

PARTNERS FOR RESILIENCE

PARTICIPATORY RISK ASSESSMENT

Manual of Tools



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Annex 1

Introduction

The Partners for Resilience Project aims at **strengthening the capacities of communities who are vulnerable due to increasing disaster risk, climate change and ecosystem degradation**.

Participatory Risk Assessment is the first step towards designing interventions **for reducing the vulnerability and enhancing capacities of target communities**. The assessment aims to create basic understanding of:

- a) The community : number of households, social and economic status, its organization
- b) Livelihood systems: key activities that people undertake for living and leisure
- c) Dependence on natural resources : linkage of livelihoods with natural resources, access and benefit sharing
- d) Profile of hazards: elements (natural, physical, social) that render livelihoods vulnerable, their trends , implications of their intensification
- e) Current coping (short term) and adaptation (medium to long term) capacities: capacities (human and physical) that the community has to deal with various hazards, and limits subsequent to which the hazard becomes a disaster
- f) Factors limiting livelihood resilience: an understanding of reasons why the community is vulnerable and not able to cope with disasters
- g) Intervention plans: what needs to be done to enhance capacities of communities to make them less vulnerable to increasing disaster risk, climate change and ecosystem degradation

The tool pack is therefore designed in three broad sections. The first section provides a context to the risk assessment through an understanding of the profile of the village, its inhabitants and resources. Tools that are included in this section are:

- a) Village profile – enabling description of the broad geographical location and the governance systems.
- b) Community profile – enabling description of demographic features, socio-economic status and livelihood systems.
- c) Ecosystem profile – enable description of the natural resource elements used by the villages within their livelihood systems and helps describe the availability, seasonality and productivity of the natural resource asset base.

The second part of the tool pack focuses on the hazard and vulnerability assessment, and contains the following broad sections:

- a) Hazard and vulnerability profile – enabling description of livelihood elements at risk, trends and seasonality of disasters and climate induced risks
- b) Capacity profile – enabling description of current coping and adaptation mechanisms including a focus on early warning systems and institutional arrangements that enhance readiness of the communities to disasters.

The final section leads to the development of risk reduction plan and contains specific interventions needed for reducing vulnerability and hazard and enhancing capacities. These interventions would be directly / facilitated by the Partners for Resilience project. A scheme of risk assessment is presented in Fig. 1. Annex 1 presents the general guidance of do's and don'ts to be followed with the analysis.

