## PEOPLE'S BIODIVERSITY REGISTER TISI VILLAGE

Compiled by

Members of Biodiversity Management Committee, Tisi Village

&

Mizoram State Biodiversity Board
Office of Chief Wildlife Warden
Environment, Forest & Climate Change Department
MINECO, Khatla, Aizawl
Mizoram

# PART-I

#### 1. The Biological Diversity Act, 2002 & Rules, 2004

The Biological Diversity Act, 2002 (No. 18 of 2003) was notified by the Government of India on 5<sup>th</sup> February, 2003. The Act extends to the whole of India and reaffirms the sovereign rights of the country over its biological resources. Subsequently the Government of India published Biological Diversity Rules, 2004 (15<sup>th</sup> April, 2004). The Rules under section 22 states that 'every local body shall constitute a Biodiversity Management Committee (BMC) within its area of jurisdiction'.

#### 2. People's Biodiversity Registers and role of the Biodiversity Management Committee

The mandate of the Biodiversity Management Committee has been clearly highlighted in the Biological Diversity Rules 2002 as follows:

- The main function of the BMC is to prepare People's Biodiversity Register in consultation with the local people. The register shall contain comprehensive information on availability and knowledge of local biological resources, their medicinal or any other use.
- > The other functions of the BMC are to advice on any matter referred to it by the State Biodiversity Board or Authority for granting approval, to maintain data about local vaids and practitioners using the biological resources.
- > The Authority shall take steps to specify the form of People's Biodiversity Registers, and the particulars it shall contain and the format for electronic database.
- > The Authority and the State Biodiversity Boards shall provide guidance and technical support to the Biodiversity Management Committees for preparing People's Biodiversity Register.
- > The People's Biodiversity Registers shall be maintained and validated by the Biodiversity Management Committees.

## 3. People's Biodiversity Registers and role of National Biodiversity Authority (NBA)

The National Biodiversity Authority shall provide guidance and technical support to the Biodiversity Management Committee (BMC) for preparing People's Biodiversity Register.

#### People's Biodiversity Registers and the role of State Biodiversity Board (SBB)

The State Biodiversity Board (SBB) would provide necessary training to the technical Support Group (TSG) of the district and enable smooth functioning and aid in networking for creation and maintenance of People's Biodiversity Registers (PBR).

## People's Biodiversity Registers and Role of the Technical Support Group (TSG)

The Technical Support Group (TSG) will consist of experts from various disciplines and line departments, universities, research institutes, colleges and schools and non-governmental organizations. The Technical Support Group will provide technical inputs and advice to the BMC's on identification of plants and animals, monitor and evaluate the PBR exercise, examine confidential information and advice on legal protection, maintain a database of local and external experts on biodiversity.

## 4. People's Biodiversity Registers (PBR)

Being a mega biodiverse country, India is very rich in biological and cultural diversity. It is also a home of many tribal groups, pursuing different kinds of nature based livelihoods. In addition, a large number of farming, fishing communities, and nomadic group possessed traditional knowledge of varying degrees. The development of modern science and technology in biotechnology and information technologies have increased the value of biodiversity and associated knowledge including traditional knowledge (TK). The growing importance of biodiversity, bio-resources and associated knowledge is fairly well understood. The first step towards conservation is sustainable utilization of biodiversity and its documentation. Biodiversity and associated knowledge is found in different ecosystems under different legal management regimes and hence the results and the manner of documentation will also differ.

The present manual guidelines have been drafted taking into consideration different ecosystems and include the rural, urban and protected areas. The guidelines may be customized and further information may be added to enrich the effort. It is important to keep in mind some of the issues related to PBRs:

- > It is to be undertaken in a participatory mode involving varying sections of village society
- ➤ While documenting the PBR, knowledge and views of both genders are to be recorded
- > Information's provided by the community should be collated, analyzed and crosschecked by the members of the Technical Support group (TSG) before documentation
- > PBR is important base document in the legal arena as evidence of prior knowledge and hence careful documentation is necessary
- The document should be endorsed by the BMC and later publicized in the Gram Sabha/Grma Panchayat/Panchayat Samiti. The document can be a very useful tool in the management and sustainable use of bio-resources. The document can also be a very useful teaching tool for teaching environmental studies at schools, colleges and university level.
- > The document should be periodically updated with the additional and new information as and when generated.

#### **4.1** The PBR Process

The preparation of People's Biodiversity registers (PBR) involves the active support and cooperation of a large number of people who need to share their common as well as knowledge (traditional knowledge). The first and foremost important task for preparing a PBR is organizing a group meeting to explain the objectives and purpose of the exercise. Different social groups in the village need to be identified for purpose of data collection from those groups. In an urban situation, spots where biodiversity are important need to be identified for the purpose of the study and documentation. The documentation process includes information gathered from individuals through detailed questionnaire; focused group discussion with person's having knowledge and published secondary information.

## 4.2 Documentation and Traditional Knowledge (TK) related to biodiversity

Documentation of knowledge of individuals with regard to biodiversity and its uses is an important part of PBR. Every effort should be made to identify the persons with proven knowledge of local biodiversity; special attention should be given to the elderly persons who can also provide information on the biodiversity which was available in the past but no longer seen at present. In some cases focus group discussion may be held for the purpose of documentation.

## 4.3 PBR Methodology

The PBR is a participatory process requiring intensive and extensive consultation with the people. The objectives and purpose is to be explained in a group meeting in the presence of all sections of people in the Panchayat, members of the BMC, students, knowledgeable individuals and those interested in the effort. Documentation includes photographs (including digital images), drawings, audio and video recordings and other records like printed material.

## 4.4 Process in PBR Preparation

**Step I** : Formation of Biodiversity Management Committee (BMC)

**Step II** : Sensitization of the community/local people about the study, survey and possible management

**Step III**: Training of members in identification and collection of data on biological resources and traditional knowledge

Step IV : Collection of data. Data collections includes review of literature on the natural resources of the districts, Participatory Rural Appraisal

(PRAs) at village level, household interviews, individual interviews with village leaders and knowledgeable individuals, household heads,

key actors of the panchayat raj institutions and NGOs and direct field observations

**Step V** : Analysis and validation of data in consultation with technical support group and BMC

**Step VI**: Preparation of People's Biodiversity Register (PBR)

**Step VII** : Computerization of information and resources.

## General Details of People's Biodiversity Register (PBR) of Tisi Village

Name of the village : Tisi

Block : Tipa RD Block

**District** : Siaha

State : Mizoram

**Geographical Area of the Panchayat Samity** : 1.8 sq.km

**Population under the Panchayat Samity** : 1280

**Male** : 715

**Female** : 564

Habitat and Topography : Tropical evergreen forest, Hilly terrain & Plain

Climate (Rainfall, Temperature and other

weather patterns)

: 3°C - 30°C with annual rainfall of 1200mm-2500mm

Land use (Nine fold classification available

with village records) : Agriculture/Farming

**Date, Month and Year of PBR preparation** : 17-February-2022

Management Regime: Reserve Forests (RF)/
Joint Management (JM)/Protected areas (PA)/
Community Owned and Managed Forests (COM)

: COM & RF

## Annexure I

Details of the BMC members 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 Chairman Age Gender Address Area of specialization	: N. Zalo : 51 : Male : Tisi-I area : VCP	2.	Name Age Gender Address Area of specialization	: Z. Laihno : 55 : Male : Tisi-II area : VCP
3.	Name Age Gender Address Area of specialization	: Collin VTC Siahlei : 43 : Male : Tisi-I area :	4.	Name Age Gender Address Area of specialization	: Siakhu Syhlo : 45 : Male : Tisi-II area : Business
5.	Name Age Gender Address Area of specialization	<ul><li>: Baby Nancy</li><li>: 45</li><li>: Female</li><li>: Tisi-I area</li><li>: Farmer</li></ul>	6.	Name Age Gender Address Area of specialization	<ul><li>: V. Dawchia</li><li>: 48</li><li>: Female</li><li>: Tisi-II area</li><li>: Farmer</li></ul>
7.	Name Age Gender Address Area of specialization	<ul><li>: N. Beikhaitlua</li><li>: 54</li><li>: Male</li><li>: Tisi-I area</li><li>: Farmer</li></ul>	8.	Name Age Gender Address Area of specialization	: Ng. Khaibei : 47 : Male : Tisi-II area : Forest Guard

#### **Annexure II**

List of Vaids, hakims and traditional healthcare (human and livestock) practitioners residing and or using biological resources occurring within the jurisdiction of the village.

Name : **NIL** 

Age : Gender : Address : Area of specialization :

Location from which the person accesses biological material :

Perception of the practitioner

on the resource status :

#### **Annexure III**

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

Name : NIL

Age : Gender : Address : Area of Specialization :

#### **Annexure IV**

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

1) Contact Person : Dr. Lalneihpuia Chhakchhuak 3. Contact Person : Dr. Seikuti Nohro

Name and Address : Technical Assistant Name and Address : Consultant

Mizoram State Biodiversity Board Environment & Forest Department

2) Contact Person : Derrick Zothanmawia Mara Autonomous District Council (MADC)

Name and Address : Computer Assistant Siaha, Mizoram

Mizoram State Biodiversity Board

# PART - II

## **AGROBIODIVERSITY**

## Format 1: Crop Plants

1	2	3	4	5	6	7	
Crop	Scientific Name	Local Name	Variety	Landscape/	Approx. area	Local S	tatus
•				Habitat	sown	Past	Present
Turmeric	Curcuma longa	Aieng	Local	Hilly terrain, Jhum land	Not measured	Few	Few
Para cress	Acmella paniculata	Ankasa	Local	Hilly terrain, Jhum land	-do-	Abundant	Few
Mustard	Brassica rapa	Antam	Local	Hilly terrain, Jhum land	-do-	Abundant	Few
Deccan hemp	Hibiscus cannabinus	Anthur	Local	Hilly terrain, Jhum land	-do-	Abundant	Few
Wild coriander	Eryngium foetidum	Bahkhawr	Local	Hilly terrain, Jhum land	-do-	Abundant	Few
Perennial herb	Colocasia sp	Baibing	Local	Hilly terrain, Jhum land	-do-	Abundant	Abundant
Taro	Colocasia esculenta	Bal	Local	Hilly terrain, Jhum land	-do-	Abundant	Few
Brinjal	Solanum melongena	Bawkbawn	Local	Hilly terrain, Jhum land	-do-	Abundant	Few
Lady's finger	Abelmoschus esculentus	Bawrhsaiabe	Local	Hilly terrain, Jhum land	-do-	Few	Few
Bean	Phaseolus vulgaris	Bean	Local	Hilly terrain, Jhum land	-do-	Few	Few
Cow pea	Vigna unguiculata	Behlawi	Local	Hilly terrain, Jhum land	-do-	Abundant	Few
Pigeon pea	Cajanus cajan	Behliang	Local	Hilly terrain, Jhum land	-do-	Abundant	Few
Soyabean	Glycine max	Bekang	Local	Hilly terrain, Jhum land	-do-	Abundant	Few
Hyacinth bean	Lablab pupureus	Bepui	Local	Hilly terrain, Jhum land	-do-	Few	Abundant
Winged Bean	Psophocarpus tetragonolobus	Bepuipawr	Local	Hilly terrain, Jhum land	-do-	Abundant	Few
Snake gourd	Trichosanthes anguina	Berul	Local	Hilly terrain, Jhum land	-do-	Abundant	Abundant
Broccoli	Brassica olearcea var italica	Brocoli	Local	Hilly terrain, Jhum land	-do-	Few	Few
Rice	Oryza sativa	Buh	Local	Hilly terrain, Jhum land	-do-	Abundant	Few
Bitter gourd	Momordica charantia	Changkha	Local	Hilly terrain, Jhum land	-do-	Few	Few
White durra	Sorghum cernuum	Chhawhchhi	Local	Hilly terrain, Jhum land	-do-	Abundant	Few
Cucumber	Cucumis sativas	Fanghma	Local	Hilly terrain, Jhum land	-do-	Abundant	Few
Broad or sword bean	Canavalia ensiformis	Fangra	Local	Hilly terrain, Jhum land	-do-	Abundant	Few
Chilli	Capsicum annuum	Hmarchapui	Local	Hilly terrain, Jhum land	-do-	Few	Few
Birds eye chilli	Capsicum frutescens	Hmarchate	Local	Hilly terrain, Jhum land	-do-	Abundant	Few
Squash	Sechium edule	Iskut	Local	Hilly terrain, Jhum land	-do-	Abundant	Few
Roselle	Hibiscus sabdariffa	Lakher anthur	Local	Hilly terrain, Jhum land	-do-	Abundant	Abundant
Aromatic herb	Elsholtzia communis	Lengser	Local	Hilly terrain, Jhum land	-do-	Abundant	Abundant
Pumpkin	Cucurbita maxima	Mai/Maian	Local	Hilly terrain, Jhum land	-do-	Abundant	Few
Ash gourd	Benincasa hispida	Maipawl	Local	Hilly terrain, Jhum land	-do-	Abundant	Few
-	Coix lacryma-jobi	Mim	Local	Hilly terrain, Jhum land	-do-	Abundant	Few
Mula	Raphanus sativas	Mula	Local	Hilly terrain, Jhum land	-do-	Few	Few
Cauliflower	Brassica oleracea var. botrytis	Parbawr	Local	Hilly terrain, Jhum land	-do-	Few	Few
Wild celery	Trachyspermum roxburghianum	Pardi	Local	Hilly terrain, Jhum land	-do-	Few	Abundant
-	Clerodendrum colebrookianum	Phuihnam	Local	Hilly terrain, Jhum land	-do-	Abundant	Abundant
Wild basil	Ocimum americanum	Runhmui	Local	Hilly terrain, Jhum land	-do-	Abundant	Few
Bitter tomato	Solanum aethiopicum	Samtawk	Local	Hilly terrain, Jhum land	-do-	Abundant	Abundant
African eggplant	Solanum macrcarpon	Satinrem	Local	Hilly terrain, Jhum land	-do-	Abundant	Abundant

