



# PREPARING A PEOPLES' BIODIVERSITY REGISTER



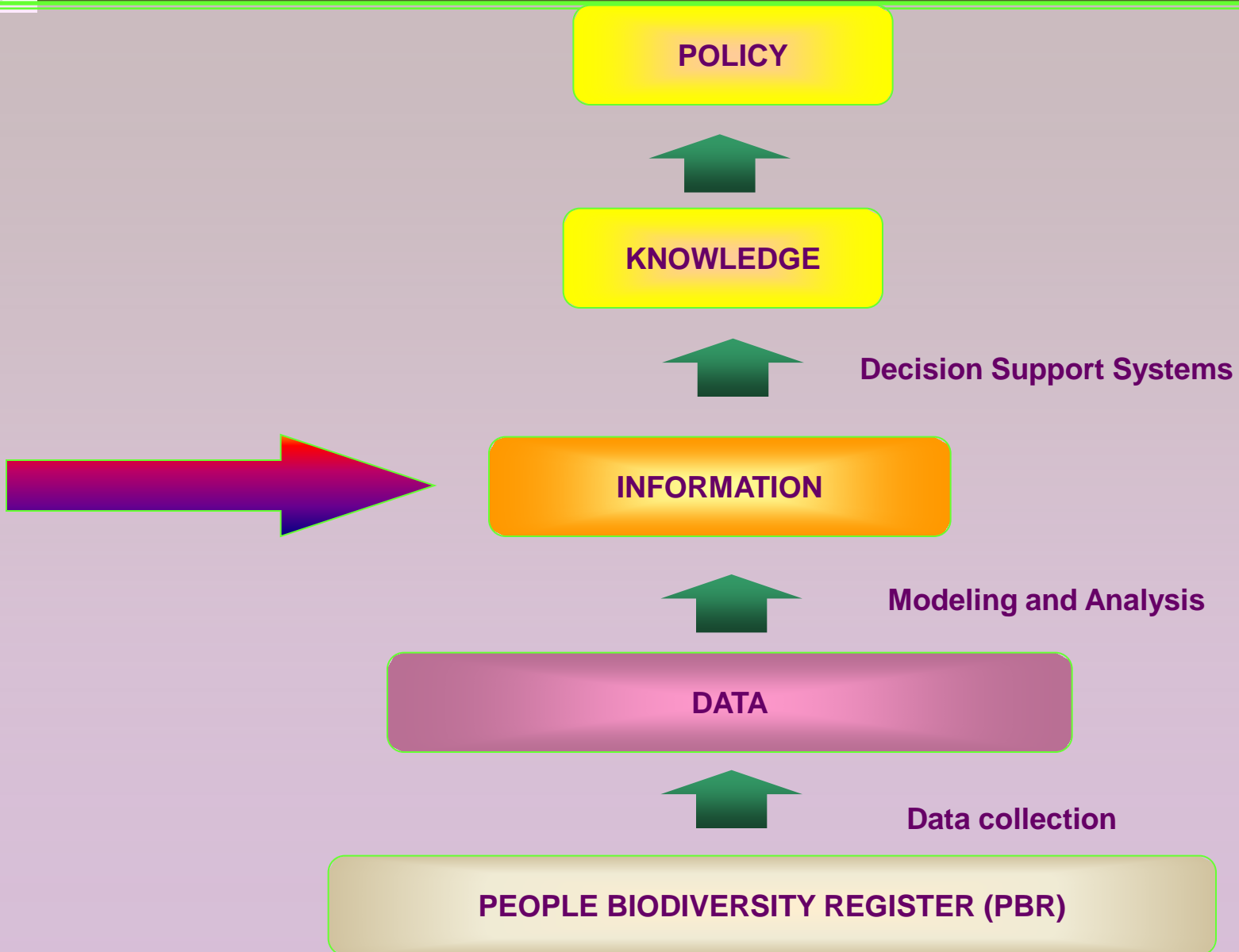
This Presentation was prepared by Dr. K. Thulsi Rao and modified by NBA





