

Social Analysis using Qualitative tools



International Crops Research Institute for the Semi-Arid Tropics
Patancheru 502 324, Andhra Pradesh, India

Contributors

R Padmaja : Lead Scientific Officer, ICRISAT

B Rupsha : Consultant (Applied sociology), ICRISAT

M C S Bantilan : Global Theme Leader – Global Theme on Institutions, Markets,
Policy and Impacts, ICRISAT

Usefulness of the Tools

The purpose of this guideline is to serve as an aid for sociologists/ researchers to make sure that certain issues are not omitted while collecting information on the perceptions of vulnerability and adaptation to climate change

The usefulness of these tools lies in the fact that each of the tools complements the other to get a better understanding of the village/ community, their perceptions, attitudes and dynamics and development pathways, climate change and the issues of concern with regards to adaptation strategies. No one tool is complete without the aid and supplement of the other. For example if one is doing a time line exercise, it can be supplemented and enriched if one has the aid of the resource social and even the seasonal maps to understand whether, the resource allocation, social setting or the weather has had an influence on the individual's wealth condition. Similarly, while conducting a focus group, if the researcher has already done a timeline exercise, he/she can use it for probing into further questions of perception along with understanding the different levels of vulnerability, the reasons of the same and why certain adaptation strategies were taken up.

Guidelines for Qualitative Data Collection

Qualitative Tools to gain a greater understanding of the experiences of poverty – Economic, psychological, sociological aspects; understand and describe social processes, social change and other shocks

The purpose of this guideline is to serve as an aid for sociologists/researchers to make sure that certain issues are not omitted while collecting information on the perceptions of vulnerability and adaptation to climate change]

Contents

Qualitative Research in Brief	4
1. Focus Group Discussions.....	6
2. Wealth Ranking	15
3. Timelines	26
4. Social and Resource Maps	31
5. Seasonal Calendars	42
6. Life History and Narratives	46
7. Transect Walks	50
8. Venn Diagrams	55

Qualitative Research in Brief

Qualitative research is concerned with developing explanations to any social phenomenon and capturing the subjective aspects of our world. It seeks to answer questions about¹:

- Why people behave the way they do
- How opinions and attitudes are formed
- How people are affected by the events that go on around them
- The difference between various social groups

This form of research helps in understanding perceptions of the respondents and how and why certain outcomes were achieved or not. It has the advantage of allowing more diversity in responses and capacity to adapt to new developments and issues while the research itself is going on. Some of the key features of Qualitative Research are as follows:

- Goes into depth and details as compared to a standard questionnaire
- Openness can generate new theories and recognize phenomena ignored by most
- Does not tend to impose categories but helps people see views of those studied
- Attempts to avoid pre-judgements - goal is to try to capture what is happening and present people from their own perspectives and views

However, it is important to note that qualitative research acts as a compliment to quantitative research and it could also be said that it sets the ground for objective research and analysis. In no way does it act in isolation and the richness of any research output is best achieved if both the methods are involved.

For the purpose of our study, the document provides a guide to some of the key qualitative tools and techniques that can be used for gathering perceptions, observing trends and providing analysis with reference to poverty in all its dimensions, livelihood options, dynamics and development pathways, gender and risks and shocks including climate change.

¹ Hancock Beverly, (2002) An Introduction to Qualitative Research , Trent Focus Group



1. Focus Group Discussions

Introduction

- Semi-structured group meetings during which participants contribute to the generation of data on specific issues of concern to a community, stakeholders, projects or policies; in this case it is questions related to climate change and the perceptions of the farmers, women, youth etc.
- The meetings serve as a forum to address a particular concern and reach consensus with regards to a research topic/inquiry (eg. climate change) in terms of socio-economic, technological and institutional capacity of the community to embrace particular adaptation strategies. It is also a good way of capturing reactions to a given phenomenon or intended interventions in a community
- A series of focus groups is not only a rapid way of collecting comparative data but is also a reliable method of cross checking information got from other sources

Objective

The focus group discussions are for the purpose of understanding how the lives of the people in our villages have evolved through time and how they are getting affected by climate variability in particular and climate change in general. The focus group serves as a value addition in understanding the socio-cultural factors involved in shaping adaptation strategies to climate change.²

Exercise Requirements

Note book, pen and paper for taking down notes while the discussion is going on, in addition a Dictaphone if possible to record the conversation for transcription and further analysis.

Steps

- Make sure that before the group members are assembled there is a gatekeeper who can make sure that there are no unwanted additions in the group who may

² BVJ Gandhi, (2008) Field Work Plan: VLS Villages Master Document for Qualitative Research Component, ICRISAT GT-IMPI

result in deviation from the issue of discussion, a moderator who facilitates the discussion and a person to take down notes while the discussion is taking place.

- Assemble a group of 8-12 members. Depending on the issues you are discussing it can be a mixed group or specific groups of men/women/ caste based groups.
- Preferably take down the names of the participants later after the discussion as they might get uncomfortable if you start writing their names



FGD session Source: Shirapur 2009

- in the beginning itself. You could however note down basic details for example the number of members in the group/ proportion of men and women if the group is a mixed one
- Keep in mind that the members of the group should have something in common depending on the profession, socio-economic status or a group which has been the part of implementation of some programs in the villages
- Introduce the topic and explain in detail the objective of the discussion
- Have a well prepared question guide so that you do not miss out on important points (see box 1)
- Since this is different from the other exercises which involve mapping and drawings, make sure that you start the discussion at the right note by an ice breaker of probably introducing yourself or asking the group to sing a song which could be related to the harvest or a festival
- Facilitate the discussion and make sure that all members are participating as much as possible. If you feel that one of the members is dominating the discussion encourage the others to speak but without offending your key speaker of the group

Documentation

Focus Group Discussions are usually recorded as some crucial points can be missed out while taking notes. Therefore, the best method of documentation is the transcription of the recorded discussion along with the inclusion of the field notes.

Box 1. Key questions to gather the perceptions of people regarding changes in climate over the past decades

- Has the village changed over the past ten years? If yes, how has it changed and what are the reasons for these changes? Does the change have anything to do with an experienced change in climatic conditions?
- Is the village better off or worse off now? Why?
- How have climatic shocks in the past affected the way the village has developed in ten years?
- Which types of households were affected and how? Who in particular was affected?
- Is there anything that can be done in advance to prevent or soften the impact of this type of event? If so, what? Does anyone do this?
- Do people in the village have any savings, either in cash or kind? For what purpose might they have savings?
- Is there any way by which people have access to financial aid in case of an emergency or unforeseen event or shock? If yes, who usually gives these loans? What is the rate of interest? What happens if one cannot repay the loan?
- Do people ever borrow money in order to buy something (consumption or investment loans)? If so, what is usually purchased with borrowed money?
- What are all the extra costs a family must meet when they lose different members (in the event of migration or sudden death in the family)?
- What are the ways that an extended family, community group or caste group cooperates to help its members?
- Have any children been left without any close relatives (parents, grandparents, aunts and uncles) who could take them into their households in case of the emergencies or in case of a climatic shock?
- What kinds of help did people in the community provide to those affected? Who provided help, and what kind:
 - Relatives (extended family)?
 - Landlord or employer?
 - Club or association?
 - Local government (Panchayat)?
 - NGOs or donors?
 - Neighbors (nonrelatives)?
 - Community group?
 - Religious leaders?
 - Other government officials

Two examples of FGM guides are given below for easy understanding.