Ginger	Zingiber officinale	Sawhthing	Local	Hilly terrain, Jhum land	-do-	Few	Few
Devils tongue	Amorphophallus sp	Telhawng	Local	Hilly terrain, Jhum land	-do-	Few	Abundant
Tomato	Solanum lycopersicum	Tomato	Local	Hilly terrain, Jhum land	-do-	Few	Few
Tobacco plant	Nicotiana tabacum	Vaihlo	Local	Hilly terrain, Jhum land	-do-	Abundant	Few
Maize	Zea mays	Vaimim	Local	Hilly terrain, Jhum land	-do-	Abundant	Few

	9	10	11	12	13	14
Special Features	Cropping Season	Uses	Associated TK	Other Details	Source of Seeds /Plants	Community Knowledge Holder
Rhizome is used as condiment	Mar-April	Edible	Juice of rhizome is used for stomach ulcer, jaundice, doarrhoea, dysentery, cholera, asthma, food poisoning, and also used as a tonic for blood purifier	1	Local	Mara
Leaves and stems as vegetable	Mar-April	Edible	Flowers are chewed to relieve toothache and affections of the gum and throat	-	Local	Mara
Young leaves are eaten as vegetables	Mar-April	Edible	Seeds and oil are used in medicine	-	Local	Mara
Leaves are eaten as vegetables, curry	Mar-April	Edible	Leaves are used as diuretic, sedative, refrigerant	-	Local	Mara
Leaves used as flavouring dishes	Mar-April	Edible	Leaves are used for expulsion of threadworms from the body, as a remedy for food poisoning. Roots and leaves are boiled and the water is drunk for malarial fever, diabetes, pneumonia, and constipation	-	Local	Mara
Spadix is eaten cooked as vegetable	Mar-April	Edible	-	-	Local	Mara
Corm, stem and young leaves are eaten as vegetables	Mar-April	Edible	Acrid juice is applied to wounds and bee sting. Whole plant is used for pig feed	-	Local	Mara
Unripe fruit as vegetable	Mar-April	Edible	Root, leaves, fruits and seeds are used as medicine	-	Local	Mara
Unripe fruit eaten as vegetable	Mar-April	Edible	Cut fruit soaked in water overnight (water) is used to control diabetes	-	Local	Mara
Green immature pods are cooked and eaten as vegetables	Mar-April	Edible	Beans are also used for diarrhoea, dysentery, burns, diabetes, rheumatism, sciatica etc	-	Local	Mara
Young leaves, pods and seeds as vegetable	Mar-April	Edible	Seed is useful to strengthen stomach and kills worm in the stomach	-	Local	Mara
Tender leaves, pods as vegetable, yellow seeds as pulse	Mar-April	Edible	Leaves and seeds are medicinal, leaves as cattle fodder	-	Local	Mara
Seeds are edible rich in protein, oils and minerals	August	Edible	Seeds are cooked, fermented and eaten as delicacies (called <i>Bekang</i> famous –traditional Mizo dish). Boiled water of seeds are given to pigs for fertility control	-	Local	Mara
Young pods, seeds as vegetable	Mar-April	Edible	Juice of crushed leaves is used against diarrhoea, stomach-ache	-	Local	Mara
Young pods as vegetable	Mar-April	Edible	The plant is a good fodder, green manuring and ground cover	-	Local	Mara
Fruit and young leaves as vegetable	Mar-April	Edible	Fruits and leaves are considered antidote for snake bite	-	Local	Mara
Flower buds and leaves are eaten as vegetable	September	Edible	-	-	Local	Mara
Grain is the staple food	April	Edible	Chipstraw is boiled and the water is used for kidney stone and urinary problems. Rice wash water is also used for diarrhoea, dysentery	-	Local	Mara
Young fruit and leaves are cooked or fried eaten as vegetable	Mar-April	Edible	Leaves and fruits are medicinal used to treat fever, jaundice, diabetes, dysentery, intestinal worms etc	-	Local	Mara

-	Mar-April	Edible	Baked grains are pounded and eaten as curry	-	Local	Mara
Fruit is edible	Mar-April	Edible	Juice of the leaves and stem are used in high blood pressure. Fruits and seeds are also medicinal	-	Local	Mara
-	Mar-April	Edible	Grains are cooked and eaten	-	Local	Mara
Fruits are condiment and leaves as vegetable	Mar-April	Edible	Juice of the fruits is applied to burns, snake bite and centipede sting	-	Local	Mara
Fruits are condiment and leaves as vegetable	Mar-April	Edible	Juice of the fruits is applied to burns, snake bite and centipede sting	-	Local	Mara
Fruits, young shoot and roots are eaten as vegetable-	Mar-April	Edible	Leaves are used for fodder	-	Local	Mara
Leaves are eaten as vegetables, curry	Mar-April	Edible	Leaves are used as diuretic, sedative, refrigerant	-	Local	Mara
Leaves and flowers -are used for flavouring curry-	Mar-April	Edible	-	-	Local	Mara
Flowers, fruit, you-ng leaves and stem are all eaten as v-egetables	Mar-April	Edible	Seeds are used to expel worms from the body	-	Local	Mara
Fruits and tender leaves are eaten as vegetable	Mar-April	Edible	Juice of the fruit is a cure for cholera, diarrhoea, dysentery, fever, asthma, vomiting and kidney diseases. Infusion of leaves and fruit are used externally in snake bite	-	Local	Mara
Grains are eaten as vegetable	Mar-April	Edible	-	-	Local	Mara
Young fruit and flower eaten as vegetable	Mar-April	Edible	Roots, leaves and seeds are medicinal	-	Local	Mara
Flower buds and leaves are eaten as vegetable	September	Edible	-	-	Local	Mara
Leaves and flowers are used as condiment	Mar-April	Edible	-	-	Local	Mara
Leaves and flowers are eaten cooked as vegetable	Mar-April	Edible	Leaves are cooked with water and water is taken for hypertension, blood sugar etc	-	Local	Mara
Leaves and flowers are used as condiment	Mar-April	Edible	-	-	Local	Mara
Green- fruit are eaten as vegetable	Mar-April	Edible	Fruit is good for high blood pressure, skin problems and anti microbial	-	Local	Mara
Leaves are used as vegetable and cooked with any kind of meat	Mar-April	Edible	-	-	Local	Mara
Rhizomes are used as spice and condiment, taken as cure for food poisoning	Mar-April	Edible	Tender leaves, young flowers are eaten cooked as vegetable, juice of the pounded rhizomes is given to women in case of insufficient supply of milk for their babies and also dropped into the ear when attacked by ticks.	-	Local	Mara
-	Mar-April	Edible	Corm and young leaf stalk and shoots are eaten cooked as veg.	-	Local	Mara
Fruit is edible	Mar-April	Edible	-	-	Local	Mara
-	Mar-April	Edible	Leaves are pounded, dried and used for making cigarette	-	Local	Mara
Grains are eate-n cooked, roasted, fried-	Mar-April	Edible	Grains and leaves are used to feed poultry, pigs and cows. Decoction of the grain is used as hip bath for piles, lessen pain	-	Local	Mara
-	-	Edible	Tuberous root is edible	-	Local	Mara

Format 2: Fruit plants

1	2	3	4	5		6
Plant	Scientific name	Local name	Variety	Landscape/habitat	Local	status
					Past	Present
Herb	Musa acuminata	Balhla	Local	Hilly Terrain	Few	Few
Shrub	Garcinia lanceifolia	Chengkek	Local	Hilly Terrain	Few	Few
Climber	Citrullus lanatus	Dawnfawh	Local	Hilly Terrain	Few	Few
Tree/Shrub	Prunus domestica	Japan theite	Local	Hilly Terrain	Few	Few
Herb	Ananus comosus	Lakhuihthei	Local	Hilly Terrain	Abundant	Abundant
Shrub	Citrus limon	Nimbu	Local	Hilly Terrain	Abundant	Few
Climber	Passiflora edulis	Sapthei	Local	Hilly Terrain	Abundant	Few
Climber	Eleagnus latifolia	Sarzukpui	Local	Hilly Terrain	Few	Few
Climber	Eleagnus pyriformis	Sarzukte	Local	Hilly Terrain	Few	Few
Shrub	Citrus limon	Ser (fang)	Local	Hilly Terrain	Few	Few
Shrub	Citrus medica	Serpui	Local	Hilly Terrain	Few	Few
Climber	Stixis suaveolens	Theisawntlung	Local	Hilly Terrain	Abundant	Few
Tree	Carica papaya	Thingfanghma	Local	Hilly Terrain	Few	Few

7	8	9	10	11	12
Source of seeds/plants	Season of fruiting	Associated TK	Uses	Other details Market/ Own use	Community Knowledge holder
Locally available	Mar-Dec	-	Fruit is edible	Market/own use	Mara
Locally available	Whole year	Fruits are good in blood purification, indestion etc. leaves are cooked and water is used for bathing in case of measles	Fruit is edible	Market/own use	Mara
Locally available	Mar-Sept	Fruit purifies blood, cures biliousness, sore eyes, scabies, itching, seeds are tonic to the brain		Own use	Mara
Locally available	July	Fruit is edible	Fruit is laxative and refrigerant	Own use	Mara
Locally available	October	-	Fruit is edible	Market/own use	Mara
Locally available	August	Fruit juice rich in vitamin C is used to treat various diseases like stomach problems, liver diseases, hypertension, diabetes etc	Fruit is edible	Market/own use	Mara
Locally available	April	Ripe fruit is used for jaundice and liver problems	Leaves are used as vegetable	Market/own use	Mara
Locally available	April	Decoction of root is medicinal	Wood is used as a good fuel	Own use	Mara
Locally available	October	Decoction of root and boiled leaves is medicinal	Fruit is edible	Own use	Mara
Locally available	October	Fruits edible, rich source of vitamin C	Roots are used in colic, vomiting etc	Market/own use	Mara
Locally available	October	Fruits edible, rich source of Vitamin C	Roots are used in colic, vomiting etc	Market/own use	Mara
Locally available	Oct – Dec	-	Ripe fruit is edible	Market/own use	Mara
Locally available	September	-	Fruit is edible	Market/own use	Mara

