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Monitoring, Evaluation, Accountability & Learning (MEAL) Through a Gross National Happiness Lens

An Introductory Manual for MEAL Practice in Bhutan

Bhutan Education & Skills Training (BEST)

October 2024

BEST
Bhutan Education and Skills Training

In partnership with Canada

RENEW

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This manual was co-created by:

Kent Schroeder
Humber Polytechnic
Toronto, ON, Canada

and

BEST Data Focals Group*
Bhutan Education & Skills Training (BEST) project
Bhutan

*Alphabetical by first name:

Chencho Tshering, RENEW
Chojay Norbu, RENEW
Choki Wangmo, Technical Training Institute-Samthang
Dorji Tshering, Rural Development Training Centre
Jigme Choden, Technical Training Institute-Rangjung
Karma Wangdi, College of Zorig Chusum
Karsang, College of Zorig Chusum
Kelzang Lhamo, Technical Training Institute-Khuruthang
Kelzang Namgyel, Technical Training Institute-Rangjung
Kencho Tshering, RENEW
Kinley Penjor, Technical Trainers Training and Resources Centre-Dekiling
Lekey Dorji, Workforce Planning and Information Division, Department of Workforce Planning and Skills Development
Mamta Gurung, Department of Employment and Entrepreneurship, Ministry of Industry, Commerce and Employment
Neem Lhamo Moktan, RENEW
Nima Lhamo, Rural Development Training Centre
Phub Lhamo, Technical Training Institute-Chumey
Rinchen Dorji, Rural Development Training Centre
Rinchen Dorji, RENEW
Rinzin Dema, RENEW
Sajaindra Rai, Technical Training Institute-Chumey
Sangay Bidha, College of Zorig Chusum
Sonam Jamtsho, Royal Institute for Tourism and Hospitality
Sonam Norbu, Technical Trainers Training and Resources Centre-Dekiling
Sonam Tenzin, RENEW
Sonam Yangzom, Technical Training Institute-Thimphu
Tandin Zangmo, Royal Institute for Tourism and Hospitality, Thimphu
Tashi Tobgay, National Institute for Zorig Chusum

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PART I

THE MEAL FRAMEWORK

CHAPTER 1

WHAT IS MEAL?

1. WHAT IS MEAL?

Monitoring, Evaluation, Accountability & Learning, or MEAL, is a process of tracking and measuring the progress and results of a project (or programme or policy). It is a comprehensive approach to collecting project data, analysing that data; and reporting the results of the analysis to inform project decision-making and measure the change that was created by a project. MEAL ensures we can track changes in a way that is systematic and evidence-based.

This manual provides an introductory overview of MEAL. It provides readers with a foundation of knowledge and skills to carry out MEAL activities in a manner that is effective, ethical, and culturally appropriate. The manual draws on the experience of the Bhutan Education and Skills Training (BEST) project, an initiative implemented by Humber College in Toronto, Canada, in partnership with the Ministry of Education & Skills Development (MoESD) and RENEW. BEST is a five-year project (2022-2027) funded by the Government of Canada that supports the process of Technical & Vocational Education & Training (TVET) reform. While this manual was developed as part of a TVET project and uses TVET-related examples, it is written for a general audience of people interested in developing MEAL knowledge and skills.

The design and writing of the manual occurred through a process of co-creation. Trainers and staff from each of the public TVET institutions in Bhutan as well as officials from government and the civil society sector came together in October 2023 for a collaborative workshop on MEAL in Bhutan. Participants in the BEST workshop were presented with information on MEAL practice in Canada and internationally. They then analyzed and assessed this practice for Bhutan and collectively designed strategies for applying MEAL practices in a culturally appropriate way for Bhutan. This manual therefore represents a "Bhutanization" of international MEAL practices to ensure their relevant application. Given this collaborative process of co-creation that bridges Canadian and Bhutanese knowledge, the manual is co-authored by all the participants in the workshop.

The manual is organized in the following way: the current chapter defines and introduces MEAL and explores the nature of ethical MEAL practice. Chapter 2 analyses the current practice of MEAL in Bhutan and, drawing on Bhutanese research, identifies current gaps that exist. Based on the information in chapters 1 and 2, chapter 3 provides a proposed Gross National Happiness (GNH) lens for undertaking

MEAL work. The lens adapts international MEAL practices to Bhutan and ties them to the nine domains of GNH. The result is a GNH MEAL lens specific to Bhutan's development and cultural context.

Building on the GNH MEAL lens, chapter 4 discusses how to design and plan a MEAL initiative. This is followed by five chapters that provide step-by-step instructions for data collection. The process of selecting who will participate in data collection, called sampling, is explored in chapter 5. Chapter 6 provides information on carrying out key informant interviews (KIIs). Focus group discussions (FGDs) are covered in chapter 7. Chapter 8 explores document analysis, observation, and participatory rapid appraisal. Administering surveys are the focus of chapter 9. The next two chapters provide a step-by-step guide to analysing data that has been collected. Chapter 10 explores analysing qualitative data while chapter 11 covers quantitative data analysis.

Chapter 12 discusses accountability, or how to undertake data collection and data analysis in ways that are responsible, accurate, and reflect the needs of all stakeholders. The final chapter covers learning. It explores how we need to make sense of all the data that has been collected and analysed, and how to put it to good use through effective reporting and dissemination.

> *The MEAL framework is an essential tool for organizations to measure and track the progress and impact of their programs and projects.*
>
> - EvalCommunity, 2024

1.1. The four components of MEAL

MEAL is critical as it enables us to systematically collect and analyse project data in order to make adjustments to a project to improve it during its implementation and to understand its end results. Ultimately, MEAL is a systematic approach for 'telling the story' of a project; it helps us answer the question: How successful was our project? Telling the story requires collecting MEAL data, analysing that data, and reporting on the results of the analysis.

The term MEAL is relatively new. You may be more familiar with related terms such as M&E (Monitoring & Evaluation) or MEL (Monitoring, Evaluation & Learning). These terms are all similar. M&E was used originally, but M&E practitioners realized that their work was not just about evaluation and monitoring (M&E) but identifying and sharing the *learning* that comes out of evaluations. The term Monitoring, Evaluation & Learning (MEL) therefore emerged to incorporate the additional focus on learning. More recently, it was realized that the process of undertaking monitoring, evaluation & learning needs to put ethics at its centre. In particular, the process of collecting, analysing and reporting project data needs to be *accountable* to those who take part in the process. The result of this evolution is the term is MEAL, which is the term most often used today.

To better understand MEAL, we can look at what each of its component parts mean:

Monitoring is the ongoing and systematic collection and analysis of data about a project's ***progress***. Collecting and analysing monitoring data provides information that can be used to improve how a project is being implemented.

Evaluation is the periodic collection and analysis of data to assess a project's ***results***. Collecting and analysing evaluation data provides information on how effective the project is and whether it is achieving its goal.

Monitoring and evaluation both involve data collection and data analysis, so are sometimes confused. The table below outlines the key differences.

	Monitoring	**Evaluation**
Focus	Project progress	Project results
Purpose	Improve efficiency and effectiveness of the implementation of a project – make changes to the project based on monitoring data	Understand results – identify the results of a project based on evaluation data
Objective	Oversight	Assessment
Frequency	Regularly during project implementation	Periodic over the life of a project – often three times, including at the beginning of a project (called "baseline), middle (called "midline evaluation") and end (called "endline" or "final evaluation")
Sources of data	Progress reports, attendance sheets, activity evaluations, surveys, interviews, and other methods.	Surveys, Key Informant Interviews, Focus Groups and other methods used with project beneficiaries or stakeholders.

Accountability is ensuring monitoring & evaluation activities are transparent and ethical in addressing the needs of all stakeholders e.g. Ensuring accurate interpretation of data.

Learning is the incorporation of processes to identify and disseminate new knowledge and learnings that emerge from the analysis of monitoring and evaluation data. The learnings can then be used to make good project decisions e.g. team meeting of TVET trainers to review evaluation data to revise teaching methods. The learning also is used to assess the success of a project's results.

As the above definitions show, the four MEAL components are all related to one another. *Monitoring* and *evaluation* both collect and analyse data to assess the progress and results of a project. The process of collecting and analysing data through monitoring and evaluation must be done in a manner that is

accountable through ethical and transparent actions. Finally, the monitoring and evaluation data that is collected and analysed in an accountable way are used for *learning* to promote good decision-making. Think of these four MEAL components as interlocking pieces of a puzzle.

Image from: https://monitoringevaluationaccountabilityandlearning.com/ngomeal-com/meal/articles/what-is-meal/

1.2 Some key definitions

The MEAL process is about collecting and analysing data in an accountable way that leads to learning. What do we mean by data? Who collects this data? And from whom is this data collected? Before going any further, it is important to define a few terms that are used throughout this manual that help us answer these questions.

Data: Information that is collected, analysed, and used for decision-making, discussion, or reasoning. Note that 'data' is the plural form of the word and 'datum' is the singular form. Data are multiple pieces of information while datum is a single piece.

MEAL practitioner: The person or people who is/are collecting and analysing data as part of the MEAL process. A MEAL practitioner might be a consultant, a CSO or NGO staff person, or a government official. It all depends on the nature of the project. MEAL practitioners are also sometimes referred to as evaluators.

MEAL participants: The people from whom data are collected in the MEAL process e.g. survey respondents. MEAL participants will usually be those people who are the focus of a project. For example, an evaluation of a project that seeks to improve education standards would involve students, teachers, and educational administrators. These are the MEAL participants who would provide data to the MEAL practitioner to understand the nature of the project's success. Data are provided by the MEAL participants through methods such as surveys, interviews and focus groups discussions. MEAL participants are also sometimes referred to as respondents or informants.

1.3 Ethics and MEAL

MEAL is about collecting, analysing, and reporting on project data. These data are usually provided by MEAL participants. This means that we as MEAL practitioners are directly collecting data from other people based on their own experiences, ideas, and thoughts as a means to assess a project. They are sharing details that may be personal in nature. How do we ensure there are no risks to MEAL participants when we collect data from them? How do we ensure that they feel comfortable and safe when providing us with data? How do we appropriately use data provided to us by MEAL participants?

These questions illustrate that ethics must play a central role in the MEAL process. MEAL is not only about collecting, analysing and reporting on data, it is about doing so ethically.

Ethics in MEAL can be defined as "the right or agreed principles and values that govern the behaviour of an individual within the specific, culturally defined context within which an evaluation is commissioned or undertaken."

- United Nations Evaluation Group (UNEG) Ethical Guidelines for Evaluation

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Developing a set of principles and values for ethical behaviour is therefore a critical beginning point for all MEAL work. The following is an example of a framework of ethical principles for MEAL adapted from a Canadian organization.

Ethical Principles for MEAL – An Example

RESPECT – MEAL participants should be able to make their own informed choice about participating in MEAL activities.

CONCERN FOR WELFARE - Ensure no harm or minimize any potential harm to participants in MEAL activities.

JUSTICE, FAIRNESS, EQUITY – MEAL participants need to be treated in a fair and equitable way throughout the MEAL process.

OWNERSHIP OF DATA - Ensure MEAL participants understand who owns the data (e.g. government, community) and how the data will be used.

TRANSPARENCY - Ensure transparency throughout the MEAL process, including identifying any ethical issues or conflicts of interest as they arise.

COMMUNITY ENGAGEMENT - Validate the processes you are undertaking with the community to align with the values of the community and reduce bias.

* Adapted from CanWaCH (2023). Ethics in MEAL for Health and Rights Programming.

The ethical framework in the box above provides a good starting point for thinking about ethics and MEAL in Bhutan. But take another look of the definition of MEAL ethics from UNEG provided in blue on the previous page. The definition clearly states that a MEAL ethical framework needs to be relevant to the *specific, culturally defined context* within which MEAL occurs. In other words, for MEAL work in Bhutan, the ethical foundation for that work needs to reflect Bhutanese values and ethics.

To help us understand what MEAL should look like in Bhutan, we turn in chapter 2 to an overview of the current state of MEAL practice in Bhutan. Chapter three then outlines what a proposed Gross National Happiness (GNH) MEAL lens that is rooted in Bhutanese ethical principles looks like.

Further Reading

UNEG Ethical Guidelines for Evaluation

Ethics in MEAL for Health & Rights Programming: A Short Guide

CHAPTER 2

CURRENT MEAL PRACTICE IN BHUTAN

2.1 The MEAL ecosystem in Bhutan

2.2 Current issues in Bhutanese MEAL practice

2. CURRENT MEAL PRACTICE IN BHUTAN

Monitoring, Evaluation, Accountability and Learning (MEAL) does not have a long history of practice in Bhutan. Nonetheless, the profile of MEAL and its perceived importance for successful projects and programmes is now growing in the country. Understanding the current practice of MEAL in Bhutan requires exploring the existing ecosystem for MEAL in Bhutan, current issues that arise in MEAL practices, and the connection of MEAL to Gross National Happiness.

2.1 The MEAL ecosystem in Bhutan

MEAL practice in Bhutan is in a nascent stage. In order for it to expand and grow, it is important to understand the MEAL ecosystem, or the interconnected parts that constitute the environment within which MEAL practice takes place. By understanding the MEAL ecosystem, we can better plan and strategise for making MEAL practice more prominent and effective in Bhutan.

When we speak of a MEAL ecosystem, we mean the interconnected components that make up the context for MEAL practice. In particular, a MEAL ecosystem is composed of the legal environment for MEAL, the demand for MEAL in the country, the supply of MEAL practitioners, and other enabling factors. A Policy Brief on Bhutan's MEAL ecosystem written in 2021 provides an excellent overview of these components of the MEAL ecosystem in Bhutan.[1]

i) Legal environment: According to the Policy Brief, a legal framework for MEAL at the national level is not yet in force in Bhutan as of 2021, although a draft Evaluation Policy exists. Given that the policy is not yet in force, individual organisations are left to develop their own MEAL frameworks. No consistent national framework to standardise MEAL currently exists in Bhutan.

[1] Phuntsho Choden. (2021). Fostering a vibrant evaluation ecosystem in Bhutan. EAB.

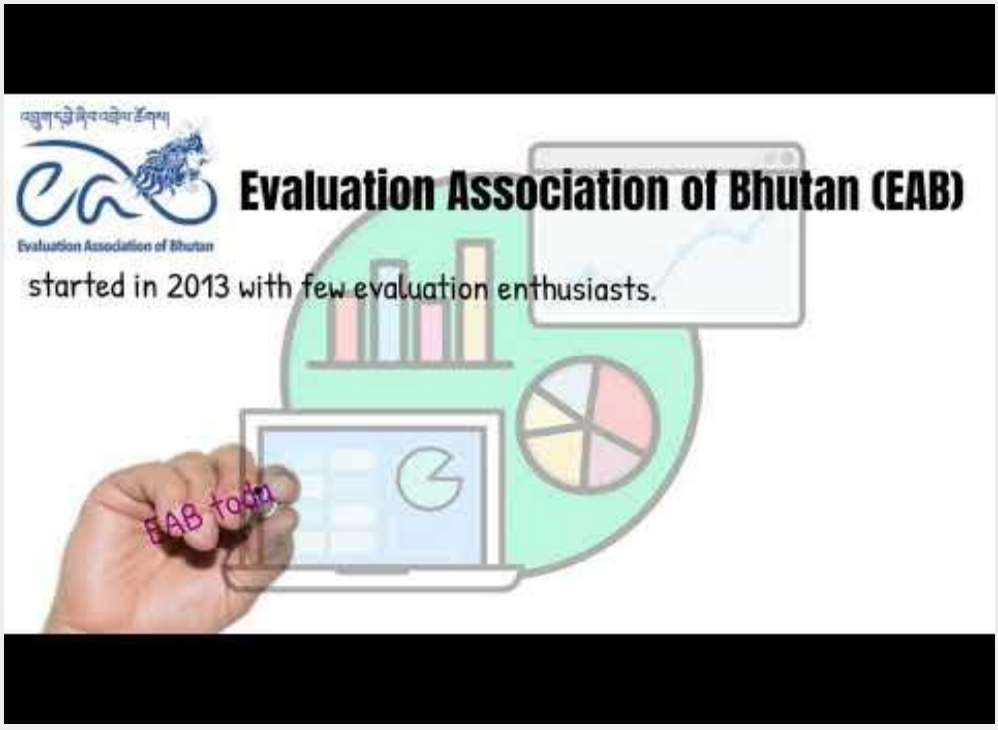
ii) Demand for MEAL: there is low demand for MEAL services in Bhutan and a culture of evaluation still remains small in the country. Outside of international donor funded projects where MEAL is a requirement, little demand for monitoring and evaluation exists in Bhutan.

iii) Supply of MEAL practitioners: Many organisations do not have designated MEAL practitioners according to the Policy Brief. In addition, those that do exist are not fully supported as there are few formal training opportunities to improve MEAL capacity and skills.

iv) Enabling factors: The Evaluation Association of Bhutan (EAB) is a civil society organization (CSO) that exists to help strengthen the practice of MEAL in Bhutan. It can play a key role in enabling a stronger MEAL culture in the country and to help build capacity and skills. At the same time, the Policy Brief suggests that awareness of EAB is low among Bhutanese organisations.

Video

A short introductory video to the Evaluation Association of Bhutan.



Click here to access the video: https://www.youtube.com/watch?v=tdLUJTLATZk&t=7s

The current nature of the MEAL ecosystem in Bhutan therefore illustrates that MEAL practice has much room to grow. While demand for MEAL is quite low, capacity to undertake MEAL is limited, and a clear

national legal framework does not yet exist, increasing commitment to better enabling MEAL can be seen in CSOs like EAB. In this ecosystem context, what current issues exist in MEAL practice in Bhutan?

2.2 Current issues in Bhutanese MEAL practice

Relevantly little is known about MEAL practice in Bhutan. An excellent study, however, was published by EAB in 2023 that explores the current situation.[2] The study draws on interviews with MEAL stakeholders in Bhutan. The insights from these MEAL stakeholders are interesting in the context of the current MEAL ecosystem.

Insights from MEAL stakeholders in Bhutan

"Monitoring is practiced widely but the practice of evaluation is still at a nascent stage."

"In Bhutan, M&E [MEAL] is mostly applied in project activities as part of donor requirements. Most government projects are completed without proper monitoring, let alone evaluation."

"I think it is always important to view any evaluation approach through a gender lens."

"There are no 'One-size-Fits All' methods in M&E. Different M&E needs different approaches depending on the objectives and the goals of the program or project implemented."

The EAB study draws on these insights and others to make a series of recommendations for MEAL practice in Bhutan.

Recommendations from the study include the following:

- More awareness and advocacy on the importance of evaluation must be conducted;
- Capacity development programs on M&E (MEAL) should be strengthened;

[2] EvalYouth Bhutan. (2023). An Exploratory Study of Evaluation Practices in Bhutan.

- Trainings on gender-sensitive evaluation approaches and methods are needed; and,
- Relevant agencies (EAB, Strategic Evaluation Division, Centre for Bhutan and GNH Studies) must explore contextualizing evaluation approaches to align with our overarching development philosophy of GNH.

The last recommendation is particularly relevant to MEAL practice in Bhutan. MEAL is not a one-size fits all practice. Given the central role of Gross National Happiness in Bhutan's development, how can MEAL practice align with GNH? The next chapter explores this question and proposes a GNH MEAL lens to guide MEAL practice in Bhutan.

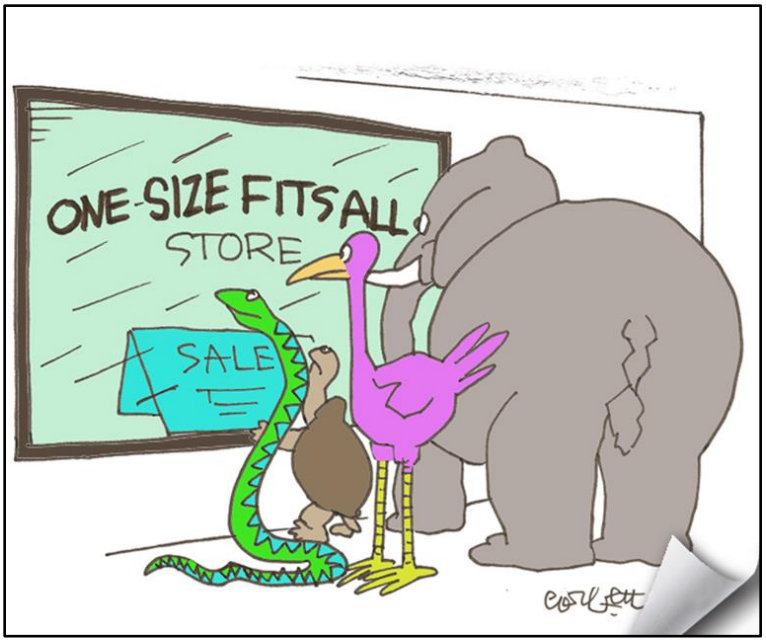


Illustration by Jack Corbett found at https://teachwithgive.org/resource/remote-learning-applying-universal-design-for-learning-udl-principles/

Further Reading

An Exploratory Study on Evaluation Practices in Bhutan

Fostering a Vibrant Evaluation Ecosystem in Bhutan

CHAPTER 3

A GNH MEAL LENS

3. A GNH MEAL LENS

The concept of Gross National Happiness (GNH) articulates an understanding of development that moves beyond a sole focus on economic growth and incorporates interrelated social, political, economic, cultural and environmental dimensions. It is an attempt to construct development in a holistic manner that addresses the multiple dimensions of being human. GNH was originally conceptualized by His Majesty the Fourth King. It has been Bhutan's national development strategy for several decades. Yet the idea that happiness should be at the centre of development goes back much further in Bhutan. Indeed it is at the core of the country's legal code of 1729.

> ***"If the government cannot create happiness (dekidk) for its people, there is no purpose for the government to exist."***
>
> ***- 1729 Legal Code***

Happiness as the core of development has therefore existed for centuries in Bhutan. But what exactly is the nature of Gross National Happiness and how does it relate to MEAL? This chapter provides an overview of GNH and proposes a GNH lens to guide MEAL work in Bhutan.

3.1 Defining GNH

Gross National Happiness recognizes that real happiness is a state of being involving a balance between the external world and the inner person. This is quite different than how happiness is defined in the "West", where happiness is understood as the immediate achievement of feelings of satisfaction, pleasure, or joy. Happiness in this sense can be fleeting and temporary. In contrast, happiness in GNH is

much deeper through its balancing of the external and internal. Accordingly, Gross National Happiness has been defined as the following:

> ***GNH is "a multidimensional development approach that seeks to achieve a harmonious balance between material wellbeing and the spiritual, emotional and cultural needs of an individual and society."***

This definition of GNH illustrates that it is characterised by multiple dimensions that incorporate spiritual, emotional, cultural and ecological concerns. Balance among these dimensions is the key. Given this, GNH has often been referred to as "the middle path". Please see the video below for an address by former Prime Minister Jigme Y. Thinley at Humber College in Toronto discussing GNH in detail.

Video

Keynote address by Jigme Y. Thinley at *Beyond GDP: Development Alternatives to Growth* conference at Humber College, Toronto.

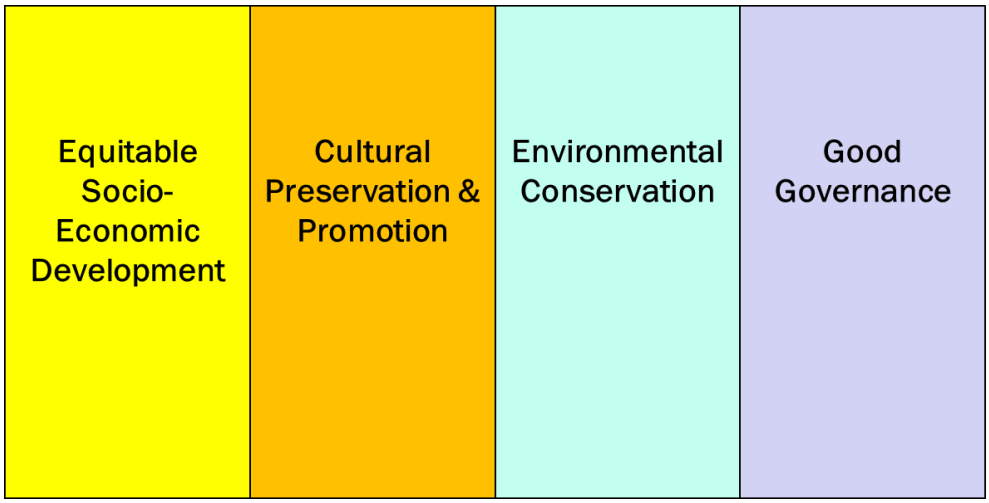
Click here to access the video: https://www.youtube.com/watch?v=UGvLFq1vxkY

3.2 The GNH pillars and domains

Gross National Happiness was initially operationalized as four pillars intended to work together to maximise happiness. The four GNH pillars constitute the material and non-material dimensions of

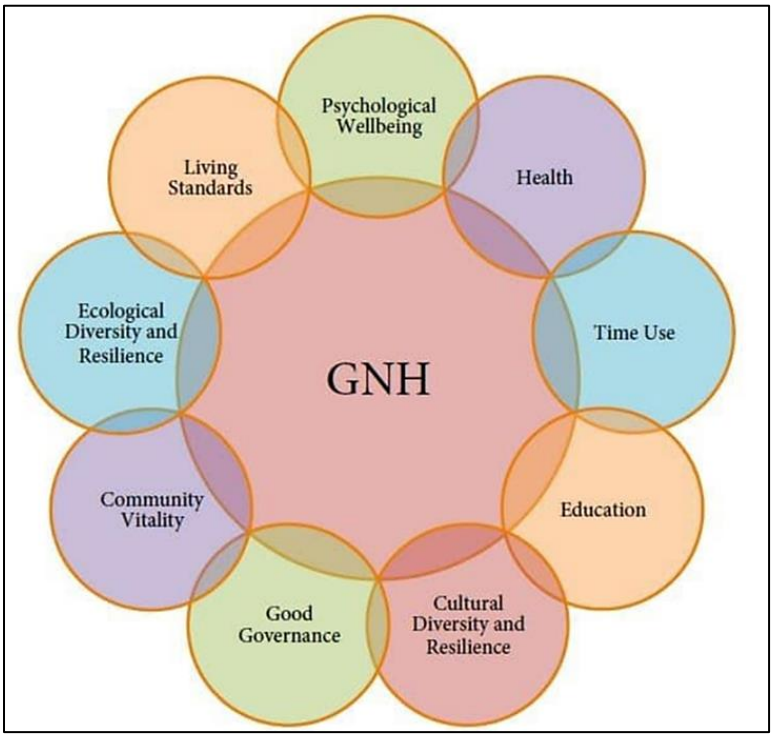
happiness that are important in the Bhutanese context: equitable social and economic development, cultural preservation and promotion, environmental conservation, and good governance.

The four pillars of GNH



The GNH pillars were further developed and expanded into nine domains. The domains further operationalise GNH into an applied and holistic development model.

The nine domains of GNH

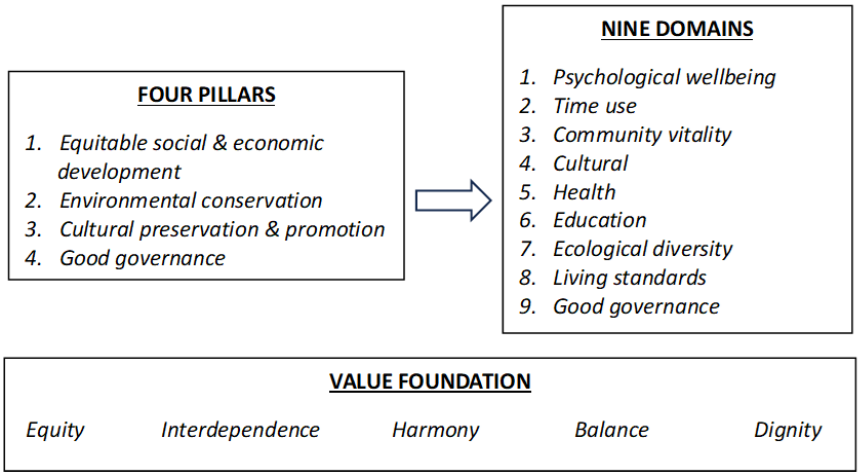


3.3 GNH values

The GNH pillars and domains usually get the most attention as they operationalise the GNH model. But it is important to recognise that the pillars and domains are rooted in Bhutanese cultural values.

> ***"To me, GNH is simply development with values."***
>
> ***- His Majesty the Fifth King***

These values include things like *equity* across all people, *interdependence* among all sentient beings, *harmony* within society and with nature, *balance* between the inner and outer worlds, and *dignity* of all people.[3] These cultural values are best understood as a foundation upon which the GNH pillars and domains rest.