# The Biodiversity Policy Pyramid

BIODIVERSITY POLICY MAKING





# Process in PBR Preparation

**Formation of BMC**



**Sensitization of the public about the study, survey and possible management**



**Training of members in identification and collection of data**



**Collection of Data.**



**Analysis and validation of data**

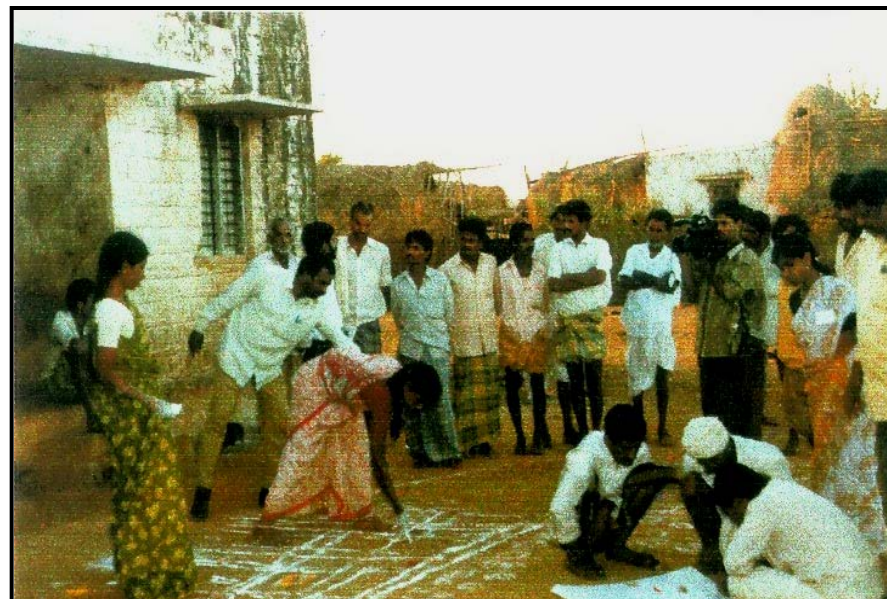


**Preparation of People's Biodiversity Register**



**Computerization of Information and resources**

# Consultative Led by Local Communities



Through Biodiversity Management Committees (BMCs)

# All Taxa Biodiversity Inventory, Management Information System & Bio-Mapping

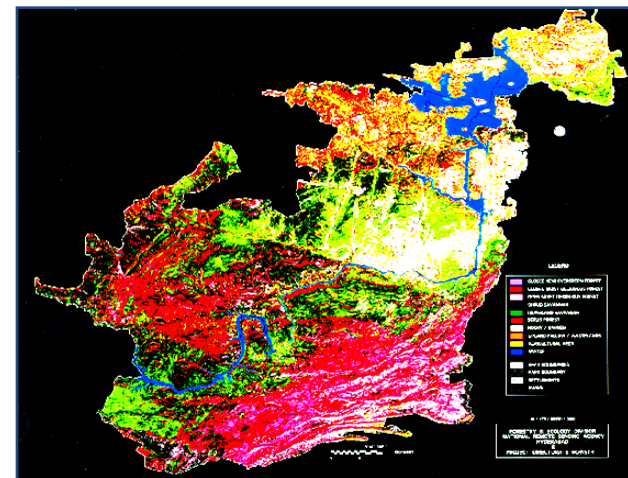
← **Surveying & Collection of Voucher Specimens** →



← **Specimens Identification & Preservation** →



← **Database Management & Bio-Mapping** →



Bio Diversity Management Information Systems - [Fauna]

Ecology Human Dimensions Research

Bio Region: [CONES OF THE DECCAN] Division: [ACHANKRPT]  
 Sanctuary / National Park: [NSTR] Range: [MANNANUR 05]  
 Biotic Province: [SA & 66] Beat: [MANNANUR (N) 15]  
 District: [MARABOONNAGAR] Compartment: [319]

Site Specific Details  
 Forest Type: [MIXED DRY DECIDUOUS FOREST] Soil Type: [SANDY SOIL] Longitude: [00 00 000] Altitude: [0]  
 Temperature: [35] Humidity: [0] Season: [WINTER] Latitude: [00 00 000] D  
 Rainfall Status: [NO RAIN] Date: [27/02/2002] Time: [9:00:00 AM] Locality / Landmark: [ ]

Species Details  
 Field Observations  
 Total No Sighted: [00]  
 No of Specimens Collected: [0]  
 Status: [UNCOMMON]  
 Collected By: [A]  
 Specimen No.: [1004]  
 Specimen Code: [FNA272021004]  
 Fauna Code: [ ]  
 Fauna Group Name: [LICARIDS]

