



Leather Processing Level I Curriculum

**Based on December 2021, Version 4 Occupational
Standards (OS)**

December 2021
Addis Ababa, Ethiopia

Preface

The reformed TVET-System is an outcome-based system. It utilizes the needs of the 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 comparable TVET-Delivery. The Curricula help to facilitate the training 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).

This curriculum has been developed by a group of professional experts from different Regional TVET Bureaus, colleges, Industries, Institutes and universities based on the occupational standard for Basic Leather Processing Operations Level I.

The curriculum development process has been actively supported and facilitated by **Ministry of Labor and Skills**.

Page 2 of 62	Ministry of Labor and Skills Author/Copyright	Leather Processing Level I	Version 1
			December 2021

TVET-Program Design

1.1. TVET-Program Title: Basic Leather Processing Operations Level I

1.2. TVET-Program Description

The Program is designed to develop the necessary attitude, knowledge and skills 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 **Operator** with competencies elaborated in the respective OS. Graduates of the program will have the required qualification to work in the **Industry Sector** in the field of **Leather Processing**.

The prime objective of this training program is to equip the trainees with the identified competences specified in the OS. Graduates are therefore expected Identify hide and skin for Leather Processing, Apply 5S Procedures, Undertake Material and Product Handling, Perform Unhairing Operations, Perform Trimming and Piling and Perform Drying Operation 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: –

IND LEP1 01 1121 Identify Hide and Skin for Leather Processing

IND LEP1 06 1121 Apply 5S Procedures

IND LEP1 02 1121 Undertake material and product handling

IND LEP1 03 1121 Perform Unhairing Operation

IND LEP1 04 1121 Perform Trimming and Piling

IND LEP1 05 1121 Perform Drying Operation

1.4. Duration of the TVET-Program

The Program will have duration of **198 Hours** including the on-the-job practice or cooperative training time.

Page 3 of 62	Ministry of Labor and Skills Author/Copyright	Leather Processing Level I	Version 1
			December 2021

No	Unit competency	On school training		Cooperative Training	Total Hours	Remarks
		Theory	Practical			
1.	Identify Hide and Skin for Leather processing	24	0	12	36	
2.	Apply 5S Procedures	9	15		24	
3.	Undertake Material and Product handling	12	16	8	36	
4.	Perform Unhairing Operation	12	25	8	45	
5.	Perform Trimming and Piling	3	24		27	
6.	Perform Drying Operation	8	14	8	30	
Total calculated					198	

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 I**”.

The trainee can exit after successfully completing the modules in one level and will be awarded the equivalent institutional certificate on the level completed. However, only institutional certificate of training accomplishment 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.

1.8 Mode of Delivery

This TVET-Program is characterized as a formal Program on middle level technical skills. The mode of delivery is co-operative training. The time spent by the trainees in the real work place/ 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.

Hence based on the nature of the occupation, location of the TVET institutions, and interest of the industry alternative mode of cooperative training such as apprenticeships, internship and traineeship will be employed. In addition, in the areas where industry is not sufficiently available the established production and service centers/learning factories in TVET institutions will be used as cooperative training places. The Training-Institution and identified companies have forged an agreement to co-operate with regard to the implementation of this program.

1.9 TVET-Program Structure

Unit of Competence		Module Code & Title		Learning Outcomes	Duration (In Hours)
IND LEP1 01 1121	Identify Hide and Skin for Leather Processing	IND LEP1 M01 1221	Identifying Hide and Skin for Leather Processing	<ul style="list-style-type: none"> Identify characteristics of hides and skins understand traditional skin/hide processing and their applications understand modern skin/hide processing and their applications 	36
IND LEP1 06 1121	Apply 5S Procedures	IND LEP1 M02 1221	Applying 5S Procedures	<ul style="list-style-type: none"> Prepare for work. Sort items. Set all items in order. Perform shine activities. Standardize 5S. Sustain 5S 	24
IND LEP1 02 1121	Undertake Material and Product handling	IND LEP1 M03 1221	Undertaking Material and Product handling	<ul style="list-style-type: none"> Receive materials and products Preserve and store skins or hides Pack, store or distribute semi-processed/end product 	36

