



INFORMATION BROCHURE

Skill Development Course

ON

Gardening

Job Role: Gardener



Training Partner

**CENTRAL INSTITUTE OF HORTICULTURE
DEPARTMENT OF AGRICULTURE, COOPERATION & FARMERS WELFARE
MINISTRY OF AGRICULTURE & FARMERS WELFARE
GOVERNMENT OF INDIA
MEDZIPHEMA, NAGALAND**



BACKGROUND OF THE INSTITUTE

Recognizing the huge potential for horticulture development in the North-Eastern region and to provide institutional support to tap this potential, Government of India has set up the “Central Institute of Horticulture” at Medziphema, Nagaland in the year 2005-06 under the Central Sector Scheme. This Institute is set up for holistic development of horticulture in NE Region of India.

The Institute is being set up at Medziphema in an area of 43.50 ha, which is situated at 35 kms from Dimapur and 45 kms from Kohima city on National Highway 39. It has an elevation ranging from 250 to 300 metres having temperature between 12 to 35 degree centigrade and average rainfall of 2500 mm. The area has low hilly terrains with good soil rich in organic matter suitable for growing most of the tropical, sub tropical and temperate horticultural crops.

VISION

To emerge as the pioneering, innovative, farmer focused and self-supporting horticultural Institute in the country.

MISSION

To provide excellent, innovative and relevant training to all the stakeholders so as to empower individuals and enable horticulture industry to bring about socio-economic development and sustainability in North East Region.

OBJECTIVES & PROGRAMMES OF THE INSTITUTE

- ❖ Capacity building by training of trainers and farmers/beneficiaries.
- ❖ Demonstration of improved production technologies.
- ❖ Accreditation and Certification of Nurseries in NE region.
- ❖ Certificate courses in horticulture.
- ❖ Follow-on extension support in the field of horticulture.
- ❖ Promotion of organic cultivation of horticulture crops.
- ❖ Establishing convergence and synergy among programmes in the field of horticulture.
- ❖ Monitoring of Centrally Sponsored Programmes in the area of horticulture.

FOCUS AREAS

- ❖ Training of State Government Officials and Farmers/Beneficiaries of North Eastern Region.
- ❖ Production and supply of Quality Planting Material.
- ❖ Accreditation and certification of horticulture nurseries in NER.
- ❖ Certificate courses in horticulture.
- ❖ Transfer of technology through method & result demonstration & publication of folders, manuals, leaflets etc.
- ❖ Promotion of Organic Farming.
- ❖ Marketing and agri-business promotion through exhibitions, seminars, workshops, exposure trips, buyers & sellers meet.
- ❖ Coordination with State Horticulture Departments of NER and other National Organizations, NGOs, Farmers' Group and Self Help Groups.



SKILL DEVELOPMENT COURSE

GARDENING

Job Role: Gardener.



SECTOR: AGRICULTURE AND ALLIED

SUB-SECTOR: Agriculture Crop Production

OCCUPATION: Landscaping and Gardening

REFERENCE ID: AGR/Q0801

ALIGNED TO: NCO-2004/6113.3

Gardener in the agriculture industry is a very important job role related to landscaping and gardening activity, in hindi it is commonly known as 'Mali'. The job role involves a lot of technical knowhow. He works in familiar, unpredictable, routine, situations of clear choice.

Brief Job Description: Gardening is responsible for taking care of beautification of lawns and gardens for private Houses, Parks, and Hotels in order to attract customers.



Personal Attributes: This job requires the individual to work independently and be comfortable in making decisions pertaining to his/her area of work. The individual should be result oriented. The individual should also be able to demonstrate skills of identifying crops, maintaining garden, use of various tools and decision making for instant problem solving.

