

Qualitative Data Analysis Session

Work Package 1

Abuja, Nigeria, March 2019

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Ethics: The activities, which led to the production of this manual, were assessed and approved by the CIRAD Ethics Committee (H2020 ethics self-assessment procedure). When relevant, samples were prepared according to good hygiene and manufacturing practices. When external participants were involved in an activity, they were priorly informed about the objective of the activity and explained that their participation was entirely voluntary, that they could stop the interview at any point and that their responses would be anonymous and securely stored by the research team for research purposes. Written consent (signature) was systematically sought from sensory panelists and from consumers participating in activities.

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WP1: QUALITATIVE DATA ANALYSIS SESSION

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RTBfoods 1st Annual Meeting, March 2019, Abuja, Nigeria



- Introduction
- 9 steps of qualitative data analysis
 - with Individual Interview example
- Team practice of analysis
- Team presentations

DAY 3, Wed. 20 March	
Qualitative Analysis (Hale and Bela)	
900	Introduction to qualitative work
	Nine steps of Qualitative analysis
	Review of completed steps (1+2) to date
930	Step 3: Reviewing the data
	Step 4: Organising the data
10	Step 5: Coding
	- <i>Team work exercise 1: coding for <u>6 responses</u> of II Q17 (gender + decision making)*</i>
10h30	<i>Coffee Break</i>
1100	- <i>Team work on coding continued...</i>
1130	Step 6: Creating categories or themes
	Step 7: Looking for patterns and connections
	- <i>Team work exercise 2: categorise for same <u>6 responses</u> and discuss possible patterns and connections</i>
12h30-1330	<i>Lunch</i>
1330	Step 8: Interpretation and Reporting
	- <i>Team work exercise 3: complete analysis and reporting for same <u>6 responses</u></i>
1400	FGD exercise
	- <i>Team work exercise 4: analysis of <u>4 responses</u> of FGD Q9 (decision making + multiple use)</i>
1430	
15h30	<i>Coffee Break</i>
1500 -1630	- Team work cont...
	- Team Presentations of FGD results and discussion

1. INTRODUCTION

Introduction (1)

- Aim: to provide guidance on *qualitative* Activity 3 data analysis
 - Objective 1: teams to gain confidence in analysing and presenting qualitative data
 - Objective 2: consistent approach across partners to analysing and presenting data
- Presentation builds on day 1, which is also qualitative analysis because it is analysing text – and in some cases, narratives.
- Presentation will focus on:
 - Qualitative analysis of cleaned and organised data as presented in GREAT training and the WP1 Capacity strengthening and sharing session last year
 - Guiding practice with selected questions from FGD and II with presentations

Why Qualitative analysis?

- Grounded in the language and priorities of the people who grow, process and eat the products
- Qualitative analysis entails organizing & interpreting data for meaning/making sense out of the data through identification of:
 - Themes
 - Patterns
 - Connections
 - Explanations
- Qualitative data analysis mainly answers the “how things happen” & “why” questions
- Reveals people’s experiences, context, and the meaning they attach to different behaviors or things

Introduction (2)

Grounded theory (Glaser & Strauss)

Uses constant comparative method for data analysis:

- “The researcher looks for **relationships** between these **concepts** and categories, by constantly comparing them, to form the basis of the **emerging theory**. The researcher continues with this process of constant comparison until they reach what is called ‘**theoretical saturation**’, that is no new significant categories or concepts are emerging.” (Lacey & Luff, 2007)
- **Iterative data analysis**: revisiting data when new analytical ideas emerge.

2. 9 STEPS OF QUALITATIVE DATA ANALYSIS

9 steps in qualitative data analysis

1. Data cleaning (*briefly – should be complete*)
2. Transcription (*should be complete*)
- 3. Reviewing**
4. Organising
5. Coding
6. Creating categories or themes
7. Looking for patterns
8. Interpretation
9. Reporting

Step 3: Reviewing the data

Take time to read through your transcripts and the Excel file

Have a coffee/tea

Take notes on your general observations, including important themes and contradictions

Choose a category to work in

Social segmentation

‘Good’ crop characteristics and multiple use)

10 minutes

Example: social segmentation

Social segmentation*

- KII Q2 description of different groups in the community and proportion.
- KII Q3 community wealth categories and socio-cultural demographics.
- FGD Q3 different wealth categories in the community and socio-cultural demographics
- FGD Q4 farming practices and social segmentation
 - Differences in the way people farm and their relation to different social segments
 - Farm management and gender (shared or separate plots), similarities and differences

‘Good’ crop characteristics (in general) and multiple use*

- FGD Q7 characteristics make it a good crop in general (open) and rank.
- FGD Q9 decision making of crop when it is used for multiple purposes
- II Q14 characteristics make it a good crop in general (open) and rank. Same as spouse?
- II Q17 decision making of crop when it is used for multiple purposes

*Question numbers may differ

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Step 4: Organising data- before workshop

- Data can be organised and analysed in different ways (question, topic, group etc) for qualitative analysis
- For RTBfoods we are using an Excel database template for consistency.
- KII, FGD and II responses should be in separate worksheets.

