

Model Curriculum

Friends of Coconut Tree

SECTOR: AGRICULTURE & ALLIED
SUB-SECTOR: AGRICULTURE CROP PRODUCTION
OCCUPATION: PLANTATION CROP CULTIVATION
REF ID: AGR/Q0504, V1.0
NSQF LEVEL: 3



Certificate

CURRICULUM COMPLIANCE TO QUALIFICATION PACK – NATIONAL OCCUPATIONAL STANDARDS

is hereby issued by the

AGRICULTURE SKILL COUNCIL OF INDIA

for the

MODEL CURRICULUM

Complying to National Occupational Standards of
Job Role/Qualification Pack: **'Friends of Coconut Tree'** QP No. **'AGR/Q0504 NSQF Level 3'**

Date of Issuance: October 20th, 2016

Valid up to: March 31st, 2019

* Valid up to the next review date of the Qualification Pack



Authorised Signatory
(Agriculture Skill Council of India)

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Friends of Coconut Tree

CURRICULUM / SYLLABUS

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

Program Name	Friends of Coconut Tree		
Qualification Pack Name & Reference ID. ID	AGR/Q0504, v1.0		
Version No.	1.0	Version Update Date	
Pre-requisites to Training	No entry barrier, 5 th standard passed preferable		
Training Outcomes	<p>After completing this programme, participants will be able to:</p> <ul style="list-style-type: none"> • Climb coconut palm using climbing machine: understand the working mechanism of climbing machine & undertake climbing of palms • Identify & harvest nuts of appropriate age group: identify growth stages & harvest at appropriate stage followed by proper post-harvest activities depending on the purpose/use • Advise farmers on coconut palm cultivation: undertake soil nutrient management, integrated pest & disease management, irrigation practices, intercropping, mixed cropping, organic farming etc • Practice health & safety at the work place: Well versed with health and safety measures in terms of personal as well as others’ safety. 		

This course encompasses 6 out of 6 National Occupational Standards (NOS) of "Friends of coconut tree" Qualification Pack issued by "Agriculture Skill Council of India".

Sr. No.	Module	Key Learning Outcomes	Equipment Required
1	Introduction Theory Duration (hh:mm) 05:00 Practical Duration (hh:mm) 00:00 Corresponding NOS Code Bridge Module	<ul style="list-style-type: none"> Understand General Discipline in the class room (Do's & Don'ts) Study the Scope & importance of Plantation crops especially coconut in India Understand the Role of a 'Friends of coconut tree (FoCT)' 	Laptop, white board, marker, projector
2	Coconut Palm climbing using climbing machine Theory Duration (hh:mm) 05:00 Practical Duration (hh:mm) 20:00 Corresponding NOS Code AGR / No521	<ul style="list-style-type: none"> Understand the working mechanism of the climbing machine Undertake machine adjustments before climbing Undertake precautionary measures before & during climbing palms Develop skills to climb palms gradually from 15 ft to 40ft Undertake fitness activities- yoga, breathing & free hand exercises Undertake proper treatment in case of injuries/mishap Understand facilities available for health/ medical/ life insurance Get acquainted with financial literacy 	Laptop, white board, marker, projector, Audio-visual aids, White Marker, Climbing machine, rope, first aid kit
3	Identification and harvesting of tender/mature nuts Theory Duration (hh:mm) 05:00 Practical Duration (hh:mm) 21:00 Corresponding NOS Code AGR/No522	<ul style="list-style-type: none"> Distinguish between tender & mature nuts Handle and harvest the tender/ mature nuts at appropriate stage & time depending upon the variety (tall/dwarf/medium) and purpose (culinary/ copra making/seed nut etc) Store the harvested nuts Undertake proper post-harvest activities depending on the purpose of the use of the nuts 	Laptop, white board, marker, projector, Audio-visual aids, sickle, dehusker,
4	Integrated Nutrient Management in coconut	<ul style="list-style-type: none"> Understand role of fertilizers & manure at different growth stages of coconut 	Laptop, white board, marker, projector,

