

**NATURAL RESOURCES CONSERVATION AND
DEVELOPMENT**

NTQF Level -II

Learning Guide #33

Unit of Competence: - Demonstrate Routine Site
Assessment and Measurements

Module Title: - Demonstrating Routine Site
Assessment and Measurements

LG Code:- AGR NRC2 M01 LO1-LG-33

TTLM Code: AGR NRC2 TTLM 0919v1

LO 4: - Finalize Work and Report

This learning guide is developed to provide you the necessary information regarding the following **content coverage** and topics –

- Identifying and searching information
- Identifying alternatives resources

This guide will also assist you to attain the learning outcome stated in the cover page.

Specifically, upon completion of this Learning Guide, **you will be able to**

- Identify and searching information
- Identify alternatives resources

Learning Instructions:

1. Read the specific objectives of this Learning Guide.
2. Follow the instructions described in number 3 to 20.
3. Read the information written in the “Information Sheets 1”. Try to understand what are being discussed. Ask you teacher for assistance if you have hard time understanding them.
4. Accomplish the “Self-check 1” in page 5.
5. Ask from your teacher the key to correction (key answers) or you can request your teacher to correct your work. (You are to get the key answer only after you finished answering the Self-check 1).
6. If you earned a satisfactory evaluation proceed to “Information Sheet 2”. However, if your rating is unsatisfactory, see your teacher for further instructions or go back to Learning Activity #1.
7. Submit your accomplished Self-check. This will form part of your training portfolio.
8. Read the information written in the “Information Sheet 2”. Try to understand what are being discussed. Ask you teacher for assistance if you have hard time understanding them.
9. Accomplish the “Self-check 2” in page 7.
10. Ask from your teacher the key to correction (key answers) or you can request your teacher to correct your work. (You are to get the key answer only after you finished answering the Self-check 2).
11. Read the information written in the “Information Sheets 3 . Try to understand what are being discussed. Ask you teacher for assistance if you have hard time understanding them.
12. Accomplish the “Self-check 3” in page 11.
13. Ask from your teacher the key to correction (key answers) or you can request your teacher to correct your work. (You are to get the key answer only after you finished answering the Self-check 3).
14. If you earned a satisfactory evaluation proceed to “Operation Sheet 1” in page 12. However, if your rating is unsatisfactory, see your teacher for further instructions or go back to Learning Activity #1.
15. Read the “Operation Sheet 1” and try to understand the procedures discussed.



16. If you earned a satisfactory evaluation proceed to “Operation Sheet 2” in page 13. However, if your rating is unsatisfactory, see your teacher for further instructions or go back to Learning Activity #1.
17. Read the “Operation Sheet 2” and try to understand the procedures discussed.
18. If you earned a satisfactory evaluation proceed to “Operation Sheet 3” in page 14. However, if your rating is unsatisfactory, see your teacher for further instructions or go back to Learning Activity #1.
19. Read the “Operation Sheet 3” and try to understand the procedures discussed.
20. Do the “LAP test” in page 15 (if you are ready). Request your teacher to evaluate your performance and outputs. Your teacher will give you feedback and the evaluation will be either satisfactory or unsatisfactory. If unsatisfactory, your teacher shall advise you on additional work.



Information Sheet-1	Following enterprise procedures
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1.1. Following enterprise procedures

Following enterprise procedures for **tools and equipment** cleaning, storing/ decontamination of equipment and vehicle as necessary for the safety and durability of it.

For proper use of equipments and tools after need frequent cleaning either through chemical, mechanical or manual means which include

- ✓ Clean foreign matter or pollutants;
- ✓ Make free of dirt or impurities;
- ✓ Make free of infection or diseased;
- ✓ Freshly laundered or washed after use;
- ✓ Particular about personal hygiene: taking pains over personal hygiene or grooming;
- ✓ Make free of problems: without problems or difficulties;
- ✓ Make smooth-edged: without rough or jagged edges;
- ✓ Make it produce the least possible pollution;
- ✓ Minimally radioactive: producing the least possible radioactive fallout or contamination;
- ✓ free of weeds: cleared of weeds and unwanted undergrowth
- ✓ Make it free of dirt: to rid something of dirt or impurities
- ✓ Remove dirt: to get rid of unwanted dirt, stains, or marks

