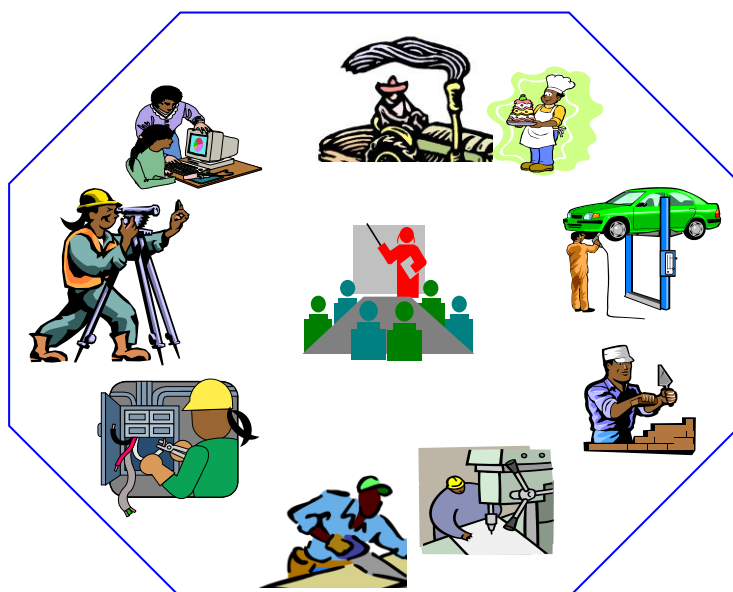




NATURAL RESOURCES CONSERVATION AND DEVELOPMENT Level-IV Curriculum



**Based on March 2018, Version3 Occupational
standards**

September, 2021

Adama, Ethiopia



East Africa Skills for Transformation and Regional Integration Project (EASTRIP)

Natural Resources Conservation and Development L-IV	Version 1 and Year: 0921	Page 0 of 180
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Preface

The reformed TVET-System is an outcome-based system. It utilizes the needs of the short term labor market and occupational requirements from the world of work as the benchmark and standard for TVET delivery. The requirements from the world of work are analyzed and documented – taking into account international benchmarking – as occupational standards (OS).

In the reformed TVET-System, curricula and curriculum development play an important role with regard to quality driven TVET-Delivery. Curricula help to facilitate the learning process in a way, that trainees acquire the set of occupational competences (skills, knowledge and attitude) required at the working place and defined in the occupational standards (OS).

The curriculum development process has been done by Federal TVET Agency facilitation, Regional TVET-Authorities participation and Holeta PTC Providers with financial supports of World Bank EASTRIP project.

1. TVET-Program Design

1.1. TVET-Program Title: Natural Resources conservation and Development- Level IV

1.2. TVET-Program Description

The Program is designed to develop the necessary knowledge, skills and attitude of the learners to the standard required by the occupation. The contents of this program are in line with the occupational standard. Learners who successfully completed the Program will be qualified to work as a **Natural resource Conservation and Development L- IV** with competencies elaborated in the respective OS. Graduates of the program will have the required qualification to work in the **Agriculture** sector in the field of **Natural Resources conservation and Development**.

The prime objective of this training program is to equip the learners with the identified competences specified in the OS. Graduates are therefore expected to _Develop Participatory Management Plan for a Designated Area, Participate in Designing Sustainable Natural Resources Utilization, Manage Natural Resources Information System, Promote Climate Change Adaptation and Mitigation Techniques, Coordinate Natural Area Restoration Program, Coordinate Natural Resources Infrastructure Development and Maintenance, Monitor and Evaluate Implementation of Land Use Plan, Implement Natural Resources Policies and Legislations, Monitor and Evaluate Fire Potential and Prevention Method, Apply Forest Management Practice, Promote Community Awareness Program, Develop and Provide Community Education Projects, Support Individuals in Resource Management Change Processes, Plan and Organize Work, Migrate to New Technology, Establish Quality Standards, Develop Individuals and Team, Utilize Specialized Communication Skills, Manage Micro, Small and Medium Enterprises (MSMEs), Apply Problem Solving Techniques and Tools as technical manager to meet the need of stakeholders in accordance with the performance criteria described in the OS.

1.3. TVET-Program Learning Outcomes

The expected outputs of this program are the acquisition and implementation of the following units of competence

1. **AGR NRC4 01 0318** Develop Participatory Management Plan for a Designated Area.
2. **AGR NRC4 02 0318** Participate in Designing Sustainable Natural Resources Utilization
3. **AGR NRC4 03 0318** Manage Natural Resources Information System
4. **AGR NRC4 04 0318** Promote Climate Change Adaptation and Mitigation Techniques
5. **AGR NRC4 05 0318** Coordinate Natural Area Restoration Program
6. **AGR NRC4 06 0318** Coordinate Natural Resources Infrastructure Development and Maintenance.
7. **AGR NRC4 07 0318** Monitor and Evaluate Implementation of Land Use Plan
8. **AGR NRC4 08 0318** Implement Natural Resources Policies and Legislations
9. **AGR NRC4 09 0318** Monitor and Evaluate Fire Potential and Prevention Method.
10. **AGR NRC4 10 0318** Apply Forest Management Practice.
11. **AGR NRC4 11 0318** Promote Community Awareness Program.
12. **AGR NRC4 12 0318** Develop and Provide Community Education Projects.
13. **AGR NRC4 13 0318** Support Individuals in Resource Management Change Processes
14. **AGR NRC4 14 0318** Plan and Organize Work.
15. **AGR NRC4 15 0318** Migrate to New Technology.
16. **AGR NRC4 16 0318** Establish Quality Standards.
17. **AGR NRC4 17 0318** Develop Individuals and Team.
18. **AGR NRC4 18 0318** Utilize Specialized Communication Skills
19. **AGR NRC4 19 0318** Manage Micro, Small and Medium Enterprises (MSMEs)
20. **AGR NRC4 20 0318** Apply Problem Solving Techniques and Tools.

1.4. Duration of the TVET-Program

The Program will have duration of **772 hours** including the on-the-job practice or cooperative training time.

No	Unit competency	On school training		Cooperative training	Total hours	Remark
		Theory	Practical			
1.	Develop Participatory Management Plan for a Designated Area.	15	19	8	42	
2.	Participate in Designing Sustainable Natural Resources Utilization	13	18	7	38	
3.	Manage Natural Resources Information System	12	14	6	32	
4.	Promote Climate Change Adaptation and Mitigation Techniques	14	18	8	40	
5.	Coordinate Natural Area Restoration Program	14	20	6	40	
6.	Coordinate Natural Resources Infrastructure Development and Maintenance.	17	26	7	50	
7.	Monitor and Evaluate Implementation of Land Use Plan	17	26	7	50	
8.	Implement Natural Resources Policies and Legislations	12	14	6	32	
9.	Monitor and Evaluate Fire Potential and Prevention Method.	14	18	8	40	
10.	Apply Forest Management Practice.	16	23	9	48	

11.	Promote Community Awareness Program.	11	12	5	28	
12.	Develop and Provide Community Education Projects.	14	18	8	40	
13.	Support Individuals in Resource Management Change Processes	11	14	5	30	
14.	Plan and Organize Work.	14	20	6	40	
15.	Migrate to New Technology.	12	15	8	35	
16.	Establish Quality Standards.	13	16	7	36	
17.	Develop Individuals and Team.	13	16	6	35	
18.	Utilize Specialized Communication Skills	11	13	4	28	
19.	Manage Micro, Small and Medium Enterprises (MSMEs)	15	23	10	48	
20.	Apply Problem Solving Techniques and Tools.	14	19	7	40	
Total calculated		272	362	138	772	
Total to be provided		272	362	138	772	

1.5. Qualification Level and Certification

Based on the descriptors elaborated on the Ethiopian National TVET Qualification Framework (NTQF) the qualification of this specific TVET Program is “**Level IV**”.

The learner can exit after successfully completing the Modules in one level and will be awarded the equivalent institutional certificate on the level completed. The learner can also exit after completing any one learning module. However, only certificate of attainment or attendance (this is institutional discretion) will be awarded.

1.6. Target Groups

Any citizen with or without disability who meets the entry requirements under items **1.7** and capable of participating in the learning activities is entitled to take part in the Program.

1.7. Entry Requirements

The prospective participants of this program are required to possess the requirements or directive of the Federal TVET Agency, Ministry of Education.

1.8. Mode of Delivery

This TVET-Program is characterized as a formal Program on technical managerial skill. The mode of delivery is co-operative training. The TVET-institution and identified companies have forged an agreement to co-operate with regard to implementation of this program. The time spent by the trainees in the industry will give them enough exposure to the actual world of work and enable them to get hands-on experience.

The co-operative approach will be supported with school-based lecture-discussion, simulation and actual practice. These modalities will be utilized before the trainees are exposed to the industry environment.

1.9. TVET-Program Structure

Unit of Competence	Module Code & Title	Learning Outcomes	Duration (In Hours)
AGR NRC4 17 0318 Develop Individuals and Team.	AGR NRC4 M01 0921 Developing Individuals and Team.	<ul style="list-style-type: none"> • Provide team leadership 	35hrs
		<ul style="list-style-type: none"> • Foster individual and organizational growth 	
		<ul style="list-style-type: none"> • Monitor and evaluate workplace learning 	
		<ul style="list-style-type: none"> • Develop team commitment and cooperation 	
		<ul style="list-style-type: none"> • Facilitate accomplishment of organizational goals 	
AGR NRC4 18 0318 Utilize Specialized Communication Skills	AGRNRC4M02 0921.Utilizing Specialized Communication Skills	<ul style="list-style-type: none"> • Meet common and specific communication needs of clients and colleagues 	28hrs
		<ul style="list-style-type: none"> • Contribute to the development of communication strategies 	
		<ul style="list-style-type: none"> • Represent the organization 	
		<ul style="list-style-type: none"> • Facilitate group discussion 	
		<ul style="list-style-type: none"> • Conduct interview 	
AGR NRC4 20 0318 Apply Problem Solving Techniques and Tools.	AGR NRC4 M03 0921 Applying Problem Solving Techniques and Tools.	<ul style="list-style-type: none"> • Identify and select theme/problem 	40hrs
		<ul style="list-style-type: none"> • Grasp current status and set goal. 	
		<ul style="list-style-type: none"> • Establish activity plan. 	
		<ul style="list-style-type: none"> • Analyze causes of a problem. 	
		<ul style="list-style-type: none"> • Examine countermeasures and their implementation. 	
		<ul style="list-style-type: none"> • Assess effectiveness of the solution 	
		<ul style="list-style-type: none"> • Standardize and sustain operation 	

AGR NRC4 14 0318 Plan and Organize Work.	AGR NRC4 M04 0921 Planning and Organizing Work.	• Set objectives	40hrs
		• Plan and schedule work activities	
		• Implement work plans	
		• Monitor work activities	
AGR NRC4010318 Develop Participatory Management Plan for a Designated Area.	AGR NRC4 M 05 09 21 Develop Participatory Management Plan for a Designated Area.	• Review and evaluate work plans and activities	42hrs
		• Define the need for a participatory management plan	
		• Undertake preliminary planning activities	
		• Prepare a site description	
		• Analyze site information and description	
AGR NRC4 02 0318 Participate in Designing Sustainable Natural Resources Utilization	AGR NRC4 M06 0921 Participating in Designing Sustainable Natural Resources Utilization	• Identify participatory management strategies	38 hrs
		• Prepare participatory management plan	
		• Plan community based natural resources utilization	
		• Establish means of promotion and advertisement	
		• Undertake a site analysis	
AGR NRC4 03 0318 Manage Natural Resources Information System	AGR NRC4 M07 0921 Managing Natural Resources Information System	• Develop a concept design	32hrs
		• Produce a final plan	
		• Utilize Natural Resource information systems	
		• Collect, analyze and review Natural Resource information	
		• Manage the Natural Resource information systems	
		• Manage resource planning	

AGR NRC4 05 0318 Coordinate Natural Area Restoration Program	AGR NRC4 M08 0921 Coordinating Natural Area Restoration Program	• Inspect and assess site conditions	40hrs
		• Plan natural area restoration program	
		• Monitor natural area restoration works	
		• Review natural area restoration program	
AGR NRC4 06 0318 Coordinate Natural Resources Infrastructure Development and Maintenance.	AGR NRC4 M09 0921. Coordinating Natural Resources Infrastructure Development and Maintenance.	• Determine infrastructure requirements	50hrs
		• Obtain infrastructure	
		• Manage infrastructure	
		• Record and manage information	
AGR NRC4 07 0318 Monitor and Evaluate Implementation of Land Use Plan	AGR NRC4 M10 0921 Monitoring and Evaluating Implementation of Land Use Plan	• Conduct monitoring and evaluation	50hrs
		• Collect feed back	
		• Undertake revision of the plan	
AGR NRC4 10 0318 Apply Forest Management Practice.	AGR NRC4 M11 0921 Applying Forest Management Practice.	• Carryout and monitor thinning operations	48hrs
		• Develop coppice stems and Undertake thinning	
		• Use appropriate sampling techniques and estimate volume and yield of stand	
		• Establish forest data base management system	
		• Prepare and implement forest management plan	
		• Manage Natural Forest	
AGR NRC4 09 0318 Monitor and Evaluate	AGR NRC4 M12 0921 Monitoring and Evaluating Fire	• Prepare for fires	40hrs
		• Assess fire potential	
		• Evaluate fire prevention	

Fire Potential and Prevention Method.	Potential and Prevention Method	<ul style="list-style-type: none"> Record and report information fire potential 	
AGR NRC4 04 0318 Promote Climate Change Adaptation and Mitigation Techniques	AGR NRC4 M13 0921 Promoting Climate Change Adaptation and Mitigation Techniques	<ul style="list-style-type: none"> Interpret available weather and climate information 	40hrs
		<ul style="list-style-type: none"> Carry out adaptation and mitigation measures 	
		<ul style="list-style-type: none"> Monitor weather and climate effects during adverse conditions 	
		<ul style="list-style-type: none"> Return to normal operations and documentations 	
AGR NRC4 11 0318 Promote Community Awareness Program.	AGR NRC4 M14 0921 Promoting Community Awareness Program.	<ul style="list-style-type: none"> Identify information, resource and service requirements 	28hrs
		<ul style="list-style-type: none"> Support community participation 	
		<ul style="list-style-type: none"> Promote domestic violence awareness 	
AGR NRC4 12 0318 Develop and Provide Community Education Projects.	AGR NRC4 M15 0921 Developing and Providing Community Education Projects.	<ul style="list-style-type: none"> Develop an education project 	40hrs
		<ul style="list-style-type: none"> Deliver the education project 	
		<ul style="list-style-type: none"> Review the education project 	
AGR NRC4 13 0318 Support Individuals in Resource Management Change Processes	AGR NRC4 M16 0921 Supporting Individuals in Resource Management Change Processes	<ul style="list-style-type: none"> Identify change processes 	30hrs
		<ul style="list-style-type: none"> Conceptualize impact of changes 	
		<ul style="list-style-type: none"> Implement support techniques 	
		<ul style="list-style-type: none"> Review support outcomes 	
AGR NRC4 08 0318 Implement Natural	AGR NRC4 M17 0921 Implementing Natural	<ul style="list-style-type: none"> Monitor and supervise the application of related Policies and legislations 	32hrs

Resources Policies and Legislations	Resources Policies and Legislations	<ul style="list-style-type: none"> Supervise the Identification and objective realization of natural resources property rights 	
		<ul style="list-style-type: none"> Identify and analyze the role of formal and informal institutions 	
		<ul style="list-style-type: none"> Facilitate and support local bye-laws formulation and implementation 	
		<ul style="list-style-type: none"> Establish Informal institutions for conflict resolution 	
AGR NRC4 15 0318 Migrate to New Technology.	AGR NRC4 M18 0921 Migrating to New Technology.	<ul style="list-style-type: none"> Apply existing knowledge and techniques to technology and transfer 	35hrs
		<ul style="list-style-type: none"> Apply functions of technology to assist in solving organizational problems 	
		<ul style="list-style-type: none"> Evaluate new or upgraded technology performance 	
AGR NRC4 19 0318 Manage Micro, Small and Medium Enterprises (MSMEs)	AGR NRC4 M19 0921 Managing Micro, Small and Medium Enterprises (MSMEs)	<ul style="list-style-type: none"> Develop and communicate Strategic work plan 	48hrs
		<ul style="list-style-type: none"> Identify daily work requirements and Develop effective work habits 	
		<ul style="list-style-type: none"> Manage Marketing of MSMEs 	
		<ul style="list-style-type: none"> Manage Human Resources 	
		<ul style="list-style-type: none"> Manage production and Operation 	
		<ul style="list-style-type: none"> Maintain financial records and use for decision making 	
		<ul style="list-style-type: none"> Monitor, Manage and Evaluate work performance 	

AGR NRC4 16 0318 Establish Quality Standards.	AGR NRC4 M20 0921 Establishing Quality Standards	• Establish quality specifications for product	36hrs
		• Identify hazards and critical control points	
		• Assist in planning of quality assurance procedures	
		• Implement quality assurance procedures	
		• Monitor quality of work outcome	
		• Participate in maintaining and improving quality at work	
		• Report problems that affect quality	

*The time duration (Hours) indicated for the module should include all activities in and out of the TVET institution.

1.10 Institutional Assessment

Two types of evaluation will be used in determining the extent to which learning outcomes are achieved. The specific learning outcomes are stated in the modules. In assessing them, verifiable and observable indicators and standards shall be used.

The **formative assessment** is incorporated in the learning modules and form part of the learning process. Formative evaluation provides the trainee with feedback regarding success or failure in attaining learning outcomes. It identifies the specific learning errors that need to be corrected, and provides reinforcement for successful performance as well. For the teacher, formative evaluation provides information for making instruction and remedial work more effective.

Summative Evaluation the other form of evaluation is given when all the modules in the program have been accomplished. It determines the extent to which competence have been achieved. And, the result of this assessment decision shall be expressed in the term 'competent or not yet competent'.

Techniques or tools for obtaining information about trainees' achievement include oral or written test, demonstration and on-site observation.

1.11 TVET Teachers Profile

The teachers conducting this particular TVET Program are **at least B Level** and have satisfactory practical experiences or equivalent qualifications.

LEARNING MODULE 01	TVET logo
TVET- PROGRAMME TITLE: Natural Resources Conservation and Development Level IV	
MODULE TITLE: Applying Developing Individuals and Team	
MODULE CODE : <u>AGR NRC4 M01 0921</u>	
NOMINAL DURATION: 35 hours	
MODULE DESCRIPTION: This module covers the knowledge, skills and attitude required to determine individual and team development needs and facilitate the development of the workgroup.	
LEARNING OUTCOMES At the end of the module the learner will be able to: LO1. Provide team leadership LO2. Foster individual and organizational growth LO3. Monitor and evaluate workplace learning LO4. Develop team commitment and cooperation LO5. Facilitate accomplishment of organizational goals	
MODULE CONTENTS: LO1. Provide team leadership <ul style="list-style-type: none"> 1.1. Identifying and implementing learning and development needs 1.2. Developing and implementing learning plan 1.3. Encouraging Individuals 1.4. Collecting feedback on performance of team members LO2. Foster individual and organizational growth <ul style="list-style-type: none"> 2.1. Identifying learning and development program goals and objectives 2.2. Making learning delivery methods 2.3. Providing workplace learning opportunities and coaching/ mentoring 2.4. Identifying and approving resources and timelines required for learning LO3. Monitor and evaluate workplace learning <ul style="list-style-type: none"> 3.1. Using feedback from individuals or teams 3.2. Assessing and recording outcomes and performance of individuals/teams 3.3. Negotiating modifications to learning plans 	

3.4. Maintaining records and reports of competence requirement.

LO4. Develop team commitment and cooperation

4.1. Using open communication processes to obtain and share information

4.2. Reaching decisions by the team

4.3. Developing mutual concern and camaraderie in the team.

LO5. Facilitate accomplishment of organizational goals

5.1. Participating team members actively in team

5.2. Developing individual and joint responsibility

5.3. Sustaining collaborative efforts

LEARNING METHODS:			
For None Impaired Trainees	Reasonable Adjustment for Trainees with Disability (TWD)		
	Deaf	Hard of hearing	Physical impairment
Lecture-discussion	<ul style="list-style-type: none"> ❖ Assign sign language interpreter ❖ Arrange the class room seating to be conducive for eye to eye contact ❖ Make sure the luminosity of the light of class room is kept ❖ Introduce new and relevant vocabularies ❖ Use short and clear sentences ❖ Give emphasis on visual lecture and ensure the attention of the trainees ❖ Avoid movement during lecture time ❖ Present the lecture in video format ❖ Summarize main points 	<ul style="list-style-type: none"> ❖ Organize the class room seating arrangement to be accessible to trainees ❖ Speak loudly ❖ Ensure the attention of the trainees ❖ Present the lecture in video format ❖ Ensure the attention of the trainees 	<ul style="list-style-type: none"> ❖ Organize the class room seating arrangement to be accessible for wheelchairs users. ❖ Facilitate and support the trainees who have severe impairments on their upper limbs to take note ❖ Provide Orientation on the physical feature of the work shop
Demonstration	<ul style="list-style-type: none"> ❖ use Sign language interpreter ❖ Use video recorded material ❖ Ensure attention of the trainees ❖ Provide structured training ❖ Show clear and short method ❖ Use gesture ❖ Provide tutorial support (if necessary) 	<ul style="list-style-type: none"> ❖ Illustrate in clear & short method ❖ Use Video recorded material ❖ Ensure the attention of the trainees ❖ Provide tutorial support (if necessary) 	<ul style="list-style-type: none"> ❖ Facilitate and support the trainees having severe upper limbs impairment to operate equipment/ machines ❖ Assign peer trainees to assist ❖ Conduct close follow up ❖ Provide tutorial support (if necessary)
Group discussion	<ul style="list-style-type: none"> ❖ Use sign language interpreters ❖ Facilitate the integration of trainees with group members ❖ Conduct close follow up ❖ Introduce the trainees with other group member ❖ 	<ul style="list-style-type: none"> ❖ Facilitate the integration of trainees with group members ❖ Conduct close follow up ❖ Introduce the trainees with other group member ❖ Inform the group members to speak loudly 	<ul style="list-style-type: none"> ❖ Introduce the trainees with their peers

Exercise	<ul style="list-style-type: none"> ❖ Conduct close follow up and guidance ❖ Provide tutorial support if necessary ❖ provide special attention in the process/practical training ❖ Introduce new and relevant vocabularies 	<ul style="list-style-type: none"> ❖ Conduct close follow up and guidance ❖ Provide tutorial support if necessary ❖ provide special attention in the process/practical training 	<ul style="list-style-type: none"> ❖ Assign peer trainees ❖ Use additional nominal hours if necessary
Individual assignment	<ul style="list-style-type: none"> ❖ Use sign language interpreter ❖ Provide briefing /orientation on the assignment ❖ Provide visual recorded material 	<ul style="list-style-type: none"> ❖ Provide briefing /orientation on the assignment ❖ Provide visual recorded material 	
ASSESSMENT METHODS:			
Interview	<ul style="list-style-type: none"> ❖ Use sign language interpreter ❖ Ensure or confirm whether the proper communication was conducted with the trainee through the service of the sign language interpreter ❖ Use short and clear questioning ❖ Time extension 	<ul style="list-style-type: none"> ❖ Speak loudly ❖ Using sign language interpreter if necessary 	<ul style="list-style-type: none"> ❖ Use written response as an option for the trainees having speech challenges
Written test	<ul style="list-style-type: none"> ❖ Prepare the exam using short sentences, multiple choices, True or False, matching and short answers ❖ Avoid essay writing ❖ Time extension 	<ul style="list-style-type: none"> ❖ Prepare the exam using short sentences, multiple choices, True or False, matching and short answers if necessary. 	<ul style="list-style-type: none"> ❖ Use oral response as an option to give answer for trainees having severe upper limb impairment ❖ Time extension for trainees having severe upper limb impairment
Demonstration/ Observation	<ul style="list-style-type: none"> ❖ Use sign language interpreter ❖ Brief on the instruction of the exam ❖ Provide activity-based/ practical assessment method ❖ Time extension 	<ul style="list-style-type: none"> ❖ Provide activity based assessment ❖ Brief on the instruction of the exam ❖ Use loud voice ❖ Time extension 	<ul style="list-style-type: none"> ❖ Provide activity based assessment ❖ Conduct close follow up ❖ Time extension ❖

ASSESSMENT CRITERIA

Meet common and specific communication needs of clients and colleagues

LO1. Provide team leadership

- Learning and development needs are systematically identified and implemented in line with organizational requirements.
- Learning plan to meet individual and group training and developmental needs is collaboratively developed and implemented.
- Individuals are encouraged to self-evaluate performance and identify areas for improvement.
- Feedback on performance of team members is collected from relevant sources and compared with established team learning process.

LO2. Foster individual and organizational growth

- Learning and development program goals and objectives are identified to match the specific knowledge and skills requirements of Competence standards.
- Learning delivery methods are made appropriate to the learning goals, the learning style of participants and availability of equipment and resources.
- Workplace learning opportunities and coaching/ mentoring assistance are provided to facilitate individual and team achievement of competencies.
- Resources and timelines required for learning activities are identified and approved in accordance with organizational requirements.

LO3. Monitor and evaluate workplace learning

- Feedback from individuals or teams is used to identify and implement improvements in future learning arrangements.
- Outcomes and performance of individuals/teams are assessed and recorded to determine the effectiveness of development programs and the extent of additional support.
- Modifications to learning plans are negotiated to improve the efficiency and effectiveness of learning.
- Records and reports of competence are maintained within organizational requirement.

LO4. Develop team commitment and cooperation

- Open communication processes to obtain and share information is used by team.
- Decisions are reached by the team in accordance with its agreed roles and responsibilities.
- Mutual concern and camaraderie are developed in the team.

LO5. Facilitate accomplishment of organizational goals

- Team members are actively participated in team activities and communication processes.
- Individual and joint responsibility is developed by team's members for their actions.
- Collaborative efforts are sustained to attain organizational goals.

