Module 16

Mixed Methods

Rationale and Use of Mixed Method Evaluations in USAID
Module Objectives

By the end of all the sessions you will be able to:

1. Describe what mixed methods approaches are
2. Identify 2 types of mixed methods designs
3. Understand why mixed methods are important for USAID evaluations
4. Describe how they have been applied in USAID and other programs and what benefits they produced
5. Understand how to use mixed methods in USAID evaluations
6. Identify 10 common pitfalls and 10 practical tips to use when managing a mixed methods evaluation
1. What are Mixed Methods?

Defining Mixed Methods

- “A mixed method evaluation is one that uses two or more techniques or methods to collect the data needed to answer one or more evaluation questions.

- This could involve the collection and use of both quantitative and qualitative data to analyze and identify findings and to develop conclusions in response to the evaluation questions.”

Mixed Methods Combine Depth and Breadth of Analysis and Understanding

Quantitative methods

Breadth

Providing reliable estimates of the characteristics of the total population

Qualitative methods

In-depth understanding

Lived experience of individuals, groups and communities

Social, economic, political and environment context of each project

More complete understanding of the project, activity or group being studied
Using Mixed Methods to Evaluate USAID’s Initiative to End Hunger in Africa

- Review of on-farm production data from project beneficiaries
- Direct observation of a sample of IEHA projects
- Farmer interviews in targeted countries project areas
- Internet survey with USAID and IPs
Challenges in Using Mixed Methods

• National health survey reported a high level of satisfaction with rural health clinics by women.
• Qualitative studies found significant numbers of women did not use the clinics due to complaints of sexual harassment and lack of respect.
• Government did not trust qualitative data because they said sample was selected to highlight poorly performing clinics.
2. Why are Mixed Methods Important?
Triangulation Through Mixed Methods

**QUANTITATIVE data collection:**
Household survey data collected on income and expenditures.

**QUANTITATIVE data analysis:**
Calculating mean, frequency distributions and standard deviation of income and expenditures.

**QUALITATIVE data collection:**
Sub-sample of household interview families selected. Interviews, key informants and observation occurs. Detailed notes, taped interviews and photos.

**QUALITATIVE data analysis:**
Review of interview and observation notes.

**TRIANGULATION PROCESS**
Findings compared, reconciled and integrated. When different estimates are obtained, all of the data is reviewed to understand why differences occur. If necessary, teams may return to the field to investigate further.

Possible return to field
Short Exercise: Comparing Quantitative and Qualitative Methods

- Participants will divide into 5 groups:
  
  A. Estimating household income
  B. Measuring women’s participation in community meetings
  C. Time spent collecting water each day and the problems this causes for women and their families
  D. The effects of the construction of a rural road
  E. Measuring the capacity of civil society organizations
Each group will have 15 minutes to discuss the following questions:

- What quantitative methods could you use to collect this information?
- What qualitative methods could you use?
- What would be the advantages and disadvantages of the quantitative and qualitative approaches?
- How could you use a mixed method approach to strengthen the reliability of the information? Do you think the extra cost and time to use the mixed method approach would be justified?

There will then be 10 minutes per group for feedback and discussion.
• See R-14 Strengths and Weaknesses of QUANT and QUAL Methods

• R-15 How QUANT and QUAL Approaches are Complementary at Each Stage of an Evaluation

• C-24 Elements of a Mixed Methods Evaluation Approach

• C-25 Comparing Probability, Purposive, and Mixed Methods Sampling Strategies

• R-16 Pitfalls to Avoid in using Mixed Methods.
What is a mixed methods (MM) design?

