Fourth Meeting of the Latin American Monitoring and Evaluation Network
Belo Horizonte, November 24-25, 2008

The Benefits of a Mixed Methods Approach

Michael Bamberger

Consultant
Independent Evaluation Group
The World Bank

Outline

1) Why do we need mixed method designs? Limitations of conventional impact evaluation designs
2) Weaknesses of mono-method approaches: comparing QUANT and QUAL designs
3) Mixed method evaluation designs
4) Using mixed-methods to strengthen impact evaluation designs

1. Why do we need Mixed Methods designs?

Limitations of conventional impact evaluation designs

Evaluation design issues

- Construct validity
- Decontextualizing the evaluation
- Ignoring project implementation [the “black box” approach]
- Inflexibility of conventional designs
- Adequacy of the sampling frame
- Unclear time horizon
- Unanticipated events and outcomes

Data collection issues

- Missing baseline data
- Indicator validity
- Reaching hard-to-find groups
- Collecting information on sensitive topics
- Ignoring contextual clues
- Ensuring well-matched control group
- The vanishing control group

2. Weaknesses of mono-method approaches

Comparing QUANT and QUAL designs

The Quantitative approach

- The world consists of “social facts” that can be observed, measured and analyzed
- The evaluator is an “objective” outsider
- Programs can be studied independently of their context
- Cause and effect relationships can be identified
- Changes/effects can be quantified and subjected to statistical analysis

QUANT data collection methods

- Structured surveys (household, farm, transport usage etc)
- Structured observation
- Anthropometric measures
- Aptitude and behavioral tests

Strengths and weaknesses of Quantitative approaches

Strengths

- Generalizability
- Statistically representative
- Estimate magnitude and distribution of impacts
- Clear documentation of methods
- Standardized approach
- Statistical control of bias and external factors

Weaknesses

- Surveys cannot capture many types of information
- Not work well for difficult to reach groups
- No analysis of context
- Survey situation may alienate respondents
- Long delay in obtaining results
- Data reduction loses information

The Qualitative approach

- The researcher's perspective is an integral part of what is recorded about the social world
- Scientific detachment is not possible
- Meanings given to social phenomena and situations must be understood
- Programs cannot be studied independently of their context.
- Cause and effect cannot be defined and change must be studied holistically.

Qualitative data collection methods

- Interviewing
- Observation
- Analysis of documents and artifacts

See Table 3

Cultural competence and professional expertise

- Interviewing requires a higher level of cultural competence than administering a structured questionnaire because:
  - it requires interaction with respondents
  - adapting to their culture and
  - understanding contextual clues

Strengths and weaknesses of Qualitative approaches

Strengths

- Flexibility to evolve
- Sampling focuses on high value subjects
- Holistic focus (“the big picture”)
- Multiple sources provide complex understanding
- Narrative reports more accessible to non-specialists
- Triangulation strengthens validity of findings

Weaknesses

- Lack of clear design may frustrate clients
- Lack of generalizability
- Multiple perspectives - hard to reach consensus
- Individual factors not isolated.
- Interpretivist methods appear too subjective

For more details see

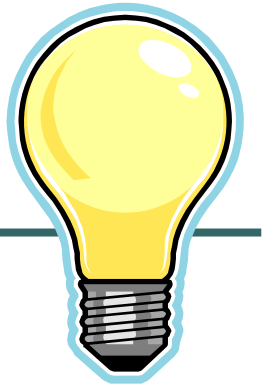


Table 1 Comparing QUANT and QUAL approaches to different stages of the evaluation process.