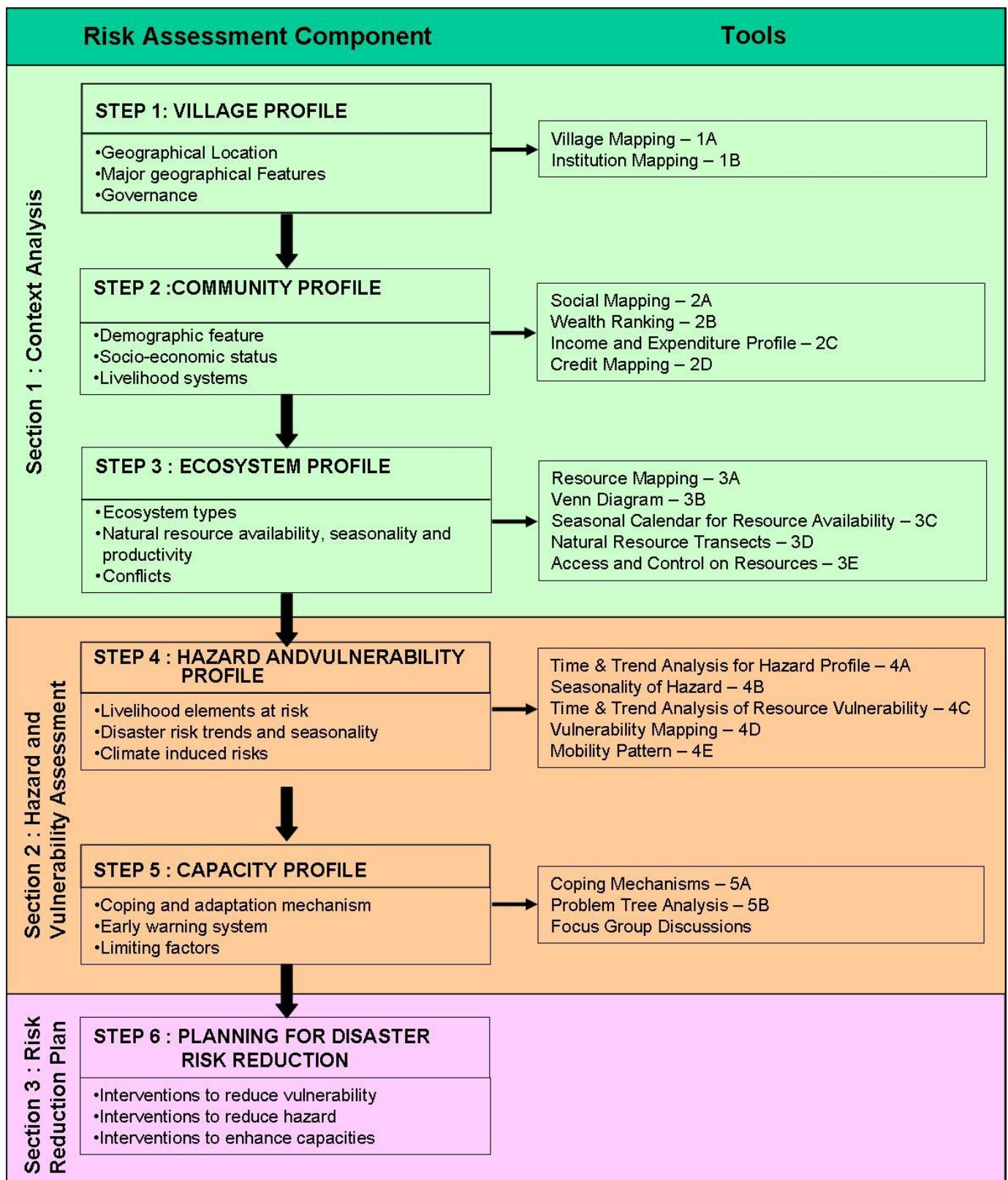


Fig. 1

STEP 1: VILLAGE PROFILE

A. Landscape mapping

Respondent: Elderly members of Village/ Panchayat/Region

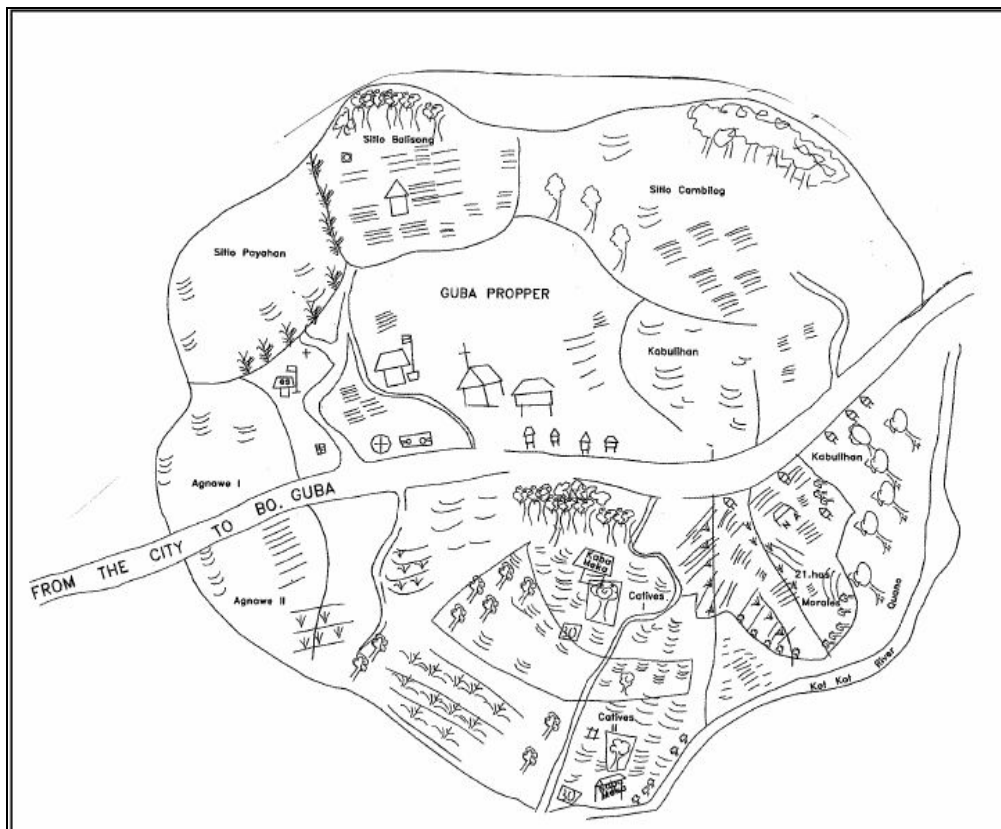
Expected Result:

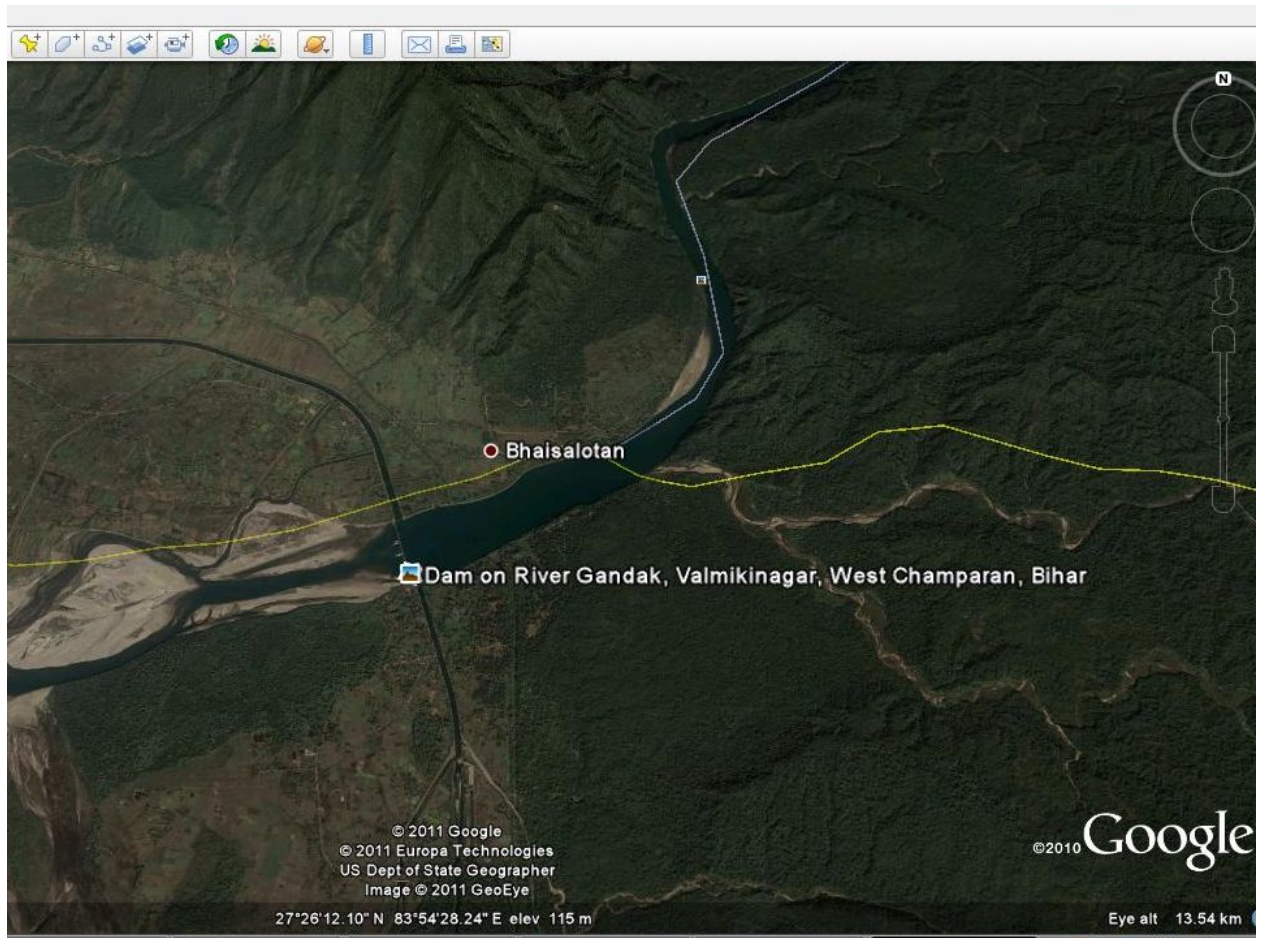
1. The landscape of the region will be known

Process

- Determine the extent and location of village
- Identify village from prominent landmarks
- Draw key landscape feature, including a highway, river or a mountain / forest.
- Locating the village from the landscape feature, along with correct labeling
- Drawing village boundaries and labeling all the boundaries. The north pointer should also be indicated in the map.
- Indicate the major geographical features
- Distances between various features should also be placed against the labels.
- If possible note the latitude and longitude with your own GPRS system (mobile phone)
- Note the elevation of the region with respect to the major geographical features identified

An illustration of a village/region map is shown below:





Landscape map of West Champaran, Bihar

B. Institutions mapping

Respondent: Men and women who know about the various institutions and its function

Expected results:

1. The different institutions available for villagers will be known
2. The services that they provide like health, education, recreation, legal, nutritional, infrastructure, water, sanitation will be known.
3. Which service provider they prefer and why will be known.