- A **full mixed methods evaluation design** combines quantitative (QUANT) and qualitative (QUAL) approaches at all stages of the evaluation.
- A **partial mixed methods design** is that is predominantly QUANT or QUAL but where the two approaches are combined in some stages of the evaluation.
- A full mixed methods evaluation will be designed and managed by a multidisciplinary team (for example economists, sociologists, anthropologists).
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
4. Strategies for Using Mixed Methods

- One approach dominant or both given equal importance

- QUANT and QUAL methods can be used:
  - Sequentially
  - In Parallel
  - Multi-level
Sequential **QUAL-Dominant** Mixed Methods Design

Evaluating the adoption of new seed varieties by different types of rural families

**QUANT** → **QUAL** → **QUAL**

- **QUANT**
  - Rapid QUANT household survey in project villages to describe household characteristics, ethnicity, agricultural production and seed adoption

- **QUAL**
  - QUAL data collection using key informants focus groups, observation, and preparation of case studies on households and farming practices.

- **QUAL**
  - QUAL data analysis using within and between-case analysis and constant comparison. Triangulation among different data sources.
Studying interhousehold transfers as a survival strategy: Cartagena, Colombia

Sequential QUANT-Dominant Mixed Methods Design

QUAL → QUANT → QUANT

4 week ethnographic study to understand household survival strategies, inter-household transfers mechanisms and the concept of a household

Household sample survey quantifying the volume and types of transfer between households within and outside the community

Econometric analysis to quantify transfers and identify factors determining the direction and magnitude of transfers
## Multi-level Mixed Methods Design: Evaluating the Impact of School Meals Program on Student Enrollment

<table>
<thead>
<tr>
<th>Unit of analysis</th>
<th>Quantitative methods</th>
<th>Qualitative methods</th>
<th>Topics</th>
</tr>
</thead>
<tbody>
<tr>
<td>School district</td>
<td>Analysis of enrolment and attendance records for schools in the district</td>
<td>In-depth interviews with sample of directors</td>
<td>Using differences in enrolment and attendance to select school sample</td>
</tr>
</tbody>
</table>
| School           | Survey of school directors | • In-depth interviews with teachers  
• Observation of feeding process | • Opinions on how feeding programs affect enrolment/attendance and how feeding programs are administered |
| Classes and class teachers | • Survey of teachers  
• Observation of attendance | • In-depth interviews with teachers  
• Observation of feeding process | • Opinions on how feeding affects enrolment/attendance  
• How feeding affects different socio-economic groups  
• Who actually gets fed (do children not attending school also get fed)  
• Do some children leave school as soon as they are fed? |
| Students         | • Survey of students | Focus groups and in-depth interviews | • Opinions on the effect of feeding programs on enrolment and attendance  
• The attitudes of parents on feeding programs and how they decide who attends school |
| Families         | Survey | In-depth interviews and participant observation | • Opinions on feeding programs  
• How do families decide who should enroll in school and who should attend each day |
Multi-level Mixed Methods Design:
Evaluating the Impact of School Meals Program on Student Enrollment

**Qualitative methods**
- QUAL interviews with head teacher and administrators
- Interviews with teachers on how feeding programs affect attendance
- Focus group interviews with students
- In-depth interviews with families and observation of children travelling to school

**Quantitative methods**
- QUANT analysis of school records
- QUANT analysis of test scores and attendance
- QUANT observation of no. of students attending class
- Students fill-in QUANT questionnaire
- Survey of households
Managing Mixed Methods Evaluations

- What are some common pitfalls to avoid?
- What are some practical solutions?
- See R-16
Review Questions

• What is a mixed method approach?

• What are two types of mixed method designs?

• What are three common pitfalls when managing a mixed methods evaluation?
1. Revisit the evaluation methods you have selected for your evaluation project.

2. Using C-24, C-25, R-14, R-15, and R-16, consider how you can strengthen your evaluation plan by using mixed methods:
   • What is the optimum mix of methods for your evaluation?
   • What is the optimum sequencing of your methods?
   • What are the time and cost considerations for implementing your mixed methods approach?
   • What are required competencies for the evaluation team?

3. Update your Planning Matrix with your evaluation methods.

4. Be prepared to explain your work.