Sr. No.	Module	Key Learning Outcomes	Equipment Required
	cultivation Theory Duration (hh:mm) 10:00 Practical Duration (hh:mm) 12:00 Corresponding NOS Code AGR/No517	palms <ul style="list-style-type: none"> • Undertake soil sampling • Understand the importance of soil testing and use of recommended doses of fertilizers and manure • Ensure usage of green manure, bio-fertilizers and another cultural practices for maintaining & improving soil health • Identify different weeds & undertake weed control activities • Proper application of fertilizers & weedicides 	Audio-visual aids, khurpa, sickle, weeder, sparyer, chemicals
5	Integrated Pest & Disease Management in coconut cultivation Theory Duration (hh:mm) 10:00 Practical Duration (hh:mm) 22:00 Corresponding NOS Code AGR/No518	<ul style="list-style-type: none"> • Identify different types of pest infesting coconut palm, their behaviour & their infesting stage • Identify different diseases, physiological disorders etc • Identify signs & symptoms of damage • Identify crop stages & pest/disease incidence • Identify pest life cycle & their natural enemies • Undertake preventive & curative methods- chemical, biological & mechanical • Undertake proper application of pesticides etc 	Laptop, white board, marker, projector, Audio-visual aids, chemicals, sprayer,
6	Optimal cultivation practices in coconut palm cultivation Theory Duration (hh:mm) 10:00 Practical Duration (hh:mm) 15:00 Corresponding NOS Code AGR/No519	<ul style="list-style-type: none"> • Undertake appropriate irrigation method & follow timely schedule • Undertake soil moisture conservation techniques like mulching etc • Undertake intercropping & mixed cropping depending on the climatic requirement & resource availability • Emphasize on organic farming practices for ecological security 	Laptop, white board, marker, projector, Audio-visual aids, spade
7	Maintain Health & Safety at the work place Theory Duration (hh:mm) 10:00 Practical Duration	<ul style="list-style-type: none"> • Maintain a clean & efficient workplace • Render appropriate emergency procedures • On Time Reporting to appropriate person. • Practice General safety and first aid 	Laptop, white board, marker, projector, , Personal protective equipment Like: Helmet / head gear, safety gloves, Safety boots, Safety Harness;

Sr. No.	Module	Key Learning Outcomes	Equipment Required
	(hh:mm) 10:00 Corresponding NOS Code AGR/N9903		First Aid Kit: Bandages, Adhesive bandages, Betadine Solution / ointment, Pain relief spray / ointment, Antiseptic liquid; Phone directory, Search lights, fire extinguisher
8	Soft Skills/ Computer Literacy/ Financial Literacy/ Entrepreneurship Skills Theory Duration (hh:mm) 15:00 Practical Duration (hh:mm) 10:00 Corresponding NOS Code	<ul style="list-style-type: none"> • Basic Communication Skills • Basic Computer Skills • Various types of documents and their uses- Birth certificate, 10th Certificate, Ration Card, Voter Id Card, Aadhar Card, PAN card, Driving License, Bank Pass Book • Various types of loan/credit available (relevant to the trainees' requirement) and the process to avail the same 	Computer, Audio-visual aids, Projector
	Total Duration: Theory Duration (hh:mm) 70:00 Practical Duration (hh:mm) 110:00	Unique Equipment Required: Laptop, white board, marker, projector, Audio-visual aids, Climbing machine, rope, first aid kit, sickle, dehusker, khurpa, weeder, sprayer,	

Grand Total Course Duration: **180 Hours, 0 Minutes**

(This syllabus/ curriculum has been approved by [Agriculture Skill Council of India](#))

Trainer Prerequisites for Job role: “Friends of Coconut Tree” mapped to Qualification Pack: “AGR/Q0504, v1.0”