Format 3: Fodder crop

1	2	3	4	5	
Plant	Scientific name	Local name	Landscape/habitat	Local s	tatus
				Past	Present
Herb	Brassica rapa	Antam	Jhum field	Abundant	Few
Herb	Colocasia esculenta	Bal	Jhum field	Abundant	Few
Herb	Musa acuminata	Balhla	Cultivated land	Abundant	Abundant
Tree	Trema orientalis	Belphuar	Hilly terrain	Few	Few
Grass	Oryza sativa	Buh	Jhum field	Abundant	Few
Herb	Musa sp.	Changel	Hilly terrain, fallow land	Abundant	Abundant
Herb	Colocasia esculenta	Dawl/Bal	Cultivated and fallow land	Abundant	Few
Grass	Imperata cylindrica	Di	Fallow land	Few	Few
BroomGrass	Thysanolaena latifolia	Hmunphiah	Cultivated and fallow land	Abundant	Few
Mile-a minute	Mikania micrantha	Japanhlo	Hilly terrain, fallow land	Abundant	Few
Climber	Ipomoea batatas	Kawlbahra	Cultivated land	Abundant	Abundant
Shrub	Manihot esculenta	Pangbal	Jhum field	Abundant	Abundant
Tree	Morus alba	Theihmu	Hilly terrain	Abundant	Abundant
Shrub	Carica papaya	Thingfanghma	Cultivated land	Few	Few
Maize	Zea mays	Vaimim	Cultivated land	Abundant	Few

6	7	8	9	10
Source of	Associated TK	Part Used	Other details	Community/
seeds/plants				Knowledge holder
Wild /Local	Leaves are used for pig feed	Leaves	-	Mara
Wild /Local	Corm, leaves and stem are used for pig feed	Corm, leaves, stem	-	Mara
Wild /Local	Stems and unripe fruit are used for pig feed	Stem, unripe fruit	=	Mara
Wild /Local	Fruits and leaves are eaten by animals. Wood is used for making gun powder, charcoal	Leaves	=	Mara
Wild /Local	Grains are cooked and used for pig feed	Grains	=	Mara
Wild /Local	Stem is used for pig feed. Leaves are used for serving food when feast is prepared	Stem	=	Mara
Wild /Local	Whole plant is used for pig feed and corm is eaten by wild boar etc. Corm, stem and young	Whole plant	-	Mara
	leaves are eaten as vegetables. Juice of corm and leaves are medicinal			
Wild /Local	Levaes are used for cattle fodder, pig feed	Leaves	=	Mara
Wild /Local	Flower panicles are used for making brooms, leaves are for cattle fodder	Panicles & Leaves	-	Mara
Wild /Local	Juice of crushed leaves used for fever, stomachache, diarrhoea, dysentery, fresh cuts.	Leaves	=	Mara
Wild /Local	Cooked leaves are used against diarrhoea, dysentery, stomach problems, diabetes etc	Leaves	=	Mara
Wild /Local	Leaves are used for cattle fodder, pig feed	Leaves	=	Mara
Wild /Local	Levaes are used for cattle fodder, pig feed	Leaves	-	Mara
Wild /Local	Unripe fruit is used for pigs feed	Unripe fruit	-	Mara
Wild /Local	Grains are eaten as vegetables. Used for feeding poultry and pigs	Grains & Leaves	-	Mara

## Format 4: Weeds

1	2	3	4	5	6
Plant	Scientific name	Local name	Affected Crop	Impact	Landscape/habitat
Herb	Acmella paniculata	Ankasate	All the jhum crops	Growth is effecte, which leads	Hilly terrain, cultivated and fallow
				to decrease in crop production	land.
Climber	Cyclanthera pedata	Ar-a fanghma	-do-	Yes	-do-
Herb	Solanum viarum	Athlo hling	-do-	Yes	-do-
Shrub	Ageratina adenophora	Bihar Hlo	-do-	Yes	-do-
Grass	Imperata cylindrical	Di	-do-	Yes	-do-
Shrub	Mimosa pudica	Hlonuar	-do-	Yes	-do-
Erect shrub	Inula cappa	Hmeithai sarawh tul	-do-	Yes	-do-
Herb	Hypoestes phyllostachya	Hnahde	-do-	Yes	-do-
Climber	Dysolobium grande	Hruichun	-do-	Yes	-do-
Climber	Mucuna bracteata	Hruiduk	-do-	Yes	-do-
Climber	Mikania micrantha	Japanhlo	-do-	Yes	-do-
Herb	Centella asiatica	Lambak	-do-	Yes	-do-
Herb	Phyllanthus urinaria	Mitthi sunhlu	-do-	Yes	-do-
Grass	Cynodon dactylon	Phaitualhlo	-do-	Yes	-do-
Grass	Chrysopogon aciculatus	Phaitualhnim	-do-	Yes	-do-
Under shrub	Urena lobeta	Se hnap	-do-	Yes	-do-
Under shrub	Triumfetta pilosa	Se meibawm	-do-	Yes	-do-
Shrub	Rubus birmanicus	Siali nu chhu	-do-	Yes	-do-
Climber	Merremia vitifolia	Thiannu	-do-	Yes	-do-
Climber	Merremia umbellata	Thianpa	-do-	Yes	-do-
Shrub	Chromolaena odorata	Tlangsam	-do-	Yes	-do-
Herb	Ageratum houstonianum	Vailenhlo	-do-	Yes	-do-
Herb	Ageratum conyzoides	Vailenhlo	-do-	Yes	-do-
Herb	Hibiscus surattensis	Zawng anthur	-do-	Yes	-do-

	7	8	9	10	11	12
Local	Status	Uses if any	Management options	Associated	Other	Community/
Past	Present			TK	details	Knowledge holder
Abundant	Abundant	Some weeds have medicinal properties	Weeding is done by using	-	-	Mara
Abundant	Abundant	and were used for treating fresh cuts, and	hands/knives. Herbicides or any other	-	-	Mara
Abundant	Abundant	certain illness. While other weeds like	chemicals were not used for	-	-	Mara
Abundant	Abundant	Imperata cylindrical, Mikania micrantha etc are used for pig feed and cattle	mangaging weeds.	-	-	Mara
Abundant	Abundant	fodder.		-	-	Mara
Abundant	Abundant	Toddor.		-	-	Mara
Abundant	Abundant			-	-	Mara
Abundant	Abundant			-	-	Mara

Abundant	Abundant
Abundant	Abundant

Format 5: Pests of Crops -

1	2	3	4	5	6
Plant	Insect/Animal	Scientific Name	Local Name	Habitat	Time/Season of attack
Maize	Insect pest	Spodoptera frugiperda	Fall army worm	Jhum field	Apr – May
Jhum crops	Insect	Caelifera sp.	Khau	Jhum field	Mar – May
Brinjal/Bitter tomato	Insect	Epicauta hirticornis	Kutdurh	Jhum field	July – Aug
Jhum crops	Reptile	Eutropis carinata	Laitel	Jhum field	Mar - Apr
Maize	Animal	Abundant iops macclellandi	Thehlei	Jhum field	July – Aug
Orange	Insect	Eusthenes sp.	Thlangdar	Forest	June-September
Fruits & Vegetables	Bird	Pycnonotus cafer	Tlaiberh	Forest & Jhum field	When the crop is cultivated

7	8	9	10
Management Mechanism	Associated TK	Other Details	Community/
			Knowledge holder
	=	Fall army worm	Mara
No specific Management	=	Khau	Mara
	=	Kutdurh	Mara
	=	Laitel	Mara
	=	Thehlei	Mara
	-	Thlangdar	Mara
	-	Tlaiberh	Mara

Format 6: Market 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)	Types of Animals bought & sold	Types and No. of animals transacted in a day	Places from which animals are bought	Places to which animals are sold/ transported	Name & location of fish market	Types of fish sold	Source of fish
Field Area	Monthly	Pigs, Chicken etc.	_	Within the Village	Within the Village	-	-	-

Format 7: Peoplescape

1	2	3	4	5	6
Community	Families &	Sub-	Depending	Major resources accessed and seasons of access	Landscape Management
&	Major	occupation	Landscape		Practices
Population	Occupation				
Mara	230	Teachers,		Forest products including timber, firewood, raw materials for constructions and	
1280	Farming	Daily wage workers etc.	-	furniture, wild vegetables and medicinal plants etc are the major resources obtained and season of access may vary from their availability.	-

7	8	9	10	11
Resource Management Practices	Cast/Tribe	Social Condition	Nature of inhabitants	No of
				Households
There is no specific mechanism followed for the resource management.	Mara	Lower & Middle class	Houses are mostly Assam type houses with	230
			few RCC concrete houses	

Format 8 : Landscape

		1	2	3	4	5	6	
Majo	Major Landscapes		ajor Landscapes Sub-land		scapes Sub-land Features Ownership		General Flora	General Fauna
Agri.	Pond	Fallow	scape	and approx.				
Land		Land		area				
12ha	-	28 ha	-	Hill Slope/Hilly Terrain	Mara (Local Community)	Albizia lucida, Tinospora sinensis, Caesalpina pulcherrima, Gomphrena globose, Bougainvillea spectabilis, Cestrum nocturnum, Terminalia myriocarpa, Syzygium cumini, Ficus sp, Bischofia javanica, Baccaurea ramiflora, Schima wallichii, Brassica rapa, Callicarpa arborea etc.	Apis cerana indica, Gallus domesticus, Artiodactyla suidae, Capra aegagrus hircus, Trimeresurus erythrurus/albolabris, Lophura leucomelanos, Paradoxurus hermaphroditus, Prionailurus bengalensis, Trachypithecus pileatus etc.	

7	8	9	10	11	12
User Groups	Management Practices	General Uses	Associated TK	Other details	Community accessed
Local people	No specific management practice followed by the community or BMC. Members of the village councils have followed and practice land management systems adopted by them with their own skills and knowledge.		-	-	Mara

Format 9: Waterscape

1	2	3	4	5	6
Waterscape Element	Sub-type	Features and	Ownership	General Flora	General fauna
type		approx. area			
Tisi Chavah	River	Not measured	Mara	-	Bithynia tentaculate, Macrobrachium rosenbergii, Bagarius bagarius, Semiplotus modestus, Garra manipurensis and Gara tyao, Channa gachua, Macrognathus sp, Potamonautes sp. etc.

7	8	9	10	11	12	13
Major Uses User Groups		Management Practices	General Uses	Associated TK	Other details	Community accessed
Domestic uses like cooking, washing etc.	Local people	No specific management were practiced but the Village council along with MTP preserved and protected their water sources (rivers) with their own skills and knowledge.	Domestic uses	-	-	Mara

## Format 10 : Soil type

1	2	3	4
Soil Type	Color & Texture	Features	Soil Management
Loam to Clay	-	-	Soil fertility is maintained and preserved by practicing terrace system for cultivation of agricultural crops. Contour trenching
loam			has been practiced by some locals. The community does not practice any other systematic mechanism for the management of
			soils. Soils are highly fertile and any kind of jhum crops can be cultivated and thrives very well in this kind of soils.

5	6	7	8
Plants/Crop	Flora and Fauna	Associated	Other
Suitable		TK	Information
Nearly all kinds of	Flora: Albizia lucida, Tinospora sinensis, Caesalpina pulcherrima, Gomphrena globose, Bougainvillea spectabilis,		
agricultural crops	Cestrum nocturnum, Terminalia myriocarpa, Syzygium cumini, Ficus sp, Bischofia javanica, Baccaurea ramiflora, Schima	=	-
and jhum crops are	wallichii, Brassica rapa, Callicarpa arborea etc.		
cultivated.	Fauna: Apis cerana indica, Gallus domesticus, Artiodactyla suidae, Capra aegagrus hircus, Lophura leucomelanos,		
	Trimeresurus rythrurus/albolabris, Paradoxurus hermaphroditus, Prionailurus bengalensis, Trachypithecus pileatus etc.		