Step 4: Organising data- next steps

- Extract (copy and paste) the question and paste in a new worksheet to start the analysis
- Gender and factors of social difference variables (e.g. ethnicity, household headship) **need to be retained** in the new sheet for the analysis (to filter for analysis by segment).
- Questions on a similar topic (from II or FGD) can be analysed after and combined in the write up

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Example of question extraction for analysis (NRCRI)

ID number	Gender	Age	Household headship	17.2 How were decisions made on how the crop would be used among the different products? About what is consumed at home or sold? Who was involved and what was considered?
SE/VIL4/II/02	Female	39	Married	I tell my husband anything I want to produce from the cassava, and he will tell me to go ahead if he is okay with it. But, if he is not okay, he will give his own suggestion and then we deliberate on it and reach an agreement.
SE/VIL4/II/08	Male	60	Married	Sometimes my wife and I will sit down and discuss what products the cassava should be made into. We also talk about the quantity that should be consumed and the quantity that should be sold. I said sometimes, so, I sometimes also take the entire decision as the head of the family.
SE/VIL4/II/10	Female	43	Married	Decisions are taken with my husband to harvest cassava root from our farm, then I decide on what product I want to use it for based on family needs. At the same time I decide the quantity to be consumed at home or sold. I consider, that I do the farming and also my children's need. My husband has no option, what ever we present to him, he collects.

9 steps in qualitative data analysis

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Step 5: Coding

- After you extract the question you want to analyse, read through the responses in the column
- Use words, abbreviations, phrases, symbols, or colors to code
- For RTBfoods we suggest coding with colors and labels
- Highlight key words/text that represent responses to the question and explanations
- Different codes will help you to create categories/themes and subcategories/sub-themes

Step 5: Coding

- Continue until there are no new codes in the responses
- Reading and re-reading the text helps to ensure that all the data is coded
- Group emerging codes into meaningful categories and themes

Coding is time consuming and labour intensive but it is the heart of qualitative analysis!

Example of question extraction for analysis (NRCRI)



ID number	Gender	Age	Household headship	17.2 How were decisions made on how the crop would be used among the different products? About what is consumed at home or sold? Who was involved and what was considered?	Codes
SE/VIL4/I/02	Female	39	Married	I tell my husband anything I want to produce from the cassava, and he will tell me to go ahead if he is okay with it. But, if he is not okay, he will give his own suggestion and then we deliberate on it and reach an agreement.	Independent ideas but need permission (what cassava products) Joint decision through discussion + negotiation
SE/VIL4/I/08	Male	60	Married	Sometimes my wife and I will sit down and discuss what products the cassava should be made into. We also talk about the quantity that should be consumed and the quantity that should be sold. I say sometimes, so, I sometimes also take the entire decision as the head of the family.	Joint decision through discussion (what cassava product) Joint decision through discussion (quantity consumed) Joint decision through discussion (quantity sold) Changes in decision making Men make decisions as head of family
SE/VIL4/I/10	Female	43	Married	Decisions are taken with my husband to harvest cassava root from our farm, then I decide on what product I want to use it for based on family needs. At the same time I decide the quantity to be consumed at home or sold. I consider, that I do the farming and also my children's need. My husband has no option, what ever we present to him, he collects.	Joint decision through discussion (harvesting cassava) Women make decisions (what cassava product) + Family needs Women make decisions (quantity consumed) Women make decisions (quantity sold) Women make decisions + Family need Women make decisions + who does the labour Men are passive/not involved



Exercise 1

Code for up to 6 responses for question you have chosen within the category

30 minutes



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Step 6: Creating categories or themes

- Different codes will help you to create categories/themes and subcategories/sub-themes
- Group emerging codes into meaningful names/labels
- These could be super/large or sub categories

Example of emerging categories/themes (NRCRI)



