

Model Curriculum

General Worker – Rubber Plantation

SECTOR: Rubber Industry
SUB-SECTOR: Natural Rubber (NR) Plantation
OCCUPATION: Production – NR
REF ID: RSC/Q6107, V1.0
NSQF LEVEL: 4



Certificate

**CURRICULUM COMPLIANCE TO
QUALIFICATION PACK – NATIONAL
OCCUPATIONAL STANDARDS**
is hereby issued by
the
Rubber Skill Development Council
for the
**MODEL
CURRICULUM**
Complying to National Occupational Standards
of
Job Role/ Qualification Pack: '**General Worker Rubber Plantation**' QP No.
'**RSC/ Q 6107 NSQF Level 4**'

Date of Issuance: **December 15, 2015**
Valid Upto: **December 15, 2017**
* Valid up to the next review date of the Qualification Pack



Authorised Signatory
Rubber Skill Development Council

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General Worker – Rubber Plantation

CURRICULUM/SYLLABUS

This program is aimed at training candidates for the job of an “General Worker – Rubber Plantation”, in the “Rubber” Sector/Industry and aims at building the following key competencies amongst the learner

Program Name	General Worker – Rubber Plantation		
Qualification Pack Name & Reference ID	RSC/Q6107		
Version No.	1.0	Version Update Date	
Pre-requisites to Training	Class 10 th (High School Education)		
Training Outcomes	After completing this programme, participants will be able to: <ul style="list-style-type: none"> • Rubber Plantation Development and Maintenance • Natural Resources Management • Feedback to Higher Authorities • To learn Entrepreneurship Skills 		

This course encompasses three out of three National Occupational Standards (NOS) of “RSC/ Q 6107” Qualification Pack issued by “Rubber Skill Development Council”.

S. No	Module	Key Learning Outcomes	Equipments
1	Introduction and Orientation Theory 2 hours Practical 0 hours Corresponding NOS Bridge Module	<ul style="list-style-type: none"> Importance of Rubber Sector Role and responsibility of Rubber Plantation Worker 	Laptop, white board, marker, projector
2	Rubber Plantation Development and Maintenance Theory 25 hours Practical 40 hours Corresponding NOS RSC/ N6108	<ul style="list-style-type: none"> Maintaining cleanliness in the plantation Construction and maintenance of the estate road Lining, peg marking and pitting (either mechanical/manual) Refilling with top soil, making of silt pit and soil / stone bunds. Maintenance of terraces and drainage facility Loading, unloading of planting materials/other inputs and shifting to planting site carefully. Planting in pits as per the instructions Treatment of seeds as per the instructions Using recommended fungicides/pesticides/insecticide to control leaf/stem/root diseases. Operation of different types of sprayer, dusters and weed cutting machines for weed control Manuring weaker plants as per the instructions. Treatment for nutritional deficiency diseases. Fertilizer application as per the instructions. Cleaning and maintenance of tools required for maintenance of plants Pruning of lower branches and mulching plant bases using dried leaves/ providing shade baskets. White washing the brown portion of the plants using lime/clay to reduce heat absorption. Replacement of vacant planting points using healthy advanced planting materials as per the instructions. Repair and maintenance of terrace/soil/stone bunds Confining cover crops growth within inter rows. Raising of wind belt in wind prone areas. Making fire belt during summer season. Raising of intercrop (if any) during the initial 3 years. Maintaining intercrops as per instructions 	Power point presentation, LCD projector, Computer, LCD screen, white board, marker, pointer. Road tracer, pegs, rope for lining (50 meters), crowbar, paid, felling knife, Sample planting materials (Nursery Plant) in poly bag/root trainer, crowbar, trowel, spade, felling knife, bucket, water, Samples of diseases affected portions, Hand saw, knife, lime, plastic bucket, Spade, felling Knife