3.4 A proposed GNH MEAL lens for Bhutan

The Bhutan MEAL report discussed in chapter 2 argued that the practice of MEAL in Bhutan should align with Gross National Happiness. How might it do so in a meaningful way? Can both the GNH domains and values be incorporated into MEAL? As part of the MEAL workshop that led to the development of this manual, participants assessed international MEAL practices and adapted them to incorporate GNH domains and values. This collaborative process resulted in the conceptualization of an overall "GNH MEAL lens" to guide MEAL work in Bhutan. A lens is a tool for seeing things. The GNH MEAL lens is therefore a way of "seeing" MEAL from a GNH perspective. The lens is characterized by two things:

- An ethical foundation to guide MEAL that is rooted in GNH values.

[3] For a more detailed discussion of the literature on GNH values, see Schroeder, Kent. (2018). *Politics of Gross National Happiness: Governance and Development in Bhutan*. New York: Springer.

- GNH domains incorporated into MEAL practices within each of the four components of MEAL.

3.4.1. A GNH ethical foundation for MEAL in Bhutan

MEAL involves collecting and analysing data from people in an accountable manner and sharing the learning. Because this process deals directly with people and their experiences, MEAL practitioners must act ethically. No harm, either psychological, reputational, or physical, should come to MEAL participants. Creating an ethical foundation for MEAL that is specific to Bhutan is therefore critical.

The participants in the MEAL workshop that led to the creation of this manual reviewed ethical principles for MEAL used in the Canadian context (see chapter 1). They also reviewed the key values that underlie GNH. Based on this activity, they assessed the set of Canadian ethical MEAL principles for its appropriateness in Bhutan. While agreeing that these ethical principles are relevant to Bhutan, they expanded them to develop a set of ethical principles for Bhutan that incorporates GNH values.

Ethical Principles for a GNH MEAL Lens

Empowerment: the dignity of all people means MEAL should be carried out in a way that empowers people and strengthens human rights (*GNH value: dignity*).

Inclusion: MEAL practice should engage the full diversity of people who are impacted by a project or program. People should be encouraged to speak in the MEAL process based on their own life experience (*GNH values: equity & balance*)

Respect: MEAL practices must be respectful in three ways:

i) Respect for individuals – privacy and confidentiality must be maintained in the data collection, analysis, and reporting processes (*GNH value: dignity*)

ii) Respect for culture - cultural norms, including respect for elders, need to be incorporated into data collection, analysis, and reporting processes (*GNH values: dignity & interdependence across generations*)

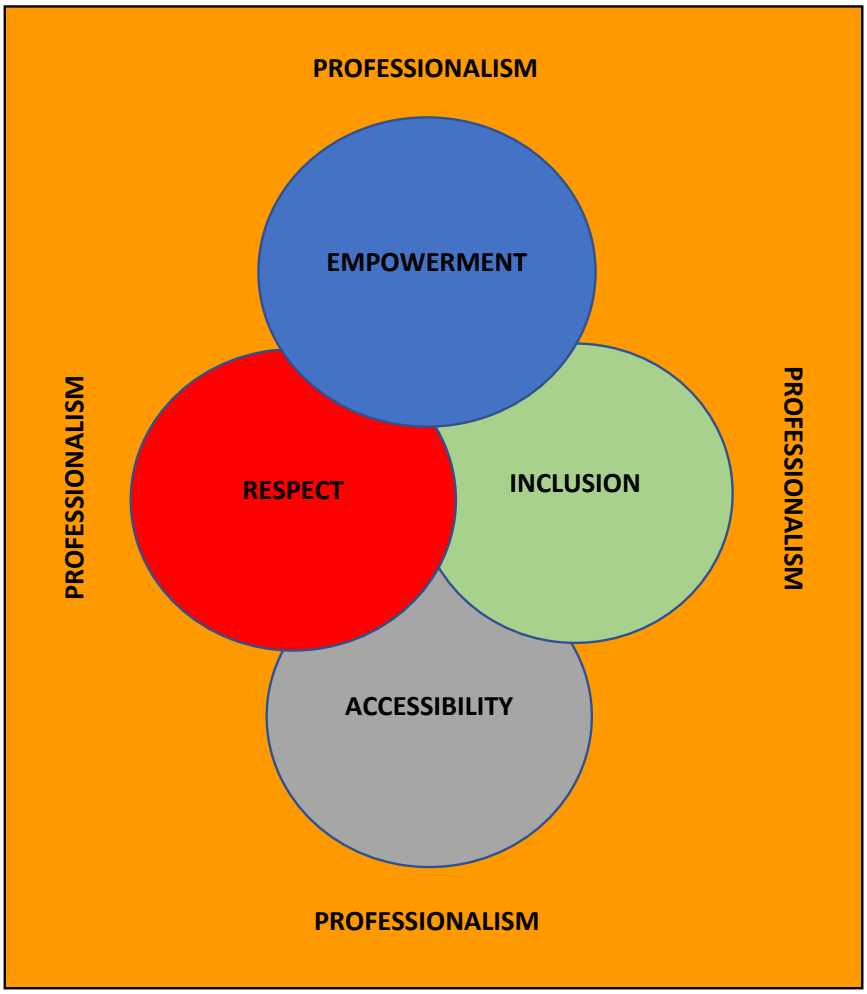
iii) Respect for the environment: MEAL practices should use data collection, analysis and reporting processes that recognize the link between human consumption and the environment (*GNH values: harmony with nature*)

Accessibility: Engaging diverse people in the MEAL process requires the use of appropriate, clear, and simple language in data collection, transparency in how data are used, and sharing of lessons/reporting with all stakeholders in appropriate methods (GNH values: dignity & equity)

Professionalism: MEAL personnel must enable MEAL participants to speak freely for themselves, ensure this collected data are not purposefully misinterpreted, and keep data secure to maintain confidentiality (GNH value: dignity).

This set of ethical principles based on GNH values will help ensure MEAL practice is appropriate and relevant for Bhutan. It is important to note that these GNH-influenced ethical principles for MEAL do not stand alone. Consistent with GNH as a holistic model, these principles are interrelated and interdependent. True commitment to *Empowerment* of MEAL participants requires that they receive *Respect* in the MEAL process and that *Inclusion* does not leave anyone out, disempowering them. Promoting respect, in turn, requires *Accessibility*, ensuring that MEAL participants can meaningfully engage in the MEAL process through accessible language and practices. Lastly, all of these ethical principles – empowerment, respect, inclusion, accessibility – rest on *Professionalism* on the part of MEAL personnel to treat people with dignity and ensure that data provided by MEAL participants are kept confidential and secure, ensuring no risk to participants.

A GNH Ethical Foundation for MEAL in Bhutan



3.4.2. GNH domains and MEAL practices

Incorporating GNH values as the ethical foundation for MEAL practice in Bhutan is one aspect of a GNH MEAL lens. In addition to ethically carrying out MEAL work based on GNH values, the MEAL activities themselves should contribute to the promotion of the nine GNH domains. Participants in the MEAL workshop upon which this manual is based collectively identified a set of MEAL practices that can actively contribute to the GNH domains. These GNH practices cover all aspects of MEAL: monitoring, evaluation, accountability, and learning. The following table outlines this set of GNH MEAL practices and the GNH domain(s) to which they contribute, as well as the GNH ethical principle(s) upon which they are based.

GNH MEAL Practices

GNH MEAL Practice	GNH Domain	GNH MEAL Ethical Principle
1. Data Collection		
• Use online data collection methods where possible to promote environmental conservation.	Ecological diversity & resilience	Respect for the environment
• Use local language when collecting data whenever possible.	Cultural diversity & resilience	Accessibility; Respect for culture
• Follow *Driglam Namzha* when engaging with MEAL participants	Cultural diversity & resilience	Accessibility; Respect for culture
• Allow participants involved in data collection to withdraw from participation with no questions asked.	Psychological wellbeing; Health (mental health)	Respect for individuals
• Include data collection questions focused on the experience of marginalized groups like vulnerable women and people with disabilities.	Health (disability)	Empowerment; Inclusion
• Seek input from stakeholders in the design of data collection questions to avoid bias.	Good governance	Respect for individuals; Empowerment; Professionalism
• Schedule the timing of data collection so it is not disruptive to participants' livelihoods or other priorities, especially in the case of women.	Time use; Living standards	Respect for individuals
• Where relevant, collect data from elders to incorporate their knowledge	Cultural diversity & resilience	Accessibility; Respect for culture
• Store data that is collected in a secure manner that safeguards confidentiality.	Good governance	Professionalism; Respect for individuals
2. Data Analysis		
• Use online data analysis tools where possible to promote environmental conservation.	Ecological diversity & resilience	Respect for the environment

• Share a draft of data analysis findings for stakeholder input to avoid bias.	Good governance	Respect for individuals; Empowerment; Professionalism
• Share data analysis results in local languages where possible.	Cultural diversity & resilience	Accessibility; Respect for culture
3. Accountability		
• Always gain the consent of those participating in data collection.	Good governance	Professionalism; Respect for individuals
• Provide consent forms in the local language whenever possible.	Cultural diversity & resilience	Accessibility; Respect for culture
• Allow for verbal consent from participants for whom written consent may be a challenge.	Psychological wellbeing	Respect for individuals
• Engage MEAL stakeholders at all stages of the process.	Good governance	Empowerment
• Engage diverse MEAL stakeholders, including elders, women and people with disabilities, whenever possible.	Good governance; Health (disability)	Empowerment; Inclusion
• Provide opportunities for data collection participants to ask questions of you.	Good governance	Empowerment; Respect for individuals
4. Learning		
• Disseminate learnings through online mechanisms where possible.	Ecological diversity & resilience	Respect for the environment
• Disseminate learnings in local languages whenever possible.	Cultural diversity & resilience	Accessibility; Respect for culture
• Disseminate learnings to all MEAL participants where possible, not just donor and project personnel.	Education	Respect for individuals; Empowerment; Inclusion
• Where possible, disseminate relevant learnings to the broader community, including elders.	Community vitality; Education	Empowerment; Inclusion
• Include learnings that address the needs of marginalized groups, like vulnerable women and people with disabilities.	Education; Health (disability)	Inclusion
• Include learnings that address the promotion of GNH overall.	All GNH domains	Empowerment

3.4.3. The overall GNH MEAL lens

The above two sections outline a GNH ethical foundation for MEAL and a set of GNH MEAL practices respectively. These two things are clearly related, with the GNH ethical foundation being the base upon which the GNH MEAL practices rest. Together, they constitute a proposed overall GNH MEAL lens for Bhutan to guide monitoring and evaluation (data collection and data analysis), accountability, and learning. A graphic representation of the overall GNH MEAL lens can be found on the next page.

Overall GNH MEAL Lens

Note that this overall GNH MEAL lens is a *proposed* lens. Additions, revisions, and changes to the overall lens are encouraged as you gain more experience carrying out MEAL practices in Bhutan.

The rest of this manual provides a step-by-step approach to carrying out a MEAL initiative. As part of this, each chapter contains a *GNH Application* section at the end of the chapter. The content of these sections applies the overall GNH MEAL lens to the specific topic covered in the respective chapter. This ensures that specific strategies for incorporating GNH into MEAL practice are provided in detail for each component of the process: data collection, data analysis, accountability, and learning.

CHAPTER 4

MEAL FRAMEWORK DESIGN

4. MEAL FRAMEWORK DESIGN

The previous chapter provided a proposed GNH MEAL lens to help guide MEAL work in Bhutan. We are now ready to explore how to actually carry out monitoring, evaluation, accountability, and learning for an individual project (or programme or policy). The first step is to create an overall MEAL framework. The MEAL framework is the roadmap for how you will carry out your MEAL activities; it provides overall focus as well as strategies for your MEAL work. This chapter analyses the relationship between project design and MEAL design, and provides instructions on how to design and plan a MEAL framework. It concludes by applying the GNH MEAL lens to the process of designing a MEAL framework.

4.1 Project design as the foundation for MEAL design

MEAL is about assessing the progress and outcomes of a project. Designing and planning a MEAL framework therefore needs to occur within the larger purpose and goals of the project. The larger process of project design, which is technically not a part of the MEAL process, is therefore required before a MEAL framework can be created. Note that while this section of the manual will discuss project design, it is likely something that you, as a MEAL practitioner, may not have to. The design of a project will likely have been completed before you are engaged as a MEAL practitioner on the project. It is important to understand the process of project design, however, as it directly influences how you design a MEAL framework. The following is a very brief overview of the process of project design.

Project design is the process of defining the purpose, resources, activities, and expected results for a project. Two key components characterise project design: the Theory of Change (ToC) and the Logic Model (LM), sometimes called a logical framework.

4.1.1 Theory of Change

A theory of change (ToC) is a description of the purpose of a project as well as how and why a planned change will occur through the activities of the project. It answers the question: how will desired change be achieved through the proposed project? Developing an answer to this question involves undertaking the following steps:

- Identifying the main problem or issue the project will address;
- Identifying the desired long-term goal or outcome of the project (often called the *Ultimate Outcome*) needed to address the main problem or issue;
- Working backwards from the long-term outcome (*Ultimate Outcome*), identifying the medium-term outcomes (often called *Intermediate Outcomes*) needed to achieve the Ultimate Outcome;
- Working backwards from the Intermediate Outcomes, identifying the short-term outcomes (often called *Immediate Outcomes*) needed to achieve the Intermediate Outcomes;
- Identifying the kinds of activities and their *outputs,* which are the direct products of completing an activity*,* which need to occur to achieve the Immediate outcomes;
- Identifying the assumptions that underlie this change process, and an assessing whether these assumptions are accurate.

Once the above steps are completed, the ToC provides an understanding of all the connections and relationships between project activities through to the achievement of the project's desired long-term outcome (*Ultimate Outcome*). This is sometimes referred to as a "results chain".

The results chain can be depicted like this:

Activities → **Outputs** → **Immediate Outcomes** → **Intermediate Outcomes** → **Ultimate Outcome**

Once the outcomes, activities, and assumptions have been developed, a narrative description should be written. This is your theory of change. The whole process of developing the ToC needs to occur with input from key project beneficiaries and stakeholders to ensure relevance, transparency, and accountability.

Further Reading

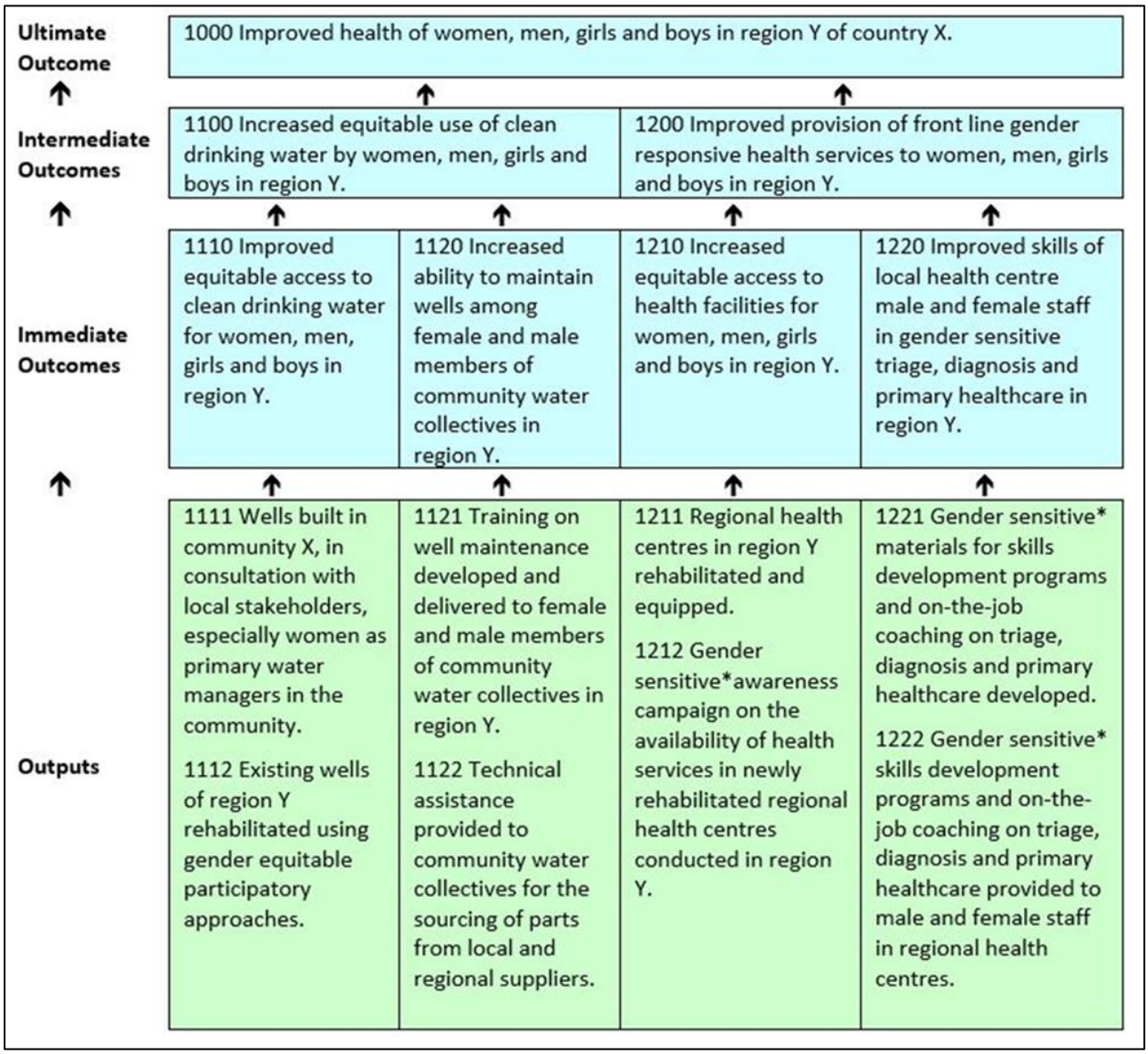
For more details on how to develop a Theory of Change, please see the following:

What is Theory of Change? - Theory of Change Community

4.1.2 Logic Model

A logic model (LM) depicts the components and relationships of the Theory of Change in a visual manner. In particular, it illustrates the connections between project outputs, Immediate Outcomes, Intermediate Outcomes, and the ultimate Outcome. The LM depicts this logic through a series of boxes representing each of these components, with the Ultimate Outcome usually at the top, working down to the outputs at the bottom. Note that a LM often does not depict a project's activities. This is because there often are many activities that, if included in the LM, would make it very long and less useful as a compact visual depiction of the project.

The following is an example of a logic model taken from a manual on project design published by Global Affairs Canada, the funder of the BEST project upon which this manual is based.



Once the ToC and LM are completed, the *inputs* required for undertaking the project's activities need to be identified. Inputs include the financial, human, and material resources needed to complete each specific activity.

The above is a short introduction to the LM. For more details on how to develop one, see the link in the box below.

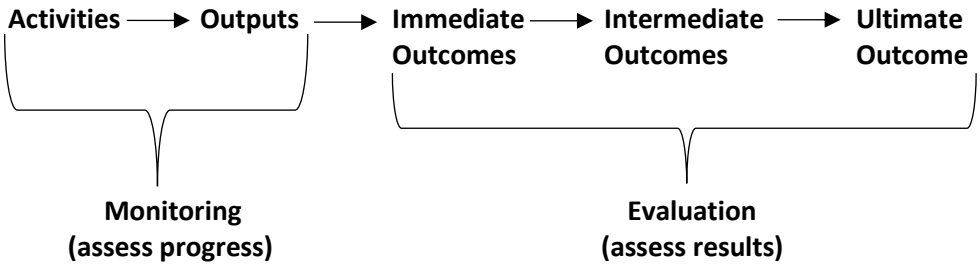
Further Reading

For more details on how to develop a Logic Model, please see the following:

Results-based management for international assistance programming: A how-to guide

4.1.3 Project design and MEAL

Where does MEAL fit into all of this? The collection and analysis of MEAL data corresponds to specific components of the ToC and LM. If we look again at the logic of the ToC and the LM, the role of MEAL can be diagrammed as follows:



Remember:

As a MEAL Practitioner, the design of a project may have already been completed prior to your involvement in a project.

It is your job to design the MEAL framework to fit the project design.

4.2 MEAL design

The ToC and LM are the key project design tools that need to be completed before a MEAL framework is designed. As mentioned above, as a MEAL practitioner, you most likely will not be involved in project design. Once the project is designed, however, your role will be to design the MEAL framework based on the nature of the project's design.

Four core components of designing a MEAL framework include identifying the purpose of the MEAL framework, identifying the type of data required to fulfill the MEAL purpose, designing indicators that will measure change in the project, and identifying the stages of data collection and analysis. Each of these is looked at in turn below.

4.2.1 Identify the purpose of the MEAL framework

The first step in designing a MEAL framework is to explicitly identify its purpose. What is the MEAL framework trying to do? This may sound like a challenging job but it's actually not. Remember that the MEAL framework is directly tied to the project that emerges from the process of project design. The overall purpose of the MEAL framework is therefore always to assess whether the project is achieving its Ultimate Outcome.

For example, the Ultimate Outcome of the BEST project is "A reformed, inclusive, and environmentally responsive TVET system that produces graduates who respond to labour market needs". The purpose of BEST's MEAL framework is therefore "To assess whether the BEST project is achieving its Ultimate Outcome of a reformed, inclusive, and environmentally responsive TVET system that produces graduates who respond to labour market needs."

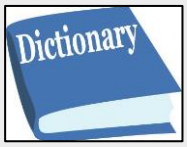
While the MEAL purpose focuses on the Ultimate, or long term, Outcome, carrying out this purpose requires monitoring and evaluating all aspects of the project from its activities and outputs through to its Immediate, Intermediate, and Ultimate outcomes. All of these are interconnected.

Once you have developed the purpose of the MEAL framework, it should be formalized by writing it down.

4.2.2 Identify the type of data required

Once the MEAL purpose has been defined, the next step involves thinking through the kind of data you need to collect in order to fulfill the MEAL purpose. This involves reading through the project's outputs and outcomes (Immediate, Intermediate, and Ultimate) to determine the kind of data you will need to understand whether or not these outputs and outcomes have been achieved.

In order to do this, we need to take a step back and understand the nature of data. There are two kinds of data: quantitative and qualitative. The next page provides an overview of the nature of each of these kinds of data.



Key Definitions

Quantitative Data: ***Data that measures quantities or values. It uncovers information that can be counted or measured.***

Quantitative data are numbers.

"How many or how much?"

Qualitative Data: ***Data that explores the quality of an experience, process, or relationship. It uncovers information that is descriptive rather than measured.***

Quantitative data are usually words (or photos, videos, etc.)

"Why, what, when or how?"

Here is an example of how the two kinds of data differ:

Quantitative data on the TVET experience of trainees with disabilities might measure how many trainees with disabilities enroll in a TVET course and compare it to how many graduate.

Qualitative data on the same issue might explore the nature of the challenges experienced by TVET trainees with disabilities in completing their education.

Key characteristics of **quantitative data** include the following:

- Measure the quantity of something.
- Use data collection tools that are standardized.
- Collects data that are numeric rather than textual (words).
- Data collection is usually done using surveys or polls.
- Data are often presented in graphs, tables or figures.

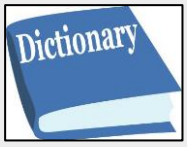
Strengths of quantitative data:	Limitations of quantitative data:
1. Able to reach a large number of people. 2. Data can be collected quickly. 3. If done well, results can be generalized to larger populations. 4. Can be easily duplicated in later evaluation studies.	1. Limited to analyzing "how much". 2. It can be difficult to account for context. 3. Often more expensive than other methods. 4. Statistical analysis can be complicated.

Key characteristics of **qualitative data** include the following:

- Explore a topic in depth.
- Describe and explain experiences, processes or relationships.
- Use data collection tools that are flexible.
- Collect data that are textual (words) rather than numeric.
- Data collection is usually based on interviews where people share their experiences.

Strengths of qualitative data:	Limitations of qualitative data:
1. Provides rich detail on people's experiences. 2. Values the knowledge and experience of those who are interviewed (the "respondents"). 3. Helps shift the balance of power to respondents in a way that reduces the bias and assumptions of the researcher. 4. Allows information to be understood within its larger cultural, community or organizational context.	1. In-depth analysis usually involves a small number of people who are not randomly chosen. This reduces the evaluator's ability to make generalizations to broader populations. 2. It can be difficult to replicate a qualitative study in another context given the flexible nature of data collection. 3. Different evaluators may interpret textual data differently i.e. bias 4. Can be more time consuming than quantitative approaches.

Quantitative and qualitative data provide two different options for the kind of data that can be collected. As a result, the nature of the questions used for collecting each type of data tends to differ. Quantitative data collection tends to use what are called 'closed-ended' questions whose answers can be tallied up while qualitative data collection tends to use 'open-ended' questions.



Key Definitions

***Closed-ended question:** lists pre-determined answer categories, and respondents simply identify one or more answer they consider the most appropriate. The number of answers for each answer category is then totaled up.*

e.g. Are you a graduate of a TVET course? Yes ____ No ____

***Open-ended question:** does not include pre-determined answer categories, enabling respondents to tell their experience in their own words.*

e.g. Describe the most important thing you learned in your

TVET course: _____

We have seen that quantitative and qualitative data are different and both have strengths and limitations. When designing a MEAL framework, you need to choose which kind of data to collect based on your MEAL purpose. This will involve reading each of the project's outputs and outcomes and determining the kind of data needed to measure whether they are being achieved.

For example, if one of the project's Intermediate Outcomes is "Increased number of female trainees enrolled in TVET", then the type of data to collect is quantitative as you need a number in your assessment.

If, however, one of the project's Intermediate outcomes is "Improved economic opportunities for TVET graduates", the choice of data for this specific outcome is more complicated. Should you assess "improved economic opportunities" as a number of something (quantitative) or as a quality of something (qualitative)?

In the past, there has often been a lot of acrimonious debate over which kind of data is better to collect. The reality is, it is best to collect both quantitative and qualitative data as part of your MEAL framework if possible. The two can complement one another: quantitative data will provide numeric figures that help you assess success, or lack of success, of your project (e.g. how many TVET trainees graduated),

while qualitative data will provide deeper context of why or how this success, or lack of success, occurred (e.g. how did student support services assist students in successfully graduating?).

4.2.3 Design indicators

Deciding on whether to collect quantitative data, qualitative data or both, is a process that goes hand-in-hand with designing indicators for your MEAL framework. Indicators are tools that measure whether outputs and outcomes are being achieved. They can be either quantitative or qualitative measurements. Indicators enable us to assess progress (monitoring) and results (evaluation) of a project; they allow us to understand whether the project is achieving its outputs and outcomes as laid out in the logic model. Each output and each Immediate, Intermediate and Ultimate outcome need at least one indicator assigned to it.

Here is a simple example of an indicator:

> Immediate outcome: “Increased number of female trainees enrolled in TVET”.
>
> Indicator: Annual enrolment number of female trainees in the TVET system (quantitative indicator)

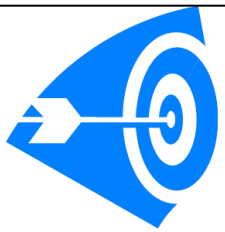
Individual indicators can be either quantitative or qualitative. The example above is quantitative as the immediate outcome is focused on the number of female trainees. Below is an example of an intermediate outcome with both a quantitative and a qualitative indicator:

> Intermediate outcome: “Improved economic opportunities for TVET graduates”
>
> Indicator 1: Percent of TVET graduates who secure employment within 6 months of graduation (quantitative indicator).
>
> Indicator 2: Satisfaction among graduates with their job after one year of employment (qualitative indicator).

By having two indicators for the above intermediate outcome, we can more accurately and more deeply assess the success of the project in achieving the outcome. The first quantitative indicator will enable us to assess how successful graduates are in finding employment. This is important for assessing the achievement of the outcome. Yet it does not necessarily tell us everything. Graduates may be finding jobs, but they be low paying jobs or employment that does not allow for advancement. By also qualitatively assessing the satisfaction of graduate with their new employment, we can more deeply evaluate the success in achieving the Intermediate Outcome.

It is common practice for projects to use only quantitative indicators. It is much more effective to use a combination of quantitative and qualitative indictors in the overall MEAL framework when possible.

Indicators need to be designed for each project output and for each project outcome.



Best Practice

Use 2-3 indicators for <u>each</u> outcome with a mix of both quantitative and qualitative.

Use at least one indicator for <u>each</u> output.

Designing good indicators is a skill that can take practice. A common framework for designing indicators is the SMART framework. According to SMART, each indicator needs to be:

Specific: An indicator needs to be clearly defined and focus on a single, specific area;
Measurable: An indicator must provide a measurement of progress;
Achievable: An indicator must be realistic within the available timeframe and resources;
Relevant: An indicator must be relevant to the output or outcome it is intended to measure;
Time bound: An indicator should have a defined time-period of measurement where relevant.

