

## DACUM Panel

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## DACUM Facilitator:

Engr. Aijaz Ahmed Zia

# Occupational Profile Chart of “Crop Protection Helper/Gardener- Level 1 Crop Protection Assistant- Level 2”

*Date*

*20<sup>th</sup>-24<sup>th</sup> March, 2023*

*NAVTTC HQ, Islamabad, Pakistan*



**National Vocational & Technical  
Training Commission**

## Level 1- Crop Protection Helper (Beldar)/Gardener

DUTIES and TASKS					
<b>A. Follow basic health and safety practices</b>					
<b>A1.</b> Wear Personal Protective Equipment (PPEs) as per requirement	<b>A2.</b> Follow basic precautionary measures				
<b>B. Assist in performing Crop Protection Operations</b>					
<b>B1.</b> Clean the equipment	<b>B2.</b> Take protective measures	<b>B3.</b> Prepare the crop protection material as per instructions	<b>B4.</b> Apply crop protection material and ensure complete coverage		
<b>C. Return redundant inventory to the store as per SOP.</b>					
<b>C1.</b> Re-clean the used equipment	<b>C2.</b> Return the equipment as per inventory	<b>C3.</b> Follow personal safety measures after the completion of task			
<b>D. Assist in the maintenance and care of a kitchen garden.</b>					
<b>D1.</b> Help in preparing soil beds for planting by digging, tilling, and adding soil amendments	<b>D2.</b> Help in Plant and transplant seedlings as per instructions	<b>D3.</b> Maintain garden beds regularly to ensure healthy plant growth			

E. Follow basic green practices for crop protection					
<b>E1.</b> Help in organizing working environment	<b>E2.</b> Perform disposal of waste material in designated area as per SOP	<b>E3.</b> Help in recycle plastic material			

## Level 2- Crop Protection Assistant

DUTIES and TASKS					
F. Follow health and safety practices at agriculture field					
<b>F1.</b> Ensure safe handling of equipment as per SOP	<b>F2.</b> Follow safety precautionary measures	<b>F3.</b> Provide first aid during injuries	<b>F4.</b> Operate fire extinguisher		
G. Maintain soil fertility					
<b>G1.</b> Identify soil condition	<b>G2.</b> Assist in soil testing	<b>G3.</b> Assist in water testing	<b>G4.</b> Prepare the soil as per requirements	<b>G5.</b> Add organic/inorganic fertilizer as per requirement	
H. Select seed for quality and productivity					
<b>H1.</b> Assist in choosing the certified seeds	<b>H2.</b> Treat the seed as per requirement	<b>H3.</b> Sow the seed as per recommendation			
I. Identify insect, pests and diseases					
<b>I1.</b> Differentiate between	<b>I2.</b> Identify crop wise pests and diseases				

insect, pests and diseases					
<b>J. Perform Pest scouting</b>					
<b>J1.</b> Learn the infestation level	<b>J2.</b> Perform pest scouting method	<b>J3.</b> Keep the record			
<b>K. Assist in procurement of the crop protection material</b>					
<b>K1.</b> Generate demand for crop protection material as per instructions	<b>K2.</b> Assist in handling the procured material as per SOP	<b>K3.</b> Help in keeping the record material			
<b>L. Assist in the application of Crop protection material</b>					
<b>L1.</b> Wear PPEs before performing any field operation	<b>L2.</b> Calibrate the equipment	<b>L3.</b> Prepare the applicable material	<b>L4.</b> Assist in monitoring the spraying operation in the farm		
<b>M. Assist in controlling weeds in the agriculture field</b>					
<b>M1.</b> Identify the weeds	<b>M2.</b> Perform weed control at agriculture farm	<b>M3.</b> Arrange the required material to control weed	<b>M4.</b> Apply the weedicide as per recommendation		
<b>N. Follow intermediate green practices for crop protection</b>					
<b>N1.</b> Use natural methods, such as	<b>N2.</b> Assist in collecting	<b>N3.</b> Assist in preparation of			

crop rotation and cover crops, to improve soil health	and recording data on soil health, water quality, and crop yield	environmental reports and compliance documents			
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## Additional Information for Crop Protection Helper/Gardener & Assistant

Worker traits	Entry Requirements	Duration of Training Required	Career Paths
<ul style="list-style-type: none"> <li>• Environment Friendly</li> <li>• Motivated for SDGs</li> <li>• Honest</li> <li>• Punctual</li> <li>• Knowledgeable about Green TVET</li> <li>• Interpersonal skills</li> <li>• Hard worker</li> <li>• Team worker</li> <li>• Collaborative</li> <li>• Confident</li> <li>• Communicative Skills</li> </ul>	<p>*Middle/Class 8</p>	<p>The proposed duration for level 1&amp;2 training is 6 months.</p>	<ul style="list-style-type: none"> <li>• Crop Protection Helper/Gardener</li> <li>• Crop Protection Assistant</li> <li>• Crop Protection Technician</li> <li>• Crop Protection/Farm Supervisor</li> <li>• Crop Protection/Farm Manager</li> </ul>

## List of Tools and equipment

Tool/Equipment	Quantity
Backpack sprayer (16L)	5
Hand sprayer (1L)	25
Pesticide applicator's safety kit (gloves, goggles, mask, apron)	25 sets
Knapsack sprayer spare parts kit (including nozzle, gasket, wand, hose)	5 kits
pH meter	1
Moisture meter	1
Digital thermometer	1
Plant disease diagnostic kit	1
Soil sampling kit	1
Pruning shears	25
Hand trowels	25
Garden rake	5
Hoe	5
Wheelbarrow	5
Safety signs (e.g. "Do not enter", "Pesticide application in progress")	5