Annex: Resource Requirements

AGR NRC4 M01 0921: Developing Individuals and Team				
Item No.	Category/Item	Description/ Specifications	Quantity	Recommended Ratio (Item: Trainee)
A.	Learning Materials			
1	TTLM.	Prepared by the trainer	25	1:1
2	Reference book			
2.1	<i>Adair on teambuilding and motivation</i>	Thomas, N. (Ed.). (2004). London: Thorogood	5	1:5
2.2	The contingent effects of leadership on team collaboration in virtual teams	Rui Huang Simran Kahai Rebecca Jestice, 2010	5	1:5
2.3	<u>Performance Management with Individuals and Teams</u>	<u>George Telfer, 2021</u>	5	1:5
B.	Learning Facilities & Infrastructure			
1	Lecture room/work shop	5m*5m	1	1:25

2	Library	10m*10m	1	1:25
C	Consumable Materials			
1	Copy paper	A4 size	5 rim	1:5
2	Paper A4	A4 size	5 dasta	1:5
3	Flip chart	Standard	5	1:5
4	Marker	Permanent and temporary	25	1:1
D	Tools and equipment Materials			
1	Computer	dell	5	1:5
2	Camera	Digital	5	1:5

LEARNING MODULE 02		TVET logo
TVET-PROGRAMME TITLE: Natural Resources Conservation and Development Level IV		
MODULE TITLE : Utilizing Specialized Communication Skills		
MODULE CODE: AGR NRC4 M02 0921		
NOMINAL DURATION: 28 Hours		
MODULE DESCRIPTION: This module covers knowledge, skills and attitude required to use specialized communication skills to meet specific needs of internal and external clients, conduct interviews, facilitate group discussions, and contribute to the development of communication strategies.		
LEARNING OUTCOMES At the end of this module the trainees will be able to: LO1. Meet common and specific communication needs of clients and colleagues LO2. Contribute to the development of communication strategies LO3. Represent the organization LO4. Facilitate group discussion LO5. Conduct interview		
LO1: Meet common and specific communication needs of clients and colleagues 1.1. Identifying specific communication needs 1.2. Approaches used to meet communication needs 1.3. Addressing conflict promptly and in a timely LO2: Contribute to the development of communication strategies 2.1. Developing, promoting, implementing and reviewing strategies for internal and external dissemination of information 2.2. Establishing and reviewing communication channels 2.3. Providing coaching in effective communication 2.4. Maintaining work related network and relationship 2.5. Using negotiation and conflict resolution strategies 2.6. Making communication with clients and colleagues LO3: Represent the organization 3.1. Researching and presenting internal or external fora		
Natural Resources Conservation and Development L-IV	Version 1 and Year: 0921	
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		Page 21 of 180

- 3.2. Delivering clear and sequential
- 3.3. Utilizing appropriate media.
- 3.4. Respecting differences in views
- 3.5. Making written communication
- 3.6. Responding consistent inquiries

LO4. Facilitate group discussion

- 4.1. Defining and implementing mechanisms
- 4.2. Using strategies which encourage all group members
- 4.3. Setting and following objectives and agenda's
- 4.4. Providing relevant information
- 4.5. Undertaking evaluation of group communication
- 4.6. Identifying and addressing specific communication needs

LO5. Conduct interview

- 5.1. Employing range of appropriate communication strategies
- 5.2. Conducting different types of interview
- 5.3. Making and maintaining records of interviews
- 5.4. Using effective communication techniques.

LEARNING METHODS:				
For None Impaired Trainees	Reasonable Adjustment for Trainees with Disability (TWD)			
	Low Vision and Blind	Deaf	Hard of hearing	Physical impairment
Lecture-discussion	<ul style="list-style-type: none"> ❖ Provide large print text ❖ Prepare the lecture in Audio/video & in <u>Brail</u> format ❖ Organize the class room seating arrangement to be accessible to trainees ❖ Write short notes on the black/white board using large text ❖ Make sure the luminosity of the light of class room is kept ❖ Use normal tone of voice ❖ Encourage trainees to record the lecture in audio format ❖ Provide Orientation on the physical feature of the work shop ❖ Summarize main points 	<ul style="list-style-type: none"> ❖ Assign sign language interpreter ❖ Arrange the class room seating to be conducive for eye to eye contact ❖ Make sure the luminosity of the light of class room is kept ❖ Introduce new and relevant vocabularies ❖ Use short and clear sentences ❖ Give emphasis on visual lecture and ensure the attention of the trainees ❖ Avoid movement during lecture time ❖ Present the lecture in video format 	<ul style="list-style-type: none"> ❖ Organize the class room seating arrangement to be accessible to trainees ❖ Speak loudly ❖ Ensure the attention of the trainees ❖ Present the lecture in video format ❖ Ensure the attention of the trainees 	<ul style="list-style-type: none"> ❖ Organize the class room seating arrangement to be accessible for wheelchairs users. ❖ Facilitate and support the trainees who have severe impairments on their upper limbs to take note ❖ Provide Orientation on the physical feature of the work shop

		❖ Summarize main points		
Demonstration	<ul style="list-style-type: none"> ❖ Conduct close follow up ❖ Use verbal description ❖ Provide special attention in the process of guidance ❖ facilitate the support of peer trainees ❖ Prepare & use simulation 	<ul style="list-style-type: none"> ❖ use Sign language interpreter ❖ Use video recorded material ❖ Ensure attention of the trainees ❖ Provide structured training ❖ Show clear and short method ❖ Use gesture ❖ Provide tutorial support (if necessary) 	<ul style="list-style-type: none"> ❖ Illustrate in clear & short method ❖ Use Video recorded material ❖ Ensure the attention of the trainees ❖ Provide tutorial support (if necessary) 	<ul style="list-style-type: none"> ❖ Facilitate and support the trainees having severe upper limbs impairment to operate equipments/ machines ❖ Assign peer trainees to assist ❖ Conduct close follow up ❖ Provide tutorial support (if necessary)
Group discussion	<ul style="list-style-type: none"> ❖ Facilitate the integration of trainees with group members ❖ Conduct close follow up ❖ Introduce the trainees with other group member ❖ Brief the thematic issues of the work 	<ul style="list-style-type: none"> ❖ Use sign language interpreters ❖ Facilitate the integration of trainees with group members ❖ Conduct close follow up ❖ Introduce the trainees with other group member 	<ul style="list-style-type: none"> ❖ Facilitate the integration of trainees with group members ❖ Conduct close follow up 	<ul style="list-style-type: none"> ❖ Introduce the trainees with their peers

			<ul style="list-style-type: none"> ❖ Introduce the trainees with other group member ❖ Inform the group members to speak loudly 	
Exercise	<ul style="list-style-type: none"> ❖ Conduct close follow up and guidance ❖ Provide tutorial support if necessary ❖ provide special attention in the process 	<ul style="list-style-type: none"> ❖ Conduct close follow up and guidance ❖ Provide tutorial support if necessary ❖ provide special attention in the process/practical training ❖ Introduce new and relevant vocabularies 	<ul style="list-style-type: none"> ❖ Conduct close follow up and guidance ❖ Provide tutorial support if necessary ❖ provide special attention in the process/ practical training 	<ul style="list-style-type: none"> ❖ Assign peer trainees ❖ Use additional nominal hours if necessary
Individual assignment	<ul style="list-style-type: none"> ❖ prepare the assignment questions in large text/Brail 	<ul style="list-style-type: none"> ❖ Use sign language interpreter ❖ Provide briefing /orientation on the assignment ❖ Provide visual recorded material 	<ul style="list-style-type: none"> ❖ Provide briefing /orientation on the assignment 	

	<ul style="list-style-type: none"> ❖ Encourage the trainees to prepare and submit the assignment in large texts/Brail ❖ Make available recorded assignment questions ❖ Facilitate the trainees to prepare and submit the assignment in soft or hard copy 		<ul style="list-style-type: none"> ❖ Provide visual recorded material 	
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ASSESSMENT METHODS:

Interview		<ul style="list-style-type: none"> ❖ Use sign language interpreter ❖ Ensure or conform whether the proper communication was conducted with the trainee through the service of the sign language interpreter ❖ Use short and clear questioning ❖ Time extension 	<ul style="list-style-type: none"> ❖ Speak loudly ❖ Using sign language interpreter if necessary 	<ul style="list-style-type: none"> ❖ Use written response as an option for the trainees having speech challenges
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Written test	<ul style="list-style-type: none"> ❖ Prepare the exam in large texts/Brail ❖ Use interview as an option if necessary ❖ Prepare the exam in audio format ❖ Assign human reader (if necessary) ❖ Time extension 	<ul style="list-style-type: none"> ❖ Prepare the exam using short sentences, multiple choices, True or False, matching and short answers ❖ Avoid essay writing ❖ Time extension 	<ul style="list-style-type: none"> ❖ Prepare the exam using short sentences, multiple choices, True or False, matching and short answers if necessary. 	<ul style="list-style-type: none"> ❖ Use oral response as an option to give answer for trainees having severe upper limb impairment ❖ Time extension for trainees having severe upper limb impairment
Demonstration/Observation	<ul style="list-style-type: none"> ❖ Brief the instruction or provide them in large text/Brail ❖ Time extension 	<ul style="list-style-type: none"> ❖ Use sign language interpreter ❖ Brief on the instruction of the exam ❖ Provide activity-based/practical assessment method ❖ Time extension 	<ul style="list-style-type: none"> ❖ Provide activity based assessment ❖ Brief on the instruction of the exam ❖ Use loud voice ❖ Time extension 	<ul style="list-style-type: none"> ❖ Provide activity based assessment ❖ Conduct close follow up ❖ Time extension

ASSESSMENT CRITERIA

Meet common and specific communication needs of clients and colleagues

LO1: Meet common and specific communication needs of clients and colleagues

- Specific communication needs of clients and colleagues are identified and met.
- Different approaches are used to meet communication needs of clients and colleagues.
- Conflict is addressed promptly and in a timely way and in a manner which does not compromise the standing of the organization.

LO2: Contribute to the development of communication strategies.

- Strategies for internal and external dissemination of information are developed, promoted, implemented and reviewed as required.
- Channels of communication are established and reviewed regularly.
- Coaching in effective communication is provided
- Work related network and relationship are maintained as necessary.
- Negotiation and conflict resolution strategies are used where required.
- Communication with clients and colleagues is made appropriate to individual needs and organizational objectives.

LO3: Represent the organization

- When participating in internal or external fora, presentation is relevant, appropriately researched and presented in a manner to promote the organization.
- Presentation is made clear and sequential and delivered within a predetermined time.
- Appropriate media is utilized to enhance presentation.
- Differences in views are respected.
- Written communication is made consistent with organizational standards.
- Inquiries are responded in a manner consistent with organizational standard.

LO4: Facilitate group discussion

- Mechanisms which enhance effective group interaction are defined and implemented.
- Strategies which encourage all group members to participate are used routinely.
- Objectives and agenda are routinely set and followed for meetings and discussions.
- Relevant information are provided to group to facilitate outcomes.
- Evaluation of group communication strategies is undertaken to promote participation of all parties.
- Specific communication needs of individuals are identified and addressed.

LO5. Conduct interview

- A range of appropriate communication strategies are employed in interview situations.
- Different types of interview is conducted in accordance with the organizational procedures.
- Records of interviews are made and maintained in accordance with organizational procedures.
- Effective questioning, listening and nonverbal communication techniques are used to ensure that required message is communicated.

Annex: Resource Requirements

AGR NRC4 M02 0921: Utilizing Specialized Communication Skills				
Item No.	Category/Item	Description/ Specifications	Quantity	Recommended Ratio (Item: Learner)
A.	Learning Materials			
1.	Books		25	1:1
2.	Manuls	To be prepared by trainer	25	1:1

2.	TTLM	To be prepared by trainer	25	1:1
3.	Journals	To be prepared by any concerned body	25	1:1
4.	News prints	To be prepared by any concerned body	25	1:1
B.	Learning Facilities & Infrastructure			
1.	Laboratory room	dimension of 8 x 5 sqm	1	1:25
2.	Demonstration site	Work place or field	1	1:25
3.	Class rooms	Furnished with necessary tables and chairs, equipment's and right ventilation and lighting with dimension of 8 x 5 sqm	1	1:25
4.	Internet	Broad band	25	1:1
5	Computer	Standard	5	1:5
C	Consumable materials			
1	Stationary materials(Paper, pen, pencil, marker)	Packet	25	1:1
2	Fuel	Petroleum and lubricant		
3	Flash Disk	Sandisk	25	1:1
4	5s job cycle charts	Standard	5	1:5
5	Visual	Standard	1	1:25
6	Printer paper	Lessor jet	25	1:1

LEARNING MODULE 03	TVET logo
TVET- PROGRAMME TITLE: Natural Resources Conservation and Development Level IV	
MODULE TITLE: Applying Problem Solving Techniques and Tools	
MODULE CODE : <u>AGR NRC4 M03 0921</u>	
NOMINAL DURATION: 40 hours	
MODULE DESCRIPTION: This module covers the knowledge, skills and attitude required to apply scientific problem solving techniques and tools to enhance quality, productivity and other kaizen Element on continual basis.	
LEARNING OUTCOMES At the end of the module the learner will be able to: <ul style="list-style-type: none"> LO1. Identify and select theme/problem LO2. Grasp current status and set goal. LO3. Establish activity plan. LO4. Analyze causes of a problem. LO5. Examine countermeasures and their implementation. LO6. Assess effectiveness of the solution LO7. Standardize and sustain operation 	
MODULE CONTENTS: LO1. Identify and select theme/problem <ul style="list-style-type: none"> 1.1. Following safety requirements. 1.2. Listing all possible problems related to the process /Kaizen Element 1.3. Applying statistical quality control tools and techniques. 1.4 Identifying and listing on Visual Management Board/Kaizen Board. 1.5. Classifying Problems 1.6. Critical factors <ul style="list-style-type: none"> 1.6.1. Number of customers affected, 1.6.2. Potentials for bottlenecks, 1.6.3 Number of complaints 1.6.4. Kaizen Element 	

LO2. Grasp current status and set goal

- 2.1. Defining the extent of the problem
- 2.2. Setting appropriate and achievable goal

LO3. Establish activity plan.

- 3.1. Confirming the problem
- 3.2. Selecting high priority problem
- 3.3. Defining the extent of the problem
- 3.4. Establishing activity plan as per 5W1H.

LO4. Analyze causes of a problem.

- 4.1. Listing all possible causes of a problem
- 4.2. Analyzing cause relationships
- 4.3. Identifying causes of the problems
- 4.4. Selecting root causes
- 4.5. Selecting the root cause to the problem
- 4.6. Listing all possible ways
- 4.7. Testing and evaluating the suggested solutions carefully
- 4.8. Preparing detailed summaries of the action plan

LO5. Examine countermeasures and their implementation

- 5.1. Implementing action plan
- 5.2. Monitoring implementation

LO6. Assess effectiveness of the solution

- 6.1 Identifying tangible and intangible results
- 6.2 Verifying the results over time.
- 6.3 Comparing tangible results with targets

LO7. Standardize and sustain operation

- 7.1. Standardizing and making part of daily activities
- 7.2. Training on the new Standard Operating Procedures (SOPs).
- 7.3. Verifying and following
- 7.4. Selecting the next problem to be tackled by the team.

LEARNING METHODS:			
For None Impaired Trainees	Reasonable Adjustment for Trainees with Disability (TWD)		
	Deaf	Hard of hearing	Physical impairment
Lecture-discussion	<ul style="list-style-type: none"> ❖ Assign sign language interpreter ❖ Arrange the class room seating to be conducive for eye to eye contact ❖ Make sure the luminosity of the light of class room is kept ❖ Introduce new and relevant vocabularies ❖ Use short and clear sentences ❖ Give emphasis on visual lecture and ensure the attention of the trainees ❖ Avoid movement during lecture time ❖ Present the lecture in video format ❖ Summarize main points 	<ul style="list-style-type: none"> ❖ Organize the class room seating arrangement to be accessible to trainees ❖ Speak loudly ❖ Ensure the attention of the trainees ❖ Present the lecture in video format ❖ Ensure the attention of the trainees 	<ul style="list-style-type: none"> ❖ Organize the class room seating arrangement to be accessible for wheelchairs users. ❖ Facilitate and support the trainees who have severe impairments on their upper limbs to take note ❖ Provide Orientation on the physical feature of the work shop
Demonstration	<ul style="list-style-type: none"> ❖ use Sign language interpreter ❖ Use video recorded material ❖ Ensure attention of the trainees ❖ Provide structured training ❖ Show clear and short method ❖ Use gesture ❖ Provide tutorial support (if necessary) 	<ul style="list-style-type: none"> ❖ Illustrate in clear & short method ❖ Use Video recorded material ❖ Ensure the attention of the trainees ❖ Provide tutorial support (if necessary) 	<ul style="list-style-type: none"> ❖ Facilitate and support the trainees having severe upper limbs impairment to operate equipment/ machines ❖ Assign peer trainees to assist ❖ Conduct close follow up ❖ Provide tutorial support (if necessary)
Group discussion	<ul style="list-style-type: none"> ❖ Use sign language interpreters ❖ Facilitate the integration of trainees with group members ❖ Conduct close follow up ❖ Introduce the trainees with other group member ❖ 	<ul style="list-style-type: none"> ❖ Facilitate the integration of trainees with group members ❖ Conduct close follow up ❖ Introduce the trainees with other group member ❖ Inform the group members to speak loudly 	<ul style="list-style-type: none"> ❖ Introduce the trainees with their peers

Exercise	<ul style="list-style-type: none"> ❖ Conduct close follow up and guidance ❖ Provide tutorial support if necessary ❖ provide special attention in the process/practical training ❖ Introduce new and relevant vocabularies 	<ul style="list-style-type: none"> ❖ Conduct close follow up and guidance ❖ Provide tutorial support if necessary ❖ provide special attention in the process/practical training 	<ul style="list-style-type: none"> ❖ Assign peer trainees ❖ Use additional nominal hours if necessary
Individual assignment	<ul style="list-style-type: none"> ❖ Use sign language interpreter ❖ Provide briefing /orientation on the assignment ❖ Provide visual recorded material 	<ul style="list-style-type: none"> ❖ Provide briefing /orientation on the assignment ❖ Provide visual recorded material 	
ASSESSMENT METHODS:			
Interview	<ul style="list-style-type: none"> ❖ Use sign language interpreter ❖ Ensure or conform whether the proper communication was conducted with the trainee through the service of the sign language interpreter ❖ Use short and clear questioning ❖ Time extension 	<ul style="list-style-type: none"> ❖ Speak loudly ❖ Using sign language interpreter if necessary 	<ul style="list-style-type: none"> ❖ Use written response as an option for the trainees having speech challenges
Written test	<ul style="list-style-type: none"> ❖ Prepare the exam using short sentences, multiple choices, True or False, matching and short answers ❖ Avoid essay writing ❖ Time extension 	<ul style="list-style-type: none"> ❖ Prepare the exam using short sentences, multiple choices, True or False, matching and short answers if necessary. 	<ul style="list-style-type: none"> ❖ Use oral response as an option to give answer for trainees having severe upper limb impairment ❖ Time extension for trainees having severe upper limb impairment
Demonstration/ Observation	<ul style="list-style-type: none"> ❖ Use sign language interpreter ❖ Brief on the instruction of the exam ❖ Provide activity-based/ practical assessment method ❖ Time extension 	<ul style="list-style-type: none"> ❖ Provide activity based assessment ❖ Brief on the instruction of the exam ❖ Use loud voice ❖ Time extension 	<ul style="list-style-type: none"> ❖ Provide activity based assessment ❖ Conduct close follow up ❖ Time extension ❖

ASSESSMENT CRITERIA

Meet common and specific communication needs of clients and colleagues

LO1. Identify and select theme/problem

- Safety requirements are followed in accordance with safety plans and procedures.
- All possible problems related to the process /Kaizen Element are listed using statistical tools and techniques.
- All possible problems related to kaizen Element are identified and listed on Visual Management Board/Kaizen Board.
- Problems are classified based on obviousness of cause and action.
- Critical factors like the number of customers affected, Potentials for bottlenecks, and number of complaints etc... is selected.
- Problems related to priorities of Kaizen Element are given due emphasis and selected.

LO2. Grasp current status and set goal.

- The extent of the problem is defined.
- Appropriate and achievable goal is set.

LO3. Establish activity plan.

- The problem is confirmed.
- High priority problem is selected.
- The extent of the problem is defined.
- Activity plan is established as per 5W1H

LO4. Analyze causes of a problem.

- All possible causes of a problem are listed.
- Cause relationships are analyzed using 4M1E.
- Causes of the problems are identified.
- Root causes are selected.
- The root cause which is most directly related to the problem is selected.

- All possible ways are listed using creative idea generation to eliminate the most critical root cause.
- The suggested solutions are carefully tested and evaluated for potential complications.
- Detailed summaries of the action plan are prepared to implement the suggested solution.

L05. Examine countermeasures and their implementation.

- Action plan is implemented by medium KPT members.
- Implementation is monitored according to the agreed procedure and activities are checked with preset plan

L06. Assess effectiveness of the solution

- Tangible and intangible results are identified.
- The results are verified over time.
- Tangible results are compared with targets using various types of diagram

L07. Standardize and sustain operation

- If the goal is achieved, the new procedures are standardized and made part of daily activities.
- All employees are trained on the new Standard Operating Procedures (SOPs).
- OP is verified and followed by all employees.
- The next problem is selected to be tackled by the team.

Annex: Resource Requirements

AGR NRC4 M03 0921: Applying Problem Solving Techniques and Tools				
Item No.	Category/Item	Description/ Specifications	Quantity	Recommended Ratio (Item: Trainee)
A.	Learning Materials			
1	TTLM.	Prepared by the trainer	25	1:1
2	Reference book			
2.1	Problem Solving Tools And Techniques: For IT Services Delivery	Elsevier BV, 2019	5	1:5
2.2	Problem Solving and Decision Making: Hard, Soft and Creative Approaches. Cengage Learning ISBN 9781861526175.	Michael J. Hicks. (2004).	5	1:5
B.	Learning Facilities & Infrastructure			
1	Lecture room/work shop	5m*5m	1	1:25
2	Library	10m*10m	1	1:25
C	Consumable Materials			
1	Copy paper	A4 size	5 rim	1:5
2	Paper A4	A4 size	5 dasta	1:5
3	Flip chart	Standard	5	1:5
4	Marker	Permanent and temporary	25	1:1
D	Tools and equipment Materials			
1	Computer	Dell	5	1:5
2	Camera	Digital	5	1:5
3	LCD	Sony	1	1:25

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LEARNING MODULE 04	TVET logo
TVET-PROGRAMME TITLE: Natural Resource Conservation and Development IV	
MODULE TITLE: Planing and Organizing Work	
MODULE CODE: AGR NRC4 M04 0921	
NOMINAL DURATION: 30 hours	
MODULE DESCRIPTION : <p>This module covers the knowledge, skills and attitude required in planning and organizing work activities in a production application.It may be applied to a small independent operation or to a section of a large organization.</p>	
LEARNING OUTCOMES <p>At the end of this module the trainees will be able to:</p> <p>LO1. Set objectives</p> <p>LO2. Plan and schedule work activities</p> <p>LO3. Implement work plans</p> <p>LO4. Monitor work activities</p> <p>LO5. Review and evaluate work plans and activities</p>	
MODULE CONTENTS <p>LO1. Set objectives</p> <p>1.1 . Planning the objectives.</p> <p>1.2. Stating the Objectives.</p> <p>1.3. Supporting the reflacted objectives.</p> <p>1.4. Identifying realistic and attainable objectives.</p> <p>LO2. Plan and schedule work activities</p> <p>2.1 . Identifying and prioritizing tasks/work.</p> <p>2.2 Undertaking Tasks/work activities.</p> <p>2.3 Assigning task/work activities.</p> <p>2.4 Allocating resources.</p> <p>2.5 Coordinating schedule of work activities.</p>	

LO3.Implement work plans

3.1.Identifying work methods and practices.

3.2.Implementing Work plans

LO4. Monitor work activities

4.1 . Monitoring and comparing work activities.

4.2 Work performance is monitored.

4.3. Reporting and coordinating deviations.

4.4. Compiling report requirements.

4.5. Observing timeliness of the report.

4.6. Establishing and maintaining files

LO5. Review and evaluate work plans and activities

5.1 . Reviewing Work plans, strategies and implementation.

5.2 Undertaking review with comprehensive consultation.

5.3 Prioviding the results of review.

5.4 Conducting performance appraisal.

5.5. Preparing performance appraisal report.

5.6. Preparing and presenting recommendations.

5.7 Implementing feedback mechanisms.

LEARNING METHODS:				
For None Imaired Trainees	Reasonable Adjustment for Trainees with Disability (TWD)			
	Low Vision and Blind	Deaf	Hard of hearing	Physical impairment
Lecture-discussion	<ul style="list-style-type: none"> ❖ Provide large print text ❖ Prepare the lecture in Audio/video & inBrail format ❖ Organize the class room seating arrangement to be accessible to trainees ❖ Write short notes on the black/white board using large text ❖ Make sure the luminosity of the light of class room is kept ❖ Use normal tone of voice ❖ Encourage trainees to record the lecture in audio format ❖ Provide Orientation on the physical feature of the work shop ❖ Summarize main points 	<ul style="list-style-type: none"> ❖ Assign sign language interpreter ❖ Arrange the class room seating to be conducive for eye to eye contact ❖ Make sure the luminosity of the light of class room is kept ❖ Introduce new and relevant vocabularies ❖ Use short and clear sentences ❖ Give emphasis on visual lecture and ensure the attention of the trainees ❖ Avoid movement during lecture time ❖ Present the lecture in video format ❖ Summarize main points 	<ul style="list-style-type: none"> ❖ Organize the class room seating arrangement to be accessible to trainees ❖ Speak loudly ❖ Ensure the attention of the trainees ❖ Present the lecture in video format ❖ Ensure the attention of the trainees 	<ul style="list-style-type: none"> ❖ Organize the class room seating arrangement to be accessible for wheelchairs users. ❖ Facilitate and support the trainees who have severe impairments on their upper limbs to take note ❖ Provide Orientation on the physical feature of the work shop

Demonstration	<ul style="list-style-type: none"> ❖ Conduct close follow up ❖ Use verbal description ❖ Provide special attention in the process of guidance ❖ facilitate the support of peer trainees ❖ Prepare & use simulation 	<ul style="list-style-type: none"> ❖ use Sign language interpreter ❖ Use video recorded material ❖ Ensure attention of the trainees ❖ Provide structured training ❖ Show clear and short method ❖ Use gesture ❖ Provide tutorial support (if necessary) 	<ul style="list-style-type: none"> ❖ Illustrate in clear & short method ❖ Use Video recorded material ❖ Ensure the attention of the trainees ❖ Provide tutorial support (if necessary) 	<ul style="list-style-type: none"> ❖ Facilitate and support the trainees having severe upper limbs impairment to operate equipments/ machines ❖ Assign peer trainees to assist ❖ Conduct close follow up ❖ Provide tutorial support (if necessary)
Group discussion	<ul style="list-style-type: none"> ❖ Facilitate the integration of trainees with group members ❖ Conduct close follow up ❖ Introduce the trainees with other group member ❖ Brief the thematic issues of the work 	<ul style="list-style-type: none"> ❖ Use sign language interpreters ❖ Facilitate the integration of trainees with group members ❖ Conduct close follow up ❖ Introduce the trainees with other group member 	<ul style="list-style-type: none"> ❖ Facilitate the integration of trainees with group members ❖ Conduct close follow up ❖ Introduce the trainees with other group member ❖ Inform the group members to speak loudly 	<ul style="list-style-type: none"> ❖ Introduce the trainees with their peers

Exercise	<ul style="list-style-type: none"> ❖ Conduct close follow up and guidance ❖ Provide tutorial support if necessary ❖ provide special attention in the process 	<ul style="list-style-type: none"> ❖ Conduct close follow up and guidance ❖ Provide tutorial support if necessary ❖ provide special attention in the process/practical training ❖ Introduce new and relevant vocabularies 	<ul style="list-style-type: none"> ❖ Conduct close follow up and guidance ❖ Provide tutorial support if necessary ❖ provide special attention in the process/practical training 	<ul style="list-style-type: none"> ❖ Assign peer trainees ❖ Use additional nominal hours if necessary
Individual assignment	<ul style="list-style-type: none"> ❖ prepare the assignment questions in large text/Brail ❖ Encourage the trainees to prepare and submit the assignment in large texts/Brail ❖ Make available recorded assignment questions ❖ Facilitate the trainees to prepare and submit the assignment in soft or hard copy 	<ul style="list-style-type: none"> ❖ Use sign language interpreter ❖ Provide briefing /orientation on the assignment ❖ Provide visual recorded material 	<ul style="list-style-type: none"> ❖ Provide briefing /orientation on the assignment ❖ Provide visual recorded material 	
ASSESSMENT METHODS:				
Interview		<ul style="list-style-type: none"> ❖ Use sign language interpreter 	<ul style="list-style-type: none"> ❖ Speak loudly 	<ul style="list-style-type: none"> ❖ Use written response as an

		<ul style="list-style-type: none"> ❖ Ensure or conform whether the proper communication was conducted with the trainee through the service of the sign language interpreter ❖ Use short and clear questioning ❖ Time extension 	<ul style="list-style-type: none"> ❖ Using sign language interpreter if necessary 	option for the trainees having speech challenges
Written test	<ul style="list-style-type: none"> ❖ Prepare the exam in large texts/Brail ❖ Use interview as an option if necessary ❖ Prepare the exam in audio format ❖ Assign human reader (if necessary) ❖ Time extension 	<ul style="list-style-type: none"> ❖ Prepare the exam using short sentences, multiple choices, True or False, matching and short answers ❖ Avoid essay writing ❖ Time extension 	<ul style="list-style-type: none"> ❖ Prepare the exam using short sentences, multiple choices, True or False, matching and short answers if necessary. 	<ul style="list-style-type: none"> ❖ Use oral response as an option to give answer for trainees having severe upper limb impairment ❖ Time extension for trainees having severe upper limb impairment
Demonstration/Observation	<ul style="list-style-type: none"> ❖ Brief the instruction or provide them in large text/Brail ❖ Time extension 	<ul style="list-style-type: none"> ❖ Use sign language interpreter ❖ Brief on the instruction of the exam 	<ul style="list-style-type: none"> ❖ Provide activity based assessment ❖ Brief on the instruction of the exam ❖ Use loud voice 	<ul style="list-style-type: none"> ❖ Provide activity based assessment ❖ Conduct close follow up ❖ Time extension

		❖ Provide activity-based/ practical assessment method ❖ Time extension	❖ Time extension	
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ASSESSMENT CRITERIA

LO1. Set objectives

- Objectives are planned consistent with and linked to work activities in accordance with organizational aims.
- Objectives are stated as measurable targets with clear time frames.
- Support and commitment of team members are reflected in the objectives.
- Realistic and attainable objectives are identified.

