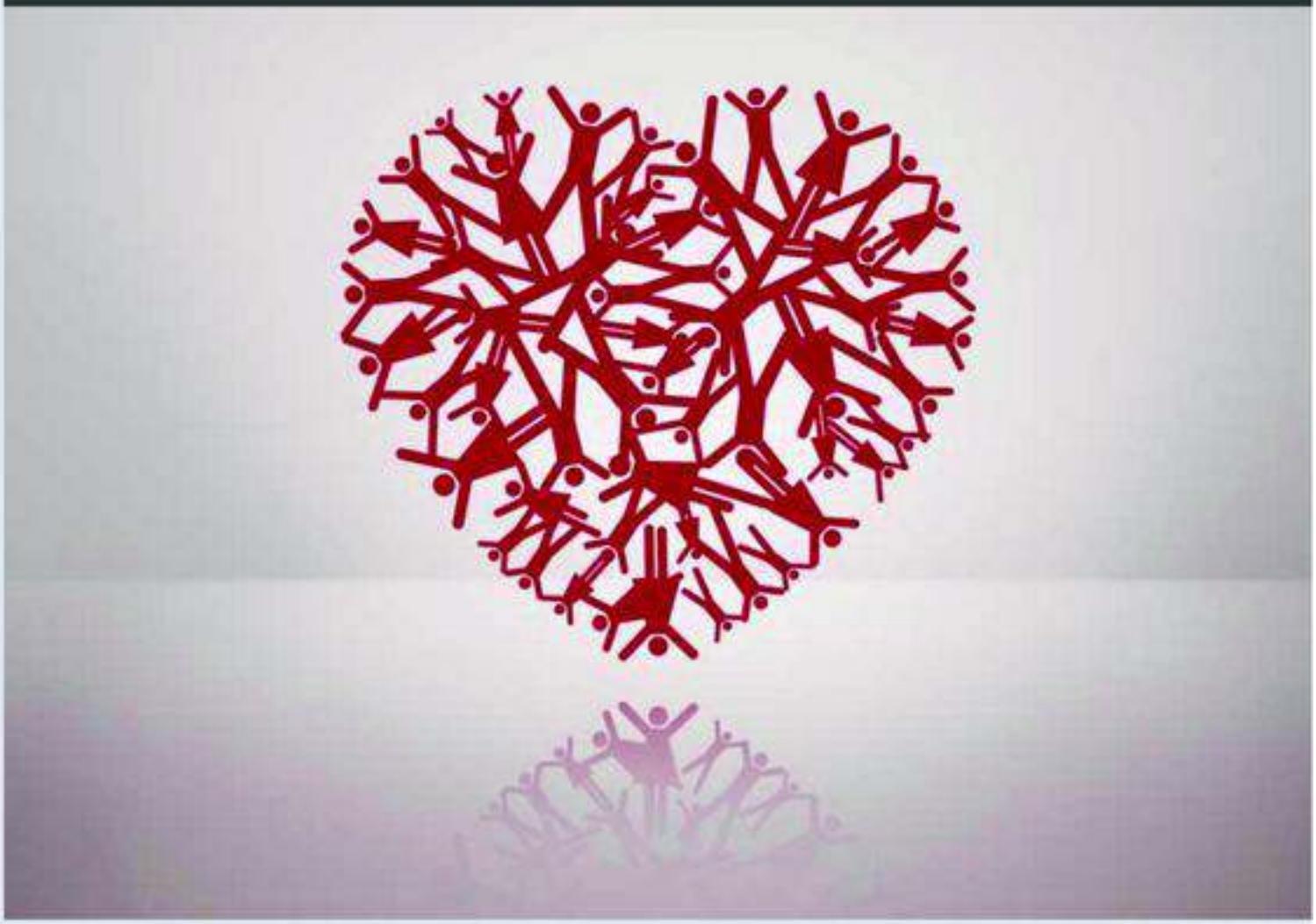
SRI BALAJI VIDYAPEETH
DEEMED UNIVERSITY

MAHATMA GANDHI MEDICAL COLLEGE & RESEARCH INSTITUTE

THE HeART



HEALTH APPRAISAL BY RAPID TECHNIQUES

FOR 1 MBBS STUDENTS

A module on community based experiential learning

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Preface

Humans are a curious species, by nature - every child brims with the natural curiosity to explore the world around it. A million questions – Why is the sky blue? How does fire feel like? How are babies born? and so on... However, as the child grows up, his / her natural curiosity to question and learn new things seems to become increasingly blunted by a complex mix of social and cultural factors.

Science is essentially a way of trying to make sense of the world around us. In this process of exploring and explaining, Scientific Research may use sophisticated tools but fundamentally, *we are still asking the same questions as the curious child* - **what, how and why** things are the way they are.

Research in the Medical field has been growing exponentially over the past decades and has contributed significantly in the betterment of human health. However, because of the increasingly complex nature of the matters being researched, today we are in a state where the realm of the practising Doctor is becoming increasingly detached from the realms of Scientific Research.

Current systems of Medical Education world-over are predominantly hospital oriented and our medical graduates are educated based only on a very narrow, disease-centric approach to health. What we really need, are teaching/learning approaches that equip medical graduates with a scientific temper, facilitate them in comprehending the multi-dimensional nature of health and empathize with the patients' needs, ultimately providing healthcare with a humanistic touch.

Considering these, the **HeART Module** (Health Assessment by Rapid Techniques) has been designed as an innovative ***Community Based Experiential Learning Opportunity*** designed for the first year undergraduate medical students of MGMC&RI.

HeART Module envisions **two broad goals**:

1. Expose medical students to the Bio-psycho-social dimensions of health and disease – beyond the usual disease-centric hospital-based learning.

2. Demystify 'Research' by orienting students to the basics of Health Research Methodology

Educational Objectives

The HeART program primarily aims to provide the medical students a broader perspective of health and disease. Through the week-long hands-on Community Based experience, it encourages the students to experience and explore the complex inter-relations that exist between the biological, psychological & social factors and health.

The HeART module would enable the students to

- Observe, interact with and experience the daily life of the local populace
- Explore the social, cultural and environmental links of health and disease
- Work as a team, in organizing, coordinating and facilitating the program
- Use qualitative data collection tools to elicit necessary information
- Gather, collate and understand primary and secondary data
- Communicate / present their findings with a broader audience

The program would also *sensitise* the students to the basics of

- The nature of Scientific Approach
- Health Research Methodology
- Quantitative and Qualitative Research methods

The specific competencies to be gained during the programme are:

Selected competency	*Selected experience*
1. Obtain health related data about social and cultural environments, needs and interests.	Teams gather qualitative and quantitative data from primary data collection and secondary sources. Students improve their powers of observation
2. Analyze social, cultural, economic and political factors that influence health.	Students analyze many factors that impact health within the community.
3. Appreciate principles of community organization in planning programs.	Students identify areas for community intervention and strategies to achieve them.
4. Communicating health and health education needs concerns and resources.	Students interview members of the community and service providers to learn about the perceptions of each group and the assets and needs identified.
5. Develop skills in oral and written presentations.	Students present their findings to their teachers and peers
6. Apply appropriate research principles and methods	Use both quantitative and qualitative research in a real community setting
7. Assess the merits and limitations of qualitative and quantitative research methods	Students discern the merits and limitations of each type of data collection tools.
8. Work effectively as a member of a team	Students work as a team to identify health issues, seek root causes and suggest solutions to problems identified.
9. Use Information technology to enhance learning and for research	Students use information technology to search for literature. They use electronic tools for data collection and analysis. E.g. Computers, smartphones, and online forms.

Determinants of Health

What is health?

'Health' is one of those things like 'Happiness', in the sense, everyone knows what it is; everyone knows what it feels like – yet, when we try to define it, it becomes elusive. The World Health Organization (WHO) has defined Health as a 'state of complete physical, mental and social wellbeing and not merely the absence of disease or infirmity and the ability to lead a socially and economically productive life'.

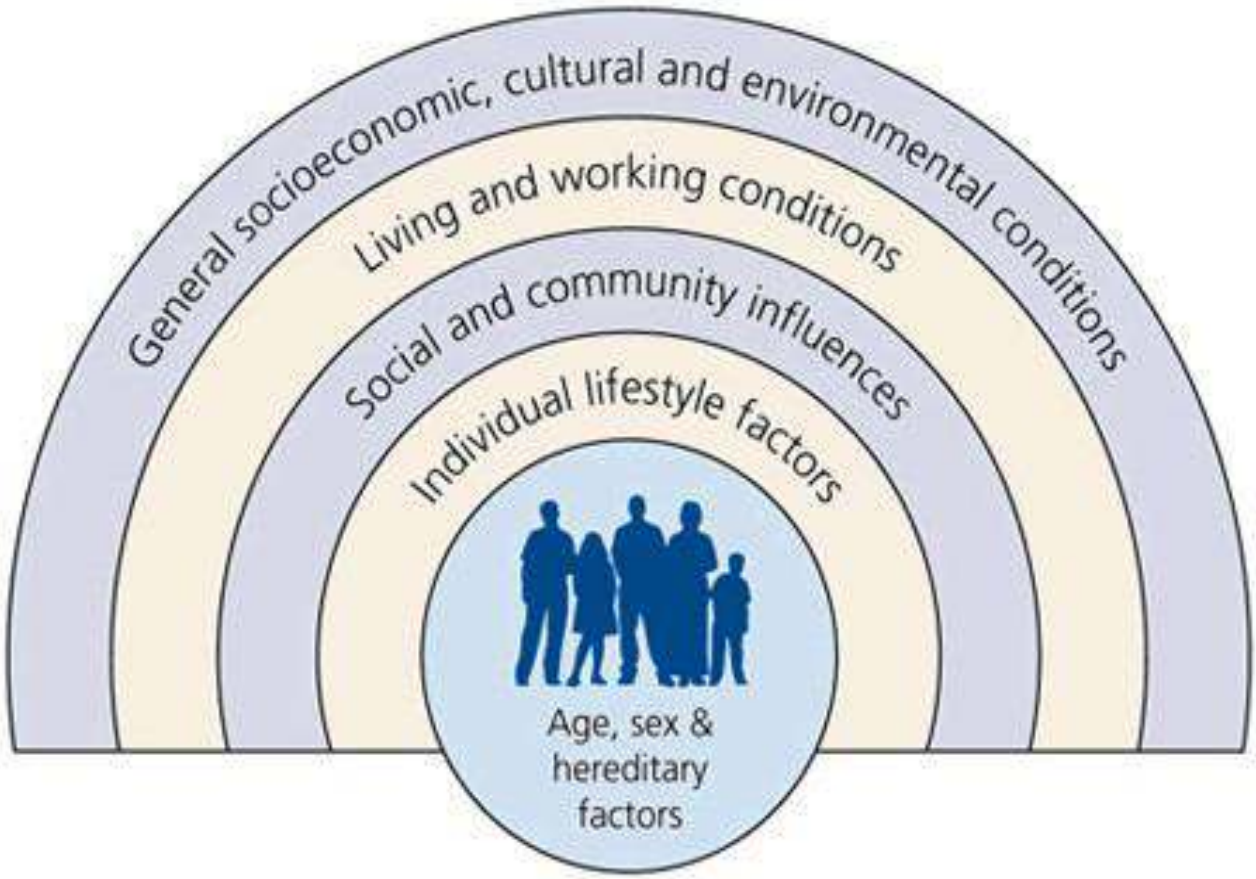
What is a health determinant? … and what all determines health?