Sr. No.	Area	Details
1	Description	Trainer is responsible for educating the trainees – Coconut Palm climbing using climbing machine, Harvesting of tender/mature nuts, Optimal Cultivation practices along with pest, disease & nutrient management, health & safety at the workplace
2	Personal Attributes	Trainer should be Subject Matter Expert. He/ she should have good communication, leadership, observation and practical oriented skills.
3	Minimum Educational Qualifications	Bachelor’s Degree, Preferably in Horticulture
4a	Domain Certification	Certified for Job Role: “Friends of Coconut Tree” mapped to QP: “AGR/Q0504, v1.0”. Minimum accepted score is 80%.
4b	Platform Certification	Recommended that the Trainer is certified for the Job Role: “Trainer”, mapped to the Qualification Pack: “SSC/Q1402”. Minimum accepted % as per respective SSC guidelines is 70%.
5	Experience	<ul style="list-style-type: none"> • M.Sc (Horticulture) with 1 Year experience • B.Sc.(Horticulture) with 3 Years experience • Any Graduate with 5+ years experience in relevant field • Any +2 having 7/8 Years of experience in Coconut Crop Cultivation

Annexure: Assessment Criteria

Assessment Criteria	
Job Role	Friends of Coconut Tree
Qualification Pack	AGR/Q0504, 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 50% in aggregate
6	In case of successfully passing only certain number of NOS's, the trainee is eligible to take subsequent assessment on the balance NOS's to pass the Qualification Pack

Assessable Outcome	Assessment Criteria	Total Mark (600)	Out Of	Marks Allocation	
				Theory	Skills Practical
1. AGR / No521 - Coconut palm climbing using climbing machine	PC1. Prepare the machine by adjusting size of the wire according to the width of the palm	120	20	10	10
	PC.2 Develop skills to climb palms of height up to 15 feet on 1st day		8	0	8
	PC.3 Develop skills to climb palms of height up to 25 feet on 2nd day		8	0	8
	PC.4 Develop skills to climb palms of height up to 35 feet on 3rd day		8	0	8
	PC.5 Develop skills to climb palms of height up to 40 feet on 4th day		8	0	8
	PC.6 Treat wounds, injuries, bees and wasp attacks, fractures etc		10	4	6
	PC.7 Practice Yoga, breathing exercises, free hand exercises		8	0	8
	PC.8 Get acquainted with Health/Medical/life insurance envisaged for Neera technician		10	7	3
	PC.9 Learn Banking aspects such as how to start a savings account, systematic savings and investment		20	8	12
	PC.10 Learn & do Book keeping		20	8	12
			120	37	83
2. AGR / No522 - Identification and harvesting of tender/mature nuts	PC1. Distinguish between tender and mature nuts just by its appearance.	120	20	10	10
	PC.2 Harvest tender and mature coconuts which have reached an appropriate stage, and allowing the rest of the nuts for harvesting in the next harvest		20	10	10
	PC.3 Handle tender and mature nuts properly so that it does not get damaged.		15	7	8
	PC.4 Harvest the crop at the appropriate time as per the variety (tall/dwarf/hybrid) and purpose (culinary/copra making/seed nut etc)		30	14	16
	PC.5 Arrange the harvested nuts in heaps under shade for a few days since the stored nuts are easy to de-husk		15	9	6
	PC.6 Do the required Post harvest		20	10	10

