

Research design and methods
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What's within your research design and method?

- What research design will guide your study?
- What is the scope/ location of your study?
Why?
- What research methods will you use?
- Who will you interview, how, when and why?
 - (i.e. sampling strategy)
- What research tools will you use?

What's within your research design and method?

- What analysis techniques will you use to arrive at your findings?
 - Content analysis;
 - Variables : (grouping, classifying, comparing, connecting)....
- What is the timeline for your research method?
- What are your research limitations?

Quantitative Data

- Use statistics to 'filter-out' the differences and identify associations which deserve attention
- Descriptive statistics
 - Frequency
 - Mean / median (and standard deviation)
 - Percentages/ percentage change
 - Ratios
- Cross tabulation/ correlation tests (Chi-square...)
- One variable at a time is often not good enough
 - Need to consider confounding
 - Logistic / Linear regression methods
 - Consider 'recoding' continuous variables as categorical variables

Qualitative Data

- Helps with understanding of discourses, perceptions, mechanisms etc.
- Can be analyzed systematically
- You may just use “descriptive analysis”
- You can consider using content analysis
 - Coding could strengthen evidence-base and may facilitate semi-quantitative analysis

Analysis: Mixed method analysis

- Qualitative
 - Helping set up questions/queries
 - Ideas of what to measure
- Quantitative to
 - Prevalence (high, low)
 - Explore associations (negative, positive)
 - Adjust for confounding
- Qualitative
 - Refine & nuance interpretation
 - Explain differences due to evidence of context and conditions

Making sure that you collect the right data

1.5.4 Methodology Matrix and Interview Strategy

Table 1 : Methodology Matrix

Questions: How can hybrid governance play a role in Thailand community VSPPs as relates to national energy security?	Data needed	Interviewee/ origin of the source	Tools
1. What are the incentives of each actor in economic, social and environmental aspects?	<ul style="list-style-type: none"> -Interests and incentives of each actors -Internal process of decision-making to arrive at a leadership or an agreement to negotiate with the partners. -Environmental motivations that drive policymakers -The ability to access funding -Norms of management -The role of the community in participating in the organization 	-The organization's stakeholder (representative from each partnership)	<ul style="list-style-type: none"> -In-depth interview -Secondary data review -Non-participatory observation

Methods of data collection

- Interview
 - Interviewee : Respondents/informants, Key informant, Case studies
 - Interview approach: in-depth, structured, semi-structure, probing
- Observation: normal and participant observation, unobtrusive observation
- Focus group discussion
- Measurement of physical variables

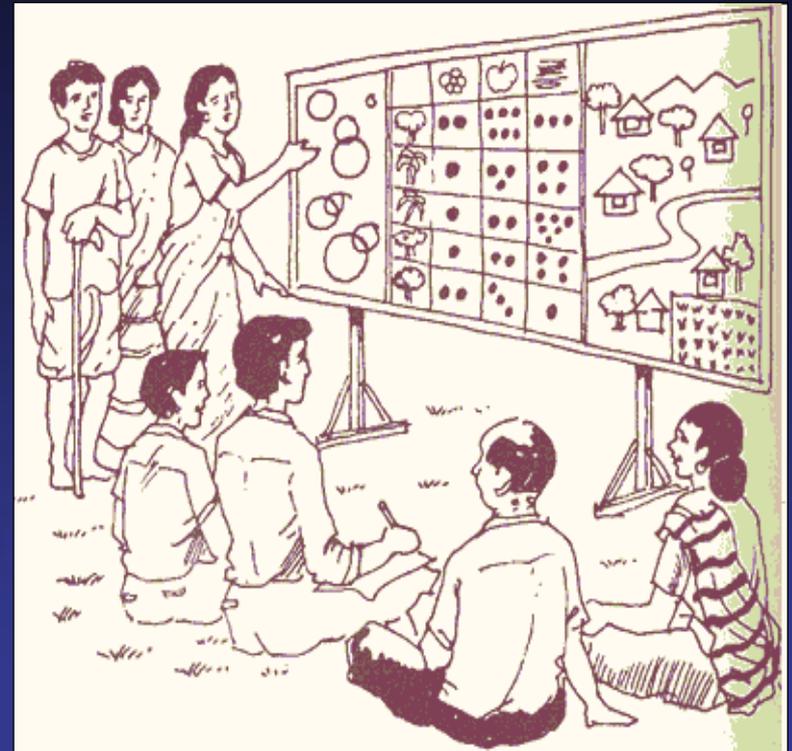
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- Focus Group Discussions
- Survey interviews (semi-structured interviews)
- Indepth interviews
 - With expert “key informants”
 - With interesting households
- Plus scientific surveys, such as water quality studies, or medicinal plant taxonomy...