Unit of Competence		Module Code & Title		Learning Outcomes	Duration (In Hours)
IND LEP1 03 1121	Perform Unhairing Operation	IND LEP1 M04 1221	Performing Unhairing Operations	<ul style="list-style-type: none"> • Confirm requirements • Prepare Hides/skins for unhairing • Perform unhairing 	45
IND LEP1 04 1121	Perform Trimming and Piling	IND LEP1 M05 1221	Performing Trimming and Piling	<ul style="list-style-type: none"> • Identify and Prepare trimming and piling tools/ equipment • Perform Trimming and piling operations • Clean and store tools and equipment 	27
IND LEP1 05 1121	Perform Drying Operation	IND LEP1 M06 1221	Performing Drying Operation	<ul style="list-style-type: none"> • Confirm requirements • Prepare for drying • Carry out drying tasks 	30

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 **B Level** and have satisfactory practical experiences or equivalent qualifications.

LEARNING MODULE 01	
TVET-PROGRAMME TITLE: Leather Processing Level I	
MODULE TITLE: Identifying Hide and Skin for Leather Processing	
MODULE CODE: IND LEP1 M01 1221	
NOMINAL DURATION: 36 Hours	
MODULE DESCRIPTION: This module covers the knowledge, attitude and skill required to identify and characterize the values of hide/skin for leather processing and understand their applications	
LEARNING OUTCOMES: At the end of the module the learner will be able to: LO1 Identify Characteristics of hide and skin LO2 Understand traditional skin/hide processing and their applications LO3 Understand modern skin/hide processing and their applications	
MODULE CONTENTS: LO1 Identify and classify animal skin 1.1 Identifying characteristics of hide and skin 1.2 Classification of skins/hides based on different methods 1.3 Understanding the economic value of hide and skin LO2 Understand traditional skin/hide processing and their applications 2.1 Traditional Preservation methods of skins/hides 2.2 Traditional processing techniques of hides/skins 2.3 Traditional uses of skins/hides LO3 Understand modern skin/hide processing and their applications 3.1 Modern Preservation methods of skins/hides 3.2 Modern skin/hides processing techniques 3.3 Modern uses of skins/hides	

LEARNING STRATEGIES:				
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 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 	<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 	<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

		format	trainees	
		<ul style="list-style-type: none"> Summarize main points 		
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
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

ASSESSMENT CRITERIA:

LO1 Identify and classify animal skin

- Skins/hides of different animals are identified
- Skins/hides are classified based on different methods using appropriate PPE
- Value of hide and skin is understood

LO2 Understand traditional skin/hide processing and their applications

- Traditional skin/hide preservation methods are introduced
- Traditional techniques of processing are explained
- The various traditional uses of skin/hide are explained

LO3 Understand modern skin/hide processing and their applications

- Modern skin/hide preservation methods are introduced
- Modern techniques of skin/hide processing are explained
- The various modern uses of skin/hide are understood

Annex: Resource Requirements

IND LEP1 M01 1221: Identifying Hide and Skin for Leather Processing				
Item No.	Category/Item	Description/ Specifications	Qty	Recommended Ratio (Item: Learner)
A. Learning Materials				
1.	TTLM	Prepared by trainer	25	1:1
B. Learning Facilities & Infrastructure				
1.	Lecture Room	7x10 sq.mtr	1	1:25
2.	Library	7 x 15 sq.mtr	1	1:25
C. Consumable Materials				
	Raw hide and skin		125	5:1
	Preservation salt		As required	
	Stationery			
1	White board marker /chalk	Different color	1pkt	1:2
2	Paper	A4	1 rim	1:25
3	Duster	-	2 pcs	2:25
D. Tools and Equipment				
1	Projector	-	1	1:25
2	Laptop	-	1	1:25
	White/Black board		1	1:25
3	PPE	Rubber Glove & Apron	25	1:1
4	Knife (for trimming)		5	1:5
5	Pallet/table	Wooden	5	1:5