Do Not Use the equipment -

- without reading the manual of instructions
- outside of the intended limit
- disabling safety system and removal of hazard notices
- modification and conversion of the instrument
- open with instruments / tools, unless specified or required
- accessories from other manufacturers without approval

Store Equipments and tools safely

- There should have a sufficient supply of tools for different operations. A good care should be taken of the tools, which would then have a long life. It is not wise to keep workers sitting idle at critical periods of work because of shortage of tools. A list of standard tools is provided below.
- All tools should be hung or otherwise stored in fixed place where they can be readily found. They should be stored in-groups of similar articles so that checking to ensure that all have been returned after work done at a glance.
- Store the instrument inside the vehicle when not in use in the field.
- Make sure the instrument is dry before storing.
- Damp instrument must be unpacked



Self-Check -1	Written Test
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Name: _____

Date: _____

Short Answer Questions

Directions: Answer all the questions listed below. Use the Answer sheet provided in the next page:

1. Mention proper use of equipments and tools after need frequent cleaning either through chemical, mechanical or manual means? (10points)

Note: Satisfactory rating >5 points

Unsatisfactory - below 5 points

Answer Sheet

Score = _____

Rating: _____



Information Sheet-2	Documenting and Reporting the result of assessment
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2.0. Documenting and Reporting the result of assessment

Documenting result of information

- Information which is extracted from different sources should be documented for future use.
- Documentation of extracted information would help in collecting all relevant information together as evidence or as reference material for required purposes which would further help in providing written details or information about land situation.
- Extracted information may be documented based on but not limited to:
 - date of extraction
 - sources of extraction
 - purpose of extraction
 - Relationship of information

Preparing report/correspondence

Developing a report/correspondence format, plan and structure

Report is needed to give information about the situation in logical order or to inform relevant personnel in authority about the situation that has happened

Format of the report

To meet the needs of these different users of the report, it has frequently been found useful to divide the plan into the following sections:

- ❖ ***Executive summary:*** a summary of the land situation, its problems, the opportunities and the recommendations for action, i.e. the focal point. Reasons for decisions taken are given, but only briefly. Clear, concise writing is of the highest importance. This section should include at least one key map, the (master) land-use plan and possibly other maps at small scales.
- ❖ ***Main report:*** Explains the methods, findings and factual basis of the plan. Written for technical and planning staff who wants to know details, including reasons for decisions taken. Often five to ten times as long as the executive summary.
- ❖ ***Maps volume:*** An integral part of the main report, presented separately for convenience of binding with Appendixes. Give the technical data that support the main report. These may run to several volumes. They include the results from original surveys conducted as part of the plan, e.g. soil surveys, forest inventories, records of river flow.

Example of headings for a report

TITLE

SUMMARY

- *Highlight problems, recommendations and the main reasons for these recommendations.*

INTRODUCTION

- *The long-term goals for the planning area and the purpose of the plan*



- *Relationship with other documents. Briefly describe legislation and any higher-level plans as well as local plans that are related to this plan.*
- *Description of the planning area. A brief overview of location, area, population, land resources, current land use and production*

MANAGEMENT PROBLEMS AND OPPORTUNITIES

- *Statement of land-use problems and opportunities.*
- *Rationale for the selected option.*
- *Summary of the changes the plan will bring about, by subject area or geographic area.*

DIRECTION

- *List land-use types and standards that apply to the whole planning area and to individual planning units.*
- *Identify projects. Illustrate with maps and diagrams.*
- *Time scale for action.*

MONITORING AND REVISION

- *Describe the procedure for reviewing progress and revising the plan.*

WORK PLAN FOR IMPLEMENTATION

- *List individual projects with details of location, time, resources required and responsibility for implementation.*

APPENDIXES

- *Supporting information:- physical environment, planning units, agroclimate and soil data;*
 - *population, settlement, infrastructure, tenure;*
 - *present land use;*
 - *land-use types and land requirements;*
 - *land suitability;*
 - *economic projections.*

Public relations material

Relatively few people will read the full planning document, a larger number will read the executive summary, but a lot of people need to be informed about the plan. Equally important is a range of public information documents, posters and press releases which are needed to inform the people about the plan, its relevance, the benefits to the community as a whole and the participation needed from different sections of the community. This additional material will draw on the main report but should be specially prepared and well illustrated to secure the most effective participation of all parties.

Writing a report/correspondence

- ✓ After deciding the format of the report the next step is to write a report or account of something from notes made earlier and making communication by means of exchanged written messages such as letters

Formatting a report/correspondence according to enterprise policies and procedures.

