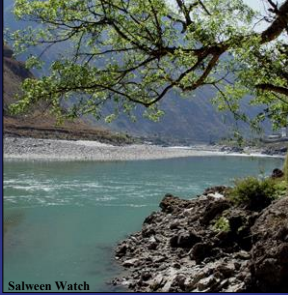


Workshop on Field study and Data Analysis



*Dr. Carl Middleton, Dr. Chu Thai Hoanh,
Dr. Ha Hai Doung, and Dr Kanokwan Manorom*

Agenda

10:30 – 10:40: Introduction to “fieldwork” design

10:40 – 12:00: Fieldwork practices

- Recap of Research Design document
- Qualitative versus Quantitative approaches
- Factual, behavioral and non-factual data
- Fieldwork approaches, and sampling

12:00 – 13:00: Lunch

13:00 – 14:00: Fieldwork practices (continued)

- Designing interviews
- Conducting interviews
- Keeping field notes, and use of photography

Agenda

14:00 – 14:40: Gender and fieldwork (Michael Simon)

14:30 – 14:45: Tea break

14:45 – 15:15: Data analysis

- Transcribing and coding
- Working with your findings
- Data verification
- Strategies to work with quantitative data
- Strategies to work with qualitative data

**Just as the principle of the WriteShop was
to write....**

**The principle of a field school is to practice
fieldwork skills, not sit in the classroom**

Recap: Research design document

In relation to your fieldwork design, what is the purpose of:

- Your research questions / objectives?
- Your problem statement?
- Your conceptual framework?
- Your research scope?
- Ethical issues?
- Budget?

Draft Research Proposal
Professional Development of Water Governance and Rational Development Practitioners in the No-Threshold-Salween Basin 2012-2014

1. Introduction
1.1. Title
1.1.1 Full title
1.1.2 Short title
2. Problem Statement (200 Words)
3. Literature Review (1000 Words)
4. Conceptual Framework
5. Research Questions
5.1a. Main Research Questions
5.1b. Sub-Research Questions
5.1.1
5.1.2
5.1.3
6. Research Objectives
6.1
6.2

Recap:

In relation to your fieldwork design, what is the purpose of:

- 7.1 Research method?
- 7.2 Methodology matrix?
- 14 Fellowship timeline?

Draft Research Proposal
Professional Development of Water Governance and Rational Development Practitioners in the No-Threshold-Salween Basin 2012-2014

1. Introduction
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5.1.1
5.1.2
5.1.3
6. Research Objectives
6.1
6.2

The method should concisely cover:

- What was the scope of your study?
- What research methods did you use?
- What were the main ideas, constructs and/or variables that you considered?
- What was your unit of analysis?
- Who interviewed, when and why?
- Research tools used
- What analysis techniques did you use to arrive at your findings?
- Any research limitations

Your matrix enables you to operationalize your research

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?	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)	-In-depth interview -Secondary data review -Non-participatory observation

Types of data: Qualitative vs Quantitative

Qualitative data :

- Local or subject's perspectives
- descriptive / thick / deep / rich
- Offers historical background and context
- Helps with understanding of discourses, perceptions, mechanisms etc.
- Qualitative data can be very “unstructured”; hard to manage
- Quantitative data
 - Data that is “countable” in some way
 - We can use statistics to ‘filter-out’ the differences and identify associations which deserve attention
 - Quantitative information is relatively easy to condense

Based on Lebel, 2012

Some common contrasts between quantitative and qualitative research

Quantitative	Qualitative
Numbers	Words
Point of view of researcher	Points of view of participants
Researcher distant	Researcher close
Theory testing	Theory emergent
Static	Process
Structured	Unstructured
Generalization	Contextual understanding
Hard, reliable data	Rich, deep data
Macro	Micro
Behaviour	Meaning
Artificial settings	Natural settings