	management depending upon the purpose of the use of nuts				
			120	60	60
3. AGR / No517 - Integrated Nutrient Management in Coconut Palm cultivation	PC.1 Take soil sample as per the recommended sampling procedure from the field	90	10	4	6
	PC.2 Dry the soil and prepare samples as per procedure		6	3	3
	PC.3 Pack, label and submit to nearby soil testing laboratory for analysis		6	3	3
	PC.4 Collect the soil analysis report from the lab		2	0	2
	PC.5 Collect the recommended organic and inorganic fertilizer dosage from Agriculture Department based on the soil analysis report.		5	2	3
	PC.6 Regularmanuring from the first year of planting is essential to achieve higher productivity.		5	3	2
	PC.7 Apply the manure to the soil as per recommended dosage and procedure		10	5	5
	PC.8 Ascertain Green manure/ eco-friendly botanicals/biofertiliser that can be applied		10	5	5
	PC.9 Adopt various cultural practices that enhances the soil nutrient status for the benefit of Coconut crop stand		8	4	4
	PC.10 Apply fertilisers for macro and micro nutrients as per the recommended dosage, timing, placement locations and method of application		10	5	5
	PC.11 Take up Weed control as per recommendation		10	5	5
	PC.12 Remove rogue infected plant/ plant parts		8	4	4
			90	43	47
4. AGR / No518 - Integrated Pest and Disease Management in Coconut cultivation	PC1. Identify the types of pests associated (Rhinoceros beetle, Black headed caterpillar Red palm weevil, termites, etc)	120	10	5	5
	PC2. Identify the stage of crop and pest incidence – pest calendar		5	2	3
	PC3. Identify the signs and symptoms of damage		10	5	5
	PC4. Identify the pest life cycle – estimate the duration		5	3	2
	PC5. Identify the natural enemies of the pests (naids/dragon flies, trichogramma, mirid bug, lady bird beetles, spiders, preying mantidsetc)		5	2	3

	market and price				
	PC6. Consider the canopy size, age and spacing of the coconut at the time of selection of inter/mixed crop		5	2	3
	PC7. Consider Green crops and Cover Crops that may also be raised to increase the organic matter content of the soil and to prevent soil erosion		8	4	4
	PC8. Consider taking Multiple crops depending upon the suitability.		5	3	2
	PC9. Apply recommended quantity of water and manures and fertilizers to the intercrops separately.		10	5	5
	PC10. Prune / remove of dry leave as per requirement and procedures		4	2	2
	PC11. Remove dead plants		2	0	2
	PC12. Do tillage		5	3	2
	PC13. Utilize recycled palm waste		4	2	2
	PC14. Apply organic manure		4	2	2
			90	45	45
6. AGR/N9903- Health & Safety at the work place	PC1. undertake basic safety checks before operation of all machinery and vehicles and hazards are reported to the appropriate supervisor	60	4	2	2
	PC2. work for which protective clothing or equipment is required is identified and the appropriate protective clothing or equipment is used in performing these duties in accordance with workplace policy.		4	2	2
	PC3. read and understand the hazards of use and contamination mentioned on the labels of pesticides/fumigants etc		4	2	2
	PC4. assess risks prior to performing manual handling jobs, and work according to currently recommended safe practice.		4	5	-1
	PC5. use equipment and materials safely and correctly and return the same to designated storage when not in use		4	2	2
	PC6. dispose of waste safely and correctly in a designated area		4	2	2
	PC7. recognise risks to bystanders and take action to reduce risk associated with jobs in the workplace		6	3	3
	PC8. perform your work in a manner which minimizes environmental damage all procedures and work instructions for controlling risk are followed closely		4	2	2

	PC9. report any accidents, incidents or problems without delay to an appropriate person and take necessary immediate action to reduce further danger		2	1	1
	PC10. follow procedures for dealing with accidents, fires and emergencies, including communicating location and directions to emergency.		4	2	2
	PC11. follow emergency procedures to company standard / workplace requirements		4	2	2
	PC12. use emergency equipment in accordance with manufacturers' specifications and workplace requirements		4	2	2
	PC13. provide treatment appropriate to the patient's injuries in accordance with recognized first aid techniques		4	2	2
	PC14. recover (if practical), clean, inspect/test, refurbish, replace and store the first aid equipment as appropriate		4	2	2
	PC15. report details of first aid administered in accordance with workplace procedures.		4	2	2
			60	33	27
	Total	600	600	280	320
	Percentage Weightage:			47%	53%
	Minimum Pass% to qualify (aggregate):			50%	