Process:

- Identify a group of male/female 12 – 14 in number who have an idea of various institutions.
- Ask participants about the CBO/MFI/NGO/GO/Company working/worked in that area during normal situation as well as at the time of hazard.
- Find out what are the services (prevention, mitigation and community survival) they are providing like education, recreation, health, food, counseling, saving, loan, embankment etc
- On a chart paper, draw a matrix and on the first column, write the name of the MFI/NGO/GO/Company and on the top row, write the services they provide.
- Now ask participants to rate the service of those particular MFI/NGO/GO/Company on a scale of 5
- Explore the reasons why they are giving that particular score to that MFI/NGO/GO/Company

	Shelter	Food	Loan	Health	Insurance	Rate the performance	
									Before disaster	During disaster
NGO										
Bank										
MFI										
SHG										
Water board department										
Panchayat Raj Institutions										
Govt.										

STEP 2: COMMUNITY PROFILE

A. Social Resource Mapping

Respondent: General community who knows well about their village

Expected Result:

1. Social stratification in the village
2. Infrastructure: Government building such as school, health centre, bank, personal property, etc.
3. Community Property Resources: Temple, Masjid, Gurudwara, graveyard, church etc.
4. Commercial: Market, individual shop
5. Living Being: Human, livestock
6. The vulnerable caste or strata in the village

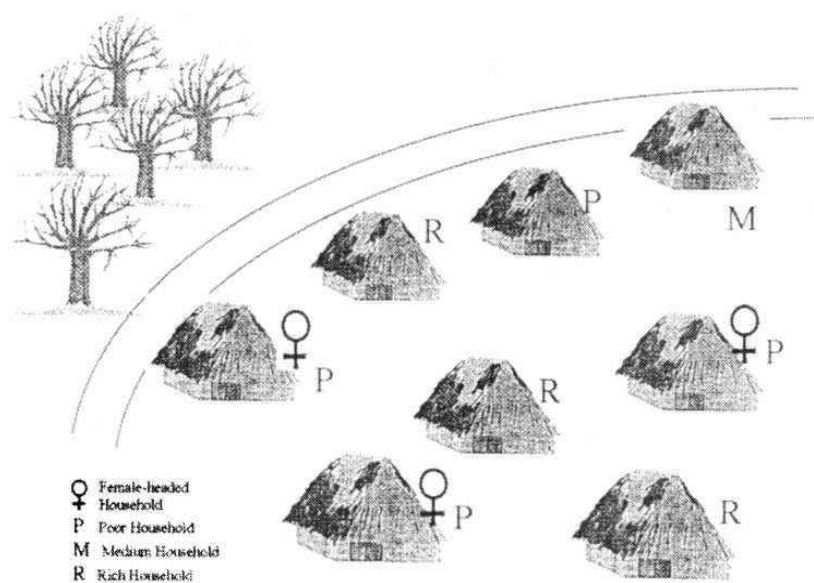
Process:

- Ask community to draw the entire village on the chart including social groups (also show population) as well as resources (houses, temple, land, government building, commercial building, roads, common property etc).
- While locating the physical resource, please indicate its quality for example in case of house, whether its kuttcha or pucca
- While locating the houses, please show/indicate elderly, PWD, widow, dalits, etc.
- Facilities related to water, electricity, drainage, toilets etc
- Locate the infrastructure utilized by community/group
- Specify with symbols if the infrastructure is utilized by all groups/community

Define a coding scheme for various social amenities eg.

Category	Sub Category	Number	Symbol
Community	Name of group		
	Name of group		
	Name of group		
	Name of group		
Housing	Kutcha		
	Semi Pucca		
	Pucca		
Sanitation	Toilet		
	Others		
Source of energy	Cooking		
	Lighting		
Primary occupation	Agriculture		
	Fishing		
		
		

Assets	Land holding		
	Agricultural implements		
	Boats		
	Nets		
	Livestock		
		
		
		
Infrastructure	School		
	Hospital		
	Common shelter		
	Temple		
	Handpump/Well		
		
		
		



- Record information on each household on the above mentioned parameters on the postcards using the colour coding schemes.
- Compile the information to develop social profile of the village

Develop Social map on the Village map

B. Wealth Ranking

Respondent: Community members with social stratification

Process

- Identification of indicators of well being through discussion with the communities.
- The indicators may include apart from income, land holding, boats, type of housing etc.
- Classification of cards generated through social mapping into individual wealth ranking categories
- Summarizing occupation wise wealth ranks through frequency analysis

An illustration of wealth ranking exercise as an example:

	Rich	Average	Poor
Cattle	30	15	3
Farm production	50 bags	20 bags	5 bags
Children's education	Upto University	Upto matriculation	Less than matriculation/illiterate/drop out (ratio boys/girls)
Housing	4 concrete rooms	3 rooms with tinned	2 rooms thatched
Area of land	8 acres	2 acres	1 acre
Farm Implement	Tractor	Bullock cart	Plough
Fishing implements			
Vehicle			
Others			
.....			
.....			

C. Income and Expenditure Profile

Respondent: Male and female (earning member) 18 - 55 years

Expected results:

1. The average monthly earning will be known.
2. Where and how much they spend will be known.
3. Earning VS expenditure will be known.
4. The credit source and credit expenditure will be known.