Anything that can influence the health of a person / community may be considered as a 'Health Determinant'.

As we just saw, Health is a multi-dimensional entity – with physical, mental, social and even spiritual dimensions. Each of these dimensions may be affected by a myriad of factors, such as

- Biological factors (age, gender, immunity, genetics, ethnicity etc),
- Lifestyle factors (behaviours, personal hygiene, exercise, etc)
- Nutritional factors
- Literacy status and Occupation
- Family, social support
- Economic status
- Social factors (customs, beliefs etc)
- Environmental factors (housing, drinking water, sanitation etc)
- Availability and utilization of Healthcare services

Collectively, the complex interplay of all these factors influencing health may be termed as the **Social Determinants of Health (SDH)**



Over the past century, the average human lifespan has increased by over 30 years. More than new drugs and diagnostics, it has been the non-specific lifestyle factors viz. better Education, Nutrition, Sanitation, Safe drinking water, Vaccination that have been the major contributors to the increase in lifespan. This again reinforces the concept of Social Determinants of Health.

Most of these factors like Immunization, Chlorination of drinking water, Pasteurization of milk etc are the direct result of advancements in Science and Technology. In the next section, let us take a closer look at what science is and how science works.

The way of Science and Scientific Research

Science, in essence, is a way of seeking knowledge to explain the world around us. If we pause to think about it, Religion is also a 'way' to explain the world around us. Yet, there is a world of difference between the two - while religion relies on faith and subjective experiences, science relies on establishing objective facts through verifiable experimentation. These facts lead to interpretation and theories which can be proved or disproved.

The biggest advantage of adopting a scientific approach is that, by definition, science is a *constantly updating* way of explaining things. As and when newer evidence becomes available to better explain our observations, older models/explanations are replaced and or updated.

Scientific advancements have brought about significant changes in the way we live. From farming practices to medical care; from clothing to housing; from transportation to telecommunication, we can witness the benefits of science and technology everywhere around us. Research is how science progresses and technology is the by-product of scientific progress.

Advancements in Health / Medical Sciences is happening at such break-neck speeds that it has become near-impossible to keep ourselves up to date with all the advancements, even within a given specialty. New scientific findings are reported / published by researchers in periodic Medical 'Journals'. Other researchers try to reproduce these findings and thereby corroborate the evidence. Once enough people agree on something (i.e., once a scientific consensus is achieved), then it becomes a 'scientific fact'.

By now, you may be wondering what all these have to do with a MBBS student… Let us find out more in the coming sections.

What is the difference between art and science?

Art is about creative communication of ideas and emotions. It can take different forms such as drawings and paintings, photography, dance, music.

Science is about establishing truth or finding objective facts through verifiable experimentation. The facts lead to interpretation and theories which can be proved or disproved. Interpretation are dependent on time and place.

Is Medicine an art or science?

Medicine is predominantly based on science. However, as communication of ideas between people are involved there is an element of art in medicine.

What is scientific method?

It is a systematic method of data collection by observation and/or experiment and drawing inferences from them. The data and inferences can be corroborated again.

What are the advantages of scientific method?

The data is unprejudiced, the results repeatable, and inferences and theories falsifiable. Eg: The world was thought to be flat till it was falsified by evidence attributed to Pythagoras. Later Columbus thought he could reach India by travelling west as the world was round and he landed somewhere else!

Why should I adopt a scientific approach?

- Having joined a professional course your primary responsibility is to improve the well-being of people, reduce human suffering and save human life without affecting other species and the environment.

- You need to identify health problems and solve them and promote well-being.
- You need to be curious and advance new knowledge and strive for excellence.

These are best achieved by adopting a scientific approach.

When we adopt a scientific method to discover new knowledge, reaffirm or challenge what has already been established, it can be called research.

How do we define research?

It is a process of

- asking a question,
- or a series of related questions,
- and then
- initiating a systematic procedure to obtain valid answers to that question.

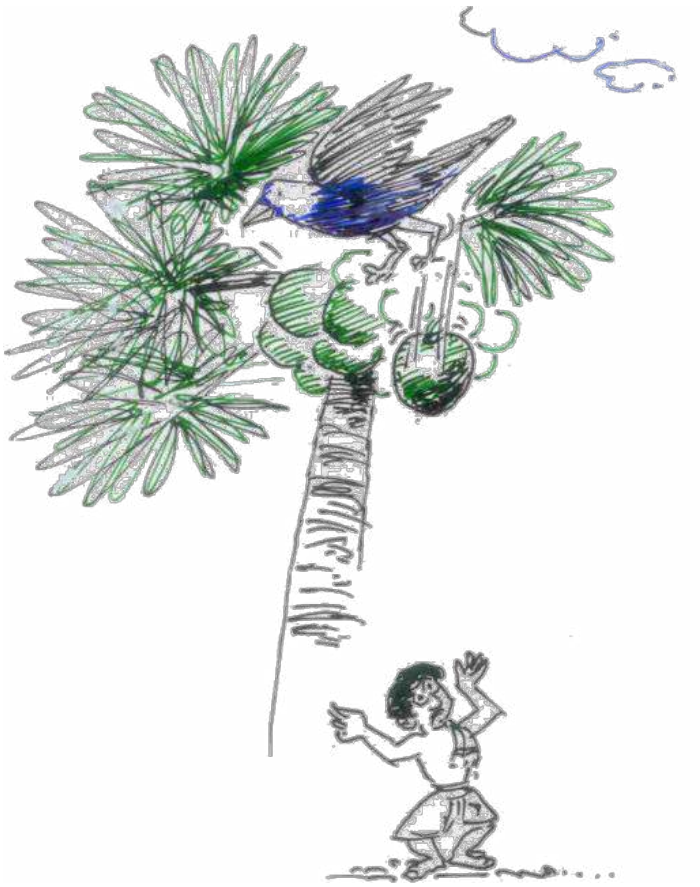
What questions do I ask?

- Is there something I have observed or read that I would like to know more about?
- Can I relook at an old idea in a different way or is there a problem to solve?
- Do I need to measure something?
- Do I need to understand why people behave in certain ways?

If you can define any of these, you have the basis for something to research and can formulate a question.

Task

Look at diagram 1. Is there a phenomenon to be studied further? Can you think of a research question? Can you refine the question further to make it focused?



Characteristics of Good Research Questions

A research question should be

- well-grounded in current theoretical and empirical knowledge (know the literature)
- amenable to the formulation of clear hypotheses and operational definitions
- important in terms of theory and application (usually weighted toward one)

What are the criteria for a good research question (FINER)?

a. Can I study it? How Feasible (F) is it to study
    i. Problem is common enough
    ii. There is adequate expertise to study or investigate it
    iii. It is affordable in time and cost of investigation
    iv. Manageable in scope
b. Interesting to the investigator (I)
    i. Research question should be interesting to the investigator, so as the reliability of the findings of investigation is maintained.
c. Novel (N)
    i. To confirm or refute previous findings
    ii. To extend previous findings
    iii. To provides newer findings
d. Ethical (E)
    i. Follow the medical ethics
e. Relevant (R)
    i. To add scientific knowledge
    ii. To clinical and health policy
    iii. To future research directions

How do I get answers to my question?

Answers to research questions are obtained by observations and measurements which are recorded and then analysed. The process is carried out in a systematic manner which is called research methodology. After analysis, inferences are drawn on the findings by reasoning.

Why do MBBS students need to know about research?

Asking questions and finding out answers is the very core of scientific research. As pupils of Modern Medicine, we follow the Evidence Based approach to objectively assess problems and arriving at appropriate solutions.

The entire body of knowledge of Modern Medicine is based on findings of rigorous scientific research. Putting it in a simpler way – every fact, sentence or concept you read in all of your Medical Textbooks is based on and backed up by sound scientific research.

But have you ever wondered – just *who* exactly do all these research? Where do they come from? Do we have any idea as to what one has to do to become a researcher? If you have never thought in these lines, give it a thought now – just who are these "researchers"?

Underscoring the importance of Research Aptitude among Medical graduates, the Medical Council of India (MCI) has laid down that ... *At the end of undergraduate program, the medical student should be able to* ***develop scientific temper****, acquire educational experience for proficiency in profession and promote healthy living. Undergraduate students coming out of a medical institute should ... possess the attitude for continued self-learning and to seek further expertise or to* ***pursue research in any chosen area of medicine****.*

The following are some of the benefits of MBBS students being familiar with the basic concepts of Health Research:

- Appreciate principles of research in deriving the evidence
- Research experience fosters knowledge and skills.
- Research and Academics are complimentary to each other. They stimulate the interests in each other and doing research does not affect the academics.

- UG research experience enhances employability.
- Associated with higher levels of student satisfaction.
- Evidence based practice cornerstone of effective and good practice
- Required to make informed judgements
- Critical appraisal
- Improves student-faculty contact
- PG research – Dissertation.

What, Who, How and Why are some of the most frequently asked questions in science. Hence, it makes sense if we learn and understand this language – the language of science.

Ultimately, keen aptitude for research makes us **life-long self-learners.**

Types of research - Quantitative and Qualitative

Re-Search: "Re" means *once more, afresh, anew* OR get *back, return to a previous state* and "**Search"** means *to look thorough* OR *go over thoroughly to look for something* OR *examine to find anything concealed*

Types of Research: Research studies may be 'classified' on the basis of different methods in to various 'types' of research

- Quantitative Research
- Basic Research
- Applied Research
- Longitudinal Research
- Qualitative Research
- Descriptive Research
- Classification Research

- Comparative Research
- Explorative Research
- Explanatory Research
- Causal Research
- Theory-testing Research
- Theory-Building Research
- Action Research

Research methods are split broadly into *Quantitative* and *Qualitative*

In any form of research, we will be required to either count things and/or talk to people. We can broadly classify research methods using this distinction.

QUANTITATIVE - as the name suggests, it is concerned with trying to quantify things; it asks questions such as 'how long', 'how many' or 'the degree to which'. Quantitative methods look to quantify data and generalize results from a sample of the population of interest. They may look to measure the incidence of a disease or event or views and opinions in a chosen sample or aggregate results.

QUALITATIVE – concerned with a quality of information, qualitative methods attempt to gain an understanding of the underlying reasons

and motivations for actions and establish how people interpret their experiences and the world around them. Qualitative methods provide insights into the setting of a problem, generating ideas and / or hypotheses.

QUANTITATIVE APPROACHES

- Attempts to explain phenomena by collecting and analysing numerical data
- Tells us if there is a "difference" but not necessarily why
- Data collected are always numerical and analysed using statistical methods - If there are no numbers involved, it's not quantitative.