In most cases, it is also useful to develop targets for each indicator. A target is what you want to achieve for an indicator by the end of the project; it is the measure of success that the project wants to achieve. Here is an example of a target:

Immediate outcome: “Increased number of female trainees enrolled in TVET”.

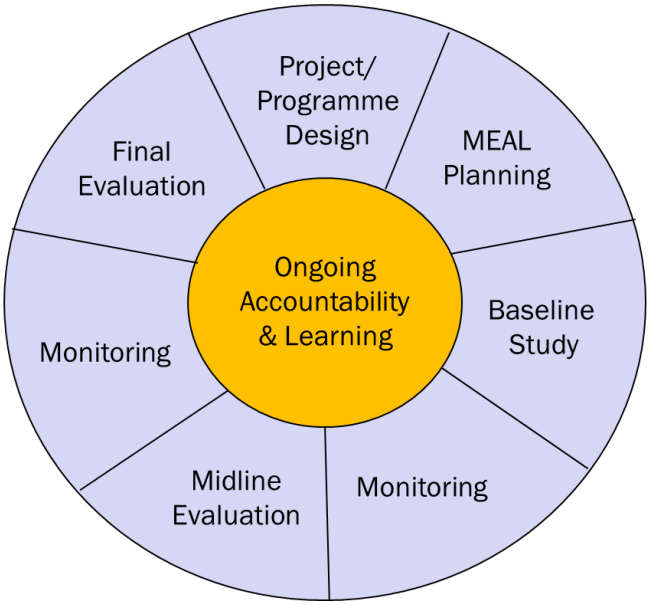
Indicator: Annual enrolment number of female trainees in the TVET system (quantitative indicator)

Target: 250 enrolled female trainees in the final year of the project

The targets for each indicator should be developed after completion of what is called the “baseline study”. The baseline study, discussed in the section below, will tell you what the current situation is at the beginning of a project, so you can then decide what the target should be by the end of the project.

4.2.4 Identify the stages of MEAL data collection and analysis

At this stage, the MEAL framework purpose is developed, decisions have been made on the type of data to collect, and indicators have been designed for each output and outcome. The next step in the design of the overall MEAL framework is to identify the stages at which data need to be collected in order to fulfill the MEAL framework’s purpose. Remember, monitoring data are collected throughout the timeline a project as monitoring measures the project’s progress during its implementation. Evaluation data, which measure the results of the project, are collected less often. When evaluation data will be collected, therefore, needs to be identified at this stage. Generally, it is common practice for MEAL frameworks to identify the stages of MEAL data collection as illustrated in the diagram below:



Note that at the top of the diagram is project design, as was covered in the first section of this chapter, followed by the MEAL design and planning stage discussed in the second part of this chapter. Once the MEAL framework design and planning is done, the first evaluation stage, sometimes called a “treatment” is a baseline study, followed by a midline evaluation an endline or final evaluation. In-between, monitoring data are continuously collected as project activities are rolled out.

Baseline study stage: Evaluation is about assessing change created by a project. In order to assess change, we need to understand the situation at the beginning of the project so we can measure the project’s change against it. For example, if we plan to implement a project focused on increasing

trainees' grades within the TVET sector, we need to know what trainees' grades are before the project begins so we can compare this with grades achieved during and at the end of the project. This will let us know if the project has been a success. Information on the situation at the beginning of a project is called "baseline data". The first stage of the MEAL process involves the collection and analysis of this baseline data prior to any project activities beginning. At this point, targets should also be developed for each indicator as the baseline study tells you where you are starting from. The targets will tell you where you want to go.

Midline evaluation stage: At some point after a project has begun but well before it ends, we need to assess the current success of the project. Doing so allows project management to make changes to the project if it is not achieving its outcomes or if its context has changed. An evaluation study therefore needs to be done during the implementation of the project. This is usually done roughly halfway through e.g. 2.5 years into a 5-year project. A midline evaluation usually assesses the state of success of the project in achieving its Immediate Outcomes. It does so by collecting data for each indicator and comparing this to the data collected for each indicator at the baseline study stage. This will show what kind of change has occurred for each indicator.

Endline, or final, evaluation stage: The midline evaluation lets us assess a project when it is about halfway through. The Endline evaluation assesses the overall success of the project once it is completed. The endline evaluation usually assesses the project's success in achieving the Intermediate Outcomes of the project as well as the Ultimate Outcome. It does so by collecting data for each indicator and comparing this to the data collected at the midline evaluation and baseline study stages. This will illustrate what kind of change has occurred over the life of the project. Not surprisingly, the endline evaluation always occurs at the project's end.

Monitoring: while evaluation activities occur at the beginning (baseline), middle (midline) and end (endline) of a project, the collection of monitoring data occurs throughout the project. As monitoring data collects information on the achievement of outputs, or the products of activities, these data are collected regularly as project as activities are undertaken.

Once you have identified the stages of MEAL data collection and analysis, you have completed the broad design of the MEAL framework. The next step is to plan the details of carrying out the MEAL framework.

4.3 MEAL planning

4.3.1 Plan how MEAL data will be collected

At this point, you have the overall MEAL framework designed: the purpose of the MEAL framework is defined, the type of data to be collected is identified, indicators are created for each project output and outcome, and the stages of the MEAL process are defined. The next step is to plan the details for how data for the indicators will be collected.

Planning should include the following:

1. Identify the sources of data for each indicator: who or what will provide the data you need for each indicator?

For example:

> *Indicator:* "Percent of TVET graduates who secure employment within 6 months of graduation"
> *Data source:* TVET institute records.
>
> *Indicator:* "Satisfaction among graduates with their job after one year of employment" *Data source:* TVET Graduates

Go through each indicator and identify the required data sources.

2. Identify the data collection methods: how will you collect the data from your data sources? What data collection tools will you use? Will you use surveys, focus groups discussions, key informant interviews, or another tool? For example:

> *Indicator:* "Satisfaction among graduates with their job after one year of employment"
> *Data source:* TVET Graduates
> *Data collection method:* Focus group discussions with graduates

Identify the data collection method for each data source. Chapters 5-8 of this manual provide step-by-step instruction on how to design data collection tools like focus group discussions.

3. Identify the frequency of data collection for each indicator: how often do you need to collect data from each data source for each indicator? In some cases this might only be three times: during the baseline study, midline evaluation, and endline evaluation. In other cases you may want to collect data annually, bi-annually, or some other timeframe. It all depends on the nature of the indicators.

> *Indicator:* "Satisfaction among graduates with their job after one year of employment"
> *Data source:* TVET Graduates
> *Data collection method:* Focus group discussions with graduates
> *Frequency:* Three times: Baseline, midline evaluation, and endline evaluation

4. Identify who is responsible for collecting the data for each indicator: who will ensure the data are collected using the correct data collection methods and at the correct frequency? This is often the MEAL practitioner or MEAL team who leads the MEAL framework.

> *Indicator:* "Satisfaction among graduates with their job after one year of employment"
> *Data source:* TVET Graduates
> *Data collection method:* Focus group discussions with graduates
> *Frequency:* Three times: Baseline, midline evaluation, and final evaluation
> *Responsibility:* MEAL Officer and MEAL consultant

After planning all of the above details, they should be put together in a single MEAL planning document. In the case of Global Affairs Canada, which funds the BEST project and the creation of this manual, this planning document is called the Performance Measurement Framework (PMF). The PMF outlines all the above planned details for collecting data for each indicator and its respective output or outcome. As such, the PMF is a critical management tool as it forms the basis to build upon to meet the objectives of the MEAL framework.

A sample PMF from the BEST project can be found in Appendix 1.

You will notice in the PMF in Appendix 1 that there are columns for “Baseline data” and “Targets” as well. These two columns will be filled in only after the baseline data are collected.

With a completed MEAL plan like a PMF, you now have the plan for collecting MEAL data for the entire project. The final step of MEAL planning is outlining how MEAL data will be analysed after they are collected.

4.3.2 Plan how MEAL data will be analysed

How you analyse the MEAL data that are collected will depend on the kind of data you are collecting through your indicators: quantitative, qualitative, or both. Regardless of the kind of data collected, planning the data analysis should include the following:

1. Identify how data will be analysed: will you use some kind of software package for analysis? There are both quantitative and qualitative software that can be used. In some cases of qualitative data, analysis can also be done by hand. Chapters 9 and 10 of this manual provides details on carrying out data analysis and the kinds of software available for analysis.

2. Identify who will analyse the data: analysis of the data is usually undertaken by the MEAL practitioner or team. If using data analysis software, a person who has skills in using the software will be required. Where possible, it is also important to circulate the initial analysis of data to the MEAL participants to validate that your analysis does not misinterpret the information they provided you (see Chapter 11 for more on accountability).

At this point, you have planned both the collection and analysis of data. The overall MEAL design and planning is now complete. The framework provides the roadmap for your MEAL work. You are now ready to implement it.

4.4 GNH application

Chapter 3 of this manual outlined an overall GNH lens for MEAL practice in Bhutan. The lens is intended to promote the incorporation of GNH values and domains directly into MEAL practices. In this section, we take the overall GNH lens and apply it directly to MEAL framework design. The table below outlines the incorporation of GNH domains into specific practices in the design of a MEAL framework. These practices will promote a MEAL framework that contributes to GNH.

GNH Practices for MEAL Framework Design	GNH Domain
1. Design diversity-sensitive indicators for marginalised populations like people with disabilities and vulnerable women. Such indicators will measure the project’s impact on marginalized populations regardless of the nature of the project.	**Good governance**: Engage diverse MEAL stakeholders in MEAL design **Health:** Include a focus on people with disabilities

2. When identifying data collection methods for the MEAL plan, seek to identify online methods to reduce the use of paper.	**Ecological diversity & resilience**
3. When developing the frequency of data collection component of the MEAL plan, schedule data collection so it is not disruptive to MEAL participants' livelihoods or other priorities.	**Time use** **Living standards**
4. When identifying data analysis methods, seek to identify online methods to reduce the use of paper.	**Ecological diversity & resilience**

The figure below highlights in red where the practices in the above table fit into the overall GNH MEAL lens.

PART II

Monitoring & evaluation:

data collection

CHAPTER 5

SAMPLING

5.1 What is a sample?

5.2 Probability samples

5.3 Non probability samples

5.4 GNH application

5. SAMPLING

The previous chapter explored the design and planning of a MEAL framework. The next four chapters turn to how to actually collect data as part of the MEAL framework. The three chapters following this one discuss three kinds of data collection tools – key informant interviews, focus group discussions and surveys - that can be used. This chapter explores how to choose the people who will participate when using these tools. Choosing people who will participate in the data collection process is called sampling. Figuring out the best sample to use when collecting MEAL data is an important step in ensuring you collect good data that allows you to effectively assess a project's success.

5.1 What is a sample?

There are often cases where we cannot collect data from every single person. For example, if you want to collect data on the Bhutanese population's views on TVET, it would likely not be possible to survey every single person in Bhutan. Not only would this require an enormous amount of time and money, but you would also need to identify every person and provide them with a survey.

In cases where we can't collect data from everyone, we need to create what is known as a 'sample'. To understand what a sample is, we need to define it, as well as the related research term 'population'.

Key Definitions

Population: ***The overall collection of individuals who are the focus of a monitoring or evaluation activity.***

Sample: ***A subset of a population that is used to represent that population in the data collection & analysis process.***

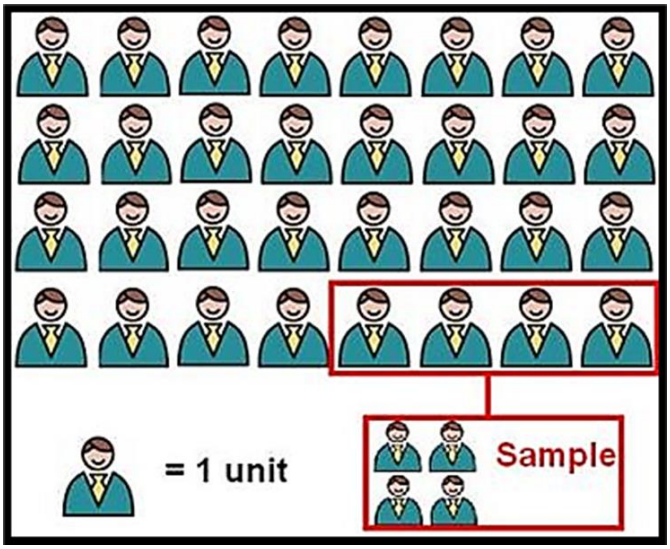
A population is therefore the entire group of individuals who make up the focus of a MEAL activity. In some cases, you can collect evaluation data from the entire population that is the focus of the MEAL activity e.g. all the participants in a training program. To figure out whether you can collect data from the whole population or if you will need to sample, it is important to be clear on who your population is. Here are a couple of examples of how a population will differ based on the nature of what you are evaluating.

> *Example 1: For an evaluation with the purpose of assessing the quality of learning among current TVET trainees, the population would be all current TVET trainees.*

> *Example 2: For an evaluation of the effectiveness of the TVET system as a whole, the population would be all TVET trainees, trainers, administrators, policymakers & industry partners.*

In each of the above cases, our MEAL activity may not be able to engage every single person in the population in the data collection process. For example, in the second case above, if we are using focus group discussions (see chapter 7) to collect qualitative data on the effectiveness of the TVET system, we likely do not have the time or resources to undertake multiple focus groups involving every single TVET trainee, trainer, administrator, policymaker, and industry partner. We therefore need to sample, meaning we need to identify a subset of this population to represent the population as a whole. We can then undertake a small number of focus groups with the individuals who have been sampled to represent the population.

The following graphic provides a simple but effective way to think about the relationship between a population and a sample.



Source: http://www.restore.ac.uk/srme/www/fac/soc/wie/research-new/srme/modules/mod1/2/

Note that the population and sample are not limited to people. You can sample other kinds of things as well. Suppose you wanted to undertake in-person key informant interviews (see chapter 6) with TVET graduates from across the country to better understand the kinds of jobs they get in different parts of Bhutan. You do not, however, have enough time and money to travel to all 20 Dzongkhags to interview graduates. In this case, you would need to develop a sample of the Dzongkhags that you will visit. For example, you might decide that to best represent all 20 Dzongkhags, the sample should include two Dzongkhags from each of west, central, east, and south Bhutan. The result is 8 Dzongkhags (the sample) where you will collect data that represent the 20 Dzongkhags (the population).

The example above of sampling Dzongkhags illustrates a key challenge of sampling: you need to ensure a sample represents the population as best as it can. This challenge has resulted in the development of different types of samples that are used in different situations. There are two broad types of samples: probability samples and non-probability samples. Let's look at each of these in turn.

5.2 Probability samples

A probability sample is one where every person (or Dzongkhag, or other unit) in the target population has the same probability of being selected to take part in the evaluation activity. In other words, every person in a population has exactly the same chance of being chosen as part of the sample as every other person in the population. This is a powerful way to ensure the sample is representative of the larger population because everyone has an equal chance of being selected. Probability samples are particularly good for collecting quantitative data.

Within the category of probability samples are three kinds of sampling techniques that are appropriate for MEAL activities.

5.2.1 Simple random sample

In this kind of sample, each person or unit of the population has an equal chance of being selected. Developing a random sample involves several steps:

Step 1: Determine the population from which you want to create the sample. For example, if you are doing an evaluation study of learning among current TVET trainees, the population is all current TVET trainees.

Step 2: Determine the sample size. If the sample is to be representative of the population, you need to determine the proper sample size. How many people will you include in the sample out of all the individuals in the population? This is a bit of a complex statistical issue, but this process has been made easy as there are now many online "sample size calculators" available. The next page contains a link to one such calculator.

Tips for using an online Sample Size Calculator

Online Calculator (click for calculator)

When using the online calculator, keep the settings at the following:

- Confidence level = 95%
- Margin of error = 5%
- Population proportion = 50%
- Population size = enter the size of your evaluation study population as you determined in step 1.

Click on "calculate" and the calculator provides you with an appropriate sample size.

Using the settings outlined in the box above is best as they will decrease the likelihood that the results of your data collection from the sample are due to chance. There may be cases, though, where a smaller sample size is needed due to resource constraints. You can decrease the sample size by either decreasing the confidence level percentage in the online sample size calculator or increasing the margin of error percentage. In both cases, though, the sample will be less accurate than a larger sample size. Decisions on sample size therefore need to take into account the desired level of accuracy balanced by the time, finance and human resource constraints that exist.

Step 3: Create the sample. Now that you know the sample size, the last step is to create the sample by randomly identifying the individuals (or other units) that will make up the simple random sample.

In order to do this, you need to assign a number to each member of the study population and then randomly draw numbers from a container to choose the sample. You will need to draw enough numbers to make up the sample size determined in Step 2.

For example, if you want to select a sample of 20 trainees from a class of 100 (the population), each trainee is assigned a number from 1 to 100 and you then draw 20 numbers from the container. The trainees whose numbers are drawn are your sample.

To make things easier, an online random number generator can be used instead of selecting numbers from a container. You can find an online Random Number Generator here.

A simple random sample is the most rigorous kind of sample with the greatest statistical power, giving you greater confidence that you can generalize your findings from your sample to the population..

5.2.2 Systematic random sample

This kind of probability sample involves selecting people from a list of the population, but on the basis of a fixed interval (e.g. select every ninth person on a list).

To use this kind of sample, you need to undertake similar steps as the simple random sample.

Step 1: Determine the population from which you want to create the sample.

Step 2: Determine the sample size. Use the online sample size calculator (see the box above).

Step 3: Create the sample. In this case, two things need to be done:

- First, identify a random place to start on the population list. You can do this by using the random number generator e.g. If the random number generator gives you the number 19, start with the 19th person on the list.
- Second, select every person based on a fixed interval you have chosen e.g. select every 9th person after your original randomly determined starting position.

A systematic random sample tends to be a more convenient way to sample than a simple random sample, although it reduces the pure randomness of the sample.

5.2.3. Stratified random sample

For this kind of probability sample, the population is sub-divided into groups with different attributes called "strata". Strata might be, for example, women and men. Or they might be TVET trainees, trainers, and administrators. It all depends on the nature of your MEAL activity. After strata are determined, independent random samples are drawn for each stratum.

This is a good random sampling strategy to use if the population has diverse attributes and you want to ensure that you collect data that represents these attributes, yet maintain random selection of people within each stratum.

The result will be data that ensure balance across the different strata and avoid a potential lack of balance that might occur with simple or systematic random samples. It ensures all population sub-groups (strata) are represented while maintaining some randomness.

Using this kind of sample involves the following steps.

Step 1: Determine the population from which you want to create the sample.

Step 2: Determine the strata. Identify the categories of people with similar attributes that are important for your evaluation activity.

Step 3: *Determine the sample size*. Use the online sample size calculator (see the box above).

Step 4: Proportionately allocate the number of people in each stratum. Identify the allocation of people to be selected for each stratum based on the proportions in the population. For example, if your chosen strata are male and female and the proportion of males and females in the population is 60:40, and your sample size is 100, allocate your sample as 60 males and 40 females.

Step 5: Randomly sample each stratum. Representatives for each stratum should be randomly selected. For the example above, this would involve randomly selecting 60 males and randomly selecting 40 females from the population using the simple random sample process.

5.3 Non-probability samples

A strength of probability sampling is that its random nature usually enables you to make generalisations from the sample to the population as a whole. In other words, our sample allows us to make claims for the whole population. Yet probability sampling may not always be possible or appropriate. For example, you may not be able to identify every person in a population, making it impossible for each person to have an equal chance of being randomly selected for a sample. In this case, non-probability sampling can be used. Non-probability samples do not use random selection like probability samples do. Rather, the sample is selected based on some kind of criteria chosen by the MEAL practitioner.

In addition to being useful when probability sampling is not possible, non-probability sampling is well suited for the collection of qualitative data. When collecting qualitative data, we are often exploring deeper issues of context, or answering the questions 'how', 'what', or 'why'. In these cases, generalising to the population is less of a concern as we are collecting qualitative data from people with specific insight or knowledge.

At the same time, because non-probability sampling is done based on selection criteria created by the MEAL practitioner, rather than randomly, it is open to bias. As such, it is important to take a systematic approach to selecting a non-probability sample.

Within the category of non-probability samples are four kinds of sampling techniques that are appropriate for MEAL activities.

5.3.1. Quota sample

This kind of non-probability sample is somewhat similar to a stratified random sample but does not include any random selection. A quota sample involves the MEAL practitioner systematically selecting people (or other units) to take part in the evaluation activity based on important groupings. This ensures specific groups are represented. The groupings and selection are done by the MEAL practitioner rather than through a process of randomization.

For example, participants might be selected by the MEAL practitioner so they represent:

- An equal number of participants from each TVET institute
- Specific proportions of women and men, people with disabilities, and people without disabilities
- Specific proportions of people from each of the 20 dzongkhags.

In order to reduce the potential for bias given that the MEAL practitioner selects the quota sample, it is a good idea to have other people familiar with the MEAL activity to review the nature of the quota sample.

5.3.2. Common sense sample

A common sense sample involves the MEAL practitioner simply selecting people (or other units) for the sample based on what seems to make sense given the characteristics of the population or the nature of

the project. This is similar to a quota sample but is less rigorous as it doesn't involve specific quotas of people.

A common sense sample is perhaps the easiest to design but it is open to significant bias. It is therefore again important for the MEAL practitioner to have others review the sample to assess it for bias.

5.3.3. Chain (or snowball) sample

A chain sample, also called a snowball sample, is used when it is difficult to identify people who should be a part of a sample. It involves existing MEAL participants providing the MEAL practitioner with names of potential other participants. For example, after interviewing a key informant, the MEAL practitioner asks the informant to identify other people who would be appropriate to interview. The sample is therefore like a chain or a rolling snowball that grows as new people are identified.

This is not a very rigorous kind of sample but is a good method if participants are difficult to identify or if you need to find hidden populations. For example, if you are doing an evaluation of social programs for youth who take illegal drugs, part of the evaluation might require interviewing such youth. Given the nature of the issue, however, they might be hard to find or identify. A chain sample would be useful in this case.

The limitation of a chain sample is that the MEAL practitioner loses control over the sampling process as others identify people in the sample. It also is open to introduces the biases of those who are identifying other sample participants.

5.3.4 Convenience sample

While a chain sample is used when sample participants are hard to identify, a convenience sample is used when there are barriers to the participation of some participants. A convenience sample selects participants based on their availability and willingness to participate in the data collection process. The process involves the MEAL practitioner identifying potential participants, contacting them to establish their availability and willingness, and then selecting those that are able and willing to participate.

A convenience sample again introduces bias into the sampling process as those not able or willing to participate may be a specific category of people from whom it is important to collect information. But it is a good sampling strategy to use if the reality is that some people are simply unable or unwilling to participate.

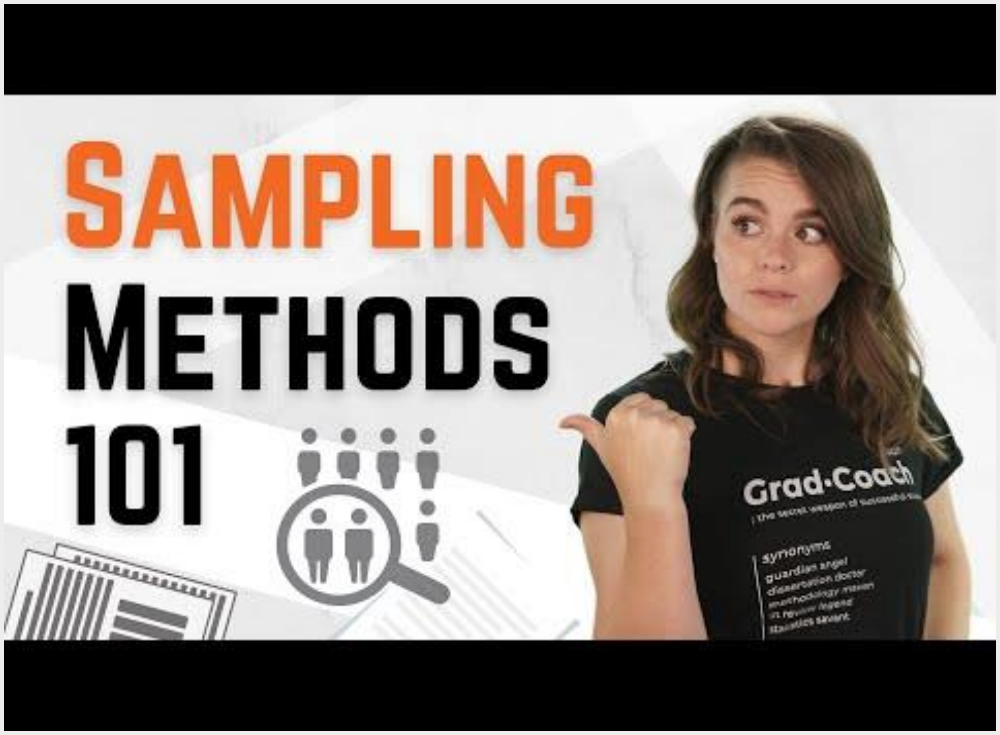
A final thing to note. Bhutan is a small country with a small population. This means that in some cases, the population of a study may be used instead of developing a sample; you can collect data from your entire MEAL population rather than having to sample the population. Deciding on whether to use the population or a sample will depend on your MEAL purpose and how you are collecting data.

For example, if you are doing an evaluation study on TVET teaching methods and decide to use an online survey of all current TVET trainers, you may be able to get responses from all current trainers (the population) rather than sampling a subset of them. In contrast, if you are doing focus group discussions with current trainers, you would need to develop a sample that represents the overall trainer population. The type of data collection tool therefore will often determine whether or not you need to sample. Data collection tools will be explored in subsequent chapters.

For more details on how to sample, including, including several sampling methods not covered in this manual, please see the video below.

Video

More tips for effective probability and non-probability sampling.



Click here to access the video: https://www.youtube.com/watch?v=fSmedyVv-Us

5.4 GNH Application

GNH Practices for Sampling	GNH Domain
1. When using samples other than simple random samples or systematic random samples, incorporate diverse stakeholders in the sample, including vulnerable women, people with disabilities, and elders in order to gain diverse views e.g. stratified sample, non-probability samples.	**Good governance**: Engage diverse MEAL stakeholders in MEAL design **Health:** disabilities **Cultural Diversity & Resilience:** elders

2. After designing a draft sample, particularly a non-probability sample, allow colleagues or other stakeholders to review the sample and provide input on potential bias.	**Good governance**: Engage diverse MEAL stakeholders in MEAL design

The practices outlined in the above table are highlighted in red in the overall GNH MEAL lens below.

This chapter has provided an introduction on how to undertake probability and non-probability samples. The next four chapters turn to exploring specific data collection tools for collecting data from your sample or population. Each chapter provides a step-by-step guide to creating and using these tools, including how to sample appropriately for each.

CHAPTER 6

KEY INFORMANT INTERVIEWS

6.1 Key characteristics of Key Informant Interviews

6.2 Advantages of Key Informant Interviews

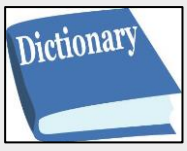
6.3 Limitations of Key Informant Interviews

6.4 Steps for carrying out Key Informant Interviews

6.5 GNH application

6. KEY INFORMANT INTERVIEWS

A key informant interview, or KII, is a method of collecting qualitative data. It is considered an "interview" as each KII involves a single MEAL participant, called an informant or respondent, in a directed discussion with the MEAL practitioner, often called the interviewer in the case of KIIs. The informant is not just anyone. They are a "key informant" because they have specific or expert knowledge of an issue that is of concern in your MEAL initiative. For example, if you are undertaking an evaluation of the administration of the TVET system, the Principals of TVET institutes would be key informants with expert knowledge of the issue. Overall, the intent of a key informant interview is the explore an issue in depth based on the key informant's expertise or knowledge. Given the need for informants with specific or expert knowledge, KIIs are usually undertaken with a small number of key informants, with each interview done with a single key informant. This chapter provides a step-by-step guide for designing and undertaking KIIs.