LEARNING MODULE 02	Logo of TVET Provider
TVET-PROGRAMME: Lather Processing Level I	
MODULE TITLE : Applying 5S procedures	
MODULE CODE : IND LEP1 M02 1221	
NOMINAL DURATION : 24 Hours	
<p>MODULE DESCRIPTION: This module covers the knowledge, skills and attitude required to apply 5S techniques to his/her workplace. It covers responsibility for the day-to-day operations of the workplace and ensuring that continuous improvements of Kaizen elements are initiated and institutionalized.</p>	
<p>LEARNING OUTCOMES</p> <p>At the end of the module, the trainee / learner will be able to:</p> <p>LO1. Prepare for work.</p> <p>LO2. Sort items.</p> <p>LO3. Set all items in order.</p> <p>LO4. Perform shine activities.</p> <p>LO5. Standardize 5S.</p> <p>LO6. Sustain 5S</p>	
<p>MODULE CONTENTS:</p> <p>LO1 Prepare for work.</p> <p>1.1. Determining Job requirements</p> <p>1.1.1. Work instructions</p> <p>1.1.2. Interpretation of job specifications</p> <p>1.2. Identifying and preparing tools and equipment</p> <p>1.3. Kaizen board and its application</p> <p>LO2. Sort items</p> <p>2.1. Preparing sorting plan</p> <p>2.2. Items identification procedures</p>	

- 2.2.1. Necessary and unnecessary items
- 2.2.2. Cleaning activity
- 2.2.3. Evaluation and items recording
- 2.3. Performance report

LO3. Set all items in order.

- 3.1. Preparing plan
- 3.2. Deciding items indication methods
 - 3.2.1. Location/layout
 - 3.2.2. Storage
 - 3.2.3. Labeling
- 3.3. Tools and equipment for setting in order
- 3.4. Setting in order items
 - 3.4.1. Placement in assigned location
 - 3.4.2. Regular checkup for proper placement
- 3.5. Performance report

LO4. Perform shine activities

- 4.1. Preparing plan
- 4.2. Preparation and application of tools and equipment
- 4.3. Implement shining activities
 - 4.3.1. Implementation procedures
 - 4.3.2. Regular checkups for implementing of shining activities
- 4.4. Performance report

LO5. Standardize 5S

- 5.1. Planning for standardizing 5S activities
- 5.2. Implementation of standardizing 5S activities
 - 5.2.1 Procedures
 - 5.2.2 Tools and equipments
 - 5.2.3 Keeping workplace to specified standard

5.3. Performance report

LO6 Sustain 5S

6.1. Plan for sustaining 5S activities

6.2. Implementation of sustaining 5S

6.2.1 Procedures

6.2.2 Tools and techniques

6.2.3 Regular inspections for compliance to the specified standard

6.2.4 Corrective actions for non-compliant situations

6.2.5 Workplace clean up

6.3. Performance report

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 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

<p>Demonstration</p>	<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)
<p>Group discussion</p>	<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 	<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 	<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 	<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 	

	❖ Facilitate the trainees to prepare and submit the assignment in soft or hard copy			
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

<p>Demonstration/Observation</p>	<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
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ASSESSMENT CRITERIA:

LO1. Prepare for work.

- Work instructions are used to determine job requirements, including method, material and equipment.
- Job specifications are read and interpreted following working manual.
- OHS requirements, including dust and fume collection, breathing apparatus and eye and ear personal protection needs are observed throughout the work.
- Tools and equipment are prepared and used to implement 5S.
- Safety equipment and tools are identified and checked for safe and effective operation.
- Kaizen Board (Visual Management Board) is prepared and used in harmony with different workplace contexts.

LO2. Sort items.