Data sources include

- Surveys where there are a large number of respondents
- Observations (counts of numbers and / or coding data into numbers)
- Secondary data (Census, other government data etc)

QUALITATIVE APPROACHES

- Tends to yield rich data to explore how and why things happened
- Don't need large sample sizes (in comparison to quantitative research)

In qualitative research, some issues may arise such as

- Respondents providing inaccurate or false information – or saying what they think the researcher wants to hear
- Ethical issues may be more problematic as the researcher is usually closer to participants
- Researcher objectivity may be more difficult to achieve

Data sources include

- Interviews (structured, semi-structured or unstructured)

- Focus Group Discussions (FGD)
- Questionnaires or surveys
- Secondary data, including diaries, self-reporting, written accounts of past events/archive data and company reports;
- Direct observations – may also be recorded (video/audio)

References:

- Some content borrowed from Skills You Need website (http://www.skillsyouneed.com/learn/research-methods.html)
- Introduction to Quantitative and Qualitative Research Models (William Bardebes). PDF at http://tinyurl.com/qq-models

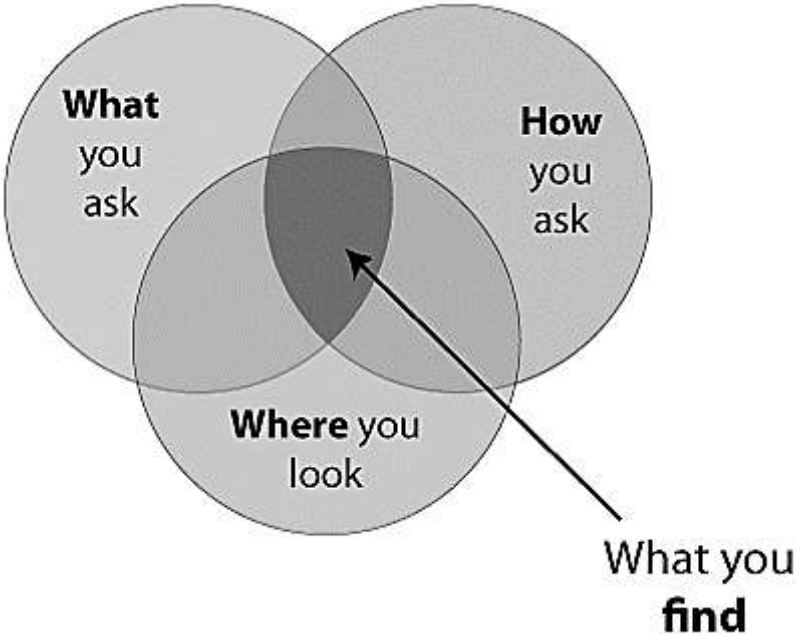
Qualitative Research	Quantitative Research
Looks at phenomena	Looks at observed facts
Inductive	Deductive
Holistic	Particularistic
Subjective – insider centered	Objective – outsider centered
Process oriented	Outcome oriented
Relative lack of control of variables	Attempts to control variables
Discovery oriented	Verification oriented
Explanatory	Confirmatory

Introduction to Qualitative research methods

Typically, most scientific research involves "quantification" - that is, expressing findings / results in numerical terms. These would be the research studies that try to answer the questions like who, what, how and how much. *Such research may collectively be called 'Quantitative Research studies'*

However, there is another group of research studies which **try to answer the question "why"**. Most of the times, these are social sciences research and deal with peoples' beliefs and thoughts – things that may not be captured numerically. *Such research may collectively be called 'Qualitative Research studies'*

For our HeART module, we would be using a mix of quantitative and qualitative research methods with the aim of getting to know the local community.



Qualitative research seeks to understand a given research problem or topic from the perspectives of the local population it involves. Qualitative research is especially effective in obtaining culturally specific information about the values, opinions, behaviors, and social contexts of particular populations.

Several health-related issues today are a complex interplay of social factors, hence the need for qualitative research. For example

1. Why do people continue to smoke even when the evidence about harmful effects of smoking is well known to those who smoke?

2. Why do people not take the medicine prescribed for them?

What are some common qualitative research methods?

The three most common qualitative methods, explained in detail in their respective modules, are participant observation, in-depth interviews, and focus groups. Each method is particularly suited for obtaining a specific type of data.

• ***Participant observation*** is appropriate for collecting data on naturally occurring behaviors in their usual contexts.

• ***In-depth interviews*** are optimal for collecting data on individuals' personal histories, perspectives and experiences, particularly when sensitive topics are being explored.

• ***Focus groups*** are effective in eliciting data on the cultural norms of a group and in generating broad overviews of issues of concern to the cultural groups or subgroups represented.

How do we capture the data from qualitative research?

The types of data these three methods generate can be recorded as field notes, audio (and sometimes video) recordings, and transcripts.

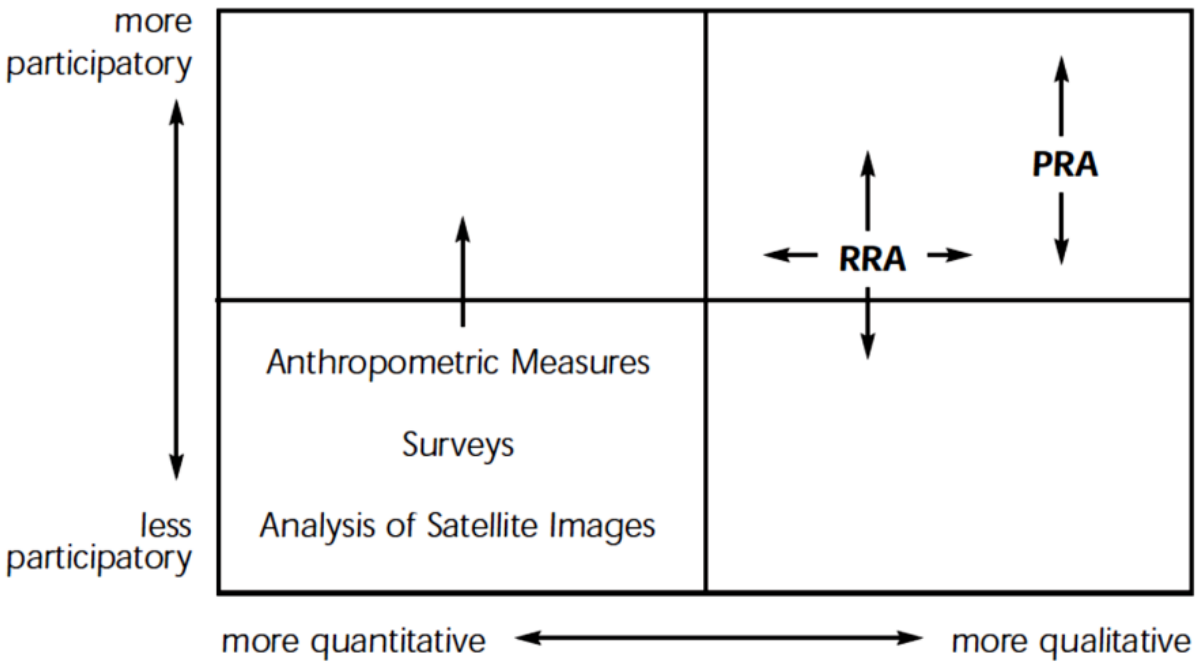
Within the broad umbrella term of Qualitative Research, we have the *'conventional' methods* such as Focus Group Discussions & In-Depth Interviews and then we also have the newer *'Rapid Appraisal'* methods.

Rapid Appraisal (RA) is a method of gaining as much information as possible about a community in a limited period of time. Depending on the geographical setting, the amount of time taken and the level of participation of the local community, different terminologies have been evolved under the "Rapid Appraisal"

- Participatory Rural Appraisal (PRA)
- Rapid Rural Appraisal (RRA)
- Participatory Learning Appraisal (PLA)

For our HeART module, we would be using a mix of Quantitative data, PRA tools and Secondary data.

The picture below depicts both quantitative and qualitative studies and the level of local community participation that is usually found in these study methods



PRA tools for community needs assessment

WHAT IS COMMUNITY NEEDS ASSESSMENT?

Community Need Assessment (CNA) refers to a systematic needs-assessment and planning for services with the involvement of the community and its stakeholders. It is an approach aimed at the assessment of needs **from the community's point of view** and not based on the needs that may be perceived by personnel at the higher levels of the administrative hierarchy.

The CNA approach has been widely used in the implementation of reproductive and child health service programs in India. **Participatory Rural Appraisal (PRA)** techniques are applied to facilitate interaction with the community members and to ensure their active engagement in the process which is crucial to the success of any CNA initiative.

WHAT IS PARTICIPATORY RURAL APPRAISAL (PRA)?

The term Participatory Rural Appraisal (PRA) was coined by Robert Chambers who went on to define PRA as ***"A family of approaches and methods to enable rural people to present, share and analyze their knowledge of life and conditions to plan and act".*** PRA is a process of knowing the community with full participation of the community members. PRA enables the information seekers (researchers) to appreciate the behavior and attitude of the community towards a given issue.

Before the advent of these techniques, plans for village development were laid out by officials based on their perceptions and previous experiences. The involvement of the community was minimal and even when they were consulted the marginalized sections were often not represented. In contrast, PRA is grounded in the fact that every community is complex and diverse. It is based on the belief people can identify their own problems and devise solutions with the support of trained professionals.

As the name suggests, PRA techniques depends on active community participation. The emphasis is on appreciating the local community member's knowledge and experiences about their own realities. In the process, the community members with their active participation are asked to put forward their opinions about the specific issue. The process of PRA also facilitates the community members to put forward solutions to overcome the deficiencies in their own community. Though the name suggests that PRA is used only in rural settings, it is a misnomer and can be applied to urban settings as well.

KEY PRINCIPLES OF PRA

1. **Participation:** All PRA techniques involve active participation of the community members

2. **Team work:** Unlike quantitative research methods where bulk of the data collation is the responsibility of a single investigator, PRA techniques are the collective efforts of a team of investigators as well as community members.

3. **Flexibility:** There may not be a pre-determined algorithm for the use of PRA techniques. The researchers may have to use a combination of PRA techniques to achieve the objective. They may also have to improvise and introduce PRA techniques depending on the type of information being given by the community.

4. **Triangulation:** It is advised to use to use more than one technique to ensure that the information is valid and reliable.

5. **Optimal ignorance and appropriate imprecision:** The team avoids unnecessary detail, accuracy, and over collection of data (as in sample survey) which is not immediately essential for the purpose of the PRA (this is decided through on-the-spot analysis).

DIFFERENCES BETWEEN PRA AND USUAL RESEARCH-SURVEYS

1. In usual surveys, as the questionnaires are formulated by the researcher, it may fail to capture the issues and dimensions which the community considers to be important. Whereas in PRA, the community members are active participants or partners and the data collection tool is not biased by the researcher's viewpoint.

2. The researcher is not restrictive in PRA. He just acts as a facilitator during the activity; there is scope for two-way communication.

3. In the questionnaire based surveys, each participant irrespective of the different section (gender, age group, interest group…) tend to answer the same set of questions. However, the PRA techniques are iterative and can be molded in order to capture the views of the various groups/ participants.

4. Since the intention is to gain as much insight as possible into a particular issue, PRA techniques often rely on purposive sampling techniques so that people who can provide the most amount of information and are likely to participate actively are included.

5. Questionnaire based studies are analyzed and interpreted at the end of the data collection process. In PRA techniques the researcher has to analyse the information on the spot and use it to decide on the further course of action.

SEQUENCING OF PRA TECHNIQUES

The choice of PRA technique(s) will depend on the topic being explored. However, there are few general rules which can be followed to start off -

It is good to start with mapping and modeling as they stir up interest in the participants and also give us an overview of the area.