## DOMESTICATED BIODIVERSITY

Format 11 : Fruit Trees

1	2	3	4	5	6		7
Plant	Scientific name	Local name	Variety	Landscape Habitat	Local S	tatus	Source of Plants/Seeds
type				_	Past	Present	
Tree	Persea Americana	Butter thei	Introduced	Hilly Terrain	Few	Few	Introduced
Tree	Prunus domestica	Japan theite	Local	Hilly Terrain	Few	Few	Locally available
Tree	Psidium guajava	Kawlthei	Local	Hilly Terrain	Few	Few	Locally available
Tree	Rhus chinensis	Khawmhma	Local	Hilly Terrain	Abundant	Few	Locally available
Tree	Baccaurea ramiflora	Pangkai	Local	Hilly Terrain	Abundant	Abundant	Locally available
Tree	Pyrus communis	Pear	Local	Hilly Terrain	Few	Few	Locally available
Tree	Citrus limon	Ser (fang)	Local	Hilly Terrain	Few	Few	Locally available
Tree	Citrus medica	Serpui	Local	Hilly Terrain	Few	Few	Locally available
Tree	Citrus maxima	Sertawk	Local	Hilly Terrain	Few	Few	Locally available
Tree	Phyllanthus emblica	Sunhlu	Local	Hilly Terrain	Few	Few	Locally available
Tree	Mangifera indica	Theihai	Local	Hilly Terrain	Few	Few	Locally available
Tree	Bruinsmia polysperma	Theipalingkawh	Local	Hilly Terrain	Few	Few	Locally available
Tree	Ficus semicordata	Theipui	Local	Hilly Terrain	Few	Few	Locally available
Tree	Artocarpus lacucha	Theitat	Local	Hilly Terrain	Few	Few	Locally available
Tree	Prunus persica	Theitehmul	Local	Hilly Terrain	Few	Few	Locally available
Tree	Carica papaya	Thingfanghma	Local	Hilly Terrain	Few	Few	Locally available
Tree	Parkia timoriana	Zawngtah	Local	Hilly Terrain	Abundant	Abundant	Locally available
Tree	Morus alba	Thing Theihmu	Local	Hilly Terrain	Abundant	Abundant	Locally available

8	9	10	11	12
Season of Fruiting	Uses (Usage)	Associated TK	Other details	Community/ Knowledge Holder
Oct-Feb	Leaves flowers fruits and seeds are used in medicine	Infusion of pounded leaves is useful for stomach ulcer	Own/Market use	Mara
May-Jul	Fruit is edible	Fruit is laxative and refrigerant	Own/Market use	Mara
Sept-Nov	Bark & young leaves are used against diarrhoea, dysentery. Richest natural source of vitamin C	Juice of pounded bark, leaves & ripe fruits are applied to carbuncle. Bark paste is applied to toothache.	Own/Market use	Mara
Dec-Jan	Decoction of fruit used for colic, diarrhoea, dysentery	Wood used for fence posts & gun powder	Own/Market use	Mara
June-Aug	Bark is used for constipatioan and leaves for toothache	-	Own/Market use	Mara
Apr-May	Fruits are eatable	-	Own/Market use	Mara
Jun-Sep	Fruits edible, rich source of vitamin C	Roots are used in colic, vomiting etc	Own/Market use	Mara
Jun-Sep	Fruits edible, rich source of Vitamin C	Roots are used in colic, vomiting etc	Own/Market use	Mara
Nov-Mar	Fruit is medicinal	Seeds are used for hypertension and diabetes	Own/Market use	Mara
Whole year	Fruit which is very rich in vitamin C.	Bark is used for poisoning fish. Juice of the crushed bark is used for lung diseases, tarantula bite, dysentery and diarrhoea. Bark	Own/Market use	Mara

		is boiled and water is used for washing rash or sores. Pounded fruits are soaked in water and are taken for expelling the retained placenta. Fruits are boiled in water and drunk for diabetes.		
May-Aug	Wood is used fir furniture, boat building, planking, tea boxes, pcking cases etc. Fruits is eadible and used for making pickles.	Decoction of young leaves used in diabetes, diarrhoea, ash of dried leaves is also taken to stop hiccough.	Own/Market use	Mara
Dec-Feb	Fruits are edible	Juice of fruits and leaves are applied on sharp pain caused bu nettles or by poisonous hairs of caterpillars	Own/Market use	Mara
Throughout the year	Bark fibre is used for making ropes. Fruits are edible. Leaves are used for cattle fodder and polishing wood	Young fruits are pounded with tender shoots of <i>Acacia pennata</i> and eaten. White latex is applied on boils. Roots, bark and fruits are used in medicine	Own/Market use	Mara
May-July	Fruit is edible, wood is used for firewood.	-	Own/Market use	Mara
Oct – Dec	Fruit is edible and leaves are lopped for cattle fodder	-	Own/Market use	Mara
Whole year	Ripe fruit is good for digestion.	Decoction of unripe fruit is used to cure jaundice, diabetes etc. juice of boiled leaves is used to treat various type of cancer and stomach problems	Own/Market use	Mara
Nov-Feb	Unmatured pods and tender leaves are eaten as vegetable.	Young leaves and seeds are useful against food allergy, colic, diarrhoea and dysentery. Bark and fruits are prescribed to check excessive bleeding during menstruation. Juice of the green rind of the pod is applied to fresh cuts, scabiea and itching.	Own/Market use	Mara
April - June	Silkworm fed on its leaves. Young leaves and twigd are for fodder. Wood is used for furniture, house construction etc	Leaves are sometimes boiled with meats and eaten as curry	Own/Market use	Mara

## **Format 12 : Medicinal Plants**

1	2	3	4	5	6
Plant type	Local Name	Scientific Name	Variety	Landscape/habitat	Source of Plant/Seeds
Herb	Aieng	Curcuma longa	Local	Cultivated	Tuber
Herb	Bahkhawr	Eryngium foetidum	Local	Wild/cultivated	Seeds
Grass	Fu	Saccharum officinarum	Local	Cultivated	Seeds
Climber	Hlozak/Hlonuar	Mimosa pudica	Local	Wild	Plantlet
Tree	Hnahkiah	Callicarpa arborea	Local	Wild	Plantlet/seeds
Climber	Hruivankai	Tinospora sinensis	Local	Wild	Seeds
Climber	Japanhlo	Mikania micrantha	Local	Wild	Seeds
Tree	Kawhtebel	Trevesia palmata	Local	Cultivated	Seeds
Tree	Khawmhma	Rhus chinensis	Local	Wild/cultivated	Seeds
Herb	Lambak	Centella asiatica	Local	Wild	Seeds
Climber	Maipawl	Benincasa hispida	Local	Cultivated	Seeds/Plantlet
Herb	Mitthi Sunhlu	Phyllanthus urinaria	Local	Wild	Seeds
Shrub	Nimbu	Citrus limon	Local	Cultivated	Seeds
Shrub	Phuihnam	Clerodendrum colebrookianum	Local	Wild/Cultivated	Seeds/Plantlet

Climber	Sarzuk	Elaeagnus sp	Local	Wild/Cultivated	Seeds
Herb	Sawhthing	Zingiber officinale	Local	Cultivated	Tuber
Tree	Theihai	Mangifera indica	Local	Cultivated	Seeds
Tree	Thingfanghma	Carica papaya	Local	Cultivated	Seeds
Shrub	Tlangsam	Chromolaena odorata	Local	Wild	Seeds/Plantlet
Herb	Tumbu	Musa sp.	Local	Wild	Seeds

7		8	9	10	11	12
Local Past	Status Present	Uses (Usage)	Part Used	Associated TK	Other details market/ own use	Community/ Knowledge Holder
Abundant	Abundant	-	Rhizome	Juice of rhizome is used for stomach ulcer, jaundice, doarrhoea, dysentery, cholera, asthma, food poisoning, and also used as a tonic for blood purifier	Own use	Mara
Abundant	Abundant	-	Leaves, berries	Leaves are boiled in water and taken against urinary problems and kidney stones. Juice of green berries is applied to boils, ringworm etc	Own use	Mara
Abundant	Abundant	-	Fruit	Fruit is rich in antioxidant and used in medicine	Own use	Mara
Abundant	Abundant	-	Leaves, roots	Leaves are used for flavouring curry. They are used for expulsion of threadworms from the body, as a remedy for food poisoning. Roots and leaves are boiled for treating malarial fever, diabetes, pneumonia, constipation	Own use	Mara
Abundant	Few	-	Stem juice	Juice of the stem is used as a remedy for jaundice, purifies blood, good for lungs, diuretic etc	Own use	Mara
Abundant	Few	-	Roots	Roots decoction used in piles and jaundice, diseases of liver and kidney etc	Own use	Mara
Abundant	Few	-	Bark & Leaves	Decoction of bark and leaves used for diabetes, cholera, internal bleeding, stomach ulcer etc. Leaves are used for fermenting cooked soya bean ( <i>Bekang</i> ), famous mizo dish.	Own use	Mara
Abundant	Abundant	-	Rhizome	Juice of the pounded rhizome is used in indigestion, stomach trouble, dysuria, dysentery.	Own use	Mara
Abundant	Abundant	-	Leaves	Leaf juice applied on fresh wounds, stomach pain & ulcer	Own use	Mara
Few	Few	-	Root, leaves	Roots and leaves are used to treat stomachache	Own use	Mara
Abundant	Abundant	-	Leaves & fruits	Decoction of fruit & Leaves used in various diseases	Own use	Mara
Abundant	Few	-	Whole plant	Plant is used in diabetes, jaundice, pile,dysentery,diarrhoea,hypertension etc	Own use	Mara
Abundant	Abundant	-	Fruit & Leaves	Juice of fruit is used for diarrhoea, cholera, diabetes, vomiting, kidney problems	Own use	Mara
Abundant	Few	-	Roots and leaves	Roots and leaves are used in medicine	Own use	Mara
Abundant	Abundant	-	Leaves	Boiled water of leaves is used to treat diabetes, hypertension, stomach problems etc	Own use	Mara
Abundant	Abundant	-	Leaves	Leaf juice used in High blood pressure	Own use	Mara
Abundant	Abundant	-	Roots & leaves	Decoction of roots and leaves is used for treating menstrual and urinary problems	Own use	Mara

Few	Abundant	-	Rhizome	Rhizomes are used as spice and condiment, taken as a cure for food	Own use	Mara
				poisoning. Juice of pounded rhizome is is given to women in case of		
				insufficient supply of milk for their children and also dropped into the ear		
				when attacked by ticks.		
Few	Abundant	-	Leaves	Young leaves are cooked and juice is eaten for food poisoning, diarrhoea,	Own use	Mara
				dysentery etc		
Abundant	Abundant	=	Leaves, fruit	Fruit is edible and used for constipation, stomach troubles, juice of boiled	Own use	Mara
				leaves is used in treating stomach ulcer, cancer and other stomach related		
				problems		
Abundant	Abundant	-	Leaves	Juice of the leaves applied to fresh cuts	Own use	Mara
Abundant	Abundant	-	Buds	Plaintain is cooked with water and water is drink for treating deficiency	Own use	Mara
				of white blood		

## Format 13 : Ornamental Plants

1	2	3	4	5
Plant type	Local Name	Scientific Name	Variety	Source of Plants/Seeds
Tree	April par	Delonix regia	Introduced	Locally available
Shrub	April parte	Caesalpina pulcherrima	Introduced	Locally available
Tree	Chawnpui	Lagerstroemia speciosa	Local variety	Locally available
Shrub	Christmas par	Poinsettia pulcherrima	Introduced	Locally available
Herb	Chuailopar	Gomphrena globosa	Local variety	Locally available
Herb	Dahlia	Dahlia pinnata	Local variety	Locally available
Herb	Daisy	Bellis perennis	Introduced	Locally available
Shrub	Rose par	Rosa indica	Local variety	Locally available
Thorny shrub	Saron par	Bougainvillea spectabilis	Local variety	Locally available
Deciduous shrub	Uaiting wayvet	Lagerstroemia indica	Local variety	Locally available
Tree	Vaube	Bauhinia variegata	Local variety	Locally available
Glabrous shrub	Zan rimtui	Cestrum nocturnum	Local variety	Locally available

6	7	8	9	10
Commercial/Non commercial	Uses	Associated TK	Other Details	Community/ Knowledge holder
Non commercial	Ornamental purpose	-	-	Mara
Non commercial	Ornamental purpose	-	-	Mara
Non commercial	Ornamental purpose	-	-	Mara
Non commercial	Ornamental purpose	-	-	Mara
Non commercial	Ornamental purpose	-	-	Mara
Non commercial	Ornamental purpose	-	-	Mara
Non commercial	Ornamental purpose	-	-	Mara
Non commercial	Ornamental purpose	-	-	Mara
Non commercial	Ornamental purpose	-	-	Mara
Non commercial	Ornamental purpose	-	-	Mara
Non commercial	Ornamental purpose	-	-	Mara
Non commercial	Ornamental purpose	-	-	Mara