LO2. Plan and schedule work activities

- Tasks/work activities to be completed are identified and prioritized as directed.
- Tasks/work activities are broken down into steps in accordance with set time frames and achievable components.
- Task/work activities are assigned to appropriate team or individuals in accordance with agreed functions.
- Resources are allocated as per requirements of the activity.
- Schedule of work activities is coordinated with personnel concerned.

LO3. Implement work plans

- Work methods and practices are identified in consultation with personnel concerned.
- Work plans are implemented in accordance with set time frames, resources and standards.

LO4. Monitor work activities

- Work activities are monitored and compared with set objectives.
- Work performance is monitored.
- Deviations from work activities are reported and recommendations are coordinated with appropriate personnel and in accordance with set standards.
- Reporting requirements are complied with in accordance with recommended format.
- Timeliness of report is observed.

- Files are established and maintained in accordance with standard operating procedures.

LO5. Review and evaluate work plans and activities

- Work plans, strategies and implementation are reviewed based on accurate, relevant and current information.
- Review is done based on comprehensive consultation with appropriate personnel on outcomes of work plans and reliable feedback.
- Results of review are provided to concerned parties and formed as the basis for adjustments/simplifications to be made to policies, processes and activities.
- Performance appraisal is conducted in accordance with organization rules and regulations.
- Performance appraisal report is prepared and documented regularly as per organization requirements.
- Recommendations are prepared and presented to appropriate personnel/authorities.
- Feedback mechanisms are implemented in line with organization policies.

Annex: Resource requirements

AGR NRC4 M 04 0921: Planing and Organizing Work				
Item No.	Category/Item	Description/ Specifications	Quantity	Recommended Ratio (Item: Trainee)
A.	Learning Materials			
1.	TTLM	To be developed by the Trainers	25	1:1
2.	Training manual	Health and safety handbook	25	1:1
B.	Learning facilities & infrastructure			
1.	Laboratory	Standard	1	1: 25
2.	Lecture room	Standard	1	1:25

3.	Library	Standard	1	1:25
4	Demonstration site	Standard	1	1:25
5	Workshop	Standard	1	1:25
6	Vehicle	Bus(45seats)	1	1:25
C. Consumable materials				
1	Helmet	Standard	25	1:1
2	Gloves	Plastic	25	1:1
3	Goggle	Plastic	25	1:1
4	Face Mask	Standard	25	1:1
5	Overall(tuta)	Cotton	25	1:1
6	Flip chart	Standard	25	1:1
7	Bandage	Standard	25	1:1
8	Hearing protection	Standard	25	1:1
9	Faceguards	Standard	25	1:1
10	Respirators	Standard	25	1:1
11	Hazardous materials	Standard	25	1:1
12	Stationary materials(pen, pencil, note book, paper...)	Standard	25each	1:1
13	MSDSs	Standard	25	1:1
14	Hard hat	Standard	25	1:1
15	Ear mask	Standard	25	1:1
16	Safety boots	Rubber	25	1:1
D. Tools and Equipments				
1	Camera	Digital	5	1:5
2	Video recorders	Sony	5	1:5
3	GPS	Germen	5	1:5
4	Field guides	Standard	25	1:5
5	Dissolved oxygen (DO)	Standard	5	1:5
6	Electrical conductivity (EC)	Standard	5	1:5

LEARNING MODULE 05	TVET logo
TVET PROGRAM TITLE: Natural Resource Conservation and Development L- IV	
MODULE TITLE: Developing Participatory Management Plan for a Designated Area	
MODULE CODE: <u>AGR NRC4 M05 09 21</u>	
NOMINAL DURATION: 42 hours	
MODULE DESCRIPTION: <p>This Module the knowledge, skills and attitude required to undertake preliminary planning, prepare a site description, analyze site information, and prepare participatory management plan for designated area.</p>	
LEARNING OUTCOMES: <p>LO1: Define the need for a participatory management plan</p> <p>LO2: Undertake preliminary planning activities</p> <p>LO3: Prepare a site description</p> <p>LO4: Analyze site information and description</p> <p>LO5: Identify participatory management strategies</p> <p>LO6: Prepare participatory management plan</p>	
MODULE CONTENTS: <p>LO1. Define the need for a participatory management plan</p> <p>1.1 Participatory management plan objectives</p> <p>1.2 Consultation with client.</p> <p>1.3 Identification of Planning team</p> <p>LO2. Undertake preliminary planning activities</p> <p>2.1 Identification of major stakeholders.</p> <p>2.2 Availability of specialists in management planning</p> <p>2.3 Timelines for development of the participatory management plan and reporting</p> <p>2.4 Identification of resources for development of management strategies</p>	

L03. Prepare site description

- 3.1 Identification of Landscape value and mapping
- 3.2 Identification of Physical condition and mapping
 - 3.2.1. physical features and characteristics
 - 3.2.2 Mapping physical features
- 3.3 Assessing Land use and historical modifications
- 3.4 Biological characteristics of the site

L04. Analyze site information and description

- 4.1 Evaluating information principles and objectives.
- 4.2 Documenting site plans, technical reports and maps.
- 4.3 Determining priorities and key conservation issues
- 4.4 Preparing longitudinal projections of continuing impacts
- 4.5 Land capability assessment
- 4.6 Identifying and documenting opportunities and constraints
- 4.7 Under taking Presentation to stakeholders/clients

L05. Identify participatory management strategies

- 5.1 Identifying management strategies
- 5.2 Designing management strategy
- 5.3 Costing and comparing management strategies
- 5.4 Planning to prioritize outcomes and management resource allocation
- 5.5 Consultation with stakeholders/clients

L06. Prepare participatory management plan

- 6.1 Documentation of Site information and management strategies
- 6.2 Consultation with stakeholders/clients
- 6.3 Preparation and presentation of final plan

LEARNING METHODS				
For None Impaired Trainees	Reasonable Adjustment for Trainees with Disability (TWD)			
	Low Vision and Blind	Deaf	Hard of hearing	Physical impairment
Lecture-discussion	<ul style="list-style-type: none">❖ Provide large print text❖ Prepare the lecture in Audio/video & in <u>Brail</u> format❖ Organize the class room seating arrangement to be accessible to trainees❖ Write short notes on the black/white board using large text❖ Make sure the luminosity of the light of class room is kept❖ Use normal tone of voice	<ul style="list-style-type: none">❖ Assign sign language interpreter❖ Arrange the class room seating to be conducive for eye to eye contact❖ Make sure the luminosity of the light of class room is kept❖ Introduce new and relevant vocabularies❖ Use short and clear sentences❖ Give emphasis on visual lecture and ensure the attention of the trainees	<ul style="list-style-type: none">❖ Organize the class room seating arrangement to be accessible to trainees❖ Speak loudly❖ Ensure the attention of the trainees❖ Present the lecture in video format❖ Ensure the attention of the trainees	<ul style="list-style-type: none">❖ Organize the class room seating arrangement to be accessible for wheelchairs users.❖ Facilitate and support the trainees who have severe impairments on their upper limbs to take note❖ Provide Orientation on the physical feature of the work shop

	<ul style="list-style-type: none"> ❖ Encourage trainees to record the lecture in audio format ❖ Provide Orientation on the physical feature of the work shop ❖ Summarize main points 	<ul style="list-style-type: none"> ❖ Avoid movement during lecture time ❖ Present the lecture in video format ❖ Summarize main points 		
Demonstration	<ul style="list-style-type: none"> ❖ Conduct close follow up ❖ Use verbal description ❖ Provide special attention in the process of guidance ❖ facilitate the support of peer trainees ❖ Prepare & use simulation 	<ul style="list-style-type: none"> ❖ use Sign language interpreter ❖ Use video recorded material ❖ Ensure attention of the trainees ❖ Provide structured training ❖ Show clear and short method ❖ Use gesture ❖ Provide tutorial support (if necessary) 	<ul style="list-style-type: none"> ❖ Illustrate in clear & short method ❖ Use Video recorded material ❖ Ensure the attention of the trainees ❖ Provide tutorial support (if necessary) 	<ul style="list-style-type: none"> ❖ Facilitate and support the trainees having severe upper limbs impairment to operate equipments/ machines ❖ Assign peer trainees to assist ❖ Conduct close follow up ❖ Provide tutorial support (if necessary)

Group discussion	<ul style="list-style-type: none"> ❖ Facilitate the integration of trainees with group members ❖ Conduct close follow up ❖ Introduce the trainees with other group member ❖ Brief the thematic issues of the work 	<ul style="list-style-type: none"> ❖ Use sign language interpreters ❖ Facilitate the integration of trainees with group members ❖ Conduct close follow up ❖ Introduce the trainees with other group member 	<ul style="list-style-type: none"> ❖ Facilitate the integration of trainees with group members ❖ Conduct close follow up ❖ Introduce the trainees with other group member ❖ Inform the group members to speak loudly 	<ul style="list-style-type: none"> ❖ Introduce the trainees with their peers
ASSESSMENT METHODS:				
Interview		<ul style="list-style-type: none"> ❖ Use sign language interpreter ❖ Ensure or conform whether the proper communication was conducted with the trainee through the 	<ul style="list-style-type: none"> ❖ Speak loudly ❖ Using sign language interpreter if necessary 	<ul style="list-style-type: none"> ❖ Use written response as an option for the trainees having speech challenges

		<p>service of the sign language interpreter</p> <ul style="list-style-type: none"> ❖ Use short and clear questioning ❖ Time extension 		
Written test	<ul style="list-style-type: none"> ❖ Prepare the exam in large texts/Brail ❖ Use interview as an option if necessary ❖ Prepare the exam in audio format ❖ Assign human reader (if necessary) ❖ Time extension 	<ul style="list-style-type: none"> ❖ Prepare the exam using short sentences, multiple choices, True or False, matching and short answers ❖ Avoid essay writing ❖ Time extension 	<ul style="list-style-type: none"> ❖ Prepare the exam using short sentences, multiple choices, True or False, matching and short answers if necessary. 	<ul style="list-style-type: none"> ❖ Use oral response as an option to give answer for trainees having severe upper limb impairment ❖ Time extension for trainees having severe upper limb impairment
Demonstration/Observation	<ul style="list-style-type: none"> ❖ Brief the instruction or provide them in large text/Brail 	<ul style="list-style-type: none"> ❖ Use sign language interpreter ❖ Brief on the instruction of the exam 	<ul style="list-style-type: none"> ❖ Provide activity based assessment 	<ul style="list-style-type: none"> ❖ Provide activity based assessment ❖ Conduct close follow up ❖ Time extension

	❖ Time extension	❖ Provide activity-based/ practical assessment method ❖ Time extension	❖ Brief on the instruction of the exam ❖ Use loud voice ❖ Time extension	
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ASSESSMENT CRITERIA:

LO1: Define the need for participatory management plan

- Participatory management plan objectives are identified for the designated area in consultation with community and local administration.
- Terms of references are agreed in consultation with client.
- Planning team including specialists and communities is identified.

LO2: Undertake preliminary planning activities

- Major stakeholders are identified in line with the objectives of the project.
- Availability of specialists to assist in management planning work is ascertained
- Timelines for development of the participatory management plan and reporting arrangements to client are established.
- Resources required for the development of management strategies are identified and organized

LO3: Prepare site description

- Landscape values of the area are identified and mapped
- Physical condition and physical features and characteristics of the area are identified and mapped.
- Land uses, including current cultural and historical modifications are assessed and their effects on the natural resource area are determined and recorded.
- Biological characteristics of the site are documented according to legal and organizational guidelines.

LO4: Analyze site information and description

- Information is evaluated in terms of core principles and objectives.
- Documents of the site including plans, technical reports and maps are produced.
- Priorities and key conservation issues are determined in line with the designated area requirements.
- Longitudinal projections of continuing impacts are prepared.

- Land capability is assessed jointly with specialists and community group.
- Opportunities and constraints to meeting planning objectives and goals are identified and documented.
- Presentation to stakeholders/clients is undertaken and feedback incorporated into planning documentation.

LO5: Identify participatory management strategies

- Management strategies that address defined objectives are identified.
- Management strategies are designed to alleviate existing impacts or to target management actions.
- Management strategies are costed and compared to existing budgets and available resources.
- Steps of work are planned to prioritize outcomes and management resource allocation.
- Consultation with stakeholders/clients is undertaken and feedback incorporated into planning documentation

LO6: Prepare participatory management plan

- Site information and management strategies are documented into a draft management plan for consultation.
- Consultation with stakeholders and clients is undertaken according to enterprise guidelines.
- Changes are made to the draft plan, and a final plan is prepared and presented to client

Context of assessment:- Competency may be assessed in the work place or in a simulated work place setting

Annex: Resource Requirements

AGR NRC4 M05 0921: Developing Participatory Management Plan for a Designated Area					
	Category/Item	Description/ Specifications	Quantity	Recommended Ratio (Item: Trainee)	Requirements (e.g. Maintenance)
A.	Learning Materials				
1	TTLM	To be prepared by the trainers	25	1:1	For one class
2	Reference				
2.1	ONRS (Oromia National Regional State), 2001. Oromia Natural Resource Development and Environmental Protection Authority Establishment Proclamation NO. 43/2001. Finfine, Ethiopia.	(Oromia National Regional State), 2001	5	1:5	
2.2	Marshall, M. 1997. Common Property, Communal property and open access regimes, In: Beyond Fences: Seeking Social	Marshall, M. 1997	5	1:5	

	Sustainability in Conservation. Vol. 2, pp. 5. IUCN.				
2.3	Ecosystem preservation and the economy in the Greater Yellowstone area.	Power, T. M.1991	5	1:5	Recent Editions
B.	Learning Facilities & Infrastructure				
1	Demonstration farm	Hectare	1	100 m ² :1	Permanent
2	Laboratory	5 x 8 m	1	1:25	Fully equipped
3	Class rooms	5 x 8 m	1	1:25	Fully equipped
4	Library	Standard	1	1:25	Recent reference books
5	Internet	On 25 computer	1	1:1	
6	Vehicles (bus)		1	1:25	
C	Consumable Materials				
1	Duplication paper	Desta	10	10:25	
2	Printing paper	Desta	10	10:25	
3	Photocopy paper	Desta	10	10:25	
4	Pen	Ball point Bic	50	2:1	
5	Pencil	BH	25	1:1	

6	Stencil	Ambassador	2	2:1	
7	Toner	4250	2	2:25	
8	Stencil ink	Pkts	2	2:25	
9	Marker	(art-line 90)	50	2:1	
10	Graph paper	Roll	10	10:25	
11	Philip char paper	Roll	1	1:25	
12	Scotch tape	Pcs	10	10:25	
13	UHU	Pcs	25	1:1	
14	Fastener	Pkts	1	1:25	
15	Small stapler	Pcs	5	1:5	
16	Large Stapler	Pcs	5	1:5	
17	Medium Stapler	Pcs	5	1:5	
18	Paper basket	Pcs	2	2:25	
19	Paper tray	Pcs	5	1:5	
20	Staple remover	Pcs	5	1:5	
21	Spills	Pkts	10	10:25	
22	Classer (hard paper)	Pcs	100	5:1	
23	File Box	With ring	25	1:1	
24	File Box	With string	25	1:1	
25	Bag	Brief case	1	1:25	
26	Calculator	Scientific	25	1:1	
27	Ruler	Plastic (30, 50, 100 cm)	25	1:1	
28	T-Square	Aluminum metal type	25	1:1	
29	Writing pad	Small	25	1:1	
30	Writing pad	Medium	25	1:1	
31	Writing pad	Large	25	1:1	
32					

33	Tools and Equipment				
1	Computer	Desk Top Flat screen, 17" <i>DELL</i>	25	1:1	Maintenance
2	Computer	Lab top (Toshiba)	1	1:25	Maintenance
3	Camera	Digital	1	1:25	Maintenance
4	Video Camera	Digital	1	1:25	Maintenance
5	Photocopier	Hp laser Jet	1	1:25	Maintenance
6	Printer Color	Hp laser Jet	1	1:25	Maintenance
7	Printer Normal	Hp laser Jet	1	1:25	Maintenance
8	Scanner	Hp	1	1:25	Maintenance
9	Measuring tape	50 and 100 m	25	1:1	
10	Scissors	Pcs			
11	Topographicmap	Pc	25	1:1	

LEARNING MODULE 06		TVET logo
TVET-PROGRAMME TITLE: Natural Resources Conservation and Development Level IV		
MODULE TITLE: Participating in Designing Sustainable Natural Resources Utilization		
MODULE CODE : AGR NRC4 M06 0921		
NOMINAL DURATION: 38 Hours		
MODULE DESCRIPTION: This module covers knowledge, skills and attitude required for designing of sustainable utilization plan of wildlife resource, forest resource, land and water resource without causing damage to the natural environment.		
LEARNING OUTCOMES At the end of the module the learner will be able to: <ul style="list-style-type: none"> LO1. Plan community based natural resources utilization LO2. Establish means of promotion and advertisement LO3. Undertake a site analysis LO4. Develop a concept design LO5. Produce a final plan 		
MODULE CONTENTS: LO1. Plan community based natural resources utilization <ul style="list-style-type: none"> 2.1 Preparing long and short term community based strategic plan 2.2 Identifying and incorporating local community benefits 2.3 Identifying and promoting cultural taboos and traditional practices 2.4 Outlining mechanisms for sustainable utilization of natural resources 2.5 Designing monitoring and evaluation mechanisms with clients 2.6 Identifying appropriate mechanisms for infrastructures development LO2. Establish means of promotion and advertisement <ul style="list-style-type: none"> 2.1. Establishing experience sharing mechanisms 2.2. Identifying source of information 2.3. Identifying and advertised natural resources potential areas 		

LO3. Undertake a site analysis

- 3.1. Visiting and inspecting the site by using tools and equipment
- 3.2. Quantifying and mapping physical element and features of the site
 - 3.2.1. Physical and biological condition
 - 3.2.2. Presence of threats
- 3.3. Recording
 - 3.3.1. Soil and topography aspects
 - 3.3.2. Habitat resources
 - 3.3.3. Existing fauna and flora
 - 3.3.4. Climatic factors
- 3.4. Assessing and documenting legal requirements and constraints
- 3.5. Assessing the potential for natural resources conservation
- 3.6. Identifying and recording the limiting factors
- 3.7. Determining and recording options for passive and active interventions
- 3.8. Assessing and recording other relevant information

LO4. Develop a concept design

- 4.1 Preparing concept design
- 4.2 Undertaking consultation with the stake holders
- 4.3 Using a professional graphic format

LO5. Produce a final plan

- 5.1. Preparing and drafting A detailed plan
- 5.2. Communicating information on the plan clearly
- 5.3. Including plan, notes and specifications on plan
- 5.4. Organizing and preparing further landscape design documentation

LEARNING METHODS:			
For None Impaired Trainees	Reasonable Adjustment for Trainees with Disability (TWD)		
	Deaf	Hard of hearing	Physical impairment
Lecture-discussion	<ul style="list-style-type: none"> ❖ Assign sign language interpreter ❖ Arrange the class room seating to be conducive for eye to eye contact ❖ Make sure the luminosity of the light of class room is kept ❖ Introduce new and relevant vocabularies ❖ Use short and clear sentences ❖ Give emphasis on visual lecture and ensure the attention of the trainees ❖ Avoid movement during lecture time ❖ Present the lecture in video format ❖ Summarize main points 	<ul style="list-style-type: none"> ❖ Organize the class room seating arrangement to be accessible to trainees ❖ Speak loudly ❖ Ensure the attention of the trainees ❖ Present the lecture in video format ❖ Ensure the attention of the trainees 	<ul style="list-style-type: none"> ❖ Organize the class room seating arrangement to be accessible for wheelchairs users. ❖ Facilitate and support the trainees who have severe impairments on their upper limbs to take note ❖ Provide Orientation on the physical feature of the work shop
Demonstration	<ul style="list-style-type: none"> ❖ use Sign language interpreter ❖ Use video recorded material ❖ Ensure attention of the trainees ❖ Provide structured training ❖ Show clear and short method ❖ Use gesture ❖ Provide tutorial support (if necessary) 	<ul style="list-style-type: none"> ❖ Illustrate in clear & short method ❖ Use Video recorded material ❖ Ensure the attention of the trainees ❖ Provide tutorial support (if necessary) 	<ul style="list-style-type: none"> ❖ Facilitate and support the trainees having severe upper limbs impairment to operate equipment/ machines ❖ Assign peer trainees to assist ❖ Conduct close follow up ❖ Provide tutorial support (if necessary)
Group discussion	<ul style="list-style-type: none"> ❖ Use sign language interpreters ❖ Facilitate the integration of trainees with group members ❖ Conduct close follow up ❖ Introduce the trainees with other group member ❖ 	<ul style="list-style-type: none"> ❖ Facilitate the integration of trainees with group members ❖ Conduct close follow up ❖ Introduce the trainees with other group member ❖ Inform the group members to speak loudly 	<ul style="list-style-type: none"> ❖ Introduce the trainees with their peers

Exercise	<ul style="list-style-type: none"> ❖ Conduct close follow up and guidance ❖ Provide tutorial support if necessary ❖ provide special attention in the process/practical training ❖ Introduce new and relevant vocabularies 	<ul style="list-style-type: none"> ❖ Conduct close follow up and guidance ❖ Provide tutorial support if necessary ❖ provide special attention in the process/practical training 	<ul style="list-style-type: none"> ❖ Assign peer trainees ❖ Use additional nominal hours if necessary
Individual assignment	<ul style="list-style-type: none"> ❖ Use sign language interpreter ❖ Provide briefing /orientation on the assignment ❖ Provide visual recorded material 	<ul style="list-style-type: none"> ❖ Provide briefing /orientation on the assignment ❖ Provide visual recorded material 	
ASSESSMENT METHODS:			
Interview	<ul style="list-style-type: none"> ❖ Use sign language interpreter ❖ Ensure or confirm whether the proper communication was conducted with the trainee through the service of the sign language interpreter ❖ Use short and clear questioning ❖ Time extension 	<ul style="list-style-type: none"> ❖ Speak loudly ❖ Using sign language interpreter if necessary 	<ul style="list-style-type: none"> ❖ Use written response as an option for the trainees having speech challenges
Written test	<ul style="list-style-type: none"> ❖ Prepare the exam using short sentences, multiple choices, True or False, matching and short answers ❖ Avoid essay writing ❖ Time extension 	<ul style="list-style-type: none"> ❖ Prepare the exam using short sentences, multiple choices, True or False, matching and short answers if necessary. 	<ul style="list-style-type: none"> ❖ Use oral response as an option to give answer for trainees having severe upper limb impairment ❖ Time extension for trainees having severe upper limb impairment
Demonstration/ Observation	<ul style="list-style-type: none"> ❖ Use sign language interpreter ❖ Brief on the instruction of the exam ❖ Provide activity-based/ practical assessment method ❖ Time extension 	<ul style="list-style-type: none"> ❖ Provide activity based assessment ❖ Brief on the instruction of the exam ❖ Use loud voice ❖ Time extension 	<ul style="list-style-type: none"> ❖ Provide activity based assessment ❖ Conduct close follow up ❖ Time extension ❖

Assessment criteria

LO1. Plan community based natural resources utilization

- Long and short term community based strategic plan is prepared in accordance with time frame of the natural resources utilization strategic plan.
- Local community benefits are identified and incorporated in the plan
- Cultural taboos and traditional practices are identified and promotion mechanisms included in the plan.
- Mechanisms for sustainable utilization of natural resources are outlined based on national rules and regulations and community requirements
- Monitoring and evaluation mechanisms are designed in the plan with consultation of the clients.
- Appropriate mechanisms for infrastructures development are identified to enhance the promotion and establishment of natural resources utilization in collaboration with other relevant stakeholders

LO2. Establish means of promotion and advertisement

- Experience sharing mechanisms are established among communities, farmers etc to promote sustainable natural resources utilization based on relevant information sources
- Natural resources potential areas are identified and advertised through appropriate media, such as; meeting notice board and other means of communicating with community

LO3. Undertake a site analysis

- The site is visited and inspected at the first stage of the design work by using appropriate tools and equipment.
- Physical element and features of the site, its physical and biological condition and the presence of threats are quantified and mapped onto the base plan.

- Soil and topography aspects, habitat resources, existing fauna and flora and climatic factors are recorded on the base plan and in the site report.
- . Legal requirements and constraints for natural resources utilization are assessed and documented.
- The potential for natural resources conservation is assessed and the limiting factors are identified and recorded.
- Options for passive and active interventions are determined and recorded.
- Other relevant information is assessed and recorded.