This may be followed by a transect walk since the mapping will help in identifying the transect path. The transect walk can help in identifying more participants as well as give a better understanding of the various dimensions of the problem as perceived by the community.

The above two activities would serve as pointers for future activities. Individual interviews if required are usually schedules towards the end of the entire exercise.

CHALLENGES / LIMITATIONS OF PRA

1. Requires well trained teams
2. Usually a long process
3. Securing a necessary level of trust from the local community
4. Organizing / Analysing qualitative data is relatively complex
5. May not be useful in situations where the solutions demand large-scale structural reorganization

DESCRIPTION OF PRA TOOLS

Focus Group Discussion (FGD)

What is it?

A focus group discussion involves gathering people from similar backgrounds or experiences together to discuss a specific topic of interest.

It is a form of qualitative research where questions are asked about their perceptions, attitudes, beliefs, opinion or ideas. In focus group discussion participants are free to talk with other group members; unlike other research methods it encourages discussions with other participants. It generally involves group interviewing in which a small group of usually 6 to 12 people.

The group of participants is guided by a moderator (or group facilitator) who introduces topics for discussion and helps the group to participate in a loosely structured lively and natural discussion of various topics of interest amongst themselves.

The strength of FGD relies on allowing the participants to agree or disagree with each other so that it provides an insight into how a group thinks about an issue, about the range of opinion and ideas, and the inconsistencies and variation that exists in a particular community in terms of beliefs and their experiences and practices.

Where it can be used?

Focus Group Discussions should be used when you need to understand an issue at a deeper level than you can access with a survey. They are helpful for adding meaning and understanding to existing knowledge, or getting at the “why” and “how” of a topic.

A survey would be a good way to learn that 54% of the population prefers Program A. However, an FGD is a good way to learn why 54% of the population prefers Program A.

FGDs can be used to explore the meanings of survey findings that cannot be explained statistically, the range of opinions/views on a topic of interest and to collect a wide variety of local terms. In bridging research and policy, FGD can be useful in providing an insight into different opinions among different parties involved in the change process, thus enabling the process to be managed more smoothly. It is also a good method to employ prior to designing questionnaires.

How to do it?

FGD sessions need to be prepared carefully through identifying the main objective(s) of the meeting, developing key questions, developing an agenda, and planning how to record the session. The next step is to identify and invite suitable discussion participants; the ideal number is between six and eight.

The crucial element of FGD is the facilitation. Some important points to bear in mind in facilitating FGDs are to ensure even participation, careful wording of the key questions, maintaining a neutral attitude and appearance, and summarising the session to reflect the opinions evenly and fairly. A detailed report should be prepared after the session is finished. Any observations during the session should be noted and included in the report.

Limitations of Focus Group Discussions

It is important to realize that there are several limitations to FGDs. First, since FGD data is qualitative, it cannot necessarily be generalizable to the population. This is because qualitative data is often context specific.

Second, facilitators must ensure that their bias is not evident. Otherwise, it will veer the trajectory of the conversation. They must be

also be active in ensuring that active participants do not overpower subdued participants during the discussion.

Additional material:

https://blog.socialcops.com/academy/resources/conduct-successful-focus-group-discussion/

Using focus groups for evaluation

Focus groups as qualitative research

Dos and don’ts of a positive focus group experience

Guidelines for conducting a focus group

Preparing for focus group discussion

Focus group methodology: introduction and history

Village Transect Walk

What is it?

The concept of transect walk was borrowed from wild-life researchers. *A transect walk is a systematic walk along a defined path/ transect in a village, together with local key informants* carried out to explore a particular subject / condition in the village by observing, asking, listening, looking and producing a transect diagram.

Where it can be used?

1. Used an initial step prior to planning a full scale intervention
2. To get a general impression of an area or may focus on very specific topics, such as livestock, forestry or health and sanitation conditions.
3. Provides a spatial distribution of the prevalent problems
4. Identifying major problems and possibilities perceived by different groups of local analysts in relation to features or areas along the transect
5. Can support site selection (e.g. for a public toilet)
6. Learning about local technology and practices
7. Triangulating data collected through other tools

How to do it?

1. Decide what issues to focus on and the information that needs to be gathered. Make a checklist with points of observation during the transect walk.
2. Identify key informants
3. In consultation with the informants, identify the transect line which will pass through the specific areas in the village relevant to the issue being explored. The transect walk should lead the team through as diverse an area as possible. The transect line is ideally a straight line.

4. **Form teams** for the transect walks. Assign responsibilities for observations, note taking and discussions among group members. Each team should also include the key informants selected earlier.
5. Prepare sheets of paper divided into columns and rows, leaving space for a diagram at the top. Topics to be addressed can be indicated in the first column, leaving room for other topics to be added by the group. The subsequent columns may be used to fill in the observations made on each topic at various areas along the transect walk.
6. **Start walking**. During the walk, take notes on relevant features observed; seek clarifications from local people; discuss problems and opportunities. You do not need to adhere to the original route of the transect. Deviate from the route from time to time to observe the surrounding area and gather any relevant and useful information. Travel slowly and patiently and try to understand the physical features in the village from different perspectives. Proper observations are not possible if you walk fast.
7. **Be aware, Observe & record:** During the entire transect walk, be constantly aware of the things happening around you. Observe the surroundings and ensure that your field experience is recorded as comprehensively as possible – Use notes, sketches, photos, audio / video recordings, GPS markings etc.
8. After the walk, meet with participants to **discuss** notes; involve participants in drafting a transect diagram to be used for further discussion and feedback to the community at large. The diagram should be based on the information collected indicating different resources, characteristics, management, constraints and solutions. Symbols should be used as much as possible to make the diagram as understandable as possible for all group members.
9. **Present** the findings in a format easily comprehensible for outsiders (researchers as well as villagers). For villagers who did not join on in

the transect walk other villagers who accompanied the team should explain how it was done. Discuss the findings in a larger group.

Limitations

1. This tool only takes into account the currently "observable" situation and features.
2. Can be time consuming

Additional material

1. http://www.sswm.info/content/transect-walk
2. https://assets.helvetas.org/downloads/pra_participatory_appraisal_tool_en.pdf
3. https://siteresources.worldbank.org/EXTTOPPSISOU/Resources/1424002-1185304794278/4026035-1185375653056/4028835-1185375678936/1_Transect_walk.pdf
4. https://www.youtube.com/watch?v=4TqRSHU1hsw&t=582s

Social Mapping

What is it?

Social mapping is a visual method of showing the relative location of households and the distribution of different types of people (such as male, female, adult, child, landed, landless, literate, and illiterate) together with the social structure and institutions of an area. The maps are made by local people using the locally available materials. The interest here is to capture how community members perceive social dynamics within their locality. It is an image of the habitation pattern of an area, according to people's perceptions.

Where it can be used?

1. For creating a base understanding of the social and physical characteristics of a village
2. For collecting demographic data, such as detailed household specific information
3. For establishing a comfortable forum for discussion, where people are able to open up about the intricacies of social relations within their community.
4. As an interactive tool to gain insight on how different well-being groups live, and provides a means of comparison for factors such as proximity of different castes to water sources, government service-providers, etc.

How is it done?

Social mapping should include the following steps:

1. Before starting the mapping consult with community members, and determine a convenient time and location to conduct the exercise.
2. Once convened, explain the purpose of the social map to the participants. Allow participants to choose the materials they would prefer to use (as sticks, stones, leaves, seeds, coloured powder, and so on). Requesting participants to draw the prominent physical features of a locality can be a fitting way to begin such an exercise.

3. As the process unfolds, listen to the discussions carefully and take detailed notes of the proceedings.
4. Make sure that you create an environment where participants are able to take initiative, and become deeply involved in the process. Be cognizant of who is actively involved, and which sections of society they belong to. Proactively involve those who are left out of the process.
5. If you require clarification, wait for the appropriate moment, and be careful not to interrupt the process. Ask the community members in case of clarifications.
6. Once the mapping is complete, make sure you number the households, and ask people to identify their home.
7. If you require specific information, according to the purpose of the study, ask participants to depict the information that you are interested in. For instance, you may be interested in household-specific details, such as caste composition, number of school-age children, etc.
8. Meticulously copy the map onto a large sheet of paper, making sure to include all details that the community has noted down.

Limitations:

1. Reluctance from the community members
2. Lack of confidence, fear of being ridiculed by others, and the belief that maps are only made by experts are the origins of such hesitations.
3. Social mapping is easier when communities are small, but the process becomes much more complex when household numbers are high.

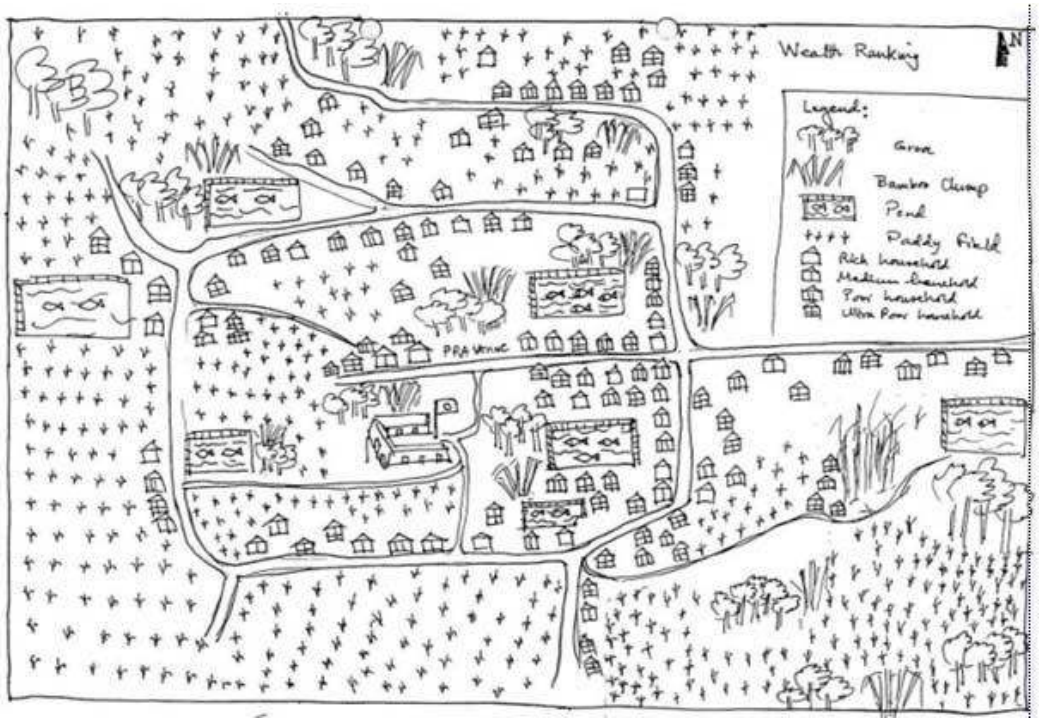


Figure: Social Map depicting source of livelihood in a rural community

Additional Materials

1. World Bank (2005)*Poverty and Social Impact Analysis Sourcebook*- http://go.worldbank.org/ZGZHJEDBZ0
2. https://www.youtube.com/watch?v=4PW9TLDxWzM

Historical Mapping

What is it?