Format 14 : Timber plants

1	2	3	4	5	5	6	7
Plant Type	Local Name	Scientific Name	Habitat	Local Past	Status Present	Wild/ home-	Other uses
Type				Past	Present	garden	
Tree	Anku	Celtis australis	Wild	Few	Few	Wild	Wood tough, used for building. Tool handles, firewood etc
Tree	Ardah	Albizia lucida	Wild	Few	Few	Wild	Wood hard used for firewood
Tree	Belphuar	Trema orientalis	Wild	Few	Few	Wild	Wood is used for gunpowder, charcoal, firewood etc
Tree	Bul	Alseodaphne petiolaris	Wild	Few	Few	Wild	Wood is used for building, furniture, firewood etc
Tree	Bung	Ficus benghalensis	Wild	Abundant	Abundant	Wild	Wood used for fuelwood, well curbs etc
Tree	Chalthei	Pyrus pashia	Wild	Abundant	Abundant	Wild	Wood reddish brown, hard used for making walking stick, combs, tobacco pipe and firewood. Leaves for fodder
Tree	Char	Terminalia myriocarpa	Wild	Abundant	Abundant	Wild	Wood used for furniture, house building, firewood etc
Tree	Fah	Lithocarpus dealbatus	Wild	Few	Few	Wild	Wood used for rice pestle, firewood and charcoal etc
Tree	Herhse	Mesua ferrea	Wild	Few	Few	Wild	Wood very hard used for bridges, railway sleepers, tool handles, firewood, rice pestle, charcoal etc
Tree	Hmawng	Ficus sp	Wild	Few	Few	Wild	Wood used for fuel and charcoal etc
Tree	Hmuipui/Lenhmui	Syzygium cumini	Wild	Few	Few	Wild	Wood is moderately hard, used for plywood, furniture, tool handles, panels, posts and firewood etc
Tree	Hnahkhar	Mallotus paniculatus	Wild	Few	Few	Wild	Wood used for firewood
Tree	Hnum	Engelhardtia spicata	Wild	Few	Few	Wild	Wood used for house construction, tea boxes, packing etc
Tree	Kawihthuang	Leucosceptrum canum	Wild	Few	Few	Wild	Wood can be used as firewood
Tree	Kharduap	Macaranga indica	Wild	Few	Few	Wild	Wood can be used for firewood etc
Tree	Khiang	Schima wallichii	Wild	Abundant	Few	Wild	Wood durable is used in planking, building,plywood,firewood
Tree	Khiangzo	Schima khasiana	Wild	Few	Few	Wild	Wood used for house building, firewood etc
Tree	Khuangthli	Bischofia javanica	Wild	Abundant	Abundant	Wild	Wood used for house building, furniture, firewood etc
Tree	Lawngthing	Dipterocarpus turbinatus	Wild	Few	Few	Wild	Wood used for house construction, floors, plywood, firewood, railway sleepers, tool handles etc
Tree	Nganbawm	Acrocarpus fraxinifolius	Wild	Abundant	Abundant	Wild	Wood used for furniture, motor bodies, planking, flooring etc
Tree	Ngiau	Michelia champaca	Wild	Few	Few	Wild	Wood hard and durable used in furniture, building, planking
Tree	Pang	Bombax insigne	Wild	Abundant	Abundant	Wild	Wood used for packing cases, matchboxes, splints
Tree	Pangkai	Baccaurea ramiflora	Wild	Abundant	Abundant	Wild	-
Tree	Phuanberh	Macropanax undulatus	Wild	Few	Few	Wild	Wood is soft and can be used for firewood
Tree	Phuanberhpui	Ailanthus integrifolia spp	Wild	Few	Few	Wild	Wood used for partition wall, plywood, packing cases etc
Tree	Saper	Lindera nacusua	Wild	Few	Few	Wild	Wood used for building construction
Tree	Saperbul	Cinnamomum glaucescens	Wild	Few	Few	Wild	Wood is durable, used for furniture, boat building,

							fuelwood
Tree	Sehawr	Castanopsis indica	Wild	Few	Few	Wild	Wood hard used for furniture, building, firewood etc
Tree	Sentezel	Callophyllum polyanthum	Wild	Few	Few	Wild	Wood moderately hard, strong and elastic is used for
							building, firewood, bridges etc
Tree	Teak	Tectona grandis	Wild	Few	Few	Wild	Wood extremely durable, used for buildings, bridges,
							furniture, plywood, constructions etc
Tree	Theikum	Diospyros malabarica	Wild	Abundant	Few	Wild	Wood used for building, firewood etc
Tree	Theipalingkawh	Bruinsmia polysperma	Wild	Few	Few	Wild	Sawn timber used for house construction
Tree	Theipui	Ficus semicoradata	Wild	Few	Few	Wild	Wood used for mortars, firewood etc
Tree	Thelret	Hevea brasilliensis	Wild	Few	Few	Wild	Wood used for furniture industry and can be used as
							firewood
Tree	Thingdawl	Tetrameles nudiflora	Wild	Few	Few	Wild	Wood is used for flooring, walling, matches, plywood
							etc.
Tree	Thingdawn	Itea macrophylla	Wild	Few	Few	Wild	Wood used as fuel
Tree	Thingpuithing	Lithocarpus elegans/obscurus	Wild	Few	Few	Wild	Wood used for firewood, building, charcoal etc
Tree	Thingsaphu	Dysoxylum mollissimum	Wild	Few	Few	Wild	Wood red, durable used for house building, furniture,
							boats
Tree	Thingtheihmu	Morus alba	Wild	Abundant	Abundant	Wild	Wood used for house construction, furniture, tool
							handles etc
Tree	Thingvawkpui	Balakata baccata	Wild	Few	Few	Wild	Wood used for plywood, packing cases, firewood etc
Tree	Thlanvawng	Gmelina arborea	Wild	Few	Few	Wild	Wood used for planking, furniture, house posts etc
Tree	Vaube	Bauhinia variegata	Wild	Abundant	Abundant	Wild	Wood is used for tool handles, firewood, charcoal etc.
							leaves are a good fodder. Decoction of bark/leaves is
							used in menstrual disorders, piles, diabetes, diarrhoea
							and dysentery
Tree	Vawmbal	Drimycarpus racemosus	Wild	Abundant	Abundant	Wild	Wood is used for building, boats, firewood etc
Tree	Vawngthla	Premna milleflora	Wild	Few	Few	Wild	Wood durable used for house posts etc

8	9	10
Associated TK	Other details	Community/
		knowledge holder
-	Leaves and fruits are used in medicine	Mara
-	-	Mara
Bark yields a strong fibre and leaves are lopped for cattle fodder	It is a light demanding tree, fsat growing and short-lived	Mara
	tree	
-	Ripe fruit is eaten by birds and animals	Mara
Bark and aerial roots are used for making coarse ropes	Leaves are good for cattle fodder	Mara
Leaves are used in medicine	-	Mara
-	Leaves are good for fodder, it is a fast growing tree	Mara
-	-	Mara
Bark, unripe fruit, flowers and seed oil are medicinal	Seed oil is used for burning, lubricating and soap making	Mara
Leaves and twigs are lopped for cattle fodder	Bark, fruit and leaves are used in medicine	Mara
Seed is very useful for treating diabetes and the bark for fever, jaundice, urinary problems, sore	Fruits are eaten by man, birds and wild animals	Mara

throat, ronchitis, asthma, ulcers and chronic dysentery etc		
<del>-</del>	-	Mara
Bark is medicinal and also used for poisoning fish. Leaves are lopped for fodder	It is a light demander	Mara
-	-	Mara
Different parts of the plant are used in various traditional medicine	-	Mara
Powdered fruit is used in scorpion sting, bites of centipede, juice of the bark for chronic ulcer and fresh cuts. Leaves are lopped for fodder	Tender leaves are cooked eaten. It is moderate light demander and moderately fast-growing tree	Mara
Pounded bark is used for poisoning of fish	-	Mara
Juice of young leaves is used for curing tonsillitis and sores	Bark, stem and leaves are also medicinal. Leaves are lopped for cattle fodder	Mara
Bark is prescribed for fever, strangury, ulcers, skin diseases and the roots for diarrhoea, dysentery	It is a strong light demander but the seedlings are shade tolerant.	Mara
Leaves are lopped for cattle fodder	This tree is a quick growing and moderate light demander	Mara
-	-	Mara
Leaves are lopped for cattle fodder	-	Mara
Leaves are lopped for cattle fodder	-	Mara
Tender leaves are cooked and eaten without its water as vegetables	Leaves are lopped for cattle fodder	Mara
-	-	Mara
<del>-</del>	-	Mara
Leaves are eaten cooked as vegetable	-	Mara
-	-	Mara
Fruits are eaten by wild animals. Trunk is used for making mortars for pounding rice	It is a moderate shade bearer in youth. Seed often germinates soon after falling under its mother tree	Mara
Leaves are used for fermenting cooked soyabean (Bekang), a traditional mizo delicacy	It is a strong light demander and fire resistant	Mara
-	-	Mara
Juice of fruits and leaves are applied on sharp pain caused by nettles or poisonous hairs of caterpillars	It is a fast-growing tree	Mara
-	-	Mara
-	It yields the para rubber, the finest and the most durable catoutchouc known	Mara
Leaves are used as soap for washing 'Mizo Pawnpui' (Blanket)	It is a fast growing, good coppice and facvoured for birds nesting. Bark can be used for poisoning fish juice of crushed bark and leaves are used to tick bite.	Mara
Fibre of the bark is used for cordage. Decoction of the root bark is given to women after delivery of a baby	-	Mara
Saplings used as pendant for scorching off the bristles of the pig killed	-	Mara
Bark is used internally for pain in the stomach	-	Mara
Silkworm fed on its leaves. Leaves are sometimes boiled with meats and eaten as curry. Root park, leaves and fruits are also medicinal.	Young leaves and twigs are good for cattle fodder	Mara
Fruits are eaten by man and birds	Endi silkworm reared on the leaves	Mara
Flowers are eaten cooked as vegetables, leaves are lopped for cattle fodder	It is a light demander and fire-resistant, fast-growing tree	Mara
Leaves, tender fruits and flower buds are eaten as vegetable	It is a moderate light demander and wind firm tree	Mara

Thick paste of the plant is applied on broken bone. Juice of the plant is also applied on sore of	Plant is laxative and cooling used for cold, sinusitis and	Mara
baby's navel	menstruation problems	
Tender leaves are boiled with meats and eaten as vegetables	-	Mara

## **Format 15: Domesticated Animals**

1	2	3	4	5	6
Animal type	Local name	Scientific name	Breed	Features	Method of keeping
Poultry	Ar	Gallus domesticus	Local	-	Poultry house made up of bamboo, poles and GI Sheets near the house
Cattle	Bawng	Bos gaurus	Local	-	Cattle Shed
Poultry	Broiler Ar	Gallus gallus domesticus	Broiler	-	Poultry House/Shed
Cattle	Kel	Capra aegagrus hircus	Local	-	Cattle Shed
Dog	Ui	Cannis familiaris	Local	-	Kennel
Pig	Vawk	Artiodactyla suidae	Local	=	Pig shed built separately near the owner's house
Cat	Zawhte	Felis catus	Local	=	Inside house alongwith the owner's family

7		8	9	10	11	12
Local	Status	Uses	Associated TK	Commercial	Other details	Community/
Past	Present			Rearing		Knowledge
						holder
Abundant	Abundant	For meat and eggs	Chickens are used for sacrifice in olden days	Commercial and	Dung is used as fertilisers for	Mara
				own use	cultivated crops	
Abundant	Few	For meat and milk	-	Commercial	Cow dung is used as fertilizers	Mara
Few	Few	For meat	-	Commercial	Dung is used as fertilisers for	Mara
					cultivated crops	
Abundant	Abundant	For meat	-	Commercial	-	Mara
Few	Few	For housekeeper	Fresh blood used for inflammatory disease of	-		Mara
			gland (Hrilawn)			
Few	Few	For meat	-	Commercial	Dung is used for cultivated crops	Mara
Few	Abundant	-	-	-	-	Mara

#### **Format 16 : Culture Fisheries**

1	2	3	4	5	6	7	
Fish type	Local Name	Scientific Name	Variety	Features	Waterscape	Local status	
			-		_	Past	Present
Carp	Common carp	Cyprinus carpio	-	-	Pond	Few	Abundant
Carp	Grass carp	Ctenopharyngodon idella	-	-	-do-	Few	Abundant

8	9	10	11	12
Uses	Associated TK	Commercial rearing	Other	Community/
			details	Knowledge holder
Edible	-	Commercial	-	Mara
Edible	-	Commercial	-	Mara