- ✓ Revising and updating of the report up to date by writing additional entries according to enterprise policies and procedures.



Checking report/correspondence for accuracy

- ✓ Regularly check the report for updates and correctness with the tangible situation as of comparing with the changes of the local situation.

Finalizing report/correspondence

- ✓ Arranging review and sign off of report/correspondence
- ✓ Forwarding report/correspondence to client



Name: _____

Date: _____

➤ **Short Answer Questions**

Self-Check -2	Written Test
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Directions: Answer all the questions listed below. Use the Answer sheet provided in the next page:

1. List the contents of a format of the report.(3points)
2. How does extracted information may be documented?(2points)
3. How does finalizing report/correspondence?(5points)

Note: Satisfactory rating >5 points

Unsatisfactory - below 5 points

Answer Sheet

Score = _____
Rating: _____



Information Sheet-3	Recording and documenting work out comes
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1.0 Recording and documenting work out comes

Why Recording and documenting?

Different request would be coming in to you through various means. Those requests may have also different purposes. Therefore, documenting the request accordingly would help you to properly react to request with referring to it. This would further avoid complication and promote keeping evidence for future use. Moreover, identification of request is important to process information and document those information for erosion assessment and measurement I in the planning area. Some of the requested/ required information may be obtained from documented report, maps and aerial photographs if available. However, much of the information will have to be collected from field reconnaissance.

Thus, documenting information would help in obtaining information with saving time and resources with limited core disciplines.

The format of soil erosion assessment and measurement for documentation purpose consists:

- a) **The development map:** The location of the development measures are shown on this map. The extension worker therefore can easily locate on the ground where various soil and water conservation measures to be built. In addition any development work that has been previously implemented (which has been indicated on the present land use map) should be also recorded on this map
- b) **A table of inputs:** After completing the development map the next step is preparing the table of inputs to determine the appropriate inputs required for implementing the plan. The volume of inputs required can be estimated from the extent of the work, specification, availability of tools, materials, labour and others.
- c) **The time table:** A time table for the development measure should be prepared. The time table is used when to implement the various development measure and quantity of labour and other material required.

Recording and documenting system

- Manual/hard copy
- Digital and soft copy



Name: _____

Date: _____

➤ **Short Answer Questions**

Self-Check -3	Written Test
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Directions: Answer all the questions listed below. Use the Answer sheet provided in the next page:

1. Why recording and documenting information? (3points)
2. What does the format of documentation purpose consists of?(5points)
3. List the two Recording and documenting system .(2points)

Note: Satisfactory rating >5 points

Unsatisfactory - below 5 points

Answer Sheet

Score = _____
Rating: _____



List of Reference Materials

1- BOOKS

Mitiku, H., Herweg, K., Stillhardt, B., 2006 *Sustainable Land Management – A New Approach to Soil and Water Conservation in Ethiopia*. Mekelle, Ethiopia: Land Resources Management and Environmental Protection Department, Mekelle University; Bern, Switzerland: Centre for Development and Environment (CDE), University of Bern, and Swiss National Centre of Competence in Research (NCCR) North-South. 269 pp.

LAND DEGRADATION ASSESSMENT IN DRYLANDS (LADA) PROJECT.____. Manual for local level assessment of land degradation, sustainable land management and Livelihoods: part2 – Field methodology and tools.

Liniger, H.P., R. Mekdaschi Studer, C. Hauert and M. Gurtner. 2011. *Sustainable Land Management in Practice – Guidelines and best Practices for Sub-Saharan Africa*. TerrAfrica, World Overview of Conservation Approaches and Technologies (WOCAT) and Food and Agriculture Organization of the United Nations (FAO).

Humberto Blanco and Rattan Lal.2008. *Principles of Soil Conservation and Management*. Current address:Kansas State University Western Agricultural Research Center-Hays 1232 240th Avenue Hays, KS 67 601 USA; The Ohio State University 2021 Coffey Road Columbus OH 43210 422B Kottman Hall USA.

R. P. C. Morgan. 2005. *SOIL EROSION AND CONSERVATION* .3rd ed. published by Blackwell Publishing Ltd. ISBN 1-4051-1781-8 (pbk. : alk. paper): A catalogue record 2004009787.

2- Manuals

-Workplace communication teaching manuals used

3- WEB ADDRESSES (PUTTING LINKS)