Identification: Scientific Name: [ ] Forest Density: [DENSE]  
 Common Name: [CROCODILE] Associated Species: [ ]  
 Vernacular Name: [ ]  
 Order: [ ] Species Other Characteristics: [ ]  
 Family: [ ]  
 Identified By: [ERM LABS] Species Charecters: [ ]  
 Fauna Colour: [GRAY] Habitat Observations: [ ]  
 Gender: [ADULT MALE]  
 Measurement Details: [ ]

FAUNA SPECIMEN CODE	COMMON NAME	TOT SIGHTED	DATE	BEAT	STATUS	FOREST TYPE
FNA272021004	HONEY BEE	20	27/02/2002	MANNANUR (N)	COMMON	MIXED DRY DECIDUOUS FOREST
FNA272021005	DRAGON FLY	3	27/02/2002	MANNANUR (N)	ABUNDANCE	MIXED DRY DECIDUOUS FOREST
FNA2812020002	SEETFS	5	28/2/2002	BOMMANAPALLY	ABUNDANCE	MIXED DRY DECIDUOUS FOREST





*Lynx Sp*



*Argiope pulchella*



*Tommy Sp*



*Peucetia viridana (lynx)*



Scare crow spider



*Argiope arcuata*



*Nephilia maculata*



*Myrmarachne sp*



*Orb Spider*



Demon spider



# Peoples' Biodiversity Registers (PBRs) Guidelines

## **The Process :**

- It is to be undertaken in a participatory mode involving varying sections of village society.
- While documenting, the knowledge and views of both genders are to be recorded.
- Information provided by people need to be collated, analysed and crosschecked before documentation.
- The PBR is important base document in the legal arena as evidence of availability of resource and knowledge and hence careful documentation is necessary.





# Peoples' Biodiversity Registers (PBRs) Guidelines

## **The Process :**

- The document should be endorsed by the BMC and later publicized in the Gram Sabha / Gram 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 additional and new information as and when generated.
- The PBR will be deposited with State Biodiversity Board (SBB) according to some SBB Rules (Ex: Kerala).