Process:

- How many families live in the village? Identify the same income category people for the exercise. Repeat this exercise with other income groups also.
- Ask people what are the different occupations there in which people are involved and how much they earn in the month
- Ask people on what they spent out of their earning and how much.
- Compare the total income and the expenditure.
- If there is difference, ask why it is so.
- If they take credit then extend the exercise till credit mapping, rating and ranking.
- Do you also invest during emergency? If yes, then on what?
- How much do you spent for that?
- Ask them if their occupation is dependent on weather
- Do they feel that the change in climate over a period has affected their source of income and how?
- Prioritize their expenditure and the amount spent

Sources of earning	Earning	Expenditure	Sources on which they spend	Savings	Amount
Agriculture			Education	Bank	
Fishing			Repairing of boats	SHG	
Daily wage			Health	Post Office	
Rent			Clothing	
Private job			Food	
----			Water	
-----			Alcohol		
----			Gambling		
----			Social function		
			Recreation		
-----			----		
Total			Total		

D. Credit mapping

Respondent: Men and Women (earning members preferred) 18 – 55 Years

Expected Result:

1. Various sources of credit will be known
2. Reason for taking credit will be known
3. Preference for credit will be known and why
4. Positive and negative impact of credit on their life will be known
5. Average amount of credit taking will be known

Process:

- Ask people why do they take credit?
- From which source they take credit?
- Ask them to decide on what basis you decide any credit provider is good or bad?
- Ask them to give rating to the credit provider on the various parameter.
- What has been the positive and negative impact of credit taking on their life?
- How do they return the credit?
- How many month/years do they take to return the loan amount?
- How often they take credit?
- What are the problems that they face while getting credit?
- Is there any institution to guide people positively towards the right institution and person during normal and emergency as far as credit taking is concerned?
- Ask them whether the amount of credit increases during the time of hazard and fill the matrix for credit ranking for pre and during hazard period separately.

Sources	More amount can be availed	Distance	Easy access	Behaviour of staff	Rate of interest	No. of installment	Mortgage
Bank							
SHG							
Shopkeeper							
Friends							
Money lender							
Post office							

STEP 3: ECOSYSTEM PROFILE

A. Resource mapping

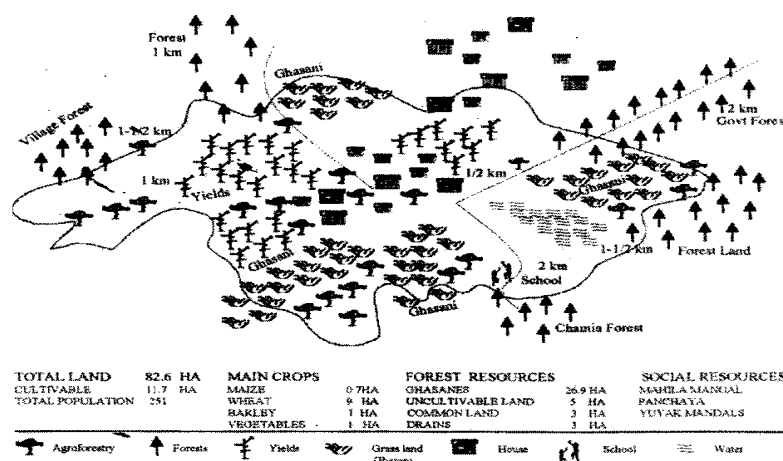
Respondent: General community who knows well about their village

Expected Results:

1. The existing natural resources in the village/region (including land, river, forest, ponds etc) and dependence of community on the same will be known.
2. The uses of these resources along with accessibility of the poor people to these resources will be known.
3. Resource map also shows the quality or status of each resource.
4. Types of resources in the village and their characteristics in the initial stages of the development process are identified and inventorised.
5. This process of mapping ensures that all kinds of diversities are taken into account during further discussion with the local people.

Process

- Select a large open area for the exercise.
- Place a small stone, or leaf / any coloured object to mark as the central landscape feature, for example a village pond
- Draw all the resources available within the village and associated forests
- When the drawings are finished, the discussions may focus on:
- What are the resources available?
- User groups – who uses these resources?
- What is the extent of production from these resources?
- What is the state of these resources, if they are degraded, why they are degraded?
- What measures need to be taken to ensure sustainable resource use?
- What are constraints faced in sustainable use?
- Capture the resource map and the discussions for further analysis
- Make sure map includes features of major environmental changes such as deforested zones, flood plains, erosion etc
- Try and find out the proximate reasons for these changes and how have they impacted their life and livelihood



Develop the Resource map on the Village map

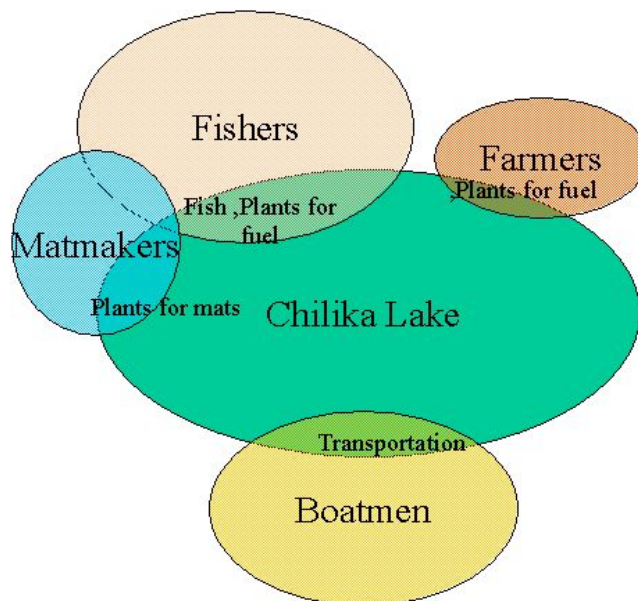
B. Venn Diagram

1. Venn diagramming is used to represent relationships between entities, including communities, resources, institutions etc.
2. Venn diagram in the present context will be used for stakeholder analysis, through showing graphical linkages between wetland (river, lake etc.) and its direct and indirect stakeholders. The

Process

- Draw several smaller circles and label them as per stakeholder groups for example fishers, agriculture farmers, mat makers, boatmen etc. The sizes of the circles would define the stakeholder size.
- Overlap the smaller circles on the wetland circle based on the assessment of resource use. A larger area under overlap would indicate a much stronger dependence on wetland.
- Within the overlap area, indicate the resource use by the stakeholder group. For example, in the overlap area of fishers within wetland, you may indicate the resources used as fish, fodder, packing material and so on.
- Capture the Venn diagram on a large sheet of paper for recording and further analysis

An illustration of Venn Diagramming for identification of stakeholders is given below as example:



C. Seasonal Calendar for Resource availability

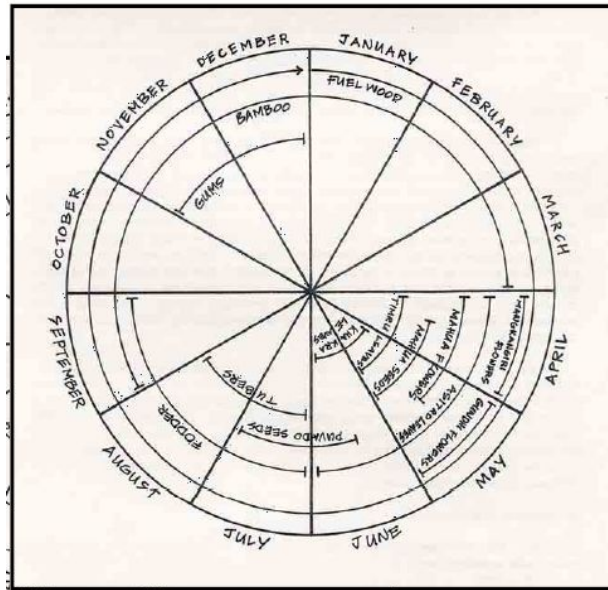
Respondent: General community who knows well about their village

1. A seasonal calendar is a useful tool to documents the flow of resources over a period and how resource collection changes over a season.
2. This information contributes to estimation of yields and contribution of natural resources to overall incomes of the communities.

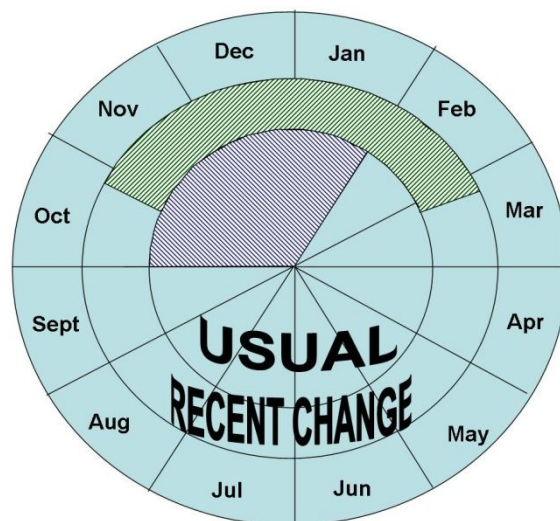
Process

- List all the natural resources used by the village communities. All species, whether used in raw or processed form should be listed
- Classify these resources by their source – within village or adjoining wetland, forests /catchments
- Draw three separate circles for each resource source with labels marked as wetland, within Village and Forests
- For each individual resource source, begin with an individual species and mark the total duration of its availability by a concentric semi circle. Under each month, label the related activity (for example agriculture will begin with first month indicating land preparation, second month sowing and the last as harvesting).
- Repeat same exercise for all species for an individual resource source and similarly for each of the three resource sources
- Record the observations on paper and analyse for resource dependency
- Record in which seasons does the community typically plant crops and has this changed
- Do they use weather warning systems to harvest the crops
- Has the temperature and rainfall pattern changed
- Is there any positive outcome of this change
- Is there any noticeable change in wildlife or fish stock in the particular season of catch.

An illustration for a seasonal calendar is shown below:



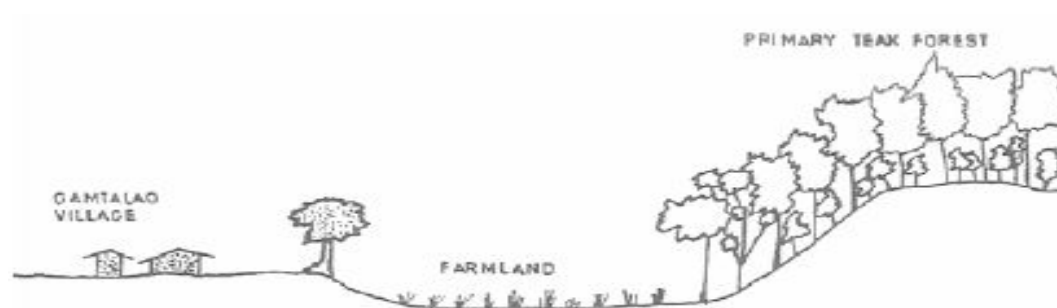
Incorporate changes induced by climate in the seasonal calendar



D. Natural Resources Transects

1. Natural Resources Transect is a walk or series of walks across the village to assess the range of natural resources accessed by the village communities.
2. Focal group discussions conducted during the geographical transect can throw important light on resource use, trends of productivity, problems limiting sustainable use and opportunities to promote the wise use of resources.
3. Natural resources transect usually takes place walking across the village to all landscape features and field observations / discussions with the participating members. The recording of the observations should however be done along with the entire group.
4. Take into account the resources like manure heaps, straws etc used by the community

A sample transect could be drawn as following:



	Homesteads	Agriculture land	Forests	Embankment
Current use					
User Groups					
Productivity					
Tenure					
Reasons for declining productivity					
Opportunities for promoting use					
.....					

Access and Control on Resources

Respondent: Separately done with men and women and elderly persons

Expected Result:

1. The access and control over the resources (family & community) among men and women will be known.
2. The various aspects where men and women takes decision commonly as well as separately before, during and after hazards will be known
3. Reasons for such gender differences.
4. What are the problem that you face while accessing the resources at family as well as community level

Process:

- Ask them to list down all the resources that they know in the family and community.
- What are the resources on which they have access?
- What the resources on which they have control?
- Try to present on the chart according to matrix given below. Please tick “yes” according to the response of participants.
- Please share problem that you face while accessing the family as well as community level resources
- Consider information as a resource and find out access and control for developmental schemes

Family Resources	Access		Control	
	Before Disaster	During Disaster	Before Disaster	During Disaster
Land				
House				
Household assets				
Food				
Clothing				
Cash				
Others (<i>Please specify</i>)				
Community Resources				
Temple				
Roads				
Market				
River				
Ponds				
Forests				
Grazing land				
Shops				
Hospital				
Panchayat				

Funds/resource				
Community center				
Community Resources				
Embankment				
Boat				
Other government building				
Government hand pump/water resource				
Government Schemes				
.....				
.....				

- Further ask them to list down all the family level and community level decision takes place.
- Prepare small slips of all the decision listed out by them.
- Ask them to pick up the slips (decision) according to their decision making power.
- Ask for the various reasons for the same.
- How this differences affects gender?
- Ask them what can be done to improve this disparity?