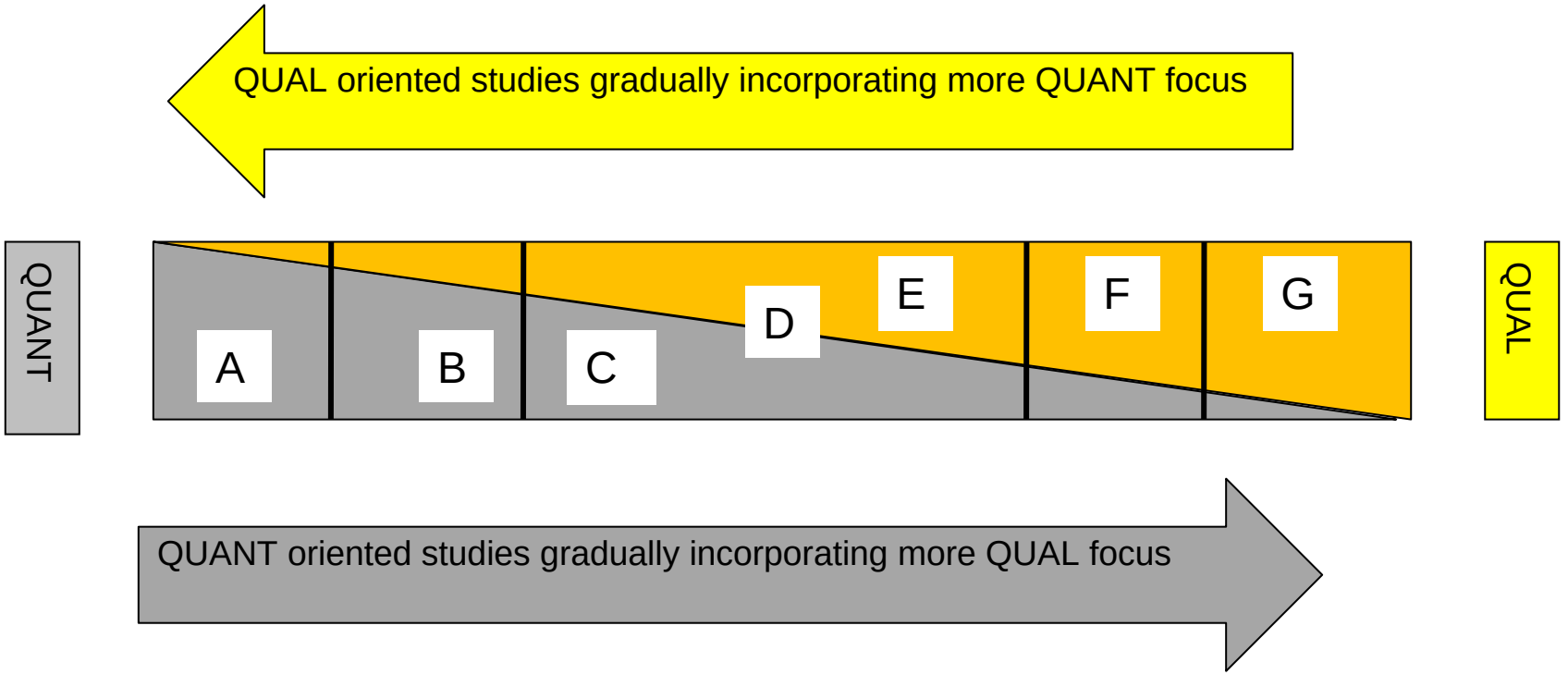
Table 2 How QUANT and QUAL approaches complement each other at different stages of an evaluation

Table 4 Elements of an integrated, mixed methods approach

3. Mixed method designs

- Combining QUANT and QUAL methods at all stages of the evaluation
  - Integrating conceptual frameworks – not just data collection methods
- Including different professions in the core evaluation team