# Peoples' Biodiversity Registers (PBRs)

Operating spatial scales

PBR can be proposed at

Village



Panchayat



Block



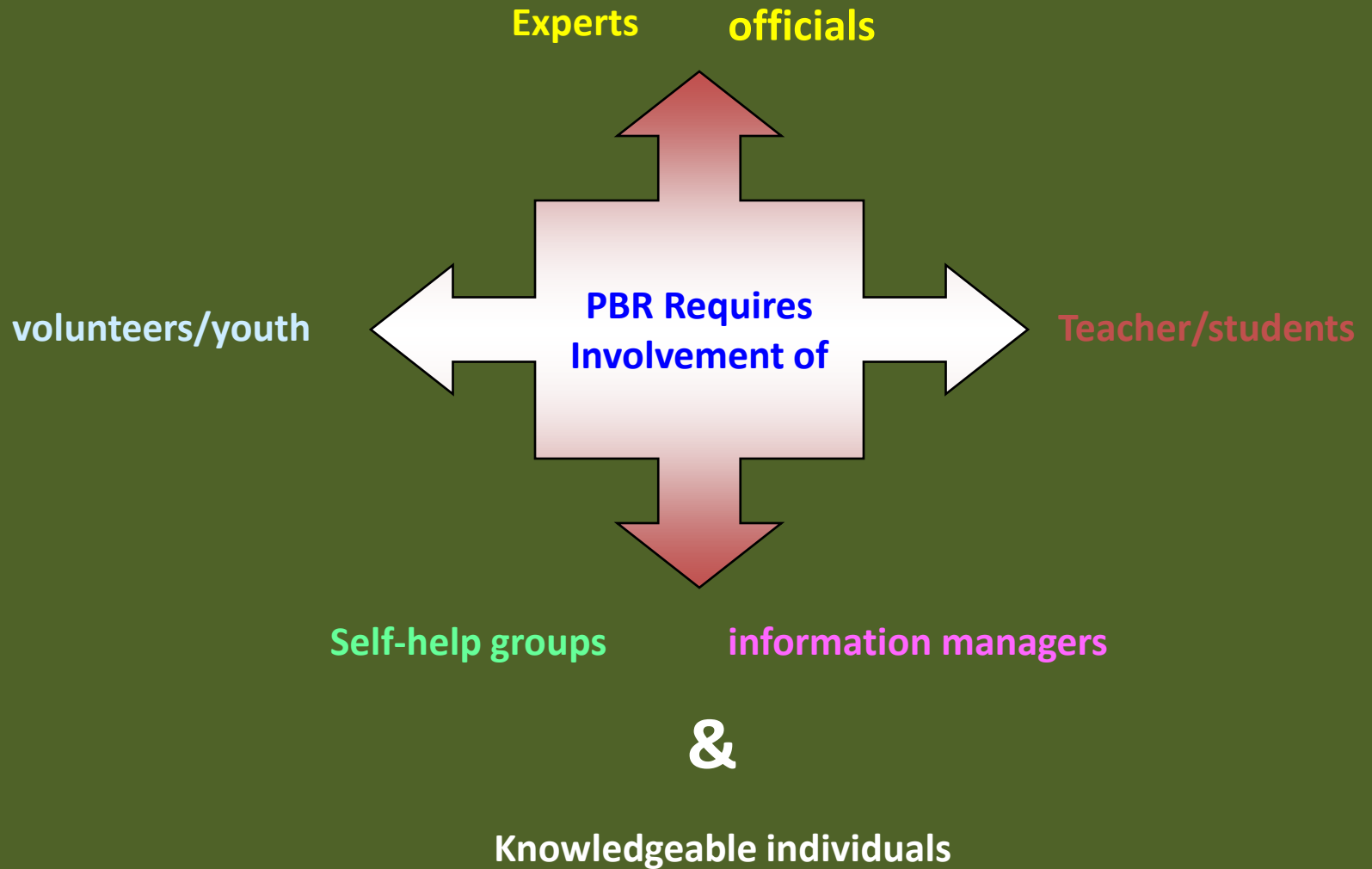
Municipality



District



Corporation Levels





# ❖ Overview

## The PBR process shall be

1. An integral component of decentralized, participatory management of natural resources,
2. It shall be introduced in phases, beginning with the relatively simpler activities.



# Peoples' Biodiversity Registers (PBR)

## Seven Streams (Suggestive)

Organizing the effort (7 Activities)



Capacity building (3 Activities)



Data collection (8 Activities)



Resource management (7 Activities)



Verification (2 Activities)



Information management (2 Activities)



Feeding into action (3 Activities)