Key Definition

Key Informant Interview (KII):

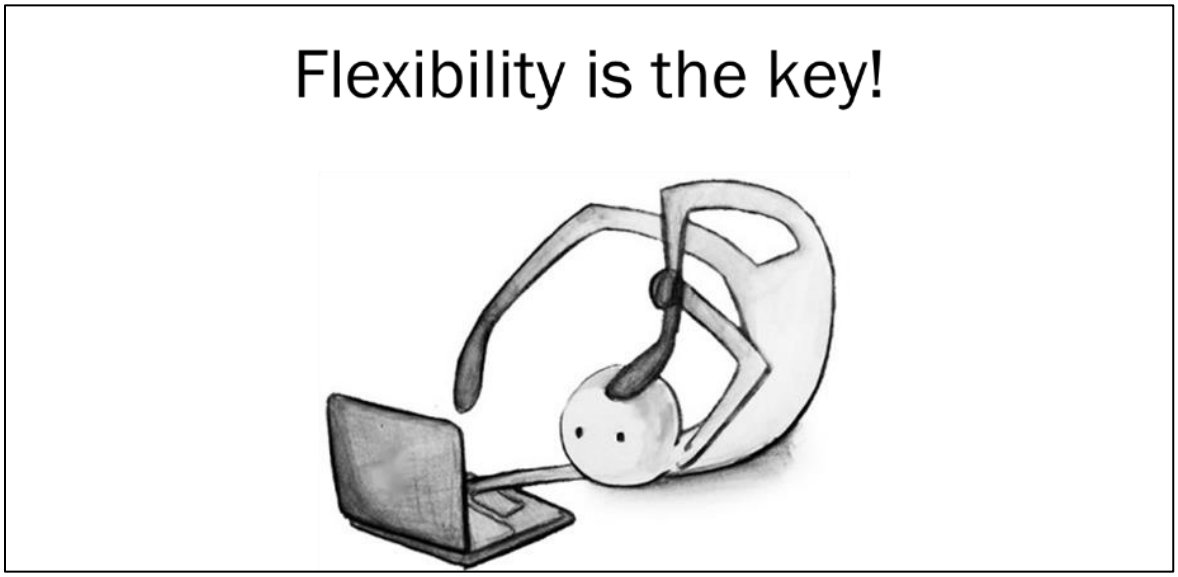
An in-depth individual interview with a small number of informants who have specific knowledge of the monitoring/evaluation topic.

6.1 Key characteristics of Key Informant Interviews

A key informant interview is meant to be a guided conversation rather than an inflexible survey. The interviewer (usually the MEAL practitioner) and the key informant engage in a free-flowing conversation that is guided by open-ended questions or topics developed by the interviewer prior to the KII. This allows the conversation to go in whatever direction makes sense, yet still remain on topic. This further allows for exploring issues in depth and allows unexpected information to arise that may be important to the evaluation topic. Flexibility is the key to KIIs!

Key characteristics:

- An interview involves a single key informant. You may hold multiple interviews with multiple key informants, but each interview involves only one key informant.
- The interview does not have a rigid structure. It should flow like a guided conversation. Open-ended questions are usually used.
- The interviewer is guided by a set of open-ended questions or topics developed beforehand called an "Interview Guide."
- The questions or topics in the Interview Guide may be covered in the same order or a different order for each key informant interview, depending on how each conversation unfolds.
- New questions or ideas not in the Interview Guide can arise and be explored as the interview unfolds. The key is to remain flexible.



Cartoon Source: http://msfielding.global2.vic.edu.au/files/2014/10/Flexibility-Cartoon-29ajsos.jpg

6.2 Advantages of Key Informant Interviews

Using a flexible approach to interviewing a single key informant at a time has many advantages.

- You are able to collect very detailed or complex data from people with knowledge of a specific issue.
- The flexible nature of the interview can uncover unexpected information.
- The free- flowing nature of the interview enables the exploration of attitudes, beliefs and motives.
- KIIs allow for follow-up questions and clarification of responses.
- The interview enables a deep exploration of the impact of the larger context.

KIIs therefore provide an excellent method for collecting data from people with specific kinds of knowledge that is important to your MEAL activity. The qualitative nature of the interview further allows for a deep exploration of the topic of the interview.

6.3 Limitations of Key Informant Interviews

Every data collection method has both advantages and limitations. This is one reason why it is good to use several kinds of data collection methods in an evaluation activity. Key informant interviews have the following limitations:

- Carrying out multiple key informant interviews can take a lot of time. They may also be expensive if travel is required to meet with multiple key informants. Carrying out a KII online can limit the costs.
- Successful KIIs require a skillful interviewer to ensure flexibility while staying within the focus of the topic.
- Multiple KIIs are usually needed in order to get data that allows you to reach meaningful conclusions.

6.4 Steps for carrying out Key Informant Interviews

There are five steps for carrying out effective KIIs. These include:

i) Develop an Interview Guide

ii) Pre-test and revise the Interview Guide

iii) Create a consent form

iv) Decide who to include (sample if needed)

v) Plan and carry out the KII

Let's look at each of these steps in turn.

6.4.1. Step 1: Develop an Interview Guide

The Interview Guide is the data collection tool that is used to frame the conversation in a key informant interview. Remember, the interview is intended to be a conversation but the Interview Guide provides questions to keep the conversation on track. Developing a good Interview Guide is therefore critical for carrying out successful KIIs.

Key Definition

Interview Guide:

"An interview guide is a list of topics, themes, or questions to be covered in an interview. This is normally created in advance of the interview by the evaluator [MEAL practitioner] and is constructed in such a way as to allow flexibility and fluidity in the topics and areas that are to be covered, the way they are to be approached with each respondent, and their sequence."

Source: Mason, J. (2004). "Semistructured interviews." in Lewis-Beck, M. et al. (eds.), *The SAGE Encyclopedia of Social Science Research Methods. Thousand Oaks, CA: Sage.*

A good Interview guide should be developed in three stages.

Stage 1: Determine the kinds of key informants you want to interview based on the MEAL plan.

Remember that the sources of data, or the kinds of key informants you need, will generally be covered in your project's MEAL design and plan, such as the Performance Measurement Framework (PMF) (see the example in Appendix 1). Make sure to refer to this MEAL plan to identify the kinds of key informants you need.

Do you need to interview government officials, community members, a certain category of people? Let the project you are evaluating and your MEAL plan guide this decision. To revisit our previous example, an evaluation of the administration of the TVET system would include Principals of the TVET institutes as key informants. You do not need to identify specific people at this point, just the kinds of key informants that are necessary for you to get the information you need.

At this stage it is also a good time to decide whether or not key informants should remain anonymous. Anonymity is important if the evaluation deals with sensitive information.

Stage 2: Design good interview questions.

Once you have determined the kind of key informants to involve, the next stage for developing the Interview Guide is to design the questions you will use in the KIIs. It is important to ensure you take enough time to design good questions. Your interview will only be as good as your questions.

As a first step in designing the questions for your Interview Guide, create a section at the top of the Interview Guide with the following:

- Areas to fill in the date of the KII and its the location, as well as the name, affiliation, gender and any other important personal information on the key informant.

- If the key informants are to remain anonymous, do not include a section for the name. Rather, include a coding system to identify each key informant. For example, if you are interviewing Principals of TVET institutes, the coding system could be P1 for the first Principal, P2, P3, etc.

The above ensures you have the information you need to keep track of your individual KIIs. Next, you need to develop the actual questions for the Interview Guide.

Remember that KIIs are used primarily to collect qualitative data, so open-ended questions are usually used. In some cases, a small number of closed-ended questions can also be used if they are relevant to your KII topic.

Key Definitions

Closed-ended question: ***lists pre-determined answer categories, and respondents simply identify one or more answer they consider the most appropriate. The number of answers for each answer category is then totalled up.***

e.g. Are you a graduate of a TVET course? Yes ____ No ____

Open-ended question: ***does not include pre-determined answer categories, enabling respondents to tell their experience in their own words.***

e.g. Describe the most important thing you learned in your TVET course: _____

The nature of your questions will be based on the topic of your MEAL activity, but here are some tips for writing good questions:

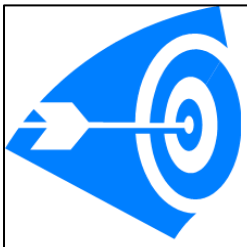
- Questions should be clear, concise, and as simple as possible.
- Avoid questions that address more than 1 issue at a time.
- Each question should be relevant to your monitoring/evaluation purpose.
- Open-ended questions should begin with ‘what’, ‘how’, ‘when’, ‘why’, ‘describe’, or ‘tell me about…’.

- Closed-ended questions, if used, should focus on 'yes' or 'no' answers and include a follow-up open-ended question requesting more details.
- Do not use 'leading' or 'loaded' questions that encourage a specific answer.

Below are some examples of poorly worded open-ended questions compared with suggestions for improved wording based on the tips above.

Comparison of poorly worded open-ended questions with improved wording

Poorly worded question	Problem with the question	Improved alternative
Why was your TVET experience an excellent experience for providing you with new knowledge and skills?	A leading question. It assumes the experience was "excellent".	How effective was your TVET experience in providing you with new knowledge and skills?
What was the main learning you gained from your TVET course and how have you applied it in your work?	Addresses two issues in a single question: learning and application. It should be divided into two separate questions.	What was the main learning you gained from your TVET course? How have you applied your TVET learning to your work?
How do you think Bhutanese society views TVET as an education opportunity compared to other kinds of education or other pathways to employment?	An unclear and confusing question. It needs to be clearer and more concise.	How do you think Bhutanese society views TVET education?



Best Practice

Develop no more than 7-10 questions for the KII Interview Guide.

A KII is meant to be an in-depth conversation, so do not overload the Interview Guide with too many questions.

Stage 3: Determine the sequence of the questions. Once you have designed the questions for the Interview Guide, you need to sequence them. In what order will you ask them? Here are three tips for sequencing the questions:

- Ensure there is logic to the sequence, recognizing that a key informant interview is a flexible conversation where the sequence of questions may change for each interview.
- Start with questions that are the least difficult or least sensitive to put the key informant at ease.
- Put difficult or sensitive questions in the middle of the question order when the key informant will be more comfortable.

At this point, a draft Interview Guide is now complete: the questions are designed and their sequence created. The next step is to pre-test the draft Interview Guide.

6.4.2. Step 2: Pre-test and revise the Interview Guide

Pre-testing means carrying out a few 'test' or 'mock' interviews with the draft Interview Guide prior to carrying out the actual KIIs. Testing is important because it allows you to assess whether you have good questions and whether their order makes sense. You can then make changes to the questions if needed before doing the 'real' KIIs.

Key things to remember when testing the Interview Guide:

- The 'test' interviews should involve people who are similar to your intended key informants. If this is not possible, a pre- test can occur with other volunteers.
- Try to carry out at least 2 or 3 pre-test interviews.
- Use the pre-test to test the effectiveness of your questions. Are they clear and concise? Do they provide you with all the information you seek?
- Based on your pre-test, make any necessary revisions to your Interview Guide (revise question wording, revise question order, etc.).

MEAL practitioners sometimes skip pre-testing the Interview Guide because of time constraints. This is not a good practice, though, as the pre-test is critical for ensuring you will collect good data.

For an example of a completed Interview Guide from the BEST project, please see Appendix 2.

6.4.3. Create a consent form

It is critically important to gain the consent of the people who will participate in your KIIs. A key informant's consent must be gained before the interview begins. Consent should be gained through a written consent form that explains the evaluation activity and requires the informant's signature.

For key informants who may not be literate, the consent form can be read to them and their informed consent received verbally. Verbal consent may also be used if the content of the interview is very sensitive and the key informant prefers not to sign their name to further protect their anonymity.

The wording of the consent form will be specific to the nature of your MEAL activity, but generally every consent form should include the following:

- A description of the reason and purpose of the key informant interview and how it will be undertaken.
- A statement on how the collected data from the interview will be used.
- If relevant, a statement confirming that the results of the interview will be kept confidential.
- A statement of who will have access to the interview data once it has been collected.
- A statement informing the informant that they do not have to answer any questions they prefer not to answer.
- A statement that the informant can end the interview at any time without consequence or questions.
- An area for the key informant to sign their name indicating consent to be interviewed.

As you can see, the consent form not only is a tool to gain consent, but a way to communicate to the key informant the rights that they have. It is very important that the informant understands that they have the right to not answer specific interview questions and the right to end the interview at any time. The interviewer must never pressure or force an informant to answer a question or continue the interview if the informant chooses to end it.

Please see Appendix 3 for a sample consent form from the BEST project.

6.4.4. Step 3: Decide who to include (sample if needed)

At this point in the process of designing and carrying out a KII, the type of people to be interviewed has been determined, an Interview Guide has been designed and pre-tested, and a consent form developed. The next step is to decide who in particular to include in the KIIs. Who will you interview and how many people will be interviewed? Should you develop a sample (see chapter 5)? Remember, a sample is a subset of a population that is used to represent that population in the data collection & analysis process. The population, in turn, is the overall collection of individuals who are the focus of a monitoring or evaluation activity.

It may be the case with KIIs that you do not need to create a sample. Key informants are people with specific or expert knowledge related to the issue that you are evaluating. This may mean that there are a limited number of key informants who can all be interviewed. For example, if you are evaluating the administration of public TVET institutes, key informants would include the 10 Principals of the 10 public TVET institutes. If you can interview all 10 Principals, you do not need to sample.

If, however, the number of potential key informants is large and you cannot interview all of them, a sample is needed. For example, if an evaluation is focused on the quality of learning among TVET graduates, the TVET graduates themselves are key informants. You likely do not have the time and resources to interview all of them, so you need to sample.

Qualitative data collection methods like KIIs usually make use on non-probability samples where participants are chosen by the MEAL practitioner based on specific selection criteria. Chapter 5 outlined four kinds of non-probability samples that can be used:

Quota sample: Quotas of people are systematically selected to take part in the evaluation based on important groupings e.g. 50% females and 50% males.

Common sense sample: people are selected to take part in the evaluation based on what seems to make sense to the MEAL practitioner given the characteristics of the population or the nature of the project.

Chain (or snowball) sample: existing KII participants provide the MEAL practitioner with names of other potential participants. This sampling technique is best when it is difficult for the MEAL practitioner to identify potential key informants on their own.

Convenience sample: participants are selected based on their availability and willingness to participate.

After selecting one of these sampling techniques, the key question is how many key informants should be in the sample. How many should you interview? Here are a few tips to guide your selection of the number of key informants for your sample:

- It is generally good practice to include 15-30 key informants in your sample when you have many to choose from. Ensure there are enough key informants to get a range of views.
- Select a number for which you have enough time & money to collect data.
- Be sensitive to 'data saturation': data collection can end once no new information is received from key informants. In other words, once you begin to consistently hear the same information from different key information, no new interviews are needed.

6.4.5. Step 4: Plan and carry out the KIIs

At this point, you have an Interview Guide, a consent form, and, if needed, a sample to guide who and how many key informants you will interview. It is now time to plan and actually carry out the KIIs. This step is just as important as the previous ones to ensure the KIIs are undertaken effectively.

Planning the KIIs involves the following:

- Contact each key informant in advance and request the interview. Set up a time and place that is comfortable and quiet.
- Decide how you will record the interviews. Will you take notes or use a recording device? If the latter, practice using the recording device before the interview.
- Practice asking your questions before the interview.
- Organize all relevant material to bring to the interview: consent form, interview guide, notebook, pens, recording device.

Best Practice

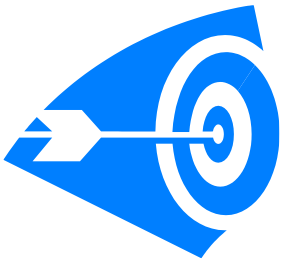
If using a recording device, ensure to bring extra batteries to the interview!

Once you have completed planning all of the KIIs, it's time to actually carry them out. There are several steps to follow to begin the interview:

- Arrive on time for the interview. Ensure you can carry out the interview in a private place to help protect confidentiality.
- Start the interview by introducing yourself and the purpose of the interview.
- Obtain consent to be interviewed, either written or oral, from the key informant. Confirm with the key informant if the interview is confidential and anonymous.
- If using a recording device, ask permission to use it. Inform the key informant that the recording will not be shared.
- Start the interview by putting the key informant at ease. Emphasize that they have important information to share and you are there to listen to them.

Now that you have set the stage for the interview, carry it out based on the Interview Guide. Take notes if not using a recording device. A note-taker can be used in addition to the interviewer, if available.

Ideally, the interview should last between 30-60 minutes, depending on the topic. Try not to go over 60 minutes as a long interview will tire out the key informant, leading to less useful information.



Best Practice

Taking interview notes:

i) Take your notes in shorthand. Don't try to write everything down. Focus on writing down key themes, ideas and phrases.
ii) Include notes on things like body language where relevant.
iii) If you add your own thoughts into the notes, put them in brackets.
iv) Ideally, the final detailed notes should be turned into an electronic file.

Once you have completed an interview with a key informant, your data collection work is not quite done. Good practice after an interview involves undertaking the following tasks.

- Write down your impressions immediately after the interview. These impressions may help with carrying out future interviews.
- If you took written notes during the interview, expand on them into detailed notes based on your memory of the interview.
- If you used a recording device, transcribe the recording onto a computer or as written notes.
- Store written notes, computer files and, if applicable, your recording device, in a safe and secure place until you are ready to analyze them.

Carry out the above process for each of your Key Informant Interviews.

6.5 GNH application

GNH Practices for Key Informant Interviews	GNH Domain
1. Get stakeholder input on your draft Interview Guide by carrying out a pre-test of the KII questions.	**Good governance:** stakeholder input on Meal Design to avoid bias
2. Regardless of the focus of the MEAL activity, design KII questions focused on issues related to vulnerable groups, including people with disabilities and marginalized women, as well as elders where relevant.	**Health:** disability **Cultural diversity & resilience:** elders
3. Develop a sample that includes diverse key informants, including females and people with disabilities, to ensure active participation of diverse groups.	**Health:** diverse MEAL stakeholders
4. Schedule KIIs so they are not disruptive to key informants' livelihoods and personal, familial, or community schedules. Make sure the timing works well for each key informant.	**Time use** **Living standards**

5. Always get the consent of a key informant prior to starting a KII.	**Good governance**
6. Provide a consent form in the local language.	**Cultural diversity & resilience**
7. Allow key informants to provide verbal consent instead of written consent if that is their preference.	**Psychological wellbeing**
8. If appropriate, carry out the interview in the local language.	**Cultural diversity & resilience**
9. Follow *Driglam Namzha* when engaging with MEAL participants	**Cultural diversity & resilience**
10. Where possible, record interviews and transcribe them into a computer file rather than taking notes on paper.	**Ecological diversity & resilience**
11. Store interview notes securely, preferably on a password protected computer, in order to safeguard confidentiality.	**Good governance**

The practices outlined in the table above are highlighted in red in the overall GNH MEAL lens below.

CHAPTER 7

FOCUS GROUP DISCUSSIONS

7. FOCUS GROUP DISCUSSIONS

A Focus Group Discussion (FGD), like a Key Informant Interview, is another way to collect qualitative data. Rather than engaging in an interview with a single person, however, a FGD involves a MEAL Practitioner interviewing a group of people at the same time. By focusing on a group of people, A FGD allows these participants, often called respondents, to interact with one another when responding to a question. This provides them with an opportunity to build on one another's answers, discuss different or similar points of view or experiences, and stimulate forgotten memories. Like a KII, a FGD is meant to explore issues more deeply, but to do so in a way that lets people interact with one another. Many of the steps in designing a FGD are similar to designing a KII, but there are differences as well. This chapter provides step-by-step directions for designing, planning and carrying out an FGD.

Key Definition

Focus group:

A method for collecting qualitative data through a group interview on a topic chosen by the evaluator. A focus group typically consists of a tape-recorded discussion among six to twelve participants who are interviewed by an evaluator.

Source: Morgan, D. (2006). "Focus groups." In Jupp, V. (ed.), *The SAGE Dictionary of Social Research Methods*. Thousand Oaks, CA: Sage.

7.1 Key characteristics of Focus Group Discussions

A Focus Group Discussion is a tool for collecting qualitative data. Like key informant interviews, an FGD is a guided conversation but instead of interviewing one person at a time, it involves interviewing a group of people at the same time. An Interview Guide is again used to guide the interviewer through the process. The intent is again to allow for a free-flowing conversation that is guided and kept on track by the questions in the Interview Guide. Like KIIs, flexibility is the key. The main difference between a KII and a FGD is that a FGD provides an opportunity for the participants to interact with one another when answering questions.

Key characteristics:

- Usually around 6 – 12 people are interviewed as a group
- The FGD is characterized by a conversational style involving group interaction. The conversation is confidential.
- The interviewer uses an *Interview Guide* with open-ended questions and promotes interaction among FGD participants. The Interview Guide is created before the FGD occurs.
- New questions or ideas not in the Interview Guide can arise and be explored as the focus group discussion unfolds.
- The group discussion format promotes valid data by engaging different views and stimulating participants' memories.
- Focus group discussions can be recorded or a note-taker can take detailed notes. Ideally, the interviewer should not take detailed notes as they need to focus on facilitating the conversation.

7.2 Advantages of Focus Group Discussions

Using a Focus Group Discussion has many advantages as a means of collecting qualitative data.

- FGDs allow participants to react to one another and build on one another's answers.
- They provide data quickly and at a relatively low cost given the use of a group of participants.
- They enable the collection of large amounts of data given the use of open-ended questions.
- FGDs provide opportunities for clarification of responses or follow-up questions.
- The FGD interviewer can observe non-verbal behavior in group interactions.

Focus Group Discussion are unique in their ability to collect data based on people's interactions. As outlined above, this has some distinct advantages. There are, however, some limitations of FGDs as well.

7.3 Limitations of Focus Group Discussions

Like all other data collection methods, FGDs have limitations. These include:

- Focus groups can be dominated by a single individual or several individuals in the group.
- They require a skillful interviewer who can ensure the group stays on topic.
- The interviewer can bias the results by trying to promote group consensus on specific questions.

- The relatively small number of FGD participants can make it difficult to draw broader generalizations to the population.
- Focus Group Discussions are inappropriate for exploring sensitive information that may embarrass participants in a group discussion.

Given the nature of the advantages and limitations of FGDs, it is best to use them for collecting data in the following circumstances:

- When you need to obtain information about the nature of interactions among people, social norms, or group opinions or experiences.
- When you have limited time and resources to interview people.
- To obtain detailed information on issues that emerged through other techniques, such as key informant interviews.
- Useful on their own if the overall population of people you are studying is small.

7.4 Steps for carrying out Focus Group Discussions

There are five steps for carrying out successful FGDs. These steps are the similar to the steps used in carrying out KIIs, with some differences in step iv: how to carry out the FGD.

i) Develop an Interview Guide

ii) Pre-test and revise the Interview Guide

iii) Develop a consent form

iv) Decide who to include (sample if needed)

v) Plan and carry out the FGD.

7.4.1. Step 1: Develop an Interview Guide

Remember, an Interview Guide is a list of primarily open-ended questions to be covered in an FGD. It is created in advance of the FGD and is constructed in such a way as to allow flexibility. Creating an Interview Guide for an FGD follows the same process as creating one for a KII. It involves three stages.

Stage 1: De*termine the kinds of participants you want to involve in an FGD based on your monitoring or evaluation purpose.*

Do you need to interview government officials, community members, a certain category of people? A combination of several categories of participants? Let your monitoring or evaluation purpose and plan guide this decision. You do not need to identify specific people at this point, just the kinds of participants that are necessary for you to get the information you need.

Once you have decided on the kinds of participants you need, you will need to decide on how many FGDs you will need to hold. It may be the case that one FGD is enough. There may be other cases, however, where more than one is needed. For instance, your evaluation focus may involve sensitive issues where bringing people together may make certain FGD participants uncomfortable

about speaking up. For example, an evaluation of the teaching methods used in the TVET system would benefit from a FGD involving both trainers and trainees. Using the FGD method would allow information to be collected from both perspectives. Yet trainees may be uncomfortable speaking up or criticizing trainers if they are in the same FGD. In such a case, you would lose valuable information. It would therefore better to set up two FGDs, one with trainers and one with trainees.

The box below provides an example of the different FGDs used as part of the collection of baseline data for the BEST project. BEST focuses on the overall reform of the TVET system including administration, teaching, curriculum, and industry linkages. In addition, a special focus of BEST is attracting more females and people with disabilities into TVET. The type of people in the FGDs and how they were organised reflected this project focus.

Focus Group Discussions in the BEST project

1. FGD #1: Government officials and TVET administrators
2. FGD #2: TVET trainers
3. FGD #3: Mixed group of female and male TVET graduates
4. FGD #4: Mixed group of female and male TVET trainees
5. FGD #5: Female TVET trainees only
6. FGD #6: Vulnerable females in the community
7. FGD #7: People with disabilities in the community
8. FGD #7: Industry partners of TVET institutes

Stage 2: Design good interview questions.

The design of good interview questions for FGD is largely the same as for KIIs. Again, ensure to take enough time to design good questions. Your interview will only be as good as your questions.

As is the case with the Interview Guide for KIIs, start the design of your Interview Guide by creating a section at the top with the following:

- A section to fill in the date of the FGD
- A section to list the type of FGD participants e.g. government officials and TVET administrators
- A section to list the location of the FGD

Note that it is usually not necessary of desirable to include the names of the participants in the FGD. They should remain anonymous.

You now need to develop your FGD questions. Note that these may differ for different FGDs based on who the participants are. Remember that FGDs, like KIIs, are used primarily to collect qualitative

data so open-ended questions are usually used. In some cases, a small number of closed-ended questions can also be used if they are relevant to your FGD topic.

Here, again, are the tips for writing good questions. They are the same as was the case with KIIs.

- Questions should be clear, concise and as simple as possible.
- Avoid questions that address more than 1 issue at a time.
- Each question should be relevant to your monitoring/evaluation purpose.
- Open-ended questions should begin with 'what', 'how', 'when', 'why', 'describe', or 'tell me about…'.
- Closed-ended questions, if used, should focus on 'yes' or 'no' answers and include a follow-up open-ended question requesting more details.
- Do not use 'loaded questions' that encourage a specific answer.

Please see page 51 in chapter 6 for some examples of good and poor question construction.

Stage 3: Determine the sequence of the questions.

Once you have designed the questions for the Interview Guide, you need to sequence them. In what order will you ask them? Here are three tips for sequencing the questions:

- Ensure there is logic to the sequence, recognizing that a focus group discussion is meant to be a free-flowing conversation where the sequence of questions may change for each FGD.
- Start with questions that are the least difficult or least sensitive to put the FGD respondents at ease.
- Put difficult or sensitive questions in the middle of the question order when the respondents are more comfortable.

At this point, a draft Interview Guide is now complete: the questions are designed and their sequence created. The next step is to pre-test the draft Interview Guide.

7.4.2. Step 2: Pre-test and revise the Interview Guide

The FGD Interview Guide should be pre-tested to ensure the questions are clear. Similar to the KII Interview Guide, the pre-test of an FGD Interview Guide should involve a "test" of "mock" FGD prior to carrying out the real thing. .

Remember the key things for testing the Interview Guide:

- The 'test' FGD should involve people who are similar to your intended FGD participants.
- Try to carry out at least 1 test FGD.
- Use the pre-test to test the effectiveness of your FGD questions. Are they clear and concise? Do they provide you with all the information you seek?

- Based on your pre-test, make any necessary revisions to your Interview Guide (revise question wording, revise question order, etc.).

7.4.3. Develop a consent form

Carrying out a FGD always requires gaining the consent of FGD participants, just as was the case when carrying out a KII. As is the case with KIIs, it is best to get a signed consent form, but verbal consent can be used if participants are not literate or prefer to promote greater anonymity.

The nature of the consent form for a FGD is the same as the consent form for KIIs discussed on pages 52-53 of chapter 6 above. The consent form should include:

- A description of the reason and purpose of the key informant interview and how it will be undertaken.
- A statement on how the collected data from the FGD will be used.
- If relevant, a statement confirming that the results of the FGD will be kept confidential.
- A statement of who will have access to the FGD data once it has been collected.
- A statement informing the participants that they do not have to answer any questions they prefer not to answer.
- A statement that a participant can end their participation in the FGD at any time without consequence or questions.
- An area for the FGD participants to sign their name indicating their consent to participate.

Please see Appendix 3 for a sample consent form from the BEST project's baseline study.

7.4.4. Step 3: Decide who to include (sample if needed)

Now that you have the type of people to be involved in the FGDs determined, an Interview Guide is designed and pre-tested, and a consent form developed, the next step is to decide who the actual FGD participants will be. A single FGD usually involves between 6-12 participants. You may have also decided to hold multiple FGDs, each with 6-12 participants. Identifying specifically who will be involved in the FGDs will require sampling. It may even require developing different kinds of samples for each FGD if you are holding more than one.

The kind of sample(s) you choose will largely be determined by the kind of FGD participants you have. There may be cases where a random sample can be used. For example, if you want to hold a FGD with current TVET trainees, you could choose 6-12 trainees with a probability sample like a simple random sample. This assumes, however, that you have a list of all current trainees and that all of them are available to take part in an FGD. This is often not the case. Most often, then, a non-probability sample will be used for Focus Group Discussions to select the 6-12 people in each FGD.