The QUANT --- MM --- QUAL research design continuum

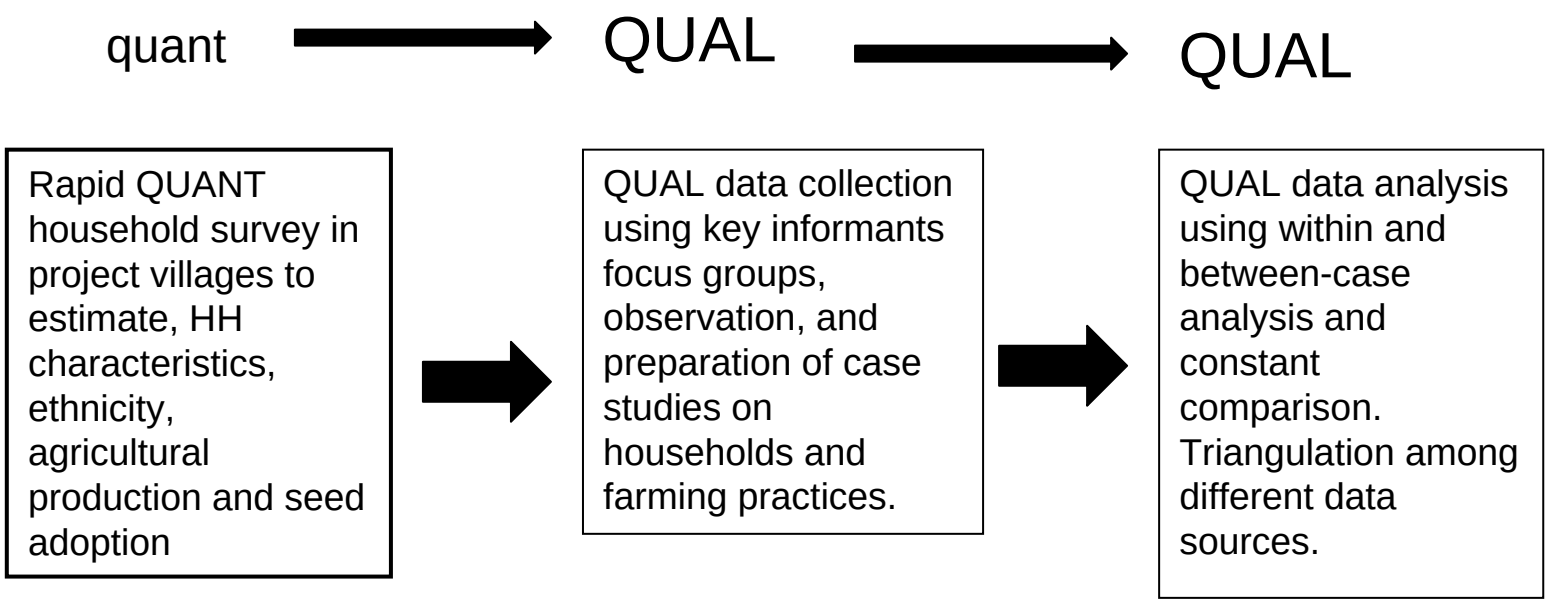


A = completely QUANT design
B = dominant QUANT with some QUAL elements
C = QUANT oriented design giving equal weight to both approaches
D = Study designed as MM
E = QUAL oriented design giving equal weight to both approaches.
F = dominant QUAL design with some QUANT elements
G = completely QUAL design