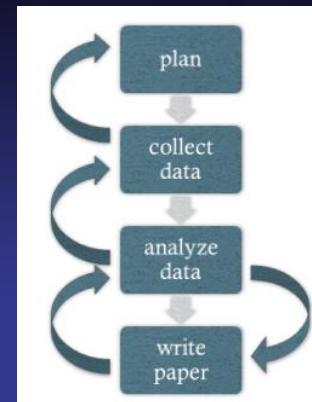
Bryman, 2012

Mixed method approaches

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

Lebel, 2012

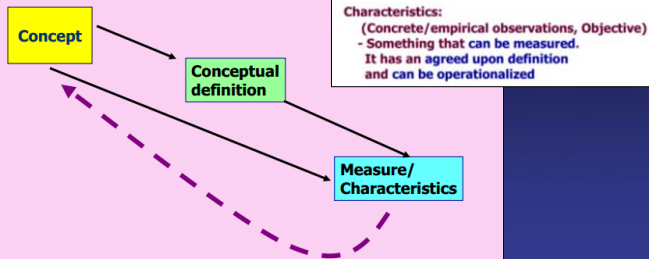
Research is not a linear process



Leehey, 2014

Research is not a linear process

Process of Operationalizing a Concept

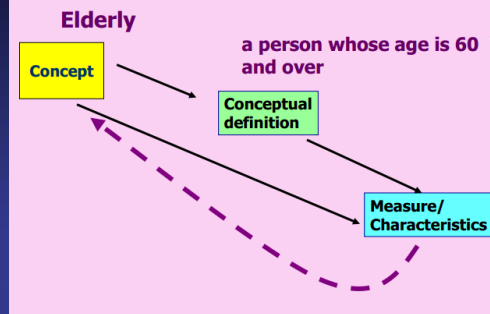


Concept: (Construct, Subjective)
- A mental image of something.
- Concepts are not real and do not exist except as an idea.
- Conceptual can differ across people and cultures

Siriboon, 2012

Research is not a linear process

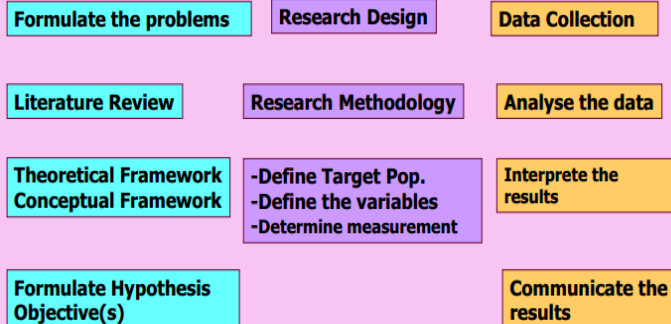
Process of Operationalizing a Concept



This number varies between countries!

Siriboon, 2012

Research Process



Siriboon, 2012

Types of “data”: A simple typology

• Factual data

- relatively permanent attributes:
 - gender, date of birth, blood group, race, ethnic group
- variable characteristics:
 - marital status, work status, occupation, socio-economic status, income
- But note, “facts” do not exist until someone has put a definition around them
 - For example, how do you define “the household” or “the family”

Types of data: A simple typology

- **Behavioral data**

- What sorts of things do people do?
- How much of it do they do? (quantification)
- How often do they do it?
- On what occasions do they do it?
- Where do they do it?
- Who do they do it with?
- How much money do they spend on doing it?

For example, fishing, growing rice, drinking alcohol, international migration....

Types of data: A simple typology

- There are various challenges in collecting behavioral data
 - How do you define the behavior?
 - How do you quantify it? Or, how to obtain averages (and over what period?)

Option 1- Actual numbers

- Actual number of times

Option 2- Vague Quantifiers

- Always
- Often
- Sometimes
- Rarely
- Seldom
- Occasionally
- Never

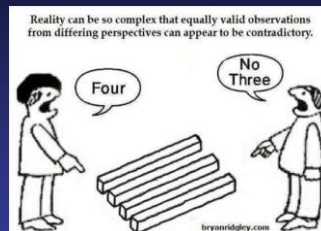
Option 3 – Approximate ranges

- More than once a day
- Almost everyday
- A few times a week
- About once a week
- Two or three times a month
- About once a month
- Less than once a month
- A few times a year
- Once a year or less

Types of data: A simple typology

- **“Non-factual” data**, namely peoples “perspectives” on the world (their “world view”):

- Knowledge
- Opinions
- Beliefs
- Intentions
- Attitudes
- Values
- Satisfaction



These can be measured qualitatively, or by a (5) scaled degree of agreement/ disagreement with a statement

Likert scale

1 Access

How do you personally evaluate the importance of the following aspects of coordinated care?

How important is.....?	very important	important	so-so	less important	not important
The surgery hours of the doctor/service provider are flexible.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The doctor/service provider takes a proactive approach with me (far-sighted, preventative) and agrees check-up appointments or reminds me that an appointment is due.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My doctor/service provider is available around the clock in case of emergencies.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The health insurer actively supports me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The interfaces between GP, specialist and hospital are not perceptible to me. There are no problems at these interfaces in the case of referral from GP to specialist or admission to hospital (loss of information)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Very Interested	Somewhat Interested	Neutral	Not Very Interested	Not at All Interested
5	4	3	2	1
Very Much Like Me	Somewhat Like Me	Undecided	Not Really Like Me	Not at All Like Me
5	4	3	2	1
Very Happy	Somewhat Happy	Neutral	Not Very Happy	Not at All Happy
5	4	3	2	1
Almost Always	Sometimes	Every Once In a While	Rarely	Never
5	4	3	2	1

DON'T FORGET: You're collecting data to answer your research questions!

