

Quantitative and Qualitative Research Methods:

Participatory studies

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Quantitative?

Qualitative?

How do you understand these terms?

Have you used these analyses in your studies/work?



Quantitative research methods

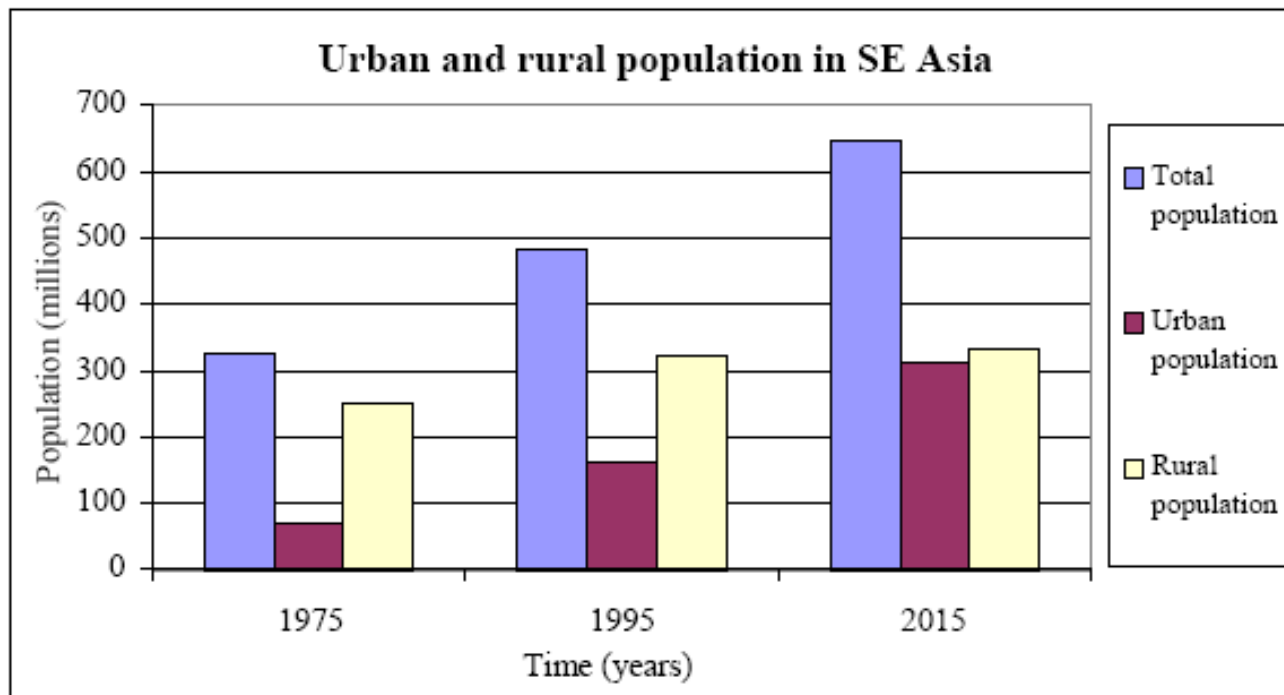
- ★ Answers to the questions **what**, **where**, and **when**
- ★ Originally developed for natural sciences to study natural phenomena.
- ★ Includes methods such as survey methods, laboratory experiments, and mathematical modeling.
- ★ Statistic is the most widely used branch of mathematics and a way to exploit quantitative data
 - Quantitative research using statistical methods typically begins with data collection based on a hypothesis, followed by the application of statistical methods.
 - Gives broad and overall information of the wanted questions or aims to find correlations such as poverty and health
- ★ Many different databanks that serves quantitative information are available