Here, again, are four types of non-probability samples outlined in Chapter 5 that can be used when sampling for a FGD or several FGDs.

Quota sample: Quotas of people are systematically selected to take part in the evaluation based on important groupings e.g. 50% females and 50% males.

Common sense sample: people are selected to take part in the evaluation based on what seems to make sense to the MEAL practitioner given the characteristics of the population or the nature of the project.

Chain (or snowball) sample: existing KII participants provide the MEAL practitioner with names of other potential participants. This sampling technique is best when it is difficult for the MEAL practitioner to identify potential key informants on their own.

Convenience sample: participants are selected based on their availability and willingness to participate.

The box below provides details of the kinds of samples used for the FGDs undertaken by the BEST project for its baseline study.

Samples used for Focus Group Discussions in the BEST project

1. FGD #1: Government officials and TVET administrators – a ***convenience sample*** was used as not all relevant officials and administrators were available to take part in the FGD.

2. FGD #2: TVET trainers - a ***quota sample*** was used to ensure representation of participants from different TVET institutes.

3. FGD #3: Mixed group of female and male TVET graduates – a ***quota sample*** was used to ensure representation of graduates from different TVET institutes.

4. FGD #4: Mixed group of female and male TVET trainees - a ***quota sample*** was used involving 2 participants from each TVET institute, with one participant from each institute being female and the other male.

5. FGD #5: Female TVET trainees only - a ***quota sample*** was used to ensure representation of female trainees from different TVET institutes.

6. FGD #6: Vulnerable females in the community - a ***convenience sample*** was used involving women who were available to participate in the FGD.

7. FGD #7: People with disabilities in the community - a ***convenience sample*** was used involving people with disabilities who were available to participate in the FGD.

8. FGD #7: Industry partners of TVET institutes - a ***convenience sample*** was used involving industry partners who were available to participate in the FGD.

Make sure to think deeply about the kind of information you need from the FGD and which sampling method will be best in generating this information.

7.4.5. Step 4: Plan and carry out the FGD

Now that you have created and pre-tested the Interview Guide and consent form, and identified who the participants are for the FGD, the next step is to plan the logistics.

- Identify a time and location for the FGD. It should be easily accessible, comfortable, private and promote conversation.
- Contact each focus group participant in advance and request the interview. Inform them of the time and location.
- Decide how you will record the focus group. Recruit a note-taker if not using a recording device.
- Identify who is the most appropriate person(s) to facilitate the FGD. Will sensitive issues be discussed?
- Practice asking your questions before the FGD.
- Organize all relevant material to bring to the FGD: consent form, interview guide, notebook, pens, recording device.

Best Practice

Put considerable thought into the location of the focus group discussion. You will get much better data from a focus group where participants are comfortable and feel free to talk openly.

Now that the logistics of the FGD have been set up, it is time to carry it out. There are several steps to follow to carry out the FGD:

- Arrive early and set up the room for the focus group discussion.
- Greet each participant as they arrive. If possible, provide refreshments. Introduce participants to one another and seat them.

Best Practice

Ideally, arrange the room with chairs in a circle so all focus group participants can see one another. Putting participants in several lines of seated rows in front of the interviewer is less effective.

- Welcome the participants and introduce the topic. Reassure respondents that their input is valuable.
- Explain that the focus group discussion is confidential. The identity of individual participants will not be shared outside the focus group.
- Provide consent forms to the participants to read and sign. Secure verbal consent from those who are not literate or for whom that is the preferred method.
- If using a recording device, ask permission to use it and ensure participants that the recordings will remain confidential.
- Outline the ground rules for the focus group: speak one at a time, respect one another, recognize that everyone's experience is important.
- Facilitate a discussion based on the Interview Guide.
- If you are not recording the discussion, a note-taker should take detailed notes. The interviewer should not take notes if possible. If this is not possible, the interviewer should take only brief notes.
- The FGD should last about 1 hour. Thank the participants when done.

Facilitating a FGD takes some skill. As the interviewer, the MEAL practitioner needs to ensure everyone in the FGD has a chance to talk and that no one is silent or dominating. The box on the next page provides some tips for effectively facilitating Focus Group Discussions.

Tips for facilitating an effective FGD

- Always remain neutral as the interviewer. Never correct participants or give evaluative comments e.g. “that’s not a good answer.”
- Periodically summarize what you have heard from participants and ask them to confirm if your understanding is accurate.
- Call on people individually to share their views. This will help avoid any single participant dominating the conversation.
- If the conversation gets tense, remind participants of the need to maintain respect.
- Remain sensitive to group dynamics. Here are suggestions for dealing with challenging group dynamics:

Type of participant	Interviewer response
The participant who dominates or interrupts.	“Thank you. Let’s hear some comments from others.”
The shy participant.	Make direct eye contact; call on them directly but with kindness.
The participants who speaks for long periods of time.	Cut in at the end of a point and ask what other participants think; remove eye contact; look at your watch as a last resort.
The participants who engage in unrelated side conversations with each other.	Make direct eye contact; ask one of them a question directly.

Right after the FGD is completed and participants have left, it is good practice for the interviewer and note-taker to meet for 15-30 minutes to debrief. This debrief should focus on whether the focus group answers are understood consistently by the interviewer and the note-taker; identification of any information gaps in the answers, and a discussion of the impact of group dynamics on the answers.

After the FGD and its debriefing are over, a final set of notes should be written that take into account any issues raised in the debriefing. If the FGD was recorded, the recording should be transcribed.

Lastly, written notes, computer files and, if applicable, your recording device, should be stored in a safe and secure place until you are ready to analyze them.

Video

Check out these examples of a good and a bad focus group discussion.

Click here to access the video: https://www.youtube.com/watch?v=Auf9pkuCc8k

7.5 GNH application

GNH Practices for Focus Group Discussions	GNH Domain
1. Get stakeholder input on your draft Interview Guide by carrying out a pre-test of the FGD questions.	**Good governance:** stakeholder input on MEAL design to avoid bias
2. Regardless of the focus of the MEAL activity, design FGD questions focused on issues related to vulnerable groups, including people with disabilities and vulnerable women, as well as elders where relevant.	**Health:** Disability **Cultural diversity & resilience:** Elders

3. Develop a sample that includes diverse FGD participants, ideally including females and people with disabilities, to ensure active participation of diverse groups.	**Health:** diverse MEAL stakeholders, including women and people with disabilities
4. Schedule FGDs so they are not disruptive to participants' livelihoods or personal, familial, or community schedules. Make sure the timing works well for each FGD participant.	**Time use** **Living standards**
5. Always get the consent of all participants prior to starting an FGD.	**Good governance**
6. Provide a consent form in the local language	**Cultural diversity & resilience**
7. Allow FGD participants to provide verbal consent instead of written consent if that is their preference.	**Psychological wellbeing**
8. If appropriate, carry out the FGD in the local language	**Cultural diversity & resilience**
9. Follow *Driglam Namzha* when engaging with MEAL participants	**Cultural diversity & resilience**
9. Where possible, record FGDs and transcribe them into a computer file rather than taking notes on paper.	**Ecological diversity & resilience**
10. Store FGD notes securely, preferably on a password protected computer, in order to safeguard confidentiality.	**Good governance**

The practices outlined in the table above can be found highlighted in red in the overall GNH MEAL lens on the next page.


Psychological Wellbeing
• Allow M&E participants to withdraw with no questions asked
• Allow verbal consent from participants for whom written consent may be a challenge
Health
• Engage diverse M&E stakeholders, including people with disabilities & women
• Design data collection questions focused on people with disabilities
Time Use
• Schedule the timing of data collection that is not disruptive to M&E participants' livelihoods or other priorities, esp. women
Education
• Disseminate learning to all M&E participants and the broader community, incl. elders
• Include learning that responds to the needs of vulnerable groups
Cultural Diversity & Resilience
• Use local language for consent form, data collection, analysis, & sharing
• Follow Driglam Namzha
• Collect data from elders
Good Governance
• Seek stakeholder input in design & analysis, incl. elders, women & PWD
• Always gain the consent of M&E participants
• Store data securely to protect confidentiality
Community Vitality
• Disseminate relevant learning to the broader community when possible, incl. elders.
Ecological Diversity & Resilience
• Use online data collection, analysis, & dissemination methods
Living Standards
• Schedule the timing of data collection that is not disruptive to M&E participants' livelihoods, esp. women
PROFESSIONALISM
EMPOWERMENT
RESPECT
INCLUSION
ACCESSIBILITY
PROFESSIONALISM
PROFESSIONALISM
PROFESSIONALISM

CHAPTER 8

OTHER QUALITATIVE METHODS:
A BRIEF OVERVIEW

8.1 Document review

8.2 Observation

8.3 Participatory Rapid Appraisal (PRA)

8.4 GNH application

8. Other Qualitative Methods: A Brief Overview

In this manual, which is based on the BEST MEAL training workshop, we have reviewed key informant interview (KIIs) and focus group discussions (FGDs) as two kinds of qualitative methods. While these are two of the most common qualitative methods, they are not the only ones. This chapter provides a brief overview of three other qualitative methods – document review, observation, and participatory rapid appraisal – that can be used in the MEAL process. For each of these three techniques, a brief overview is presented and then links are provided to documents and videos that provide greater details on carrying them out.

8.1 Document Analysis

Document analysis, sometimes called documentary analysis, is a qualitative research method that involves the analysis of written documents, including things like government documents. Document analysis uses a systematic process to identify themes within a document that are relevant to you evaluation objective. For example, document analysis can be used to analyse government documents to understand government priorities and achievements.

Below are several links that provide more details on carrying out document analysis:

Further Reading

Documentary-analysis-Jan-2018-15utwcq.pdf (cpb-eu-w2.wpmucdn.com)

Conducting a Qualitative Document Analysis (nova.edu)

Video

The following video provides a good overview of carrying out document analysis.

Click here to access the video: How to Do Document Analysis (Qualitative Research) (youtube.com)

8.2 Observation

Observation is a qualitative method that is used when you want to study the behaviour of people. It involves observing people in a situation relevant to your evaluation's purpose and recording your observations on their behaviour. As such, it is a data collection method that focuses on what MEAL participants do or how they behave in a specific setting rather than focusing on what participants say, as is the case with KIIs and FGDs. if you are evaluating a small training session, you could use FGDs or a survey (chapter 8) to collect data on the kinds of learnings participants achieved based on their reporting on their own experience. You could, however, also choose to use observation as a data collection method to observe what people are learning during the workshop and how they are learning it.

Observation can be either *non-participant observation* or *participant observation*. Non-participant observation involves the MEAL practitioner being on the sidelines, observing the activities and behaviours of the MEAL participants in whatever activity is being evaluated (e.g. a training session). Participant observation involves the MEAL practitioner actively integrating themselves within the activity being undertaken by the MEAL participants. Evaluations often make use of non-participant observation on site visits.

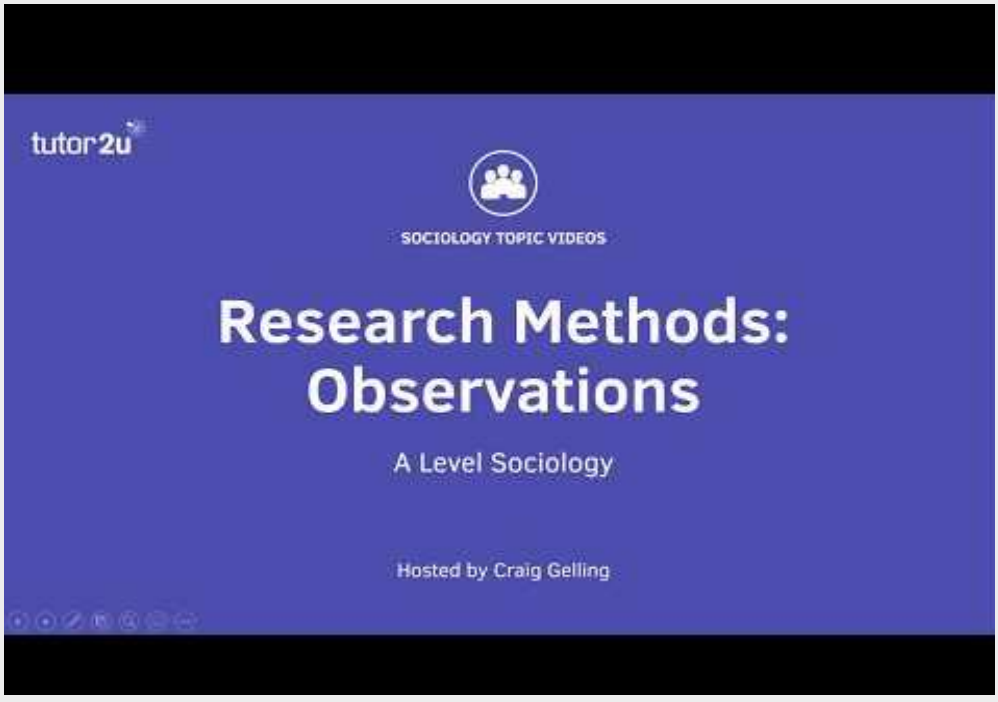
Here are several links that provide more details on how to undertake observation.

Further Reading

[What is an Observational Research: Steps, Types, Pros and Cons (sociologygroup.com)]

Video

The following provides an overview of what observation is, its usefulness, practical issues, and ethical considerations when using it as a method.



Click here to access the video: [Research Methods: Observations (Sociology Theory & Methods) (youtube.com)]

8.3 Participatory Rapid Appraisal (PRA)

Participatory rapid appraisal, sometimes called participatory rural appraisal and part of a larger family of participatory evaluation approaches, is a set of interactive data collection tools that directly engage community participants in the data collection process through participatory activities. Instead of being interviewed (KIIs and FGDs) or being observed (see above), MEAL participants actively take part in activities that include such things as social mapping, drawing, community meetings, ranking and scoring, timelines, storytelling, transect walks, and seasonal calendars. The participatory nature of these tools promotes inclusion and collaboration.

Facilitating PRA activities can be challenging and requires practice. The links below provide more details on how to facilitate PRA activities and provide instructions on how to carry out specific PRA techniques.

Further Reading

VSO_Facilitator_Guide_to_Participatory_Approaches_Principles.pdf (participatorymethods.org)

Participatory_Approaches_ENG.pdf (betterevaluation.org)

Video

This video provides a menu of PRA tool.

Click here to access the video: Participatory Rural Appraisal: Tools for Rapid Community Engagement in program Design and Evaluation (youtube.com)

8.4 GNH application

GNH Practices for Document Analysis, Observation & PRA	GNH Domain
1. Use local language whenever possible when using PRA methods.	**Cultural diversity & resilience**
2. Follow *Driglam Namzha* when engaging with MEAL participants during observation or PRA methods	**Cultural diversity & resilience**
3. Allow participants involved in observation or PRA methods to withdraw from participation with no questions asked.	**Psychological wellbeing** **Health:** mental health
4. Include a focus on the experience of marginalized groups like vulnerable women and people with disabilities when using document analysis, observation, or PRA methods.	**Health:** disability
5. Schedule the timing of data collection using observation or PRA so it is not disruptive to participants' livelihoods or other priorities, especially in the case of women.	**Time use** **Living standards**
6. Where relevant, collect data from elders to incorporate their knowledge	**Cultural diversity & resilience:** elders
7. Store written data such as results from observation or PRA methods in a secure manner that safeguards confidentiality.	**Good governance**

The practices outlined in the table above can be found highlighted in red in the overall GNH MEAL lens on the next page.


Psychological Wellbeing
Allow M&E participants to withdraw with no questions asked
Allow verbal consent from participants for whom written consent may be a challenge
Health
Engage diverse M&E stakeholders, including people with disabilities & women
Design data collection questions focused on people with disabilities
Time Use
Schedule the timing of data collection that is not disruptive to M&E participants' livelihoods or other priorities, esp. women
Education
Disseminate learning to all M&E participants and the broader community, incl. elders
Include learning that responds to the needs of vulnerable groups
Cultural Diversity & Resilience
Use local language for consent form, data collection, analysis, & sharing
Follow Driglam Namzha
Collect data from elders
Good Governance
Seek stakeholder input in design & analysis, incl. elders, women & PWD
Always gain the consent of M&E participants
Store data securely to protect confidentiality
Community Vitality
Disseminate relevant learning to the broader community when possible, incl. elders.
Ecological Diversity & Resilience
Use online data collection, analysis, & dissemination methods
Living Standards
Schedule the timing of data collection that is not disruptive to M&E participants' livelihoods, esp. women
PROFESSIONALISM
EMPOWERMENT
RESPECT
INCLUSION
ACCESSIBILITY
PROFESSIONALISM
PROFESSIONALISM
PROFESSIONALISM

CHAPTER 9

SURVEYS

9.1 Key characteristics of surveys

9.2 Advantages of surveys

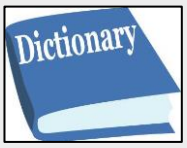
9.3 Limitations of surveys

9.4 Steps for carrying out surveys

9.5 GNH application

9. SURVEYS

Surveys are one of the most widely used methods of data collection. In popular belief, surveys are often equated with ”good” evaluation practice. While this is not the case as other tools like KIIs and FGDs are also effective qualitative methods, surveys are a very effective tool for collecting standardised data that is often quantitative in nature. In other words, collecting data that answers the question “how much?” or “how many?”. This chapter provides a step-by-step guide for carrying out a simple survey.



Key Definition

Survey:

The collection of standardized data from individuals using a structured questionnaire or interview. Surveys can be done online, on paper, in-person, by mail or phone.

9.1 Key characteristics of Surveys

Surveys make use of a questionnaire that is primarily made up of quantitative, closed-ended questions. In some instances, qualitative, open-ended questions are also included. Unlike KIIs and FGDs that use an Interview Guide that is meant to be flexible, surveys use a standardized set of questions that are asked with exactly the same wording and the same order for each survey

respondent. There is no deviation from the question wording or order. This is to ensure that the quantitative data is collected consistently so we can quantify the results. A survey is therefore a very different data collection tool than a KII or FGD, whose focus is on deeper exploration of an issue rather than on "how much". Given this difference, it is good MEAL practice to use both surveys and KIIs/FGDs if you have the resources to do so. This will provide you with more useful data as the data will cover both "how much" as well as "why" and "how". Using both quantitative and qualitative tools will also help lessen any bias associated with using just one data collection method

Key characteristics of surveys include the following:

- Surveys use a questionnaire of standardized questions.
- Questions are asked using the same wording and same order for every respondent.
- Questions are usually closed-ended but may also include a few open-ended questions.
- Surveys can be administered online, on paper, by email, in-person, by mail or phone.

9.2 Advantages of Surveys

Using a survey has many advantages as a means of collecting quantitative data.

- Surveys can reach a large number of people.
- Data can be collected relatively quickly.
- If a survey that uses a sample is done well, the results can be generalized to a larger population.
- Anonymity of respondents is easy to maintain.
- Usually quite inexpensive if done online. More expensive if done in-person or by mail.

9.3 Limitations of surveys

Like all other data collection methods, surveys have limitations. These include:

- A lack of flexibility given their standardized nature.
- Potentially low response rates i.e. low numbers of people complete the survey questionnaire.
- Possible response errors, with little opportunity to request clarification.
- The anonymity provided by surveys may in some cases increase the risk of respondents not providing honest answers.
- Long surveys can result in respondents losing interest and focus, potentially leading to less valid results.

9.4 Steps for carrying out surveys

There are five steps for administering a successful survey:

i) Design the survey questions and their sequence (questionnaire)

ii) Decide on the survey mode

iii) Pre-test the survey and revise it if needed

iv) Determine the sample (if needed)

v) Administer the survey.

9.4.1. Step 1: Design the survey questions and their sequence (questionnaire)

Remember, a survey primarily uses standardized closed-ended questions to collect quantitative data. These questions need to be well constructed before carrying out the survey as, unlike KIIs and FGDs, there usually is no opportunity to clarify or expand on a respondent's answers. Designing the questionnaire for a survey involves three stages.

Stage 1: Determine the kinds of participants based on your monitoring or evaluation plan.

This is the same process as you would use when developing an Interview Guide for KIIs or FGDs. Do you need information from government officials, community members, a certain category of people? A combination of several categories of participants? Let your monitoring or evaluation purpose and plan guide this decision. You do not need to identify specific people at this point, just the kinds of participants that are necessary for you to get the information you need. If possible, brainstorm these categories with a group of people with relevant backgrounds. This will help ensure you don't miss any needed categories of survey respondents.

Stage 2: Design good survey questions for the questionnaire

Ensure that you design questions that address the key issues you seek to explore. The beginning of the survey questionnaire should include the following:

- A description of the purpose of the survey
- How the results will be used,
- A statement about maintaining the survey respondent's anonymity.

Your specific questions will then follow as the next component of the questionnaire. There are different types of survey questions that can be used. These types of questions are described in the box on the next page.

Common Types of Survey Questions

1. Multiple choice: Allow survey respondents to select one or more options from a list of answers that you define.

Are you satisfied with the quality of your TVET course? Yes ____ No ____

2. Rating scale: Survey respondents select a number on a scale that represents their response.

How satisfied are you with the quality of your TVET course?

Not at all satisfied Extremely satisfied

1	2	3	4	5	6	7	8	9	10

3. Likert scale: Includes a series of 5 answer options. Respondents choose the option that best corresponds with how they feel about the question. The middle answer option is neutral.

I am satisfied with the quality of my TVET course.

Strongly agree ____

Agree ____

Neither agree nor disagree ____

Disagree ____

Strongly disagree ____

Best Practice

If possible, make use of different types of questions in a single survey questionnaire if it makes sense for the kind of information you are trying to collect.

Using the same kind of question each time (e.g. all Likert scale), may bore respondents, leading to less thought put into their answers.

Once you've decided on the types of survey questions you will use, the next step is to write good questions. While KIIs and FGDs tend to use open-ended questions and surveys use closed-ended question, the tips for writing effective questions are similar:

- Questions should be clear, concise and as simple as possible. Technical terms should not be used unless survey respondents are technical experts.
- Avoid questions that address more than 1 issue at a time, called "double-barreled" questions.
- Each question should be relevant to your monitoring/evaluation purpose.
- Include a balanced set of answer options that allow for a full range of answers.
- Answer options must be mutually exclusive. There must be no overlap across different answer options.
- Do not use leading or loaded questions that encourage a specific answer.

Below are examples of poorly worded closed-ended questions with accompanying suggestions on how to improve the wording based on the above tips.

Comparison of poorly worded closed-ended questions with improved wording

Poorly worded question	Problem with the question	Improved alternative
Please rate your satisfaction with the quality of your TVET learning: 1. Extremely satisfied 2. Very satisfied 3. Satisfied	The answer options are not balanced as only positive options are available.	Please rate your satisfaction with the quality of your TVET learning: 1. Very satisfied 2. Satisfied 3. Neither satisfied nor dissatisfied 4. Unsatisfied 5. Very unsatisfied
Please rate your satisfaction with the quality of your TVET learning and the extra-curricular activities.	Addresses two issues in a single question: satisfaction with learning and satisfaction with extra-curricular activities. It is a double-barreled question. It should be divided into two separate questions.	Please rate your satisfaction with the quality of your TVET learning. Please rate your satisfaction with the quality of your extra-curricular activities.
What is your age? 1. 18-25 2. 25-30 3. 30-35 4. 35+	Answers are not mutually exclusive as there is an overlap in ages in each answer.	What is your age? 1. 18-25 2. 26-30 3. 31-35 4. 36+

Stage 3: Determine the sequence of questions

Unlike KIIs and FGDs, which are flexible methods where questions can be asked in a different order based on how the conversation evolves, the sequence of survey questions should be standardized. The questions should be asked in the same order each time. Sequencing should follow these recommendations:

- Ensure there is logic to the sequence of questions.
- The first question of the questionnaire should ask the respondent whether they consent to take the survey. If the answer is 'no', the survey must end for that respondent.
- Start with questions that are the least difficult or least sensitive. The first question should be simple, non-controversial and stimulate the respondent's interest.
- Put difficult or sensitive questions in the middle of the question order when the key interviewee is more comfortable.
- It is best to put demographic questions at the end of the questionnaire (e.g. gender, age).

9.4.2. Step 2: Decide on the survey mode

Once you have designed good survey questions, you need to decide how to administer the survey. Different kinds of modes to administer the survey include online, email, in-person, on paper, by mail, and telephone.

Currently, the survey mode used most often is the online mode as it is the easiest and potentially most inexpensive way to administer a survey. Yet, it may be the case that some respondents you want to complete the survey may not have access to a good internet connection. Accordingly, a decision needs to be made on the most appropriate survey mode. Making this decision will require balancing what is the most effective mode with the kinds of resources you have available. In some cases, the most effective mode may be too expensive, so a compromise needs to be made.

Free online survey tools

The following are free tools available online for creating survey questions and sending the survey out to respondents online. Click on each one to view their website to determine which one is best for you.

Survey Monkey	Kobo Toolbox
Google Forms	Survey Planet
Typeform	SoGoLytics

For an example of a survey questionnaire from the BEST project, please see Appendix 4.

9.4.3. Step 3: Pre-test the survey questionnaire and revise it if necessary

Just like the questions in an Interview Guide for KIIs and FGDs, survey questions need to be pre-tested to ensure the questions are clear. Key things to keep in mind when pre-testing a survey questionnaire:

- Pre-test the questions with 3 - 5 people who are similar to your intended respondents.
- Use the pre-test to test the effectiveness of your questions. Are they clear and concise? Are the answer options clear and mutually exclusive?
- Is the question order appropriate?
- Based on your pre-test, make any necessary revisions to your questionnaire (revise question wording, revise question order, revise answer options, etc.).

9.4.4. Step 4: Determine the sample (if needed)

Quantitative methods like surveys typically make use of probability samples. In a probability sample like a simple random sample, every person in the target population has the same probability of being selected to take part in the survey (see page 39 of chapter 5). The strength of a probability sample is that the random nature of the sample allows for generalisations to be made to the larger population as a whole.

Here, again, is a brief description of several kinds of probability samples discussed in chapter 5.

1. Simple random sample: each person or unit of the population has an equal chance of being selected

2. Systematic sample: involves selecting people from a list on the basis of a fixed interval after a random start (e.g. select every ninth person on a list).

3. Stratified sample: the population is sub-divided into groups called “strata” (e.g. trainees, trainers). After strata are determined, independent simple random samples are drawn from each stratum.

Selecting which type of probability sample to use will be based on the nature of your evaluation activity. For example, if you are evaluating the quality of learning acquired by TVET graduates and, as part of this evaluation, want to compare learning among graduates from different TVET courses, a stratified sample would be the best option. A stratified sample would allow you to sub-divide the population of TVET graduates into ‘strata’ based on their course of learning (e.g. graduates of a graphic design program as one stratum, graduates of a construction course as a second stratum, etc.). You would then randomly sample survey participants from each of the stratum. This sampling strategy ensures you will get survey responses from graduates of each course while maintaining a degree of randomness. A simple random sample, in contrast, will not necessarily provide you with a similar number of respondents from each TVET course given its random nature.

For step-by-step details on how to design each of the above probability samples, including the sample size, please see Chapter 5.

Best Practice

If possible, surveys should use probability sampling. If the entire population of an evaluation study can be reached (e.g. all TVET trainees), use the population rather than a sample.

If neither is practical, a non-probability sample can be used

9.4.5. Step 5: Administer the survey

Once your survey questionnaire is complete, the survey mode is decided on, you have pre-tested the survey and, if needed, sampled who you will send the survey to, it's time to administer the survey.

A key challenge with using surveys is getting a good response rate. In other words, getting respondents to actually complete the survey. It is rare that every respondent will complete the survey.

Best Practice

A response rate above 25% (i.e. 25% of people who receive the survey answer it) is generally considered an acceptable rate.