1.54 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?	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)	In-depth interview -Secondary data review -Non-participatory observation

Methods of (field) data collection

- Interview
 - Group discussion
 - Focus group
 - Semi-structure
 - Structured (closed)
 - In-depth (open)
 - Measurement of physical variables
 - (Secondary data analysis)
 - (Content Analysis of written material)
- Which types of data are suited to: a) quantitative; and b) qualitative analysis?**

What is the difference between primary and secondary data?

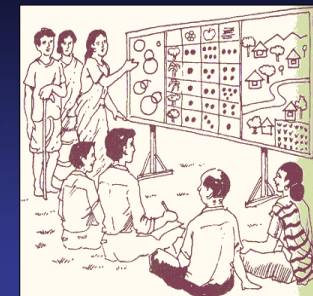
“Focus Groups”

- The focus group is a group interview that is concerned with exploring a certain topic.
- The moderator generally tries to provide a relatively free rein to the discussion.
- However, there may be contexts in which it is necessary to ask fairly specific questions
- There is concern with the joint production of meaning among focus group participants. - Group interaction is an important component of discussions.
- Focus group discussions need to be recorded and transcribed.

Bryman, 2012

Participatory Action Research

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



The successful interviewer

Kvale (1996) has proposed a very useful list of ten criteria of a successful interviewer.

- *Knowledgeable*: is thoroughly familiar with the focus of the interview; pilot interviews of the kind used in survey interviewing can be useful here.
- *Structuring*: gives purpose for interview; rounds it off; asks whether interviewee has questions.
- *Clear*: asks simple, easy, short questions; no jargon.
- *Gentle*: lets people finish; gives them time to think; tolerates pauses.
- *Sensitive*: listens attentively to what is said and how it is said; is empathetic in dealing with the interviewee.
- *Open*: responds to what is important to interviewee and is flexible.
- *Steering*: knows what he or she wants to find out.
- *Critical*: is prepared to challenge what is said—for example, dealing with inconsistencies in interviewees' replies.
- *Remembering*: relates what is said to what has previously been said.
- *Interpreting*: clarifies and extends meanings of interviewees' statements, but without imposing meaning on them.

Bryman, 2012

Interview preparation

- Internalize your research questions and objectives
- Prepare list of key questions/ questionnaires
- Identifying informants (who to interview)
 - Why?
 - Access?
- Get to know and making connection with the place/community (introduction, exploration, observation, community mapping)

Interviewing

- Ethical requirements
- Introduction of the subject, your research questions
- Get the evidence, not only opinion :
 - place, people, statistics, further references,
 - Triangulation, cross checking information
- Remember:
 - An interview is an interview, not a chat
 - YET... unlike physical sciences, research involves social interaction (and therefore power-relations, the need for rapport etc...)

Problems?

- No cooperation: why?
 - get recommendation
 - find alternative
 - new appointment
- Not getting information, why?
 - Other questions,
 - rephrase,
 - not the right person to talk to?
 - leading questions?
 - Need to build trust?

Positionality

The problem of meaning

Reflexivity

Limits to understanding behavior through interview?

Bryman, 2012

- *Problem of meaning.* People may vary in their interpretations of key terms in a question
- *Problem of omission.* When answering the question, respondents may inadvertently omit key terms in the question
- *Problem of memory.* They may misremember aspects of the occurrence of certain forms of behaviour.
- *Social desirability effect.* They may exhibit a tendency towards replying in ways that are meant to be consistent with their perceptions of the desirability of certain kinds of answer.
- *Question threat.* Some questions may appear threatening and result in a failure to provide an honest reply.
- *Interviewer characteristics.* Aspects of the interviewer may influence the answers provided.
- *Gap between stated and actual behaviour.* How people say they are likely to behave and how they actually behave may be inconsistent

What to pack for your fieldwork?