Example 1: FGM on Vulnerabilities and adaptation strategies

Objectives

- To determine how farmers are experiencing the impacts of drought/flooding/any climatic event or shock
- To document farmers' past and current coping strategies to climate variability and change and to evaluate the success of the current measures that have been adopted to cope with drought/flooding/any climatic event or shock
- To determine which of the coping strategies or measures farmers are willing to adopt in an event of such future shocks in the light of global environmental change

Additional Probing questions -

- Definition of drought/flooding/any climatic event or shock from farmers' perspectives
- Farmers' experience of drought/flooding/any climatic event or shock
- Decline/increase in rainfall; Dust storms; Deforestation; Soil erosion
- Decline in soil moisture; Declining soil fertility
- Loss of biodiversity
- Vulnerability to drought/flooding/any climatic event or shock
- Incidences of drought/flooding/any climatic event or shock and Impacts on agriculture
- Coping with drought/flooding/any climatic event or shock
- Major decisions taken to cope with drought/flooding/any climatic event or shock
- Existing plans in an event a climatic shock occurs very soon
- Major strategies to cope with future drought/flooding/any climatic event or shock
 - Main livelihood options
 - Is the income from the primary livelihood system enough for the families round the year?
 - If no, how do you overcome the deficit? (multiple responses are possible)
 - 1. Borrowing from traders
 - 2. Kinship support
 - 3. 4. Relief assistance
 - 5. Reducing consumption
 - 6. Eating wild foods
 - 7. Other (specify)

- Which activities does your household resort to other than primary livelihood system?
- What are the reasons that led your household to resort to one or more of the above activities?
- How do you evaluate viability of agriculture for future? If less viable, why?
- Which livelihood system (s) will be viable for your family in the future?
- What strategies do you practice to deal with environmental stress like drought
- Do the community members support each other during bad and good times?
- If your household had a problem and needed money or food urgently, would you be able to get it from your community or from relatives?
- How many people could you ask for this kind of help?
- In past 12 months what type of assistance did the village receive from government or aid agencies? What type
- During the last rain season, did any households in the village suffer any shortage of food?
 - If yes, in which months was food shortage most acute ?
 - How many months did the food shortage last?
- During that worst month, how many times a day did the adults and children in a household eat?

- In the periods given below is or was your village situation better, the same or worse?
 - Last year
 - last 5 years
 - Last 10 years
 - Last 15 years

Example 2 - FGM on Ladder of life or moving out of poverty - Community Level

Factors

Name of the community: _____
 Village : _____
 Mandal : _____
 Date of focus group: _____
 Type of focus group: Adult Male _____ Adult Female _____
 Facilitator: _____
 Note Taker : _____

Focus Group Members

Sl.No	Name (family name needed)	Age	Caste group	Class group (land holding)
	Total number			

A. Compared to ten to fifteen years ago, this community is:

- a. More prosperous _____
- b. About the same _____
- c. Less prosperous _____

Why? How has the community changed

B. Most important factors that have helped the community to prosper:

1.

- 2.
- 3.
- 4.
- 5.

Why do you think so these factors have helped the community to prosper
Additional details on these and other important positive factors

C. Most important harmful factors that have hindered the community:

- 1.
- 2.
- 3.
- 4.
- 5.

Why do you think so these factors have hindered the community to prosper
Additional details on these and other important harmful factors

D. Most important factors that caused the community to stagnate:

- 1.
- 2.
- 3.
- 4.
- 5.

Why do you think so these factors have caused the community to stagnate
Additional details on these and other important factors that have caused the community to stagnate:

E. Ten years from now, the community will be:

- d. More prosperous? _____
- e. About the same? _____
- f. Less prosperous? _____

Why do you think so?

F. What hopes did people have for their community?

Note:

It is important that you have more than five focus groups atleast to ensure the validity of the data or the responses you are getting. It should be remembered that there is only an upper limit of the number of members not on the number of focus group meetings you can have. The ideal group of eight to twelve members ensures better interaction, communication and sharing of information. Carrying out several focus groups ensures adequate breadth and depth of information and helps see through information which could be influenced by internal factors of the group along with simply unwillingness to interact

Notes and Learnings

A series of horizontal dotted lines intended for writing notes and learnings.

2. Wealth Ranking

Participatory wealth ranking is a tool that captures differences in standards of living as perceived by the community themselves, thus making it possible to gain insight into relative social stratification. - Chambers

“Wealth” is defined in each society using different criteria.

Introduction

- Wealth ranking is used to understand the people’s perceptions of wealth and welfare in their own village. Most research agencies use Social Map of the village as a basis for sample selection, but in the villages where we have the advantage of having the census of the entire village, this makes the process tighter and randomness is accurate.
- Wealth-ranking not only helps us identify the rich and poor families of the village but also gives us an insight into what constitutes wealth and what constitutes poverty as far as the people are concerned.



- The purpose of the exercise is to learn the meaning of wealth, poverty and vulnerability in the view of the community members, and to get their ideas on what indicators (beyond cash income) define those who are most needy.
- We are also interested in learning about the events that cause people to lose assets or income, and what, if anything, households do to resist becoming impoverished/vulnerable by these events. More generally, we are hoping to learn why some households are able to succeed in recovering from shocks and setbacks, while others lose ground and fall into deeper poverty.
- It is important to explain the purpose and goal of the exercise very clearly before beginning. Otherwise, the community may draw the conclusion that special benefits will flow to those who are ranked lowest in the exercise. The community members should understand that the households that are ranked during the exercise serve only as examples to generate discussion, and are not themselves the object of the exercise

Objective

- To investigate perceptions of wealth differences and inequalities in a community
- To identify and understand local indicators and criteria of wealth and well-being
- To map the relative position of households in a community

Exercise Requirements

Markers and large sheets of paper. Small slips or scrolls of paper to write down the names of the persons, boxes to keep the piles of slips by category.

Steps

- Assemble a small group of village residents (about 8-15 participants. This should be a mixed group of community members (males, females, poor and better-off). The FGM participants (select those who know the village and its inhabitants very well) are asked to sort the number cards/slips in as many piles as there are wealth categories in the community, using their own criteria.
- From the names of household heads collected during the Focus group meetings or Social Mapping Exercise, chose 30 names by random selection. If the census lists

of the village are readily available, in such cases a numbered list is made of all the households in the community and the name of each household head and the household number is written on a separate card/slip

- Place all the slips of paper in a bowl. Mix the slips together and then pull out 30. Do this in full view of the participants, or ask the participants to help pull out the names, to convey the understanding that the selection of these names was random. Ask two people from the FGM to be volunteers for this exercise.
- To introduce the idea of wealth ranking, ask informants to think of the wealthiest and poorest households in the neighborhood. Give the volunteers two cards, one saying "wealthiest" and the other "poorest." Ask them to place the two cards at either end of a table or a mat on the ground.
- Ask members of the group to name the heads of the five poorest households in the community, write these names on cards and ask the volunteers to place them in a stack next to the "poorest" end of the mat or table.
- Explain to the group that all the households in the village could be arranged in order of wealth between the two extremes represented by these cards, but to save time, they are being asked to arrange only 30.
- These 30 should be sorted into piles (as participants feel is appropriate, but 3-5 categories is the usual number) that represent households of similar wealth. After the larger group gives its opinion on the economic standing of the household represented by the card, the volunteers should place the card in the appropriate pile. When sorting the cards, the participants are asked to discuss each household's well-being and then assign it to the correct group on the basis of the visible and evident signs of wealth or poverty that community members normally point to when informally assessing the economic status of various households. You should make it clear that, although only the name of the household head appears on the card, they should consider the combined wealth of the entire household in making their assignments.
- If the volunteers are literate, ask them to complete the exercise independently. If the volunteers are not literate, you should read out each name and ask them to

point to the pile in which it belongs. The recorder should make note of any comments made by the group that describe their reasons for assigning the households to various piles.

- After sorting, ask the informants for the wealth criteria for each pile and differences between the piles. Assure the informants of confidentiality and do not discuss the ranks of individual families, so as not to cause bad feelings within the community.