STEP 4: HAZARD AND VULNERABILITY MAPPING

A. Time and Trend Analysis for Hazard Profile

Respondent: As in section B

Expected Result:

1. The types of hazards (Flood/ Hot waves/Drought/Epidemic/Fire/Cyclone/Tornado/Any other hazard) faced by community will be known along with cause of hazard
2. The years when minor and major (Flood/Cyclone/Drought/Epidemic) came will be known.
3. Duration on which minor and major (Flood/Cyclone/Drought/Epidemic) comes will be known.
4. Kind of impact (things at risk) of both minor and major (Flood/Cyclone/Drought/Epidemic) will be known
5. What has been the frequency of (Flood/Cyclone/Drought/Epidemic) will be known.
6. Magnitude of the impact will be known.
7. Level of water and duration of water logging in the village during hazard will be known
8. Response of government or any other agencies will be known.

Process:

- Divide the past 20 years with the trend of the hazard (Flood/Cyclone/Drought/Epidemic)?
- What has been the frequency of flood (Flood/Cyclone/Drought/Epidemic) in the last 20 years? Can you please mention the years of hazard?
- What types of flood (Flash/river) comes in your village? (Applicable for flood and cyclone)
- What is the duration of minor/major (Flood/Cyclone/Drought/Epidemic) in your village? How long the water stays in the village?
- What are the months when you face (Flood/Cyclone/Drought/Epidemic)? Encircle the month/years?
- What is the level of water in your village during minor and major flood?
- What kind of destruction happens when there is minor (Flood/Cyclone/Drought/Epidemic) in general community?
- What is the impact on soil fertility, crop production etc?

Detail of impact												
Years of Hazard	Details of hazards						Losses incurred during various hazards periods					
	Force	Months	Time	Level of water	Days when water gets logged in the area	Areas got covered	Infrastructure	Human	Land	Livelihood	House hold materials

Note: the losses will be told by participants. Please refer the PRI damage assessment data also.

B. Seasonality of Hazard

Respondent: Men and Women (*Make sure that there is participation from elderly person*)

Expected results:

1. Community preference of week and months in the village will be known.
2. Seasons of hazards will be known.
3. How it affects the employment, migration pattern, Mobility, agriculture, hazard, epidemic etc is clear/season wise employment, mobility, agriculture, hazard, epidemic etc is clear.
4. What are the options for occupation people
5. Effect on the health of people

Process:

- How many months in a year does hazard occur?
- Ask them to divide months in seasons. (according to their own understanding)
- Draw the seasons on the chart... like sweater or 26 Jan Parade for January... holi for March.... Too much hot sun for June/ or whatever may be their signs for each month/season
- Ask them about those seasons when they face hazards?
- Ask them to plot the seasons preferred for livelihood, agriculture, health crises, migration (Where and why), mobility, any epidemic,
- Which work they will prefer and on what season and why?
- What are month when education get affected?
- Collection of fuel and rations – essential commodities
- Situational bonded labour/less payment (due to impact of flood)
- Availability and Changes in food habits.
- What are the months for agriculture and which are the month?
- When you face damage of your crop?
- Which month do you face more challenges/problems related to Water and sanitation.
- When people migrate and why? When do you come back to village?
- Credit preference according to season.
- How is the impact of the season on livestock?
- Are there some diseases that are more common during certain parts of a year?
- Are there any diseases that are more common during rainy/dry season?
- Are the diseases specific to some community like women and children?

	Jan	Feb	Mar	April	May	June	July	Aug	Sept	Oct	Nov	Dec
Flood												
Drought												
Cyclone												
Fire												
Epidemic												
Cultivation												
Migration												
Employment												
Education (school closed)												
Health problems												
Water problem												
Sanitation												
Lean season												

C. Time and Trend Analysis of Resource Vulnerability

Respondent: Men & Women (*Make sure that there is participation from elderly men & Women*)

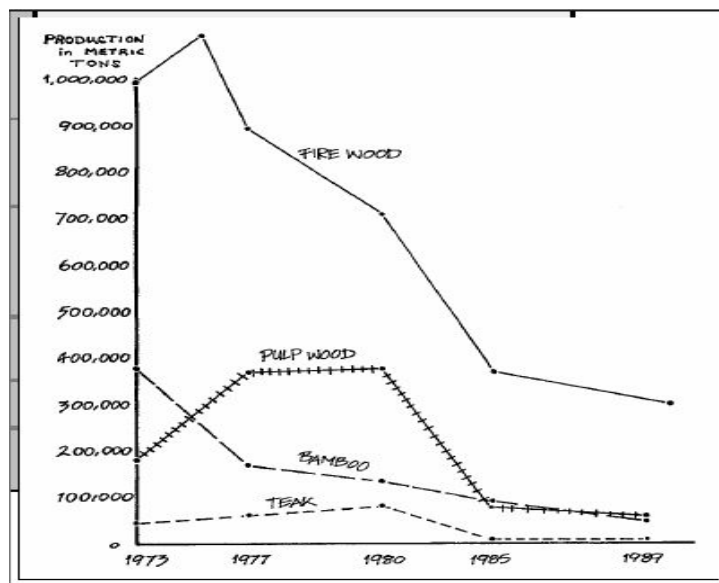
- Micro-planning for conservation and wise use of wetland would require undertaking trendlines for:
 - ✓ Lake resources
 - ✓ Forest resources
 - ✓ Population
 - ✓ Migration
 - ✓ Agricultural Productivity
- Timelines are an important source of information to highlight ecological, socio economic and / or institutional changes within a village.
- A time line is a list of key events in the history of the community that helps identify past trends, events, problems and achievements in the people's life.
- Timelines help to define the current resource use in the perspective of temporal changes, which may include changes in land use policy, immigration or migration, implementation of a developmental project and or introduction of a new regulatory regime, as notification of protected areas etc.