LO4. Develop a concept design

- Concept design is prepared to illustrate location and layout of the proposed natural resources area according to the design brief.
- Consultation with the stake holders is undertaken to establish agreement on options and approaches for development in accordance with the proposed ecological aims and goals.
- A professional graphic format is used to present the concept design with supporting written information and justification or reasons for the proposed actions.

LO5. Produce a final plan

- A detailed plan is prepared and drafted according to the design brief, concept design and organizations' guidelines.
- Information on the plan is clearly communicated with the work in a sequential manner.
- Plan, notes and specifications are included on the plan to give an interpretation of the plan, to establish the quality and standard of the works, and the responsibilities of the community during implementation.
- Further landscape design documentation are organized and/or prepared according to the plan brief and organization guidelines.

Annex: Resource Requirements

AGR NRC4 M06 0921: Participating in Designing Sustainable Natural Resources Utilization				
Item No.	Category/Item	Description/ Specifications	Quantity	Recommended Ratio (Item: Trainee)
A. Learning Materials				
1	TTLM.	Prepared by the trainer	25	1:1
2	Textbook		25	1:1
3	Reference book			
3.1	Towards a gender-responsive implementation of the Convention on Biological Diversity.	UN Women (2018).	5	1:5
3.2	Global resources outlook 2019: Natural resources for the future we want. UN Environment Programme.	International Resource Panel. (2019).	5	1:5
3.3	The role of property rights in natural resource management, good governance and empowerment of the rural poor. USAID.	Aggarwal, S. & Elbow, K. (2016).	5	1:5
3.4	Sustainable Use of Natural Resources	Group for Development and Environment Institute of Geography, University of Berne 1995	5	1:5

B.	Learning Facilities & Infrastructure	
1	Lecture room/work shop	5m*5m 1 1:25
2	Library	10m*10m 1 1:25
C.	Consumable Materials	
1	Copy paper	A4 size 5 rim 1:5
D.	Tools and Equipments	
1	First aid kit	Standard 5 1:5
2	Binoculars	Digital 5 1:5
3	Computer software	3 1:3
4	Mountain bicycle	1:5
5	Field books	25 1:1
6	Maps	topomap 5 1:5
7	GPS	5 1:5
8	Tent	5 1:5
9	Sleeping bag	5 1:5
10	Sponge mattress and	5 1:5
11	Digital camera	5 1:5

LEARNING MODULE 07		TVET logo
TVET-PROGRAMME TITLE: Natural Resources Conservation and Development Level IV		
MODULE TITLE: Managing Natural Resources Information System		
MODULE CODE : AGR NRC4 M07 0921		
NOMINAL DURATION: 32Hours		
MODULE DESCRIPTION: This Module covers knowledge, skills and attitude required to manage the identification, acquisition, analysis and use of appropriate information which plays a significant part in the organization's effectiveness.		
LEARNING OUTCOMES At the end of the module the learner will be able to: LO1: Utilize Natural Resource information systems LO2: Collect, analyze and review Natural Resource information LO3: Manage the Natural Resource information systems LO4: Manage resource planning		
MODULE CONTENTS: LO1: Utilize Natural Resource information systems 1.1. Developing strategies to effective use of organizational information systems 1.2. Assessing and reveiwing organization information 1.3. Developing Strategies to obtain information LO2: Collect, analyze and review Natural Resource information 2.1. Developing systems to collect relevant information 2.2 Analyzing Information LO3: Manage the Natural Resource information systems 3.1. Developing strategy to management information system 3.2. Store and retrieve data 3.3. Developing and implementing strategy for available technology		

LO4: Manage resource planning

- 4.1. Developing Resource proposals
- 4.2. Resource estimation and business plan
- 4.3. Supporting and presenting resource proposals

LEARNING METHODS				
For Impaired Trainees	None	Reasonable Adjustment for Trainees with Disability (TWD)		
	Low Vision and Blind	Deaf	Hard of hearing	Physical impairment
Lecture-discussion	<ul style="list-style-type: none">❖ Provide large print text❖ Prepare the lecture in Audio/video & in <u>Brail</u> format❖ Organize the class room seating arrangement to be accessible to trainees❖ Write short notes on the black/white board using large text❖ Make sure the luminosity of the light of class room is kept❖ Use normal tone of voice❖ Encourage trainees to record the lecture in audio format	<ul style="list-style-type: none">❖ Assign sign language interpreter❖ Arrange the class room seating to be conducive for eye to eye contact❖ Make sure the luminosity of the light of class room is kept❖ Introduce new and relevant vocabularies❖ Use short and clear sentences❖ Give emphasis on visual lecture and ensure the attention of the trainees❖ Avoid movement during lecture time❖ Present the lecture in video format❖ Summarize main points	<ul style="list-style-type: none">❖ Organize the class room seating arrangement to be accessible to trainees❖ Speak loudly❖ Ensure the attention of the trainees❖ Present the lecture in video format❖ Ensure the attention of the trainees	<ul style="list-style-type: none">❖ Organize the class room seating arrangement to be accessible for wheelchairs users.❖ Facilitate and support the trainees who have severe impairments on their upper limbs to take note❖ Provide Orientation on the physical feature of the work shop

	<ul style="list-style-type: none"> ❖ Provide Orientation on the physical feature of the work shop ❖ Summarize main points 			
Demonstration	<ul style="list-style-type: none"> ❖ Conduct close follow up ❖ Use verbal description ❖ Provide special attention in the process of guidance ❖ facilitate the support of peer trainees ❖ Prepare & use simulation 	<ul style="list-style-type: none"> ❖ use Sign language interpreter ❖ Use video recorded material ❖ Ensure attention of the trainees ❖ Provide structured training ❖ Show clear and short method ❖ Use gesture ❖ Provide tutorial support (if necessary) 	<ul style="list-style-type: none"> ❖ Illustrate in clear & short method ❖ Use Video recorded material ❖ Ensure the attention of the trainees ❖ Provide tutorial support (if necessary) 	<ul style="list-style-type: none"> ❖ Facilitate and support the trainees having severe upper limbs impairment to operate equipments/ machines ❖ Assign peer trainees to assist ❖ Conduct close follow up ❖ Provide tutorial support (if necessary)

Group discussion	<ul style="list-style-type: none"> ❖ Facilitate the integration of trainees with group members ❖ Conduct close follow up ❖ Introduce the trainees with other group member ❖ Brief the thematic issues of the work 	<ul style="list-style-type: none"> ❖ Use sign language interpreters ❖ Facilitate the integration of trainees with group members ❖ Conduct close follow up ❖ Introduce the trainees with other group member 	<ul style="list-style-type: none"> ❖ Facilitate the integration of trainees with group members ❖ Conduct close follow up ❖ Introduce the trainees with other group member ❖ Inform the group members to speak loudly 	<ul style="list-style-type: none"> ❖ Introduce the trainees with their peers
ASSESSMENT METHODS:				
Interview		<ul style="list-style-type: none"> ❖ Use sign language interpreter ❖ Ensure or confirm whether the proper communication was conducted with the trainee through the service of the sign language interpreter ❖ Use short and clear questioning 	<ul style="list-style-type: none"> ❖ Speak loudly ❖ Using sign language interpreter if necessary 	<ul style="list-style-type: none"> ❖ Use written response as an option for the trainees having speech challenges

		❖ Time extension		
Written test	<ul style="list-style-type: none"> ❖ Prepare the exam in large texts/Brail ❖ Use interview as an option if necessary ❖ Prepare the exam in audio format ❖ Assign human reader (if necessary) ❖ Time extension 	<ul style="list-style-type: none"> ❖ Prepare the exam using short sentences, multiple choices, True or False, matching and short answers ❖ Avoid essay writing ❖ Time extension 	<ul style="list-style-type: none"> ❖ Prepare the exam using short sentences, multiple choices, True or False, matching and short answers if necessary. 	<ul style="list-style-type: none"> ❖ Use oral response as an option to give answer for trainees having severe upper limb impairment ❖ Time extension for trainees having severe upper limb impairment
Demonstration/Observation	<ul style="list-style-type: none"> ❖ Brief the instruction or provide them in large text/Brail ❖ Time extension 	<ul style="list-style-type: none"> ❖ Use sign language interpreter ❖ Brief on the instruction of the exam ❖ Provide activity-based/ practical assessment method ❖ Time extension 	<ul style="list-style-type: none"> ❖ Provide activity based assessment ❖ Brief on the instruction of the exam ❖ Use loud voice ❖ Time extension 	<ul style="list-style-type: none"> ❖ Provide activity based assessment ❖ Conduct close follow up ❖ Time extension

ASSESSMENT CRITERIA

LO 1 . Utilize Natural resource information systems

- Strategies are developed to ensure effective use of organizational information systems, so that information required by teams can be determined and found
- Information held by the organization is accessed and reviewed to determine suitability, accessibility, up-to-date and reliability
- Strategies are developed to source and obtain information which is not immediately available/accessible

LO2. Collect, analyze and review Natural resource information

- Systems are developed to ensure that collection of information is timely, adequate, relevant to the needs of teams, and is in a format suitable for analysis, interpretation and dissemination
- Information is analyzed to identify and report relevant trends and developments to support the strategic planning process

LO3 . Manage the Natural resource information systems

- Strategies are developed to ensure that management information systems are used effectively to store and retrieve data to aid the decision making process
- Strategies are developed and implemented to ensure that technology available in the work area is used to manage information effectively
- Strategies are developed and implemented to improve the information system, and to designated groups as required

LO4. Manage resource planning

- Resource proposals are developed in consultation with relevant stakeholders using all available planning information
- Resource needs are estimated and the organization's business plans, and customer and supplier requirements reflected
- Proposals to secure resources are supported by clearly presented submissions describing realistic options, benefits, costs and outcomes

Annex: Resource Requirements

<u>AGR NRC4 M07 0921: Managing Natural Resources Information System</u>					
Item No.	Category/Item	Description/ Specifications	Qt.	Recommended Ratio (Item: Trainee)	Requirements (e.g. Maintenance)
A.	Learning Materials				
1.	TTLM	To be developed by trainer	25	1:1	
2.	Reference	<ul style="list-style-type: none"> House, William C. (1983). Decision Support Systems – A Data-Based, Model-Oriented User Developed Discipline. Petrocelli Books, Inc. New York, NY. IBM Agricultural Symposium (1963). Endicott, New York, September 23-26. Integrated Decision Support Systems in Agriculture - Successful Practical Applications. (1990) Papers from International DLG - Congress for Computer Technology held in Frankfurt, Germany on May 27-30. Keller, Gerhard and Thomas Teufel. (1998). 	5	1:5	

		<p>SAP R/3 Process-Oriented Implementation. Addison Wesley Longman, New York, NY.</p> <ul style="list-style-type: none"> Knowledge Based Systems in Agriculture - Prospects for Application. (1988) Papers from International DLG - Congress for Computer Technology held in Frankfurt, Germany on June 19-22. 			
B.	Learning Facilities & Infrastructure				
1.	Laboratory/Workshop	Lab. 6mX 10m = 60m ²	1	1:20	20 seats & tables
2.	Lecture Room	5m*8m=40m ²	1	1:25	
3.	Library	10m*15m=150m ²	1	1:60	
C.	Consumable Materials				
1.	Topographic map		25	1:1	
2	Satellite Image		5	1:5	
3	Stationery (pencil, graph paper, etc)		25	1:1	
D.	Tools and Equipments		25		
1	Compass		25	1:1	
2	GPS		5	1:5	
3	computer		8	1:3	

LEARNING MODULE 08	TVET logo
TVET- PROGRAMME TITLE: Natural Resources Conservation and Development Level IV	
MODULE TITLE: Coordinating Natural Area Restoration Program	
MODULE CODE : <u>AGR NRC4 M08 0921</u>	
NOMINAL DURATION: 40 hours	
MODULE DESCRIPTION: This module covers the knowledge, skills and attitude required to carry out inspection and assessment of site for the replacement of vegetation, plan natural area restoration program, monitor and review natural area restoration works.	
LEARNING OUTCOMES At the end of the module the learner will be able to: LO1. Inspect and assess site conditions LO2. Plan natural area restoration program LO3. Monitor natural area restoration works LO4. Review natural area restoration program	
MODULE CONTENTS: LO1. Inspect and assess site conditions <ul style="list-style-type: none"> 1.1. Preparing a vegetation assessment checklist/format 1.2. Identifying site conditions, level of degradation and potential 1.3. Assessing threats to existing ecosystem, flora, fauna 1.4. Assessing range of likely operating conditions, hazards and difficult 1.5. Preparing vegetation assessment report LO2. Plan natural area restoration program <ul style="list-style-type: none"> 2.1. Preparing plans and specifications for natural area restoration works 2.2. Selecting natural area restoration techniques 2.3. Following Steps of strategy 2.4. Planning protective structures 2.5. Selecting and transporting appropriate personnel 	

- 2.6. obtaining appropriate permits/licenses and authorizations
- 2.7. Sourcing Equipment and materials required for natural area restoration work

LO3. Monitor natural area restoration works

- 3.1 Conforming OHS management
- 3.2 Making Observations of o natural area restoration plans
- 3.3 Making site specifications
- 3.4 Checking plant materials, machinery and equipment
- 3.5. Performing natural area restoration works
- 3.6 Monitoring Work and undertaking remedial action

LO4. Review natural area restoration program

- 4.1. Monitoring site maintenance program
- 4.2. Assessing site of natural area restoration works
- 4.3. Reporting changes to natural area restoration techniques

LEARNING METHODS:			
For None Impaired Trainees	Reasonable Adjustment for Trainees with Disability (TWD)		
	Deaf	Hard of hearing	Physical impairment
Lecture-discussion	<ul style="list-style-type: none"> ❖ Assign sign language interpreter ❖ Arrange the class room seating to be conducive for eye to eye contact ❖ Make sure the luminosity of the light of class room is kept ❖ Introduce new and relevant vocabularies ❖ Use short and clear sentences ❖ Give emphasis on visual lecture and ensure the attention of the trainees ❖ Avoid movement during lecture time ❖ Present the lecture in video format ❖ Summarize main points 	<ul style="list-style-type: none"> ❖ Organize the class room seating arrangement to be accessible to trainees ❖ Speak loudly ❖ Ensure the attention of the trainees ❖ Present the lecture in video format ❖ Ensure the attention of the trainees 	<ul style="list-style-type: none"> ❖ Organize the class room seating arrangement to be accessible for wheelchairs users. ❖ Facilitate and support the trainees who have severe impairments on their upper limbs to take note ❖ Provide Orientation on the physical feature of the work shop
Demonstration	<ul style="list-style-type: none"> ❖ use Sign language interpreter ❖ Use video recorded material ❖ Ensure attention of the trainees ❖ Provide structured training ❖ Show clear and short method ❖ Use gesture ❖ Provide tutorial support (if necessary) 	<ul style="list-style-type: none"> ❖ Illustrate in clear & short method ❖ Use Video recorded material ❖ Ensure the attention of the trainees ❖ Provide tutorial support (if necessary) 	<ul style="list-style-type: none"> ❖ Facilitate and support the trainees having severe upper limbs impairment to operate equipment/ machines ❖ Assign peer trainees to assist ❖ Conduct close follow up ❖ Provide tutorial support (if necessary)
Group discussion	<ul style="list-style-type: none"> ❖ Use sign language interpreters ❖ Facilitate the integration of trainees with group members ❖ Conduct close follow up ❖ Introduce the trainees with other group member ❖ 	<ul style="list-style-type: none"> ❖ Facilitate the integration of trainees with group members ❖ Conduct close follow up ❖ Introduce the trainees with other group member ❖ Inform the group members to speak loudly 	<ul style="list-style-type: none"> ❖ Introduce the trainees with their peers

Exercise	<ul style="list-style-type: none"> ❖ Conduct close follow up and guidance ❖ Provide tutorial support if necessary ❖ provide special attention in the process/practical training ❖ Introduce new and relevant vocabularies 	<ul style="list-style-type: none"> ❖ Conduct close follow up and guidance ❖ Provide tutorial support if necessary ❖ provide special attention in the process/practical training 	<ul style="list-style-type: none"> ❖ Assign peer trainees ❖ Use additional nominal hours if necessary
Individual assignment	<ul style="list-style-type: none"> ❖ Use sign language interpreter ❖ Provide briefing /orientation on the assignment ❖ Provide visual recorded material 	<ul style="list-style-type: none"> ❖ Provide briefing /orientation on the assignment ❖ Provide visual recorded material 	
ASSESSMENT METHODS:			
Interview	<ul style="list-style-type: none"> ❖ Use sign language interpreter ❖ Ensure or conform whether the proper communication was conducted with the trainee through the service of the sign language interpreter ❖ Use short and clear questioning ❖ Time extension 	<ul style="list-style-type: none"> ❖ Speak loudly ❖ Using sign language interpreter if necessary 	<ul style="list-style-type: none"> ❖ Use written response as an option for the trainees having speech challenges
Written test	<ul style="list-style-type: none"> ❖ Prepare the exam using short sentences, multiple choices, True or False, matching and short answers ❖ Avoid essay writing ❖ Time extension 	<ul style="list-style-type: none"> ❖ Prepare the exam using short sentences, multiple choices, True or False, matching and short answers if necessary. 	<ul style="list-style-type: none"> ❖ Use oral response as an option to give answer for trainees having severe upper limb impairment ❖ Time extension for trainees having severe upper limb impairment
Demonstration/ Observation	<ul style="list-style-type: none"> ❖ Use sign language interpreter ❖ Brief on the instruction of the exam ❖ Provide activity-based/ practical assessment method ❖ Time extension 	<ul style="list-style-type: none"> ❖ Provide activity based assessment ❖ Brief on the instruction of the exam ❖ Use loud voice ❖ Time extension 	<ul style="list-style-type: none"> ❖ Provide activity based assessment ❖ Conduct close follow up ❖ Time extension ❖

Assessment criteria

LO1. Inspect and assess site conditions

- A vegetation assessment checklist/format is prepared.
- Site conditions, level of degradation and potential for natural area restoration are identified.
- Threats to existing ecosystem, flora, fauna and property from natural area restoration works are assessed.
- Range of likely operating conditions, hazards and difficult/sensitive environments are assessed for impact on natural area restoration works.
- A vegetation assessment report is prepared in standard format.

LO2. Plan natural area restoration program

- Plans and specifications for natural area restoration works are prepared according to program/management aims and objectives.
- Natural area restoration techniques are selected to meet management plans and enterprise requirements.
- Steps of strategy are followed for works that are outlined.
- Protective structures are planned to ensure compliance with OHS and relevant legislation.
- Appropriate personnel are selected and transported to natural area restoration sites according to enterprise procedures.
- Appropriate permits/licenses and authorizations are obtained according to legislative and enterprise requirements.
- Equipment and materials required for natural area restoration work is sourced according to enterprise procedures.

LO3. Monitor natural area restoration works

- Observations are made according to natural area restoration plans and to enterprise procedures.
- Checks are made that the site is prepared according to specifications.
- Plant materials, machinery and equipment are checked to ensure compliance with enterprise guidelines and natural area restoration plan.

- Natural area restoration works are performed according to enterprise guidelines.
- Work is monitored to ensure remedial action is undertaken as required.
- OHS management have been conformed to legislative requirements and enterprise policies and procedures

LO4. Review natural area restoration program

- Site is monitored to ensure compliance with maintenance program plans and specifications or enterprise guidelines.
- Site is assessed to determine whether natural area restoration works are addressing factors and issues consistent with management plans.
- Changes to natural area restoration techniques are reported to enterprise procedures for adoption in future works.

Annex: Resource Requirements

AGR APR4 M08 0921: Coordinating Natural Area Restoration Program				
Item No.	Category/Item	Description/ Specifications	Quantity	Recommended Ratio (Item: Trainee)
A.	Learning Materials			
1	TTLM.	Prepared by the trainer	25	1:1
2	Reference book			
2.1	Coordinating Natural Area Restoration Program	Green Austrilia, 2012	5	1:5
2.2	20-Year Forest and Natural Areas Restoration Plan	Green Kirkland Partnership, November 2015	5	1:5
B.	Learning Facilities & Infrastructure			
1	Lecture room/work shop	5m*5m	1	1:25
2	Library	10m*10m	1	1:25
C	Consumable Materials			
1	Copy paper	A4 size	5 rim	1:5
2	Paper A4	A4 size	5 dasta	1:5
3	Flip chart	Standard	5	1:5

4	Marker	Permanent and temporary	25	1:1
5	First aid kit	Standard	5	1:5
D.	Tools and Equipments			
1	Binoculars	Digital	5	1:5
2	Computer software		3	1:3
3	Field books		25	1:1
4	Maps	topomap	5	1:5
5	GPS		5	1:5
6	Digital camera		5	1:5

LEARNING MODULE 09		TVET logo
TVET-PROGRAMME TITLE: Natural Resources Conservation and Development Level IV		
MODULE TITLE: Coordinating Natural Resources Infrastructure Development and Maintenance		
MODULE CODE : AGR NRC4 M09 0921		
NOMINAL DURATION: 50 Hours		
MODULE DESCRIPTION: This module covers the knowledge, skills and attitude required to undertake planning and managing the infrastructure required for development, maintenance, production and transporting forest products.		
LEARNING OUTCOMES At the end of the module the learner will be able to: LO1. Determine infrastructure requirements LO2. Obtain infrastructure LO3. Manage infrastructure LO4. Record and manage information		
MODULE CONTENTS: LO1. Determine infrastructure requirements <ol style="list-style-type: none"> 1.1. Accessing Information 1.2. Confirming Characteristics of the land. 1.3. Identifying and accessing data . 1.4. Collecting Information . 1.5. Considering organizational requirements. 1.6. Identifying and comparing the analyzed information. 1.7. Identifying OHS hazards, assessing risks and incorporating controls. 1.8. Collecting Detail informations LO2. Obtain infrastructure <ol style="list-style-type: none"> 2.1. Identifying Solutions and bridging the gaps. 2.2. Undertaking cost benefit analysis. 2.3. Organizing and Undertaking work preparation. 2.4. Undertaking Negotiations and optimizing infrastructure. 		

2.5. Planning and commissioning infrastructural Works .

2.6. Identifying environmental and waste management requirements.

LO3.Manage infrastructure

3.1.Determining and scheduling Infrastructure maintenance programs.

3.2. Undertaking planning and consultation.

3.3. Managing unplanned maintenance situations.

3.4. Checking and adhering maintenance program.

3.5. Checking and adhering OHS requirements.

3.6. Checking and eliminating the potential detrimental environmental impacts

LO4.Record and manage information

4.1. Analyzing the recorded data,observations and documentation.

4.2. Preparing recommendations for future plans.

4.3. Preparinga report.

4.4. Keeping Records and documentation.

4.5. Completing records and documentation.

4.6. Documenting the recorded information.

LEARNING METHODS:			
For None Impaired Trainees	Reasonable Adjustment for Trainees with Disability (TWD)		
	Deaf	Hard of hearing	Physical impairment
Lecture-discussion	<ul style="list-style-type: none"> ❖ Assign sign language interpreter ❖ Arrange the class room seating to be conducive for eye to eye contact ❖ Make sure the luminosity of the light of class room is kept ❖ Introduce new and relevant vocabularies ❖ Use short and clear sentences ❖ Give emphasis on visual lecture and ensure the attention of the trainees ❖ Avoid movement during lecture time ❖ Present the lecture in video format ❖ Summarize main points 	<ul style="list-style-type: none"> ❖ Organize the class room seating arrangement to be accessible to trainees ❖ Speak loudly ❖ Ensure the attention of the trainees ❖ Present the lecture in video format ❖ Ensure the attention of the trainees 	<ul style="list-style-type: none"> ❖ Organize the class room seating arrangement to be accessible for wheelchairs users. ❖ Facilitate and support the trainees who have severe impairments on their upper limbs to take note ❖ Provide Orientation on the physical feature of the work shop
Demonstration	<ul style="list-style-type: none"> ❖ use Sign language interpreter ❖ Use video recorded material ❖ Ensure attention of the trainees ❖ Provide structured training ❖ Show clear and short method ❖ Use gesture ❖ Provide tutorial support (if necessary) 	<ul style="list-style-type: none"> ❖ Illustrate in clear & short method ❖ Use Video recorded material ❖ Ensure the attention of the trainees ❖ Provide tutorial support (if necessary) 	<ul style="list-style-type: none"> ❖ Facilitate and support the trainees having severe upper limbs impairment to operate equipment/ machines ❖ Assign peer trainees to assist ❖ Conduct close follow up ❖ Provide tutorial support (if necessary)
Group discussion	<ul style="list-style-type: none"> ❖ Use sign language interpreters ❖ Facilitate the integration of trainees with group members ❖ Conduct close follow up ❖ Introduce the trainees with other group member 	<ul style="list-style-type: none"> ❖ Facilitate the integration of trainees with group members ❖ Conduct close follow up ❖ Introduce the trainees with other group member ❖ Inform the group members to speak loudly 	<ul style="list-style-type: none"> ❖ Introduce the trainees with their peers

	❖		
Exercise	<ul style="list-style-type: none"> ❖ Conduct close follow up and guidance ❖ Provide tutorial support if necessary ❖ provide special attention in the process/practical training ❖ Introduce new and relevant vocabularies 	<ul style="list-style-type: none"> ❖ Conduct close follow up and guidance ❖ Provide tutorial support if necessary ❖ provide special attention in the process/practical training 	<ul style="list-style-type: none"> ❖ Assign peer trainees ❖ Use additional nominal hours if necessary
Individual assignment	<ul style="list-style-type: none"> ❖ Use sign language interpreter ❖ Provide briefing /orientation on the assignment ❖ Provide visual recorded material 	<ul style="list-style-type: none"> ❖ Provide briefing /orientation on the assignment ❖ Provide visual recorded material 	
ASSESSMENT METHODS:			
Interview	<ul style="list-style-type: none"> ❖ Use sign language interpreter ❖ Ensure or confirm whether the proper communication was conducted with the trainee through the service of the sign language interpreter ❖ Use short and clear questioning ❖ Time extension 	<ul style="list-style-type: none"> ❖ Speak loudly ❖ Using sign language interpreter if necessary 	<ul style="list-style-type: none"> ❖ Use written response as an option for the trainees having speech challenges
Written test	<ul style="list-style-type: none"> ❖ Prepare the exam using short sentences, multiple choices, True or False, matching and short answers ❖ Avoid essay writing ❖ Time extension 	<ul style="list-style-type: none"> ❖ Prepare the exam using short sentences, multiple choices, True or False, matching and short answers if necessary. 	<ul style="list-style-type: none"> ❖ Use oral response as an option to give answer for trainees having severe upper limb impairment ❖ Time extension for trainees having severe upper limb impairment
Demonstration/	<ul style="list-style-type: none"> ❖ Use sign language interpreter ❖ Brief on the instruction of the exam 	<ul style="list-style-type: none"> ❖ Provide activity based assessment ❖ Brief on the instruction of the exam 	<ul style="list-style-type: none"> ❖ Provide activity based assessment

Observation	<ul style="list-style-type: none"> ❖ Provide activity-based/ practical assessment method ❖ Time extension 	<ul style="list-style-type: none"> ❖ Use loud voice ❖ Time extension 	<ul style="list-style-type: none"> ❖ Conduct close follow up ❖ Time extension ❖
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Assessment criteria

LO1. Determine infrastructure requirement

- Information regarding the characteristics of the products and their respective market requirements are accessed.
- Characteristics of the land under production and conservation to be used are confirmed from colleagues and other planning processes.
- Historical data, including recent data, from organizational records is identified and accessed for input to infrastructure planning processes.
- Information regarding other organizational planning processes and potential for improvements or innovations, is collected and used to inform the infrastructure planning process.
- Requirements of the organization are taken into consideration during analysis.
- All available information is analyzed, and the infrastructure required to efficiently achieving the targeted production requirements are identified and compared with those existing and available in the organization.
- OHS hazards are identified, risks assessed and suitable controls are incorporated into the planning process.
- Details regarding infrastructure requirements are used as input to other organizational planning processes.