- List local criteria and indicators derived from the ranking discussion.



- Classification criteria are not extensive enough. Some of the classification criteria are as follows (use only for probing but community to decide on the criteria):

- Better Off/Rich :Own house, well built. Employ labour, no need to borrow money, are in a good position to lend money to others, they own good quality land and livestock.
- Medium : Own land, but not large holdings, own house, have the confidence and capacity to borrow money and repay it, considered creditworthy by others, employ labour.
- Poor : Either landless or having marginal lands, forced to borrow but poor credit worthiness; find it difficult to repay loans or create assets; forced to sell assets under crisis, forced to work for others, etc.

- After the piles are complete, ask the group (see box 2 for some key questions):

- Point to the different piles one at a time :
what do the people in this pile have in common that led you to put them in the same pile? (Possible probes include: similar property holdings, household type, e.g. female-headed, income, livestock, educational attainment, number of



workers in the family, etc.)

- Does this pile have special problems or opportunities that other groups do not have?
- Are there any households who are even poorer than those in the lowest pile? If so, who are they – why are they so poor?
- This research team visited this village and conducted this exercise ten years ago. Are there any extremely poor households you would have placed in a better-off pile if you had been in the group that conducted this exercise ten years ago? In other words, are there any households that have lost ground and become poorer? Who, and how did this happen? (Record names of downwardly mobile households for later follow-up).
- Are there any households that you would have placed in the poorest group ten years ago who are now in a better off group? If so, how did they improve their situation?
- What prevents every poor household from improving their well-being by using the same strategy?
- *Note: If the ten-year time period is difficult for informants to grasp, prompt them with reference to key events or political eras from that period. Alternatively, point to a child of approximately the correct age and say “When this child was born...”*
- Have any households fallen down into deep poverty and then recovered their previous (higher) level of well-being? How did they recover?
- Why do you think some households are better at recovering after a misfortune than others – is there something they are doing more successfully?
- Is any pile now larger than it would have been ten years ago? In other words, is the proportion of the village that is well-off (or poor) larger than it was then? Have a greater number of people lost ground or gained greater wealth during this period?



Points to remember

- Discuss the criteria that can be used to describe “wealth” (or well-being), and decide how many wealth categories will be used.

- Different groups may well have different views on criteria for wealth, especially men and women.

Discussion. An interesting topic is what can be done to get people to move to a higher wealth category. It is likely that discussion will come back to the issue of what criteria are used to define the categories of wealth.

Documentation of Wealth Ranking

Name of location:		Date:	
Name of note-taker:		Total number of participants:	
Name of facilitator/s:		Number of men:	
Method used:	Wealth Ranking in Small Group of Key Informants	Number of women:	
What was good during the exercise?			
What was difficult?			
Additional Information or special things you noticed or want to point out:			

Results: Answer given to the key questions:

What are local perceptions of wealth differences and inequalities in the community and what is the relative position of a household in this grouping?

Socio-economic groups	Local Indicators for this group	Household Numbers in this group
1.		
2.		
3.		
4.		
Other		

What else did you observe or notice?

How do you assess the situation, what are your conclusions:

Please, do not forget to **attach a copy of the Numbered List of Households, indicating the household numbers!!**

Box 2. Key questions for a wealth ranking exercise

- In any village there are two extreme classes of people the richest and the poorest does your village have the same? (Place the two headers in two extreme corners)
- Are there people who fall in between these categories? If yes what are the various categories? note the number of categories mentioned by the group)
- Point to the pile and ask them to pick random names and place them in various categories a maximum of 10 examples per category is sufficient.
- Why is a person rich? Or poor? Or other category? (Enter the information below the names in quantifiable manner; E.g. Peter has two cows, Yin has a large family size of 6 members, etc)

Note:

Key variable to be mapped and linked with the social networks and climate change specific questions is to ask how the people in various categories coped with shocks or benefited from positive events in the village. This will be collected during the timelines.

Notes and Learnings

3. Timelines

Introduction

- A graphic technique used to show significant and non repetitive changes or events which have taken place in a village over time
- This not only helps in identifying and representing sequences of key events and major changes but also helps in tracking changes in specific issues related to climatic conditions over time and predicting future events based on past experiences
- It tells us about the historical upheavals and the downfalls or lows that a village/community has experienced and their responses to them which could also lead to finding solutions to current problems
- The purpose of carrying out this exercise is to find out the main events which have influenced the community over time. This could be some good as well as bad events. This could also be a way by which one can understand the current socio-economic status of the village which could have been influenced by past events
- While carrying out this exercise one should be cautious as some sensitive issues of the past may be raised. In case of such a situation, the facilitator can move on to the next time period and come back to the sensitive issue later as too much of discussion on the sensitive issue refutes the purpose of the exercise

Objective

To identify the shocks and events that promotes critical reflections of causes and impacts of change in context to climate change.

Exercise Requirements

Markers and large sheets of paper. Note books, paper and pen to make a copy of the timeline and to make notes of the discussions that follow. However, if the timeline is drawn on the ground, then a large area is required along with sticks, stones, leaves, colours, seeds and so on to depict various events in time

Steps

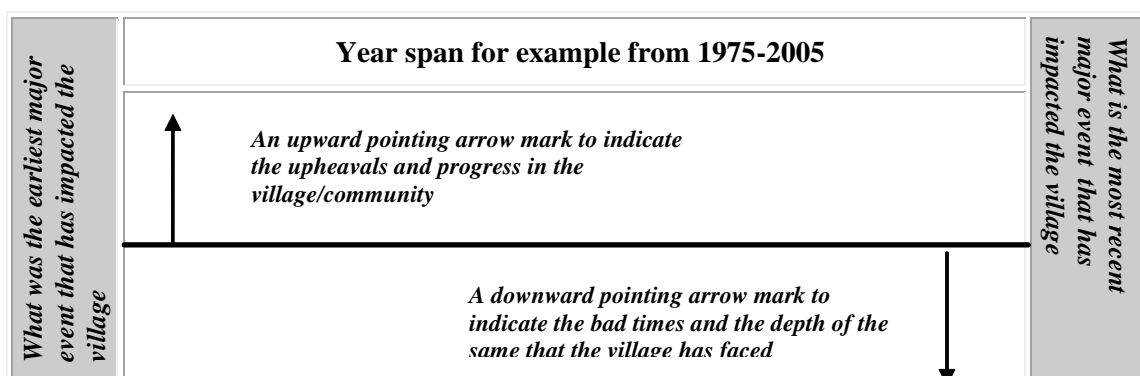
- Identify the groups which are going to take part in the exercise. In this case when timelines are being done, it is advised that it be a mixed group. *A mixed group is*

defined as a mixture of men of different age groups or women of different age groups or a group having both a mixture of men and women. It is very important to have people who know about the past and present of the village to be part of this group.

- For this exercise in order to get the required information on the important events, it is advised that the group be comprised of a mixture of old and young people both men and women. The group composition has to be a minimum of 5 and preferably should not exceed 15 members.
- Clearly explain the objective of the exercise to the group and make sure that they have understood the same and that they are comfortable with carrying out the exercise (box 3 has some key questions)
- Start the timeline by asking the above two questions. Indicate these two main events in the chart/ sand/ paper on the two extreme ends
- Pointing to these two events, map all the events that have happened between these two times frames in the village. The villagers usually go back and forth in remembering the years or events, which is fine.
- Record every event mentioned in the year in order to get a better analysis. Likewise map all the events as far as they can remember.
- For all events, probe as to how it affected specific or different sections of people in the village, (e.g. if a drought relief measure was available to all). For negative events, identify how the village coped with the event and how individuals in certain sections coped with it (e.g. how did the poor vs. rich cope in the event of a hailstorm?)