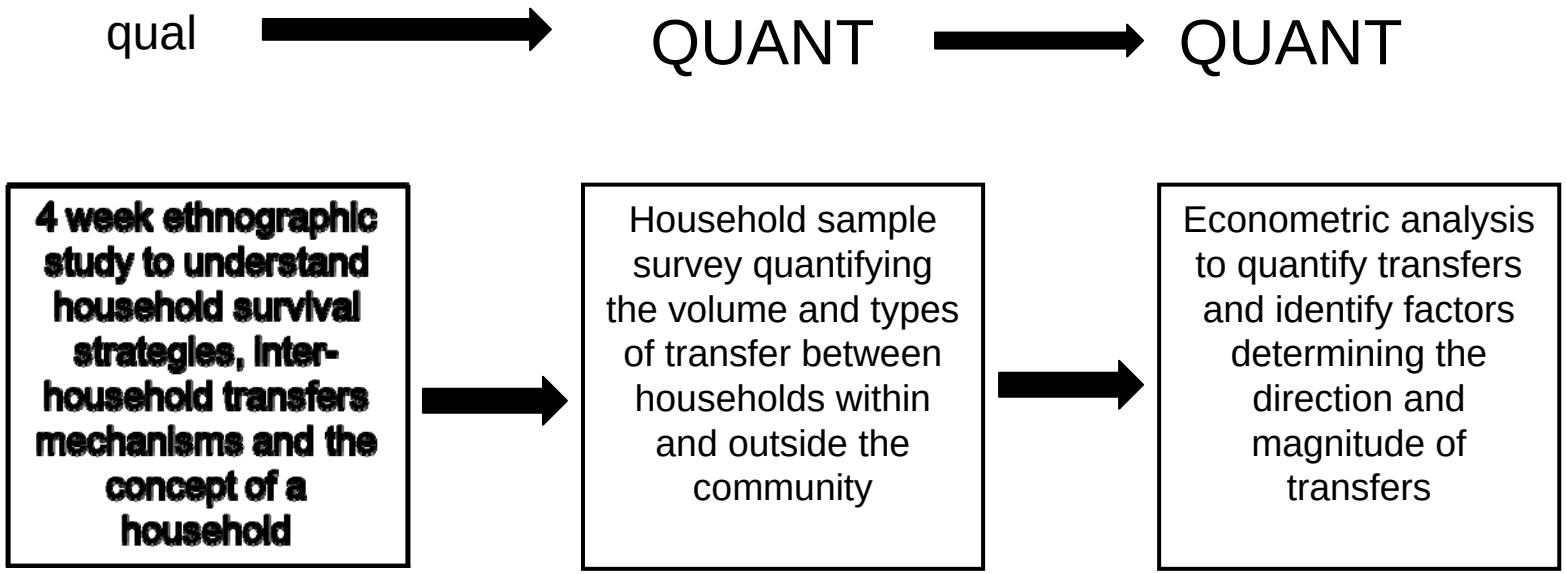
Strategies for using mixed-method approaches

- One approach dominant or both given equal importance
- QUANT and QUAL methods can be use:
  - Sequentially
  - In Parallel
  - Multi-level

Sequential QUAL dominant mixed methods design. Evaluating the adoption of new seed varieties by different types of rural families.



Sequential QUANT-dominant mixed methods design. Studying interhousehold transfers as a survival strategy. Cartagena, Colombia