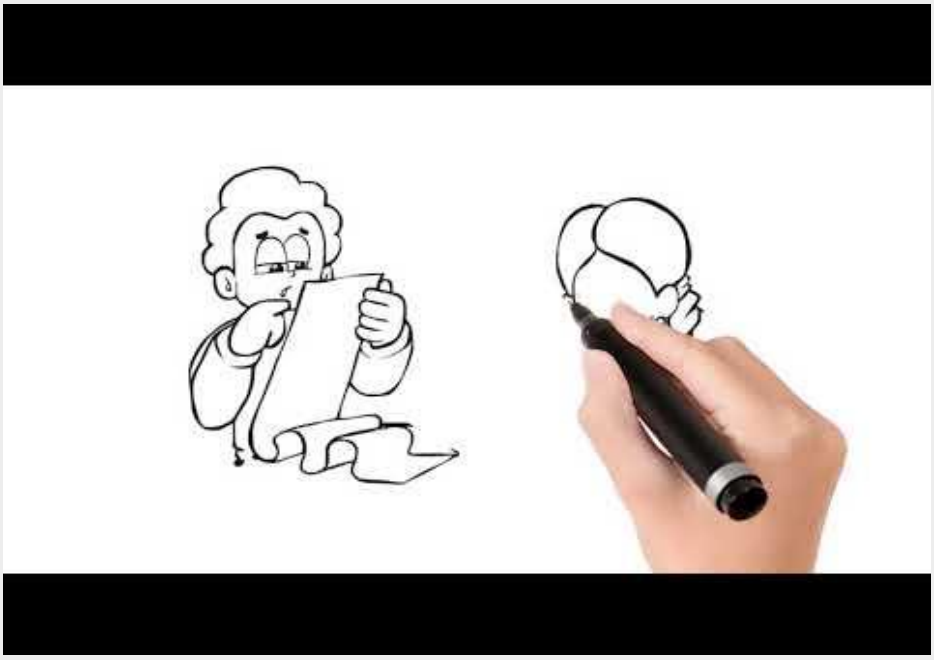
Tips for administering a survey:

- If sending out the survey questionnaire by email, send it from an official email address of someone respondents will recognize and respect. Similarly, if sending by regular mail, use official letterhead with a signature.

- If carrying out the survey by email or mail, provide a clear deadline date for completion of the survey with a statement of why completing the survey is important.
- Send follow-up messages to complete the survey before the survey completion deadline.

Video

The following video provides a short summary on how to develop good surveys.



Click here to access the video:
https://www.youtube.com/watch?v=mdVWbuffdNY&embeds_referring_euri=https%3A%2F%2Fhubblecontent.osi.office.net%2F&source_ve_path=OTY3MTQ

9.5 GNH application

GNH Practices for Surveys	GNH Domain
1. Get stakeholder input on the draft survey questionnaire by carrying out a pre-test.	**Good governance:** stakeholder input on Meal Design to avoid bias
2. Regardless of the focus of the MEAL activity, design survey questions focused on issues related to vulnerable groups, including people with disabilities, as well as elders where appropriate	**Health:** disability **Cultural diversity & resilience:** elders

3. If using a sample other than a simple random sample or a systematic random sample, seek to include females and people with disabilities in the sample to ensure active participation of diverse groups of people.	**Health:** diverse MEAL stakeholders, including women and people with disabilities
4. Where possible, use an online mode for the survey to avoid the use of paper.	**Ecological diversity & resilience**
5. Include a method of gaining consent for participation in the survey.	**Good governance**
6. If appropriate, provide the survey questionnaire in the local language	**Cultural diversity & resilience**
7. Store survey results securely, preferably on a password protected computer, in order to safeguard confidentiality.	**Good governance**

The overall GNH MEAL lens below outlines the practices from the above table in red.

PART III

Monitoring & Evaluation:

data analysis

CHAPTER 10

QUALITATIVE DATA ANALYSIS

10. QUALITATIVE DATA ANALYSIS

Once you have collected your data, it's time to analyse it. What are the data telling you? Data analysis is the process that will answer this.

If you have collected both qualitative and quantitative data, the nature of data analysis will differ for each kind of data. It is important to have an understanding of how to analyse both. This chapter will focus on analysing qualitative data collected through KIIs and FGDs. The next chapter will look at analysing quantitative data collected through surveys.

10.1 Qualitative data coding

Remember that qualitative data are information that explores the quality of an experience, process, or relationship. It uncovers information that is descriptive (usually words) rather than numbers that are measured. Qualitative data focuses on issues of "why, what, when or how".

After carrying out key informant interviews and/or focus group discussions, the next step – analysis – requires making sense of the answers you received and providing order to the data. This will allow you to understand the data as a whole. *Qualitative coding* is the process that helps you makes sense of your data and order it in a meaningful way. It is the first step in qualitative data analysis.

Qualitative coding:

The process of assigning labels to your collected qualitative data. The labels represent themes that are important to your evaluation. A label, or code, is a summary of a larger segment of text.

10.2 Inductive and deductive coding

Analysing qualitative data stars by reading through your KII and FGD notes and assigning codes to words or phrases that represent larger themes. For example, the codes used for analysing qualitative data collected for an evaluation study of an education system might include the following:

- Relevance of curriculum
- Effective teaching methods
- Soft skills in curriculum
- Effective student support services

In this example, analysing the data from KII and FGD notes involves reading through them and assigning these codes to any relevant text. These are just a few examples of codes. Most evaluations will involve a larger number of codes.

This may sound simple, but it is actually quite challenging. In particular, how do you know what codes to use when analysing qualitative data? There are two ways to develop codes:

Inductive coding: The MEAL practitioner creates codes based on the themes that emerge through a reading and re-reading of the qualitative data. Once these codes are identified after multiple readings of the data, the MEAL practitioner assigns the codes to the data through further reading of the KII and FGD notes.

Deductive coding: The MEAL practitioner uses a predefined set of codes and assigns these codes to the qualitative data. The pre-defined codes might come from previous studies or from the evaluation purpose or project objectives.

Let's look at the advantages and limitations of each of these coding methods.

Inductive coding

Advantages	Limitations
• A thorough approach to coding • Allows for new and unexpected themes to be identified • Allows for more nuanced analysis of data	• Time consuming • Evaluators can let their own biases influence how they code the data • Requires significant practice and skill

Deductive coding

Advantages	Limitations
• Less time consuming than inductive coding • Useful for confirming pre-existing theory or goal	• Unexpected themes may be missed • Evaluators can let their own biases influence how they apply codes to the data • Less nuanced than inductive coding

Qualitative coding can sometimes get quite complicated, especially if you have a lot of notes from your KIIs and/or FGDs. In order to make the practice of coding easier, it is best to create a code book to organize your codes so you remember them.

Best Practice

Use a Code Book to organize and keep track of your codes.

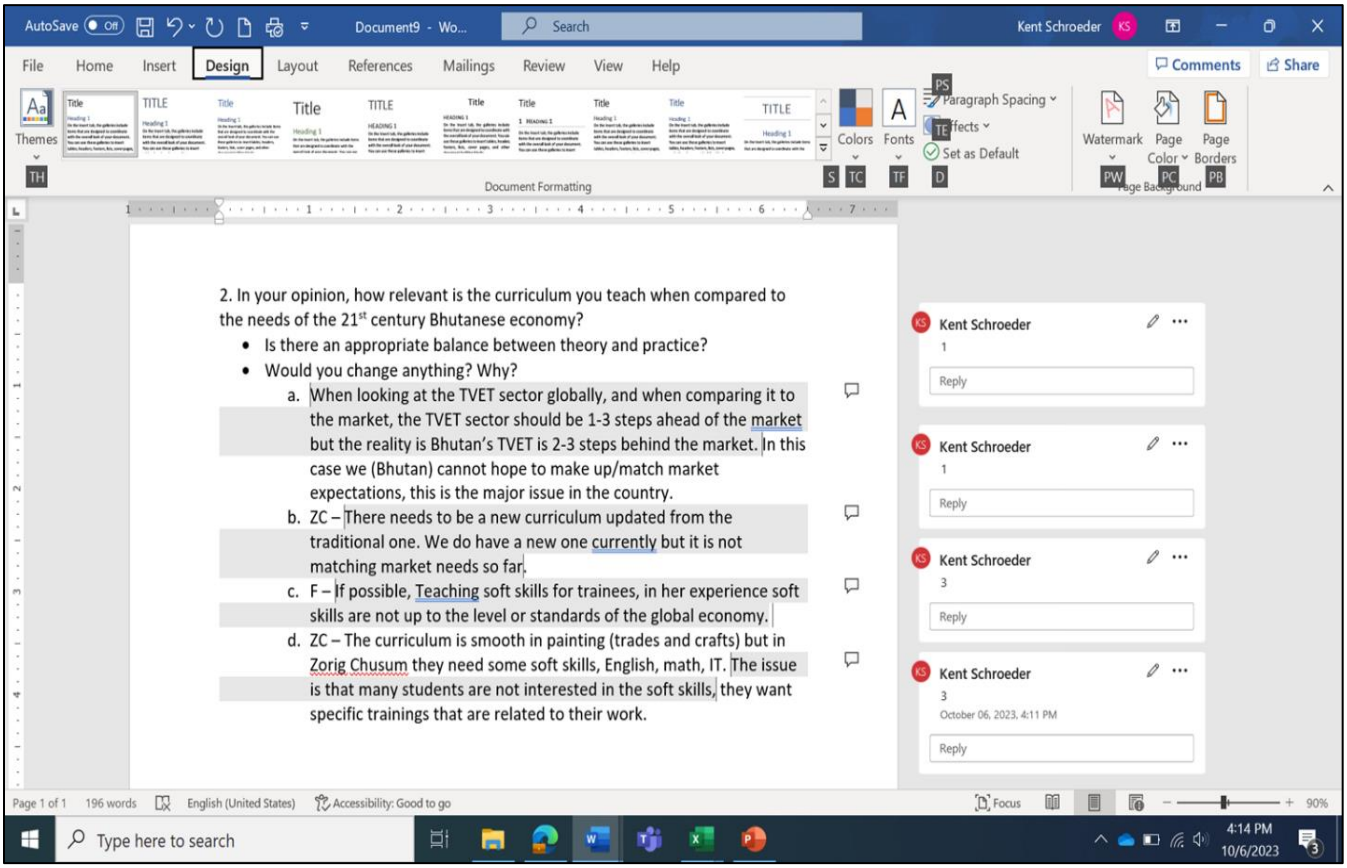
A codebook for qualitative data contains a list of the codes that you will use in your qualitative data analysis as well as a definition of each code.

The following is a sample code book based on the examples of codes used earlier. Note, though, that code books usually contain more codes than in the example below.

CODE	CODE Description
1	Relevance of curriculum
2	Effective teaching methods
3	Soft skills in curriculum
4	Effective student support services

From the example above, you can see that the code description in the column on the right describes the nature of the code while the column on the left assigns a number to each code description. When you are coding the data, this allows you assign the relevant code number to data rather than writing the whole code description out.

The following screenshot provides an example of using the above code book to code a selection of notes from a single question in a KII. Note that the coding is done right in a WORD document using the "New comment" function in the "Review" tab. The comment contains the relevant number from the code book above. Section 9.5 below will outline other tools that can be used for coding in addition to WORD.



10.3 Steps for inductive coding & analysis

As we've seen, inductive coding involves creating codes from scratch based on the themes that emerge through a reading and re-reading of the KII and FGD notes. It is a bottom-up approach that is used when you want to avoid any preconceived ideas of what is to be analysed. It is a process that can take a long time, but when done correctly it will drive meaningful analysis of your qualitative data.

The following steps can be followed for undertaking inductive coding and analysis.

- Read through all of the KII and/or FGD notes (called "transcripts"). This allows you to get to know the data and see common ideas. These common ideas need to relate to the nature of the monitoring/evaluation activity you are doing.
- As you are reading the transcripts, develop draft codes based on common ideas or issues that emerge as you read. Enter the codes in your code book.
- Once you've read through all of the transcripts and created codes in your code book based on this reading, start again with a single transcript (one KII or one FGD). Read through the transcript and start applying the codes from your code book to relevant words, phrases, or paragraphs in the transcript. For example, if one of your codes in your code book is "effective teaching methods", identify each word, phrase, or paragraph in the transcript that describes effective teaching methods.
- While reading the transcript, if you think new code ideas emerge that are currently not in your code book, create the new code(s) and enter it into the code book.
- Continue the above process with all the transcripts, applying codes to the text and creating new codes as needed.
- If possible, it is a good idea to group all data (words, phrases and paragraphs) labelled with a single code into one place. For example, cut and paste all of the words, phrases and paragraphs coded as "Effective teaching methods" across all of the transcripts into a separate Word document or Excel file.
- The final step is to now analyse all your coded data. For example, read everything that has been coded as "Effective teaching methods" and draw out key themes: What kinds of teaching methods have been identified as being effective? Why are they effective? In what contexts are these methods effective?

Inductive coding involves, reading, re-reading and reading again!

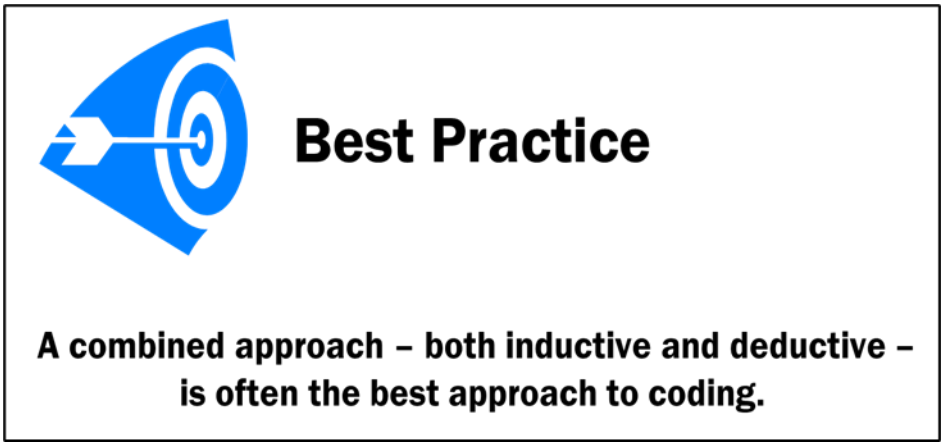
10.4 Steps for deductive coding & analysis

Deductive coding uses a code book that has been created before coding occurs. Deductive coding is used when you know ahead of time what you specifically want to analyse. The codes are created from

previous studies, a project's objectives, or from an evaluation's purpose. Given that the codes are predefined before the analysis of your qualitative data, deductive coding takes less time than inductive coding.

The following steps should be taken when using deductive coding and analysis.

- Create your code book with pre-existing codes based on the purpose of your project or evaluation.
- Read through each transcript and apply the pre-existing codes to words, phrases or paragraphs. For example, if one of your codes in your code book is "effective teaching methods", identify each word, phrase, or paragraph in the transcript that describes effective teaching methods.
- If possible, group all data (words, phrases and paragraphs) labelled with a single code into one place (e.g. a Word document). As outlined in the section on deductive coding, cut and paste all of the words, phrases and paragraphs coded as "Effective teaching methods" across all of the transcripts into a separate Word document or Excel file.
- Analyze all the data under each code for key themes. Again, as outlined in the section on deductive coding, this involves reading everything that has been coded as, for example, "Effective teaching methods" and drawing out key themes: What kinds of teaching methods have been identified as being effective? Why are they effective? In what contexts are these methods effective?



10.5 Tools for qualitative coding

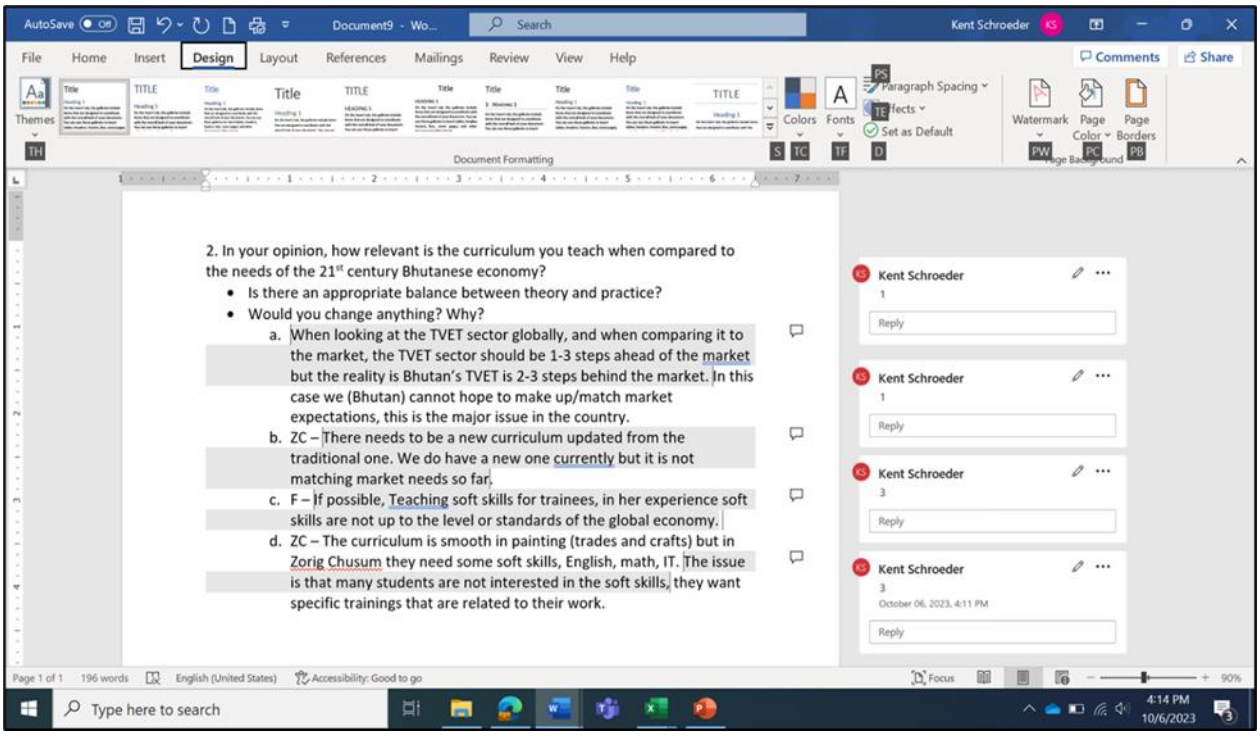
There are different kinds of tools that can help you with coding qualitative data from KIIs or FGDs. Choosing a tool is based on several factors, including the extent of qualitative data that need to be coded, the time you have available to code, and the potential cost of a coding tool.

Here are a few examples of tools that can be used for qualitative coding.

10.5.1 WORD software

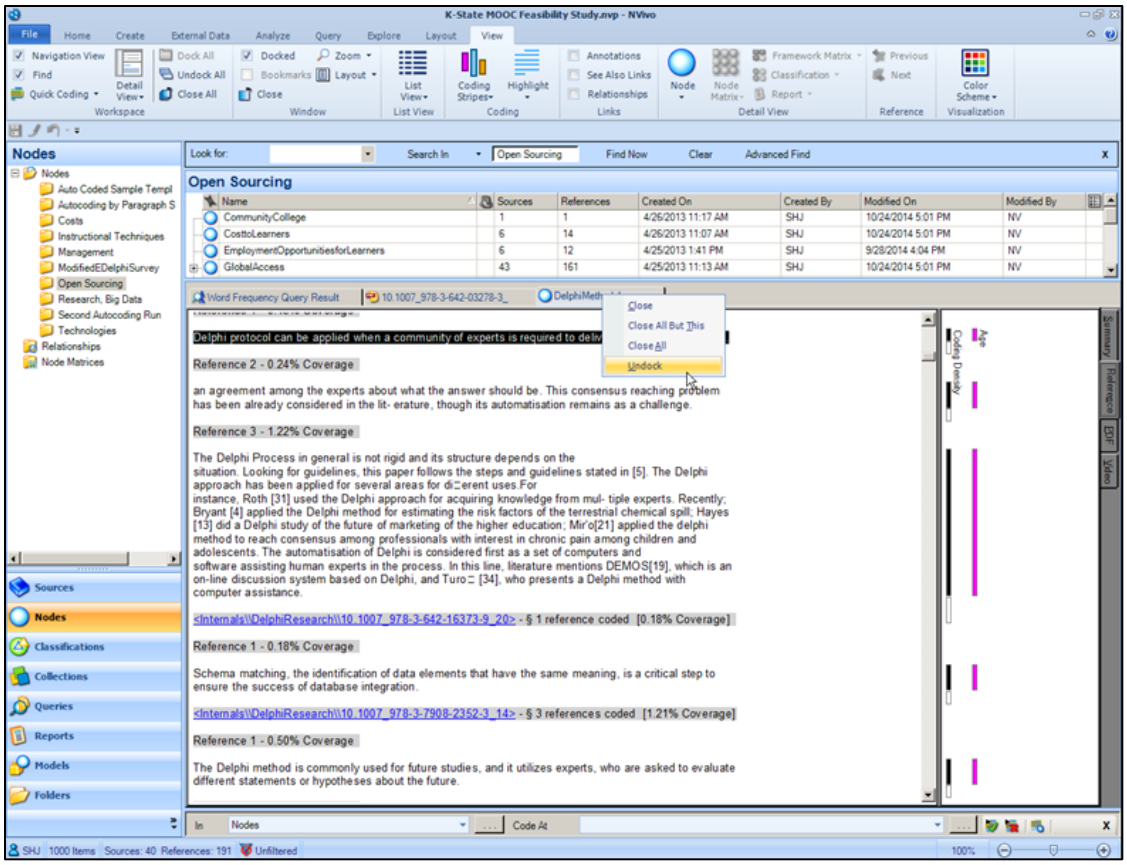
The example provided in section 9.2 above used WORD as the tool for coding. When using WORD, coding is done using "New comment" under the "Review" tab. This allows you to highlight the section you want to code in the transcript and then add the number from the code book in the corresponding comment related to the highlighted section. Using WORD to code is a good option as it is a widely available software that will require no additional cost if you or your organisation already have it.

Here again is the screenshot of an example of using WORD to code qualitative data:



10.5.2 Qualitative data analysis software

There are numerous software packages available that are used for specifically for qualitative analysis, including the coding of qualitative data. They usually involve uploading your KII or FGD transcripts as WORD or pdf files into the software for coding. These are often very powerful tools that enable advanced analysis and coding. While these online tools are powerful, they can require significant time to learn how to use them. On the next page is a screenshot of one such tool. In the middle of the screen are selected sentences from a transcript that have been coded. On the right-hand side of the screen are colour-coded bars that represent the codes (rather than numbers)



As you can see from the above screenshot, qualitative software can be quite complicated. It also can be expensive. So use of this software is best if you have the time to learn how to use it and the money to purchase it. Fortunately, there are a number of free qualitative software packages available online. These are good options if you have the time to learn how to use them.

Free software for qualitative coding and analysis (click on the links)

QDA Miner Lite

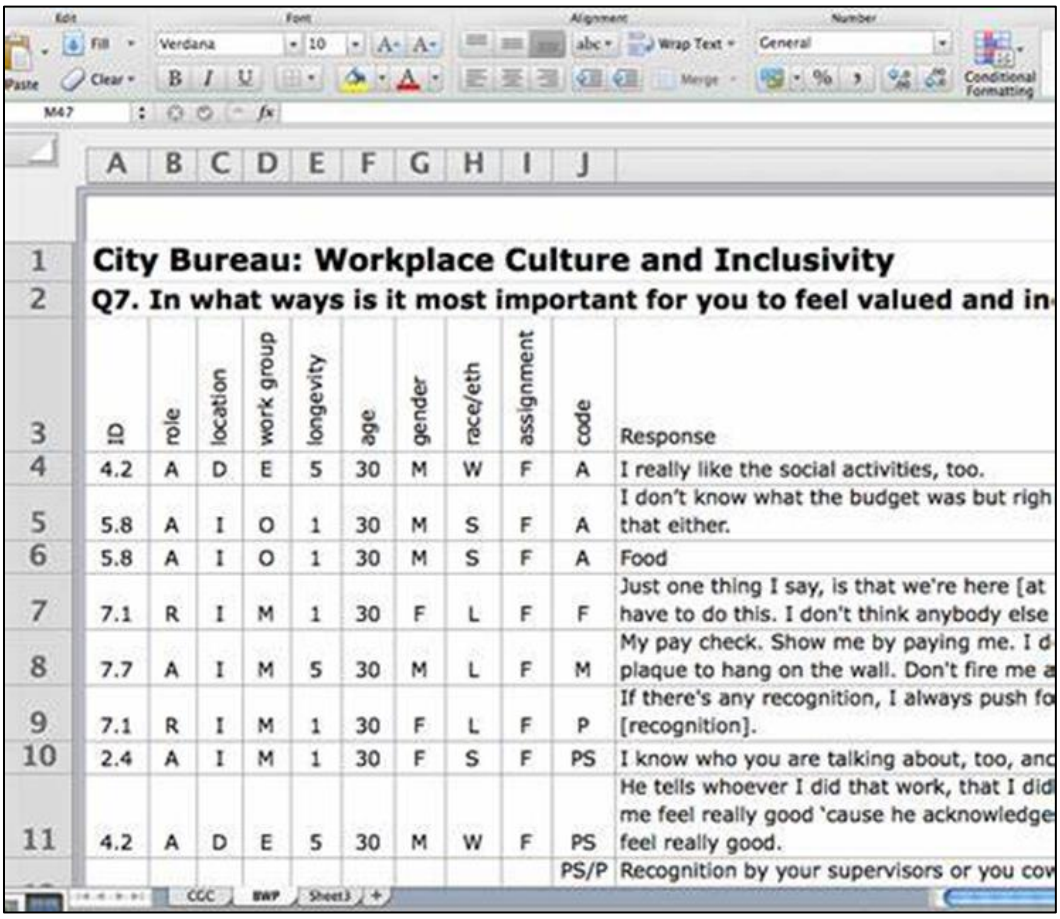
Taquette

TAMS Analyzer (Mac only)

10.5.3 Excel

Excel is another option for coding qualitative data. Like WORD, it is accessible and likely can be used without paying an additional cost if you or your organisation already have a subscription.

Below is a screenshot of an example of coding with Excel. The coding is in column J and uses letters instead of numbers. The column to the right of the code contains the corresponding text from the KII transcript. The columns to the left of the coding contain various demographic data like age and gender.



	A	B	C	D	E	F	G	H	I	J	
1	**City Bureau: Workplace Culture and Inclusivity**										
2	**Q7. In what ways is it most important for you to feel valued and in**										
3	ID	role	location	work group	longevity	age	gender	race/eth	assignment	code	Response
4	4.2	A	D	E	5	30	M	W	F	A	I really like the social activities, too.
5	5.8	A	I	O	1	30	M	S	F	A	I don't know what the budget was but righ that either.
6	5.8	A	I	O	1	30	M	S	F	A	Food
7	7.1	R	I	M	1	30	F	L	F	F	Just one thing I say, is that we're here [at have to do this. I don't think anybody else
8	7.7	A	I	M	5	30	M	L	F	M	My pay check. Show me by paying me. I d plaque to hang on the wall. Don't fire me a
9	7.1	R	I	M	1	30	F	L	F	P	If there's any recognition, I always push fo [recognition].
10	2.4	A	I	M	1	30	F	S	F	PS	I know who you are talking about, too, anc
11	4.2	A	D	E	5	30	M	W	F	PS	He tells whoever I did that work, that I did me feel really good 'cause he acknowledge feel really good.
										PS/P	Recognition by your supervisors or you cov

Source: https://data1.skinnyms.com/en/qualitative-data-coding-excel-template.html

10.5.4 By hand

If KII or FGD transcripts are written by hand (or are in printed WORD documents), coding can be done by hand by simply writing in the codes directly into the notes with a pen. This is the easiest way to code if you have hand-written notes or do not have access to a computer. It is best to only code by hand if you have a small number of interview transcripts as it does not allow you to group all text with the same code into one area.

10.6 GNH application

GNH Practices for Qualitative Analysis	GNH Domain
1. Engage colleagues or other stakeholders to review the codes you develop for the codebook when using inductive coding.	**Good Governance**: Engage diverse MEAL stakeholders
2. Develop codes that cover issues of importance to marginalized groups like vulnerable women and people with disabilities (PWD).	**Health:** diverse MEAL stakeholders, including women & PWD
3. Engage colleagues or other stakeholders to review your coding, both inductive and deductive, for consistency, relevancy, and lack of bias.	**Good Governance**: Engage diverse MEAL stakeholders
4. Seek to use online qualitative data analysis tools where possible to reduce the use of paper.	**Ecological diversity & resilience**

The overall GNH MEAL lens below highlights the practices from the above table in red.

CHAPTER 11

QUANTITATIVE DATA ANALYSIS

11. QUANTATIVE DATA ANALYSIS

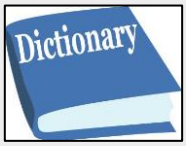
Analysing quantitative data involves different kinds of processes than analysing qualitative data. The goal, however, is the same: What are the data telling you? What evaluative claims can be made about a project based on the data? Quantitative data analysis of your survey results will answer these questions.

While quantitative and qualitative data analysis are different processes, they can work together to provide you with a fuller analytical picture of your results than if you use just one of them. It is therefore important to have an understanding of how to analyse both kinds of data. The last chapter focused on qualitative analysis. This chapter will focus on how to analyse quantitative data collected through surveys.