## WILD BIODIVERSITY

Format 18: Trees, Shrubs, Herbs, Tubers, Grasses, Climbers

1	2	3	4	5	6		
Plant type Local Name		Scientific Name	Habit	Habitat	Local status		
					Past	Present	
Herb	Aidu	Amomum dealbatum	Perennial herb	Wild	Abundant	Abundant	
Herb	Anhling	Solanum americanum	Herb	Wild	Abundant	Abundant	
Fern	Chakawk	Diplazium esculentum	Large terrestrial fern	Wild	Few	Few	
Tree	Chingit	Zanthozylum rhetsa	Small tree	Wild	Few	Few	
Herb	Herb Hnahthial (Pa) Stachyphrynium placentarium		Perennial herb	Wild	Few	Few	
Cane	Hruipui	Calamus flagellum	Cane	Wild	Abundant	Few	
Tree	Kawhte bel	Trevesia palmata	Small evergreen tree	Wild	Few	Few	
Climber	Kawihrui	Entada phaseoloides	Large climber	Wild	Abundant	Abundant	
Herb	Kawlbahra	Ipomoea batatas	Perennial prostrate herb	Wild	Few	Few	
Bamboo	Mautak	Melocanna baccifera	Evergreen single culm Bamboo	Wild	Abundant	Abundant	
Shrub	Pangbal	Manihot esculenta	Herbaceous shrub	Wild	Abundant	Abundant	
Bamboo	Rawnal	Dendrocalamus longispathus	Long sheath bamboo	Cultivated	Few	Few	
Bamboo	Rawthing Bambusa longsipiculata I		Evergreen clumped bamboo	Wild	Abundant	Abundant	
Shrub	ıb Siali nu chhu <i>Rubus birmanicus</i> Large		Large shrub	Wild	Abundant	Abundant	

7	8	9	10	11
Commercial/	Part	Associated TK	Other details	Community
own use	collected			Knowledge
				Holder
Own use	Young shoots, Buds	Stem is used for tying purposes, leaves are also used for fermenting	Plant is used for a cure of enlargement of the	Mara
		cooked soya beans	liver, young shoots and buds are eaten cooked	
			or fired as vegetables	
Own use	Leaves, berries	Water of boiled leaves is taken against urinary problems and stones	This plant is eaten cooked as vegetable	Mara
		in kidney. Juice of green berries is applied to ringworm, boils etc.		
Own use	Fronds	-	Young fronds are eaten cooked as vegetable	Mara
Own use	Tender leaves, fruit	Young fruits and leaves are used to poison fish. Oil obtained from	Tender leaves are eaten cooked as vegetable.	Mara
		fruit is medicinal		
Own use	Leaves	Leaves are used for packing and wrapping foodstuff like cooked	-	Mara
		rice, raw sugar and other eatable items including fresh vegetables		
Own use	Cane, leaves	Cane is used for making furniture and basket, leaves for thatching	-	Mara
Own use	Shoots, flowers,	Shoots, young fruits and flower buds are eaten as vegetable	Roots and leaves are used to treat stomach-ache	Mara
	fruits			
Own use	Leaves, seeds	Seeds are used for washing hairs and splitted stem for tying	Tender leaves are eaten cooked as vegetable.	Mara
		purposes. It is also used for playing games by Mizo boys and girls.	Seeds are roasted and eaten.	
		Pounded seeds mixed with water is used for expelling leeches from		

		cattle nostrils		
Own use	Leaves	Leaves are eaten cooked as vegetable, and also used against	-	Mara
		diarrhoea, dysentery, stomach-ache, digestive troubles, diabetes etc		
Own use	Culm, Tender shoots			Mara
		house walls, thatching, mats, baskets etc. the glossy surface of the	curries and pickles.	
		stem is scraped and powder is applied to fresh cuts.		
Own use	Roots, shoots	Tuberous roots are eaten cooked or fried.	Tuberous roots are used externally for skin	Mara
			diseases	
Own use	Culms, Shoots	Culms are used for making paper pulp, baskets, building etc	Young shoots are eaten cooked as vegetables	Mara
Own use	Culms, shoots	Culms are used for building purposes	Young shoots are eaten cooked as vegetables	Mara
Own use	-	-	-	Mara

Format 19: Wild Plant Species of Importance

1	2	3	4	5
Local Name	Scientific Name	Variety	Importance (Economic, Social & Cultural)	Status
Hnahthial	Phrynium/Stachyphrynium sp.	Wild	Leaves are used for packing and wrapping food stuff and vegetables, also used for carpeting rice bin	Few
Hruivankai	ivankai <i>Tinospora sinensis</i> Wild Juice of the pounded rhizome is used in indigestion, stomach trouble, dysuria, dysentery.		Abundant	
Thelret	Ficus elastica	Wild	It yields Indian rubber of commerce. Leaves are used for fodder	Few

Format 20 : Aquatic Biodiversity

1	2	3	4	5		6
Local Name	Scientific Name	Variety	Features	Habitat	Local Status	
					Past	Present
Chakai	Potamonautes sp	Local	-	Rivers and Streams	Abundant	Abundant
Chengkawl	Bithynia tentaculata	Local	-	Rivers and Streams	Abundant	Abundant
Kaikuang	Macrobrachium rosenbergii	Local	-	Rivers and Streams	Abundant	Abundant
Nghalerh	Macrognathus sp	Local	-	Rivers and Streams	Abundant	Abundant
Nghalim	Garra manipurensis and Gara tyao	Local	-	Rivers and Streams	Abundant	Abundant
Ngharul	Anguilla bengalensis	Local	-	Rivers and Streams	Abundant	Few
Nghatun	Labeo rohu	Local	-	Rivers and Streams	Abundant	Few
Nghavang	Semiplotus modestus	Local	-	Rivers and Streams	Few	Few
Nghavawk	Channa gachua	Local	-	Rivers and Streams	Abundant	Abundant
Satel	Melanochelys tricarinata	Local	-	Rivers and Streams	Abundant	Abundant
Thaichhawni nu	Bagarius bagarius	Local	-	Rivers and Streams	Abundant	Few
Uchang	Euphlyctis cyanophlyctis	Local	-	Rivers and Streams	Abundant	Few
UChang (Chung U)	Uperodon systoma	Local	-	Rivers and Streams	Abundant	Few
Utawk	Bufo stomaticus	Local	-	Rivers and Streams	Abundant	Abundant

7	8	9	10
Uses	Associated TK	Other details	Community/Knowledge Holder
Own use, edible	-	-	Mara
Own use, edible	-	-	Mara
Own use, edible	-	-	Mara

Own use, edible	-	-	Mara
Own use, edible	-	-	Mara
Own use, edible	-	-	Mara
Own use, edible	-	-	Mara
Own use, edible	-	-	Mara
Own use, edible	-	-	Mara
Own use, edible	-	-	Mara
Own use, edible	-	-	Mara
Own use, edible	-	-	Mara
Own use, edible	-	-	Mara
Own use, edible	-	-	Mara
Own use, edible	-	-	Mara
Own use, edible	-	-	Mara

Format 21 : Wild Aquatic Plant Species of Importance - NIL

Format 22: Wild Plants of Medicinal Importance

1	2	3	4	5	6	
Plant type Local Name		Scientific Name	Variety	Landscape/habitat	Source of Plant/Seeds	
Herb	Aieng	Curcuma longa	Local	Cultivated	Tuber	
Herb	Bahkhawr	Eryngium foetidum	Local	Wild/cultivated	Seeds	
Grass	Fu	Saccharum officinarum	Local	Cultivated	Seeds	
Climber	Hlozak/Hlonuar	Mimosa pudica	Local	Wild	Plantlet	
Tree	Hnahkiah	Callicarpa arborea	Local	Wild	Plantlet/seeds	
Climber	Hruivankai	Tinospora sinensis	Local	Wild	Seeds	
Climber	Japanhlo	Mikania micrantha	Local	Wild	Seeds	
Tree	Kawhtebel	Trevesia palmata	Local	Cultivated	Seeds	
Tree	Khawmhma	Rhus chinensis	Local	Wild/cultivated	Seeds	
Herb	Lambak	Centella asiatica	Local	Wild	Seeds	
Climber	Maipawl	Benincasa hispida	Local	Cultivated	Seeds/Plantlet	
Herb	Mitthi Sunhlu	Phyllanthus urinaria	Local	Wild	Seeds	
Shrub	Nimbu	Citrus limon	Local	Cultivated	Seeds	
Shrub	Phuihnam	Clerodendrum colebrookianum	Local	Wild/Cultivated	Seeds/Plantlet	
Climber	Sarzuk	Elaeagnus sp	Local	Wild/Cultivated	Seeds	
Herb	Sawhthing	Zingiber officinale	Local	Cultivated	Tuber	
Tree	Theihai	Mangifera indica	Local	Cultivated	Seeds	
Tree	Thingfanghma	Carica papaya	Local	Cultivated	Seeds	
Shrub	Tlangsam	Chromolaena odorata	Local	Wild	Seeds/Plantlet	
Herb	Tumbu	Musa sp.	Local	Wild	Seeds	

7		8	9	10	11	12
Local	Status	Uses	Part Used	Associated TK	Other details	Community/
Past	Present	(Usage)			market/ own use	Knowledge Holder
Abundant	Abundant	-	Rhizome	Juice of rhizome is used for stomach ulcer, jaundice, doarrhoea, dysentery, cholera, asthma, food poisoning, and used as a tonic for blood purifier	Own use	Mara
Abundant	Abundant	-	Leaves, berries	Leaves are boiled in water and taken against urinary problems and kidney stones. Juice of green berries is applied to boils, ringworm etc	Own use	Mara
Abundant	Abundant	-	Fruit	Fruit is rich in antioxidant and used in medicine	Own use	Mara
Abundant	Abundant	-	Leaves, roots	Leaves are used for flavouring curry. They are used for expulsion of threadworms from the body, as a remedy for food poisoning. Roots and leaves are boiled for treating malarial fever, diabetes, pneumonia, constipation	Own use	Mara
Abundant	Few	-	Stem juice	Juice of the stem is used as a remedy for jaundice, purifies blood, good for lungs, diuretic etc	Own use	Mara
Abundant	Few	-	Roots	Roots decoction used in piles and jaundice, diseases of liver and kidney etc	Own use	Mara
Abundant	Few	-	Bark & Leaves	Decoction of bark and leaves used for diabetes, cholera, internal bleeding, stomach ulcer etc. Leaves are used for fermenting cooked soya bean ( <i>Bekang</i> ), famous mizo dish.	Own use	Mara
Abundant	Abundant	-	Rhizome	Juice of the pounded rhizome is used in indigestion, stomach trouble, dysuria, dysentery.	Own use	Mara
Abundant	Abundant	-	Leaves	Leaf juice applied on fresh wounds, stomach pain & ulcer	Own use	Mara
Few	Few	-	Root, leaves	Roots and leaves are used to treat stomachache	Own use	Mara
Abundant	Abundant	-	Leaves & fruits	Decoction of fruit & Leaves used in various diseases	Own use	Mara
Abundant	Few	-	Whole plant	Plant is used in diabetes, jaundice, pile, dysentery, diarrhoea, hypertension etc	Own use	Mara
Abundant	Abundant	-	Fruit & Leaves	Juice of fruit is used for diarrhoea, cholera, diabetes, vomiting, kidney problems	Own use	Mara
Abundant	Few	-	Roots and leaves	Roots and leaves are used in medicine	Own use	Mara
Abundant	Abundant	-	Leaves	Boiled water of leaves is used to treat diabetes, hypertension, stomach problems etc	Own use	Mara
Abundant	Abundant	-	Leaves	Leaf juice used in High blood pressure	Own use	Mara
Abundant	Abundant	-	Roots & leaves	Decoction of roots and leaves is used for treating menstrual and urinary problems	Own use	Mara
Few	Abundant	-	Rhizome	Rhizomes are used as spice and condiment, taken as a cure for food poisoning. Juice of pounded rhizome is is given to women in case of insufficient supply of milk for their children and also dropped into the ear when attacked by ticks.	Own use	Mara
Few	Abundant	-	Leaves	Young leaves are cooked and juice is eaten for food poisoning, diarrhoea, dysentery etc	Own use	Mara
Abundant	Abundant	-	Leaves, fruit	Fruit is edible and used for constipation, stomach troubles, juice of boiled leaves is used in treating stomach ulcer, cancer and other stomach related problems	Own use	Mara

Abundant	Abundant	=	Leaves	Juice of the leaves applied to fresh cuts	Own use	Mara
Abundant	Abundant	-	Buds	Plaintain is cooked with water and water is drink for treating deficiency of	Own use	Mara
				white blood		