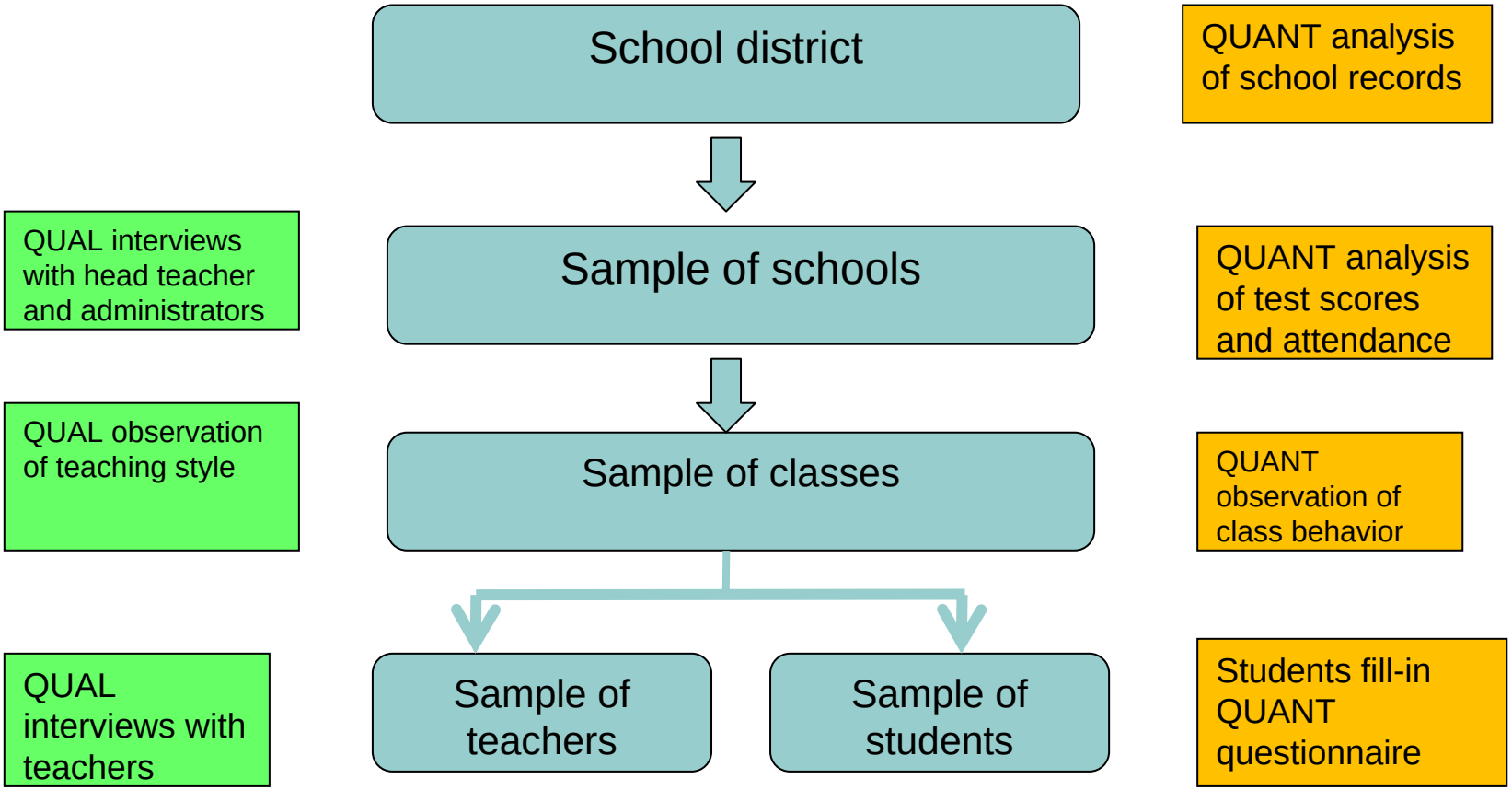
Parallel mixed-method design

impact of a school meals program on student enrolment

Unit of analysis	Method	Topics
Household sample survey	**QUANT survey**	Household characteristics, school enrolment, attitudes to school and to feeding program
Household and individual	QUAL case studies and observation	Household decision-making, gender relations, attitudes to education, checking who actually attends school and assessing influence of school feeding
Organization: school, clinic	**QUAL** observation and key informants	• how schools treat different groups of students • organization /quality of feeding programs • the school "culture"

Parallel multi-level nested design

Evaluating effects of school reforms on student attendance and performance



The stages of the mixed methods approach

1. Conceptual framework and evaluation designs [Table 5]
2. MM sampling [Table 6]
3. MM data collection
4. Analysis and interpretation of MM data [Table 7]