<p>3</p>	<p>Natural Resource Management</p> <p>Theory 20 hours</p> <p>Practical 35 hours</p> <p>Corresponding NOS RSC/ N5005</p>	<ul style="list-style-type: none"> • The possibilities and causes for soil erosion • Timely repairs/maintenance of terrace, silt pits, soil/stone bunds, to check soil/water erosion. • Correct method of drainage making. • Hedge maintenance. • Protection of water source from pollution • Rain water harvesting. • Judicious use of water during irrigation. • Mulching for soil and moisture conservation. • Avoiding excess dosage of fertilisers and chemicals to minimise damage to soil microflora. • Cover crop management. • Importance of premise cleanliness • Collection and storage of empty containers, worn out polythene bags, fertilizer bags etc from the field for reuse/disposal. • Use of personal protective devices to minimize damages while using fungicides and other chemicals, weed cutter, chain saw etc. • Timely detection and treatment for diseases to avoid over- dosage of chemicals. • Prevention of diseases through appropriate management strategies to avoid excessive use of fungicides. • Destroy sources of mosquito breeding to control possible epidemics • Awareness about consequences of chemical contamination. • Use of chemical fertilizers and other chemicals only as per recommendations. • Spraying & handlings of chemicals using hood, masks, gloves etc. • Usage of organic and bio- fertilizers. • Usage of plant growth hormones and bio-control measures against diseases. 	<p>Laptop, white board, marker, projector, Spade, felling knife, crowbar, rain shades, Cleaning equipment like dust picker, hand mop, dry mop, brush etc., Samples of fertilizers pesticides, herbicide and fungicide, Straight fertilizers, Mask, gloves, Growth Hormones</p>
<p>4.</p>	<p>Provide Feedback to Higher Authorities</p> <p>Theory 15 hours</p> <p>Practical 0 hours</p> <p>Corresponding NOS RSC / N 5006</p>	<ul style="list-style-type: none"> • Generate innovations through expertise • Report to the higher authorities for trial, modifications and evaluation • Implement/adopt the approved innovations • Identify the issues requiring trouble shooting. • Report to the higher authorities for diagnosing and remedial action. • Carry out protection measures. • Report on the effectiveness of the control measures. • Report on the effect of climatic factors on the functioning of the factory. • Identify appropriate location specific indigenous knowledge • Report it to higher authorities for trial, evaluation and adoption with modifications, if any • Report on the results of such trials • Identify the socio-economic issues • Report it to higher authorities for investigation and solution • Extend possible help for solving such problems. 	

		<ul style="list-style-type: none"> • Aware of the conflict existing and its possible causes • Report it to the higher authority for resolving the issues • Extend possible help for solving the conflict • Feed back on shortages/surplus of inputs • Information on quality issues of inputs 	
5.	<p>To Learn Entrepreneurship Skills</p> <p>Theory 08 Hours</p> <p>Practical 10 hours</p> <p>Corresponding NOS RSC/N5013</p>	<ul style="list-style-type: none"> • Importance of being aware to identify profitable business opportunity (Opportunity can be in the form of new material in use, new process, new technology, new market etc) • Maintain the confidentiality till the completion of working on the idea • Discuss the opportunity (with trusted ones) to evaluate its feasibility • Arrange/organize related documents/information • Monitor the development at competitors' end • Sustain existing business and make continual improvements • Evaluate possibilities of process simplification , combining process steps (wherever applicable) ,reducing manpower dependency • Acquire new information for optimal allocation of resources before others to gain profit • Understanding the requirement of different factors of production: land, labour and capital • Acquire and deploy necessary resources for exploitation of identified business opportunity • Develop a business plan • Acquire financial and material resources • Organize to hire experienced and efficient human resource • Arrange for best factory set up • Raise capital from different sources keeping the interest cost at minimum • Arrange for purchase, effective utilization and management of the resources • Assume risk and deal with uncertainty • Take initiative to start something new (process, product etc.) • Convert new idea into successful innovation • Replace in whole or in part inferior offerings creating new products/business model • Develop new combinations of existing inputs • To be more competitive work towards cost reduction through efficiency, improvement in quality, bring in new product/features of product • Acquire semi or fully automatic units for improved productivity • Collection and recording of all information • Compilation, analysis and documentation • Correspondence with vendors, clients, govt. agencies and public • Document notifications/letters from Government agencies and management 	

6	Health and Safety Theory 02 Hours Practical 05 hours Corresponding NOS Bridge Module	<ul style="list-style-type: none"> Identify different methods of first aid. Perform first aid. Understand CPR. Perform CPR in case of emergency. 	Power point presentation, LCD projector, Computer, LCD screen, white board, marker, pointer, CPR Mannequin, First Aid Kit
7	Soft Skills Theory 03 Hours Practical 05 hours Corresponding NOS Bridge Module	<ul style="list-style-type: none"> Understand Art of Effective Communication. Able to handle effective Communication with co-workers and their Family. Able to handle effective Communication with Peers/ colleagues using medical terminology in communication. Learn basic reading and writing skills. Follow basics of grooming and personal health Effectively work in a team Manage time effectively Prepare for interviews 	Power point presentation, LCD projector, Computer, LCD screen, white board, marker, pointer
8	IT Skills Theory 5 hours Practical 25 hours Corresponding NOS Bridge Module	<ul style="list-style-type: none"> Understand parts of a computer Understand basics of computer and concept of motherboard Use Microsoft Word Use Microsoft PowerPoint Use Microsoft Excel Understand Internet and its uses 	Power point presentation, LCD projector, Computer, LCD screen, white board, marker, pointer, Microsoft Office, Internet Connectivity
	Total 200 hrs. Theory 80 Hours Practical 120 Hours		

Grand Course Duration: **200 Hours**

(This syllabus/ curriculum has been approved by [Rubber Skill Development Council](#).)