Documentation of Timelines

Please do not forget to note the names of the participants that have been part of this exercise and do document the field notes immediately or as soon as possible



Box 3. Key Questions

- When was the village established and by whom
- What is the earliest major event that you remember that has impacted the village?
(Note down the approximate year if possible. The approximate year can be coinciding with a historical event that the village can relate to e.g. year of independence)
- What is the most recent, major event in the village that has impacted the village as a whole? *(Note down the year)*

Write these two events in the chart/sand/paper on two extreme corners

- Pointing to these two events, map all the events that have happened between these two times in the village. The villagers usually go back and forth in remembering the years or events, which is fine. (Every event mentioned and the year has to be recorded immediately by the Rapporteur in the order it was said and it can be adjusted later on)
- Likewise map all the events as far as they can remember. In case of positive events probe as to how it affected specific or different sections of people in the village,) e.g. if a drought relief measure was available to all). For negative events identify how the village coped with the event and how individuals in certain sections coped with it (eg. How did the poor vs. rich cope with the hailstorm?)

Collect random names of people in the village (according to their farm size or wealth status) and ask specific examples of how those individuals in each category coped with a particular negative event or benefited from a particular positive event).

Note:

Timelines are mainly used to examine a sequence of events over many years. However it can be used to look at a particular event within a given time frame. For example adaptation strategies over a given period of time along with possible diversification that the village has gone through in terms of rise of vulnerability due to climate change

4. Social and Resource Maps

Introduction

- A visual technique through which a map is created by the villagers for the researchers to understand the community layout, in terms of its infrastructural facilities, demography, the existing ethno-linguistic groups along with the occurrence, distribution, access and the use of resources
- It is used to identify the different social groups/institutions and the perceptions that the community/villagers have of them. In addition, it helps in recognizing different features and the significance it has attached to the community along with the problems, possibilities and the opportunities these social groups and institutions have attached with them
- Since it is a graphical representation of one's community by the villagers themselves, it helps them in communicating the perceptions that they have of their community structures, the interactions that exist between different social groups, the distribution of the community in terms of class and caste and the analyses of the resources found and how they are used

Objective

To understand the social layout and the use of the resources of a community/village in terms of its people (male, female, old, children if any, youth), structures and its institutions and how they could possibly have an influence on the development or vulnerability of the village with regards to incidence of poverty in general and climate change in particular.

Exercise Requirements

Markers and large sheets of paper. Note books, paper and pen to make a copy of the maps and to make notes of the discussions that follow. However, if the maps are drawn on the ground, then a large area is required along with sticks, stones, leaves, colours, seeds and so on to depict various events in time.

Steps for drawing a social map

- Identify the groups which are going to take part in the exercise. It should be a focused group depending on the issue being dealt with. If it helps, the group could be a mixed one of both women and men and a mixture of different classes. Getting people of different castes. *(This may be only in the case of India. In case of other countries it is preferable that for this exercise there are representation from different socio-economic class)*
- Clearly explain the objective of the exercise to the group and make sure that they have understood the same and that they are comfortable with carrying out the exercise
- Identify one member of the group who would create the map. The rest of the group will act as his /her aid in adding flesh to the map
- Start by asking him/her to prepare the outline of the map. In case its being drawn on a paper then the borders can be drawn with the markers and if on the ground then rocks can be used to determine the borders
- Ask them to determine the basic directions of East, west, north and south in their own way which they understand best. The researcher can interpret that in the standard geographical language.
- Following this ask the members to identify the center point of the village and identify the current location that they would be sitting in while doing the exercise from the center point.
- This is followed by asking the members to draw institutions and landmarks that are important to the village. These can be probed and facilitated through the above questions
- Once the map is underway, just sit back and observe and only interrupt if absolutely necessary. Let the members deliberate among themselves and discuss. If however you feel that the members might need a little help in the event that they have

abruptly stopped drawing you could provide them with certain headers depending on the situation.

- In case the entire exercise is being carried out on the ground, make sure that one of the team members of researchers is making a replication of it on paper. It is also advised to take down field notes which will emerge as part of the discussion while the maps are being made.

Summarizing the process

- Participants (Apart from Moderator, Observer)
 - Group: up to 6 ; Key informants: 1 or more
- Ask the participants to draw a map of the village, showing all households. For orientation it will be helpful first to draw roads and significant landmarks of the village.
- Discuss whether the total number of households has increased or shrunk during recent years. If there were any changes ask why and whether this has caused any problem for certain families or for the village.
- Ask the participants to also show institutions and places that offer some kind of social service or which are popular places to meet (e.g. schools, churches, health service, traditional healers, local administration office, village leaders, shops, places where people frequently meet to socialize, etc.). Box 4 and 5 has some additional key questions for probing while drawing social and resource maps.
- Ask to show on the map which different ethnic or religious groups live in the area.
- When someone has given an answer, ask the others whether they agree, disagree or want to add something. Encourage discussion throughout the exercise.

Box 4. Key questions for probing

- What are the major resources in the village? (E. g: Water Tank, School, etc)
- In which year was it established?
- Who benefits from these resources and who does not? Why/why not?
- Are there any resources that existed earlier, which are not present today? What was the reason for their closure?
- Are there any resources in the village that are harmful? In what way?
- What additional resources are required in the village?

Resource Map Guide

The resource map of a village usually overlaps with the time line as it maps various resources available to the villagers and its impacts on the development of the village over all. The process of drawing a resource map is similar to a social map but the focus here instead is on the key resources that are available and located in the village. The village takes a lesser focus but the fields and the surrounding areas come into larger focus. Some questions include whose fields are located where; what are the soil types of the fields surrounding the village; what crops are grown, where and why? Who owns fields closer to the village; etc

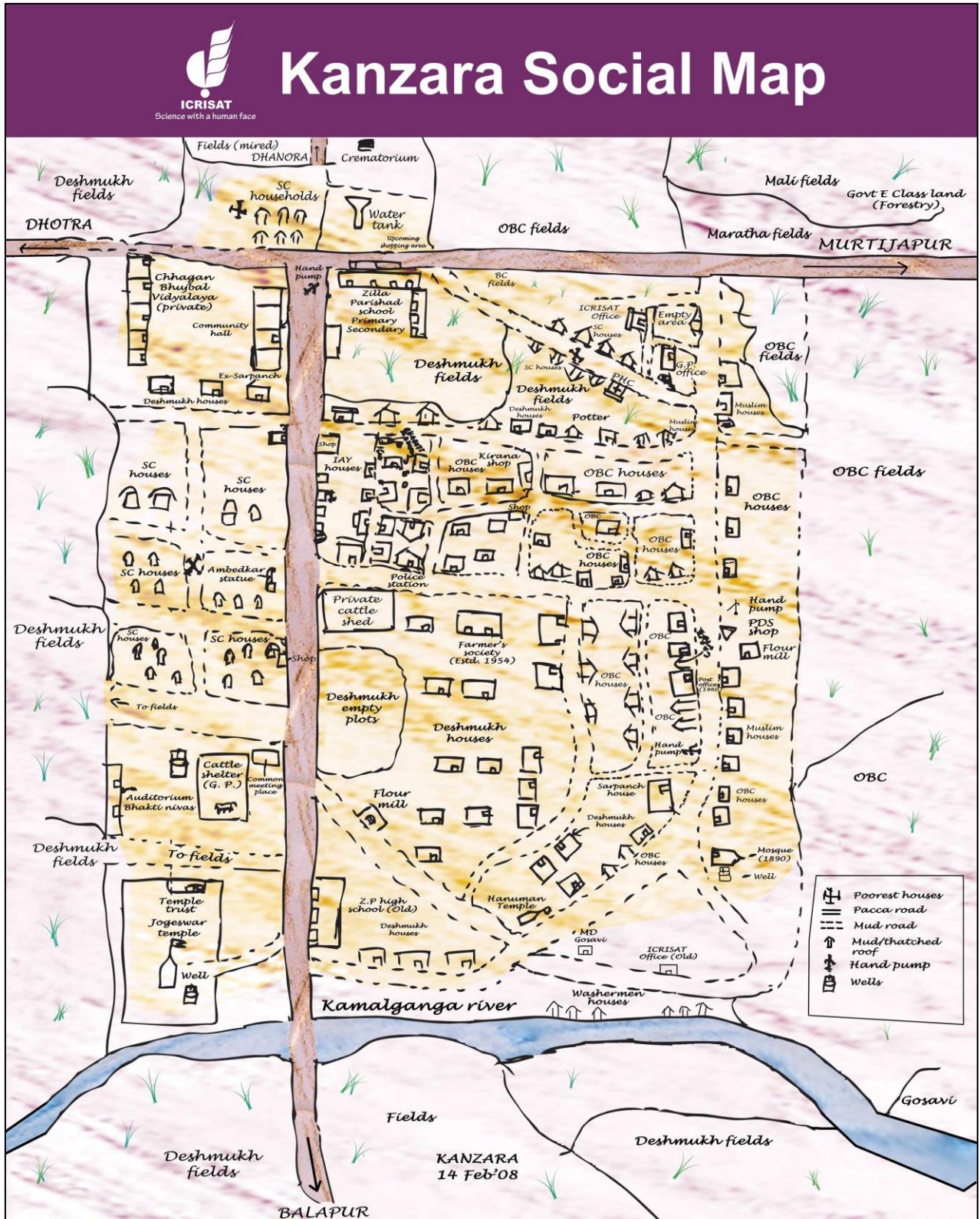
Note:

The social and resource maps of a village usually overlap with the time line as it maps various resources available to the villagers and its impacts on the development of the village over all. The Social Map on the other hand acts as a skeleton for the Resource map where the villagers are asked to point out key the resources in the village.

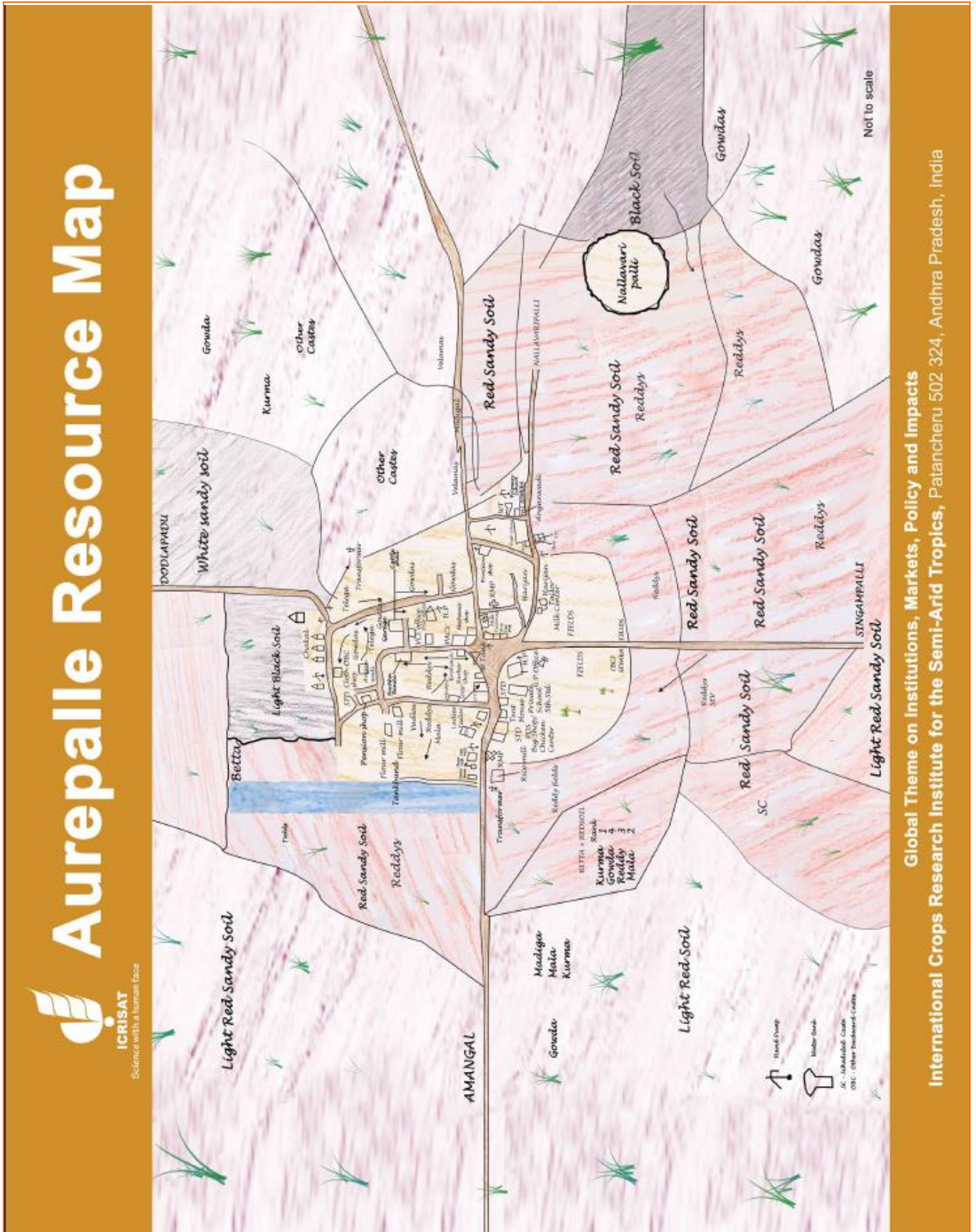
Box 5. Key Questions for social and resource maps

- What are the approximate boundaries of the community with regard to social interaction and social services?
- What social structures and institutions are found in the community?
- How did public buildings develop?
- Who built the community centers?
- Who uses the community centers?
- What are the religious groups and where do they live?
- How do people in the community decide on places of worship?
- What are the ethnic groups and where do they live?
- How many households are in the community and where are they located?
- Which households are headed by females and where are they located?
- How is land distributed for housing?
- What is the soil type that is there in the village and how is it distributed?
- Is the number of households growing or shrinking? (*This is where the timelines will come to use where the researcher can correspond it with the past years and present conditions. This can lead to discussions of issues on migration and the reasons for the same and whether the changing climatic conditions have been responsible for the same.*)
- Has this rate of growth or shrinkage caused problems for particular households or for the community in general?
- What do people do about new immigrants or growing households?
- How does access to community economic, social and political resources differ by household or social group?
- What resources are abundant or scarce?
- Which resources have the most problems or are harmful to the village and why/ why not?
- How does access to land (or another specified resource) vary between households or social groups?
- Who makes decisions about land (or another specified resource) allocation?
- What are the water sources available in the village and how where are they located in the village?
- Where do people obtain water and firewood?
- Who collects water and firewood?
- Where do people take livestock to graze
- What additional resources are required in the village