Codes	Emerging categories and themes
<p>Independent ideas but need permission (what cassava products)</p> <p>Joint decision through discussion + negotiation</p> <p>Joint decision through discussion (what cassava product)</p> <p>Joint decision through discussion (quantity consumed)</p> <p>Joint decision through discussion (quantity sold)</p> <p>Changes in decision making</p> <p>Men make decisions as head of family</p> <p>Joint decision through discussion (harvesting cassava)</p> <p>Women make decisions (what cassava product) + Family needs</p> <p>Women make decisions (quantity consumed)</p> <p>Women make decisions (quantity sold)</p> <p>Women make decisions + Family need</p> <p>Women make decisions + who does the labour</p> <p>Men are passive/not involved</p>	<ul style="list-style-type: none"> • Women's ideas but need permission • Who makes decisions changes • Joint decisions <ul style="list-style-type: none"> - Negotiation - What cassava product - Quantity consumed - Quantity sold - harvesting • Women make decisions <ul style="list-style-type: none"> - What cassava product - Quantity consumed - Quantity sold - Responsibility of family needs - Responsibility of labour • Men make decisions <ul style="list-style-type: none"> - Head of family • Men not actively involved

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Step 7: Identify patterns and connections

- After categorising your data, until there are no more new categories, patterns and connections begin to emerge

Example

- **In terms of pattern:** You might start to see that young and newly married women have less decision making power on cassava activities (what product to process, how much to consume and sell) compared to older married women.
- **In terms of connections:** How emerging themes are linked to one another e.g., more decision making power among older women is linked to her status as an older women, years of experience and managing independent cassava plots. Less decision making power among young women was related to her lack of ownership over assets including land and processing equipment and perceived inexperience.



Exercise 2

Categorise and
themes for same 6
responses and
discussion of
patterns and
connections

30 minutes



Step 8: Interpretation

-
- Bringing out the **'big picture'** and creating meaning out the patterns and connections
 - Avoid 'data dumping' - Quotations have to rhyme with relevant themes to give meaning to the theme
 - Identify key lessons, new insights (interesting and surprising findings) and implications
 - Reflect on whether your findings answer your research question

Example of written interpretation

This level of agreement in the south eastern region can be explained by the high involvement of women in production and processing while in the southwestern region there is a general norm for married women to consult their husbands before deciding on planting a new variety. This informs women farmers on the nature of the new variety and influences their decision to adopt and utilize it for cassava products. This tradition has not changed for the past ten years:

“If there is something new that is being introduced, we may not be quick to do those things but if our men do them, then we too will do them”. Pontela women FGD.

Step 9: Reporting the findings

- Have a format for reporting the findings e.g. visual display like matrices, boxes, etc. – *a reporting format will be provided with guidance*
- Include **verbatim quotes** to illustrate the points and bring data to life
- Only quotes that support the argument should be used
- Confidentiality and anonymity are important when using quotes
 - Get people's permission to use their words (informed consent)
- Qualitative findings are context specific - but can inform studies in contexts with similar characteristics and lead to new inquiries

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3. TEAM PRACTICE OF ANALYSIS & PRESENTATIONS



Exercise 3

Analyse data from
complementary set

45 min

Teams to present
findings in a power
point (report results)



Male responses	Code (alternative)
<p>Wealth categories</p> <p>About 60% of the people in this village follow under the poor-characteristics;</p> <p>They grow crops on small scale since they have no land (they have up a maximum of 1 acre), they don't hire land for crop production, and they don't separate gardens due to limited land, they don't hire labour, they practice intercropping.</p> <p>30% of the people in Akere parish were categorized under medium. Not very rich not poor (medium). Characteristics; these farmers separate gardens, they hire labour because they have money; have land between 2-9 acres. Their children go to village private schools.</p> <p>10% of the people were categorized as rich. Characteristics; use tractors for cultivation, separate gardens (man and women cultivate separately, this is because they have enough land and also have money to look after the 2 plots/gardens), they have 10 acres and above, they use hired labour and always have access to improved varieties/planting material.</p> <p> </p>	<p>Poor</p> <p>Land limitation- under 1 acre</p> <p>Cannot hire labour</p> <p>Intercropping</p> <p>Joint production with spouse- land limitation</p> <p>Medium</p> <p>Separate gardens</p> <p>Land availability- between 2-9 acres</p> <p>Can hire labor</p> <p>Have money</p> <p>Children's education- village private school</p> <p>Rich</p> <p>Mechanization- tractors</p> <p>Separate gardens</p> <p>Land availability- more than 10 acres</p> <p>Can hire labor</p> <p>Have money</p> <p>Have access to improved varieties</p>

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Thank you!

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