Format 23: Wild relatives of Crops

1	2	3	4	5		6
Local Name	Scientific Name	Associated	Landscape/	Local	status	Uses (Usage)
		crops	Habitat	Past	Present	
Aidu	Amomum dealbatum	All Jhum crops	Wild	Abundant	Abundant	Young shoots and buds are eaten cooked or fried as vegetables
Anhling	Solanum americanum	All Jhum crops	Wild	Abundant	Abundant	Leaves are eaten cooked as vegetables
Ankasate	Acmella paniculata	All Jhum crops	Wild	Abundant	Few	Leaves with stem are used as a vegetable
Ankhapui	Marsdenia maculata	All Jhum crops	Wild	Few	Few	Young stem and leaves are cooked eaten as vegetables
Ankhate	Marsdenia formosana	All Jhum crops	Wild	Few	Few	Tender leaves are eaten cooked as vegetable
Baibing	Alocasia fornicate	All Jhum crops	Wild	Abundant	Abundant	Spadix and stem are eaten cooked as vegetables
Chakawk	Diplazium esculentum	All Jhum crops	Wild	Few	Few	Tender leaves are eaten cooked as vegetable
Chingit	Zanthoxylum rhetsa	All Jhum crops	Wild	Few	Few	Tender leaves are eaten cooked as vegetable
Hmuipui	Syzygium cumini	All Jhum crops	Wild	Few	Few	Wood moderately hard is used for plywood, tool handles, posts,
						door frames, panels, firewood, gunstocks etc
Kawhtebel	Trevesia palmata	All Jhum crops	Wild	Abundant	Abundant	The shoots, flower buds and young fruits are eaten as vegetable
Phuihnam	Clerodendrum	All Jhum crops	Wild	Abundant	Abundant	Tender leaves are cooked eaten as vegetable, also used for
	colebrookianum					fermenting cooked soyabean
Sapthei	Passiflora edulis	All Jhum crops	Wild	Abundant	Few	Leaves are cooked eaten as vegetable
Telhawng	Amorphophallus sp.	All Jhum crops	Wild	Few	Abundant	Corm and young leaf stalk and shoots are eaten cooked as veg.
Thingthupui	Calamus tenuis	All Jhum crops	Wild	Abundant	Few	Under developed shoots are used as vegetable
Tumbu	Musa sp.	All Jhum crops	Wild	Abundant	Abundant	Young bud is eaten cooked as vegetable

7	8	9	10
Part Used	Associated TK	Other details	Community/
			knowledge holder
Shoots, buds	The plant is used for a cure of enlargement of liver and the stem for tying purposes. Leaves are used for fermenting	=	Mara
	cooked soya beans.		
Leaves, berries	Water of boiled leaves is taken against urinary problems and stones in kidney. Juice of green berries is applied to	=	Mara
	ringworm, boils etc.		
Stem, leaves	Flowers are chewed to relive toothache and affections of the gums and throat	-	Mara
Stem, leaves	As the taste of this plant is bitter, it is used to take for High Blood pressure and diabetes	-	Mara
Leaves	-	•	Mara
Spadix, stem	Juice of the plant is used externally for snake bite. Leaf is also used for catching land leech from the body	=	Mara
Leaves	-	-	Mara
Leaves	Young fruits and leaves are used to poison fish. Oil obtained from fruit is used medicinally	-	Mara
Seed, leaves	Seed is used to treat diabetes, and bark for fever, jaundice, urinary problems etc. Tassar silkworm feed on its leaves	-	Mara
Whole plant	Roots and leaves are used to treat stomachache, leaves are also used as fodder	-	Mara
Leaves, Flowers	Decoction of leaves is used to reduce high blood pressure and decrease breast feeding mother's breast milk, also	-	Mara
	used to heal acute mastities		

Leaves, fruit	Ripe fruit is useful for jaundice and liver problems	-	Mara
Corm, young leaf,	The corm with Ching-al (Lye) is boiled to remove irritants. So, the boiled corm is mixed with Sa-um (fermented	-	Mara
shoot	pork fat), Ching-al (Lye) and Salt and then eaten as curry (Traditional Mizo Dish)		
Shoot, leaves	It is used for making baskets, mats, furniture, chairs etc and fruit is edible	-	Mara
Bud, stem, leaves	Leaves are used for feasts instead of rice plates. Stems are used for pig feed. Leaves are also used for cattle fodder	-	Mara

## Format 24 : Ornamental Plants

1	2	3	4	5
Plant type	Local Name	Scientific Name	Variety	Source of Plants/Seeds
Tree	April par	Delonix regia	Introduced	Locally available
Shrub	April parte	Caesalpina pulcherrima	Introduced	Locally available
Tree	Chawnpui	Lagerstroemia speciosa	Local variety	Locally available
Shrub	Christmas par	Poinsettia pulcherrima	Introduced	Locally available
Herb	Chuailopar	Gomphrena globosa	Local variety	Locally available
Herb	Dahlia	Dahlia pinnata	Local variety	Locally available
Herb	Daisy	Bellis perennis	Introduced	Locally available
Shrub	Rose par	Rosa indica	Local variety	Locally available
Thorny shrub	Saron par	Bougainvillea spectabilis	Local variety	Locally available
Deciduous shrub	Uaiting wayvet	Lagerstroemia indica	Local variety	Locally available
Tree	Vaube	Bauhinia variegata	Local variety	Locally available
Glabrous shrub	Zan rimtui	Cestrum nocturnum	Local variety	Locally available

6	7	8	9	10
Commercial/Non commercial	Uses	Associated TK	Other Details	Community/ Knowledge holder
Non commercial	Ornamental purpose	-	-	Mara
Non commercial	Ornamental purpose	-	-	Mara
Non commercial	Ornamental purpose	-	-	Mara
Non commercial	Ornamental purpose	-	-	Mara
Non commercial	Ornamental purpose	-	-	Mara
Non commercial	Ornamental purpose	-	-	Mara
Non commercial	Ornamental purpose	-	-	Mara
Non commercial	Ornamental purpose	-	-	Mara
Non commercial	Ornamental purpose	-	-	Mara
Non commercial	Ornamental purpose	-	-	Mara
Non commercial	Ornamental purpose	-	-	Mara
Non commercial	Ornamental purpose	-	-	Mara

**Format 25 : Fumigate / Chewing Plants** 

1	2	3	4	5	6		7
Plant	Local Name	Scientific Name	Variety	Habitat	t Local Status		Uses (Usage)
(Herb,					Past	Present	
shrub,tree)							
Herb	Ankasa	Acmella oleracea	Local	Wild	Abundant	Few	Leaves and flowers are eaten cooked as vgetable
Herb	Ankasate	Acmella paniculata	Local	Wild	Abundant	Few	Leaves and flowers are eaten cooked as vgetable
Tree	Khiangzo	Schima khasiana	Local	Wild	Few	Few	-
Tree	Thelret	Ficus elastica	Local	Wild	Few	Few	Leaves are good fodder. Leaf scales edible

8	9	10	11
Part used *	Associated TK	Other details	Community
		(mode of use)	Knowledge Holder
Leaves, flowers	Plant is used for poisoning fish	-	Mara
Leaves, flowers	Plant is used for poisoning fish	-	Mara
Bark	Pounded bark is used for poisoning fish	-	Mara
Latex, Fruit & Leaves	Latex (Rubber) is chewable, it yields Indian Rubber of commerce	Fruit eaten by man and animals, birds etc	Mara

## Format 26: Timber Plants

1	2	3	4	5	5	6	7
Plant	Local Name	Scientific Name	Habitat	Local	Local Status		Other uses
Type				Past	Present	home- garden	
Tree	Anku	Celtis australis	Wild	Few	Few	Wild	Wood tough, used for building. Tool handles, firewood etc
Tree	Ardah	Albizia lucida	Wild	Few	Few	Wild	Wood hard used for firewood
Tree	Belphuar	Trema orientalis	Wild	Few	Few	Wild	Wood is used for gunpowder, charcoal, firewood etc
Tree	Bul	Alseodaphne petiolaris	Wild	Few	Few	Wild	Wood is used for building, furniture, firewood etc
Tree	Bung	Ficus benghalensis	Wild	Abundant	Abundant	Wild	Wood used for fuelwood, well curbs etc
Tree	Chalthei	Pyrus pashia	Wild	Abundant	Abundant	Wild	Wood reddish brown, hard used for making walking stick, combs, tobacco pipe and firewood. Leaves for fodder
Tree	Char	Terminalia myriocarpa	Wild	Abundant	Abundant	Wild	Wood used for furniture, house building, firewood etc
Tree	Fah	Lithocarpus dealbatus	Wild	Few	Few	Wild	Wood used for rice pestle, firewood and charcoal etc
Tree	Herhse	Mesua ferrea	Wild	Few	Few	Wild	Wood very hard used for bridges, railway sleepers, tool handles, firewood, rice pestle, charcoal etc
Tree	Hmawng	Ficus sp	Wild	Few	Few	Wild	Wood used for fuel and charcoal etc
Tree	Hmuipui/Lenhmui	Syzygium cumini	Wild	Few	Few	Wild	Wood is moderately hard, used for plywood, furniture, tool handles, panels, posts and firewood etc
Tree	Hnahkhar	Mallotus paniculatus	Wild	Few	Few	Wild	Wood used for firewood
Tree	Hnum	Engelhardtia spicata	Wild	Few	Few	Wild	Wood used for house construction, tea boxes, packing etc

Tree	Kawihthuang	Leucosceptrum canum	Wild	Few	Few	Wild	Wood can be used as firewood
Tree	Kharduap	Macaranga indica	Wild	Few	Few	Wild	Wood can be used for firewood etc
Tree	Khiang	Schima wallichii	Wild	Abundant	Few	Wild	Wood durable is used in planking,
							building,plywood,firewood
Tree	Khiangzo	Schima khasiana	Wild	Few	Few	Wild	Wood used for house building, firewood etc
Tree	Khuangthli	Bischofia javanica	Wild	Abundant	Abundant	Wild	Wood used for house building, furniture, firewood etc
Tree	Lawngthing	Dipterocarpus turbinatus	Wild	Few	Few	Wild	Wood used for house construction, floors, plywood,
		•					firewood, railway sleepers, tool handles etc
Tree	Nganbawm	Acrocarpus fraxinifolius	Wild	Abundant	Abundant	Wild	Wood used for furniture, motor bodies, planking,
							flooring etc
Tree	Ngiau	Michelia champaca	Wild	Few	Few	Wild	Wood hard and durable used in furniture, building,
							planking
Tree	Pang	Bombax insigne	Wild	Abundant	Abundant	Wild	Wood used for packing cases, matchboxes, splints
Tree	Pangkai	Baccaurea ramiflora	Wild	Abundant	Abundant	Wild	-
Tree	Phuanberh	Macropanax undulatus	Wild	Few	Few	Wild	Wood is soft and can be used for firewood
Tree	Phuanberhpui	Ailanthus integrifolia spp	Wild	Few	Few	Wild	Wood used for partition wall, plywood, packing cases
							etc
Tree	Saper	Lindera nacusua	Wild	Few	Few	Wild	Wood used for building construction
Tree	Saperbul	Cinnamomum glaucescens	Wild	Few	Few	Wild	Wood is durable, used for furniture, boat building,
							fuelwood
Tree	Sehawr	Castanopsis indica	Wild	Few	Few	Wild	Wood hard used for furniture, building, firewood etc
Tree	Sentezel	Callophyllum polyanthum	Wild	Few	Few	Wild	Wood moderately hard, strong and elastic is used for
							building, firewood, bridges etc
Tree	Teak	Tectona grandis	Wild	Few	Few	Wild	Wood extremely durable, used for buildings, bridges,
							furniture, plywood, constructions etc
Tree	Theikum	Diospyros malabarica	Wild	Abundant	Few	Wild	Wood used for building, firewood etc
Tree	Theipalingkawh	Bruinsmia polysperma	Wild	Few	Few	Wild	Sawn timber used for house construction
Tree	Theipui	Ficus semicoradata	Wild	Few	Few	Wild	Wood used for mortars, firewood etc
Tree	Thelret	Hevea brasilliensis	Wild	Few	Few	Wild	Wood used for furniture industry and can be used as
	<u> </u>	- 1.0					firewood
Tree	Thingdawl	Tetrameles nudiflora	Wild	Few	Few	Wild	Wood is used for flooring, walling, matches, plywood
	TDI: 1	Y. 1.11	XX 7'1 1			XX 7*1 1	etc.
Tree	Thingdawn	Itea macrophylla	Wild	Few	Few	Wild	Wood used as fuel
Tree	Thingpuithing	Lithocarpus elegans/obscurus	Wild	Few	Few	Wild	Wood used for firewood, building, charcoal etc
Tree	Thingsaphu	Dysoxylum mollissimum	Wild	Few	Few	Wild	Wood red, durable used for house building, furniture,
T.	TD1 : .1 :1	14 11	XX7'1 1	A.1 1	A1 1 .	337'1 1	boats
Tree	Thingtheihmu	Morus alba	Wild	Abundant	Abundant	Wild	Wood used for house construction, furniture, tool
T	TP1. '	D. I. I. I. I.	XX7:1.1	F	F	XX7:1.1	handles etc
Tree	Thingvawkpui	Balakata baccata	Wild	Few	Few	Wild	Wood used for plywood, packing cases, firewood etc
Tree	Thlanvawng	Gmelina arborea	Wild	Few	Few	Wild	Wood used for planking, furniture, house posts etc
Tree	Vaube	Bauhinia variegata	Wild	Abundant	Abundant	Wild	Wood is used for tool handles, firewood, charcoal etc.
1							leaves are a good fodder. Decoction of bark/leaves is
							used in menstrual disorders, piles,diabetes,diarrhoea
						L	and dysentery