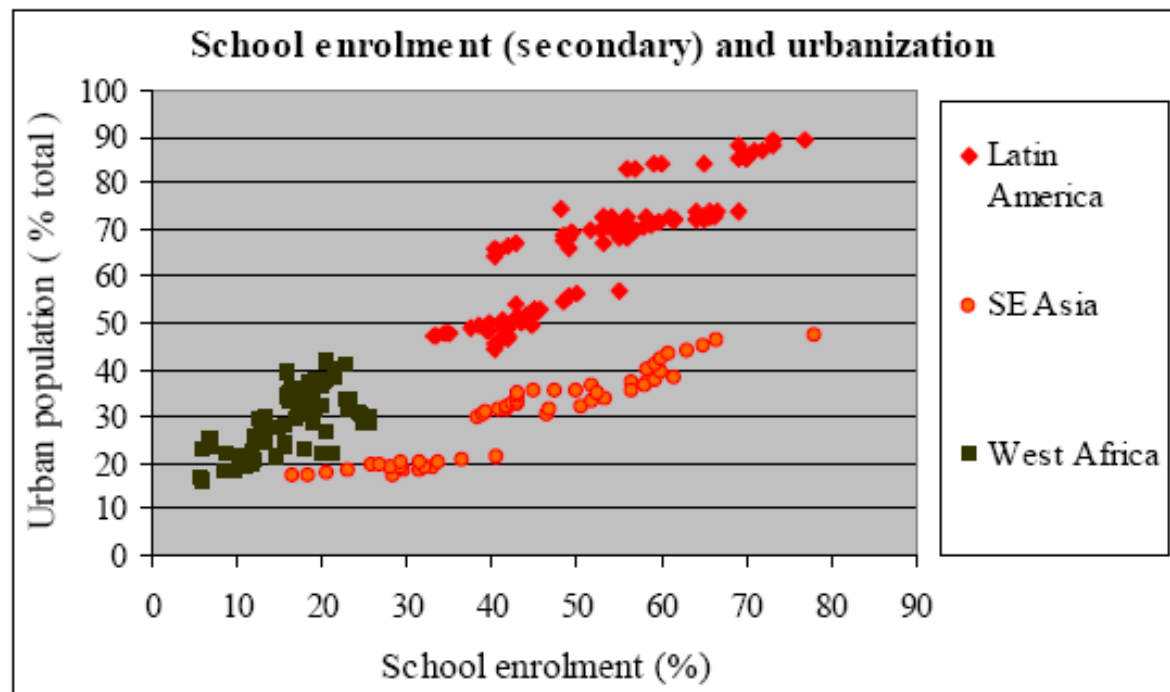
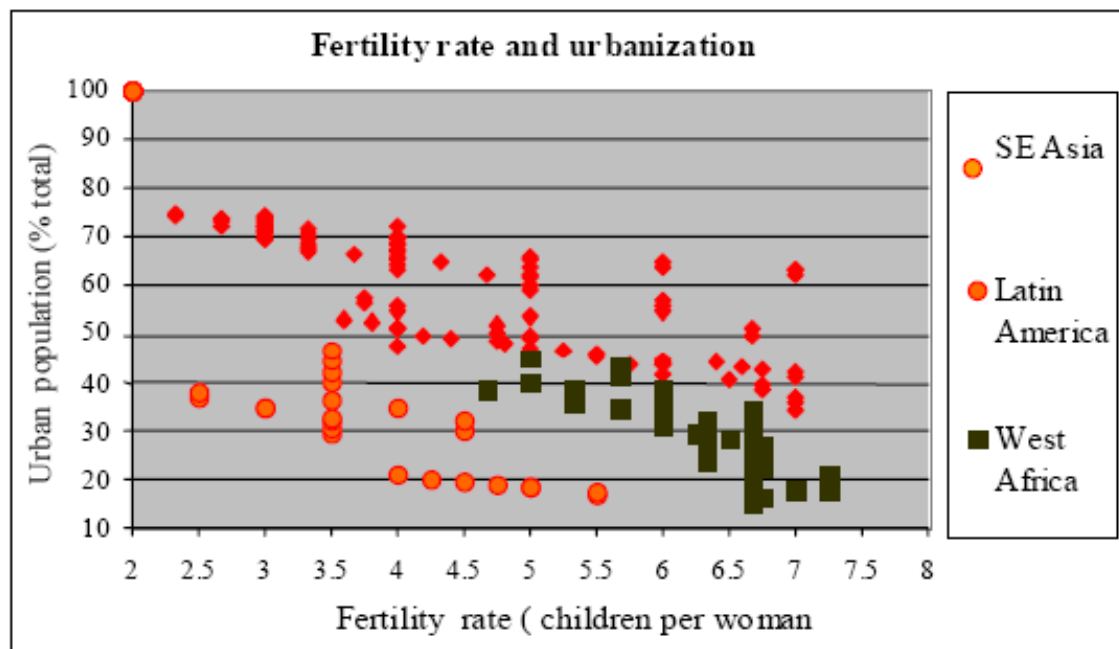
Databanks that serve the research topics related to development