Job Details	Qualifications Pack Code	AGR/Q0801		
	Job Role	Gardener		
	Credits(NSQF)	TBD	Version number	1.0
	Sector	Agriculture And Allied	Drafted on	25/02/14
	Sub-sector	Agriculture Crop Production	Last reviewed on	31/03/16
	Occupation	Landscaping Gardening & Urban Farming	Next review date	31/03/18
	NSQC Clearance on	18/06/2015		

Job Role	Gardener (‘Mali’ in Hindi)
Role Description	A Gardener is responsible for tending lawns, trees, shrubs, ground covers. He needs to be aware of the soil and nutrition requirements of plants, pests and diseases & their control and drainage. Gardeners also need to acquire skills in grafting, pruning, weeding and harvesting of flowers, fruits and vegetables. Needs to know use of basic tools and hand powered machinery such as pruners, brush cutters, lawn mowers etc
NSQF level	4
Minimum Educational Qualifications	5 th Standard Passed
Maximum Educational Qualifications	Not Applicable
Training (Suggested but not mandatory)	Basic knowledge of garden and experience in gardening for one year
Minimum Job Entry Age	17 Years
Experience	6 months to 1 year of experience in working in garden or nursery
Applicable National Occupational Standards (NOS)	Compulsory: 1. AGR / N0801 Nursery Management and Propagation of Plant Material 2. AGR / N0802 Designing of Garden Components 3. AGR / N0803 Plantation, Maintenance and Care of Garden 4. AGR/N9903 Maintain health & Safety at the work place Optional: NA
Performance Criteria	As described in the relevant OS units



Gardener

CURRICULUM / SYLLABUS

This program is aimed at training candidates for the job of a "Gardener", in the "Agriculture & Allied" Sector/Industry and aims at building the following key competencies amongst the learner

Program Name	Gardener		
Qualification Pack Name & Reference ID. ID	AGR/Q0801, v1.0		
Version No.	1.0	Version Update Date	
Pre-requisites to Training	5th Standard Passed		
Training Outcomes	<p>After completing this programme, participants will be able to:</p> <ul style="list-style-type: none"> • Identify and use basic tools, equipment & materials: Effectively identify, select & use the specified tools and equipment relevant to gardening works. • Prepare root stocks: Preparing root stocks for grafting, budding • Layout and design the Garden component: Area Measurement and planning for the layout and design of garden. Proper landscaping. • Maintain the Garden: identify and select the tools for Pruning, training, trimming and develop healthy Garden. • Become well versed with Environment Health & Safety: Well versed with health and safety measures in terms of personal safety and others as well. 		

This course encompasses 4 out of 4 National Occupational Standards (NOS) of "Gardener" Qualification Pack issued by "Agriculture Skill Council of India".

Sr. No.	Module	Key Learning Outcomes	Equipment Required
1	<p>Introduction</p> <p>Theory Duration (hh:mm) 25:00</p> <p>Practical Duration (hh:mm) 25:00</p> <p>Corresponding NOS Code Bridge Module</p>	<ul style="list-style-type: none"> • Understand and perform General Discipline in the class room (Do's & Don'ts) • Understand the Role of a Gardener • Study and understand Types of Gardens • Gain knowledge about the Aesthetic value of garden. • Study the Value in terms of money for gardening • Study the Planting materials for gardening. • Learn Basic skills of communication • Learn Basic reading capabilities to enable reading of signs, notices and/or cautions at site. 	Laptop, white board, marker, projector

2	<p>Nursery Management and Propagation of Plant Material</p> <p>Theory Duration (hh:mm) 25:00</p> <p>Practical Duration (hh:mm) 40:00</p> <p>Corresponding NOS Code AGR / N0801</p>	<ul style="list-style-type: none"> Identify appropriate garden crops as per soil & climatic conditions. Prepare nursery bed & seedlings Transplant the seedlings Maintain farm book keeping Prepare the root stocks and practice Propagation techniques. Practice cutting, grafting, budding and layering techniques Establish the physical infrastructure like shade house, green house, mist chamber, irrigation system. Understand the soil mixtures and seed beds. Understand the basic botany for garden crops. Gain knowledge about the Water, Media & Nutrition requirement for garden crops. Study the Fertilizer requirement of garden crops. Practice Pest & Disease Management of garden crops. Understand the irrigation methods /requirements of garden crops. Maintain cleanliness in nursery by sweeping trashes and pulling out dead plant parts etc. 	<p>Laptop, white board, marker, projector, Seedling Tray, sacks, polythene, watering cans and equipments, shade net, green house/shade house, plant labels, labellers, spade, khurpi</p>
3	<p>Designing of Garden Components</p> <p>Theory Duration (hh:mm) 30:00</p>	<ul style="list-style-type: none"> Understand the features of Garden. Gain knowledge about the different types of Garden Plan for the Design and Layout of Gardens. Layout & prepare the lawn Layout of orchard, plant fruit plants in the field 	<p>Laptop, white board, marker, projector, spade, khurpi, shears, loppers, hedge cutters</p>
	<p>Practical Duration (hh:mm) 45:00</p> <p>Corresponding NOS Code AGR/N0802</p>	<ul style="list-style-type: none"> Understand the different components of garden. Implement the techniques to beautify the gardens. 	