LO2. Obtain infrastructure

- Solutions to bridging the gaps between required and existing infrastructure are identified
- Preferred solution to fill gaps in required infrastructure is determined from a cost benefit analysis.
- Negotiations are undertaken to obtain infrastructure at the best rate for the organization.
- Preparation work required for existing infrastructure is organized and undertaken as necessary.
- Works required are planned and commissioned according to organization requirements.
- All alterations to infrastructure or new developments have been given due consideration to environmental and waste management requirements.

LO3. Manage infrastructure

- Infrastructure maintenance programs are determined including scheduling and responsibilities.
- Any reallocations of land required are undertaken with the planning and consultation required by the organization, and within all relevant guidelines and regulations.
- Situations that require unplanned maintenance are managed within organization guidelines and policy.
- Checks are made to ensure that program specifications are adhered to and amendments are made where necessary.
- Checks are made to ensure that all OHS requirements are adhered to, including the appropriate use of PPE.
- Checks are made to ensure that potential detrimental environmental impacts are minimized or eliminated.

LO4. Record and manage information

- Data, observations and documentation recorded during the production cycle are analyzed against the plan according to organization guidelines.
- Recommendations for future plans are prepared based on the analysis of the data.
- A report is prepared that documents the plans implementation according to the organizations requirements and guidelines.
- Records and documentation are created, maintained and kept as described in the infrastructure plan, the OHS requirements, and machinery and equipment management programs.
- Records and documentation are completed clearly and accurately throughout production in the organization.
- The record keeping system that is used ensures that required information is available, accessible, meaningful and useful.

Annex: Resource Requirements

AGR NRC4 M09 0921: Coordinating Natural Resources Infrastructure Development and Maintenance				
Item No.	Category/Item	Description/ Specifications	Quantity	Recommended Ratio (Item: Trainee)
A.	Learning Materials			
1	TTLM.	Prepared by the trainer	25	1:1
2	Textbook		25	1:1
3	Reference book	CommunityBased Participatory Watershed Development,		
3.1	CommunityBased Participatory Watershed Development,	Minstry of agriculture, January 2005 Addis Ababa Ethiopia	5	1:5
3.2	Agroforestry for Increased Productivity, Sustainability and Poverty Alleviation	Tewari DN. 1995. International Book Distributors.	5	1:5
3.3.	Ecological and Environmental Studies	Garg SK. 2006. Khanna Publishers.	5	1:5
3.4.	Forest Management and Planning	Bettinger P, Boston K, Siry J, Grebner D. 2008. Academic Press.	5	1:5
3.5.	Methods for Community Participation	Kumar S. 2002. Practical Action.	5	1:5

3.	The Science and Art of Receiving Feedback Well	Viking/Penguin, 2014	5	1:5
B.	Learning Facilities & Infrastructure			
1	Lecture room/work shop	5m*5m	1	1:25
2	Library	10m*10m	1	1:25
C.	Consumable Materials			
1	Copy paper	A4 size	5 rim	1:5
2	Fuel	Standared	400lt	1:25
3	Lubricants	Stantared	50lt	1:25
D.	Tools and Equipments			
1	Tractor	Class	1	1:5
2	Pick up	Toyota	1	1:25
3	Primary tillage implements	All types	1 set	1:25
4	Secondary tillage implements	All types	1 set	1:25
5	Seeder	Standared	1	1:25
6	Sprayer	Standared	1	1:25
7	Fertilizer spreader	Standared	1	1:25
8	mulchers or rakes	Standared	1	1:25
9	Harvester	Standared	1	1:25
10	Trailer	Standared	1	1:25

LEARNING MODULE 10		TVET logo
TVET- PROGRAMME TITLE: Natural Resources Conservation and Development Level IV		
MODULE TITLE: Monitoring and Evaluating Implementation of Land Use Plan		
MODULE CODE :AGR NRC4 M10 0921		
NOMINAL DURATION: 40 hours		
MODULE DESCRIPTION: This module covers the knowledge, skills and attitude required to set the time and conduct monitoring and evaluation of implementation of land use plan, collect feedback and revise the plan for future actions.		
LEARNING OUTCOMES At the end of the module the learner will be able to: LO1. Conduct monitoring and evaluation LO2. Collect feed back LO3. Undertake revision of the plan		
MODULE CONTENTS: LO1: Conduct monitoring and evaluation <ol style="list-style-type: none"> 1.1. Setting monitoring period. 1.2. Preparing performance evaluation plan. 1.3. Preparing checklists and materials. 1.4. Making decision. 1.5. Undertaking community and stakeholders participation. 1.6. Conducting monitoring and evaluation. 1.7. Organizing the Collected information. 1.8. Reviewing evaluation report. LO2: Collect feed back <ol style="list-style-type: none"> 2.1. Sorting the identified land use . 2.2. Identifying and communicating. 2.3. Providing backstopping cases. LO3.Undertake revision of the plan <ol style="list-style-type: none"> 3.1. Checking goals 		

3.2. Initiating modifications.

3.3. Performing program redesigning.

LEARNING METHODS:			
For None Impaired Trainees	Reasonable Adjustment for Trainees with Disability (TWD)		
	Deaf	Hard of hearing	Physical impairment
Lecture-discussion	<ul style="list-style-type: none"> ❖ Assign sign language interpreter ❖ Arrange the class room seating to be conducive for eye to eye contact ❖ Make sure the luminosity of the light of class room is kept ❖ Introduce new and relevant vocabularies ❖ Use short and clear sentences ❖ Give emphasis on visual lecture and ensure the attention of the trainees ❖ Avoid movement during lecture time ❖ Present the lecture in video format ❖ Summarize main points 	<ul style="list-style-type: none"> ❖ Organize the class room seating arrangement to be accessible to trainees ❖ Speak loudly ❖ Ensure the attention of the trainees ❖ Present the lecture in video format ❖ Ensure the attention of the trainees 	<ul style="list-style-type: none"> ❖ Organize the class room seating arrangement to be accessible for wheelchairs users. ❖ Facilitate and support the trainees who have severe impairments on their upper limbs to take note ❖ Provide Orientation on the physical feature of the work shop
Demonstration	<ul style="list-style-type: none"> ❖ use Sign language interpreter ❖ Use video recorded material ❖ Ensure attention of the trainees ❖ Provide structured training ❖ Show clear and short method ❖ Use gesture ❖ Provide tutorial support (if necessary) 	<ul style="list-style-type: none"> ❖ Illustrate in clear & short method ❖ Use Video recorded material ❖ Ensure the attention of the trainees ❖ Provide tutorial support (if necessary) 	<ul style="list-style-type: none"> ❖ Facilitate and support the trainees having severe upper limbs impairment to operate equipment/ machines ❖ Assign peer trainees to assist ❖ Conduct close follow up ❖ Provide tutorial support (if necessary)
Group discussion	<ul style="list-style-type: none"> ❖ Use sign language interpreters ❖ Facilitate the integration of trainees with group members ❖ Conduct close follow up ❖ Introduce the trainees with other group member 	<ul style="list-style-type: none"> ❖ Facilitate the integration of trainees with group members ❖ Conduct close follow up ❖ Introduce the trainees with other group member ❖ Inform the group members to speak loudly 	<ul style="list-style-type: none"> ❖ Introduce the trainees with their peers

	❖		
Exercise	<ul style="list-style-type: none"> ❖ Conduct close follow up and guidance ❖ Provide tutorial support if necessary ❖ provide special attention in the process/practical training ❖ Introduce new and relevant vocabularies 	<ul style="list-style-type: none"> ❖ Conduct close follow up and guidance ❖ Provide tutorial support if necessary ❖ provide special attention in the process/practical training 	<ul style="list-style-type: none"> ❖ Assign peer trainees ❖ Use additional nominal hours if necessary
Individual assignment	<ul style="list-style-type: none"> ❖ Use sign language interpreter ❖ Provide briefing /orientation on the assignment ❖ Provide visual recorded material 	<ul style="list-style-type: none"> ❖ Provide briefing /orientation on the assignment ❖ Provide visual recorded material 	
ASSESSMENT METHODS:			
Interview	<ul style="list-style-type: none"> ❖ Use sign language interpreter ❖ Ensure or confirm whether the proper communication was conducted with the trainee through the service of the sign language interpreter ❖ Use short and clear questioning ❖ Time extension 	<ul style="list-style-type: none"> ❖ Speak loudly ❖ Using sign language interpreter if necessary 	<ul style="list-style-type: none"> ❖ Use written response as an option for the trainees having speech challenges
Written test	<ul style="list-style-type: none"> ❖ Prepare the exam using short sentences, multiple choices, True or False, matching and short answers ❖ Avoid essay writing ❖ Time extension 	<ul style="list-style-type: none"> ❖ Prepare the exam using short sentences, multiple choices, True or False, matching and short answers if necessary. 	<ul style="list-style-type: none"> ❖ Use oral response as an option to give answer for trainees having severe upper limb impairment ❖ Time extension for trainees having severe upper limb impairment
Demonstration/	<ul style="list-style-type: none"> ❖ Use sign language interpreter ❖ Brief on the instruction of the exam 	<ul style="list-style-type: none"> ❖ Provide activity based assessment ❖ Brief on the instruction of the exam 	<ul style="list-style-type: none"> ❖ Provide activity based assessment

Observation	<ul style="list-style-type: none"> ❖ Provide activity-based/ practical assessment method ❖ Time extension 	<ul style="list-style-type: none"> ❖ Use loud voice ❖ Time extension 	<ul style="list-style-type: none"> ❖ Conduct close follow up ❖ Time extension ❖
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Assessment criteria

LO1. Conduct monitoring and evaluation

- Regular ongoing/ progress monitoring period is set for planed activities based on work place regulation.
- Performance evaluation plan is prepared based on duration of the program and outcome expected.
- Checklists and materials are prepared to collect information based on planned activities
- Decision is made on sharing responsibilities to carryout monitoring and evaluation to ensure community participation
- Community and other stakeholders participation is ensured in monitoring and evaluation for planned activities.
- Monitoring and evaluation is conducted through participatory rural appraisal based on the set period
- Collected information is organized to take corrective measures based on progress report
- Evaluation report is reviewed by involvement of relevant stakeholders to decide for future actions in accordance with standard.

LO2. Collect feed back

- Land use problems that are identified through monitoring and evaluation and which demands assistance from outside are sorted out based on the criteria set by reviewers
- Institutions that could be communicated for backstopping are identified based on types of technologies implemented.
- Cases that need backstopping are provided to relevant higher bodies following work place procedure.

LO3. Undertake revision of the plan

- Goals are checked if they are still valid and redefined
- Modifications are initiated to revise the plan either through implementing agencies or by developing proposal and reference back to decision makers
- Redesigning program is performed based on periodic evaluation.

Annex: Resource Requirements

AGR NRC4 M10 0921: Monitoring and Evaluating Implementation of Land Use Plan				
Item No.	Category/Item	Description/ Specifications	Quantity	Recommended Ratio (Item: Trainee)
A. Learning Materials				
1	TTLM.	Prepared by the trainer	25	1:1
2	Reference book		5	1:5
	Forest Management and Planning Bettinger P, Boston K, Siry J, Grebner	D. 2008. Academic Press.	5	1:5
	Remote Sensing of the Environment: An	Earth Resource Perspective	5	1:5
			5	1:5
			5	1:5
2.1	How to build strong teams	Carla Rudder April 10, 2019	5	1:5
2.2	The contingent effects of leadership on team collaboration in virtual teams	Rui Huang Simran Kahai Rebecca Jestice, 2010	5	1:5
2.3				
B. Learning Facilities & Infrastructure				
1	Lecture room/work shop	5m*5m	1	1:25
2	Library	10m*10m	1	1:25
C Consumable Materials				
1	Copy paper	A4 size	5 rim	1:5
D. Tools and Equipments				
1	Paper A4	A4 size	5 dasta	1:5
2	Flip chart	Standard	5	1:5
3	Marker	Permanent and temporary	25	1:1

LEARNING MODULE 11	TVET logo
TVET- PROGRAMME TITLE: Natural Resources Conservation and Development Level IV	
MODULE TITLE: Applying Forest Management Practices	
MODULE CODE : <u>AGR NRC4 M11 0921</u>	
NOMINAL DURATION: 48 hours	
MODULE DESCRIPTION: This module covers knowledge, skills and attitude required to estimate volume and yield estimation of forest stands through surveying; control (non-commercially thinning) of the species growing on site and determine stocking rate so as to ensure maximum vigor and optimum product outcome.	
LEARNING OUTCOMES At the end of the module the learner will be able to: <ul style="list-style-type: none"> LO1. Carryout and monitor thinning operations LO2. Develop coppice stems and Undertake thinning LO3. Use appropriate sampling techniques and estimate volume and yield of stand LO4. Establish forest data base management system LO5. Prepare and implement forest management plan LO6. Manage Natural Forest 	
MODULE CONTENTS: LO1. Carryout and monitor thinning operations <ul style="list-style-type: none"> 1.1 Identifying and checking thinning operation tools and equipment 1.2 Identifying sample area and measuring trees 1.3 Marking trees 1.4 Implementing thinning operations 1.5 Reviewing operation 1.6 Analyzing information and data 1.7 Preparing recommendations for future operations 1.8 Recording and reporting operation processes LO2. Develop coppice stems and Undertake thinning	

- 2.1 . Assessing and using Environmental conditions
- 2.2. Directing tool operators
- 2.3. Clearing stools of debris
- 2.4 Protecting coupe from wildlife and grazing animals
- 2.5. Removing standard seedlings
- 2.6. Assessing stools and gauging the amount of coppice growth
- 2.7 Undertaking thinning

LO3. Use appropriate sampling techniques and estimate volume and yield of stand

- 3.1 Applying random, stratified, systematic and cluster sampling techniques
- 3.2 Determining sample size
- 3.3. Measuring diameter and height of stand
- 3.4. Calculating mean annual and current annual increment of stand
- 3.5. Determining cost-benefit analysis on estimated yield

LO4. Establish forest data base management system

- 4.1. Collecting data
- 4.2. encoding , analyzing and interpreting collected data
- 4.3. Making information available

LO5. Prepare and implement forest management plan

- 5.1 Preparing forest management plan
- 5.2 Implementing prepared management plan
- 5.3 Reviewing plan frequently

LO6. Manage Natural Forest

- 6.1 Undertaking review of existing natural forest status and collection of data
- 6.2 Identification of species composition at all canopy layers
- 6.3 Carrying out natural regeneration inventory
- 6.4. preparing and implementing enrichment planting activities plan
- 6.5 Carrying out climber cutting and canopy opening activities

LEARNING METHODS:			
For None Impaired Trainees	Reasonable Adjustment for Trainees with Disability (TWD)		
	Deaf	Hard of hearing	Physical impairment
Lecture-discussion	<ul style="list-style-type: none"> ❖ Assign sign language interpreter ❖ Arrange the class room seating to be conducive for eye to eye contact ❖ Make sure the luminosity of the light of class room is kept ❖ Introduce new and relevant vocabularies ❖ Use short and clear sentences ❖ Give emphasis on visual lecture and ensure the attention of the trainees ❖ Avoid movement during lecture time ❖ Present the lecture in video format ❖ Summarize main points 	<ul style="list-style-type: none"> ❖ Organize the class room seating arrangement to be accessible to trainees ❖ Speak loudly ❖ Ensure the attention of the trainees ❖ Present the lecture in video format ❖ Ensure the attention of the trainees 	<ul style="list-style-type: none"> ❖ Organize the class room seating arrangement to be accessible for wheelchairs users. ❖ Facilitate and support the trainees who have severe impairments on their upper limbs to take note ❖ Provide Orientation on the physical feature of the work shop
Demonstration	<ul style="list-style-type: none"> ❖ use Sign language interpreter ❖ Use video recorded material ❖ Ensure attention of the trainees ❖ Provide structured training ❖ Show clear and short method ❖ Use gesture ❖ Provide tutorial support (if necessary) 	<ul style="list-style-type: none"> ❖ Illustrate in clear & short method ❖ Use Video recorded material ❖ Ensure the attention of the trainees ❖ Provide tutorial support (if necessary) 	<ul style="list-style-type: none"> ❖ Facilitate and support the trainees having severe upper limbs impairment to operate equipment/ machines ❖ Assign peer trainees to assist ❖ Conduct close follow up ❖ Provide tutorial support (if necessary)
Group discussion	<ul style="list-style-type: none"> ❖ Use sign language interpreters ❖ Facilitate the integration of trainees with group members ❖ Conduct close follow up ❖ Introduce the trainees with other group member ❖ 	<ul style="list-style-type: none"> ❖ Facilitate the integration of trainees with group members ❖ Conduct close follow up ❖ Introduce the trainees with other group member ❖ Inform the group members to speak loudly 	<ul style="list-style-type: none"> ❖ Introduce the trainees with their peers

Exercise	<ul style="list-style-type: none"> ❖ Conduct close follow up and guidance ❖ Provide tutorial support if necessary ❖ provide special attention in the process/practical training ❖ Introduce new and relevant vocabularies 	<ul style="list-style-type: none"> ❖ Conduct close follow up and guidance ❖ Provide tutorial support if necessary ❖ provide special attention in the process/practical training 	<ul style="list-style-type: none"> ❖ Assign peer trainees ❖ Use additional nominal hours if necessary
Individual assignment	<ul style="list-style-type: none"> ❖ Use sign language interpreter ❖ Provide briefing /orientation on the assignment ❖ Provide visual recorded material 	<ul style="list-style-type: none"> ❖ Provide briefing /orientation on the assignment ❖ Provide visual recorded material 	
ASSESSMENT METHODS:			
Interview	<ul style="list-style-type: none"> ❖ Use sign language interpreter ❖ Ensure or conform whether the proper communication was conducted with the trainee through the service of the sign language interpreter ❖ Use short and clear questioning ❖ Time extension 	<ul style="list-style-type: none"> ❖ Speak loudly ❖ Using sign language interpreter if necessary 	<ul style="list-style-type: none"> ❖ Use written response as an option for the trainees having speech challenges
Written test	<ul style="list-style-type: none"> ❖ Prepare the exam using short sentences, multiple choices, True or False, matching and short answers ❖ Avoid essay writing ❖ Time extension 	<ul style="list-style-type: none"> ❖ Prepare the exam using short sentences, multiple choices, True or False, matching and short answers if necessary. 	<ul style="list-style-type: none"> ❖ Use oral response as an option to give answer for trainees having severe upper limb impairment ❖ Time extension for trainees having severe upper limb impairment
Demonstration/ Observation	<ul style="list-style-type: none"> ❖ Use sign language interpreter ❖ Brief on the instruction of the exam ❖ Provide activity-based/ practical assessment method ❖ Time extension 	<ul style="list-style-type: none"> ❖ Provide activity based assessment ❖ Brief on the instruction of the exam ❖ Use loud voice ❖ Time extension 	<ul style="list-style-type: none"> ❖ Provide activity based assessment ❖ Conduct close follow up ❖ Time extension ❖

Assessment criteria

LO1. Carryout and monitor thinning operations

- Thinning operation tools and equipment ,parameters and method of operation are identified and checked with appropriate personnel
- Sample area is identified and trees are measured in accordance with organizational procedures.
- Trees are marked for treatment in accordance with plan and organizational procedures
- Thinning operations are implemented in accordance with plans, budget, OHS and legislative requirements
- Operation is reviewed against inventory program and organizational requirements
- Information and data are analyzed to determine effectiveness of thinning operations and improvements to future operations
- Recommendations for future operations are prepared based on findings of assessment of information collected
- Operation processes are recorded and reported to the appropriate personnel

LO2. Develop coppice stems and Undertake thinning

- Environmental conditions are assessed and used to plan the coppice development of each tree stump
- Tool operators are directed to cut tree stumps at ground level to form stools
- Stools are cleared of debris and allowed to rest and sprout coppice
- Coupe is protected from wildlife and grazing animals during coppice development
- Standard seedlings are removed or left in accordance with the coppice management plan used
- Stools are regularly assessed to measure and gauge the amount of coppice growth

- Thinning is regularly undertaken to control re-growth and promote the growth of the retained coppice stems

LO3. Use appropriate sampling techniques and estimate volume and yield of stand

- Random, stratified, systematic and cluster sampling techniques are applied and sample size is determined based on the population size and type.
- Diameter and height of stand are measured to calculate volume of stand
- Mean annual and current annual increment of stand is calculated to understand current and annual status of stand
- Cost-benefit analysis is determined based on estimated yield

LO4. Establish forest data base management system

- Data is collected based on available resources.
- Collected data is encoded, analyzed and interpreted using the established data base management system
- Information is made available to users through various means of communication

LO5. Prepare and implement forest management plan

- Forest management plan is prepared in accordance with organization scope.
- Prepared management plan is implemented according to scheduled plan.
- Plan is reviewed frequently for improvement according to the organizations requirement.

LO6. Manage Natural Forest

- Review of existing natural forest status and collection of data regarding diversity and Identification of species composition at all canopy layers, are undertaken according to natural forest management guideline.
- Natural regeneration inventory with special reference to commercially desirable species and associated flora is carried out according to organizational work manual.

- Enrichment planting activities are planned is prepared and implemented according to the organizational work plan
- Climber cutting and canopy opening activities are carried out according to technical guideline and the work schedule.

Annex: Resource Requirements

AGR NRC M11 0921: Applying Forest Management Practices				
Item No.	Category/Item	Description/ Specifications	Quantity	Recommended Ratio (Item: Trainee)
A.	Learning Materials			
1	TTLM.	Prepared by the trainer	25	1:1
2	Reference book			
2.1	FOREST MANAGEMENT 101 A handbook to forest management in the North Central Region	Brian J. Palik et. http://www.ncrs.f s.fed.us/fmg/nfm g/fm101/bmp/	5	1:5
2.2	Classification of Forest Management Approaches: A New Conceptual Framework and Its Applicability to European Forestry	Duncker, P. S., S. M. Barreiro, G. M. Hengeveld, T. Lind, W. L. Mason, S. Ambrozy, and H. Spiecker. 2012.	5	1:5
B.	Learning Facilities & Infrastructure			
1	Lecture room/work shop	5m*5m	1	1:25
2	Library	10m*10m	1	1:25
C	Consumable Materials			
1	Copy paper	A4 size	5 rim	1:5
2	Paper A4	A4 size	5 dasta	1:5
3	Flip chart	Standard	5	1:5
4	Marker	Permanent and temporary	25	1:1
5	First aid kit	Standard	5	1:5
D.	Tools and Equipments			
1	Binoculars	Digital	5	1:5

2	Computer software		1	1:25
3	Field books		25	1:1
4	Maps	Topomap	5	1:5
5	GPS	Germin	5	1:5
6	Clinometer	Suntoo	5	1:5
7	Hypsometer	Digital	5	1:5
8	Diameter tabe	5.64	5	1:5
9	Cliper	Digital	5	1:5

LEARNING MODULE 12		TVET logo
TVET-PROGRAMME TITLE: Natural Resources Conservation and Development Level IV		
MODULE TITLE: Monitoring and Evaluating Fire Potential and Prevention Method		
MODULE CODE: AGR NRC4 M12 0921		
NOMINAL DURATION: 40 Hours		
MODULE DESCRIPTION: This module covers the knowledge, skills and attitude required to continually monitor and assess the potential of fire during normal work activities and evaluating basic fire prevention measures.		
LEARNING OUTCOMES At the end of the module the learner will be able to: LO1. Prepare for fires LO2. Assess fire potential LO3. Evaluate fire prevention LO4. Record and report information fire potential		
MODULE CONTENTS: LO1. Prepare for fires <ul style="list-style-type: none"> 1.1. Identifying and compiling OHS 1.2. Evaluating types and potential of fire hazard and positive effects <ul style="list-style-type: none"> 1.2.1. Evaluating types of fire 1.2.2. Potential of fire hazard 1.2.3. Positive effects of fire 1.3. Selecting and checking appropriate equipment 1.4. Planning evaluation processes 1.5. Establishing and maintaining communication LO2. Assess fire potential <ul style="list-style-type: none"> 2.1. Monitoring and reporting Weather conditions 		

2.2. Monitoring equipment conditions

2.3. Monitoring hazardous and flammable substances

LO3. Evaluate fire prevention

3.1. Controlling and monitoring fire risks and hazards

3.2. Checking equipment regularly

3.3. Handling hazardous or flammable substances

LO4. Record and report information of fire potential

4.1. Reporting potential of fire

4.2. Recognizing signs of fire potential and alarms

4.3. Recording and reporting fire potential and prevention

LEARNING METHODS:			
For None Impaired Trainees	Reasonable Adjustment for Trainees with Disability (TWD)		
	Deaf	Hard of hearing	Physical impairment
Lecture-discussion	<ul style="list-style-type: none"> ❖ Assign sign language interpreter ❖ Arrange the class room seating to be conducive for eye to eye contact ❖ Make sure the luminosity of the light of class room is kept ❖ Introduce new and relevant vocabularies ❖ Use short and clear sentences ❖ Give emphasis on visual lecture and ensure the attention of the trainees ❖ Avoid movement during lecture time ❖ Present the lecture in video format ❖ Summarize main points 	<ul style="list-style-type: none"> ❖ Organize the class room seating arrangement to be accessible to trainees ❖ Speak loudly ❖ Ensure the attention of the trainees ❖ Present the lecture in video format ❖ Ensure the attention of the trainees 	<ul style="list-style-type: none"> ❖ Organize the class room seating arrangement to be accessible for wheelchairs users. ❖ Facilitate and support the trainees who have severe impairments on their upper limbs to take note ❖ Provide Orientation on the physical feature of the work shop
Demonstration	<ul style="list-style-type: none"> ❖ use Sign language interpreter ❖ Use video recorded material ❖ Ensure attention of the trainees ❖ Provide structured training ❖ Show clear and short method ❖ Use gesture ❖ Provide tutorial support (if necessary) 	<ul style="list-style-type: none"> ❖ Illustrate in clear & short method ❖ Use Video recorded material ❖ Ensure the attention of the trainees ❖ Provide tutorial support (if necessary) 	<ul style="list-style-type: none"> ❖ Facilitate and support the trainees having severe upper limbs impairment to operate equipment/ machines ❖ Assign peer trainees to assist ❖ Conduct close follow up ❖ Provide tutorial support (if necessary)
Group discussion	<ul style="list-style-type: none"> ❖ Use sign language interpreters ❖ Facilitate the integration of trainees with group members ❖ Conduct close follow up ❖ Introduce the trainees with other group member ❖ 	<ul style="list-style-type: none"> ❖ Facilitate the integration of trainees with group members ❖ Conduct close follow up ❖ Introduce the trainees with other group member ❖ Inform the group members to speak loudly 	<ul style="list-style-type: none"> ❖ Introduce the trainees with their peers