- ★ <http://www.worldbank.org/>
- ★ <http://www.un.org/esa/population/unpop.htm>
- ★ <http://unstats.un.org/unsd/demographic/sconcerns/densurb/densurb2.htm>
- ★ <http://www.nis.gov.kh/CENSUSES/Census1998/statistics.htm>

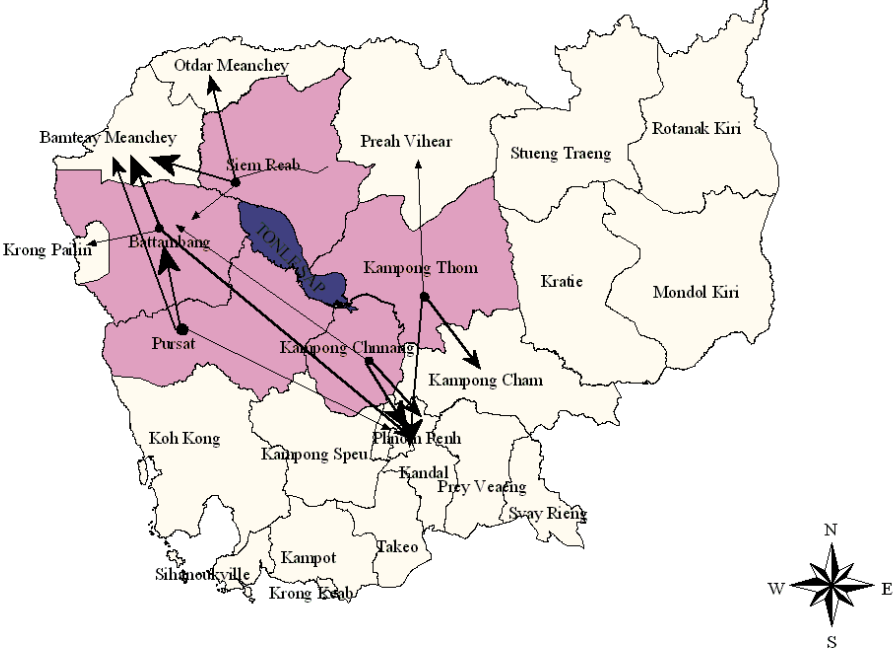
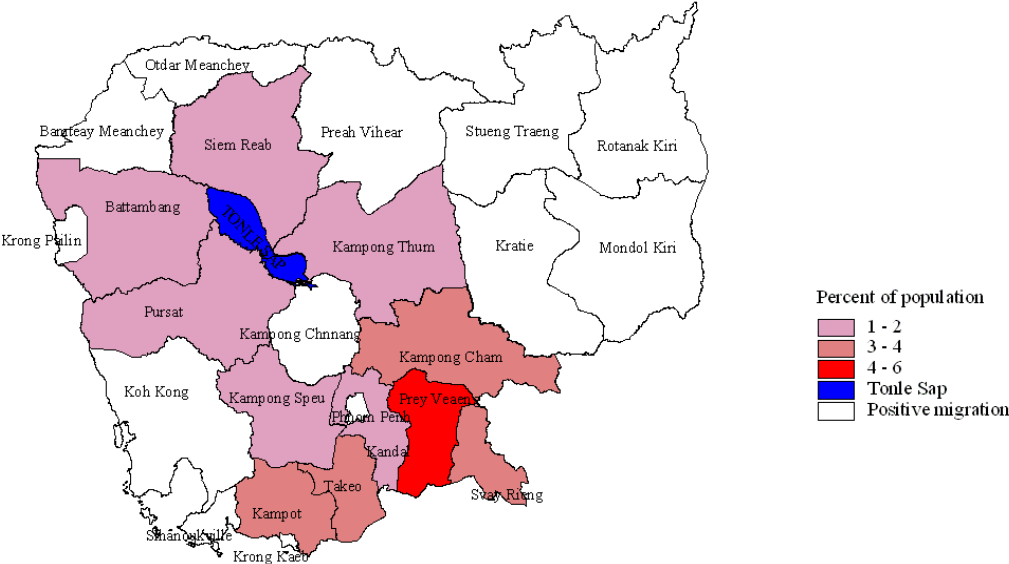