Remember that quantitative data are information that can be counted up or measured. Quantitative data are numbers. They answer the question "How many or how much?" Analysing quantitative data involves using statistics. The use of statistics can be quite complicated. Indeed, there are entire manuals and textbooks that focus on statistical techniques. As this is manual is an introduction to all aspects of MEAL, this chapter will only focus on several simple statistical techniques that can be used for analysing quantitative data. In particular, this chapter will look at frequency distribution, measures of central tendency, and measures of variability. Frequency distribution tells you how often a value occurs across your data (the collection of your data, such as all the answers to a survey, is called a dataset). Measures of central tendency provide you with averages in your dataset. Measures of variability tell you how spread out the values are in your dataset. Collectively, these are known as descriptive statistics. They are key tools for analysing quantitative data.

11.1 Frequency distribution

Once you have collected your quantitative data using a tool such as a survey questionnaire, the next step is to organize the data so you can analyse how frequent each answer option (called a "value") occurs. In other words, how often each answer option, or value, appears in the dataset. The number of times a value of the data occurs is called a *frequency*, and a *frequency distribution* provides the frequencies for the set of data that is being examined, usually in the form of a graph or table.



Key Definition

Frequency distribution:

The distribution of all values in a data set e.g. the number of times each answer occurs for a single question.

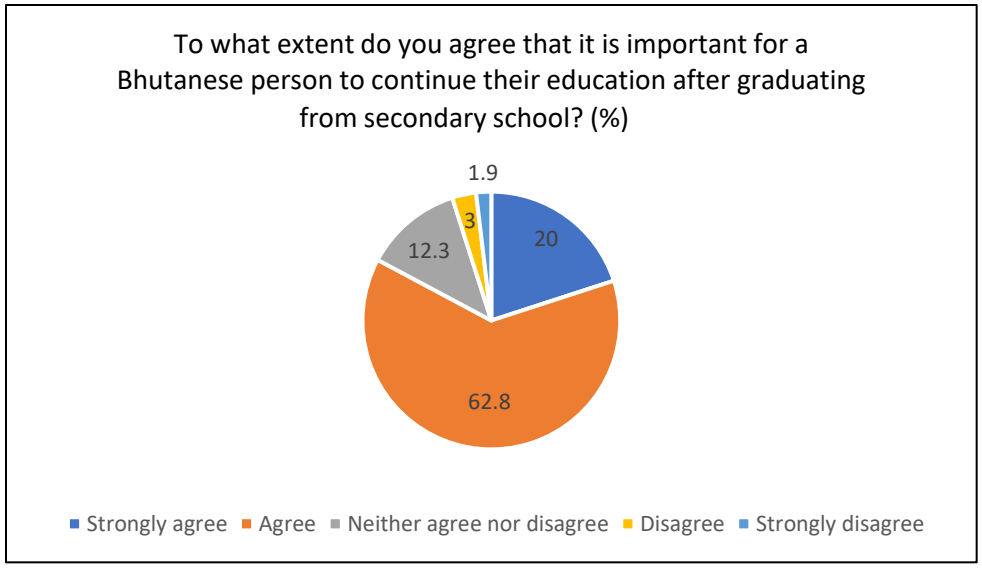
The frequency of every value (or answer to a question), can be summarized in tables, graphs or text.

Frequency distributions are usually provided as percentages or raw numbers. It is good practice to provide both if possible. Here is an example of a frequency distribution for a single survey question. The results are provided in a table:

Question: To what extent do you agree that it is important for a Bhutanese person to continue their education after graduating from secondary school?

Answer	Frequency	Percentage
1. Strongly agree	83	20.0
2. Agree	260	62.8
3. Neither agree nor disagree	51	12.3
4. Disagree	12	3.0
5. Strongly disagree	8	1.9
Total	414	100

This same frequency distribution could also be presented in other ways. For example, the pie chart on the next page shows the same data in a different way:



Frequency distributions are important because the allow you to meaningfully organize your data. They identify the most frequently occurring values (or answers), the least frequently occurring values, and everything in-between. This is important information for any evaluation.

There are different ways you can calculate and display frequency distributions. The video link in the box below provides instructions on how to calculate frequency distributions using Excel.

Using Excel for calculating frequency distribution

Frequency Distribution Table in Excel - Easy Steps! - Statistics How To

Presenting a frequency distribution using a graph or chart is a good way to present your data in an easily understandable manner. The two video links in the box below provide instructions on how to make simple charts in Excel and Word.

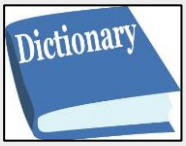
Creating charts in Excel and Word

Excel: https://www.youtube.com/watch?v=64DSXejsYbo

Word: https://www.youtube.com/watch?v=bOMKl2RPzrA

11.2 Measures of central tendency

As a MEAL practitioner, calculating frequency distributions is always an important foundation of your data analysis. It may also be important for your analysis to calculate measures of central tendency. A measure of central tendency provides a single number that represents the "centre" of the dataset, commonly called an average. Knowing central tendency allows the MEAL practitioner to understand what is 'normal' or 'average' in a large set of data.



Key Definition

Measures of central tendency:

A measure of central tendency is a statistic that represents the center point of a dataset. It is a single number that is the "average" of a dataset.

The most common measures of central tendency are mean, median, and mode.

Mean: The sum of all values divided by the total number of values.

Median: The value that is in the exact centre of a dataset when it is ordered from low to high. It is the value separating the top half from the lower half of a dataset.

Mode: The most frequently occurring value in the dataset.

Let's take a look at how to calculate each of these measures of central tendency.

11.2.1. Mean

The mean is the measure of central tendency that we normally think of as an average. It is the sum of all values in a dataset divided by the total number of values.

To calculate the mean, sum up all the values (e.g. question answers) and divide this sum by the total number of values (e.g. total number of answer responses). Below is a simple example from a survey question related to TVET in Bhutan that was answered by 15 people.

Mean:

How satisfied are you with the quality of your TVET course?

Not at all satisfied — Extremely satisfied

1	2	3	4	5	6	7	8	9	10

Answers: 2, 3, 5, 5, 5, 6, 6, 6, 7, 7, 7, 7, 9, 9, 10

Mean: 94/15 = 6.26

The mean is the most appropriate measure of central tendency to use when the data are roughly symmetric (similar) and have few outliers. An outlier is a data point that is much larger or smaller than the next data point.

For example, using the mean as a measure of central tendency is appropriate for the following simple dataset of the ages of a group of 10 people: 18, 22, 25, 19, 23, 29, 26, 27, 25, 22.

As you can see, the ages of the 10 people are quite similar, or symmetric, so the mean, which is 23.6 years of age, will provide useful information on the average age of this group.

If the dataset is not very symmetric and has outliers, however, the mean is less useful for analysing the data. For example, the following simple dataset of the ages of a group of 9 people has an outlier of 65 years of age, which is much higher than the second oldest person, who is 29 years: 19, 22, 22, 23, 25, 25, 27, 29, 65.

In this case, the mean is 28.5 years of age. This is less useful for analysis because while it provides the average age, 7 of the 9 people are younger than 28.5 years of age because the person who is 65 (the outlier) increases the value of the mean. This is known as 'skewed' data. In a case like this where there is an outlier, it is more useful to use the median as a measure of central tendency.

11.2.2. Median

The value that is in the exact centre of a dataset when it is ordered from low to high is called the median. It is the value separating the top half from the lower half of a dataset.

For a dataset with an odd number of values, the median is the middle number. For a dataset with an even number of values, the median is calculated by adding the two middle numbers and dividing by 2.

Below are two simple examples of calculating the median. The first example uses a dataset with an odd number of values while the second uses a dataset with an even number of values. The example uses the same question as in the box above where the example of calculating the mean was provided.

Median:

How satisfied are you with the quality of your TVET course?

Not at all satisfied Extremely satisfied

1	2	3	4	5	6	7	8	9	10

Answer for scenario 1 (odd # of values): 2, 3, 5, 5, 5, 6, 6, **6**, 7, 7, 7, 7, 9, 9, 10
Median = 6

Answer for scenario 2 (even # of values): 3, 5, 5, 5, 6, 6, 6, 7, 7, 7, 7, 9, 9, 10
Median = (6+7)/2 = 6.5

Notice that the median in scenario one is 6, which is the number in the middle of the dataset as there are seven number on either side of the six. In the second scenario, the values of 6 and 7 are in the middle of the dataset as it is made up of an even number of values.

Using the median is appropriate when there are outliers in the dataset. To take the example above of people's ages, calculating the median involves identifying the middle number when the ages are ordered from youngest to oldest: 19, 22, 22, 23, 25, 25, 27, 29, 65.

The underlined middle number of 25 is the median. This is a more useful figure than the mode, which is 28.5, as it better represents the nature of the dataset, including the outlier of 65 years of age.

The examples above use very small datasets. When using large datasets, the median is the most appropriate measure of central tendency when the data are very skewed, or when there are a large number of outliers.

11.2.3. Mode

Mode is the most frequently occurring value in the dataset (i.e. the most frequent answer to a question). A dataset can have one mode, more than one mode, or no mode. To find the mode, identify the response that occurs most frequently. On the next page is an example of calculating the mode using the same survey question and dataset presented in the boxes above for the mean and median.

Mode:

How satisfied are you with the quality of your TVET course?

Not at all satisfied Extremely satisfied

1	2	3	4	5	6	7	8	9	10

Answers: 2, 3, 5, 5, 5, 6, 6, 6, 7, 7, 7, 7, 9, 9, 10

Mode: 7

The mode in the example above is 7 as it is a value that appears 4 times in the dataset, more than any other value.

The mode is used less often in evaluation practice as a measure of central tendency. It is best to use it when you have what are called 'nominal' data. Nominal data are data with a qualitative label rather than a numerical value.

For example, if one of the questions in a survey asks respondents to indicate which dzongkhag they are from, the mean and median cannot be used as they are only for numerical data. In contrast, the mode can be used in this example as the evaluator can add up which dzongkhag is selected the most in the survey.

There are many programs that can calculate measures of central tendency. The video link in the box below provides instructions on how to calculate mean, median, and mode using Excel.

Using Excel for calculating measures of central tendency

https://www.youtube.com/watch?v=KBj8iS8GWTQ

11.3 Measures of variability

Measures of central tendency are important as they provide information on average values, or values at the centre of a dataset. Measures of variability, in contrast, provide information on how spread-out values are in a dataset. While there will almost always be some variability (not everyone will likely answer a survey question exactly the same), measuring variability tells us how dramatic the spread of

values is. Low variability means the values in a dataset are similar to one another. High variability means values are more dissimilar or skewed, characterized by lots of outliers.

Understanding variability is important as it lets us know what the extremes are in our data. For example, if a survey question asks respondents how satisfied they are with their TVET course, measuring their answers using the mean will tell us the average level of satisfaction among all respondents. Measuring variability, however, will tell us how spread-out the levels of satisfaction are from the average.

Key Definition

Measures of variability:

A measure of variability is a statistic that illustrates how spread-out data are in a dataset.

The are several kinds of measures of variability. We will look at two: range and standard deviation.

11.3.1. Range

Rage measures how far apart the most extreme values are (highest and lowest) in a dataset. For example, you may be interested in knowing the age range of respondents who completed a survey. Using range will tell you how far apart the youngest and oldest respondents are in age. To calculate the range, simply subtract the lowest value from the highest value in your dataset.

To demonstrate now range works, let's revisit the example that was used above in the discussion of the mean, median, and mode.

Range:

How satisfied are you with the quality of your TVET course?

Not at all satisfied — Extremely satisfied

1	2	3	4	5	6	7	8	9	10

Answers: 2, 3, 5, 5, 5, 6, 6, 6, 7, 7, 7, 7, 9, 9, 10

Range: 10–2 = 8

The example above illustrates that there is a large range in the dataset. From the 10 answer options (1-10), there is a range of 8 as respondents provided answers ranging all the way from 2 to 10.

11.3.2. Standard deviation

The range is a good measure of extremes. It shows the difference between the highest and the lowest values in your dataset. Range does not, however, tell you anything about the variation in the rest of the data. In contrast, standard deviation measures the average amount of variability in your dataset. It tells you on average how far each value in the dataset lies from the mean (the average). When the standard deviation is high, it means that values are generally far from the mean. When the standard deviation is low, it means that values in your dataset are clustered close to the mean.

Standard deviation is therefore important as it shows how spread out the data is in a dataset, rather than just the difference between the highest and lowest values. Let's look again at our example of a survey question that asked 15 TVET trainees about their satisfaction with their TVET course.

Standard deviation:

How satisfied are you with the quality of your TVET course?

Not at all satisfied Extremely satisfied

1	2	3	4	5	6	7	8	9	10

Answers: 2, 3, 5, 5, 5, 6, 6, 6, 7, 7, 7, 7, 9, 9, 10

Mean: 94/15 = 6.26

Standard deviation (average distance from the mean): 2.15

As the box above shows, the average level of satisfaction (the mean) among the 15 trainees with their TVET course is 6.26 out of 10. The distance from the mean for each of the answers on average is 2.08. The higher the number for standard deviation, the greater variation there is in your data. In other words, the data is spread out; there are notable differences in the data.

Calculating standard deviation is a little bit complicated. Fortunately, there are many standard deviation calculators available online. Excel can also calculate the standard deviation of your dataset.

When calculating the standard deviation, it is important to be clear on whether you are calculating it for a population or for a sample. Calculate the standard deviation for the population if your dataset contains all the values you are interested in. For example, if you have collected data from the entire population of TVET trainees. Calculate the standard deviation for a sample if your dataset represents a

sample of a larger population . For example, if you have collected data from a sample of TVET trainees rather than all of them. It is likely that you will most often calculate standard deviation for a sample. Both Excel and online calculators will give you the option to easily choose 'population' or 'sample' when calculating standard deviation.

Using Excel for calculating measures of variability (range & standard deviation)

https://www.youtube.com/watch?v=mZycnFm4ifc

Standard deviation calculator

https://www.calculator.net/standard-deviation-calculator.html

11.4 GNH application

GNH Practices for Quantitative Analysis	GNH Domain
1. When using descriptive statistics like frequency distributions and the mean, calculate them not only for your entire sample, but separately for: • women, men and other genders (called "gender disaggregation") • if possible, people with disabilities and people without disabilities (called "disability disaggregation") • different age groups, including elders	**Health:** diverse MEAL stakeholders, including women and people with disabilities **Cultural diversity & resilience:** elders
2. Use online quantitative data analysis tools to reduce the use of paper.	**Ecological diversity & resilience**

The GNH practices from the above table are highlighted in red in the overall GNH MEAL lens on the next page.


Psychological Wellbeing
Allow M&E participants to withdraw with no questions asked
Allow verbal consent from participants for whom written consent may be a challenge
Health
Engage diverse M&E stakeholders, including people with disabilities & women
Design data collection questions focused on people with disabilities
Time Use
Schedule the timing of data collection that is not disruptive to M&E participants' livelihoods or other priorities, esp. women
Education
Disseminate learning to all M&E participants and the broader community, incl. elders
Include learning that responds to the needs of vulnerable groups
Cultural Diversity & Resilience
Use local language for consent form, data collection, analysis, & sharing
Follow Driglam Namzha
Collect data from elders
Good Governance
Seek stakeholder input in design & analysis, incl. elders, women & PWD
Always gain the consent of M&E participants
Store data securely to protect confidentiality
Community Vitality
Disseminate relevant learning to the broader community when possible, incl. elders.
Ecological Diversity & Resilience
Use online data collection, analysis, & dissemination methods
Living Standards
Schedule the timing of data collection that is not disruptive to M&E participants' livelihoods, esp. women
PROFESSIONALISM
EMPOWERMENT
RESPECT
INCLUSION
ACCESSIBILITY
PROFESSIONALISM
PROFESSIONALISM
PROFESSIONALISM

PART IV

Accountability & learning

CHAPTER 12

ACCOUNTABILITY

12.1 Developing key roles

12.2 Engaging stakeholders

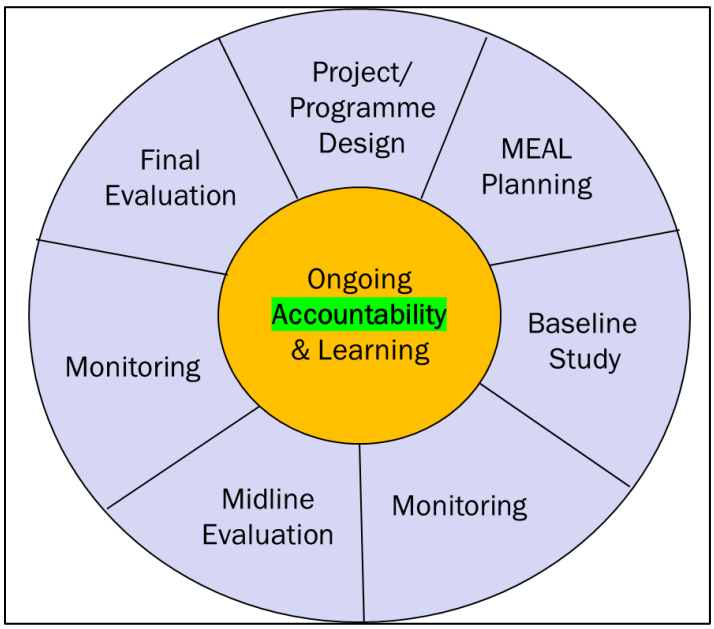
12.3 Implementing accountability mechanisms

12.4 Promoting learning & informed decision making

12.5 GNH application

12. ACCOUNTABILITY

To this point in this manual, we have looked at how to carry out data collection and data analysis for monitoring and evaluation activities. These are the core activities for effectively evaluating a project. Yet, the nature of the *process* of collecting and analysing data is also important. We need to ensure we engage in monitoring & evaluation activities in a way that is transparent and ethical. We need to ensure that the way we collect and analyse data is responsible, accurate and reflects the needs of all stakeholders. Accountability is therefore a key component of effective MEAL practice. We can conceptualise it as being at the core of the MEAL process.



Central to promoting accountability are several processes: i) developing clear roles for all involved; ii) engaging stakeholders in data collection and data analysis; iii) implementing accountability mechanisms; and iv) using monitoring and evaluation results to promote learning and inform decision-making.

12.1 Develop clear roles

It is important to develop clear roles and responsibilities for everyone involved in the monitoring and evaluation of a project. This includes the MEAL practitioner(s), MEAL participants, and the staff of the organisation or agency for which the evaluation is being done. Establishing and clarifying the responsibilities of each of these stakeholders will ensure that everyone involved understands their role and the role of others. This is particularly important to overcome the challenge of MEAL participants in an evaluation not knowing who they are interacting with or why; it helps promote shared understanding.

12.2 Engage stakeholders

Developing clear roles of stakeholders is important in promoting accountability but it is not enough. Stakeholders such as MEAL participants and project staff should also be directly engaged in the design and implementation of a monitoring and evaluation activity. This not only promotes further shared accountability and ownership, but ensures an evaluation is not perceived as simply "outsiders" coming in to extract information from MEAL participants for their own purposes.

Knowing when and how to engage stakeholders can be challenging, so it is important to think this through at the beginning of an evaluation initiative. Ideally, stakeholders can be engaged in data collection and data analysis.

12.2.1 Data collection and stakeholder engagement

Accountability can be promoted directly in the process of data collection. This includes incorporating strategies at both the question design stage and the collection of data stage.

> ***Question design****:* A variety of stakeholders can be involved in the design of questions for data collection. This can be KII, FGD, or survey questions. Getting input from MEAL participants themselves is helpful for ensuring questions are appropriate and are addressing important issues.
>
> In addition to getting input on question design, once a draft set of questions has been developed, it is good practice to circulate the questions to relevant stakeholders, such as project staff, for their review before pre-testing the questions. It is a good idea to engage stakeholder input on questions from both women and men as well as any key groups that may be involved in your evaluation activity e.g. people with disabilities.
>
> ***Collecting data*****:** There are multiple strategies that can be used to promote accountability when collecting qualitative data through KIIs and FGDs. These strategies ensure that you are accurately understanding the information that MEAL participants are providing and avoiding your own biases:
>
> - Ensure MEAL participants understand the purpose of the interview or survey and how their data will be used.

- In cases where a MEAL participant's answer may be unclear, you, as the interviewer, should re-phrase the answer and clarify if that interpretation is correct.
- In FGDs, summarize key themes that emerge from the discussion and ask participants if your interpretation of the themes is correct.
- Give participants in KIIs and FGDs the opportunity to ask you questions so they fully understand the evaluation, its focus, and why it is being done.
- If possible, circulate a written summary of the KII or FGD to the MEAL participants for confirmation that your notes are an accurate representation of the information they provided.

Most of the strategies above can only be used for face-to-face KIIs or FGDs. Some of them can also be used if you are administering a survey in person. However, it is now common to use online survey, which do not allow you to interact directly with MEAL participants. In this context, there are other ways to promote stakeholder engagement for accountability:

- Ensure the survey contains a written description of the purpose of the survey, who is carrying it out, and how the results will be used.
- Include the name and contact details in the survey or the MEAL practitioner or organisation undertaking the survey. This will allow participants to contact you if they have any questions or concerns.

12.2.2 Data analysis and stakeholder engagement

Stakeholders can also be directly engaged in the process of data analysis. This can sometimes be challenging but it is important to undertake if possible. Engaging stakeholders will help ensure you do not interpret data incorrectly or let your own biases intrude into the analysis. Two strategies are particularly helpful at the data analysis stage:

- Have someone review your coding of the data to ensure you have avoided bias in the creation and application of the codes.
- Once you have identified key themes in your overall analysis, circulate them to relevant stakeholders for comment to ensure you have avoided bias in your interpretation. Remember, though, the comments you receive from others should not change what the data are telling you!

12.3 Implement accountability mechanisms

Developing clear roles for everyone and engaging stakeholders in data collection and analysis should be paired with the implementation of specific accountability mechanisms. These mechanisms help promote ethical MEAL practice. Three key accountability mechanisms include consent forms, a feedback and complaints process, and data security mechanisms.

12.3.1 Consent forms

This manual has already discussed consent forms in previous chapters. It is worth re-stating their importance here. It is unethical to collect data from people if they are not clear on the reason for an evaluation or their role in it, and don't explicitly consent to take part. Using a consent form ensures that a MEAL participant understands why the evaluation is being carried out and how the information they provide will be used, and explicitly consents to take part.

It is important to note that if children under 18 years of age are involved in an evaluation, consent must be gained from their parent or guardian.

As discussed previously, a consent form must be used before starting a KII or FGD. The process of gaining consent can be done in writing or verbally. In other words, MEAL participants can read the consent form and sign it, or the form can be read to them and they sign it or verbally consent. For an online survey, the first question in the survey can be used to ask for consent with a 'yes' or 'no' option that can be selected. If the participant selects 'no', the survey ends.

12.3.2 Feedback and complaints process

It is good MEAL practice to put in place a process that allows stakeholders involved in a MEAL initiative to provide feedback and, if needed, lodge a complaint about the process. This will help avoid the MEAL activity being a one-sided process dominated by the evaluator. Details of the feedback/complaints process can be provided to MEAL participants prior to the evaluation activity. They can also be provided on the consent form.

The nature of the feedback/complaints process will likely be different based on how the evaluation is undertaken and who is undertaking it. It may involve email, phone, or in-person reporting. Regardless of the method, it is important to ensure that the feedback/complaints process allows the name of the person providing the feedback or complaint to remain confidential.

12.3.3 Data security

MEAL work may involve collecting data that are sensitive. It also involves collecting data from individuals about their own experiences, perceptions, or beliefs. Part of maintaining the confidentiality of this data is ensuring that it is kept in a secure place. If you have hand-written notes from KIIs and FGDs, they should be kept somewhere where no one else can read them, like a locked drawer or safe. For data that are kept on a computer, the computer should always be password protected and this password not shared with anyone outside of the MEAL team. Meal participants need to be comfortable with how their data is kept. If they are not, they will likely not provide you with accurate information.

12.4 Promote learning and informed decision-making

One of the criticisms of MEAL practice in the past was that MEAL practitioners come in, collect data from MEAL participants, and then leave with participants and other stakeholders never knowing the evaluation results or how they were used. The MEAL practitioner ends up writing a report, sending it to an organisation or donor, and that's the end of the process. Accountability in MEAL requires that this

not be the end of the process. Results should be shared to promote learning among all stakeholders, including MEAL participants, and inform decision-making in a project or initiative. Indeed, 'learning' is one of the four key components of MEAL. Ensuring that MEAL participants know the learnings that emerge from the data they have provided is essential for ethical MEAL practice. Effective evaluation is about shared learning. It is about everyone benefitting, not just the MEAL practitioner or the organisation implementing the project being evaluated.

The next chapter turns to providing details on how to foster learning and reporting.

12.5 GNH application

GNH Practices for Accountability	GNH Domain
1. Engage diverse MEAL stakeholder input in the design of KII, FGD, or survey questionnaire questions to ensure relevance and reduce bias	**Good Governance**: Engage diverse MEAL stakeholders in MEAL design & analysis
2. Provide opportunities to engage KII and FGD participants in the data collection process to promote accuracy and reduce bias e.g. outline the purpose of the MEAL activity and how data used, provide opportunities for MEAL participants to ask questions of the MEAL practitioner, summarize participants' comments and ask for confirmation of accuracy, provide a written summary of the KII or FGD to MEAL participants.	**Good Governance**: Engage diverse MEAL stakeholders in MEAL design & analysis
3. Engage diverse MEAL stakeholder input in the process of data analysis e.g. stakeholder review of codes and coding, circulate key analysis themes to stakeholders for input and to reduce bias.	**Good Governance**: Engage diverse MEAL stakeholders in MEAL design & analysis
4. Always gain consent of MEAL participants.	**Good Governance**
5. Provide a feedback and complaints process to MEAL participants	**Good Governance**
6. Store all data securely to safeguard confidentiality	**Good Governance**

The overall GNH MEAL lens on the next page highlights in red the GNH practices from the table above.


Psychological Wellbeing
Allow M&E participants to withdraw with no questions asked
Allow verbal consent from participants for whom written consent may be a challenge
Health
Engage diverse M&E stakeholders, including people with disabilities & women
Design data collection questions focused on people with disabilities
Time Use
Schedule the timing of data collection that is not disruptive to M&E participants' livelihoods or other priorities, esp. women
Education
Disseminate learning to all M&E participants and the broader community, incl. elders
Include learning that responds to the needs of vulnerable groups
Cultural Diversity & Resilience
Use local language for consent form, data collection, analysis, & sharing
Follow Driglam Namzha
Collect data from elders
Good Governance
Seek stakeholder input in design & analysis, incl. elders, women & PWD
Always gain the consent of M&E participants
Store data securely to protect confidentiality
Community Vitality
Disseminate relevant learning to the broader community when possible, incl. elders.
Ecological Diversity & Resilience
Use online data collection, analysis, & dissemination methods
Living Standards
Schedule the timing of data collection that is not disruptive to M&E participants' livelihoods, esp. women
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PROFESSIONALISM
PROFESSIONALISM

CHAPTER 13

LEARNING

13.1 Identify key findings emerging from data analysis

13.2 Provide recommendations

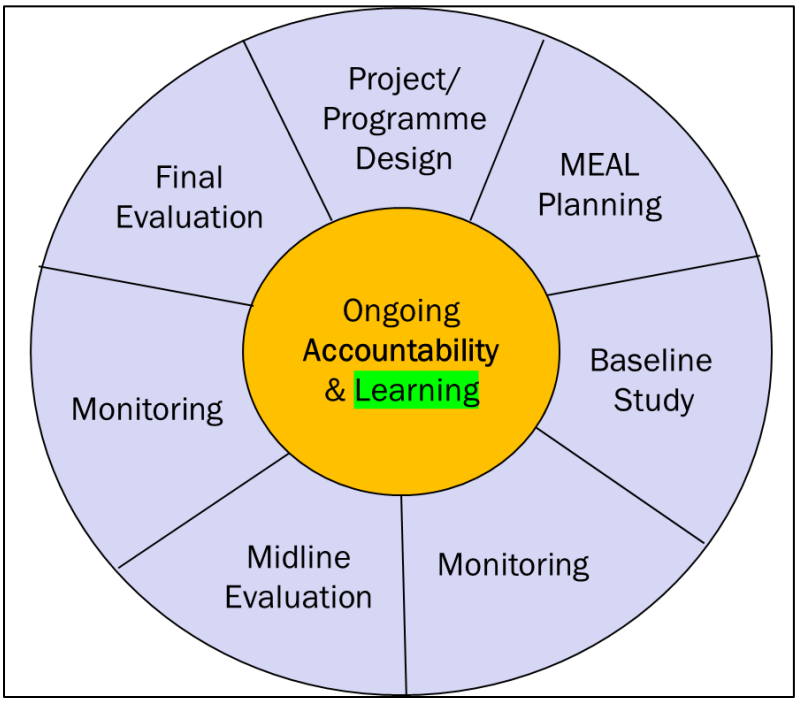
13.3 Report findings & recommendations

13.4 Broaden the dissemination of learnings

13.5 GNH application

13. LEARNING

Collecting monitoring and evaluation data, analysing it, and ensuring both of these processes are done in ways that promotes accountability are all critical components of the overall MEAL process. But it does not end there. When we have collected and analysed the data, we need to make sense of all the data and put it to good use. Too often, the results of a MEAL activity are written up as a report and then end up sitting on a shelf or computer somewhere, unused. Good MEAL practice will ensure that learning that emerges from monitoring and evaluation needs to be identified and shared. Ultimately, learning from the MEAL process needs to inform decision-making around a project. Learning is therefore the desired end of the MEAL process and, like accountability, is at the core of the process.