A timeline may be constructed as follows:

- On a sheet of paper draw a line with years as markers. Assess from the group the oldest person present and for how long back can information be generated
- Mark an important event on the sheet of paper as a beginning, for example Chilika Legislation banning shrimp farming
- From the event, start identifying key historical events on the time line. You may also involve participants to link key trends in resources to the timeline and record the discussions

1950s	Private land allocation and titling
1968-1970	Commercial clear-felling of forests in the area
1970	Kotwalia basket-makers begin to settle in Phulwadi
1980-1987	Repeated attempts and failures to reforest Gamtalao area with <i>Acacia auriculiformis</i> and Eucalyptus
1988	Circle conservator and GFD staff hold meeting with Gamtalao villagers to discuss reforestation, community needs, and collaborative management possibilities
1988	Formation of Gamtalao Forest Protection Committee (unregistered); 25 hectares protected with enrichment planting of local species
1989	Gamtalao village begins protecting 60 additional hectares; Phulwadi villagers request the people of Gamtalao to allocate 35 hectares of forest land under their protection
1990	Gamtalao FPC places 20 more hectares under community protection
1991	First gobar gas plant set up (12 total)
1992	Phulwadi women propose to establish <i>Mahila Mandal</i>

For every change exhibited, reasons should be elicited from the communities, and mapped on the associated timelines. A sample trendline is illustrated below:



Take into account the increase in population over the years to evaluate the stress on resource availability

D. Vulnerability Mapping (On Landscape map)

Respondent: General community

- Which direction the flood/cyclone comes? (Applicable in case of flood and cyclone)
- In how many houses water enters during hazard?
- Mention the distance of the family and resources from the hazards.
- Location of the family and resource (elevated and low lying).
- Time of hazard (early morning, afternoon, evening, late night)
- Show the location which is prone to flood/cyclone/epidemic/drought near to hazard. Please mention which of the families and resources are fully or partially hit by hazard.
- The catchment area in the village along with the areas from where hazard enters?
- Where the shops/markets are available? (no. of shops/market)
- Capture the institutional vulnerability and what are the elements which become defunct during disaster
- Capture the human relation/trust factor during disaster

Rank the elements at risk for a particular hazard

Flood							
	What is the location	Why you feel they are vulnerable	High	Medium	Low	Number
Human Life*							
Houses							
Livestock							
School							
Any other							
Cyclone							
Human Life*							
Houses							
Livestock							
School							
Any other							

- Physically challenged, pregnant women, elderly, children

E. Mobility Pattern

Respondent: To be conducted separately for adult male, female, boys, girls, pregnant women, physically challenged, elderly persons

Expected results:

1. Mobility pattern of adult including male & female and adolescent including boys and girls will be known- inside and outside the village before, during and after the hazard
2. Duration of stay at any place will have been known
3. Where do they access basic shelter, food, water, sanitation etc
4. Frequency of changing one place and frequency within a day will be known
5. How do they go and what asset do they use for transport will be known
6. Impact of hazards on the mobility and impact of mobility on their life will be known.
7. How the mobility of livestock get affected due to hazards.
8. The problem faced due to mobility during hazard will be known

Process:

- Draw a point on the chart and make adult/adolescent assume it as that this our village where they live
- Ask them to tell those areas where they move within the village before, during and after emergency situation (flood/drought/cyclone/epidemic situation) and mark them on the chart as per the reason (*food, Shelter, Water, grocery, sanitation etc*), direction and the distance of that place from the village. People must draw those directions. ---- Write the name of those places on the chart
- Mobility mapping outside the village before, during and after flood/drought/cyclone/epidemic situation and mark them on the chart as per the reason, direction and the distance of that place from the village. People must draw those directions. ---- Write the name of those places on the chart
- Please ask how do you go to those places before and during flood situation
- Then ask one by one the distance of place from the village in case of outside movement or centre of the village in case of within the village movement.
- Ask people for what purpose (*food, Shelter, Water, grocery, sanitation, livelihood, medical, asset protection etc*) they move to those places
- How much time they spend there?
- Ask them the frequency of their movements.
- What is their mode of transport?
- Ask what is the impact and risk of such mobility during emergency / What are the problem that you face while visiting any place during hazard?
- Different chart will be used for both type of mobility
- Please share what are the place in and around village where delivery is done during hazard?

STEP 5: CAPACITY PROFILE

A. Coping Mechanisms

Respondent: Community members (Please ensure to record the individual capacities of male, female and children)

Expected Result:

1. Gives an understanding of what the individual members and community do to cope with the hazard
2. Understand the individual skills they have to save lives

Process:

- Prepare a matrix for what the individual village members and community as a whole do for prevention, mitigation, individual survivability and community readiness.
- Record what means they adopt to strengthen their livelihood?
- How well prepared they are for health related problems during/after hazard?
- Record how effective and efficient is the governance
- Record how the individual capacities of educated and illiterate differ

	What are the existing mechanisms	What is required	Gaps
Prevention			
Mitigation			

	What they do		What needs to be done	
	Pre- disaster	During disaster	Pre- disaster	During disaster
Individual Survivability				
i. Food				
ii. Water				
iii. Sanitation				
iv. Shelter				
v. First Aid				
vi. Mobility				
vii. Early warning				
viii. Any other				
Community Readiness				
i. Food				
ii. Water				
iii. Sanitation				
iv. Shelter				
v. First Aid				
vi. Mobility				

vii. Early warning				
viii. Any other				

B. Problem Tree Analysis

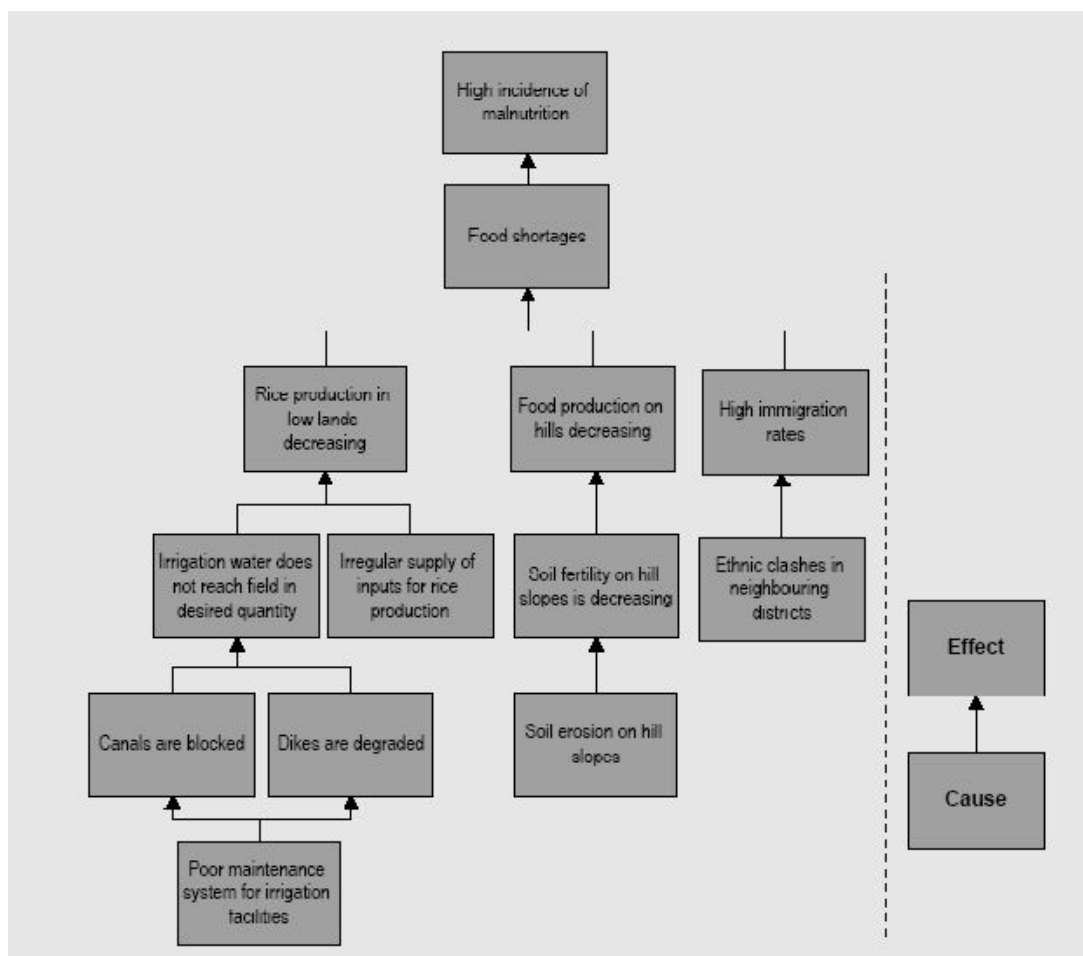
Respondent: Male and Female members of Village