How quantitative data can be used?





Negative Migration in Cambodia



Qualitative research

- ★ Answers to the question **why** and **how**
- ★ Is often used to gain a general sense of phenomena and to form theories.
- ★ Can be found in many disciplines and fields, using a variety of approaches, methods and techniques.
- ★ Qualitative methods were developed in the social sciences to enable researchers to study social and cultural phenomena.
- ★ Includes interviews, documents, and participant observation data
- ★ Qualitative research methods are designed to help researchers to understand people and the social and cultural contexts!



Qualitative research data

★ Documents

- existing literature e.g. newspapers, magazines, books, websites, memos, reports

★ Observation

- no interaction
- data can be taken up by audio or video recording or photographing

★ Interviews (structured, semi- structured or non-structured)

- to find out about the phenomenon of interest
- individual interviews and group interviews.
- allows interaction
- data can be taken up by e.g. audio recording, video recording or written notes.



Qualitative research methods

★ **There are many qualitative methods available. Here just to show few of them:**

- **Ethnography (studying the whole culture, participant observation)**
- **Phenomenology (wants to understand how the world appears to others)**
- **Grounded Theory (develop theory about phenomena and then root it with the observation)**
- **Field Research (participatory field studies)**



What is meant by
participatory?



Participation: 3 levels

- ★ Non-participation (voting)
- ★ Controlled participation (e.g under special budget)
- ★ Power-participation (co-management, self-management)



Different ways of participation

- ★ Changes according to the system/project, its type, duration and goal
 1. giving information,
 2. data collection,
 3. working responsibility,
 4. collaboration,
 5. active participation



What issues hinder successful participation?

- ★ Participation is not widely approved
- ★ The project leaders do not want to give power to the local people
- ★ Wrong timing
- ★ Lack of information (prejudice, Nimby)
- ★ Difficulties to choose the relevant stakeholders (symbolic meaning)



Participation, gender and ethical minorities

- ✳ Culture and behaviour patterns hinder the possibilities of women and ethnic minorities to participate
- ✳ Women are often illiterate and not involved in the decision-making outside the homes
- ✳ These problems and the social structure of the target area/community needs to be taken into account when working with participatory methods



How to succeed in participatory approach?

- ★ Bottom-up method, learning from the grassroot should be enhanced in development work
- ★ Qualitative, holistic, and problem-based approach should be favored in all the development work particularly in projects
- ★ Real interest in the topic and the problems
- ★ The context of development should change according the country and situation -> you cannot copy the approaches



PRA: Participatory Rural Appraisal

- ★ One of the many methods to empower people and collect information (both quantitative and qualitative) of the place, its population etc.
- ★ Different research topics can be included such as history, geography, social aspects, economy, health, migration
- ★ Methods: historical profiles, seasonal calendars, influence diagrams and preference rankings



Continues..

- ★ The process does not need large resources or materials, only education
- ★ Makes discussions with the different groups of society possible (women, children, etc)
- ★ Staying in the target place is extremely important
- ★ Process helps the villagers also to understand their resources and problems. Information is there but not understood or used.



An example of the PRA in use

- ★ Water Utilization Programme (WUP-FIN) is a complementary project to the Mekong River Commission.
- ★ Aims to understand physical, chemical and biological processes in the Tonle Sap Lake, Cambodia, and to assist in the maintenance of sustainable conditions of the lake.
- ★ Aims to understand the links between environment and society to enhance sustainable development of the river basin.