Historical mapping uses a series of participatory mapping exercises to portray the demographic and natural resources situation of the community at different moments of its history. Usually, three maps are drawn, showing the situation as it existed one generation ago, at the present time, and what is expected after one generation's time in the future. Demographic information can be plotted as household symbols or circles to represent 10 or 100 people.

Where it can be used?

1. Historical mapping can be extremely helpful to introduce the time dimension in participatory environmental appraisal and/or participatory census exercises.
2. It can provide visual evidence of changes that have occurred and expected trends (change in livestock, food consumed, physical activity, diseases in the community)
3. It can help identify determinants of environmental degradation and population dynamics and enables participants to consider suitable means of moving towards a desired future.

How to do it?

1. A map of the current demographic and environmental situation is drawn with participants.
2. With the help of elderly community members, the same exercise is repeated to show the situation as it was approximately twenty years ago.
3. The current and past maps are then compared, often with a brainstorming, to collectively identify major changes and their root causes.
4. Based on the list of changes and causes, a prospective map can be drawn by the participants to show their expectations of the

situation which will exist in the community in 20-30 years from now, if the current trends are maintained.

5. The future map can be reviewed to explore differences between what is projected and what a desirable future status would be. The discussion can progress to identify potential means for addressing environmental degradation and population dynamics.

Limitations:

1. The exercise is long and complex. Three sessions with the group may be needed to get through the whole sequence of mapping and discussion.
2. Sensitive issues from the past may be raised, including conflicts within the community and between the community and outsiders.
3. The analysis is likely to identify effects and causes which are beyond community control. Discouragement and frustration may develop among participants.

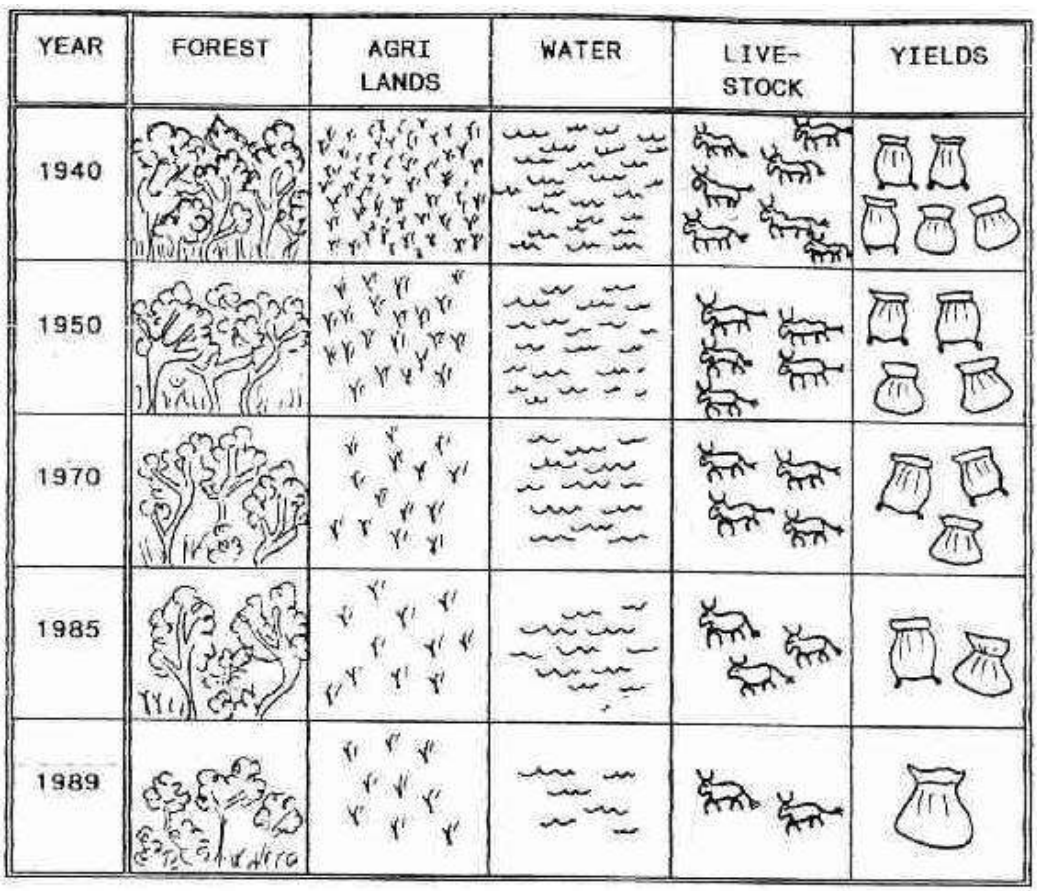


Figure: Historical Mapping depicting the change in forest, agri lands, water, livestock and yields from year 1940-90 in Ardhanaripura, Kollegal Taluk, Karnataka

Additional material

1. https://assets.helvetas.org/downloads/pra_participatory_appraisal_tool_en.pdf
2. http://www.kit.nl/sed/wp-content/uploads/publications/737_Module%207.doc
3. http://www.myrada.org/pra/pra3.htm

Seasonal Calendar

What is it?

The seasonal calendar attempts to establish regular cycles or patterns of activities and occurrences within a community over 12 months (one year). A seasonal calendar is a visual method of showing the distribution of seasonally varying phenomena (such as economic activities, resources, production activities, problems, illness/disease, migration, and natural events/ phenomena) over time.

For example, seasonal calendar data provides information on opinions and attitudes of the community towards certain activities. These include attitudes towards gender allocation of labour, gender ownership and control of resources, etc. Such information helps the PRA Team and the community to prepare the community action plan.

Where it can be used?

1. To show month-to-month variations in variables such as rainfall, labor, income, expenditures, debt, animal fodder or pests, and harvesting periods can be drawn (or created with stones, seeds, and sticks) and
2. Seasonal constraints and to highlight opportunities for action.
3. To understand the season of the year when different social groups are more or less vulnerable for specific risk conditions and to identify some of the reducing, mitigating, and coping strategies which people can use to manage those risk factors.

How to do it?

Data for seasonal calendars should be collected from community groups. If a community has two or three distinct ecological zones, groups should be selected from each so that differences in cycles are depicted in the calendar. Efforts should be made to diversify informants from community groups i.e. men and women, informal leaders, young and old residents.

1. Decide what issues to focus on and the information that needs to be gathered
2. Find group of people able and willing to share their knowledge and their views
3. Any kind of material can be used to indicate the duration or amounts i.e. seeds, stones, beans, soil, sand, leaves, pods, ash etc
4. Decide whether the informant mark the unit on the ground, floor or a paper
5. Notebooks/paper and pens will be needed to make a copy of the calendar and for the note-taker to record the discussion generated during the calendar development. The discussion group will include a facilitator, observer/note-taker, and selected local people
6. Explain the purpose of exercise carefully and begin with asking when their year starts
7. Ask how they divide the year and use locally available calendars which the participants use in their home.
8. Religious festivals or agricultural operation can be used as a proxy for the calendar
9. Probe the participants regarding each of the activity they do
10. Ask the participant to mark which month is are the most extreme for the event of your interest (which you want to collect details) to occur
11. Compare the depicted quantities and continue comparing each month with extreme until the whole year is completed
12. Make a permanent record such as photo and analyze the information from different calendars
13. Compare the months to identify periods of stress and comfort

Limitations:

1. The difference in the calendars used by the local community needs to be considered in order to overcome the mismatch between the facilitator and the participant.

Additional material

1.http://siteresources.worldbank.org/EXTTOPPSISOU/Resources/1424002-1185304794278/4026035-1185375653056/4028835-1185375811087/3_Seasonal_calendar.pdf

2. https://www.youtube.com/watch?v=BLe5mdwCNGc

3.http://www.fao.org/docrep/003/X5996E/x5996e06.htm#6.2.7.Seasonal Calendar

24-Hour Calendar/Daily Activity Clocks

What is it?

A 24-hour calendar is a visual method of showing how people allocate their time between different activities over a 24-hour period. It illustrates all of the different kind of activities carried out in one day.

Where it can be used?

1. To explore what activities do the individuals do over 24 hours on a given common day.
2. Compare the relative work-loads of people between different groups in the community.
3. Comparisons of clocks show who works the longest hours, who concentrates on a few activities and who does a number of tasks in a day, and who has the most leisure time and sleep (such as factory workers vs. street vendors, students vs. children not in school, and people from different well-being categories).
4. Daily workloads of different members within a household (such as young males vs. young women)
5. The potential impact of policy changes/implementation on workloads and activity patterns of different social groups
6. Gender difference in doing household and other works in the community; especially in communities where gender role divisions are still pronounced.

How to do it?

1. Markers and large sheets of paper are required. An alternative is to draw the calendar on the ground.
2. Notebooks/paper and pens will be needed to make a copy of the calendar and for the note-taker to record the discussion generated during the calendar development. The discussion group will include a facilitator, observer/note-taker, and selected local people.

3. The PRA team facilitates discussions through a neutral process of mapping out a daily calendar.
4. Men and women discuss on each daily activity on agreed season (raining or dry season) and depict their timetable, from the time they wake up in the morning to the time they got to sleep in the evening.
5. It might be necessary to construct 24-hour calendars for both working days and nonworking days; or a day at harvest time and during the growing season; or for a day in the dry season and in the wet season, and so on.
6. One approach might be to make a daily time line and divide it into hours (or other time periods such as morning, afternoon, and evening) or points where activities change.
7. Then ask the local people to represent different activities using words, symbols, or blocks of time and place them by the line at the times when activities are undertaken.
8. The activities should include productive activities (such as production, processing, storage, and marketing), co-productive activities (such as fetching water, cooking, house maintenance, child care), and socio-cultural activities (such as religious activities, networking, participation in community activities, and other social obligations).
9. Ask the participants to place objects such as sticks, stones, seeds, and such next to each activity to represent the amount of effort used for each activity (more objects represent more effort)
10. Ask the participants how different they feel their days are at different times of the year to help them make a decision about how many 24-hour calendars to produce and analyze. An alternative that might help to show concurrent activities is to construct a matrix with time periods along one axis and activities along the other axis.
11. Cross-check and probe for possible inconsistencies within the diagram.

12. Ask the participants to examine possible linkages or relationships between different activities they undertake and workloads.
13. Conclude the Activity by asking the participants to make a copy of the diagram on paper for the research team. Thank the local participants for their time and effort.
14. Analyze a 24-Hour Calendar-both during and after the production of the calendar, ask the participants to discuss issues regarding periods of heavy or lighter workloads, differences in activities and workloads between different social groups, and any problems associated with daily activities.