- Plan is prepared to implement sorting activities.
- Cleaning activities are performed.
- All items in the workplace are identified following the appropriate procedures.
- Necessary and unnecessary items are listed using the appropriate format.
- Red tag strategy is used for unnecessary items.
- Unnecessary items are evaluated and placed in an appropriate place other than the workplace.
- Necessary items are recorded and quantified using appropriate format.
- Performance results are reported using appropriate formats.
- Necessary items are regularly checked in the workplace

LO.3 Set all items in order.

- Plan is prepared to implement set in order activities.
- General cleaning activities are performed.
- Location/Layout, storage and indication methods for items are decided.
- Necessary tools and equipment are prepared and used for setting in order activities.
- Items are placed in their assigned locations.

- After use, the items are immediately returned to their assigned locations.
- Performance results are reported using appropriate formats.
- Each item is regularly checked in its assigned location and order.

LO4. Perform shine activities.

- Plan is prepared to implement shine activities.
- Necessary tools and equipment are prepared and used for shining activities.
- Shine activity is implemented using appropriate procedures.
- Performance results are reported using appropriate formats.
- Regular shining activities are conducted.

LO5. Standardize 5S.

- Plan is prepared and used to standardize 5S activities.
- Tools and techniques to standardize 5S are prepared and implemented based on relevant procedures.
- Checklists are followed for standardize activities and reported to relevant personnel.
- The workplace is kept to the specified standard.
- Problems are avoided by standardizing activities.

LO6 Sustain 5S

- Plan is prepared and followed to sustain 5S activities.
- Tools and techniques to sustain 5S are discussed, prepared and implemented based on relevant procedures.
- Workplace is inspected regularly for compliance to specified standard and sustainability of 5S techniques.
- Workplace is cleaned up after completion of job and before commencing next job or end of shift.
- Situations are identified where compliance to standards is unlikely and actions specified in procedures are taken.
- Improvements are recommended to lift the level of compliance in the workplace.
- Checklists are followed to sustain activities and report to relevant personnel.
- Problems are avoided by sustaining activities.

Annex: Resource Requirements

IND LEP1 M02 1221 Applying 5S Procedures				
Item No.	Category/Item	Description/ Specifications	Quantity (pc./ participant)	Recommended Ratio (Item: Trainee)
A.	Learning Materials			
1	TTLM		25	1:1
2	Reference book			
2.1	5S for operators- The 5 pillars of visual workplace	The productivity press devt team	1	1:25
2.2	Journals/publications/magazine	Recent	5	1:5
B.	Learning Facilities & Infrastructure			
1	Lecture room	standard	-	-
	Model Tannery		1	1:25
C.	Consumable Materials			
1	Copy paper	A4 size	1rim	1:25
2	Colored paper	A4 size	1rim	1:25
3	Pencil	standard		
4	Permanent marker	standard	1pkt	1:25
5	Marker/Chalk	standard	1pkt	1:25
D.	Tools and Equipment's			
1	Safety equipment's (Dust masks/goggles, Glove, Working cloth, First aid and safety shoes)			
2	Paint	Yellow, red, black	1galon	1:1
3	Hook	standard	25	1:1
4	Sticker	standard	25	1:1
5	Signboard	standard	1	1:25

6	Nails	standard	1	1:25
7	Shelves	standard	1	1:25
8	Chip wood	standard		
9	Sponge	standard	5	1:5
10	Broom	standard		
11	Shadow board/Tools board	standard		
12	Wheelbarrow	standard	1	1:25

LEARNING MODULE 03	
TVET-PROGRAMME TITLE: Leather Processing Level I	
MODULE TITLE: Undertaking Material and Product handling	
MODULE CODE: IND LEP1 M03 1221	
NOMINAL DURATION: 36 Hours	
MODULE DESCRIPTION: This module covers the attitude, knowledge and skills required to handle materials and products during their receipt, storage, preservation and transport for leather production.	
LEARNING OUTCOMES: At the end of the module the learner will be able to: LO1 Receive materials and products LO2 Preserve and store hide/skin LO3 Pack, store or distribute semi-processed/end product	
MODULE CONTENTS: LO1 Receive materials and products 1.1 Materials' and products' receiving procedure 1.2 Storing input materials/consumables and other goods produced 1.3 Receiving, storing and transferring skin/hide LO2 Preserve and store skin/ hide 2.1 Preservation methods of skins/hides 2.2 Preparing skins/hides for storage or transportation 2.3 Manual handling procedures for materials and products LO3 Pack, store or distribute semi-processed/end product 3.1 Checking instructions for packing, storing and dispatching 3.2 Packing, storing/ dispatching of semi-processed/end product	