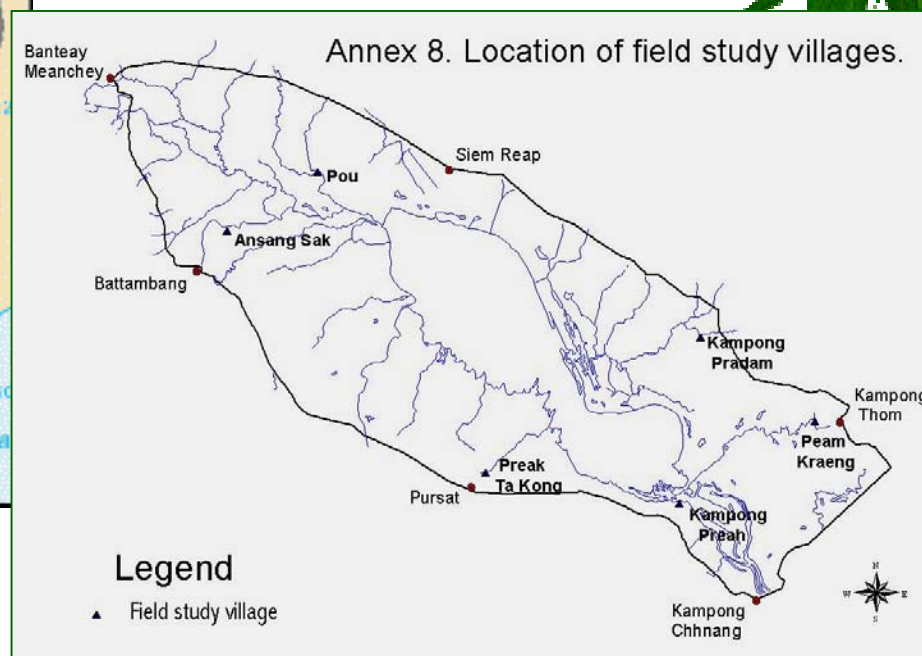


Data collection for the project

- ★ analysis of the data from various databases
- ★ expert interviews
- ★ participatory field work
 - to see the relevancy of quantitative data
 - to collect more qualitative information of the lake and the societies living around the lake
 - PRA method was used



Tonle Sap Lake





Social structure of the village

Information from the village chief:

population

age structure

gender balance

fertility

livelihood

poverty





Discussion with the villagers

- ★ Do we have right information?
- ★ Main livelihoods
- ★ Water use
- ★ Problems