4	<p>Plantation, Maintenance and Care of Garden</p> <p>Theory Duration (hh:mm) 20:00</p> <p>Practical Duration (hh:mm) 30:00</p> <p>Corresponding NOS Code AGR/N0803</p>	<ul style="list-style-type: none"> Understand the seasonal Gardening and Ground maintenance. Understand the different planting and Culture of Floral Display. Understand and perform the irrigation maintenance in the garden. Practice Pest and Disease management. Perform filed operations like Maintain Lawn and Turf, Mowing, Fertilizing, Weeding, Irrigation, Aeration and Renovation. Gain knowledge about the different Plant and Culture of Trees, shrubs etc Identify different fruit plants & ornamental plants Prepare pot mixtures, potting & repotting of plants Prune shrubs, hedge, edge & topiary Collect soil samples for soil analysis Identify vegetable seed, garden tools & implements Prepare Bordeaux mixture Prepare spray solution, handling sprayers & dusters 	<p>Laptop, white board, marker, projector, Hedge cutter, shears, loppers, sprayers, plant labels, pesticides, weedicides, fertilizers, water pumps and equipments, watering timers and controllers</p>
5	<p>Health & Safety at the work place</p> <p>Theory Duration (hh:mm) 10:00</p> <p>Practical Duration (hh:mm) 10:00</p> <p>Corresponding NOS Code AGR/N9903</p>	<ul style="list-style-type: none"> Understand the basic safety measures. Understand the minimization of environmental damage during farm operations. Proper use of equipment. Practice General safety and first aid 	<p>Hand Gloves, Mask, Pair of shoes, first aid kit</p>
	<p>Total Duration:</p> <p>Theory Duration 110:00</p> <p>Practical Duration 150:00</p>	<p>Unique Equipment Required: Laptop, white board, marker, projector, Seedling Tray, sacks, polythene, watering cans and equipments, shade net, green house/shade house, plant labels, labellers, spade, khurpi, shears, loppers, hedge cutters, sprayers, plant labels, pesticides, weedicides, fertilizers, water pumps and equipments, watering timers and controllers, Hand Gloves, Mask, Pair of shoes, first aid kit</p>	

Grand Total Course Duration: **260 Hours, 0 Minutes**



Annexure: Assessment Criteria

Assessment Criteria	
Job Role	Gardener
Qualification Pack	AGR/Q0801, v1.0
Sector Skill Council	Agriculture

Sr. No.	Guidelines for Assessment
1	Criteria for assessment for each Qualification Pack will be created by the Sector Skill Council. Each Performance Criteria (PC) will be assigned marks proportional to its importance in NOS. SSC will also lay down proportion of marks for Theory and Skills Practical for each PC.
2	The assessment for the theory part will be based on knowledge bank of questions created by the SSC.
3	Individual assessment agencies will create unique question papers for theory part for each candidate at each examination/training centre (as per assessment criteria below)
4	Individual assessment agencies will create unique evaluations for skill practical for every student at each examination/training center based on this criteria
5	To pass the Qualification Pack, every trainee should score a minimum of 60% in aggregate and 40% in each NOS
6	The marks are allocated PC wise; however, every NOS will carry a weight age in the total marks allocated to the specific QP

Training Centre:	Central Institute of Horticulture Department of Agriculture, Cooperation & Farmers Welfare Ministry of Agriculture & Farmers Welfare Government of India Medziphema, Nagaland-797106.
NSDC Registration No.:	NSDC-REGNo-15564
Training Centre ID:	90550
Course ID:	9458
Contact Details (SPOC):	Dr. N K Patle, Director Ph: 03862-247707 Fax: 03862-247088 Email: directorcih-ngl@gov.in naveen_patle2002@regdiffmail.com Website: www.cihner.gov.in