Limitations:

1. Good facilitation skills are the key.
2. May not be an efficient tool to capture the work pattern of whole of the group

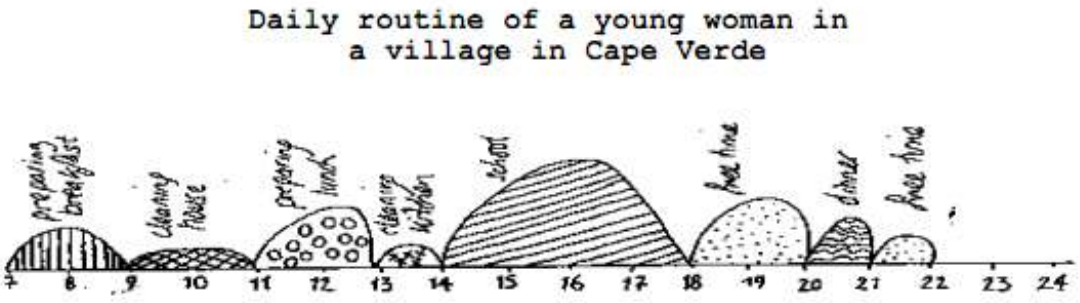


Figure: Daily routine of a young woman using 24 hr calendar technique

Additional material

1.http://www.fao.org/docrep/003/X5996E/x5996e06.htm#6.9. Daily Activity Clocks

2.http://siteresources.worldbank.org/EXTTOPPSISOU/Resources/1424002-1185304794278/4026035-1185375653056/4028835-1185375811087/4_24_hour_calendar.pdf

3.http://www.fsnnetwork.org/sites/default/files/pra_guide.pdf

Cause - Outcome diagram / Causal Flow diagram

What is it?

Cause – outcome is a method of eliciting what is the perception of the community in terms of the cause or factors influencing the problem in a household in the community. Highlights the compounding causes and effects of a specific problems faced by households in a Village. Propose activities to overcome some of the causes and effects of problem faced by households in a Village. This tool is a method of showing diagrammatically the causes, effects, and relationships between events or patterns of behavior.

Where it can be used?

1. To identify the perceptions of causes of problems facing households in a Village
2. To identify the household perceptions of effects of problems facing households
3. To examining relationships among economic, political, social, and environmental factors in the community
4. Planning activities, especially social programs, with households
5. You can use Problem Trees for almost any type of problem raised by households—you can investigate livestock, cropping, natural disaster or rural infrastructure problems as well!

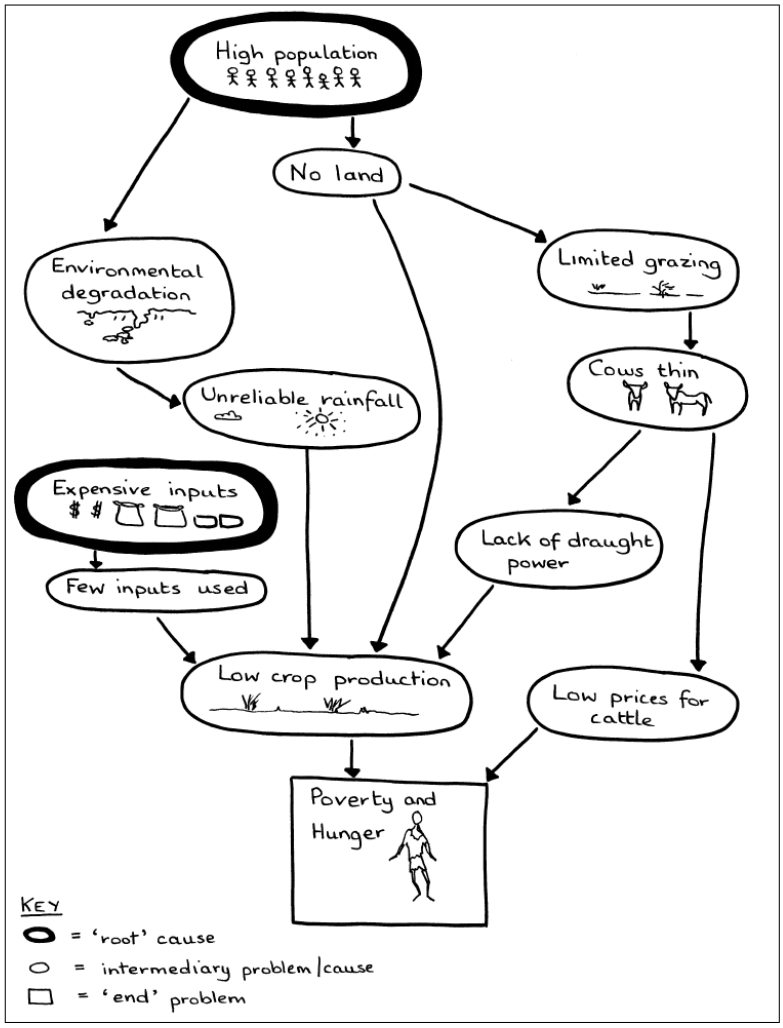
How to do it?

1. Start by discussing the problem that will be analyzed-Write this problem on a coloured card and place this in the middle of the paper.
2. Draw a line across the middle of the paper (through the problem) and write ‘Causes’ above the line and ‘Effects’ below the line
3. Ask the households to discuss some of the causes of the problem and write each cause on a card—make sure the cards are the same colour

4. Discuss each of the causes and identify any contributing and flow-on causes and remember that causes are linked—draw lines to show these links
5. Start to discuss the effects of the problem once you have identified all the contributing causes and their links
6. Write each effect on a card—these cards are a different colour to the 'Causes'
7. Discuss each of the effects and identify any contributing and flow-on effects
8. Remember to show that effects are linked and use lines to draw these
9. You should have all the causes and effects of the problem—now you can start to identify some activities that households can conduct to solve some of the causes of the problem
10. Write each of the activities on a card— these cards are a different colour to the causes and effects
11. Review some of the causes to make sure they a clear and more appropriate and feasible activities are proposed

Limitations

1. Flow diagrams produced that show linear relationships might be oversimplifications of more complex realities.
2. However, there is also a danger that diagrams can quickly become very complex and potentially confusing.
3. Sensitive issues (such as causes of problems) might arise that impact on group dynamics and need good facilitation skills to handle effectively.



Additional material

1.http://www.fsnnetwork.org/sites/default/files/pra_guide.pdf

Force Field analysis

What is it?

Force Field Analysis is a handy technique for decision making, which can help in determining the factors which may hinder achieving a goal and can also be used in decision making. This principle was developed by psychologist ***Kurt Lewin***. Force Field Analysis looks at forces that are either driving movement toward a goal (helping forces) or blocking movement toward a goal (hindering forces).

Driving forces are forces that push in a direction that causes change to occur. Driving forces facilitate change because they push the person in the desired direction. They cause a shift in the equilibrium towards change.

Restraining forces are forces that counter driving forces. Restraining forces hinder change because they push the person in the opposition direction Restraining forces cause a shift in the equilibrium which opposes change.

Equilibrium is a state of being where driving forces equal restraining forces and no change occurs. Equilibrium can be raised or lowered by changes that occur between the driving and restraining forces.

Where it can be used?

1. Identify the perceived causes and effects of individual diseases
2. Identify the causes and effects of environmental changes due to modernization
3. Identify hurdles and eventual effects in achieving the set goals

How to do it?

1. The forces that are to be considered are divided in two categories, namely, Driving Forces and Restraining Forces.
2. When considering forces for and against change, you may have to look into social factors such as the attitude and beliefs that affect people in question, as well as technical aspects like the pros and

cons of implementing the change, be it technology related aspects or details related to the affects that the change may have on the performance of people.

3. What forces are considered generally vary from goal to goal, however, we can generally summarize them as factors such as; resources, vested interests, relationships, trends and organizational structure that is to be analyzed for determining the strength of the forces For and Against change.

Limitations

1. Force field analysis requires the full participation of everyone involved to provide the accurate information required for an effective analysis. This can be a disadvantage when full participation isn't possible, resulting in an analysis that doesn't provide a realistic picture of the supporting and opposing forces.
2. There is the possibility that the analysis won't result in a consensus among the group. In fact, a force field analysis may actually cause a division in the group between those who support the decision and those who oppose it.

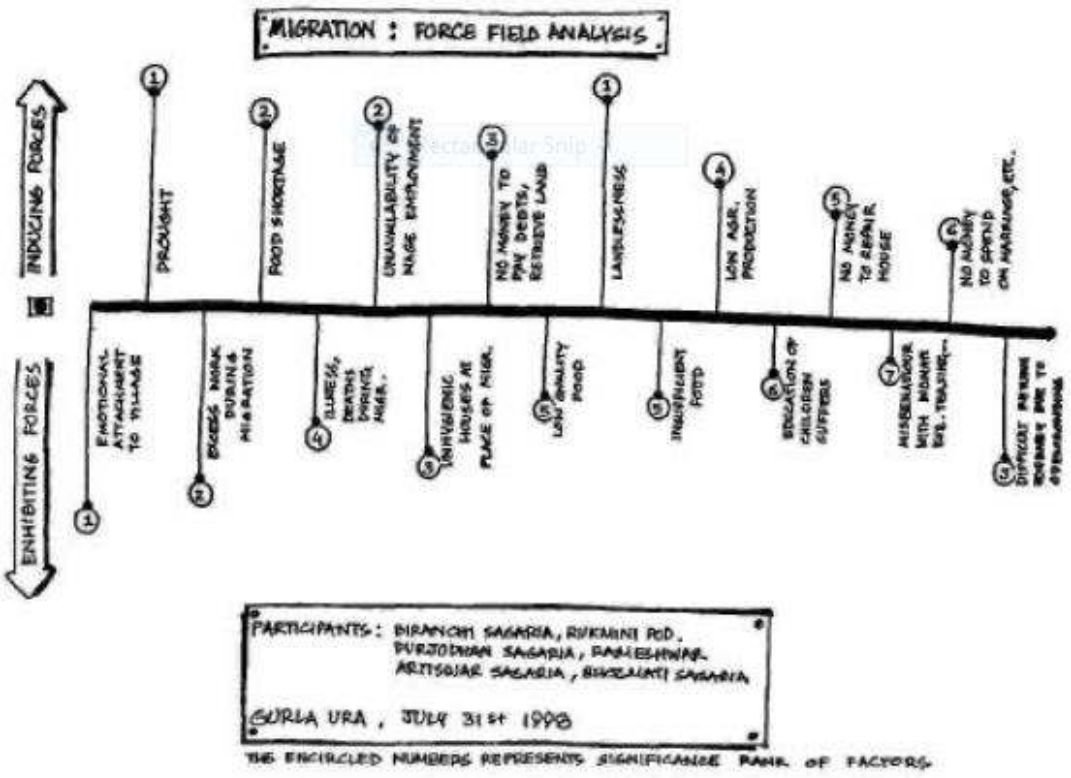


Figure: Force field analysis exploring the reasons and effect of migration

Additional material

1. http://pubs.iied.org/pdfs/G01849.pdf

Livelihood Matrix Scoring

What is it?

This tool is a method of investigating preferred livelihood options of population subgroups against specified criteria. Emphasis should be on the identification of preferences from the point of view of local analysts rather than a description of current livelihood strategies.

Where it can be used?

1. Planning activities with households and identifying preferred activities, varieties or items of households like cropping, livestock, social or community activities
2. Understanding the household-perceived importance of community problems and reasons for their importance
3. Household preferences and the reasons for these preferences
4. Problems and opportunities of different items, varieties or activities
5. Activities that are suitable and favored by households
6. The possible impacts of policy changes on livelihood options and preferences.
7. Analyze preferences of households of different income generating activities and reasons for preferences.
8. Analyze common problems or issues and score or rank these in order of importance (e.g. health or social problems)

How to do it?