Using mixed methods to strengthen the interpretation of findings

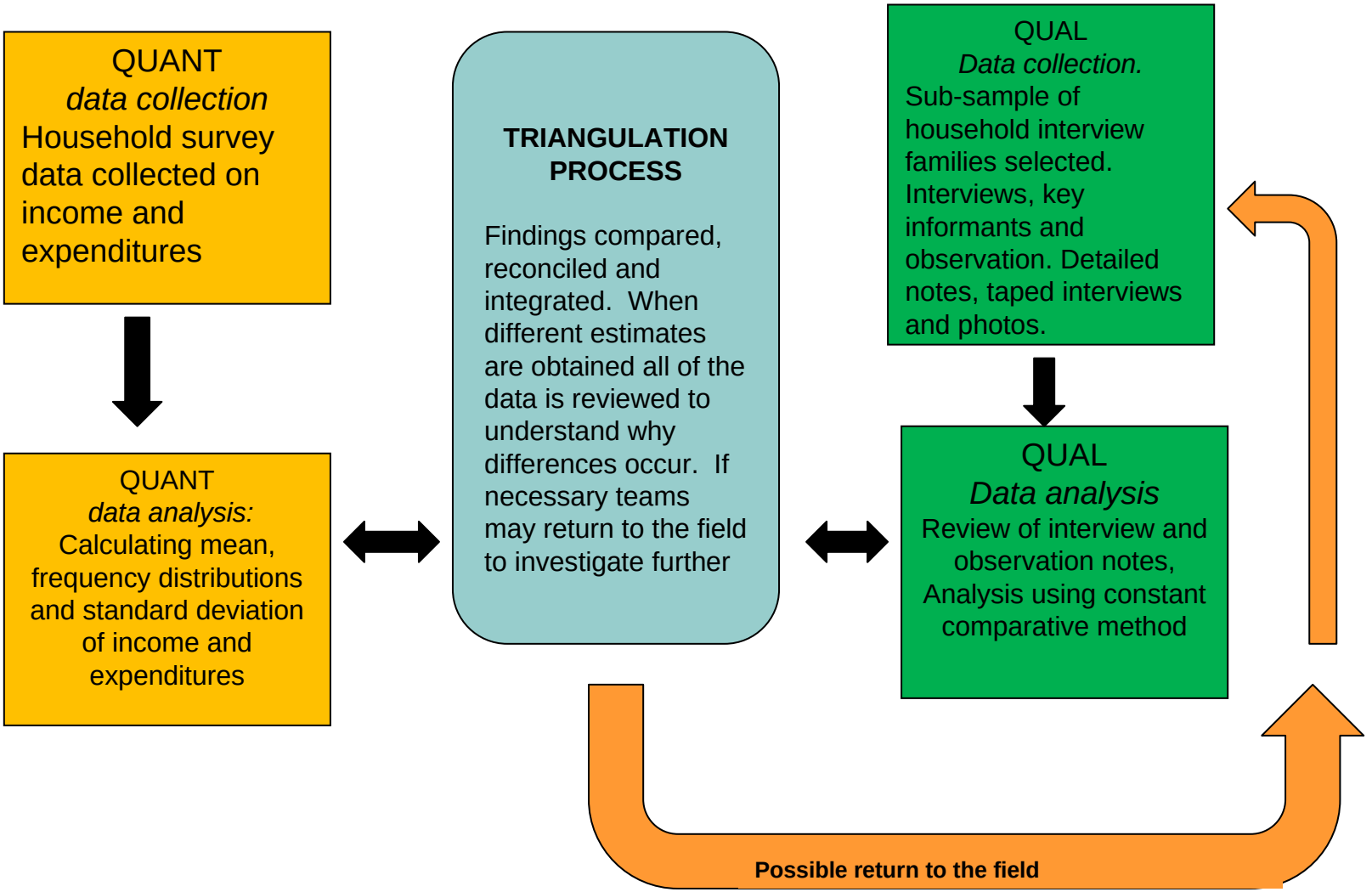
Statistical analysis frequently includes unexpected or interesting findings which cannot be explained through the statistics. Rapid follow-up visits may help explain the findings

Interpreting findings

- A QUANT survey of community water management in Indonesia found that with only one exception all village water supply was managed by women
- Follow-up visits found that in the one exceptional village women managed a very profitable dairy farming business – so men were willing to manage water to allow women time to produce and sell dairy produce

Source: Brown (2000)

Validating findings through triangulation



5. Using mixed methods to strengthen conventional impact evaluations [Table 8]

Strengthening evaluation designs

A. Strengthening construct validity
B. Contextualizing the evaluation
C. Analyze project implementation process
D. Increase evaluation design flexibility
E. Strengthening the sampling frame
F. Time frame for assessing impacts
G. Improving control group matching

Strengthening data collection

A. Reconstructing baseline data
B. Enhancing validity of indicators
C. Interviewing difficult-to-reach groups
D. Information on sensitive topics
E. Attention to contextual clues
F. The vanishing control group

Strengthening analysis and utilization of evaluation results

A. Avoiding long delays in producing useful findings and recommendations
B. Better estimates of unobservables
C. Strengthening generalization to other settings