Participatory Action Research

- Could you work with the community and other stakeholders directly to “co-produce” knowledge?



A typology of “Participation”

Passive participation	People participate by being told what is going to happen. A unilateral announcement by administration or project management without any listening to people's responses.
Participation in information giving	The information being shared belongs only to external professionals. People participate by answering questions posed by extractive researchers. People do not have the opportunity to influence proceedings, as the findings of the research are neither shared nor checked for accuracy.
Participation by consultation	People participate by being consulted, and external agents listen to views. These external agents define both problems and solutions, and may modify these in the light of people's responses. Does not concede any share in decision making, and professionals are under no obligation to consider people's views.
Participation for material benefits	People participate by providing resources such as labour, in return for food, cash or other material incentives. Much on farm research falls in this category, as farmers provide the fields but are not involved in experimentation or the process of learning. It is very common to see this called participation yet people have no stake in prolonging activities when incentives end.

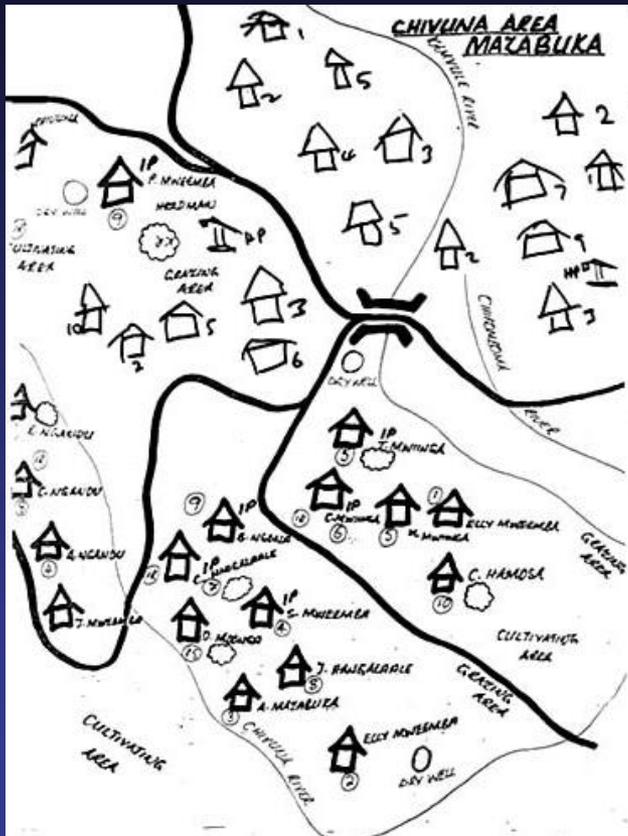
A typology of “Participation”

Functional participation	People participate by forming groups to meet predetermined objectives related to the project , which can involve the development or promotion of externally initiated social organisation. Such involvement tends not to be at early stages of project cycles or planning, but rather after major decisions have already been made . These institutions tend to be dependent on external initiators and facilitators, but may become self-dependent.
Interactive participation	People participate in joint analysis, which leads to action plans and the formation of new local institutions or the strengthening of existing ones . It tends to involve interdisciplinary methodologies that seek multiple objectives and make use of systematic and structured learning processes. These groups take control/ownership over local decisions, and so people have a stake in maintaining structures or practices.
Self-mobilization	People participate by taking initiatives independent of external institutions to change systems . Such self-initiated mobilisation and collective action that may or may not challenge existing inequitable distributions of wealth and power.