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 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 	<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 	<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

	<p>feature of the work shop</p> <ul style="list-style-type: none"> ❖ Summarize main points 	<p>time</p> <ul style="list-style-type: none"> ❖ 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 	<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 trainees with group 	<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 	<p>members</p> <ul style="list-style-type: none"> ❖ Conduct close follow up ❖ 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 ❖ 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 	
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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 	<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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		<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 ❖ 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 Receive materials and products

- Dockets, tags or other identification are checked to confirm receipt of correct materials and products
- Chemicals, consumables, equipment, and other non-hide/skin goods received are stored in accordance with OHS practices and workplace procedures
- Skins/hides are received and transferred to appropriate area for processing or storage
- Records are maintained for receipt and storage of materials

LO2 Preserve and store skin/hide

- Preservation of skins/hides is assessed and/or carried out by salting or other designated method
- Skins/hides are prepared for storage or transport using relevant manual handling procedures
- Skins/hides are stored or transported appropriately
- Records are maintained to expedite movement of the skins/hides through the various phases of treatment

LO3 Pack, store or distribute semi-processed or end product

- Paperwork is checked to confirm instructions
- Packing of semi-processed or end product is assessed according to workplace procedures for handling of products
- Products to be stored are transferred to designated location using correct manual handling practices
- Dispatch orders are coordinated to meet delivery or collection timetables
- Records are maintained

Annex: Resource Requirements

IND LEP1 M03 1221 Undertaking Material and Product handling				
Item No.	Category/Item	Description/ Specifications	Quantity (pc./participant)	Recommended Ratio (Item: Trainee)
A. Learning Materials				
1	TTLM		25	1:1
B. Learning Facilities & Infrastructure				
1	Lecture room	standard	1	1:25
2	Model tannery	standard	1	1:25
C. Consumable Materials				
1	Copy paper	A4 size	1rim	1:25
2	Fresh hides/skins, pickle, wet blue, crust, finished leather		As required	
3	Industrial salt	Industrial grade	250kg	1;10
4	Hessian bag	standard		
5	PVC sheet	standard		
6	Permanent marker	standard	1pkt	1:25
	White board marker/Chalk	Different colors	1pkt	1:25
D. Tools and Equipment's				
1	LCD projector	standard	1	1:25
2	Laptop computer	standard	1	1:25
3	White/Black board	standard	1	1:25
4	Paint	standard	1galon	1:1
5	Duster	standard	2	2:25
6	Hook	standard	25	1:1
7	Sticker	standard	25	1:1

8	PPE	Rubber glove and Apron	25	1:1
9	Weighing balance	Analogue/digital	25	1:25
10	Signboard	standard	As required	
11	Nails	standard	As required	
12	Shelves	standard	As required	
13	Chip wood/Pallet	standard	As required	
14	Broom	standard	5	1:5