Exercise	<ul style="list-style-type: none"> ❖ Conduct close follow up and guidance ❖ Provide tutorial support if necessary ❖ provide special attention in the process/practical training ❖ Introduce new and relevant vocabularies 	<ul style="list-style-type: none"> ❖ Conduct close follow up and guidance ❖ Provide tutorial support if necessary ❖ provide special attention in the process/practical training 	<ul style="list-style-type: none"> ❖ Assign peer trainees ❖ Use additional nominal hours if necessary
Individual assignment	<ul style="list-style-type: none"> ❖ Use sign language interpreter ❖ Provide briefing /orientation on the assignment ❖ Provide visual recorded material 	<ul style="list-style-type: none"> ❖ Provide briefing /orientation on the assignment ❖ Provide visual recorded material 	
ASSESSMENT METHODS:			
Interview	<ul style="list-style-type: none"> ❖ Use sign language interpreter ❖ Ensure or confirm whether the proper communication was conducted with the trainee through the service of the sign language interpreter ❖ Use short and clear questioning ❖ Time extension 	<ul style="list-style-type: none"> ❖ Speak loudly ❖ Using sign language interpreter if necessary 	<ul style="list-style-type: none"> ❖ Use written response as an option for the trainees having speech challenges
Written test	<ul style="list-style-type: none"> ❖ Prepare the exam using short sentences, multiple choices, True or False, matching and short answers ❖ Avoid essay writing ❖ Time extension 	<ul style="list-style-type: none"> ❖ Prepare the exam using short sentences, multiple choices, True or False, matching and short answers if necessary. 	<ul style="list-style-type: none"> ❖ Use oral response as an option to give answer for trainees having severe upper limb impairment ❖ Time extension for trainees having severe upper limb impairment
Demonstration/ Observation	<ul style="list-style-type: none"> ❖ Use sign language interpreter ❖ Brief on the instruction of the exam ❖ Provide activity-based/ practical assessment method ❖ Time extension 	<ul style="list-style-type: none"> ❖ Provide activity based assessment ❖ Brief on the instruction of the exam ❖ Use loud voice ❖ Time extension 	<ul style="list-style-type: none"> ❖ Provide activity based assessment ❖ Conduct close follow up ❖ Time extension ❖

ASSESSMENT CRITERIA

LO1. Communicate information about workplace processes

- Applicable OHS, legislative and organizational requirements relevant to evaluating fire potential and prevention are identified and complied
- Types and potential for fire hazard and positive effects are constantly evaluated through risk assessment and documented
- Equipment appropriate to potential work requirements are selected and checked for operational effectiveness in accordance with manufacturer's recommendations
- Evaluation processes are planned in accordance with site procedures
- Communication with others is established and maintained in accordance with OHS requirements

LO2. Assess fire potential

- Weather conditions are monitored and reports inspected for changing conditions such as storms and high winds
- Equipment conditions are monitored for overheating and electrical sparking and acted upon immediately
- Hazardous and flammable substances are monitored to assess the potential of spillage and combustion

LO3. Evaluate fire prevention

- Fire risks and hazards are controlled and monitored in accordance with workplace procedures
- Equipment is regularly checked to ensure it is serviceable for emergencies
- Hazardous or flammable substances are handled in accordance with OHS and environmental management regulations

Lo4. Record and report information fire potential

- Potential of fire is reported to appropriate personnel.
- Signs of fire potential are recognized and alarm raised to alert appropriate personnel
- Fire potential and prevention procedures are recorded and reported in accordance with workplace procedure

Annex: Resource Requirements

AGR NRC4 M12 0921: Monitoring and Evaluating Fire Potential and Prevention Method				
Item No.	Category/Item	Description/ Specifications	Quantity	Ratio (Item: Trainee)
A.	Learning Materials			
1	TTLM.	Prepared by the trainer	25	1:1
2	Textbook		5	1:5
3	Reference book			
3.1	Fire training manual and safety operational booklet	Compliant to 2020 standards	5	1:5
3.2	SOLAS Fire training manual	FIRE safety operation 3rd Edition, 2021 compliant	5	1:5
3.3	Forest/wildland fire prevention and control for sustainable forest management	Training manual compiled by Eyob Tedsa Byene Seboka, 2013 WGCNFR	25	1:1
B.	Learning Facilities & Infrastructure			
1	Lecture room/work shop	5m*5m	1	1:25
2	Library	10m*10m	1	1:25
C.	Consumable Materials			
1	Copy paper	A4 size	5 rim	1:5
D.	Tools and Equipments			
1	Communication tools	Standard	5	1:5
2	Fire fighting tools and equipment	High quality standards	5	1:5
3	Camera, binocular, compass	Standards	5	1:5

LEARNING MODULE 13	Logo of TVET
TVET- PROGRAMME TITLE: Natural Resources Conservation and Development Level IV	
MODULE TITLE: Promoting Climate Change Adaptation and Mitigation Techniques	
MODULE CODE : AGR NRC4 M13 0921	
NOMINAL DURATION: 42 hours	
MODULE DESCRIPTION: This module covers the knowledge, skills and attitude required to identify major weather and climatic factors influencing ecosystem and promote the possible adaptation and mitigation measures to minimize disaster and risk on the surrounding environment.	
LEARNING OUTCOMES At the end of the module the learner will be able to: LO1. Interpret available weather and climate information LO2. Carry out adaptation and mitigation measures LO3. Monitor weather and climate effects during adverse conditions LO4. Return to normal operations and documentations	
MODULE CONTENTS: LO1: Interpret available weather and climate information 1.1. Monitoring Weather, climate information and warnings 1.2. Assessing and anticipating weather and climate conditions 1.3. Identifying impacts of weather and climate on environment 1.4. Informing stakeholders and key personnel LO2: Carry out adaptation and mitigation measures 2.1. Identifying adaptation and mitigation measures 2.2. Informing and involving stakeholders and key personnel 2.3. Reviewing suitable adaptation and mitigation measures 2.4. Implementing adaptation and mitigation measures to minimize loss and damage of environment	

2.5. Implementing adaptation and mitigation measures to ensure the safety of personnel

LO3. Monitor weather and climate effects during adverse conditions

3.1. Monitoring wather, climate information and warnings

3.2. Adjusting and revising preventative and remedial actions

LO4. Return to normal operations and documentations

4.1. Monitoring weather and climate information and warnings

4.2. Inspecting environment for damage

4.3. Returning operations back into service

4.4. Reviewing effectiveness of preventive actions

4.5. Updating and reporting documentation

LEARNING METHODS:			
For None Impaired Trainees	Reasonable Adjustment for Trainees with Disability (TWD)		
	Deaf	Hard of hearing	Physical impairment
Lecture-discussion	<ul style="list-style-type: none"> ❖ Assign sign language interpreter ❖ Arrange the class room seating to be conducive for eye to eye contact ❖ Make sure the luminosity of the light of class room is kept ❖ Introduce new and relevant vocabularies ❖ Use short and clear sentences ❖ Give emphasis on visual lecture and ensure the attention of the trainees ❖ Avoid movement during lecture time ❖ Present the lecture in video format ❖ Summarize main points 	<ul style="list-style-type: none"> ❖ Organize the class room seating arrangement to be accessible to trainees ❖ Speak loudly ❖ Ensure the attention of the trainees ❖ Present the lecture in video format ❖ Ensure the attention of the trainees 	<ul style="list-style-type: none"> ❖ Organize the class room seating arrangement to be accessible for wheelchairs users. ❖ Facilitate and support the trainees who have severe impairments on their upper limbs to take note ❖ Provide Orientation on the physical feature of the work shop
Demonstration	<ul style="list-style-type: none"> ❖ use Sign language interpreter ❖ Use video recorded material ❖ Ensure attention of the trainees ❖ Provide structured training ❖ Show clear and short method ❖ Use gesture ❖ Provide tutorial support (if necessary) 	<ul style="list-style-type: none"> ❖ Illustrate in clear & short method ❖ Use Video recorded material ❖ Ensure the attention of the trainees ❖ Provide tutorial support (if necessary) 	<ul style="list-style-type: none"> ❖ Facilitate and support the trainees having severe upper limbs impairment to operate equipment/ machines ❖ Assign peer trainees to assist ❖ Conduct close follow up ❖ Provide tutorial support (if necessary)
Group discussion	<ul style="list-style-type: none"> ❖ Use sign language interpreters ❖ Facilitate the integration of trainees with group members ❖ Conduct close follow up ❖ Introduce the trainees with other group member ❖ 	<ul style="list-style-type: none"> ❖ Facilitate the integration of trainees with group members ❖ Conduct close follow up ❖ Introduce the trainees with other group member ❖ Inform the group members to speak loudly 	<ul style="list-style-type: none"> ❖ Introduce the trainees with their peers

Exercise	<ul style="list-style-type: none"> ❖ Conduct close follow up and guidance ❖ Provide tutorial support if necessary ❖ provide special attention in the process/practical training ❖ Introduce new and relevant vocabularies 	<ul style="list-style-type: none"> ❖ Conduct close follow up and guidance ❖ Provide tutorial support if necessary ❖ provide special attention in the process/practical training 	<ul style="list-style-type: none"> ❖ Assign peer trainees ❖ Use additional nominal hours if necessary
Individual assignment	<ul style="list-style-type: none"> ❖ Use sign language interpreter ❖ Provide briefing /orientation on the assignment ❖ Provide visual recorded material 	<ul style="list-style-type: none"> ❖ Provide briefing /orientation on the assignment ❖ Provide visual recorded material 	
ASSESSMENT METHODS:			
Interview	<ul style="list-style-type: none"> ❖ Use sign language interpreter ❖ Ensure or conform whether the proper communication was conducted with the trainee through the service of the sign language interpreter ❖ Use short and clear questioning ❖ Time extension 	<ul style="list-style-type: none"> ❖ Speak loudly ❖ Using sign language interpreter if necessary 	<ul style="list-style-type: none"> ❖ Use written response as an option for the trainees having speech challenges
Written test	<ul style="list-style-type: none"> ❖ Prepare the exam using short sentences, multiple choices, True or False, matching and short answers ❖ Avoid essay writing ❖ Time extension 	<ul style="list-style-type: none"> ❖ Prepare the exam using short sentences, multiple choices, True or False, matching and short answers if necessary. 	<ul style="list-style-type: none"> ❖ Use oral response as an option to give answer for trainees having severe upper limb impairment ❖ Time extension for trainees having severe upper limb impairment
Demonstration/ Observation	<ul style="list-style-type: none"> ❖ Use sign language interpreter ❖ Brief on the instruction of the exam ❖ Provide activity-based/ practical assessment method ❖ Time extension 	<ul style="list-style-type: none"> ❖ Provide activity based assessment ❖ Brief on the instruction of the exam ❖ Use loud voice ❖ Time extension 	<ul style="list-style-type: none"> ❖ Provide activity based assessment ❖ Conduct close follow up ❖ Time extension ❖

ASSESSMENT CRITERIA

LO1. Interpret available weather and climate information

- Weather and climate information and warnings are regularly monitored to determine likely conditions.
- Potential variations in weather and climate conditions are anticipated and assessed according to warnings, weather patterns and historical experience.
- Possible impacts of weather and climate on environment are identified
- Stakeholders and key personnel are informed of the anticipated impacts of weather and climate on environment.

LO2. Carry out adaptation and mitigation measures

- Appropriate adaptation and mitigation measures are identified in accordance with organizational procedures and recommendations.
- Stakeholders and key personnel are informed and involved in the development of adaptation and mitigation measures.
- Suitable adaptation and mitigation measures are reviewed to ensure availability of appropriate resources, safety of personnel and environment.
- Adaptation and mitigation measures to minimize loss and damage of environment are implemented in accordance with organizational procedures and government policies and strategies.
- Adaptation and mitigation measures to ensure the safety of personnel are implemented in accordance with organizational procedures & government policies and strategies.

LO3. Monitor weather and climate effects during adverse conditions

- Weather and climate information and warnings are regularly monitored to determine ongoing suitability of current preventative and remedial actions.
- Preventative and remedial actions are adjusted and revised according to weather and climatic changes.

LO4. Return to normal operations and documentations

- Weather and climate information and warnings are regularly monitored to determine the normal conditions have returned.

- Environment is inspected for damage in accordance with enterprise and organizational procedures and recommendations
- All operations are returned back into service in accordance with organizational procedures and recommendations and government policies and strategies.
- Effectiveness of preventative actions is reviewed and recommendations are developed to improve the process.
- Documentation is updated and reported in accordance with enterprise/site procedures.

Annex: Resource Requirements

AGR NRC4 M13 0921: Promoting Climate Change Adaptation and Mitigation Techniques				
Item No.	Category/Item	Description/ Specifications	Quantity	Recommended Ratio (Item: Trainee)
A.	Learning Materials			
1	TTLM.	Prepared by the trainer	25	1:1
2	Reference book			
2.1	Meteorology Today: An Introduction to Weather, Climate and the Environment	Ninth Edition C. Donald Ahrens	5	1:5
2.2	Ethiopian Use of ENSO Information in Its Seasonal Forecasts	Fekadu Bekele and Tsegay Wolde-Georgis, National Meteorological Services Agency Addis Ababa, Ethiopia	5	1:5
B.	Learning Facilities & Infrastructure			
1	Lecture room/work shop	5m*5m	1	1:25
2	Library	10m*10m	1	1:25
C	Consumable Materials			
1	Copy paper	A4 size	5 rim	1:5
D.	Tools and Equipments			
1	Paper A4	A4 size	5 dasta	1:5

LEARNING MODULE 14		TVET logo
TVET-PROGRAMME TITLE: Natural Resources Conservation and Development		
Level IV		
MODULE TITLE: Promoting Community Awareness Program		
MODULE CODE: AGR NRC4 M14 0921		
NOMINAL DURATION: 28 Hours		
MODULE DESCRIPTION: This module covers the knowledge, skills and attitude required to identify gaps in existing information, services and resources and to promote community awareness, which will enable the community to work towards knowledge development on current issues.		
LEARNING OUTCOMES At the end of the module the learner will be able to: LO1. Identify information, resource and service requirements LO2. Support community participation LO3. Promote domestic violence awareness		
MODULE CONTENTS: LO1. Identify information, resource and service requirements 1.1. Evaluation methods on domestic violence in the community 1.2. Reviewing relevance of existing community activities and materials 1.3. Identifying gaps and inadequacies of information, resources and services 1.4. Undertaking research on domestic violence and prevention LO2. Support community participation 2.1. Supporting community participation 2.2. Using appropriate interpersonal and networking skills 2.3. Providing opportunities to key people and groups 2.4. Undertaking cooperative planning and develop policies and strategies LO3. Promote domestic violence awareness 3.1. Identifying and utilizing relevant opportunities 3.2. Promoting service delivery and activities 3.3. Identifying strategies		

- | |
|--|
| <p>3.4. Identifying and clarifying opportunities for community education programs</p> <p>3.5. Evaluating and discussing community activities with key people and group</p> |
|--|

LEARNING METHODS:			
For None Impaired Trainees	Reasonable Adjustment for Trainees with Disability (TWD)		
	Deaf	Hard of hearing	Physical impairment
Lecture-discussion	<ul style="list-style-type: none"> ❖ Assign sign language interpreter ❖ Arrange the class room seating to be conducive for eye to eye contact ❖ Make sure the luminosity of the light of class room is kept ❖ Introduce new and relevant vocabularies ❖ Use short and clear sentences ❖ Give emphasis on visual lecture and ensure the attention of the trainees ❖ Avoid movement during lecture time ❖ Present the lecture in video format ❖ Summarize main points 	<ul style="list-style-type: none"> ❖ Organize the class room seating arrangement to be accessible to trainees ❖ Speak loudly ❖ Ensure the attention of the trainees ❖ Present the lecture in video format ❖ Ensure the attention of the trainees 	<ul style="list-style-type: none"> ❖ Organize the class room seating arrangement to be accessible for wheelchairs users. ❖ Facilitate and support the trainees who have severe impairments on their upper limbs to take note ❖ Provide Orientation on the physical feature of the work shop
Demonstration	<ul style="list-style-type: none"> ❖ use Sign language interpreter ❖ Use video recorded material ❖ Ensure attention of the trainees ❖ Provide structured training ❖ Show clear and short method ❖ Use gesture ❖ Provide tutorial support (if necessary) 	<ul style="list-style-type: none"> ❖ Illustrate in clear & short method ❖ Use Video recorded material ❖ Ensure the attention of the trainees ❖ Provide tutorial support (if necessary) 	<ul style="list-style-type: none"> ❖ Facilitate and support the trainees having severe upper limbs impairment to operate equipment/ machines ❖ Assign peer trainees to assist ❖ Conduct close follow up ❖ Provide tutorial support (if necessary)
Group discussion	<ul style="list-style-type: none"> ❖ Use sign language interpreters ❖ Facilitate the integration of trainees with group members ❖ Conduct close follow up ❖ Introduce the trainees with other group member ❖ 	<ul style="list-style-type: none"> ❖ Facilitate the integration of trainees with group members ❖ Conduct close follow up ❖ Introduce the trainees with other group member ❖ Inform the group members to speak loudly 	<ul style="list-style-type: none"> ❖ Introduce the trainees with their peers

Exercise	<ul style="list-style-type: none"> ❖ Conduct close follow up and guidance ❖ Provide tutorial support if necessary ❖ provide special attention in the process/practical training ❖ Introduce new and relevant vocabularies 	<ul style="list-style-type: none"> ❖ Conduct close follow up and guidance ❖ Provide tutorial support if necessary ❖ provide special attention in the process/practical training 	<ul style="list-style-type: none"> ❖ Assign peer trainees ❖ Use additional nominal hours if necessary
Individual assignment	<ul style="list-style-type: none"> ❖ Use sign language interpreter ❖ Provide briefing /orientation on the assignment ❖ Provide visual recorded material 	<ul style="list-style-type: none"> ❖ Provide briefing /orientation on the assignment ❖ Provide visual recorded material 	
ASSESSMENT METHODS:			
Interview	<ul style="list-style-type: none"> ❖ Use sign language interpreter ❖ Ensure or conform whether the proper communication was conducted with the trainee through the service of the sign language interpreter ❖ Use short and clear questioning ❖ Time extension 	<ul style="list-style-type: none"> ❖ Speak loudly ❖ Using sign language interpreter if necessary 	<ul style="list-style-type: none"> ❖ Use written response as an option for the trainees having speech challenges
Written test	<ul style="list-style-type: none"> ❖ Prepare the exam using short sentences, multiple choices, True or False, matching and short answers ❖ Avoid essay writing ❖ Time extension 	<ul style="list-style-type: none"> ❖ Prepare the exam using short sentences, multiple choices, True or False, matching and short answers if necessary. 	<ul style="list-style-type: none"> ❖ Use oral response as an option to give answer for trainees having severe upper limb impairment ❖ Time extension for trainees having severe upper limb impairment
Demonstration/ Observation	<ul style="list-style-type: none"> ❖ Use sign language interpreter ❖ Brief on the instruction of the exam ❖ Provide activity-based/ practical assessment method ❖ Time extension 	<ul style="list-style-type: none"> ❖ Provide activity based assessment ❖ Brief on the instruction of the exam ❖ Use loud voice ❖ Time extension 	<ul style="list-style-type: none"> ❖ Provide activity based assessment ❖ Conduct close follow up ❖ Time extension ❖

ASSESSMENT CRITERIA

LO1. Identify information, resource and service requirements

- Appropriate evaluation methods are used to evaluate domestic violence information, resources and services available in the community
- Relevance of existing community activities and materials are reviewed based on changing community needs and organisation philosophy
- Gaps and inadequacies in existing information, resources and services are accurately Identified in accordance with organisation standards and procedures
- Research is undertaken to ensure that information reflects the underpinning values and philosophies of domestic violence including a domestic violence prevention focus

LO2. Support community participation

- Community participation is supported in line with organisation standards and procedures
- Appropriate interpersonal and networking skills are used to enlist support from key people and groups influencing community values
- Opportunities are provided to key people and groups to participate in designing and evaluating programs, policies and strategies to address the changing needs of the community
- Cooperative planning is undertaken to develop appropriate policies and strategies which address the identified community service education needs

LO3. Promote domestic violence awareness

- Relevant opportunities are identified and utilised to formally and informally communicate and promote awareness in line with community needs
- Service delivery and activities are promoted in a way that facilitates understanding and gains support
- Strategies to address identified gaps and inadequacies in information, resources and services are implemented in accordance with organisation standards and procedures

- Opportunities for community education programs and/or resources/services, are identified and clarified and evaluated with key people and groups
- Community activities are evaluated and discussed with key people and groups to determine future directions

Annex: Resource Requirements

AGR NRC4 M14 0921 : Promoting Community Awareness Program				
Item No.	Category/Item	Description/ Specifications	Quantity	Recommended Ratio (Item: Trainee)
A.	Learning Materials			
1	TTLM	Prepared by the trainer	25	1:1
2	Textbook		5	1:5
3	Reference Books		5	1:5
B.	Learning Facilities & Infrastructure			
1	Lecture room	5m*5m	1	1:25
2	Library	10m*10m	1	1:25
3	Laboratory/demo area	5m*5m	1	1:25
C	Consumable Materials			
1.	Paper	Rim	5	1:5
3	spanners and screwdrivers, grease guns	As per required	1	1:25
D	Tools and Equipment			
1	PPE	Standard	25	1:1

LEARNING MODULE 15

TVET-PROGRAMME TITLE: **Natural Resources Conservation and Development Level IV**

MODULE TITLE: **Developing and Providing Community Education Projects**

MODULE CODE :**AGR NRC4 M15 0921**

NOMINAL DURATION: **35 Hours**

MODULE DESCRIPTION: This modules covers the knowledge, skills and attitude required to work with the community to develop and provide education projects on relevant issues.

LEARNING OUTCOMES

At the end of the module, the trainee will be able to:

LO1. Develop an education project

LO2. Deliver the education project

LO3. Review the education project

MODULE CONTENTS:

LO1 Develop an education project

- 1.1. Developing education project plan.
- 1.2. Identifying appropriate
 - 1.2.1. Human resource
 - 1.2.2. Financial resource
 - 1.2.3. Physical resource
- 1.3. Developing strategies and education/resource.
- 1.4. Preparing and disseminating promotional materials.

LO2 Deliver the education project

- 2.1. Implementing and distributing strategies and education/resource.
- 2.2. Encouraging the implemented strategies.
- 2.3. Making education project.
- 2.4. Soughing feedback on the education project

LO3 Review the education project

- 3.1. Assessing the education project.
- 3.2. Discussing the outcomes of project evaluations.
- 3.3. Documenting education project .

LEARNING METHODS:			
For None Impaired Trainees	Reasonable Adjustment for Trainees with Disability (TWD)		
	Deaf	Hard of hearing	Physical impairment
Lecture-discussion	<ul style="list-style-type: none"> ❖ Assign sign language interpreter ❖ Arrange the class room seating to be conducive for eye to eye contact ❖ Make sure the luminosity of the light of class room is kept ❖ Introduce new and relevant vocabularies ❖ Use short and clear sentences ❖ Give emphasis on visual lecture and ensure the attention of the trainees ❖ Avoid movement during lecture time ❖ Present the lecture in video format ❖ Summarize main points 	<ul style="list-style-type: none"> ❖ Organize the class room seating arrangement to be accessible to trainees ❖ Speak loudly ❖ Ensure the attention of the trainees ❖ Present the lecture in video format ❖ Ensure the attention of the trainees 	<ul style="list-style-type: none"> ❖ Organize the class room seating arrangement to be accessible for wheelchairs users. ❖ Facilitate and support the trainees who have severe impairments on their upper limbs to take note ❖ Provide Orientation on the physical feature of the work shop
Demonstration	<ul style="list-style-type: none"> ❖ use Sign language interpreter ❖ Use video recorded material ❖ Ensure attention of the trainees ❖ Provide structured training ❖ Show clear and short method ❖ Use gesture ❖ Provide tutorial support (if necessary) 	<ul style="list-style-type: none"> ❖ Illustrate in clear & short method ❖ Use Video recorded material ❖ Ensure the attention of the trainees ❖ Provide tutorial support (if necessary) 	<ul style="list-style-type: none"> ❖ Facilitate and support the trainees having severe upper limbs impairment to operate equipment/ machines ❖ Assign peer trainees to assist ❖ Conduct close follow up ❖ Provide tutorial support (if necessary)
Group discussion	<ul style="list-style-type: none"> ❖ Use sign language interpreters ❖ Facilitate the integration of trainees with group members ❖ Conduct close follow up ❖ Introduce the trainees with other group member 	<ul style="list-style-type: none"> ❖ Facilitate the integration of trainees with group members ❖ Conduct close follow up ❖ Introduce the trainees with other group member ❖ Inform the group members to speak loudly 	<ul style="list-style-type: none"> ❖ Introduce the trainees with their peers

	❖		
Exercise	<ul style="list-style-type: none"> ❖ Conduct close follow up and guidance ❖ Provide tutorial support if necessary ❖ provide special attention in the process/practical training ❖ Introduce new and relevant vocabularies 	<ul style="list-style-type: none"> ❖ Conduct close follow up and guidance ❖ Provide tutorial support if necessary ❖ provide special attention in the process/practical training 	<ul style="list-style-type: none"> ❖ Assign peer trainees ❖ Use additional nominal hours if necessary
Individual assignment	<ul style="list-style-type: none"> ❖ Use sign language interpreter ❖ Provide briefing /orientation on the assignment ❖ Provide visual recorded material 	<ul style="list-style-type: none"> ❖ Provide briefing /orientation on the assignment ❖ Provide visual recorded material 	
ASSESSMENT METHODS:			
Interview	<ul style="list-style-type: none"> ❖ Use sign language interpreter ❖ Ensure or confirm whether the proper communication was conducted with the trainee through the service of the sign language interpreter ❖ Use short and clear questioning ❖ Time extension 	<ul style="list-style-type: none"> ❖ Speak loudly ❖ Using sign language interpreter if necessary 	<ul style="list-style-type: none"> ❖ Use written response as an option for the trainees having speech challenges
Written test	<ul style="list-style-type: none"> ❖ Prepare the exam using short sentences, multiple choices, True or False, matching and short answers ❖ Avoid essay writing ❖ Time extension 	<ul style="list-style-type: none"> ❖ Prepare the exam using short sentences, multiple choices, True or False, matching and short answers if necessary. 	<ul style="list-style-type: none"> ❖ Use oral response as an option to give answer for trainees having severe upper limb impairment ❖ Time extension for trainees having severe upper limb impairment
Demonstration/ Observation	<ul style="list-style-type: none"> ❖ Use sign language interpreter ❖ Brief on the instruction of the exam ❖ Provide activity-based/ practical assessment method ❖ Time extension 	<ul style="list-style-type: none"> ❖ Provide activity based assessment ❖ Brief on the instruction of the exam ❖ Use loud voice ❖ Time extension 	<ul style="list-style-type: none"> ❖ Provide activity based assessment ❖ Conduct close follow up ❖ Time extension ❖