# 1. Organising the system

Clarifying the format



Deciding on sites,



Setting up a team



Deciding on formats, timelines, procedures for data and information collection



Preparing Drafts



Sharing of information for verification



Finalization of PBR



Sharing of information with Grama Panchayat, Gram Sabha and SBB



## 2.Capacity building

**Taxonomic Capacity**



**Traditional Knowledge**



**Ecology**



**Economics**



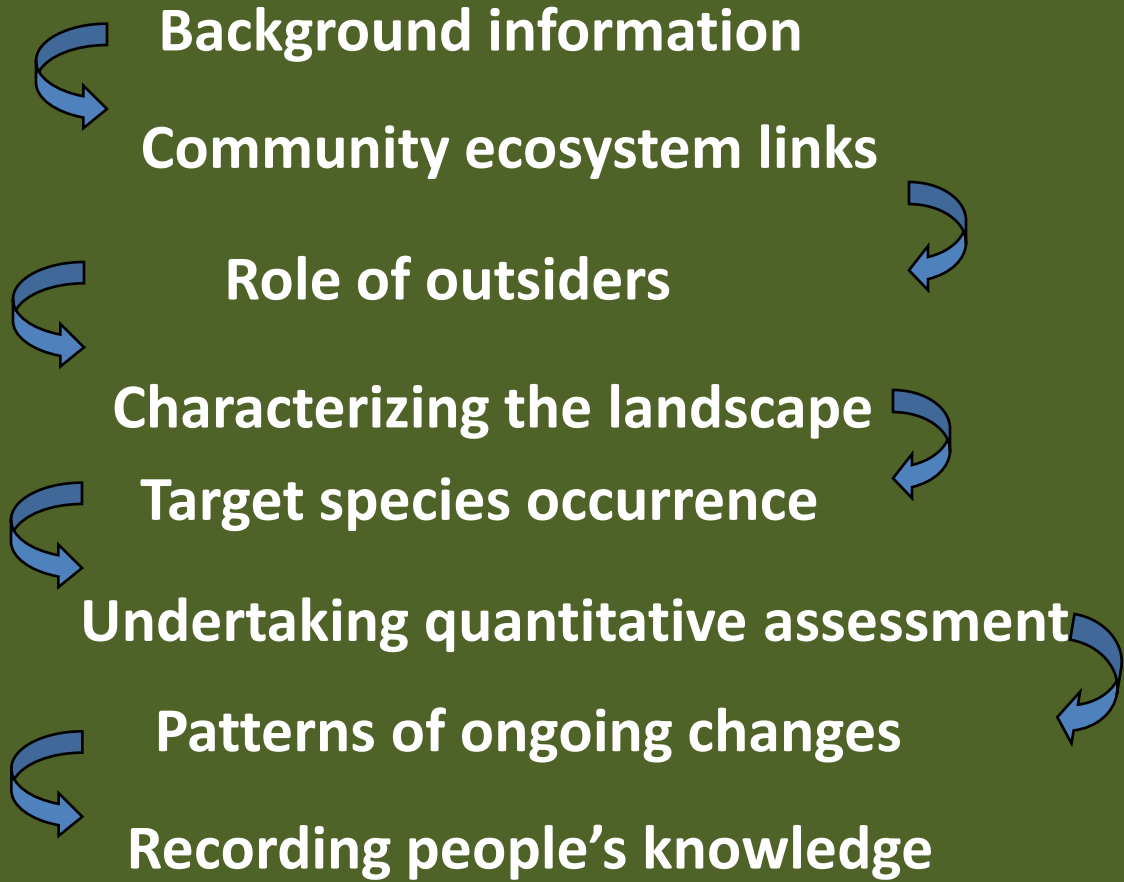
**Traditional Uses**



**Others**



# 3.Data collection







# 4.Resource management

## Perceptions, values and preferences

**Documenting** Landscape management



Management of living resources



**Valuing** habitats



Species



Likely futures



Desired futures



Response options



# 5. Verification

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Checking for duplication



Ecological information



People's knowledge



# 6. Information management

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**Preparing Hard Copy**



**Safeguarding, soft copies, if available**



**Preparing an action plan an using data and information**



# 7. Feeding into action

Agreeing on response options



Preparing a management plan



Preparing an Action Plan to use the default information



# PBR – Details - Format

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## **PART - I**

Details: General description about the GP with GPS location.

Annexure 1-5

Maps (GP, Taluk & Zilla /District)

Photos: field study, BMC members, training to BMC members and diversity of the GP.

## **PART - II**

Formats 1-30.

## **PART – III**

Profile of the study area.

Details of the natural resources.

Abbreviations.

References



# Peoples' Biodiversity Register

## Data Collection

**Form 1. Background Information**

### **C2. Community – Ecosystem Links**

**Form 2: List of categories of activities and occupations of people residing within the study area.**

**Form 3: Square matrix showing relation of activities within the study area.**

**Form 4: Composition of Eco-resource User Groups (Inside study area)**

**Composition of Eco-system links- Understanding Peoples' Perceptions through In-depth.**



# Peoples' Biodiversity Register

## C3. Role of Outsiders

Form 5: List of activities by outsider within study area

Form 6: Square matrix of outsider activities the study area

Form 7: Composition of outside influences

Form 8: List of Knowledgeable Individuals

## C4. Characterizing the landscape

Form 9A: Description of LSEs and their codes

Form 9: Description of Landscape Elements (LSEs)

Form 10: Description of Waterscape Element (WSEs)

Form 11: Topography and trend in area of selected LSEs

Form 12: Survey of selected WSEs

Form 13: Estimate of vegetation cover of selected LSEs



# Peoples' Biodiversity Register

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## C5. Target Species Occurrence

**Form 15-Occurrence and abundance of target species/varieties for entire study area.**

**Form 16- Occurrence and abundance of target species in selected LSE\WSEs**





# Peoples' Biodiversity Register

## C6: Understanding quantitative assessment

## C7: Patterns of Ongoing Changes

Form-17 Extent of interaction with important LSE\WSEs User Groups

Form-18 Extent of interaction with L\WSEs types by User groups (Outside)

Form-19-History of important LSEs over 10 years from User groups

Form-20- History of important WSEs over 10 years from User groups

Patterns of Ongoing Changes-Trend analysis



# Peoples' Biodiversity Register

## C8: Recording People's Knowledge

Form-21 Common information on knowledge

Form-22A-Health-Human/Veterinary/Plant

Form 22B-Management-L\WSE type /L/WSE/  
Population/Individual organism

Form 22C-Instrumentation

Form 224D-Ecology and behaviour

Form 22E-Agricultural practices

Form 22F-Plant and animal varieties

Form 22G-Art

Form 22H-Rituals

Form 22 I-Food processing



# Peoples' Biodiversity Register

## Resource management:

## Perceptions, values and preferences

### D1. Documenting Landscape Management

Form 23-Pattern of ongoing changes in LSEs from User groups

Form 24-Pattern of ongoing changes in WSEs from User groups

### D2. Documentation Management of Living Resources

Form-25-Patterns of ongoing changes from User groups regarding significant species