LEARNING MODULE 04	
TVET-PROGRAMME TITLE: Leather Processing Level I	
MODULE TITLE: Performing unhairing operations	
MODULE CODE: IND LEP1 M04 1221	
NOMINAL DURATION: 45 Hours	
<p>MODULE DESCRIPTION:</p> <p>This module covers the knowledge, attitude and skills required to perform unhairing operation in order to remove the hair from hides and skins, including effective use of chemicals, tools and related equipment.</p>	
<p>LEARNING OUTCOMES:</p> <p>At the end of the module the learner will be able to:</p> <p>LO1. Confirm requirements</p> <p>LO2. Prepare Hides/skins for unhairing</p> <p>LO3. Perform unhairing</p>	
<p>MODULE CONTENTS:</p> <p>LO1. Confirm requirements</p> <ul style="list-style-type: none"> 1.1 Applying Occupational Health and Safety Procedures 1.2 Identifying unhairing chemicals, tools and equipment 1.3 Arranging workplace for unhairing 1.4 Assessing pre-operation duties to fulfill Legislative/regulatory requirements <p>LO2. Prepare Hides/skins for unhairing</p> <ul style="list-style-type: none"> 2.1 Identifying unhairing methods 2.2 Preparing hides/skins for unhairing based on processing methods 2.3 Assessing the hair loosening manually <p>LO3. Perform unhairing</p> <ul style="list-style-type: none"> 3.1 Techniques of hair removal <ul style="list-style-type: none"> 3.1.1. Machine or Manual hair removal 3.1.2. Hair burring technique 3.2 Checking the effectiveness of hair removal 	

3.3 Managing the hair waste

3.4 Maintaining records in unhairing operation

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 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 	<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 	<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"> ❖ Summarize main points 	<ul style="list-style-type: none"> ❖ 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 equipment/ 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 ❖ Introduce the trainees with other 	<ul style="list-style-type: none"> ❖ Facilitate the integration of trainees with group members ❖ Conduct close 	<ul style="list-style-type: none"> ❖ Introduce the trainees with their peers

	❖ Brief the thematic issues of the work	group member	follow up ❖ Introduce the trainees with other group member ❖ Inform the group members to speak loudly	
Exercise	❖ Conduct close follow up and guidance ❖ Provide tutorial support if necessary ❖ provide special attention in the process	❖ Conduct close follow up and guidance ❖ Provide tutorial support if necessary ❖ provide special attention in the process/practical training ❖ Introduce new and relevant vocabularies	❖ Conduct close follow up and guidance ❖ Provide tutorial support if necessary ❖ provide special attention in the process/ practical training	❖ Assign peer trainees ❖ Use additional nominal hours if necessary
Individual	❖ prepare the assignment questions in large	❖ use sign language interpreter	❖ provide briefing	

assignment	<p>text/Brail</p> <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 briefing /orientation on the assignment ❖ Provide visual recorded material 	<p>/orientation on the assignment</p> <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 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
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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:

LO1. Confirm requirements

- Occupational Health and Safety Procedures are applied
- unhairing chemicals, tools and equipment are identified
- Workplace for unhairing are arranged
- Pre-operation duties are assessed to ensure fulfilling of the Legislative/regulatory and OHS requirements

LO2. Prepare Hides/skins for unhairing

- Appropriate unhairing method is identified or confirmed based on the condition and type of raw material
- Prepare hides/skins for unhairing based on processing method
- Hair loosening and its subsequent removal is assessed

LO3. Perform unhairing

- Hair is removed from hide/skins by machine or manually or solubilized in the drum
- Unhaired pelt is checked for effective hair removal and moved to the next processes
- Hair waste is managed accordingly
- Records are completed
- Documentation is maintained at each stage of the process to expedite movement through the various phases of treatment

Annex: Resource Requirements

IND LEP1 M04 1221: Performing unhairing operations				
Item No.	Category/Item	Description/ Specifications	Quantity (pc./participant)	Recommended Ratio (Item: Trainee)
A.	Learning Materials			
1	TTLM		25	1:1
B.	Learning Facilities & Infrastructure			
1	Lecture room	standard	-	-
C.	Consumable Materials			
1	Copy paper	A4 size	1rim	1:25
2	Chemicals (Water, Lime, sulphide, sulphhydrate, enzyme)	Industrial grade	As required	
3	Raw hide/ skin	standard	125	5:1
D.	Tools and Equipment's	standard		
1	Wooden beam	standard	As required	
2	Pallets	standard	As required	
3	Unhairing knife	standard	As required	
4	Baume meter	standard	As required	
5	Hook	standard	5	1:5
6	Sticker	standard	1 roll	-
7	Signboard	standard	As required	
8	PPE (overall, glove, boot)	standard	25	1:1
9	Measuring cylinder	standard	5	1:5
10	Mug	Plastic	5	1:5
11	Broom		5	1:5
12	Wheelbarrow		1	1:25

