by community
Mammals	Hog Deer (Para)	<i>Axis pornicus</i>	Forest	-	-	-	-	-	-	-	-	Generally, held by community



Mammals	Indian Wild Boar (Jungali Sour)	<i>Sus scrofa</i>	Forest	-	-	-	-	-	-	-	-	Generally, held by community
Mammals	Phesus Macaque	<i>Macaac mulatta</i>	Forest	-	-	-	-	-	-	-	-	Generally, held by community
Mammals	Red Fox (Lomari)	<i>Vulpes vulpes</i>	Forest	-	-	-	-	-	-	-	-	Generally, held by community
Birds	Red Jungle Fowl	<i>Gallus gallus</i>	Forest	-	-	-	-	-	-	-	-	Generally, held by community
Birds	Common Pea Fowl	<i>Pavo cristatus</i>	Forest	-	-	-	-	-	-	-	-	Generally, held by community
Birds	Black Partridge	<i>Francolinus francolinus</i>	Forest	-	-	-	-	-	-	-	-	Generally, held by community
Birds	Common or Grey Quail	<i>Conturnix conturnix</i>	Forest	-	-	-	-	-	-	-	-	Generally, held by community
Birds	Blue-Rock Pigeon	<i>Columba Lioia</i>	Forest	-	-	-	-	-	-	-	-	Generally, held by community
Birds	Spotted Dove	<i>Streptopelia chinesis</i>	Forest	-	-	-	-	-	-	-	-	Generally, held by community
Birds	White Backed Bengal Vultures	<i>Psuedogypes bengalensis</i>	Forest	-	-	-	-	-	-	-	-	Generally, held by community
Birds	Jungle Crow	<i>Corvov marcorhynchos</i>	Forest	-	-	-	-	-	-	-	-	Generally, held by community
Birds	House Crow	<i>Corvov splendens</i>	Forest	-	-	-	-	-	-	-	-	Generally, held by community
Birds	Rollel or Blue Jay	<i>Coracras bengalensis</i>	Forest	-	-	-	-	-	-	-	-	Generally, held by community
Birds	Koel	<i>Eudynamys scolopacea</i>	Forest	-	-	-	-	-	-	-	-	Generally, held by community
Birds	Common Hawk Cuckoo	<i>Cuculus varius</i>	Forest	-	-	-	-	-	-	-	-	Generally, held by community

Birds	Himalayan Tree Pie	<i>Dendrocitta formosea</i>	Forest	-	-	-	-	-	-	-	-	Generally, held by community
Birds	Yellow Billed Blue Mapie	<i>Urocissa erythrorhyncha</i>	Forest	-	-	-	-	-	-	-	-	Generally, held by community
Birds	Indian Myna	<i>Acridotheres tristis</i>	Forest	-	-	-	-	-	-	-	-	Generally, held by community
Birds	Blue Whistling Thrush		Forest	-	-	-	-	-	-	-	-	Generally, held by community
Birds	Black Headed Myna	<i>Sturnus pagodarus</i>	Forest	-	-	-	-	-	-	-	-	Generally, held by community
Birds	Wood Pecker	<i>Dryobates himalayansis</i>	Forest	-	-	-	-	-	-	-	-	Generally, held by community
Birds	Toota (Mansari)	<i>Psittacula crameri</i>	Forest	-	-	-	-	-	-	-	-	Generally, held by community
Birds	Cheel	<i>Milouismegrans</i>	Forest	-	-	-	-	-	-	-	-	Generally, held by community
Birds	Moor	<i>Pavo cristatus</i>	Forest	-	-	-	-	-	-	-	-	Generally, held by community
Birds	Tailor Bird	<i>Orthotomous sutorius</i>	Forest	-	-	-	-	-	-	-	-	Generally, held by community
Birds	Indian Robin	<i>Saxicolaides fulicata</i>	Forest	-	-	-	-	-	-	-	-	Generally, held by community
Birds	Paradise Fly Catcher	<i>Terpsiphon paradisi</i>	Forest	-	-	-	-	-	-	-	-	Generally, held by community
Birds	White Spotted Fantail Fly Catcher	<i>Rhipidura albicollis</i>	Forest	-	-	-	-	-	-	-	-	Generally, held by community
Birds	Whitte Breasted king Fisher	<i>Halcyon amyrnensis</i>	Forest	-	-	-	-	-	-	-	-	Generally, held by community
Birds	House Sparrow	<i>Passer domesticus</i>	Forest	-	-	-	-	-	-	-	-	Generally, held by community

Birds	The Hoopoe	<i>Upupa epops</i>	Forest	-	-	-	-	-	-	-	-	Generally, held by community
Birds	Himalayan Barred Owlet	<i>Glaucidium culculoides</i>	Forest	-	-	-	-	-	-	-	-	Generally, held by community
Birds	White Checked Bulbul	<i>Pycnonotus leucogenys</i>	Forest	-	-	-	-	-	-	-	-	Generally, held by community
Birds	Goldern oriola	<i>Oriolus oriolus</i>	Forest	-	-	-	-	-	-	-	-	Generally, held by community
Reptiles	Cobra/Naag	<i>Naja naja</i>	Forest/ Cultivated Areas/Along Water Bodies	-	Summer Season	-	-	-	-	-	-	Generally, held by community
Reptiles	Krait/Sanjuth	<i>Zamenies mucosus</i>	Forest/ Cultivated Areas/Along Water Bodies	-	Summer Season	-	-	-	-	-	-	Generally, held by community
Reptiles	Python/Sangni	<i>Python morulus</i>	Forest/ Cultivated Areas/Along Water Bodies	-	Summer Season	-	-	-	-	-	-	Generally, held by community
Reptiles	Himalayan Pit Viper	<i>Viper rusellii</i>	Forest/ Cultivated Areas/Along Water Bodies	-	Summer Season	-	-	-	-	-	-	Generally, held by community
Amphibian	Amphibians	<i>Mendak/meenk</i>	rana tigrina	Pond/Land	Rainy Season	-	-	-	-	-	-	Generally, held by community
Amphibian	Amphibians	<i>Toad/Dadu</i>	Buff melanostictus	Pond/Land	Rainy Season	-	-	-	-	-	-	Generally, held by community

**Format 29: Flora (Urban Biodiversity)**

<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>
<b>S.No.</b>	<b>Local Name</b>	<b>Scientific Name</b>	<b>Type of Plant</b>	<b>Habitat</b>	<b>Flowering Season</b>	<b>Rare/Common</b>



**Format 31: Any other information of local importance**

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

*End of Part II*