Experiences : Management of Living Resources-School level studies in support of Andhra Pradesh Biodiversity Strategy and Action Plan



# Peoples' Biodiversity Register

**D3. Valuing Habitats**

**D4. Valuing Species**

**D5. Likely Futures.**

**D6. Desired Futures**

**D7. Response Options:**

**Form 26 - Listing of managing issues**

**Form 27 - Assessing actions taken to change management**

**Form 28 - Responses to change in management actions**



# Peoples' Biodiversity Register

## ❖ Verification

**E1: Verification of Ecological Information**

**E2. Verification of People's Knowledge**



## Annexure 1

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

1) Name of the Chairperson:

Age:

Gender:

Address:

Area of specialization:

## Annexure 2

**List of Vaid, hakims and traditional health care (human and livestock) practitioners residing and or using biological resources occurring within the jurisdiction of the village**

Name:

Age:

Gender:

Address:

Area of Specialization:

Location from which the person accesses biological material:

Perception of the practitioner on the resource status:



## 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:

Age:

Gender:

Address:

Area of specialization:

## Annexure 4

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

1) Contact Person

Name and Address:

2) Contact Person

Name and Address:

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



# PBR – Formats

## AGROBIODIVERSITY

### Format 1: Crop Plants

1	2	3	4	5	6	7		8	9	10	11	12	13	14
Crop	Scientific Name	Local Name	Variety	Landscape / Habitat	Approx . area shown	Local Status		Special features	Cropping season	Uses	Associated TK	Other details	Source of Seeds/PI ants	Community/ Knowledge Past Present Holder
						Past	Present							
Rice	Oryza sativa		Veliyan	Lowland valleys		Plenty	Rare	Tall variety High yield Resistant to drought, flood, pest & diseases		Food Fodder Roofing Fuel	Provides more energy	Suitable for "Valicha" cultivation		Kurichiya Kuruma W. Chetty

















## Format 17: Markets / Fairs for Domesticated Animals, Medicinal Plants and other products

1	2	3	4	5	6	7	8	9
Name of the weekly market or fair	Location	Weekly / Fortnightly & Others Bi-annual / Annual	Day held	Month incase of bi-annual or annual market fair	Types of animal bought and Sold Number of animals (average) transacted in a day	Number of animals (average) transacted in a day	Places from where the animals are arrived	Places to where the animals are transported

## 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 Past Present Knowledge Holder
					Past	Present					

## Format 19: Wild Plant Species of Importance

1	2	3	4	5	6
S.No	Local Name	Scientific Name	Variety	Importance (as economic, social cultural etc.,)	Status









## Format 26: Timber Plants

1	2	3	4		5	6	7	8
Local Name	Scientific Name	Habitat	Local Status		uses	Associated TK	Other Details	Community / Knowledge holder
			Past	Present				

## Format 27 A: Coastal and Marine Flora

1	2	3	4	5		6	7	8	9	10
Plant Type	Local Name	Scientific Name	Habitat	Local Status		Parts Collected (if any)	uses	Associated TK	Other Details	Community / Knowledge holder
				Past	Present					

## Format 27 B: Coastal and Marine Flora

1	2	3	4	5		6	7	8	9	10
Animal Type	Local Name	Scientific Name	Habitat	Local Status		Parts Collected (if any)	uses	Associated TK	Other Details	Community / Knowledge holder
				Past	Present					



## Format 28: Wild Animals (Mammals, Birds, Reptiles, Amphibian, 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	Associated TK	Mode of Hunting, collecting	Other Details	Community / Knowledge holder
						Past	Present					

### URBAN BIODIVERSITY

### Format 29: Flora

1	2	3	4	5	6	7
Sr. No.	Local Name	Scientific Name	Type of Plants	Habitat	Flowering Season	Remarks (Rare / Common etc.)

### Format 30: Fauna

1	2	3	4	5	6
Sr. No.	Local Name	Scientific Name	Type of Animals (Mammals / Birds / Fish / Insect etc.)	Habitat	Remarks (Rare / Common etc.)

### Format 31: Any other information of Local Importance

1	2	3
Sr. No.	Information of Local Importance	Remarks



**THANK YOU**