LEARNING MODULE 05	
TVET-PROGRAMME TITLE: Leather Processing Level I	
MODULE TITLE: Performing Trimming and Piling	
MODULE CODE: IND LEP1 M05 1221	
NOMINAL DURATION: 27 Hours	
<p>MODULE DESCRIPTION:</p> <p>This module covers the knowledge, attitude and skills required for the trimming and piling operations that are performed in various stages of leather processing starting from raw to finishing</p>	
<p>LEARNING OUTCOMES:</p> <p>At the end of the module the learner will be able to:</p> <p>LO1. Identify and Prepare trimming and piling tools/ equipment</p> <p>LO2. Perform Trimming and piling operations</p> <p>LO3. Clean and store tools and equipment</p>	
<p>MODULE CONTENTS:</p> <p>LO1. Identify and Prepare trimming and piling tools/ equipment</p> <ul style="list-style-type: none"> 1.1. Identifying and using required personal safety equipment 1.2. Selecting and sharpening trimming-Knives 1.3. Arranging the pallets, trimming tables and trolleys 1.4. Confirming Trimming and piling requirements <p>LO2. Perform Trimming and piling operations</p> <ul style="list-style-type: none"> 2.1. Preparing raw hides/skins and output products of various stages 2.2. Performing trimming and piling tasks 2.3. Monitoring and disposal mechanisms of trimming-wastes 2.4. Cleaning and storing used tools and equipment <p>LO3. Clean and store tools and equipment</p> <ul style="list-style-type: none"> 3.1 Cleaning of used tools and equipment 3.2 Storing mechanisms of trimming tools and equipment 	

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 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 	<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 	<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

	<p>feature of the work shop</p> <ul style="list-style-type: none"> ❖ Summarize main points 	<p>time</p> <ul style="list-style-type: none"> ❖ 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 	<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

	<p>member</p> <ul style="list-style-type: none"> ❖ Brief the thematic issues of the work 	<ul style="list-style-type: none"> ❖ Introduce the trainees with other group member 	<ul style="list-style-type: none"> ❖ Conduct close follow up ❖ 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

<p>Individual assignment</p>	<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 ❖ 	
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ASSESSMENT METHODS:

<p>Interview</p>		<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 	<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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		❖ 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 Identify and Prepare trimming and piling tools/ equipment

- Personal safety equipment, where needed, is checked and obtained to ensure appropriateness
- Knives are selected and their condition checked for suitability
- Knives are sharpened or prepared, as required
- Pallets, trimming tables, trolleys are arranged as required
- Trimming and piling requirements are confirmed with operator or supervisor for the required processes

LO2 Perform Trimming and piling operations

- Raw hides/skins and output products of various processes are prepared
- Trimming and piling operations are performed
- Trimming and piling are assessed as required in accordance with task requirements and workplace procedures
- Trimming waste is monitored and disposed of in accordance with environmental and workplace procedures

LO3. Clean and store tools and equipment

- Used tools and equipment are cleaned appropriately in readiness for next application
- tools and equipment are stored in accordance with workplace and OHS practices

Annex: Resource Requirements

IND LEP1 M05 1221: Performing Trimming and Pilling				
Item No.	Category/Item	Description/ Specifications	Quantity (pc./participant)	Recommended Ratio (Item: Trainee)
A. Learning Materials				
1	TTLM		25	1:1
B. Learning Facilities & Infrastructure				
1	Lecture room	standard	-	-
2	Trimming work place	standard	-	-
C. Required Materials				
1	Raw hides/skins, Fleshed pelts, Pickle pelt, Wet blue, Crust leather, Finished leather		As required	-
D. Tools and Equipment's				
1	LCD projector	standard	1	1:25
2	Laptop computer	standard	1	1:25
3	White/Black board	standard	1	1:25
4	PPE (overall, glove, boot)	standard	25	1:1
5	Knives/cutter	standard	As required	
6	Grinding stone	standard	5	1:5
7	Trimming Table	standard	As required	
8	Pallets	standard	As required	
9	Trolleys	standard	As required	
10	Sticker	standard	5	1:5
11	Broom	standard	1	1:25
12	Wheelbarrow	standard		
E. Consumables				
1	Marker/Chalk	standard	1Pkt	1