Example 1: A social map of village Kanzara, Maharashtra, India

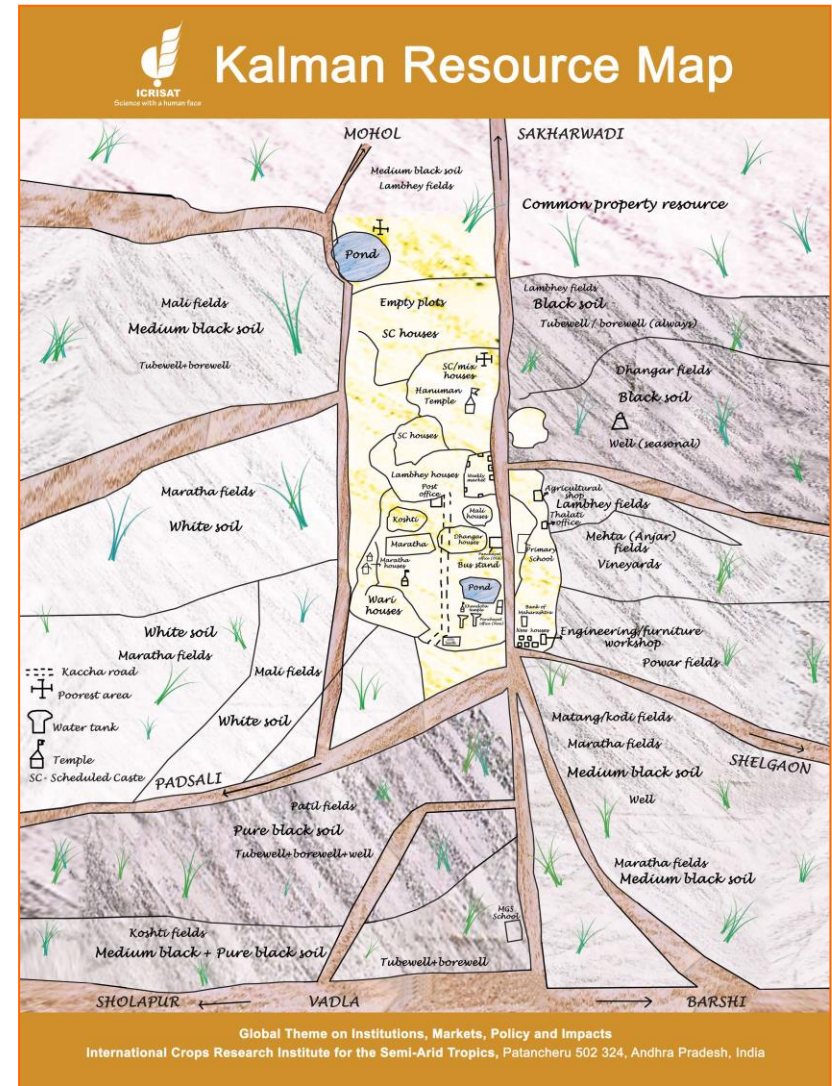
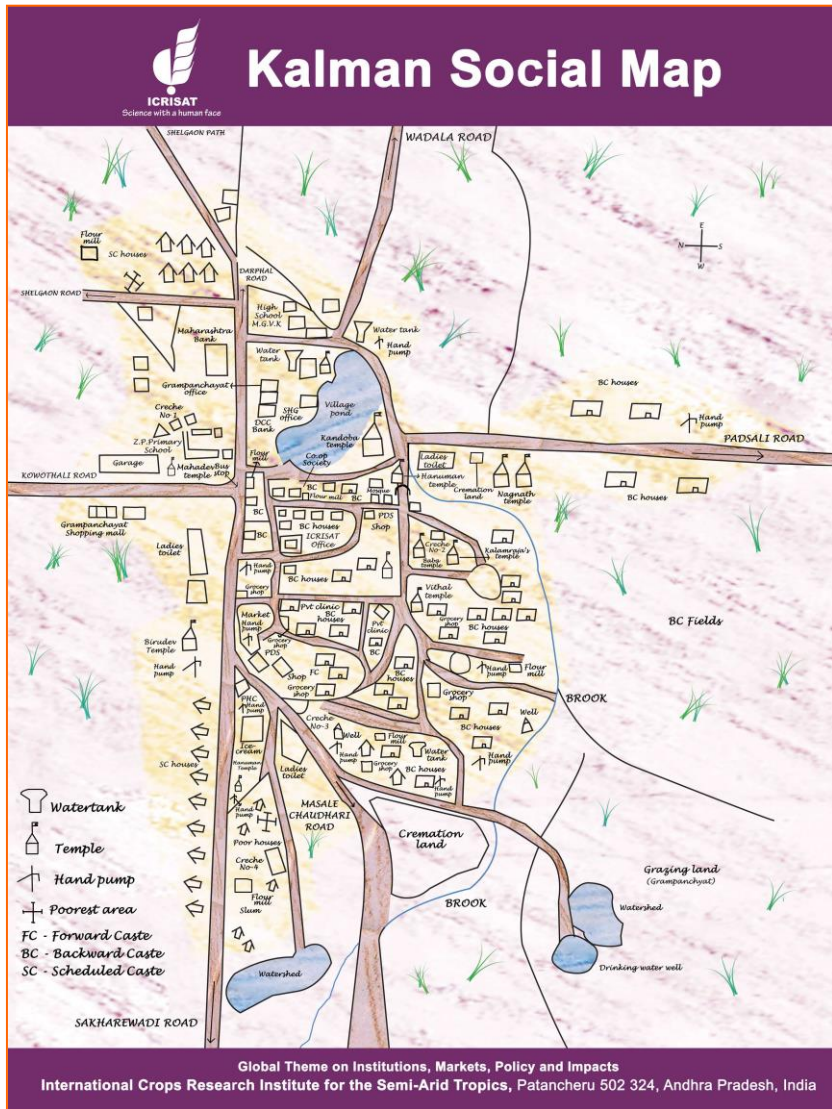


Example 2: A resource map of village Aurepalle, Andhra Pradesh, India



Global Theme on Institutions, Markets, Policy and Impacts
 International Crops Research Institute for the Semi-Arid Tropics, Patancheru 502 324, Andhra Pradesh, India

Example 3: A social and resource map of village Kalman, Maharashtra, India



Notes and Learnings

A series of horizontal dotted lines for writing notes.

5. Seasonal Calendars

Introduction

- A method for visual demonstration of the distribution of seasonal phenomena over time
- It helps understand the seasonal differences in livelihoods and vulnerability analysis as it illustrates the dynamic dimension of well being which is often not clearly represented or shown through conventional techniques of vulnerability assessment with respect to climate change
- Helps identify the coping strategies that people use to manage the risks along with hardships that people face so that appropriate safety nets can be set and remedial actions can be taken
- While conducting the exercise it should be kept in mind that the research not only acknowledge but also use the local calendars and their use in the ways of representing the seasons
- Identifying cause-and-effect relationships between seasonally varying phenomena
- Understanding the time of the year when different social groups are more or less vulnerable
- Identifying some of the reducing, mitigating, and coping strategies people use to manage risk

Objective

To identify seasonal patterns and variations that are not obvious to the local eye along with the likely impacts on proposed policy change on seasonal risks and vulnerability amongst different households. It is therefore one of the most important tools for capturing the perceptions towards climate change and adaptation strategies.

Exercise Requirements

Markers and large sheets of paper. Note books, paper and pen to make a copy of the maps and to make notes of the discussions that follow. However, if the maps are drawn on the ground, then a large area is required along with sticks, stones, leaves, colours, seeds and so on to depict various events across seasons.

Types of Seasonal Maps

○ **Seasonal Livelihood Calendar**

Indicates the source of livelihood for both men and women against different months in a year

○ **Seasonal Disease Calendar**

Is useful in carrying out an analysis of seasonal diseases that a community is faced with and could be used and linked with health intervention measures in terms of identifying the shortfalls and strengthening of primary health care depending on the frequency of the disease in the period concerned. Also it can be linked to assess whether changes in climatic conditions have been reasons for prevalence or increase in a particular disease and their effects on the community

○ **Seasonal Food Calendar**

Seasonal variations in food availability both in terms of quantum and quality can be assessed through a seasonal food calendar. Information in terms of number of people in a household/ community/group sharing food items, the amount of food being produced, purchased and sold along with discrimination if any that exists in food distribution along with the relation to climate variability can be learnt through this map. It also helps in identifying the peak and the lean season in context to food availability.