1. This is a visual problem analysis tool that can be used to specify and investigate the causes and effects of a problem and identify the possible relationships between them.
2. As the name implies, this tool resembles a tree. The trunk of the tree is the main problem under analysis. Roots of the tree are used as visual representations of causes of the main problem while the branches stand for the effects.

Process

- Identification of major problems and needs as perceived by the community.
- Rank problems to identify the key problems
- To draw the correct problem tree, the main problem must be stated or formulated correctly.
- A problem should be stated not as the absence of a solution (e.g. food is not available), but as an existing negative state (e.g. a part of the community is malnourished).

An illustration of problem tree is as done below:



C. Focus Group Discussion

i. Family Readiness

Respondent: Individual Families

Expected Results:

- Existing systems, mechanism and practices related to family readiness will be known
- The limiting factors for coping and adaptation will be known

Process:

- First of all explain what family readiness and community is all about & its importance
- What effort they make to mitigate the hazard?
- How do they manage food for human being during hazard?
- How do they manage food for livestock during hazard?
- How do they manage fuel during hazard?
- How do they manage shelter for human being during hazard?
- How do they manage shelter for your livestock during hazard?
- How do they manage sanitation practices for human being during hazard?
- How do they manage sanitation practices for livestock during hazard?
- How do they manage water for human being during hazard?
- How do they manage water for livestock during hazard?
- How do they ensure safety and rescue of human being during hazard?
- How do they ensure safety and rescue of livestock during hazard?
- How do they manage their livelihood during hazard?
- How do they ensure safety of their household assets, valuable, documents?
- How do they communicate from one place to other place during hazard?
- What are the challenges that they face during hazard and how do they deal with it?
- How hazard affects their crops and agricultural produce?
- What help do they get from government?
- How has climate affected the incidence and occurrence of hazard?
- What are the negative impacts of change in climate?
- Have they noticed any positive outcome of such impacts? *(Please specify with example)*

NOTE:

- ***Please explore indigenous mechanisms along with other efforts***
- ***Also take data on how many families practice such systems***

ii. Community Readiness

Respondent: PRI, General community (men & women) who knows the existing system on community readiness

Expected Results:

- Existing systems, mechanism and practices related to community readiness will be known

Process:

- First of all explain what community readiness is all about & its importance
- What efforts are made by panchayat to prevent the hazard?
- What efforts are made by general to prevent the hazard?
- What is the existing system of early warning?
- What is the existing system to ensure food for human being during hazard?
- What is the existing system to ensure food for livestock during hazard?
- What is the existing system to ensure shelter for human being during hazard?
- What is the existing system to ensure shelter for livestock during hazard?
- What is the existing system to ensure sanitation for human being during hazard?
- What is the existing system to ensure sanitation for livestock during hazard?
- What is the existing system to ensure water for human being during hazard?
- What is the existing system to ensure water for human being during hazard?
- What is the existing system to ensure safety and rescue of human being during hazard?
- What is the existing system to ensure safety and rescue of livestock during hazard?
- What is the existing system to ensure livelihood of families especially marginalized one during hazard?
- What is the existing system to ensure health treatment of human being during hazard?
- What is the existing system to ensure health treatment of livestock during hazard?

NOTE: Please explore indigenous mechanisms along with other efforts

Section – 1: Do's and Don'ts

Do's:

- Always be energetic with people.
- Sit in a circular arrangement in whatever place are able to provide. So, we may have to perform within the limitation.
- Maintain eye contact with all respondents available there for the exercise.
- Involve all maximum people in the discussion available at that time.
- Catch possible stakeholder of the community as per the requirement of the tools.
- It will be better if the place is bit quite and specially according to the choice of people.
- Not to involve too much with saboteurs.... Ask your co facilitator to take him/her away from that place and clear his/her doubts.
- Carry all material.... charts, markers, colours, scissor, tape, papers and other material needed for conducting exercise etc
- Carry your business/visiting/identity card with you. Sometime people may ask for your identity card.
- Always take notes.... Observation, quotes by various stakeholder.
- Use local language understandable by people.
- We are going to learn from people. So we need to hear them carefully and accept them in whatever situation are they in.
- We are the facilitators and people will be the doer.
- Consensus amongst focused people need to be assured
- After every exercise, name of all participants have to be written.

Don'ts:

- Never be angry or shout on people since they might be already in difficult situation.
- **NO LOADED QUESTIONS**
- Not to dependent on only one/few people in gathering information
- Don't preach people... how they should live life and what they should do.... Remember... they have their own style of living with flood/drought/cyclone/epidemic... they may not like your boring lectures...do not pass any judgement.
- Not to be in hurry.... Please go with the pace of the people.
- We may not be able to get so many people together then in that case please do it in small group.
- Do not pass any judgement.
- Do not commit anything such as “this assignment will be followed by some concrete intervention” because they may have some expectation from our side.
- Do not limit to the lead question only but also do enough probing to generate discussion.

Process:

1. Identify stakeholder (10-12 in number) according to the tool.
2. Create a friendly environment with people but make sure we are not casual.