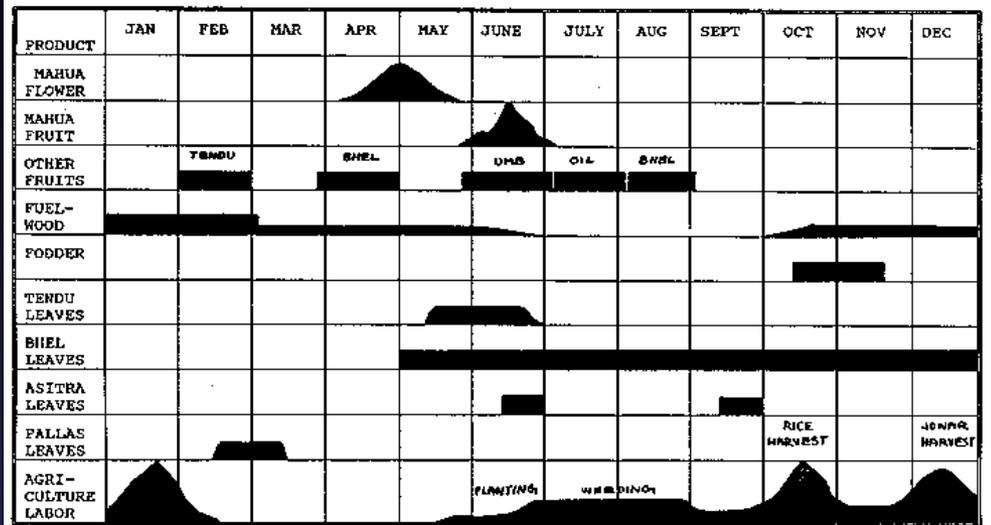
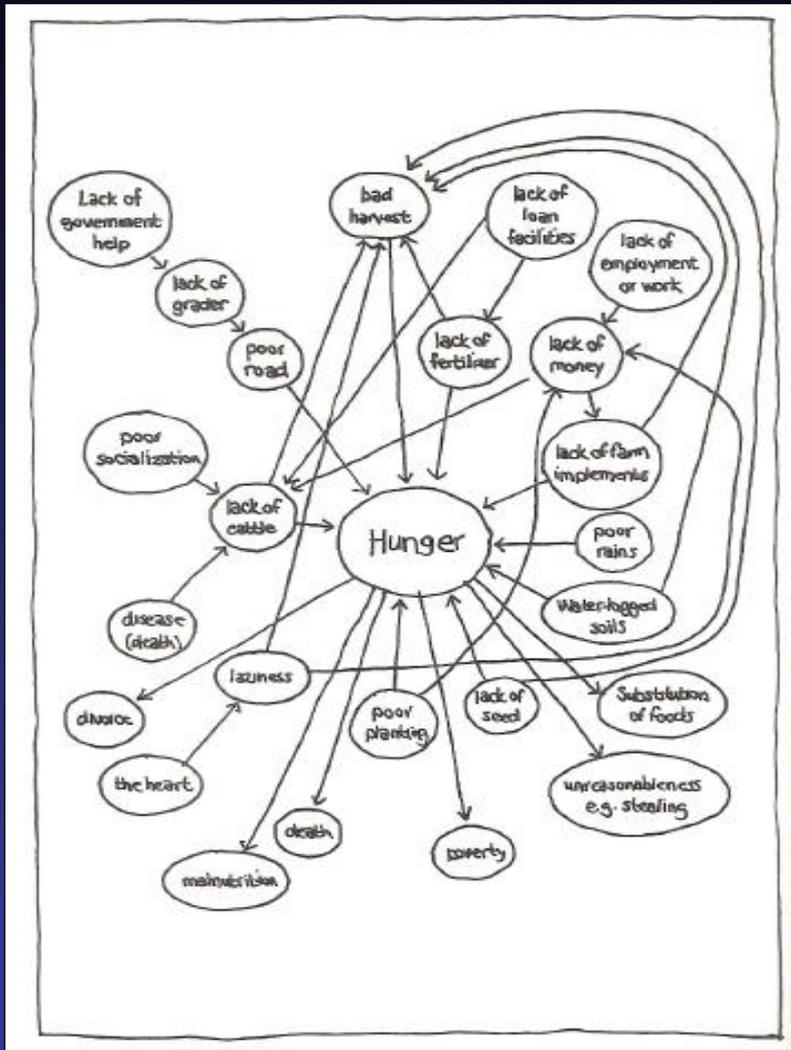
A typology of “Participation”

- All types of participation try in some way to utilize local peoples’ knowledge
- Higher levels of participation require democratic policy frameworks *and* decentralization of power
- Increasing levels of participation promotes local people as the main actors and implementers of their own development
- Increasing levels of participation shifts external agents role from actors to facilitators

Various approaches/ tools are possible



- Maps can illustrate natural resources, socio-economic features, infrastructure, movements of communities...
- Complete maps or village transects (or both)
- For example, resource maps can also be used to determine:
 - Which resources are rare
 - Which resources are important (to men, to women)
 - Who can use the resources
 - What are the main problems, as perceived by different interest groups



RESOURCE USE MATRIX								
	GENDER		WEALTH			PROVENANCE OF USER		
	Men	Women	Richer	Average	Poorer	Villager	Neighbouring village	Stranger
Cropland	12	2	10	8	5	10		
Kitchen Garden Land	3	10	10	10	10	10		
Tree Wood	6	6	5	6	10	6	4	5
Tree Leaves	3	13	6	3	10	5	3	
Medicinal Plants	6	8	2	3	8	5	3	12
Grasses	10	4	9	5	2	6	4	

Individual and group exercise

- Review own your” **research design** section individually
 - Have you clearly stated the research design addresses research questions and objectives?
 - What are the key methods you think they would help you to get sound data in order to answer your research goal and how they fit with time frame and research area?
 - Are research method satisfactory?
- After reviewing your work and editing a little, present to each other in your small groups and discuss

Individual and small group work on research design