Steps

- Identify a mixed group of people to carry out this exercise which could be a composition of women, men and the elderly. The number of members in the group should not be less than 10
- Clearly explain the objective of the exercise to the group and make sure that they have understood the same and that they are comfortable with carrying out the exercise
- Identify one member of the group who would create the map. The rest of the group will act as his /her aid in adding flesh to the map
- While making the seasonal calendar it should be kept in mind that it reflects the indigenous concepts of time and seasonal categories
- Use symbols to indicate the seasons and the phenomenon occurring so that even the illiterate people can participate in the exercise

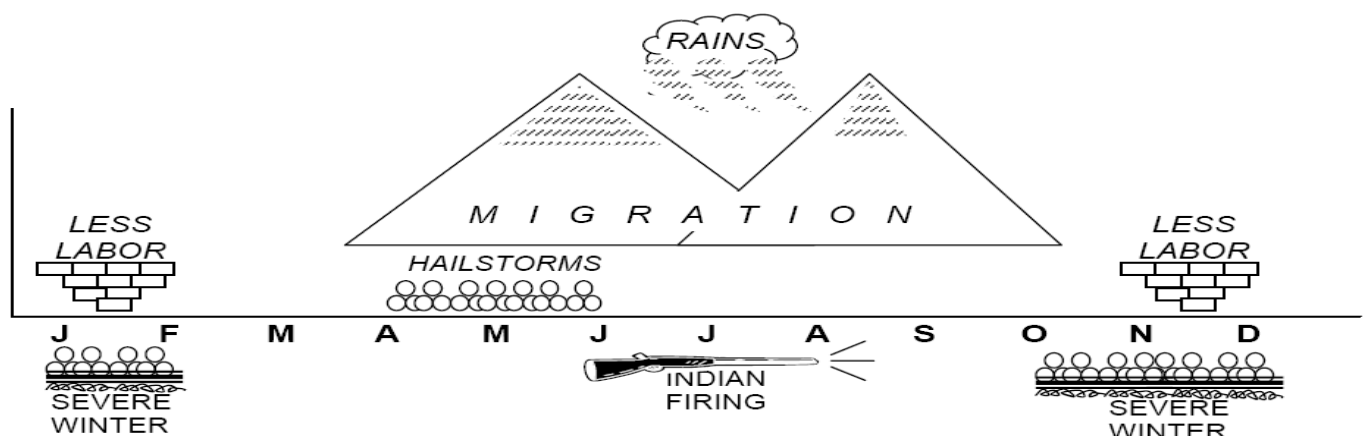
- Identifying periods when specific groups of people suffer from particular hardship so that appropriate safety nets can be set in place or other remedial actions taken
- Seasonal variations in vulnerability, risk and access to assets and resources
- The likely impact of proposed policy change on seasonal risk and vulnerability amongst different households or groups
- Have a discussion once the calendar is ready (see box 6)

Box 6. Key Questions for a seasonal calendar

- As per your calendar how many seasons would you say you have
- Could you describe to us the activities that are undertaken in each season
- Is there any particular kind of food or diseases that are particular to any season
- Have you seen any alterations that have happened in the seasons? In what form
- Has it been hotter or colder than usual or have the monsoons been affected
- What have you done as a result of the same (this depending on the response)

Case Study Example: The Pakistan Participatory Poverty Assessment Seasonal Calendar

The following seasonal calendar showing stresses on livelihoods was produced by poor and better-off male farmers, 25 to 55 years old, from Khorian, Seerian, Sangal, Bagh during the Participatory Poverty Assessment in Azad, Jammu, and Kashmir.



Note:

Ensure that enough room is left on the side in-case the seasonal map is being done on a paper to list the changing phenomena that are being investigated or the researcher feels is important. In addition a period of atleast a year should be covered as part of this exercise

6. Life History and Narratives

Introduction

- A method by which a person or a group narrates an incident, evidence of past and present experiences
- Villagers provide a historical account of how different aspects of village life have changed over the years
- However it is preferred that this exercise is carried out on an individual capacity

Objective

- Used to probe aspects of the quality of life of local people and the different changes which have taken place over a certain number of years with reference to climate change

Exercise Requirements

Note book, pen and paper for taking down notes while the discussion is going on, in addition a Dictaphone if possible to record the conversation for transcription and further analysis

Steps

- Identify the respondent from who the researcher is going to take the narrative and life history. It should be significant to the objective for which the narrative is being conducted. It is advisable that an elderly farmer is engaged who can give a complete detail in terms of events that have taken place and how he and the village have coped as a result of it.
- For an exercise such as this it is advised that instead of coming directly to the point, engage in a general conversation so that the respondent is comfortable and can be eased into a dialogue
- Once the narrative starts, make sure that the respondent is not interrupted and he/she is allowed to talk even if the events or happenings described in the process are discontinuous in order to maintain the flow

Documentation

The best form of documentation for a narrative would be to record the conversation which can be later transcribed. Only important dates and names of events can be noted so that the reference to the context is available during analysis.

Key Questions

- How has the lifestyle in your village changed since the past twenty years¹
- Have you felt any change in climatic conditions in this period
- How has your village reacted to crisis situations

Note:

Make sure that the respondent is made very comfortable before beginning the session so that he/ she feels the humility in the researcher to learn from the respondent his/ her experiences which are important to the objective with which the study is being conducted

Notes and Learnings

A series of horizontal dotted lines for writing notes.

7. Transect Walks

Introduction

- Tool involving systematic walking along with the local people as part of understanding aspects of land use and ecological areas through discussions across an identified locality.
- It helps in identifying and explaining the cause and effect relationships among topography, soils, natural vegetation, cultivation, and other production activities and human settlement patterns, in addition to major problems and possibilities perceived by different groups
- Method which facilitates learning about local technology and practices as a part of adaptation strategies and acts as a tool for site selection for future or further research

Objective

- To find out the natural resources, present land use, vegetation, changes in the physical features and cropping systems, and so on in villages due to possible effects of climate change.
- Used as a method of triangulating data collected through other data sources especially where public resources, land use, social differentiation and mobility in communities are concerned.

Exercise Requirement

Since it involves out door activities, on- the field observations, discussions and diagramming it is advised that the researcher carries a notebook and a pencil, a camera.

Types of Transect Walks

- **Joint Walk:** Based on the concept of '*seeing is believing*' such walks relates to learning from the local communities through undertaking joint walks with them, helping in the 'on-site' observation of different aspects of a selected area/s which require simultaneous in–depth discussions with the community members

- **Walking to Demonstration Site/Plot:** Helps in gathering first hand views of the opportunities and constraints associated with such sites

Steps

- Before starting on the transect walk it is advised that the researcher should be clear on the issue of focus that needs to be covered as part of the walk
- Identify and have an overview of the area to be visited and how the area stands in relation to the others
- Have selection criteria which can be based on zones, distance and land use or soil conditions.
- While carrying out the walk the researcher has to make sure that he/she is not missing out on the micro environments located in the area and taking note of the social implication of local resources in the area selected.



Transect Walk Source: Kalman 2009

Documentation

As the exercise involves a lot of movement, it is advised that the researcher should take the first chance and document what he/ she has seen before starting another transect to avoid mixing up of observation. The notes can be in the form of pictures and symbols for easy understanding and association during the time of analysis

Note:

This tool acts as a compliment to resource and social maps, timelines and seasonal calendars. Sometimes while on a transect walk the researcher might have to change track to get additional information relating to the issue.