Trainer Prerequisites for Job role: “General Worker- Rubber Plantation” mapped to Qualification Pack: “RSC/Q 6107”

Sr. No.	Area	Details
1	Description	To deliver accredited training service, mapping to the curriculum detailed above, in accordance with the Qualification Pack “RSC/Q 6107 VERSION 1.0”.
2	Personal Attributes	Aptitude for conducting training, and pre/ post work to ensure competent, employable candidates at the end of the training. Strong communication skills, interpersonal skills, ability to work as part of a team; a passion for quality and for developing others; well-organised and focused, eager to learn and keep oneself updated with the latest in the mentioned field.
3	Minimum Educational Qualifications	Any Graduate preferably in rubber or polymer
4a	Domain Certification	Certified for Job Role: “General Worker- Rubber Plantation” mapped to QP: “ <u>RSC/Q 6107</u> ”. Minimum accepted score as per RSDC guidelines 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 score as per RSDC guidelines is 80%
5	Experience	5+ years of relevant work-experience, above supervisor level

Annexure: Assessment Criteria

Assessment Criteria for General Worker- Rubber Plantation	
Job Role	General Worker- Rubber Plantation
Qualification Pack	RSC/Q 6107 VERSION 1.0
Sector Skill Council	Rubber

Sr. No.	Guidelines for Assessment
1	Criteria for assessment for Qualification Pack has been created based on the NOSs and performance criteria by RSDC. Each Performance Criteria (PC) has been assigned marks proportional to its importance within NOS and weightages have also been given among the NOSs accordingly. RSDC has laid down the proportion of marks for Skills and Theory 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 centre based on this criteria
5	To pass the Qualification Pack , every trainee should score a minimum of 70% 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

			Marks Allocation		
NOS	Element	Assessment Criteria	Total	Theory	Practical
1. RSC / N 6108 Rubber plantation development and maintenance	Preparation of plantation area	PC1.Maintaining cleanliness in the plantation	6	4	2
		PC2.Construction and maintenance of the estate road	4	2	2
		PC3. Lining, peg marking and pitting (either mechanical/manual	6	2	4
		PC4. Refilling with top soil, making of silt pit and soil / stone bunds	6	4	2
		PC5. Maintenance of terraces and drainage facility	6	4	2
	Plantation	PC6. Loading, unloading of planting materials/other inputs and shifting to planting site carefully.	4	2	2
		PC7. Planting in pits as per the instructions	4	2	2
		PC8. Treatment of seeds as per the instructions	6	4	2
	Disease Prevention	PC9. Using recommended fungicides/ pesticides/insecticide to control leaf/stem/root diseases.	6	4	2
		PC10. Operation of different types of sprayer, dusters and weed cutting machines for weed control	6	4	2
		PC11. Manuring weaker plants as per the instructions.	6	2	4
		PC12. Treatment for nutritional deficiency diseases.	2	2	0
	Maintenance	PC13. Fertilizer application as per the instructions.	4	4	0
		PC14. Cleaning and maintenance of tools required for maintenance of plants	2	2	0
		PC15. Pruning of lower branches and mulching plant bases using dried leaves/ providing shade baskets.	2	0	2
		PC16. White washing the brown portion of the plants using lime /clay to reduce heat absorption.	4	2	2
		PC17. Replacement of vacant planting points using healthy advanced planting materials as per the instructions.	4	2	2
		PC18.Repair and maintenance of terrace/soil/ stone bunds	4	2	2
		PC19. Confining cover crops growth within	4	2	2

		inter rows			
		PC20. Raising of wind belt in wind prone areas.	4	4	0
		PC21. Making fire belt during summer season.	4	2	2
	Intercrop	PC22. Raising of intercrop (if any) during the initial 3 years.	2	2	0
		PC23. Maintaining intercrops as per instructions	4	2	2
			100	60	40
2. RSC/ N 5005 Natural Resource Management	Natural resource management (Soil & water)	PC24. The possibilities and causes for soil erosion	4	2	2
		PC25. Timely repairs/maintenance of terrace, silt pits, soil/stone bunds, to check soil/water erosion.	4	2	2
		PC26. Correct method of drainage making.	6	4	2
		PC27. Hedge maintenance.	4	4	0
		PC28. Protection of water source from pollution	4	2	2
		PC29. Rain water harvesting.	4	2	2
		PC30. Judicious use of water during irrigation.	6	2	4
		PC31. Mulching for soil and moisture conservation.	6	2	4
		PC32. Avoiding excess dosage of fertilisers and chemicals to minimise damage to soil microflora.	8	6	2
	PC33. Cover crop management.	6	4	2	
	Waste management & Health care	PC34. Importance of premise cleanliness	4	2	2
		PC35. Collection and storage of empty containers, worn out polythene bags, fertilizer bags etc from the field for reuse/disposal.	6	2	4
		PC36. Use of personal protective devices to minimize damages while using fungicides and other chemicals, weed cutter, chain saw etc.	4	2	2
		PC37. Timely detection and treatment for diseases to avoid over- dosage of chemicals.	4	2	2
		PC38. Prevention of diseases through appropriate management strategies to avoid excessive use of fungicides.	4	4	0
		PC39. Destroy sources of mosquito breeding to control possible epidemics	6	4	2