1. Start by discussing the topic that will be analyzed and ask the households to list all the varieties or activities currently raised/cultivated in the village
2. Place the varieties or activities in the first column using pictures or drawings to represent these
3. Discuss some criteria to compare these varieties or activities in the top row

4. Prepare some simple criteria in advance or by asking households about what is 'good' about each variety or activity—use the different answers as your column headings
5. Rank each of the varieties or activities in based on each of the criteria (1 = highest ranking)
6. Use locally available products – it is easier for people to count with and move around if they change their mind
7. You can compare women's and men's priorities using different scoring products (e.g. men use stones, women use sticks)
8. Count and tally the results to identify the most preferred variety or activity—this is the variety or activity with the lowest count
9. Identify these problems and issues and discuss solutions or activities to solve these problems—use coloured cards
10. Write the results on the A0 paper (to replace the local materials and coloured cards) and transfer the results to an A4 sheet.

Limitations

1. Subjective criteria for making decisions and choices might not be clear or discussed
2. Investigation of livelihood issues might be highly sensitive in particular contexts (for example, where conflicts exist over livelihood resources)

Activity	Income and savings	Home consumption	*Total*
Maize	●●●●●●●●●●●		*12*
Banana	●●	●●●●●●●●●●	*12*
Fruit	●●●●	●●●●●●●●●●●●●	*18*
Vegetables	●●●●	●●●●●●	*10*
Livestock	●●●●	●●●●●●	*10*
Forage	●●●●	●●●●	*8*
Kapok		●●●●	*4*
Sweet potato	●●●●	●●●●●●	*10*
Weaving	●●●●●●	●●●●●●	*12*
Laboring		●●●●	*4*
Total	*40*	*60*	*100*

Source: Adapted from Cramb and Purcell 2001.

Additional material

1. Brocklesbury, M.A. 2002. *Chars Livelihoods Programme, Diversity and Livelihoods Assessment*. “Fieldwork Guide: Annex One: Outline of Methods.” Swansea: Centre for Development Studies.

Venn Diagram / Institutional Mapping / Chapatti diagram

What is it?

This tool is 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.

The Venn diagram method has been found very useful to study and understand local people's perceptions of local institutions, individuals, programmes, etc. The method provides valuable insights into power structures, decision-making processes, etc.

Where it can be used?

1. Various institutions and individuals and their influence on local people
2. The influence of various groups and individuals in the locality
3. The relative importance and usefulness of services and programmes
4. Social hierarchy in a locality

How is it done?

1. Explain the purpose of the exercise to the participants
2. Ask them to list local institutions, individuals, groups etc. related to the research topic
   Ask them to write and/or depict the things indicated on small cards
3. Ask the participants to place the cards in a descending order according to the perceived importance of the institution
4. Encourage the participants to make changes, if necessary
5. Ask them to assign paper circles of different sizes (cut and kept ready) to the institutions or individuals. The bigger the circle, the more important the institution or individual is for them. Paste the circles and the name cards on paper
6. Draw a circle on the ground representing the community. In the context of a specific variable, for instance accessibility, request the participants to place circles in relation to the circle of the

community. The circles should be close together if the ranking is high, while those ranking low on that variable can be kept far away

7. In some cases there are institutions/individuals that interact closely in which case they could be placed overlapping each other. The closer the circles, the higher the degree of interaction
8. Ask the participants to discuss and explain why they placed the cards in such a manner. Note down the points of discussion and explanations
9. Copy the output onto a sheet of paper. Record the name of the village, participants, date, legends, what the size of the circle represents and what the distance represents
10. Thank the participants for their active involvement and time
11. Triangulate the diagram and the major findings with other community members

Limitations:

1. Despite its usefulness, it can be quite difficult to facilitate. If the facilitator approaches the exercise one step at a time, the Venn diagram is quite manageable and neither the participants nor the facilitators get ahead of themselves in the process.

2. The Venn diagram may become a difficult exercise to conduct when the participants are in the presence of representatives from the institutions that are being critiqued. Therefore, it is important for the facilitator to be aware of these dynamics, so that the participants are able to be honest.

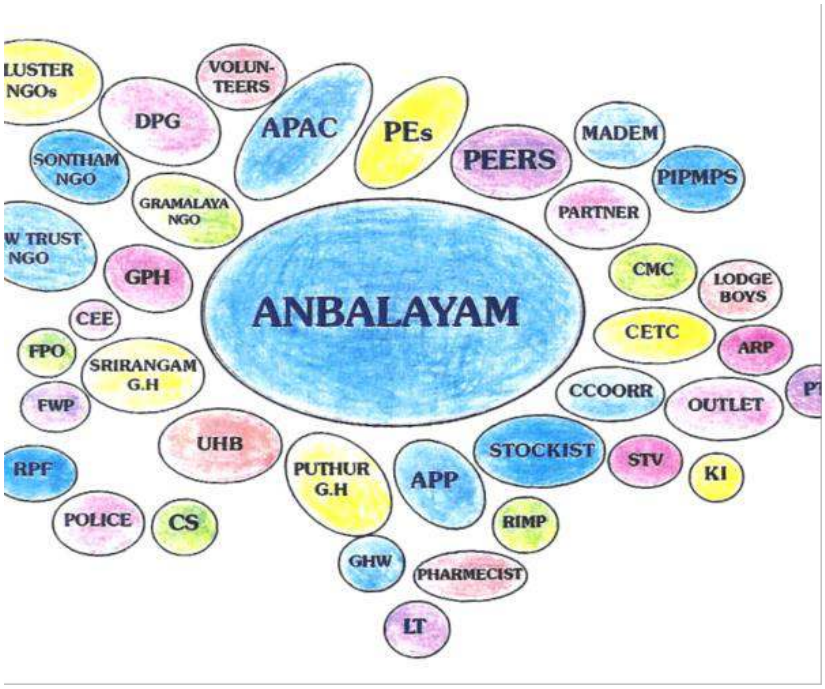


Figure: Social welfare facilities accessed by people in a village of Tiruchi, Tamil Nadu

Additional Material:

1. http://www.agraria.unipd.it/agraria/master/02-03/PARTICIPATORY%20RURAL%20APPRAISAL.pdf

Cobweb analysis / Spider web analysis

What is it?

Cobweb diagram - also referred to as spider diagram, participation wheel or evaluation wheel - is a visual tool often used to show the relative performance of different groups on a number of indicators.

Note: Each arm of the diagram represents one indicator and lines of different colours or patterns are used to denote the performance of different individuals or groups in relation to those specific indicators.

Where it can be used?

1. To compare the performance of different groups on various indicators (preferably 5-6)
2. For evaluating the performance of one group or individual over a period of time on different indicators
3. In participatory evaluation and monitoring of development projects. If the size of the cobweb increases over time, it means the performance of the project has been improving
4. To evaluate participatory development projects, such as evaluating the status of self -help groups

How is it done?

The steps for doing a spider diagram will depend to some extent on the topic and whose comparative performance you are interested in analysing and recording. For example, if you are interested in evaluating the performance of five self-help groups (SHGs) in a village, the steps would include:

1. Call for a meeting of representatives and active members of the five SHGs.
2. Explain to them the purpose of the exercise and initiate a discussion with them about how the groups are performing.
3. Ask them to identify the indicators on which these groups can be evaluated. The cobweb diagram works best with 5-6 indicators;

therefore, you may like to arrive at the 5-6 most useful indicators through the discussion.

4. Once you have decided on a set of indicators, the next step would be to draw a centre point on a large piece of paper or on the ground, and draw as many lines as indicators identified. Write the name of each indicator, one on each arm. Each of the indicators could also be depicted by visuals or symbols.
5. Now ask them to give a score to each group on different indicators. You can follow any system. For example, a scale of 0 to 5 - where 0 means low and 5 means high - may be easy to follow. The scores for each group can be plotted on the arms. Link the points/score on different indicators for each group, using a particular colour or live pattern.
6. Facilitate a discussion on the output, and clarify any doubts.
7. Copy the diagram on paper with all relevant details, including names of the participants, names of the facilitators, the date, and the location.

Limitations

1. Cobweb diagrams are unable to process large amounts of information.
2. The complexity of the diagram increases with the number of items, which makes it difficult to interpret. In such cases, matrix scoring or ranking is a more appropriate PRA tool.

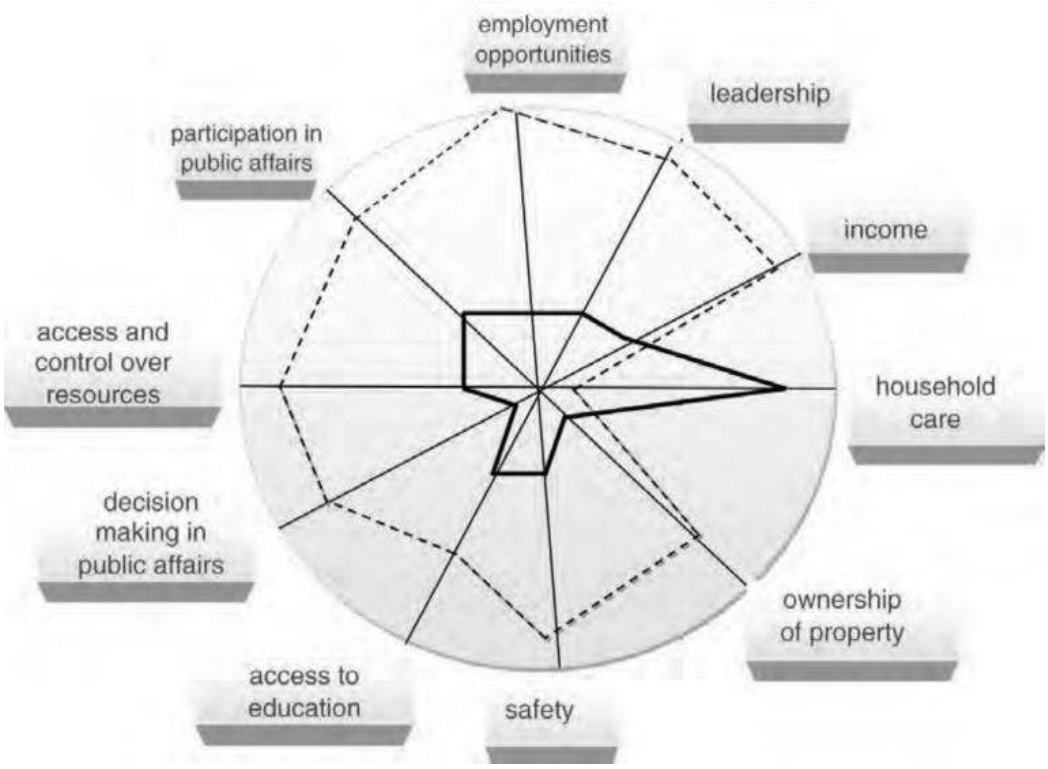


Figure: Cobweb analysis to understand the conditions and status of women in the village

Additional material:

1. Village Book: Community led planning and development processes (Training manual)

Key Informant Interview

What is it?

Key Informant interviews are qualitative, in - depth interviews of 10 to 20 people selected for their first - hand knowledge about a topic of interest. These are informal interviews with various community members based on a check-list of questions you write down beforehand. By interviewing a variety of people you can obtain a very large range of information by selecting several key members of the community.