Notes and Learnings

A series of horizontal dotted lines for writing notes.

Notes and Learnings

8. Venn Diagrams

Introduction

- A visual method of identifying and representing perceptions of key institutions (formal and informal) and individuals inside and outside a community, their relationships, and importance associated with the same.
- It also is an instrument which helps identify potential entry points for strengthening or improving relationships between key social actors
- It helps understand how different community members perceive institutions both in terms of participation, decision making, accessibility to and delivery of services within and outside the community

Objective

- It helps in finding out the perceived importance, accessibility, and impact of different institutions to local people of different social groups especially where adaptation strategies are concerned and who they would approach in case of relief or aid in the eventuality of a climatic shock
- Provides an insight into the existing institutions in a community and their relation to each other and to external agencies involved in the delivery of services and the administration of programs

Exercise Requirement

Chart papers, markers pens and different sized circles cut to represent different institutions

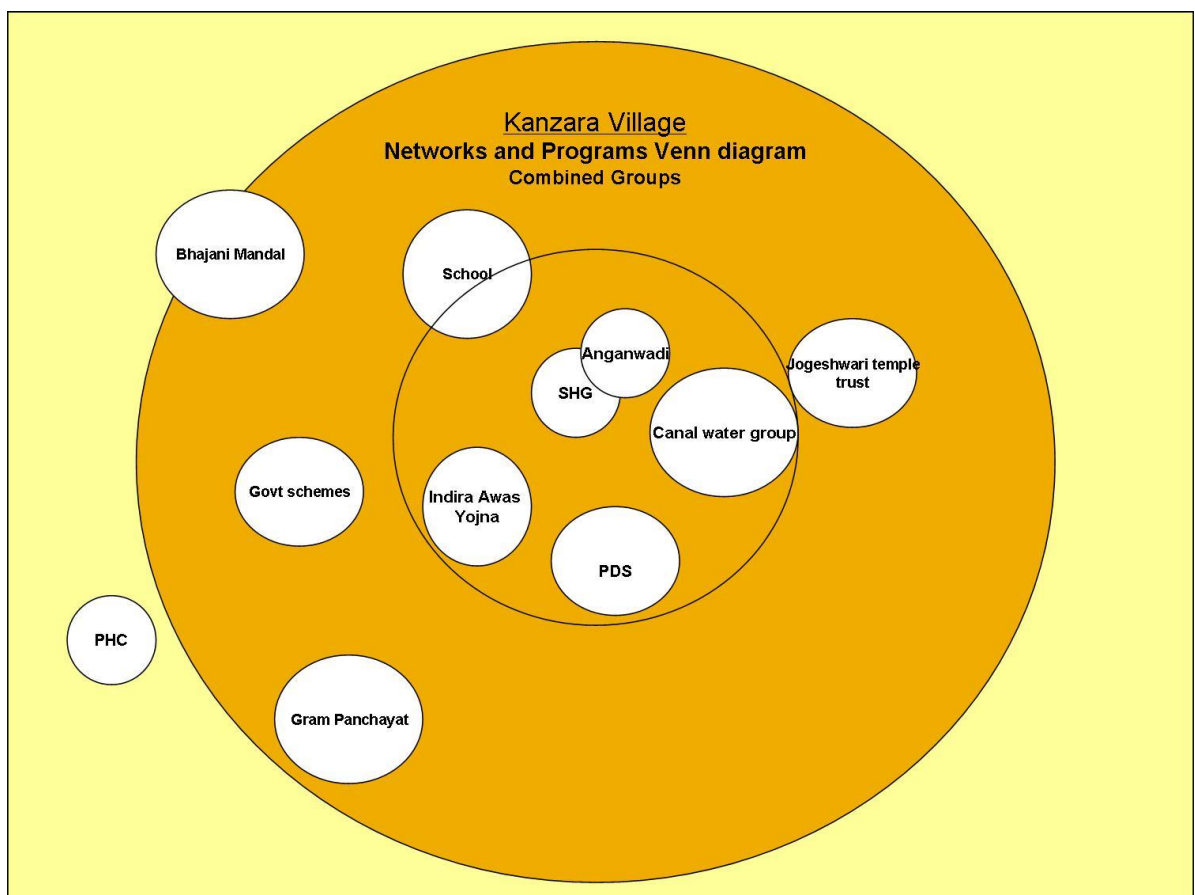
Steps

- This exercise should be carried out in a group which should be exclusive in terms of being either a women/ youth/men/elderly group
- Make sure that the researcher has the context very clear in his/her mind to which the exercise will be done. It could range from services being provided by an institution to role of the institution in facilitating activities and programs with reference to adaptation strategies or as a mechanism of providing resilience
- It is advisable that the number of circles cut should be towards an extra amount as what is assumed by the researcher to be of great importance may turn out to be the least important for the respondents

- Make a central frame to represent the respondents in order to allow them to easily relate themselves to the institutions pointed out by them as the one being most important to the least important.
- It is advised that the researcher merely acts as a facilitator and does not influence the thought process of the respondents while carrying out the exercise.

Documentation

The diagram should be preserved as has been done by the respondents and should be used for interpretation without any tampering.



Key Questions

- Can you identify the institutions that are present in your village?
- Which according to you have the most importance and why?
- Who would you approach first in the case of a climatic shock and why?

Note:

A social map are good complementary tools as it helps the researcher find possible co-relation between the disparity in offering services and consequent mobility that may take place as a result of it. The farther the circles are put from the central frame, the lesser significance the institution is the lives of the respondents

Notes and Learnings

A series of horizontal dotted lines for writing notes and learnings.

About ICRISAT



The International Crops Research Institute for the Semi-Arid Tropics (ICRISAT) is a non-profit, non-political organization that does innovative agricultural research and capacity building for sustainable development with a wide array of partners across the globe. ICRISAT's mission is to help empower 600 million poor people to overcome hunger, poverty and a degraded environment in the dry tropics through better agriculture. ICRISAT is supported by the Consultative Group on International Agricultural Research (CGIAR).

Contact Information

**ICRISAT-Patancheru
(Headquarters)**
Patancheru 502 324
Andhra Pradesh, India
Tel +91 40 30713071
Fax +91 40 30713074
icrisat@cgiar.org

ICRISAT-Bamako
BP 320
Bamako, Mali
Tel +223 20 223375
Fax +223 20 228683
icrisat-w-mali@cgiar.org

ICRISAT-Liaison Office
CG Centers Block
NASC Complex
Dev Prakash Shastri Marg
New Delhi 110 012, India
Tel +91 11 32472306 to 08
Fax +91 11 25841294

ICRISAT-Bulawayo
Matopos Research Station
PO Box 776,
Bulawayo, Zimbabwe
Tel +263 83 8311 to 15
Fax +263 83 8253, 8307
icrisatzw@cgiar.org

**ICRISAT-Nairobi
(Regional hub ESA)**
PO Box 39063, Nairobi, Kenya
Tel +254 20 7224550
Fax +254 20 7224001
icrisat-nairobi@cgiar.org

ICRISAT-Lilongwe
Chitedze Agricultural Research Station
PO Box 1096
Lilongwe, Malawi
Tel +265 1 707297, 071, 067, 057
Fax +265 1 707298
icrisat-malawi@cgiar.org

**ICRISAT-Niamey
(Regional hub WCA)**
BP 12404, Niamey, Niger (Via Paris)
Tel +227 20722529, 20722725
Fax +227 20734329
icrisatsc@cgiar.org

ICRISAT-Maputo
c/o IIAM, Av. das FPLM No 2698
Caixa Postal 1906
Maputo, Mozambique
Tel +258 21 461657
Fax +258 21 461581
icrisatmoz@panintra.com