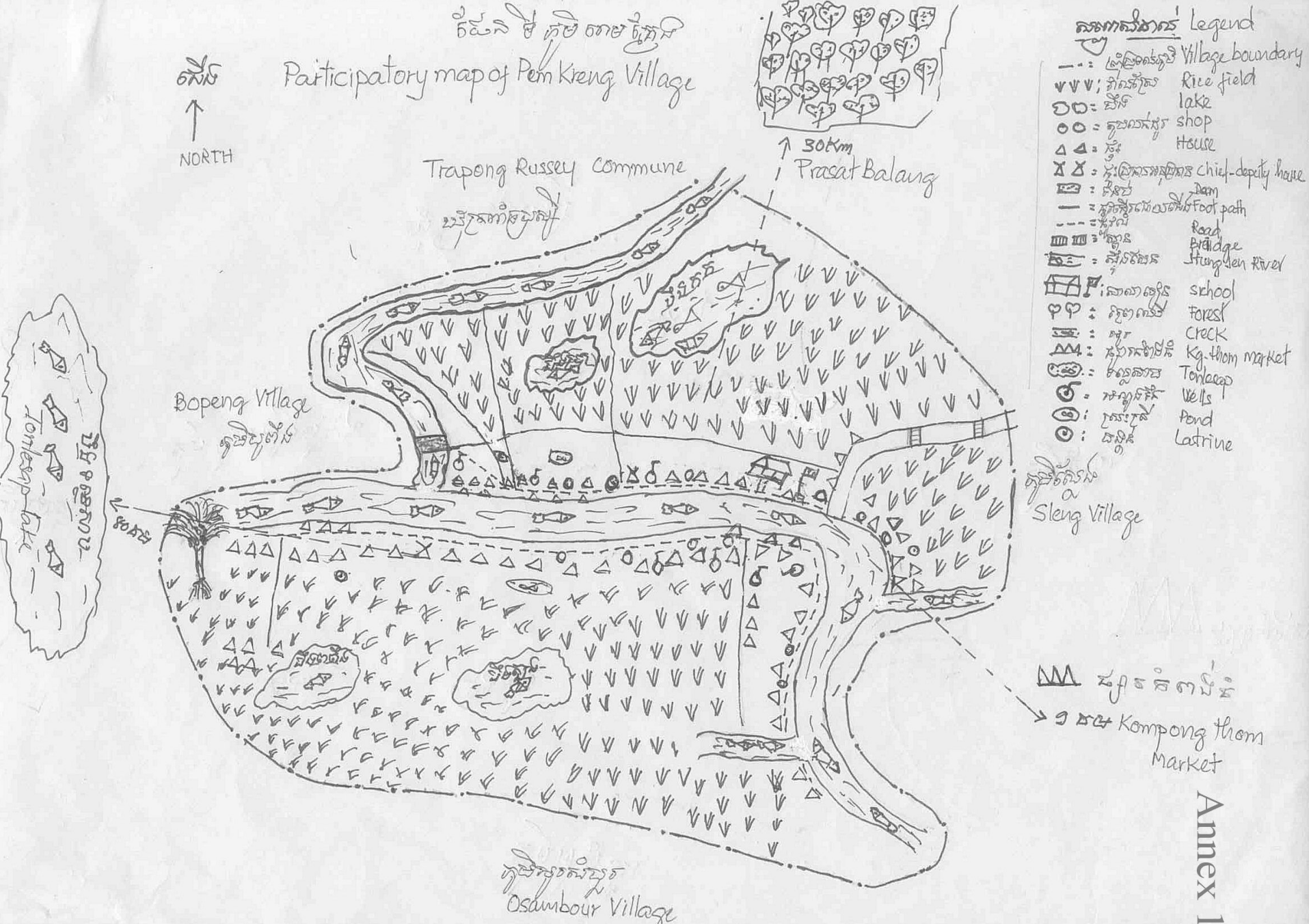


Participatory mapping, transect walk and observation

- Analyse of the village
resources







Participatory map of Peam Kraeng village

ကုလသမဂ္ဂ (အိန္ဒိယ) ကမ္ဘာ့အဖွဲ့ချုပ် ၃၀၀ မီတာ

MAP OF TRANSECT WALK

အနောက်
SOUTH

၃၀၀ မီတာ

→ အရှေ့
NORTH

									
၁	၂	၃	၄	၅	၆	၇	၈	၉	၁၀
FLOATING RICE LAND	FISH POND	FRUIT TREE HOUSE	ROAD	STOUNG SENG RIVER	FRUIT TREE HOUSE	ROAD	FRUIT TREE HOUSE	FISH POND	FLOATING RICE LAND

Time ranking

- Historical analyse

What have changed?

livelihoods

migration

floods

drouhts





Seasonal calendar and occupational preference ranking

- Seasonal variations in livelihoods and problems
- Relationship with water resources
- Migration patterns and reasons for migration





Trends in the village level

	Kampong Preah	Preak Ta Kong	Ansang Sak	Kampong Pradam	Peam Kraeng	Pou
Population	↗	↗	↗	↗	↗	↗
Level of livelihood	↘	↘	↘	↘	↘	↘
Fish catch	↘	↘	↘	↘	↘	↘
Area of flooded and other forest	↘	↘	↘	↘	↘	↗
Availability of agricultural land		↘	↘			
Amount of cattle		~	~	↗	↗	
Flooding	↗	↗	↘	↗	↗	↗
Water quality	↘	↘	↘	↘	↘	↘
Sedimentation	↗		↗	↗		↗