ASSESSMENT CRITERIA

LO1 Develop an education project

- Education project plan is developed in consultation with key people and organisations that identifies priorities and desired outcomes to address issues of concerns of target group/s
- Appropriate human, financial and physical resources are identified and secured
- Strategies and education/resource materials appropriate to the context, issue and audience are developed
- Promotional materials are prepared and disseminated to target audience and others as appropriate

LO2 Deliver the education project

- Strategies are implemented and education/resource materials distributed to ensure maximum effectiveness for delivery of the project
- Strategies are implemented to encourage full participation in the project and the expression of views and feelings about its process or content
- Education project adjustments are made as required to meet the needs of specific groups
- Feedback on the education project or activity is sought from participants

LO3. Review the education project

- The education project is assessed against the planned goals and objectives in accordance with organisation policies and procedures
- Outcomes of project evaluations are discussed with key people and organisations to determine future directions
- Education project outcomes are documented, and where necessary acted on them in accordance with organisation procedures

Annex: Resource Requirements

AGR NRC4 M15 0921:Developing and Providing Community Education Projects				
Item No.	Category/Item	Description/ Specifications	Quantity	Recommended Ratio (Item: Trainee)
A.	Learning Materials			
1	TTLM	Prepared by the trainer	25	1:1
2	Textbook		5	1:5
3	Reference Books		5	1:5
B.	Learning Facilities & Infrastructure			
1	Lecture room	5m*5m	1	1:25
2	Library	10m*10m	1	1:25
3	Laboratory/demo area	5m*5m	1	1:25
C	Consumable Materials			
1.	Lubricants		5	1:5
2	O-rings,hoses,filtersand other 'bolt-on/bolt-off' equipment parts	As per required		
3	spanners and screwdrivers, grease guns	As per required		
D	Tools and Equipment			
1	PPE	Standard	25	1:1

LEARNING MODULE 16	TVET logo
TVET PROGRAM TITLE: Natural Resource Conservation and Development L-IV	
MODULE TITLE: Supporting Individuals in Resource Management Change Processes	
MODULE CODE: <u>AGR NRC4 M16 0921</u>	
NOMINAL DURATION: 30Hrs	
<p>Module Description This module covers the knowledge ,skills and attitude in supporting individuals in resource management change processes and defines the standard required to: assess the resource management change and its potential impact on individuals; predict issues that are likely to arise from change, based on community feedback and statistical information; provide information and support to individuals and families facing resource management changes; review the methodology and effectiveness of support to improve support services for resource management change.</p>	
<p>LEARNING OUTCOME</p> <p>On the completion of this module the trainee will able to:</p> <p>LO1: Identify change processes</p> <p>LO2: Conceptualize impact of changes</p> <p>LO3: Implement support techniques</p> <p>LO4: Review support outcomes</p> <p>MODULE CONTENTS:</p> <p>LO1: Identify change processes</p> <p>1.1 Identifying Change processes in business operations</p> <p>1.2. Assessing Impacts</p> <p>LO2: Conceptualize impact of changes</p> <p>2.1. Resource management and program</p> <p>2.2. Identifying Potential difficulties</p> <p>2.3. Identifying appropriate information and support approaches</p> <p>LO3: Implement support techniques</p> <p>3.1. Obtaining information</p> <p>3.2. Providing Information</p>	

3.3. Individuals and families encouragement

3.4. Providing Support approach and information

3.5. Providing and inviting People to seek additional assistance

LO4: Review support outcomes

4.1. Assessing and providing results of support

4.2. Modifying support approach

LEARNING METHODS					
For Impaired Trainees	None	Reasonable Adjustment for Trainees with Disability (TWD)			
		Low Vision and Blind	Deaf	Hard of hearing	Physical impairment
Lecture-discussion		<ul style="list-style-type: none">❖ Provide large print text❖ Prepare the lecture in Audio/video & in <u>Brail</u> format❖ Organize the class room seating arrangement to be accessible to trainees❖ Write short notes on the black/white board using large text❖ Make sure the luminosity of the light of class room is kept❖ Use normal tone of voice❖ Encourage trainees to record the lecture in audio format	<ul style="list-style-type: none">❖ Assign sign language interpreter❖ Arrange the class room seating to be conducive for eye to eye contact❖ Make sure the luminosity of the light of class room is kept❖ Introduce new and relevant vocabularies❖ Use short and clear sentences❖ Give emphasis on visual lecture and ensure the attention of the trainees❖ Avoid movement during lecture time❖ Present the lecture in video format❖ Summarize main points	<ul style="list-style-type: none">❖ Organize the class room seating arrangement to be accessible to trainees❖ Speak loudly❖ Ensure the attention of the trainees❖ Present the lecture in video format❖ Ensure the attention of the trainees	<ul style="list-style-type: none">❖ Organize the class room seating arrangement to be accessible for wheelchairs users.❖ Facilitate and support the trainees who have severe impairments on their upper limbs to take note❖ Provide Orientation on the physical feature of the work shop

	<ul style="list-style-type: none"> ❖ Provide Orientation on the physical feature of the work shop ❖ Summarize main points 			
Demonstration	<ul style="list-style-type: none"> ❖ Conduct close follow up ❖ Use verbal description ❖ Provide special attention in the process of guidance ❖ facilitate the support of peer trainees ❖ Prepare & use simulation 	<ul style="list-style-type: none"> ❖ use Sign language interpreter ❖ Use video recorded material ❖ Ensure attention of the trainees ❖ Provide structured training ❖ Show clear and short method ❖ Use gesture ❖ Provide tutorial support (if necessary) 	<ul style="list-style-type: none"> ❖ Illustrate in clear & short method ❖ Use Video recorded material ❖ Ensure the attention of the trainees ❖ Provide tutorial support (if necessary) 	<ul style="list-style-type: none"> ❖ Facilitate and support the trainees having severe upper limbs impairment to operate equipments/ machines ❖ Assign peer trainees to assist ❖ Conduct close follow up ❖ Provide tutorial support (if necessary)
Group discussion	<ul style="list-style-type: none"> ❖ Facilitate the integration of trainees with group members ❖ Conduct close follow up 	<ul style="list-style-type: none"> ❖ Use sign language interpreters ❖ Facilitate the integration of trainees with group members 	<ul style="list-style-type: none"> ❖ Facilitate the integration of 	<ul style="list-style-type: none"> ❖ Introduce the trainees with their peers

	<ul style="list-style-type: none"> ❖ Introduce the trainees with other group member ❖ Brief the thematic issues of the work 	<ul style="list-style-type: none"> ❖ Conduct close follow up ❖ Introduce the trainees with other group member 	<ul style="list-style-type: none"> trainees with group members ❖ Conduct close follow up ❖ Introduce the trainees with other group member ❖ Inform the group members to speak loudly 	
ASSESSMENT METHODS:				
Interview		<ul style="list-style-type: none"> ❖ Use sign language interpreter ❖ Ensure or confirm whether the proper communication was conducted with the trainee through the service of the sign language interpreter ❖ Use short and clear questioning ❖ Time extension 	<ul style="list-style-type: none"> ❖ Speak loudly ❖ Using sign language interpreter if necessary 	<ul style="list-style-type: none"> ❖ Use written response as an option for the trainees having speech challenges

Written test	<ul style="list-style-type: none"> ❖ Prepare the exam in large texts/Brail ❖ Use interview as an option if necessary ❖ Prepare the exam in audio format ❖ Assign human reader (if necessary) ❖ Time extension 	<ul style="list-style-type: none"> ❖ Prepare the exam using short sentences, multiple choices, True or False, matching and short answers ❖ Avoid essay writing ❖ Time extension 	<ul style="list-style-type: none"> ❖ Prepare the exam using short sentences, multiple choices, True or False, matching and short answers if necessary. 	<ul style="list-style-type: none"> ❖ Use oral response as an option to give answer for trainees having severe upper limb impairment ❖ Time extension for trainees having severe upper limb impairment
Demonstration/Observation	<ul style="list-style-type: none"> ❖ Brief the instruction or provide them in large text/Brail ❖ Time extension 	<ul style="list-style-type: none"> ❖ Use sign language interpreter ❖ Brief on the instruction of the exam ❖ Provide activity-based/ practical assessment method ❖ Time extension 	<ul style="list-style-type: none"> ❖ Provide activity based assessment ❖ Brief on the instruction of the exam ❖ Use loud voice ❖ Time extension 	<ul style="list-style-type: none"> ❖ Provide activity based assessment ❖ Conduct close follow up ❖ Time extension

ASSESSMENT CRITERIA

LO1. Identify change processes

- Change processes that will impact individuals' and families' business operations and private lives are identified to assess their impact.
- Impacts are assessed in terms of the degree of impact on businesses and personal lives..

LO2. Conceptualize impact of changes

- Discussions are initiated with individuals and families to identify their life-style, values and views on resource management and program issues to identify potential for change.
- Potential difficulties individuals and families may have in implementing change in their business and private lives are identified.
- Appropriate information and support approaches that address potential difficulties and are inclusive of cultural and equity are identified as part of change process..

LO3 . Implement support techniques

- Information is obtained to support individuals and families facing change.
- Information is provided in appropriate format and context to support individuals and families considering the change.
- Individuals and families are given positive encouragement and support as they consider and implement change.
- Support approach and information given are provided in a culturally sensitive and equitable manner.
- People are invited to seek additional assistance and provided with avenues of assistance where this will assist in their management of change..

LO4. Review support outcomes

- Results of support provided are progressively assessed in terms of resources spent, change achieved and potential for further change.
- Support approach is modified in light of results.

Annex: Resource Requirements

AGR NRC4 M16 09121 Supporting Individuals in Resource Management Change Processes				
Item No.	Category/Item	Description/ Specifications	Quantity	Recommended Ratio (Item: Trainee)
A.	Learning Materials			
1.	TTLM	To be developed by the trainers	25	1:25
2	Reference			
2.1	Watershed hydrology Irrigation drainage, international and national perspective	Surash, Sewa Ram, 2002.	5	1:5
2.2	Land use	S. Dasberg and D. or, 1999	5	1:5
2.3	Irrigation engineering and hydraulic structures	S.K. Garg, 2006 th edition	5	1:5
B	Learning Facilities & Infrastructure			
1.	Library	According to standard	1	
2.	Laboratory Equipped w/Audiovisual	7 x 7 sqm		20 learners
3.	Lecture Room	7 x 7 sqm		20 learners
4.	Demonstration Site/Field	Actual Farm		
C.	Consumable Materials			
1.	Pen		25	1:1
2.	Compass		5	1:5

3.	Detergent (soap)			
4	Topographic map			
5	Flip chart			
6	Paper, pencil			
D.	Tools and Equipments			
1	Ring infiltro-meter	Double ring (thickness 2mm, 25 cm height, 30cm & 60cm inner and outer \varnothing) and with its accessories	4	1:5
2.	Siphon	Inverted	4	1:5
3.	Auger	Different Types	4	1:5
4.	Core sampler	Different Sizes	25	1:1
5.	Flumes	Partial flume	5	1:4
6.	Spatula	Medium size	4	1:5
7.	Camera	Digital	4	1:5
8.	Sensitive balance	Digital type	4	1:5
9.	Oven	Soil oven-dry	2	1:10
10.	GPS	German	4	1:5
11.	Computer	Dell	5	1:5

LEARNING MODULE 17	TVET Logo
TVET PROGRAM TITLE: Natural Resource Conservation and Development L-IV	
MODULE TITLE: Implementing Natural Resources Policies and Legislations	
MODULE CODE: AGR NRC4 M17 0921	
NOMINAL DURATION 32 Hrs	
<p>Module Description. This Module covers knowledge, skills and attitude required to implement natural resources management policies, rules and regulations; harmonize local and national policies, International conventions, treaties and adaptation of these to the local conditions.</p>	
<p>LEARNING OUTCOME</p> <p>On the completion of this module the trainee will be able to:</p> <p>LO1: Monitor and supervise the application of related Policies and legislations</p> <p>LO2: Supervise the Identification and objective realization of natural resources property rights</p> <p>LO3: Identify and analyze the role of formal and informal institutions</p> <p>LO4: Facilitate and support local bye-laws formulation and implementation</p> <p>LO5: Establish Informal institutions for conflict resolution</p> <p>MODULE CONTENTS:</p> <p>LO1: Monitor and supervise the application of related Policies and legislations</p> <p>1.1 Identifying and applying Forestry, wildlife, land, water and soils policies and legislations</p> <p>1.1.1. Forest police</p> <p>1.1.2. Wildlife Police</p> <p>1.1.3. Land police</p> <p>1.1.4. Soil and water police</p> <p>1.1.5. rules and regulations</p> <p>1.2 Community awareness Creation</p> <p>1.3 Promoting Community involvement in monitoring and supervision</p>	

LO2: Supervise the Identification and objective realization of natural resources property rights

- 2.1 Identifying and documenting Property rights
 - 2.1.1 State
 - 2.1.2. Communal
 - 2.1.3. Private
- 2.2. Conservation and sustainable use of resources
- 2.3. Checking Community awareness

LO3: Identify and analyze the role of formal and informal institutions

- 3.1. Role of formal and informal institutions
- 3.2. Involvement of communities and rural population

LO4: Facilitate and support local bye-laws formulation and implementation

- 4.1. Formulating and implementating of *local bye-laws*
- 4.2. Revision and documenting Bye-laws
- 4.3. Harmonizing Bye-laws

LO5: Establish Informal institutions for conflict resolution

- 5.1. Identifying Source of conflicts
- 5.2. Conflict resolution committee
- 5.3. Conflicts Resolution mechanism
- 5.4. Reporting un resolved Conflicts

LEARNING METHODS					
For Impaired Trainees	None	Reasonable Adjustment for Trainees with Disability (TWD)			
		Low Vision and Blind	Deaf	Hard of hearing	Physical impairment
Lecture-discussion		<ul style="list-style-type: none">❖ Provide large print text❖ Prepare the lecture in Audio/video & in <u>Brail</u> format❖ Organize the class room seating arrangement to be accessible to trainees❖ Write short notes on the black/white board using large text❖ Make sure the luminosity of the light of class room is kept❖ Use normal tone of voice❖ Encourage trainees to record the lecture in audio format	<ul style="list-style-type: none">❖ Assign sign language interpreter❖ Arrange the class room seating to be conducive for eye to eye contact❖ Make sure the luminosity of the light of class room is kept❖ Introduce new and relevant vocabularies❖ Use short and clear sentences❖ Give emphasis on visual lecture and ensure the attention of the trainees❖ Avoid movement during lecture time❖ Present the lecture in video format❖ Summarize main points	<ul style="list-style-type: none">❖ Organize the class room seating arrangement to be accessible to trainees❖ Speak loudly❖ Ensure the attention of the trainees❖ Present the lecture in video format❖ Ensure the attention of the trainees	<ul style="list-style-type: none">❖ Organize the class room seating arrangement to be accessible for wheelchairs users.❖ Facilitate and support the trainees who have severe impairments on their upper limbs to take note❖ Provide Orientation on the physical feature of the work shop

	<ul style="list-style-type: none"> ❖ Provide Orientation on the physical feature of the work shop ❖ Summarize main points 			
Demonstration	<ul style="list-style-type: none"> ❖ Conduct close follow up ❖ Use verbal description ❖ Provide special attention in the process of guidance ❖ facilitate the support of peer trainees ❖ Prepare & use simulation 	<ul style="list-style-type: none"> ❖ use Sign language interpreter ❖ Use video recorded material ❖ Ensure attention of the trainees ❖ Provide structured training ❖ Show clear and short method ❖ Use gesture ❖ Provide tutorial support (if necessary) 	<ul style="list-style-type: none"> ❖ Illustrate in clear & short method ❖ Use Video recorded material ❖ Ensure the attention of the trainees ❖ Provide tutorial support (if necessary) 	<ul style="list-style-type: none"> ❖ Facilitate and support the trainees having severe upper limbs impairment to operate equipments/ machines ❖ Assign peer trainees to assist ❖ Conduct close follow up ❖ Provide tutorial support (if necessary)

Group discussion	<ul style="list-style-type: none"> ❖ Facilitate the integration of trainees with group members ❖ Conduct close follow up ❖ Introduce the trainees with other group member ❖ Brief the thematic issues of the work 	<ul style="list-style-type: none"> ❖ Use sign language interpreters ❖ Facilitate the integration of trainees with group members ❖ Conduct close follow up ❖ Introduce the trainees with other group member 	<ul style="list-style-type: none"> ❖ Facilitate the integration of trainees with group members ❖ Conduct close follow up ❖ Introduce the trainees with other group member ❖ Inform the group members to speak loudly 	<ul style="list-style-type: none"> ❖ Introduce the trainees with their peers
ASSESSMENT METHODS:				
Interview		<ul style="list-style-type: none"> ❖ Use sign language interpreter ❖ Ensure or confirm whether the proper communication was conducted with the trainee through the service of the sign language interpreter ❖ Use short and clear questioning 	<ul style="list-style-type: none"> ❖ Speak loudly ❖ Using sign language interpreter if necessary 	<ul style="list-style-type: none"> ❖ Use written response as an option for the trainees having speech challenges

		❖ Time extension		
Written test	<ul style="list-style-type: none"> ❖ Prepare the exam in large texts/Brail ❖ Use interview as an option if necessary ❖ Prepare the exam in audio format ❖ Assign human reader (if necessary) ❖ Time extension 	<ul style="list-style-type: none"> ❖ Prepare the exam using short sentences, multiple choices, True or False, matching and short answers ❖ Avoid essay writing ❖ Time extension 	<ul style="list-style-type: none"> ❖ Prepare the exam using short sentences, multiple choices, True or False, matching and short answers if necessary. 	<ul style="list-style-type: none"> ❖ Use oral response as an option to give answer for trainees having severe upper limb impairment ❖ Time extension for trainees having severe upper limb impairment
Demonstration/Observation	<ul style="list-style-type: none"> ❖ Brief the instruction or provide them in large text/Brail ❖ Time extension 	<ul style="list-style-type: none"> ❖ Use sign language interpreter ❖ Brief on the instruction of the exam ❖ Provide activity-based/ practical assessment method ❖ Time extension 	<ul style="list-style-type: none"> ❖ Provide activity based assessment ❖ Brief on the instruction of the exam ❖ Use loud voice ❖ Time extension 	<ul style="list-style-type: none"> ❖ Provide activity based assessment ❖ Conduct close follow up ❖ Time extension

ASSESSMENT CRITERIA

LO1: Monitor and supervise the application of related Policies and legislations

- Forestry, wildlife, land, water and soils and related policies and legislations and industrial **rules and regulations** are identified and applied correctly.
- Community awareness is created regarding the updated rules and regulations
- Community involvement in monitoring and supervision is promoted in accordance with relevant laws

LO2: Supervise the Identification and objective realization of natural resources property rights

- Ownership rights, either state, communal or private are properly identified and documented
- Objectives related to the conservation and sustainable use of resources is realized and specified
- Community awareness is checked for compliance

LO3: Identify and analyze the role of formal and informal institutions

- The roles of formal and informal institutions related to Natural Resources Management are identified and analyzed
- Successful involvement of communities and rural population groups in activities related to natural resources management is secured

LO4: Facilitate and support local bye-laws formulation and implementation

- **Local by-laws** are formulated and implemented by communities in accordance with **socio-cultural setting** of society
- Revisiting/Revision of bye-laws is assisted and documented in accordance with the current situation of the community
- Bye-laws are harmonized with existing rules and regulations

LO5: Establish Informal institutions for conflict resolution

- Source of conflicts are identified through discussion with communities
- Conflict resolution committee members are elected from the community based on acceptance by community
- Conflicts are resolved based on various conflict resolution mechanisms
- Conflicts which are not resolved are reported to respective authority

Annex: Resource Requirements

AGR NRC4 M17 0921: Implementing Natural Resources Policies and Legislations					
Item No.	Category/Item	Description/ Specifications	Qt.	Recommended Ratio (Item: Trainee)	Requirements (e.g. Maintenance)
A.	Learning Materials				
1.	TTLM	To prepared trainer			
2	Reference				
2.1	Forest Policy in Ethiopia	Melaku 2003	5	1:5	
B.	Learning Facilities & Infrastructure				
1.	Laboratory/Workshop	Lab. 6mX 10m = 60m ² Workshop 6m*10m=60m ²	1 1	1:20 1:20	20 seats & tables
2.	Lecture Room	5m*8m=40m ²	1	1:30	
3.	Library	10m*15m=150m ²	1	1:60	
C.	Consumable Materials				
1.	Topographic map		20	1:1	
2	Aerial Photo		20	1:1	
3	Satellite Image				
4	Stationery (pencil, graph paper, etc)		20	1:1	
D.	Tools and Equipments				
1	Clinometers		20	1:1	
2	Compass		20	1:1	
3	GPS		10	1:2	
4	Line level		10	1:3	

LEARNING MODULE 18	TVET logo
TVET-PROGRAMME TITLE: Natural Resource Conservation and Development IV	
MODULE TITLE: Migrating to New Technology	
MODULE CODE: AGR NRC4 M18 0921	
NOMINAL DURATION: 45 Hours	
<p>MODULE DESCRIPTION: This module defines the knowledge, skills and attitude required in using new or upgraded technology. The rationale behind this unit emphasizes the importance of constantly reviewing work processes, skills and techniques in order to ensure that the quality of the entire business process is maintained at the highest level possible through the appropriate application of new technology. To this end, the person is typically engaged in on-going review and research in order to discover and apply new technology or techniques to improve aspects of the organization's activities</p>	
<p>LEARNING OUTCOMES</p> <p>At the end of the module the learner will be able to:</p> <ul style="list-style-type: none"> LO1. Apply existing knowledge and techniques to technology and transfer LO2: Apply functions of technology to assist in solving organizational problems LO3: Evaluate new or upgraded technology performance 	
<p>MODULE CONTENTS</p> <p>LO1. Apply existing knowledge and techniques to technology and transfer</p> <ul style="list-style-type: none"> 1.1. Identifying the existing situations 1.2. Reacquiring New or upgraded technology 1.3. Identifying, classifying and using New or upgraded equipment. <p>LO2: Apply functions of technology to assist in solving organizational problems</p> <ul style="list-style-type: none"> 2.1. Conducting testing of new or upgraded equipment. 2.2. Applying features of new or upgraded equipment. 2.3. Using features and functions of new or upgraded equipment. 2.4. Accessing sources of information. 2.5. Identifying areas of improvement. <p>LO3: Evaluate new or upgraded technology performance</p> <ul style="list-style-type: none"> 3.1. Evaluating New or upgraded equipment. 	

3.2 Determining environmental considerations.

3.3 Soughting feedback.

LEARNING METHODS:			
For None Impaired Trainees	Reasonable Adjustment for Trainees with Disability (TWD)		
	Deaf	Hard of hearing	Physical impairment
Lecture-discussion	<ul style="list-style-type: none"> ❖ Assign sign language interpreter ❖ Arrange the class room seating to be conducive for eye to eye contact ❖ Make sure the luminosity of the light of class room is kept ❖ Introduce new and relevant vocabularies ❖ Use short and clear sentences ❖ Give emphasis on visual lecture and ensure the attention of the trainees ❖ Avoid movement during lecture time ❖ Present the lecture in video format ❖ Summarize main points 	<ul style="list-style-type: none"> ❖ Organize the class room seating arrangement to be accessible to trainees ❖ Speak loudly ❖ Ensure the attention of the trainees ❖ Present the lecture in video format ❖ Ensure the attention of the trainees 	<ul style="list-style-type: none"> ❖ Organize the class room seating arrangement to be accessible for wheelchairs users. ❖ Facilitate and support the trainees who have severe impairments on their upper limbs to take note ❖ Provide Orientation on the physical feature of the work shop
Demonstration	<ul style="list-style-type: none"> ❖ use Sign language interpreter ❖ Use video recorded material ❖ Ensure attention of the trainees ❖ Provide structured training ❖ Show clear and short method ❖ Use gesture ❖ Provide tutorial support (if necessary) 	<ul style="list-style-type: none"> ❖ Illustrate in clear & short method ❖ Use Video recorded material ❖ Ensure the attention of the trainees ❖ Provide tutorial support (if necessary) 	<ul style="list-style-type: none"> ❖ Facilitate and support the trainees having severe upper limbs impairment to operate equipment/ machines ❖ Assign peer trainees to assist ❖ Conduct close follow up ❖ Provide tutorial support (if necessary)
Group discussion	<ul style="list-style-type: none"> ❖ Use sign language interpreters ❖ Facilitate the integration of trainees with group members ❖ Conduct close follow up ❖ Introduce the trainees with other group member 	<ul style="list-style-type: none"> ❖ Facilitate the integration of trainees with group members ❖ Conduct close follow up ❖ Introduce the trainees with other group member 	<ul style="list-style-type: none"> ❖ Introduce the trainees with their peers

		❖ Inform the group members to speak loudly	
Exercise	<ul style="list-style-type: none"> ❖ Conduct close follow up and guidance ❖ Provide tutorial support if necessary ❖ provide special attention in the process/practical training ❖ Introduce new and relevant vocabularies 	<ul style="list-style-type: none"> ❖ Conduct close follow up and guidance ❖ Provide tutorial support if necessary ❖ provide special attention in the process/practical training 	<ul style="list-style-type: none"> ❖ Assign peer trainees ❖ Use additional nominal hours if necessary
Individual assignment	<ul style="list-style-type: none"> ❖ Use sign language interpreter ❖ Provide briefing /orientation on the assignment ❖ Provide visual recorded material 	<ul style="list-style-type: none"> ❖ Provide briefing /orientation on the assignment ❖ Provide visual recorded material 	
ASSESSMENT METHODS:			
Interview	<ul style="list-style-type: none"> ❖ Use sign language interpreter ❖ Ensure or conform whether the proper communication was conducted with the trainee through the service of the sign language interpreter ❖ Use short and clear questioning ❖ Time extension 	<ul style="list-style-type: none"> ❖ Speak loudly ❖ Using sign language interpreter if necessary 	<ul style="list-style-type: none"> ❖ Use written response as an option for the trainees having speech challenges
Written test	<ul style="list-style-type: none"> ❖ Prepare the exam using short sentences, multiple choices, True or False, matching and short answers ❖ Avoid essay writing ❖ Time extension 	<ul style="list-style-type: none"> ❖ Prepare the exam using short sentences, multiple choices, True or False, matching and short answers if necessary. 	<ul style="list-style-type: none"> ❖ Use oral response as an option to give answer for trainees having severe upper limb impairment ❖ Time extension for trainees having severe upper limb impairment
Demonstration/	<ul style="list-style-type: none"> ❖ Use sign language interpreter ❖ Brief on the instruction of the exam 	<ul style="list-style-type: none"> ❖ Provide activity based assessment ❖ Brief on the instruction of the exam 	<ul style="list-style-type: none"> ❖ Provide activity based assessment

Observation	<ul style="list-style-type: none"> ❖ Provide activity-based/ practical assessment method ❖ Time extension 	<ul style="list-style-type: none"> ❖ Use loud voice ❖ Time extension 	<ul style="list-style-type: none"> ❖ Conduct close follow up ❖ Time extension ❖
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ASSESSMENT CRITERIA:

LO1. Apply existing knowledge and techniques to technology and transfer

- Situations are identified where existing knowledge can be used as the basis for developing new skills.
- New or upgraded technology skills reacquired and used to enhance learning.
- New or upgraded equipment are identified, classified and used where appropriate, for the benefit of the organization.