LEARNING MODULE 06	
TVET-PROGRAMME TITLE: Leather Processing Level I	
MODULE TITLE: Performing Drying Operation	
MODULE CODE: IND LEP1 M06 1221	
NOMINAL DURATION: 30 Hours	
MODULE DESCRIPTION: This module covers the knowledge, attitude and skills required to perform vacuum drying, overhead drying and toggling of leather.	
LEARNING OUTCOMES: At the end of the module the learner will be able to: LO1. Confirm requirements LO2. Prepare for drying LO3. Carry out drying tasks	
MODULE CONTENTS: LO1. Confirm requirements 1.1 Leather drying requirements 1.2 Assessing drying facilities and tools LO2. Prepare for drying 2.1 Identifying Leather drying methods 2.2 Procedures and equipment adjustment for drying LO3. Carry out drying tasks 3.1. Leather drying and handling 3.2. Monitoring leather drying operation 3.3. Documentation in drying operation	

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 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

<p>Demonstration</p>	<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)
<p>Group discussion</p>	<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 	<ul style="list-style-type: none"> ❖ Introduce the trainees with their peers

			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 ❖ 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 	<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 	

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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
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 	<ul style="list-style-type: none"> ❖ Provide activity based assessment 	<ul style="list-style-type: none"> ❖ Provide activity based assessment

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

LO1 Confirm requirements

- Requirements for the drying operation such as drying time, condition of crust leather (moisture content), conveyor speed, temperature, vacuum pressure etc. are confirmed
- Pre-drying duties are assessed to ensure the fulfilling of requirements.
- The required tools are identified to perform drying operation

LO2 Prepare for drying

- drying methods are identified based on the type of final product (upper, garment, glove etc) to be produced
- Crust leathers are loaded onto frames/conveyor in the case of natural drying or otherwise prepared for thermal drying
- Where applicable, equipment adjustments are set in accordance with manufacturer and workplace procedures.

LO3 Carry out drying tasks

- Different Methods of leather drying are performed as per the requirement
- Drying time, temperature and other conditions are monitored
- Drying is assessed in accordance with workplace procedures and, where applicable
- Unloading or removal of dried leathers from the rack, conveyor, equipment or drying area is assessed using correct OHS practices
- Dried leathers are piled and then shifted to the subsequent processes or storage
- Records are completed according to the operation
- Documentation is maintained for further movement of the dried leather through the various subsequent operations

Annex: Resource Requirements

IND LEP1 M06 1221: Performing Drying Operation				
Item No.	Category/Item	Description/ Specifications	Quantity (pc./participant)	Recommended Ratio (Item: Trainee)
A.	Learning Materials			
1	TTLM		25	1:1
B.	Learning Facilities & Infrastructure			
1	Lecture room	standard	-	-
C.	Consumable Materials			
1	Copy paper	A4 size	1rim	1:25
2	Marker/Chalk		1Pkt	1:25
D.	Tools and Equipment's			
1	Overhead dryer		As required	
2	Vacuum dryer		As required	
3	Toggle dryer		As required	
4	Togglng clips		As required	
5	Slick		As required	
6	PPE	Overall & Apron	25	1:1
7	Moisture meter	Aqua	1	1:25
8	Pallet	Horse	5	1:5
9	Hydraulic pallet		1	1:25

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Page 60 of 62	Ministry of Labor and Skills Author/Copyright	Leather Processing Level I	Version 1
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