We can break down the learning aspect of MEAL into several components: i) identify key findings emerging from data analysis, ii) provide recommendations, iii) report findings and recommendations, and iv) broaden dissemination of learnings.

13.1 Identify key findings emerging from data analysis

Once data have been collected and analysed, key findings need to be identified. What has been learned from the data that answers the purpose of your MEAL activity (e.g. endline evaluation)? What learnings are there that can assist in decision-making?

As a MEAL practitioner who is familiar with project that is being evaluated and who has been involved in designing and implementing the MEAL framework to assess it, you are in an appropriate position to review the results of your data analysis and identify the key findings that emerge. What can we learn from the data analysis? Identify the key findings from the data and write them down in draft form. Remember that these key findings need to help you answer the evaluation purpose that is the overall focus of your work. In most cases, this will be whether a project has achieved its long-term, or Ultimate Outcome (see page 25 of chapter 4).

For example, suppose you are undertaking a midline evaluation of a project focused on improving the student support services within the TVET system. The *quantitative* data you analysed show that female trainees rank on-campus health services lower than male trainees do. In addition, your analysed *qualitative* data illustrate that female trainees rank health services lower because they feel there are gaps in services for women's health in particular. A key finding from this data is that the TVET system is inadequately supporting the health of female trainees.

When it is possible, it is good practice, and also a way to promote accountability, to share your draft key findings with project stakeholders, including MEAL participants and project staff. In this way, you can get not only their input on the findings but ensure stakeholders know the final results of the evaluation activity to which they contributed.

13.2 Provide recommendations

Identifying key findings that emerge from the data analysis is a critical part of identifying the learnings from the evaluation activity. The learning component of the MEAL process, however, should move one step further. The identified learning needs to be the basis for action or decision-making.

In order to move from learning to action, a set of recommendations should be developed based on the learning. These recommendations should address the evaluation's overall purpose. In the case of a midline evaluation, the recommendations should focus on how the project can be improved. For an endline evaluation, when the project has ended, the recommendations should focus on sustaining the results of the project in the long term.

To continue with our example above of a midline evaluation of a project focused on TVET student support services, a key finding is that the TVET system is inadequately supporting the health of female trainees. Based on the nature of the project, a recommendation that emerges from this finding might

then be that TVET institutions should work directly with female trainees in the remaining timeframe of the project to design appropriate women's health services for implementation at the project's end.

As a MEAL practitioner, you need to be sensitive when developing recommendations to what is realistic for the project and its aftermath. In other words, a project needs the funds, time, and personnel to carry out your recommendations. If recommendations are not realistic and cannot be carried out, the learning from the MEAL process is not useful.

13.3 Report findings and recommendations

After identifying key findings and developing recommendations, your findings and recommendations should be written up as a report. The report needs to be appropriate for its intended audience. If you are an external MEAL consultant, this report will be for the organisation that hired you. If you are a MEAL practitioner within the organization undertaking an evaluation, the report may be for upper management or for a donor. Whatever the case, make sure your report is tailored to the audience and provides clear recommendations that can be acted on if necessary.

In some cases, a reporting format may be provided to you e.g. by an international donor. If not, you will need to develop a format for your report. While it is up to you how you structure your report, the following is a suggested format.

Executive Summary (1 page): An overview of the entire report, including the purpose, methods, and results of the evaluation.

Introduction (1-3 paragraphs): A brief overview of the purpose of your report e.g. reporting the findings of a baseline evaluation.

Background (1-3 paragraphs): A brief review of relevant background information that is necessary for understanding the report e.g. an overview of the project that is being evaluated.

Methods (as long as needed): A description of the data collection and analysis methods used in the study. Describe if you used KIIs, FGDs, a survey or a combination of these as well as any sampling techniques used.

Findings (as long as needed): An overview of the results from your data analysis and the key findings that emerge from the analysis.

Recommendations (as long as needed): A discussion of the recommendations for the project or the post-project period based on the key findings. Remember, these recommendations should focus on improving the project or sustaining it after completion, and they need to the realistic and achievable.

Conclusion (1-2 paragraphs): A short summary of your report.

Appendices: It is good MEAL practice to include copies of the Interview Guide(s) and survey questionnaire(s) that were used.

13.4 Broaden the dissemination of learnings

Submitting a report to project management or the donor is critical. The report can then be used to improve or adapt the project or sustain its results after completion based on the learning that emerged from the MEAL process. The process of learning does not need to stop here, however. If possible, try to share the learnings more broadly among those who might benefit from them.

First, share the learnings with your colleagues within your organization through meetings, presentations, or even informal discussions. Second, if there are no issues with confidentiality, share the learnings outside of your organization. What can other people or projects learn from your project's experience? You can disseminate the learning from your MEAL activity externally through meetings with other organisations, blogs, website information, or conference presentations. Make sure, however, that if you intend to share learnings externally, that you have included this information in the consent form you create for the MEAL participants in the data collection process. Never disseminate learning or present MEAL data in ways that have not been consented to by the participants in your survey, KIIs or FGDs.

13.5 GNH application

GNH Practices for Learning	GNH Domain
1. Disseminate learnings to all MEAL participants if possible.	**Education**
2. Include learnings that respond to the needs of marginalised groups like vulnerable women and people with disabilities.	**Education** **Health:** disability
3. Disseminate relevant learnings to the broader community where possible, including elders	**Community vitality**
4. When disseminating lessons to stakeholders, seek to use online methods where appropriate to reduce the use of paper.	**Ecological diversity & Resilience**

The next page provides the overall GNH MEAL lens with the GNH practices from the above table highlighted in red.


Psychological Wellbeing
Allow M&E participants to withdraw with no questions asked
Allow verbal consent from participants for whom written consent may be a challenge
Health
Engage diverse M&E stakeholders, including people with disabilities & women
Design data collection questions focused on people with disabilities
Time Use
Schedule the timing of data collection that is not disruptive to M&E participants' livelihoods or other priorities, esp. women
Education
Disseminate learning to all M&E participants and the broader community, incl. elders
Include learning that responds to the needs of vulnerable groups
Cultural Diversity & Resilience
Use local language for consent form, data collection, analysis, & sharing
Follow Driglam Namzha
Collect data from elders
Good Governance
Seek stakeholder input in design & analysis, incl. elders, women & PWD
Always gain the consent of M&E participants
Store data securely to protect confidentiality
Community Vitality
Disseminate relevant learning to the broader community when possible, incl. elders.
Ecological Diversity & Resilience
Use online data collection, analysis, & dissemination methods
Living Standards
Schedule the timing of data collection that is not disruptive to M&E participants' livelihoods, esp. women
PROFESSIONALISM
EMPOWERMENT
RESPECT
INCLUSION
ACCESSIBILITY
PROFESSIONALISM
PROFESSIONALISM
PROFESSIONALISM

APPENDICES

Appendix 1: Sample Performance Measurement Framework (MEAL Plan) – Partial plan from the BEST project

Performance Measurement Framework								
EXPECTED RESULTS	**CODE**	**INDICATORS**	**BASELINE DATA**	**TARGETS**	**DATA SOURCES**	**DATA COLLECTION METHODS**	**FREQUENCY**	**RESPONSIBILITY**
ULTIMATE OUTCOME								
1000: Improved economic participation for TVET graduates of a reformed, inclusive, and environmentally responsive TVET system	1000.1	%/total # of graduates who are employed in their field within 6 months of graduation (disaggregated by sex, age, PWD)	31% Sex Female : 28% Male: 33% Age (MoESD age categories) 18-24 years: 28% 25-30: 35% 31-35: 26% 36-40: 31% Ability/disability PWD: 50% No disability: 31%	60% by end of project	TVET graduates	Tracer study survey	Twice (Final 2 years of project, incl final eval)	MEAL Lead and MEAL officer
	1000.2	Level of satisfaction within industry of ability of TVET graduates to fill labour market needs in an environmentally responsive manner.	52.64%	90%	Industry partners	Survey & focus groups	Twice (Final 2 years of project, incl final eval)	
INTERMEDIATE OUTCOMES								

Performance Measurement Framework								
EXPECTED RESULTS	**CODE**	**INDICATORS**	**BASELINE DATA**	**TARGETS**	**DATA SOURCES**	**DATA COLLECTION METHODS**	**FREQUENCY**	**RESPONSIBILITY**
1100 Increased participation of learners particularly among youth, women and vulnerable learners in TVET education	1100.1	# of enrolled students annually in public TVET institutions (disaggregated by sex, age, PWD)	922 <u>Gender</u> Female:233 Male: 689 <u>Age</u> 18-24 years: 709 25-29: 148 30-34: 44 35-39: 21 40+: 0 <u>PWD</u> PWD: 0 No disability: 922	2300 by end of project (60% male 40% female)	Government & TVET institutions' records	Analysis of records	Annually	MEAL officer
	1100.2	%/ total # of enrolled students who are youth, women, and people with disabilities	25% female 76.89% youth (18-24 yrs) 0% PWD	40% females 85% Youth 2% PWD				
1200 Strengthened effectiveness of TVET agencies and institutions	1200.1	%/total # of students who enter a TVET institution who graduate	50%	70% by the end of the project	Government & TVET institutions' records	Analysis of records	Annually	MEAL Lead and MEAL officer

Performance Measurement Framework								
EXPECTED RESULTS	**CODE**	**INDICATORS**	**BASELINE DATA**	**TARGETS**	**DATA SOURCES**	**DATA COLLECTION METHODS**	**FREQUENCY**	**RESPONSIBILITY**
to provide inclusive and environmentally responsive TVET education to trainees, especially women	1200.2	Level of satisfaction among TVET graduates with the quality of their TVET education (disaggregated by sex, age, PWD)	65% Sex Females: 62% Males: 66% Age (MoESD age categories) 18-24 years: 63% 25-30: 66% 31-35: 67% 36-40: 63% Ability/disability PWD: 53% No disability: 65%	85% by the end of the project	TVET graduates	Tracer study survey; Focus groups	Annually	
IMMEDIATE OUTCOMES								
1110 Strengthened capacity of TVET institutions to recruit and counsel students, especially youth, women and PWD	1110.1	%/total # of TVET institutions that implement new recruitment and counseling strategies & systems	0%	100% by the end of the project	TVET institutions	Survey/Key informant interviews	Annually beginning in year 3 of the project	MEAL Lead and MEAL officer
	1110.2	Level of confidence among counselling staff at TVET institutions in their ability to effectively counsel students, including women, youth and PWD	12.5% Females: 100% Males: 0% Disability: 100% No disability: 0% 18 -29 years: 100% 30-49 years: 0% 50-64 years: 0% 65+ years: 0%	70%	TVET institution staff	Surveys/key informant interviews	Twice (mid eval. & final eval.)	

Performance Measurement Framework								
EXPECTED RESULTS	**CODE**	**INDICATORS**	**BASELINE DATA**	**TARGETS**	**DATA SOURCES**	**DATA COLLECTION METHODS**	**FREQUENCY**	**RESPONSIBILITY**
	1110.3	Level of confidence among recruitment staff at TVET institutions in their ability to effectively recruit students, including women, youth and PWD (disag. by sex, age, PWD)	11.11% Females: 0% Males: 15.38% Disability: 0% No disability: 0% 18 -29 years: 25% 30-49 years: 8.33% 50-64 years: 0% 65+ years: 0%	70%	TVET institution staff	Survey/Key informant interviews	Twice (2025 - mid eval. & 2027 - final eval.)	
1210 Increased effectiveness of national TVET agencies and TVET institutions to manage a reformed, gender & disability inclusive, and environmentally responsible TVET system	1210.1	Level of confidence among TVET officials in their ability to manage a reformed TVET system that is gender sensitive, disability inclusive and environmentally responsible (disag. by sex, age, official type)	50% Females: 42.86% Males: 53% 18-29 years: 66.67% 30-49 years: 44.44% 50-64 years: 62.5% Govt officials: 50% TVET administrators: 50%	75%	TVET officials	Survey and focus groups	Twice (2025 - mid eval. & 2027 - final eval.)	MEAL Lead and MEAL officer
	1210.2	%/total # of revised courses that are initiated within their	0%	100%	Project records	Analysis of records	Annually beginning in year 4 of the project	

Performance Measurement Framework								
EXPECTED RESULTS	**CODE**	**INDICATORS**	**BASELINE DATA**	**TARGETS**	**DATA SOURCES**	**DATA COLLECTION METHODS**	**FREQUENCY**	**RESPONSIBILITY**
		designated timeline						
1220 Strengthened capacity of targeted TVET partner institutions to develop gender-responsive programs that meet economic and environmental needs	1220.1	%/total # of courses developed through BEST that industry partners confirm as relevant to emerging economic sectors	0%	100%	Meeting records of TVET/Industry partnerships	Analysis of records	Twice (2025 - mid eval. & 2027 - final eval.)	MEAL officer
	1220.2	%/total # of courses developed through BEST that incorporate a gender-related concept, strategy or skill	0%	100%	TVET curriculum	review of curriculum		
	1220.3	%/total # of courses developed through BEST that incorporate an environmental sustainability concept, strategy or skill.	0%	100%	TVET curriculum	review of curriculum		

Performance Measurement Framework								
EXPECTED RESULTS	**CODE**	**INDICATORS**	**BASELINE DATA**	**TARGETS**	**DATA SOURCES**	**DATA COLLECTION METHODS**	**FREQUENCY**	**RESPONSIBILITY**
1230 Increased effectiveness of TVET partner institutions to deliver inclusive, industry-relevant, environmentally responsive, skills training programs to students	1230.1	%/total # of TVET instructors who apply at least one named teaching technique learned through BEST project activities (disag. By sex, age, PWD)	0%	75%	TVET instructors	Survey	Twice - years 4 and 5	MEAL Lead and MEAL officer
	1230.2	Level of TVET students' satisfaction with the quality of their instructors (disaggregated by sex, age, disability).	66% <u>Sex</u> Female: 66% Male: 66% <u>Age (MoESD age categories)</u> 18-24 yrs: 67% 25-30: 66% 31-35: 59% 36-40: 81% <u>Ability/disability</u> PWD: 71% No Disability: 66%	87%	TVET institutions' records	Analysis of records	Annually	
OUTPUTS								
1111 TVET staff are trained on gender inclusive recruitment strategies	1111.1	%/total # of TVET institutions that have staff complete the training	0%	100% by the end of project	Project records	Analysis of records	Annually beginning in year 2	Field Officer and MEAL officer

Performance Measurement Framework								
EXPECTED RESULTS	**CODE**	**INDICATORS**	**BASELINE DATA**	**TARGETS**	**DATA SOURCES**	**DATA COLLECTION METHODS**	**FREQUENCY**	**RESPONSIBILITY**
1112 Policies and procedures are established at each institution with the aim to remove barriers to equitable access to TVET	1112.1	%/total # of TVET institutions that have established updated policies and procedures to remove barriers for equitable access to TVET	0%	100% by end of project	Project records	Analysis of records	Annually beginning in year 2	Field Officer and MEAL Officer
1113 Recruitment activities are conducted at TVET institutions targeted at vulnerable learners including women and people with disabilities	1113.1	%/total of TVET institutions that conduct recruitment activities targeted at vulnerable learners	12.50%	100% by the end of project	Project records	Analysis of records	Annually beginning in year 3	Field Officer and MEAL Officer
1114 TVET staff and faculty are trained on gender-sensitive, environment responsive, and disability-inclusive admissions, advising, and counseling services at TVET institutions	1114.1	%/total # of TVET institutions that have staff complete the training	0%	100% by the end of project	Project records	Analysis of records	Annually beginning in year 3	Field Officer and MEAL Officer

Performance Measurement Framework								
EXPECTED RESULTS	**CODE**	**INDICATORS**	**BASELINE DATA**	**TARGETS**	**DATA SOURCES**	**DATA COLLECTION METHODS**	**FREQUENCY**	**RESPONSIBILITY**
1211 Revised national policies and procedures for TVET systems completed	1211.1	%/total of proposed policy/procedure suites for revision that are completed and approved by MoLHR (now MoESD)	0%	100% of policy/procedure suites	Project records	Analysis of records	Annually beginning in year 2	Field Officer
1212 Leadership and governance training delivered to TVET agencies and TVET institutions embedded with GE, ES, and GNH	1212.1	% /total of TVET agencies and institutions that have staff complete the training.	0%	100%	Project records	Analysis of records	Annually beginning in year 2	Field Officer
1213 Gender mainstreaming and environmental best practices embedded with GE, ES, and GNH in TVET agencies and TVET institutions	1213.1	%/total TVET agencies and institutions that have gender mainstreaming practices embedded with GE, ES and GNH	0%	100%	Project records	Analysis of records	Annually beginning in year 3	Field Officer and MEAL Officer
	1213.2	%/total # TVET agencies and institutions that have environmental best practices embedded with GE, ES and GNH.	0%	100%	Project records	Analysis of records	Annually beginning in year 3	

Performance Measurement Framework								
EXPECTED RESULTS	**CODE**	**INDICATORS**	**BASELINE DATA**	**TARGETS**	**DATA SOURCES**	**DATA COLLECTION METHODS**	**FREQUENCY**	**RESPONSIBILITY**
1221 Gender-sensitive labour market analysis and audits completed using GBA+ tool	1221.1	# of gender-sensitive labour market analysis and institutional gender analyses completed	0	2 by the 2nd quarter of year 3	Project records	Analysis of records	Annually from years 1 - 3	Field Officer
1222 Industry-responsive courses developed that align with the TVET reform agenda, labour market needs, GNH, and embed GE	1222.1	# of courses developed	0	4 courses by end of year 3	Project records	Analysis of records	Annually beginning in year 2	Field Officer
1223 Training provided to curriculum developers at DTE and TVET institutions on CBET curriculum development that incorporates GE, ES and GNH principles	1223.1	%/total of targeted agencies (DTE and TVET institutions) that have staff complete training on CBET curriculum development that incorporates GE, ES and GNH	0%	100% by year 3 of project	Project training records	Analysis of records	Annually beginning in year 1	Field Officer

Performance Measurement Framework								
EXPECTED RESULTS	**CODE**	**INDICATORS**	**BASELINE DATA**	**TARGETS**	**DATA SOURCES**	**DATA COLLECTION METHODS**	**FREQUENCY**	**RESPONSIBILITY**
1231 Capacity built of TVET instructors in standardized CBET pedagogical and technical skills adapted to the Bhutanese context	1231.1	# of TVET instructors who complete a capacity building initiative in CBET pedagogical and technical skills, including GE considerations (disag. by sex, age, PWD & institution)	0	150	Project training records	Analysis of records	Annually beginning in year 2	Field Officer
1232 Inclusive TVET resource centre established for knowledge sharing and continuous professional development	1232.1	# of TVET resource centres established	0	1 by end of year 3	Project records	Analysis of records	Twice- at end of year 3 and final eval	Field Officer

Appendix 2: Sample Interview Guide from the BEST project

Interview Guide for KIIs with TVET instructors
BEST Project
BEST Baseline Study
July 2022

Date:
Location:
Key informant code:
Gender:
Interviewer:

Questions:

1. What attracted you to becoming an instructor in the TVET sector?

2. In your opinion, how relevant is the curriculum you teach when compared to the needs of the 21st century Bhutanese economy?

3. What kinds of teaching methods or pedagogy do you use?

4. How important is it for you to learn new kinds of teaching methods?

5. How appropriate is the equipment and materials you have for teaching in your course?

6. In your opinion, how important is it to draw upon international practices in the TVET sector? e.g. in curriculum design and teaching methods.

7. Based on your experience as a TVET instructor, what issues do female students face in their TVET education that male students do not face?

8. Based on your experience as a TVET instructor, what issues do students with disabilities face in their TVET education that students without disabilities do not face?

9. Please describe any relationships you or your institution have with industry.

10. What kinds of support do you need from your institution or the ministry to help you do your job in a way that best prepares graduates for technical careers?

Appendix 3: Sample Consent FORM from the BEST project

Consent Form for KIIs and FGDs
BEST Project
Baseline Study
July 2022

Thank you for participating in this interview. The reason for this interview is to collect information from a variety of people to initiate the Bhutan Education and Skills Training project, known as the BEST project. The BEST project is a 5-year project led by the Ministry of Labour & Human Resources and Humber College of Toronto, Canada, in partnership with the Bhutan Canada Foundation and RENEW. The project is funded by the Government of Canada. BEST will contribute to reforming the Technical and Vocational Education and Training sector, known as TVET, in order to provide young people and others with the technical skills needed for jobs in Bhutan's economy.

You will be asked questions to start a conversation in this interview. The questions and conversation will last between 30 – 60 minutes. The questions will ask for your ideas and opinions based on your own experience. It is not meant as a test but for you to share your experience with us. The information collected during the interview will be used to make the BEST project as effective as possible.

All information supplied during the interview will be kept confidential. Written notes from the interview will be taken but will be kept anonymous in that we will not use your name or any detailed information in the notes. The notes will be safely stored on a password protected computer and shared with no one other than BEST project evaluators.

Your participation is completely voluntary and you may choose to withdraw from the interview at any time without giving a reason. You may also choose to not answer specific questions without giving a reason. You can also ask any questions you want of the interviewer before or throughout the interview.

If you have any questions or concerns after the interview is completed, you can contact the interviewer at xxxx@xxxxx.com.

I have read the above and consent to participating in the interview.

Name:

Signature:

Date:

Appendix 4: Sample in-person Survey Questionnaire from the BEST project

Community Survey
BEST Project
Baseline Study
July 2022

Interviewer's Script:

Hello, I am doing a short survey on education in Bhutan.

The survey is being undertaken by Humber College from Canada, RENEW and the Ministry of Labour & Human Resources. The survey will collect information from a variety of community people to better understand how their understanding and support for Technical & Vocational Education & Training, also known as TVET.

The results of the survey will be used to plan the Bhutan Education and Skills Training project, known as the BEST project. The BEST project is a 5-year project led by the Ministry of Labour & Human Resources and Humber College of Toronto in partnership with the Bhutan Canada Foundation and RENEW. The project is funded by the Government of Canada. BEST will contribute to reforming the Technical and Vocational Education and Training sector in order to provide young people and others with the technical skills needed for jobs in Bhutan's economy.

The survey takes about 10 minutes. I will not ask your name and you will remain completely anonymous. You can end the survey at any time without providing a reason. You can also choose not to answer specific questions without providing a reason.

Do you consent to taking the survey?

Questions:

Most of the following questions will ask you whether you agree or disagree with the question. Please answer each question with either strongly agree, agree, neither agree nor disagree, disagree, or strongly disagree. I will read these options again after each question if needed.

1. It is important for a Bhutanese person to continue their education after graduating from secondary school.

    1. Strongly agree
    2. Agree
    3. Neither agree nor disagree (neutral)
    4. Disagree
    5. Strongly disagree

2. Getting a good job requires completing a tertiary education course at a university or college.

    1. Strongly agree

2. Agree
3. Neither agree nor disagree (neutral)
4. Disagree
5. Strongly disagree

3. Bhutanese youth are interested in getting jobs in technical areas like construction, logistics, manufacturing or digital technology.

1. Strongly agree
2. Agree
3. Neither agree nor disagree (neutral)
4. Disagree
5. Strongly disagree

4. How would you describe your level of knowledge about Technical and Vocational Education and Training, also known as TVET? Do you have:

1. A great amount of knowledge about TVET education
2. Considerable knowledge
3. Some knowledge
4. A little knowledge
5. No knowledge

5. TVET is education that enables students to learn technical skills for employment in fields like digital technology, construction, logistics and manufacturing. To what extent do you agree with the following statement: Learning technical skills at a TVET institution is a good pathway to getting a job.

1. Strongly agree
2. Agree
3. Neither agree nor disagree (neutral)
4. Disagree
5. Strongly disagree

6. An education focused on technical skills is more appropriate for a male than for a female.

1. Strongly agree
2. Agree
3. Neither agree nor disagree (neutral)
4. Disagree
5. Strongly disagree

7. Completing a course in technical education at a Technical Training Institute is a better pathway to getting a job than completing a course at a university or college.

1. Strongly agree
2. Agree
3. Neither agree nor disagree (neutral)

4. Disagree
5. Strongly disagree

8. Women are just as likely as men to successfully complete a technical education course at a Technical Training Institute

1. Strongly agree
2. Agree
3. Neither agree nor disagree (neutral)
4. Disagree
5. Strongly disagree

9. A person with a disability is just as likely as a person who does not have a disability to complete a technical education course at a Technical Institute

1. Strongly agree
2. Agree
3. Neither agree nor disagree (neutral)
4. Disagree
5. Strongly disagree

10. It is difficult for a female to get a job that requires technical skills

1. Strongly agree
2. Agree
3. Neither agree nor disagree (neutral)
4. Disagree
5. Strongly disagree

11. It is difficult for a person with a disability to get a job that requires technical skills

1. Strongly agree
2. Agree
3. Neither agree nor disagree (neutral)
4. Disagree
5. Strongly disagree

12. Equality between males and females in Bhutan will increase if more women learn technical skills through an education course at a Technical Training Institute.

1. Strongly agree
2. Agree
3. Neither agree nor disagree (neutral)
4. Disagree
5. Strongly disagree

13. I would recommend getting a TVET education to a friend or family member who wants to continue their education.

1. Strongly agree
2. Agree
3. Neither agree nor disagree (neutral)
4. Disagree
5. Strongly disagree

14. I would recommend getting a TVET education to a friend or family member who is female and wants to continue her education.

1. Strongly agree
2. Agree
3. Neither agree nor disagree (neutral)
4. Disagree
5. Strongly disagree

15. I would recommend getting a TVET education to a friend or family member who has a disability and wants to continue their education.

1. Strongly agree
2. Agree
3. Neither agree nor disagree (neutral)
4. Disagree
5. Strongly disagree

16. It is important for the TVET education system to incorporate the philosophy of Gross National Happiness.

1. Strongly agree
2. Agree
3. Neither agree nor disagree (neutral)
4. Disagree
5. Strongly disagree

17. Overall, I support TVET education with its focus on technical skills as a good education option for Bhutanese.

1. Strongly agree
2. Agree
3. Neither agree nor disagree (neutral)
4. Disagree
5. Strongly disagree

Post-survey interviewer's script:

Thank you very much for your answers.

18. Can you please tell me your age:

1. 18 years or under
2. 19 – 29 years,

3. 30 – 49 years,
4. 50 – 64 years,
5. 65 years or above
6. Prefer not to say

19. What is your gender?

1. Female,
2. Male,
3. Other gender, or
4. Prefer not to say

20. In which Dzongkhag do you live?

1. Bumthang
2. Chukha
3. Dagana
4. Gasa
5. Haa
6. Lhuentse
7. Mongar
8. Paro
9. Pemagatshel
10. Punakha
11. Samdrup Jongkhar
12. Samtse
13. Sarpang
14. Thimphu
15. Trashigang
16. Trashiyangtse
17. Trongsa
18. Tsirang
19. Wangdue Phodrang
20. Zhemgang

Interviewer's script: Lastly, we are interested in understanding different people's views on TVET education based on their health status. These final questions therefore ask about difficulties you may have doing certain activities because of a health problem.

21. Do you have difficulty seeing, even if wearing glasses? Would you say… [Read response categories below]

1. No difficulty
2. Some difficulty
3. A lot of difficulty
4. Cannot do at all
5. Prefer not to say
6. Don't know

22. Do you have difficulty hearing, even if using a hearing aid? Would you say… [Read response categories]

1. No difficulty
2. Some difficulty
3. A lot of difficulty
4. Cannot do at all
5. Prefer not to say
6. Don't know

23. Do you have difficulty walking or climbing steps? Would you say… [Read response categories]

1. No difficulty
2. Some difficulty
3. A lot of difficulty
4. Cannot do at all
5. Prefer not to say
6. Don't know

24. Do you have difficulty remembering or concentrating? Would you say… [Read response categories]

1. No difficulty
2. Some difficulty
3. A lot of difficulty
4. Cannot do at all
5. Prefer not to say
6. Don't know

25. Do you have difficulty communicating, for example understanding or being understood? Would you say… [Read response categories]

1. No difficulty
2. Some difficulty
3. A lot of difficulty
4. Cannot do at all
5. Prefer not to say
6. Don't know

Thank you for your participation.