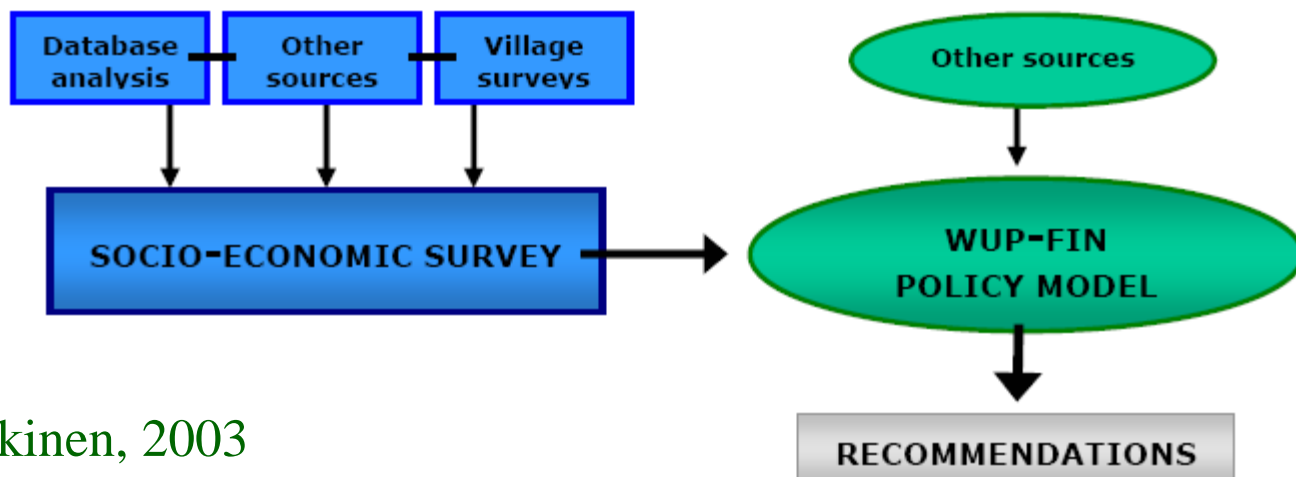
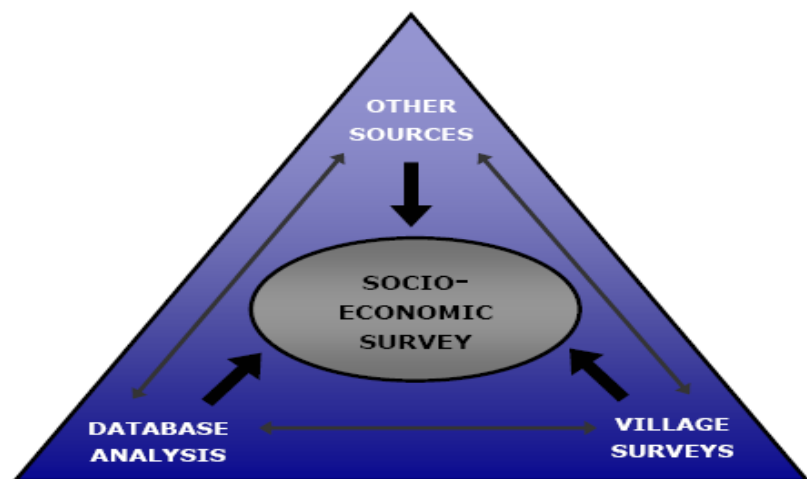


Differences in the methods and results?

Village	CENSUS 1998				PARTICIPATORY VILLAGE SURVEY			
	HH	Pop.	Fishing	Agriculture	HH	Pop.	Fishing	Agriculture
Kampong Preah	172	1100	417	130	115	796	Majority	Part-time
Prek Ta Kong	45	221	0	98	45	258	1 family	Majority
Ansang Sak	158	791	4	193	205	945	9 families	Majority
Kampong Pradam	188	975	0	490	227	990	26 families	Majority
Peam Kraeng	262	1397	0	616	271	1452	Part-time	Majority
Pou	55	310	122	6	84	470	Majority	No



How the collected data was used?



Keskinen, 2003

Thank you!

Any questions?