	Input (chemical) management	PC40. Awareness about consequences of chemical contamination.	6	4	2
		PC41. Use of chemical fertilizers and other chemicals only as per recommendations.	4	2	2
		PC42. Spraying & handlings of chemicals using hood, masks, gloves etc.	4	2	2
		PC43. Usage of organic and bio-fertilizers.	4	4	0
		PC44. Usage of plant growth hormones and bio-control measures against diseases.	2	2	0
			100	60	40
3. RSC/N 5006 Feedback to Higher Authorities	Feedback on innovations in practices/ope rations	PC45. Generate innovations through expertise	6	2	4
		PC46. Report to the higher authorities for trial, modifications and evaluation	6	2	4
		PC47. Implement/adopt the approved innovations	6	2	4
	Feedback on incidence of trouble shooting	PC48. Identify the issues requiring trouble shooting.	6	2	4
		PC49. Report to the higher authorities for diagnosing and remedial action.	6	2	4
		PC50. Carry out protection measures.	4	0	4
		PC51. Report on the effectiveness of the control measures.	8	2	6
	Feedback on indigenous knowledge/IT K	PC52. Report on the effect of climatic factors on the functioning of the factory.	6	2	4
		PC53. Identify appropriate location specific indigenous knowledge	4	2	2
		PC54. Report it to higher authorities for trial, evaluation and adoption with modifications, if any	6	2	4
	Feedback on socio- economic problems	PC55. Report on the results of such trials	4	2	2
		PC56. Identify the socio-economic issues	4	2	2
		PC57. Report it to higher authorities for investigation and solution	6	2	4
	Feedback on conflicts	PC58. Extend possible help for solving such problems.	4	2	2
		PC59. Aware of the conflict existing and its possible causes	4	2	2
PC60. Report it to the higher authority for resolving the issues		6	2	4	

		PC61. Extend possible help for solving the conflict	4	0	4
	Feedback on inputs	PC62. Feedback on shortages/surplus of inputs	6	0	6
		PC63.Information on quality issues of inputs	4	0	4
			100	30	70
4. RSC/ N 5013 To Learn Entrepreneurship Skills	Business opportunity	PC1.Importance of being aware to identify profitable business opportunity (Opportunity can be in the form of new material in use, new process, new technology, new market etc.)	2	2	0
		PC2.Maintain the confidentiality till the completion of working on the idea	3	2	1
		PC3.Discuss the opportunity (with trusted ones) to evaluate its feasibility	5	3	2
		PC4.Arrange/organize related documents/ information	4	3	1
	Sustain existing business	PC5.Monitor the development at competitors' end	2	2	0
		PC6.Sustain existing business and make continual improvements	4	2	2
		PC7.Evaluate possibilities of process simplification , combining process steps (wherever applicable) ,reducing manpower dependency	4	2	2
		PC8.Acquire new information for optimal allocation of resources before others to gain profit	4	2	2
	Factors of Production	PC9.Understanding the requirement of different factors of production: land, labour and capital	5	3	2
		PC10.Acquire and deploy necessary resources for exploitation of identified business opportunity	5	3	2
		PC11.Develop a business plan	5	3	2
		PC12.Acquire financial and material resources	5	3	2
		PC13.Organize to hire experienced and efficient human resource	4	2	2
		PC14.Arrange for best factory set up	4	2	2
		PC15.Raise capital from different sources keeping the interest cost at minimum	4	2	2
	Risk and	PC16.Arrange for purchase, effective utilization and management of the resources	4	2	2
		PC17.Assume risk and deal with uncertainty	2	0	2

	initiative	PC18.Take initiative to start something new (process, product etc.)	2	0	2
	Innovation	PC19.Convert new idea into successful innovation	2	0	2
		PC20.Replace in whole or in part inferior offerings creating new products/business model	4	2	2
		PC21.Develop new combinations of existing inputs	4	2	2
	Bring in Improvement	PC22.To be more competitive work towards cost reduction through efficiency, improvement in quality, bring in new product/features of product	5	3	2
		PC23.Acquire semi or fully automatic units for improved productivity	5	3	2
	Documentation	PC24.Collection and recording of all information	3	3	0
		PC25.Compilation, analysis and documentation	3	3	0
		PC26.Correspondence with venders, clients, govt. agencies and public	3	3	0
		PC27.Document notifications/letters from Government agencies and management	3	3	0
			100	60	40



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