Tree	Vawmbal	Drimycarpus racemosus	Wild	Abundant	Abundant	Wild	Wood is used for building, boats, firewood etc
Tree	Vawngthla	Premna milleflora	Wild	Few	Few	Wild	Wood durable used for house posts etc

8	9	10
Associated TK	Other details	Community/ knowledge holder
-	Leaves and fruits are used in medicine	Mara
-	-	Mara
Bark yields a strong fibre and leaves are lopped for cattle fodder	It is a light demanding tree, fsat growing and short-lived tree	Mara
-	Ripe fruit is eaten by birds and animals	Mara
Bark and aerial roots are used for making coarse ropes	Leaves are good for cattle fodder	Mara
Leaves are used in medicine	-	Mara
<del>-</del>	Leaves are good for fodder, it is a fast growing tree	Mara
<del>-</del>	-	Mara
Bark, unripe fruit, flowers and seed oil are medicinal	Seed oil is used for burning, lubricating and soap making	Mara
Leaves and twigs are lopped for cattle fodder	Bark, fruit and leaves are used in medicine	Mara
Seed is very useful for treating diabetes and the bark for fever, jaundice, urinary problems, sore throat, ronchitis, asthma, ulcers and chronic dysentery etc	Fruits are eaten by man, birds and wild animals	Mara
-	-	Mara
Bark is medicinal and also used for poisoning fish. Leaves are lopped for fodder	It is a light demander	Mara
-	-	Mara
Different parts of the plant are used in various traditional medicine	-	Mara
Powdered fruit is used in scorpion sting, bites of centipede, juice of the bark for chronic ulcer and fresh cuts. Leaves are lopped for fodder	Tender leaves are cooked eaten. It is moderate light demander and moderately fast-growing tree	Mara
Pounded bark is used for poisoning of fish	-	Mara
Juice of young leaves is used for curing tonsillitis and sores	Bark, stem and leaves are also medicinal. Leaves are lopped for cattle fodder	Mara
Bark is prescribed for fever, strangury, ulcers, skin diseases and the roots for diarrhoea, dysentery	It is a strong light demander but the seedlings are shade tolerant.	Mara
Leaves are lopped for cattle fodder	This tree is a quick growing and moderate light demander	Mara
-	-	Mara
Leaves are lopped for cattle fodder	-	Mara
Leaves are lopped for cattle fodder	-	Mara
Tender leaves are cooked and eaten without its water as vegetables	Leaves are lopped for cattle fodder	Mara
-	-	Mara
-	-	Mara
Leaves are eaten cooked as vegetable	-	Mara
-	-	Mara
Fruits are eaten by wild animals. Trunk is used for making mortars for pounding rice	It is a moderate shade bearer in youth. Seed often germinates soon after falling under its mother tree	Mara
Leaves are used for fermenting cooked soyabean (Bekang), a traditional mizo delicacy	It is a strong light demander and fire resistant	Mara
-		Mara

Juice of fruits and leaves are applied on sharp pain caused by nettles or poisonous hairs of caterpillars	It is a fast-growing tree	Mara
-	-	Mara
-	It yields the para rubber, the finest and the most durable catoutchouc known	Mara
Leaves are used as soap for washing 'Mizo Pawnpui' (Blanket)	It is a fast growing, good coppice and facvoured for birds nesting. Bark can be used for poisoning fish, juice of crushed bark and leaves are used to tick bite.	Mara
Fibre of the bark is used for cordage. Decoction of the root bark is given to women after delivery of a baby	-	Mara
Saplings used as pendant for scorching off the bristles of the pig killed	-	Mara
Bark is used internally for pain in the stomach	-	Mara
Silkworm fed on its leaves. Leaves are sometimes boiled with meats and eaten as curry. Root bark, leaves and fruits are also medicinal.	Young leaves and twigs are good for cattle fodder	Mara
Fruits are eaten by man and birds	Endi silkworm reared on the leaves	Mara
Flowers are eaten cooked as vegetables, leaves are lopped for cattle fodder	It is a light demander and fire-resistant, fast growing tree	Mara
Leaves, tender fruits and flower buds are eaten as vegetable	It is a moderate light demander and wind firm tree	Mara
Thick paste of the plant is applied on broken bone. Juice of the plant is also applied on sore of baby's navel	Plant is laxative and cooling used for cold, sinusitis and menstruation problems	Mara
Tender leaves are boiled with meats and eaten as vegetables	-	Mara

Format 27: Wild Animals (Mammals, Birds, Reptiles, Amphibia, Insects, Others)

1	2	3	4	5	6
Animal type	Local Name	Scientific Name	Habitat	Description	Season when seen
Mammal	Chepa	Tupaia bengaleri	Forest	-	-do-
Mammal	Hleikapsen	Callosciurus erythraeus	Forest	-	-do-
Mammal	Hleilubial	Callosciurus pygerythrus	Forest	-	-do-
Mammal	Kelral	Neofelis nebulosa	Forest	-	-do-
Mammal	Kuhpui	Hystrix brachyura	Forest	-	-do-
Mammal	Kuhsi	Atherurus macrourus	Forest	-	-do-
Mammal	Ngau	Trachypithecus pileatus	Forest	-	-do-
Mammal	Sahuai	Nyctiebus bengalensis	Forest	-	-do-
Mammal	Sakhi	Muntiacus vaginalis	Forest	-	-do-
Mammal	Sanghal	Sus scrofa	Forest	-	-do-
Mammal	Sanghar	Prionailurus bengalensis	Forest	-	-do-
Mammal	Saphu	Manis pentadactyla	Forest	-	-do-
Mammal	Saza	Capricornis sumatraensis	Forest	-	-do-
Mammal	Sazaw (Zawreng)	Paradoxurus hermaphroditus	Forest	-	-do-
Mammal	Sazuk	Rusa unicolor	Forest	-	-do-
Mammal	Sihal	Canis aureus	Forest	-	-do-
Mammal	Tlumpui	Viverra zibetha	Forest	-	-do-
Mammal	Zawng mawt/hmaitai	Stump-tailed Macaque	Forest	-	-do-
Mammal	Zuhrei	Berylmys mackenziei	Forest	-	-do-

Bird	Ramparva	Chalcophaps indica	Forest	-	-do-
Bird	Tlaiberh	Pycnonotus cafer	Forest	-	-do-
Bird Tuklo		Megalaima asiatica	Forest	-	-do-
Bird	Vahai	Anthracoceros albirostris	Forest	-	-do-
Bird	Vahmim	Turnix suscitator	Forest	-	-do-
Bird	Vahrit	Lophura leucomelanos	Forest	-	-do-
Bird	Vahui	Treron sp.	Forest	-	-do-
Bird	Varihaw	Polyplectron bicalcaratum	Forest	-	-do-
Bird	Varung	Arborophila sp.	Forest	-	-do-
Bird	Vasuih	Carpodacus erythrinus	Forest	-	-do-
Bird	Vazar	Garrulax sp.	Forest	-	-do-
Bird	Vazun	Phaenicophaeus tristis	Forest & Human habitation	-	-do-
Reptiles	Rul hlai	Ptyas korros, Coelognathus radiatus	Forest & Human habitation	-	-do-
Reptiles	Rul ngan	Ophiophagus hannah	Forest	-	-do-
Reptiles	Rultuha	Trimeresurus erythrurus/albolabris	Forest	-	-do-
Reptiles	Saphai	Python bivittatus	Ponds and near water bodies	-	-do-
Reptiles	Satel	Melanochelys tricarinata	Rivers, streams etc	-	-do-
Reptiles	Tangkawng /Tangkeu	Varanus bengalensis	Forest, open areas	-	-do-
Reptiles	Laiking	Christidorsata otai	Forest & Human habitation	-	-do-
Reptiles	Awk-e	Gecko gekko	Human habitation, House	-	-do-
Amphibians	U Chang	Euphlyctis cyanophlyctis	Rivers Ponds etc	-	-do-
Amphibians	U Sai	Hoplobatrachus crassus	Rivers Ponds etc	-	-do-
Amphibians	Utawkphar	Bufo stomaticus	Rivers Ponds etc	-	-do-
Insects	Khawivah	Apis cerana indica	Forest, open areas	-	-do-
Insects	Khawichhinkhup	Polistes tenebricosus	Forest, open areas	-	-do-
Insects	Nghalfek	Vespa tropica	Forest, open areas	-	-do-
Insects			Forest, open areas	-	-do-
Insects	Taivang	Tetraponera sp.	Forest, open areas	-	-do-
Insects	Zan taivang	Tetraponera sp.	Forest, open areas	-	-do-

7 Local Status		8	9	10	11	12 Community/ Knowledge	
		Uses (if any)	Associated TK	Mode of Hunting,	Other details		
Past	Present			collecting (if any)		Holder	
Abundant	Decreasing	-	-	By Gun or trap	-	Mara	
Abundant	Decreasing	-	-	By Gun or trap	-	Mara	
Abundant	Decreasing	-	-	By Gun or trap	-	Mara	
Few	Decreasing	-	-	By Gun or trap	-	Mara	
Abundant	Decreasing	-	-	By Gun or trap	-	Mara	
Abundant	Decreasing	-	-	By Gun or trap	-	Mara	
Abundant	Decreasing	-	-	By Gun or trap	-	Mara	
Few	Decreasing	-	-	By Gun or trap	-	Mara	
Abundant	Decreasing	-	-	By Gun or trap	-	Mara	

Abundant	Decreasing	-	-	By Gun or trap	-	Mara
Abundant	Decreasing	-	-	By Gun or trap	-	Mara
Abundant	Decreasing	-	-	By Gun or trap	-	Mara
Abundant	Decreasing	-	-	By Gun or trap	-	Mara
Few	Decreasing	-	-	By Gun or trap	-	Mara
Abundant	Decreasing	-	-	By Gun or trap	-	Mara
Abundant	Decreasing	-	-	By Gun or trap	-	Mara
Abundant	Decreasing	=	=	By Gun or trap	-	Mara
Abundant	Decreasing	-	-	By Gun or trap	-	Mara
Abundant	Decreasing	-	-	By Gun or trap	-	Mara
Few	Decreasing	=	=	By Gun or trap	-	Mara
Abundant	Decreasing	-	-	-	-	Mara
Abundant	Decreasing	-	-	-	-	Mara
Few	Decreasing	-	-	-	-	Mara
Few	Decreasing	-	-	-	-	Mara
Abundant	Decreasing	-	-	-	-	Mara
Abundant	Decreasing	-	-	-	-	Mara
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Abundant	Abundant	-	-	-	-	Mara
Abundant	Abundant	-	-	-	-	Mara
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Members of Biodiversity Management Committee (BMC), Tisi Village with Dr. Seikuti Nohro, Consultant, Environment and Forest Department, Mara Autonomous District Council, Siaha, Mizoram



- **A.** View of Tisi Village
- C. Image of Pigsty commonly found in the backyard
- **B.** Flowers commonly grown in the Village
- **D**. Image of Chicken Coop

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