LO2. Apply functions of technology to assist in solving organizational problems

- Testing of new or upgraded equipment is conducted according to the specification manual.
- Features of new or upgraded equipment are applied within the organization.
- Features and functions of new or upgraded equipment are used for solving organizational problems.
- Sources of information relating to new or upgraded equipment are accessed and used.

LO3. Evaluate new or upgraded technology performance

- New or upgraded equipment is evaluated for performance, usability and against OHS standards.
- Environmental considerations are determined from new or upgraded equipment.
- Feedback is sought from users where appropriate.

Annex: Resource requirement

AGR NRC4 M18 0921: Migrating to New Technology				
Item No.	Category/Item	Description/ Specifications	Quantity	Recommended Ratio (Item: Trainee)
A.	Learning Materials			
1.	Books		25	1:1

2.	Manuals	To be prepared by the Trainer,	25	1:1
3	TTLM	To be prepared by trainer	25	1:1
4	Flip charts	To be prepared by trainer, trainees and by any concerned body	25	1:1
5	News prints	To be prepared by any concerned body	25	1:1
6	Journals	To be prepared by any concerned body	25	1:1
B Learning facilities & infrastructure				
1	Laboratory room	Dimension of 8 x 5 sqm	1	1:25
2	Class rooms (Furnished with necessary tables and chairs, equipment's and right ventilation and lighting)	with dimension of 8 x 5 sqm	1	1:25
3	School Bus	Good for 25 people	1	1:25
4	Internet	Broad band	5	1:5
9	Computer		1	1:25
10	TV		1	1:25
C. Consumable Materials				
1	Stationary materials (Paper, pen, pencil, marker)		25	1:1
2	Fuel	Petroleum and lubricant		
3	CD RW ,CD R & Flash Disk		25	1:1
4	Printer paper	Standard	25	1:1
D. Tools and Equipments				
1.	Computer		5	1:5
2.	Telephone		5	1:5
3	Written means		25	1:1
4.	Internet		25	1:1
5	2-way radio		5	1:5
6	Software		5	1:5
11	Office premises and equipment		5	1:5

Learning Module 19	TVET logo
TVET PROGRAM TITLE: Natural resources conservation and Development L-IV	
MODULE TITLE: Managing Micro, Small and Medium Enterprises (MSMEs)	
MODULE CODE: AGR NRC4 M19 0921	
NOMINAL DURATION: 40 Hours	
MODULE DESCRIPTION: <p>This module covers knowledge, skills and attitude required in running Micro, Small and Medium enterprises. The strategies involve developing, monitoring and managing work activities and financial information, developing effective work habits, and adjusting work schedules as needed..</p>	
LEARNING OUTCOMES: <p>LO1: Develop and communicate Strategic work plan LO2: Identify daily work requirements and Develop effective work habits LO3: Manage Marketing of MSMEs LO4: Manage Human Resources LO5: Manage production and Operation LO6: Maintain financial records and use for decision making LO7: Monitor, Manage and Evaluate work performance</p>	
MODULE CONTENTS: <p>LO1: Develop and communicate Strategic work plan</p> <ul style="list-style-type: none"> 1.1. Importance of planning 1.2. Basic planning goal 1.3 Short-term business objective 1.4 Realistic activities plans 1.5 Components of work plan. 1.6. Reviewing plans <p>LO2. Identify daily work requirements and Develop effective work habits</p> <ul style="list-style-type: none"> 2.1. Basic concept of effect working culture. 2.2. Approaches to work culture. 	

- 2.3. Identifying Work requirements
- 2.4. Prioritizing Work activities
- 2.5. Work allocation
- 2.6. Identifying Work and personal priorities
- 2.7. Internal and external sources of input
- 2.8. Responding to Business or inquiries
- 2.9. Presenting Information

LO3. Manage Marketing of MSMEs

- 3.1. Analyzing Information on market and business needs
- 3.2. Evaluating Marketing mix and components
- 3.3. Determining Marketing mix
- 3.4. Monitoring and adjusting Marketing mix

LO4. Manage Human Resources

- 4.1. Human resource rules, regulations law and procedures
- 4.2. Auditing and Identifying existing human resource
- 4.3. Recruitment and selection
- 4.4. Orienting and placing on appropriate position.
- 4.5. Appraisal of employees' performance
- 4.6. Appraisal result
- 4.7. Maintaining Employee relations

LO5. Manage production and Operation

- 5.1. Developing and Implementing Production /operation plan
- 5.2. Maintaining inputs.
- 5.3. Checking and Controlling Production /operation process
- 5.4. Applying and Maintaining Quality control

LO6. Maintain financial records and use for decision making

- 6.1. Objective and benefits of financial records
- 6.2. Identifying and recording Asset, liabilities and capital
- 6.3. Balance sheet
- 6.4. Discussing, analyzing, classifyin and recording Business transactions

6.5. Financial records

6.6. Preparing and distributing Invoices and payments

6.7. Collecting outstanding accounts

6.8. Revenue, expense and costs

6.9. Discussing and maintaining ledgers and subsidiary ledgers

6.10. Profit and loss report

6.11. Conducting Financial interpretation

6.12. Preparing Financial manual

LO7. Monitor, Manage and Evaluate work performance

7.1. Coordinating People, resources and/or equipment.

7.2. Communicating Staff, clients and/or contractors.

7.3. Problem solving techniques

7.4. Monitoring opportunities

7.5. Adjusting Work schedules.

7.6. Clearly communicating and recording proposed changes

7.7. Relevant codes of practice

LEARNING METHODS					
For Impaired Trainees	None	Reasonable Adjustment for Trainees with Disability (TWD)			
		Low Vision and Blind	Deaf	Hard of hearing	Physical impairment
Lecture-discussion		<ul style="list-style-type: none">❖ Provide large print text❖ Prepare the lecture in Audio/video & in <u>Brail</u> format❖ Organize the class room seating arrangement to be accessible to trainees❖ Write short notes on the black/white board using large text❖ Make sure the luminosity of the light of class room is kept❖ Use normal tone of voice❖ Encourage trainees to record the lecture in audio format	<ul style="list-style-type: none">❖ Assign sign language interpreter❖ Arrange the class room seating to be conducive for eye to eye contact❖ Make sure the luminosity of the light of class room is kept❖ Introduce new and relevant vocabularies❖ Use short and clear sentences❖ Give emphasis on visual lecture and ensure the attention of the trainees❖ Avoid movement during lecture time❖ Present the lecture in video format❖ Summarize main points	<ul style="list-style-type: none">❖ Organize the class room seating arrangement to be accessible to trainees❖ Speak loudly❖ Ensure the attention of the trainees❖ Present the lecture in video format❖ Ensure the attention of the trainees	<ul style="list-style-type: none">❖ Organize the class room seating arrangement to be accessible for wheelchairs users.❖ Facilitate and support the trainees who have severe impairments on their upper limbs to take note❖ Provide Orientation on the physical feature of the work shop

	<ul style="list-style-type: none"> ❖ Provide Orientation on the physical feature of the work shop ❖ Summarize main points 			
Demonstration	<ul style="list-style-type: none"> ❖ Conduct close follow up ❖ Use verbal description ❖ Provide special attention in the process of guidance ❖ facilitate the support of peer trainees ❖ Prepare & use simulation 	<ul style="list-style-type: none"> ❖ use Sign language interpreter ❖ Use video recorded material ❖ Ensure attention of the trainees ❖ Provide structured training ❖ Show clear and short method ❖ Use gesture ❖ Provide tutorial support (if necessary) 	<ul style="list-style-type: none"> ❖ Illustrate in clear & short method ❖ Use Video recorded material ❖ Ensure the attention of the trainees ❖ Provide tutorial support (if necessary) 	<ul style="list-style-type: none"> ❖ Facilitate and support the trainees having severe upper limbs impairment to operate equipments/ machines ❖ Assign peer trainees to assist ❖ Conduct close follow up ❖ Provide tutorial support (if necessary)
Group discussion	<ul style="list-style-type: none"> ❖ Facilitate the integration of trainees with group members ❖ Conduct close follow up ❖ Introduce the trainees with other group member 	<ul style="list-style-type: none"> ❖ Use sign language interpreters ❖ Facilitate the integration of trainees with group members ❖ Conduct close follow up 	<ul style="list-style-type: none"> ❖ Facilitate the integration of trainees with group members 	<ul style="list-style-type: none"> ❖ Introduce the trainees with their peers

	❖ Brief the thematic issues of the work	❖ Introduce the trainees with other group member	❖ Conduct close follow up ❖ Introduce the trainees with other group member ❖ Inform the group members to speak loudly	
ASSESSMENT METHODS:				
Interview		❖ Use sign language interpreter ❖ Ensure or confirm whether the proper communication was conducted with the trainee through the service of the sign language interpreter ❖ Use short and clear questioning ❖ Time extension	❖ Speak loudly ❖ Using sign language interpreter if necessary	❖ Use written response as an option for the trainees having speech challenges
Written test	❖ Prepare the exam in large texts/Brail	❖ Prepare the exam using short sentences, multiple choices, True	❖ Prepare the exam using short sentences,	❖ Use oral response as an option to give answer for trainees

	<ul style="list-style-type: none"> ❖ Use interview as an option if necessary ❖ Prepare the exam in audio format ❖ Assign human reader (if necessary) ❖ Time extension 	<ul style="list-style-type: none"> or False, matching and short answers ❖ Avoid essay writing ❖ Time extension 	<ul style="list-style-type: none"> multiple choices, True or False, matching and short answers if necessary. 	<ul style="list-style-type: none"> having severe upper limb impairment ❖ Time extension for trainees having severe upper limb impairment
Demonstration /Observation	<ul style="list-style-type: none"> ❖ Brief the instruction or provide them in large text/Brail ❖ Time extension 	<ul style="list-style-type: none"> ❖ Use sign language interpreter ❖ Brief on the instruction of the exam ❖ Provide activity-based/ practical assessment method ❖ Time extension 	<ul style="list-style-type: none"> ❖ Provide activity based assessment ❖ Brief on the instruction of the exam ❖ Use loud voice ❖ Time extension 	<ul style="list-style-type: none"> ❖ Provide activity based assessment ❖ Conduct close follow up ❖ Time extension

ASSESSMENT CRITERIA:

LO1. Develop and communicate Strategic work plan

- The importance of planning is sensitized before acting and about the importance of plans to reduce risks and to inhibit impulsive actions and discussed.
- The basics of planning and beginning with goal setting are communicated.
- The achievement of measurable and realistic short-term business objective is addressed.
- How to develop realistic activities plans and schedule is discussed.
- Major components of work plan are introduced and understood.
- The importance of constant reviewing their plans is understood by monitoring the results

LO2. Identify daily work requirements and Develop effective work habits

- Basic concept about effect working culture is discussed and understood.
- Different approaches to work culture are developed and understood.
- Work requirements are identified for a given time period by taking into consideration of resources and constraints.
- Work activities are prioritized based on business needs, requirements and deadlines.
- If appropriate, work is allocated to relevant staff or contractors to optimize efficiency.
- Work and personal priorities are identified and a balance is achieved between competing priorities using appropriate time management strategies.
- Input is sought from internal and external sources and used to develop and refine new ideas and approaches.
- Business or inquiries is/are responded to promptly and effectively.
- Information is presented in a format appropriate to the industry and audience.

LO3. Manage Marketing of MSMEs

- Information on market and business needs is analyzed and market opportunities identified.

- Marketing mix and components are evaluated.
- Marketing mix for specific target market is determined.
- Marketing mix is monitored and continually adjusted against marketing performance.

LO4. Manage Human Resources

- Human resource rules, regulations, laws and procedures are identified and determined.
- The existing human resource is audited, and gaps are identified.
- Recruitment and selection are conducted based on the organizational requirements.
- Selected candidates are oriented and placed for the appropriate position.
- Appraisal of employees' performance is conducted.
- Appraisal result is used for training and development, promotion, compensation, disciplinary measures and other purposes as required.
- Employee relations are maintained.

LO5. Manage production and Operation

- Production /operation plan is developed and implemented.
- Required inputs are purchased and adequate inventories maintained.
- Production /operation process is checked and controlled.
- Quality control is applied and maintained. Relevant codes of practice are used to guide an ethical approach to workplace practices and decisions.

LO6. Maintain financial records and use for decision making

- The objective and benefits of financial records are discussed and understood.
- Asset, liabilities and capital are identified and recorded.
- Balance sheet and different journals are discussed.
- Business transactions are discussed, analyzed, classified and recorded.
- Daily financial records are maintained correctly in accordance with legal and accounting requirements.
- Invoices and payments are prepared and distributed in timely manner and in accordance with legal requirements.
- Outstanding accounts are collected or followed-up.

- Revenue, expense and costs are identified and discussed.
- Different ledgers and subsidiary ledgers are discussed and maintained.
- Profit and loss report is prepared.
- Financial interpretation is conducted with assistant from the appropriate person.
- Financial manual is prepared.

LO7. Monitor, Manage and Evaluate work performance

- People, resources and/or equipment are coordinated to provide optimum results.
- Staff, clients and/or contractors are communicated within a clear and regular manner, to monitor work in relation to business goals or timelines.
- Problem solving techniques are applied to work situations to overcome difficulties and achieve positive outcomes.
- Opportunities for improvements are monitored according to business demands.
- Work schedules are adjusted to incorporate necessary modifications to existing work and routines or changing needs and requirements.
- Proposed changes are clearly communicated and recorded to aid in future planning and evaluation.
- Relevant codes of practice are used to guide an ethical approach to workplace practices and decisions.

ASSESSMENT SCHEDULE:

Assessment will be conducted at the end of each learning outcome and after the module learning is completed.

ANNEX: RESOURCE CONDITIONS					
<u>AGR NRC4 M19 0921</u> Managing Micro, Small and Medium Enterprises (MSMEs)					
Item No.	Category/Item	Description/Specifications	Quantity	Recommended Ratio (Item: Trainee)	Requirements (e.g. Maintenance)
A.	Learning Materials				
1.	TTLM	developed by the trainer	25	1:1	
2.	Reference				
	Principles of economics	3 rd edition	5	1:5	in the library
	written and graphical instructions	to be prepared by the college	5	1:5	classroom/laboratory
4	Bulletins, data sheet, diagrams or sketches	to be prepared by the trainers/college	25	1:1	classroom, laboratory and library
B.	Learning Facilities & Infrastructure	Enterprise/college			
1	Classroom	40m ²	1	1:20	
2	Library	100m ²	1	1:20	
4	Computer Module	Desk top with full accessories	10	1:2	

5	Work station	to be prepared by the college, enterprise	1	1:20	by the college, enterprise
C.	Consumable Materials				
1	paper	Recommended amount & quality		as required	In the work place
2	Flip chart	Recommended quality		as required	In the work place
D.	Tools and Equipments	Enterprise/college			
1.	computer		5	1:5	
2	Video		5	1:5	

LEARNING MODULE-20		Logo of TVET
TVET-PROGRAMME TITLE: Natural Resource Conservation and Development IV		
MODULE TITLE: Establishing Quality Standards		
MODULE CODE: AGR NRC4 M20 0921		
NOMINAL DURATION: 36 hour's		
MODULE DESCRIPTION : <p>This module covers the knowledge, skills and attitude required to establish quality specifications for work outcomes and work performance. It includes monitoring and participation in maintaining and improving quality, identifying critical control points in the production of quality output and assisting in planning and implementing of quality assurance procedures.</p>		
LEARNING OUTCOMES <p>At the end of this module the trainees will be able to:</p> <ul style="list-style-type: none"> LO1. Establish quality specifications for product LO2. Identify hazards and critical control points LO3. Assist in planning of quality assurance procedures LO4. Implement quality assurance procedures LO5. Monitor quality of work outcome LO6. Participate in maintaining and improving quality at work LO7. Report problems that affect quality 		
MODULE CONTENTS <p>LO1. Establish quality specifications for product</p> <ul style="list-style-type: none"> 1.1. Identifying market specifications 1.2. Developing and agreeing quality specifications 1.3. Documenting and introducing quality specifications 1.4. Updating quality specifications <p>LO2. Identify hazards and critical control points</p> <ul style="list-style-type: none"> 2.1. Identifying critical control points impacting on quality 2.2. Determining degree of risk for each hazard 		

2.3. Accomplishing necessary documentation

LO3. Assist in planning of quality assurance procedures

- 3.1. Developing procedures for each identified control point
- 3.2. Minimizing hazards and risks
- 3.3. Developing processes to monitor the effectiveness of quality assurance

LO4. Implement quality assurance procedures

- 4.1. Allocating responsibilities for carrying out procedures
- 4.2. Preparing instructions for carrying out procedure
- 4.3. Giving induction training on quality assurance policy.
- 4.4. Staff and contractors in-service training

LO5. Monitor quality of work outcome

- 2.1. Identifying quality requirements
- 2.2. Inspecting inputs capability of quality requirements.
- 2.3. Conducting work outcomes.
- 2.4. Monitoring work processes
- 2.5. Adjusting processes for maintaining outputs.

LO6. Participate in maintaining and improving quality at work

- 6.1. Monitoring work area, materials, processes and product
- 6.2. Identifying non-conformance in inputs, process, product and/or service
- 6.3. Taking corrective action
- 6.4. Raising quality issues.

LO7. Report problems that affect quality

- 7.1. Recognizing potential or existing quality problems
- 7.2. Identifying instances of variation on quality of work instructions.
- 7.3. Reporting variation and potential problems

LEARNING METHODS:				
For None Imaired Trainees	Reasonable Adjustment for Trainees with Disability (TWD)			
	Low Vision and Blind	Deaf	Hard of hearing	Physical impairment
Lecture-discussion	<ul style="list-style-type: none"> ❖ Provide large print text ❖ Prepare the lecture in Audio/video & in Brail format ❖ Organize the class room seating arrangement to be accessible to trainees ❖ Write short notes on the black/white board using large text ❖ Make sure the luminosity of the light of class room is kept ❖ Use normal tone of voice ❖ Encourage trainees to record the lecture in audio format ❖ Provide Orientation on the physical feature of the work shop ❖ Summarize main points 	<ul style="list-style-type: none"> ❖ Assign sign language interpreter ❖ Arrange the class room seating to be conducive for eye to eye contact ❖ Make sure the luminosity of the light of class room is kept ❖ Introduce new and relevant vocabularies ❖ Use short and clear sentences ❖ Give emphasis on visual lecture and ensure the attention of the trainees ❖ Avoid movement during lecture time ❖ Present the lecture in video format ❖ Summarize main points 	<ul style="list-style-type: none"> ❖ Organize the class room seating arrangement to be accessible to trainees ❖ Speak loudly ❖ Ensure the attention of the trainees ❖ Present the lecture in video format ❖ Ensure the attention of the trainees 	<ul style="list-style-type: none"> ❖ Organize the class room seating arrangement to be accessible for wheelchairs users. ❖ Facilitate and support the trainees who have severe impairments on their upper limbs to take note ❖ Provide Orientation on the physical feature of the work shop

Demonstration	<ul style="list-style-type: none"> ❖ Conduct close follow up ❖ Use verbal description ❖ Provide special attention in the process of guidance ❖ facilitate the support of peer trainees ❖ Prepare & use simulation 	<ul style="list-style-type: none"> ❖ use Sign language interpreter ❖ Use video recorded material ❖ Ensure attention of the trainees ❖ Provide structured training ❖ Show clear and short method ❖ Use gesture ❖ Provide tutorial support (if necessary) 	<ul style="list-style-type: none"> ❖ Illustrate in clear & short method ❖ Use Video recorded material ❖ Ensure the attention of the trainees ❖ Provide tutorial support (if necessary) 	<ul style="list-style-type: none"> ❖ Facilitate and support the trainees having severe upper limbs impairment to operate equipments/ machines ❖ Assign peer trainees to assist ❖ Conduct close follow up ❖ Provide tutorial support (if necessary)
Group discussion	<ul style="list-style-type: none"> ❖ Facilitate the integration of trainees with group members ❖ Conduct close follow up ❖ Introduce the trainees with other group member ❖ Brief the thematic issues of the work 	<ul style="list-style-type: none"> ❖ Use sign language interpreters ❖ Facilitate the integration of trainees with group members ❖ Conduct close follow up ❖ Introduce the trainees with other group member 	<ul style="list-style-type: none"> ❖ Facilitate the integration of trainees with group members ❖ Conduct close follow up ❖ Introduce the trainees with other group member ❖ Inform the group members to speak loudly 	<ul style="list-style-type: none"> ❖ Introduce the trainees with their peers

Exercise	<ul style="list-style-type: none"> ❖ Conduct close follow up and guidance ❖ Provide tutorial support if necessary ❖ provide special attention in the process 	<ul style="list-style-type: none"> ❖ Conduct close follow up and guidance ❖ Provide tutorial support if necessary ❖ provide special attention in the process/practical training ❖ Introduce new and relevant vocabularies 	<ul style="list-style-type: none"> ❖ Conduct close follow up and guidance ❖ Provide tutorial support if necessary ❖ provide special attention in the process/practical training 	<ul style="list-style-type: none"> ❖ Assign peer trainees ❖ Use additional nominal hours if necessary
Individual assignment	<ul style="list-style-type: none"> ❖ prepare the assignment questions in large text/Brail ❖ Encourage the trainees to prepare and submit the assignment in large texts/Brail ❖ Make available recorded assignment questions ❖ Facilitate the trainees to prepare and submit the assignment in soft or hard copy 	<ul style="list-style-type: none"> ❖ Use sign language interpreter ❖ Provide briefing /orientation on the assignment ❖ Provide visual recorded material 	<ul style="list-style-type: none"> ❖ Provide briefing /orientation on the assignment ❖ Provide visual recorded material 	
ASSESSMENT METHODS:				

Interview		<ul style="list-style-type: none"> ❖ Use sign language interpreter ❖ Ensure or conform whether the proper communication was conducted with the trainee through the service of the sign language interpreter ❖ Use short and clear questioning ❖ Time extension 	<ul style="list-style-type: none"> ❖ Speak loudly ❖ Using sign language interpreter if necessary 	<ul style="list-style-type: none"> ❖ Use written response as an option for the trainees having speech challenges
Written test	<ul style="list-style-type: none"> ❖ Prepare the exam in large texts/Brail ❖ Use interview as an option if necessary ❖ Prepare the exam in audio format ❖ Assign human reader (if necessary) ❖ Time extension 	<ul style="list-style-type: none"> ❖ Prepare the exam using short sentences, multiple choices, True or False, matching and short answers ❖ Avoid essay writing ❖ Time extension 	<ul style="list-style-type: none"> ❖ Prepare the exam using short sentences, multiple choices, True or False, matching and short answers if necessary. 	<ul style="list-style-type: none"> ❖ Use oral response as an option to give answer for trainees having severe upper limb impairment ❖ Time extension for trainees having severe upper limb impairment
Demonstration/Observation	<ul style="list-style-type: none"> ❖ Brief the instruction or provide them in large text/Brail ❖ Time extension 	<ul style="list-style-type: none"> ❖ Use sign language interpreter ❖ Brief on the instruction of the exam ❖ Provide activity-based/practical assessment method ❖ Time extension 	<ul style="list-style-type: none"> ❖ Provide activity based assessment ❖ Brief on the instruction of the exam ❖ Use loud voice ❖ Time extension 	<ul style="list-style-type: none"> ❖ Provide activity based assessment ❖ Conduct close follow up ❖ Time extension

ASSESSMENT CRITERIA

LO1. Establish quality specifications for product

- Market specifications are sourced and legislated requirements identified.
- Quality specifications are developed and agreed upon.
- Quality specifications are documented and introduced to organization staff / personnel in accordance with the organization policy.
- Quality specifications are updated when necessary.

LO2. Identify hazards and critical control points

- Critical control points impacting on quality are identified.
- Degree of risk for each hazard is determined.
- Necessary documentation is accomplished in accordance with organization quality procedures

LO3. Assist in planning of quality assurance procedures

- Procedures for each identified control point are developed to ensure optimum quality.
- Hazards and risks are minimized through application of appropriate controls.
- Processes are developed to monitor the effectiveness of quality assurance procedures.

LO4. Implement quality assurance procedures

- Responsibilities for carrying out procedures are allocated to staff and contractors.
- Instructions are prepared in accordance with the enterprise's quality assurance program.
- Staff and contractors are given induction training on the quality assurance policy.
- Staff and contractors are given in-service training relevant to their allocated safety procedures.

LO5. Monitor quality of work outcome

- Quality requirements are identified.
- Inputs are inspected to confirm capability to meet quality requirements.
- Work is conducted to produce required outcomes.
- Work processes are monitored to confirm quality of output and/or service.
- Processes are adjusted to maintain outputs within specification.

LO6. Participate in maintaining and improving quality at work

- Work area, materials, processes and product are routinely monitored to ensure compliance with quality requirements.
- Non-conformance in inputs, process, product and/or service is identified and reported according to workplace reporting requirements.
- Corrective action is taken within level of responsibility, to maintain quality standards.
- Quality issues are raised with designated personnel.

LO7. Report problems that affect quality

- Potential or existing quality problems are recognized.
- Instances of variation in quality are identified from specifications or work instructions.
- Variation and potential problems are reported to supervisor/manager according to enterprise guidelines.

Annex: Resource Requirements

AGR NRC4 M20 0921: Establishing Quality Standards				
Item No.	Category/Item	Description/ Specifications	Quantity	Recommended Ratio (Item: Learner)
A.	<i>Learning Materials</i>			
1.	Books		25	1:1
2.	Manuls	To be prepared by trainer	25	1:1
2.	TTLM	To be prepared by trainer	25	1:1
3.	Journals	To be prepared by any concerned body	25	1:1
4.	News prints	To be prepared by any concerned body	25	1:1
B.	<i>Learning Facilities & Infrastructure</i>			
1.	Laboratory room	dimension of 8 x 5 sqm	1	1:25
2.	Demonstration site	Work place or field	1	1:25

3.	Class rooms	Furnished with necessary tables and chairs, equipment's and right ventilation and lighting with dimension of 8 x 5 sqm	1	1:25
4.	Internet	Broad band	25	1:1
5	Computer	Standard	5	1:5
C	Consumable materials			
1	Stationary materials(Paper, pen, pencil, marker)	Packet	25	1:1
2	Fuel	Petroleum and lubricant		
3	Flash Disk	Sandisk	25	1:1
4	5s job cycle charts	Standard	5	1:5
5	Visual	Standard	1	1:25
6	Printer paper	Lessor jet	25	1:1

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The Instructors (who developed the curriculum)

No	Name	Qualification	Educational background	Organization	E-mail
1	Belay Beyene	B	NRM	HPTC	belaybe.bb@gmail.com
2	Dereje Siyoum	B	Agr. Engineering	HPTC	derejeseyoum99@yahoo.com
3	Mohamed Kabo	B	NRM	HPTC	mohakabo.kabo1@gmail.com
4	Sekata Kenea	A	NRM	HPTC	sekata.ken@gmail.com