- A small, discrete note book
 - Includes your planned interviews written into it
 - Your main objectives written in the front
- At least three pens
- Your questionnaire
- A camera / recorder (i.e. your phone?)
- A rain coat
- A sun hat
- Sun screen
- A bottle of water (and possibly lunch)
- Some money in small notes
- (Imodium)

Field note keeping

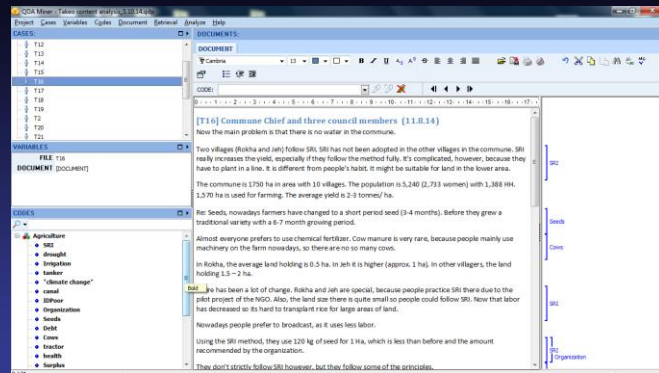
- Immediate jotted notes of things of interest
- Full field notes at the end of the day
 - Even the mundane may be useful in the long term
 - Include personal reflections (but note them as such)
 - Include analytical insights (before you forget them)
- Whilst interviewing
 - Note where, when, who – plus any other useful thoughts/ observations
 - Digital recording (if possible)
 - Interview notes (Consider working in a pair)

– Write copiously, ... but don't make people paranoid!

Photography

- Photographs can also help document observations
 - Permissions
 - anonymity
 - Sensitivity
- You are not a tourist
 - Taking photographs can be a means to build rapport
 - It can be a research method itself

Transcribing and coding your interviews



QDA4 Miner Lite is a easy to learn, easy to use software for quickly coding your interviews... and it's free

Making sense of your findings:

DEDUCTIVE thinking ("top-down"): from abstract generalizations to specifics

- Reading academic sources and learning the theories and concepts that other scholars use to talk about... "poverty" "development" (etc.)

INDUCTIVE thinking ("bottom-up"): from specifics to abstractions

- Using details of your data – and the language and concepts of your informants – to generate new concepts. (also called "grounded theory")

Leehey, 2014

Working with your findings

- Stick to your research questions/ statement of purpose
- Align your organization of results to your main questions or themes / conceptual framework
- Avoid statements not backed by evidence
- Analyze don't just describe

Adapted from Lebel, 2012

Working with your findings

- Make use of tables and figures, – (but don't then repeat detailed information in text)
- Recognize that your data is complex, and be nuanced rather than brash in your use of it
- Think very carefully about your structuring – present your results in a logical order

Adapted from Lebel, 2012

Data verification – Building an analysis from your data

- Triangulation
- Logical coherence
- Supporting Evidence
- Source verification
- Expert assessment

Analysis: 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

Lebel, 2012

Analysis: 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

Look at other scholars papers to see how they have presented their results (techniques/ structure/ style)

Lebel, 2012

Analysis: Qualitative Data

- Summarize the fundamental nature of the information:
 - Generalize from interviews and observations (and coded information) about the data suggests towards your hypothesis
 - Chronological analysis (for example legal/ institutional evolution)
 - Actor mapping (and their power and interests)
 - Building narratives explaining how and why a situation unfolded (supported by evidence!)
 - Maps/ photographs

Schmidt, 2005

Analysis: Qualitative Data

- Look for and report trends/ patterns
 - Group, for example, by demographic group, gender...
- Record frequency: Does anything appear very often in your data
- Report observed behavior (body language...)
- Identify meaningful statements/ quotes

Schmidt, 2005

Analysis: Qualitative Data – Content Analysis

- Select an open-ended questionnaire question (e.g. Why do you think fisheries have declined?)
- Define categories and code your answers (e.g. over fishing; illegal fishing; climate change...)
- Calculate frequency of answers for each category
- Put data in a table or figure
- Summarize and interpret
 - What's interesting/ what does it mean in the context of your hypothesis?
 - Identify outliers

Schmidt, 2005

Adventure County Activity Preferences of 9- To 14-Year-Old Youth

ACTIVITY PREFERENCES	AGE GROUPS		
	9-10	11-12	13-14
Get a Job for Money	5%	22%	65%
Play on a Sports Team	28%	46%	51%
Spend time with Parent/Guardian	34%	28%	22%
Other Recreation Activities for Fun	58%	64%	62%

Could use percentages or frequency

Discussion on findings

- Concisely synthesize findings responding to key research questions
- Explore alternative explanations or balance of evidence
- State significance for scholarship (theory, relate to literature, intro themes)
- Note new questions or hypotheses
- Explore consequences for policy and practice
- Critically evaluate limitations
 - For example, was data collected via a translator?

Lebel, 2012

Any questions?