Key to a KII is selection of the key informant. The KI should be articulating, willing to participate, trustworthy and should have other personal attributes conducive of conducting detailed interviews. The KI is known as key because of his/her unique position in the community by the virtue of which he/she can impart a useful piece of information.

Types of Key Informant Interviews

1. Structured – usually with a structured questionnaire
2. Semi-structured – open ended questions
3. In depth – one or two issues covered in great detail. Questions based on what the interviewee says

To interview Anganwadi teacher, Health worker, Self Help Group (SHG) member, Village doctor, Village chief or the Local school teacher.

Where it can be used?

1. When qualitative, descriptive information is sufficient for decision – making.
2. When there is a need to understand motivation, behaviour, and perspectives of our clientele and health partners. For example, In - depth interviews of program planners and managers, service providers, host government officials, and beneficiaries concerning their attitudes and behaviours about a health program activity can help explain its successes and shortcomings.

3. When the main purpose is to generate recommendations, Key informants can help formulate recommendations that can improve a program's performance.
4. When preliminary information is needed to design a comprehensive quantitative study. Key informant interviews can help frame the issues before the survey is undertaken.

How to do it?

1. Identify objectives and specific information needs – gaps in knowledge
2. Recruit the right people – keep the numbers manageable
3. *T*he interviewer must be fluent in *the local language* or have a skilled interpreter; choose a *quiet location*; introduce yourself and explain the purpose of the interview, *have a check-list of questions* to be answered but *allow the answers to emerge through* free-flowing conversation and appropriate prompting: allow 45-60 minutes: thank the informant;
4. Record notes in as much detail as possible and review right after interview to fill in any missing details
5. After the interview, ensure that all handwriting is legible or type notes in electronic template
6. Synthesize the information and consolidate the report

Limitations

1. Doesn't work for quantitative data
2. Vulnerable to informant or interviewer bias
3. Difficult to prove validity of findings

Additional Material

1. Key Informant Interview Handbook. Available from http://courses.washington.edu/nutr531/HEBD/KIInterviews/KeyInformantInterviewHandbook.pdf

2. USAID Center for Development Information and Evaluation. Conducting Key Informant Interviews. 1996.
3. Oishi, S. How to Conduct In-Person Interviews for Surveys (Vol. 5) in the Survey Kit. 2nd ed. Thousand Oaks: Sage, 2003

	TRANSECT WALK	SOCIAL MAPPING	HISTORICAL MAPPING	SEASONAL CALENDAR	24-HOUR CALENDAR
Key points	It is a systematic walk along a defined path/ transect in a village, together with local key informants to get a general impression of an area	It is a mapping used to elicit the perception of the community regarding the social structure and institutions present in the village	It is a mapping exercise portraying the demographic and natural resources of the community over the specified time period.	It shows the distribution of seasonally varying phenomena such as natural events/ phenomena over time	It is a visual method of showing how people allocate their time between different activities over a 24-hour period
Utility	Provide a quick cross-sectional overview of the different zones of the locality.	Provides great insight regarding the community perception regarding their habitation	Provide clear picture of the evolution of a number of different factors over time.	It assists local people to understand the impact of the seasons on the individual aspects of their living.	It helps the individuals to visualize their daily schedule and make necessary modifications to improve the productivity.

	CAUSE-OUTCOME ANALYSIS	FORCE-FIELD ANALYSIS	LIVELIHOOD MATRIX	VENN DIAGRAM	COB-WEB DIAGRAM	KEY INFORMANT INTERVIEW
Key points	It is a method to identify the perceived causes and effects of the given problem.	It identifies the facilitating or favorable factors and hindering or unfavorable factors for a given problem situation.	It is a method of investigating preferred livelihood options of population subgroups	It is a visual method to understand about various institutions and their influence on local people	It is a visual tool often used to show the relative performance of different groups on a number of indicators	These are qualitative, in - depth interviews of people selected for their first - hand knowledge about a topic of interest.
Utility	Helps to identify the community perception regarding the problems and also misconceptions which need to addressed.	Identifies the community perception regarding the cause of the given problem.	It compares analysis between different forms of livelihood.	It is a simple tool to study community institutional preferences for given health problem.	It helps the community to appreciate the relative performance on spheres of care delivery.	It can help in collating the required valid information in a short period.

Utilizing Secondary Data

"Secondary Data" implies data that has already been collected by somebody, for some other purposes and we are making use of it.

Wherever we go – be it a rural community or a tertiary care hospital, there is bound to be some sort of secondary data already available… and we must learn to make the best use of it.

For example, the population structure of the village – how many males, females, children live there – is probably already available with the local government office.

We can find a wealth of secondary data / information from centres like the Anganwadis (ICDS centres), Health Sub Centres (HSC) and the Primary Health Centres (PHC). In addition, we may also find crucial information from other agencies like the village Panchayat office, Commune Panchayat, the Village Administrative Office (VAO), the Block Development Office (BDO). We need to ensure that we seek / obtain proper permission before we use this data.

Some level of secondary data is probably already published in the Public Domain – like the Census data. These may be used freely, without any permission-seeking, but the source of the information must be properly acknowledged.

Communicating / Disseminating our Findings

Based on topics allotted to the groups, the students will be required to make presentations group wise. Presentations will be like sharing of findings/information regarding village life studied by their group. It will be a gist of the learning from the sessions consisting of various qualitative methods and PRA tools. The students will present the above stated key aspects of their learning over the week to the faculty members on the final day. It is imperative that ***each member in the group participates*** in preparing the report and presenting it. The presentation may be in the form of charts/PowerPoint. Students are encouraged to be ***innovative and creative*** in their presentations. Audio visual aids may be used as required.

Outline for presentation:

1. Topic
2. Objectives (What did we set out to study?)
3. Methodology (What are the methods that we used? E.g.: Social mapping, transect walk etc)
4. Results (What are our main findings?)
5. Inferences / Learning (What is the importance of our findings? How are they relevant to us as budding doctors?)

Faculty members and post graduates of Department of Community Medicine will guide and review the presentations. Faculty members of the Department of Community Medicine, other faculties across the departments and other eminent people will attend the presentation during which they will ask questions, provide additional information and clarify doubts.

Key points for dissemination of results:

1. After three days of field activity you would be expected to present the findings in the form of charts/power point presentation/ video.
2. The total duration of presentation is one and half hours.
3. For preparation of charts you are expected to bring the necessary materials including color sketches, pencil, glittering papers and so on.
4. For power point presentation be ready with laptops with Microsoft PowerPoint installed
5. It would be nice to have a uniform style with Calibri and font size of 36 for title and 28 for the contents
6. It would be an opportunity for the undergraduates for learning Microsoft PowerPoint presentation
7. The students are also required to submit a detailed written report of their activities during the Heart programme.

Program Schedule

Day / Date	Time	Activity	Faculty
Day 1 08.10.18 Monday	08.30 am – 09.30 am	Introduction to Community Medicine & HeART program	Dr. Seetharaman N
	09.30 am – 10. 45 am	Group allocation	Dr. Gayathri S
	10.45 am – 11.00 am	Tea Break – 15 min	
	11.00 am – 12.00 pm	Health & Disease - Determinants (Free listing)	Dr. Sahityaa J
	12.00 pm – 01.00 pm	Why medical graduates need to know about Research	Dr. Seetharaman N
	01.00 pm – 02.00 pm	Lunch break – 1 hour	
	02.00 pm – 03.00 pm	The process and methods of Scientific thinking	Dr. Rajkumar Patil
	03.00 pm – 04.00 pm	Types of research & Introduction to qualitative research	Dr. Partha Nandi
Day 2 09.10.18 Tuesday	08.30 am – 08.45 am	Recap of previous day's learning	Dr. Gayathri S
	08.45 am – 09.30 am	Introduction to PRA tools	Dr. Seetharaman N
	09.30 am – 10.15 am	Village Transect Walk, Social Mapping	Dr. Jayaramachandran S
	10.15 am – 11. 00 am	Seasonal Calendar, 24-hour calendar	Dr. Surekha A
	11.00 am – 11.15 am	Tea Break – 15 min	
	11.15 am – 12.00 pm	Venn Diagram, Cob-web	Dr. Abijit V Bortane
	12.00 pm – 01.00 pm	Cause-outcome, Force Field analysis	Dr. Arun S
	01.00 pm – 02.00 pm	Lunch Break (1 hr)	

Day / Date	Time	Activity	Faculty
	2.00 pm – 3.30 pm	Key Informant Interview / Focused Group Discussion	Dr. Sachin Palvae Baskar
	3.30 pm – 4.00 pm	Orientation to field activity	Dr. Gayathri S
Day 3 10.10.18 Wednesday	8.30 am – 1.00 pm	Field Activity	All faculty (as per schedule - 1)
	01.00 pm – 02.00 pm	Lunch Break (1 hr)	
	2.00 pm – 2.30 pm	Field activity debriefing	
	2.30 pm – 4.00 pm	Group work: PowerPoint / Videos / Chart preparation & reflection	
Day 4 11.10.18 Thursday	8.30 am – 1.00 pm	Field Activity	All faculty (as per schedule - 1)
	01.00 pm – 02.00 pm	Lunch Break (1 hr)	
	2.00 pm – 2.30 pm	Field activity debriefing	
	2.30 pm – 4.00 pm	Group work: PowerPoint / Videos / Chart preparation & reflection	
Day 5 12.10.18 Friday	8.30 am – 1.00 pm	Field Activity	All faculty (as per schedule - 1)
	01.00 pm – 02.00 pm	Lunch Break (1 hr)	
	2.00 pm – 2.30 pm	Field activity debriefing	
	2.30 pm – 4.00 pm	Group work and sharing of necessary materials with each other	
13.10.18: 2nd Saturday & 14.10.18 : Sunday – Holiday			

Day / Date	Time	Activity	Faculty
Day 6 15.10.18 Monday	8.30 am – 10.30 am	Guidance for making PPT and scheduling of presentation	All faculty (as per schedule - 2)
	10.30 am – 10.45 am	Tea Break (15 min)	
	10.45 am – 1.00 pm	Group work: PowerPoint / Videos / Chart preparation	
	01.00 pm – 02.00 pm	Lunch Break (1 hr)	
	2.00 pm – 4.00 pm	Group work: Power Point / Videos / Chart preparation	
Day 7 16.10.18 Tuesday	8.30 am – 10.30 am	Review of presentation / invite VIPs	All faculty (as per schedule - 2)
	10.30 am – 10.45 am	Tea Break (15 min)	
	10.45 am – 1.00 pm	Review of presentation / invite VIPs	
	01.00 pm – 02.00 pm	Lunch Break (1 hr)	
	02:00 pm – 04.00 pm	Mock Presentation	
Day 8 17.10.18 Wednesday	8.30 am – 10.00 am	Modifications to Presentations / Re-invite VIPs	All faculty (as per schedule - 2)
	10.00 am – 01.00 pm	Final Presentation and Posters Display	
	01.00 pm – 02.00 pm	Lunch Break (1 hr)	
	2.00 pm – 3.30 pm	Students' Appraisal / Feedback & Peer assessment	
	03.30 pm – 04.00 pm	Faculty Feedback	

THE HeART

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