

NSQF QUALIFICATION FILE

Approved in 13th NSQC Meeting – NCVET – 25th November 2021

Approved on File Dated 07.02.2023

Qualification Code
QG-04-AG-00294-2023-V1.1-ASCI

CONTACT DETAILS OF THE BODY SUBMITTING THE QUALIFICATION FILE

Name and address of submitting body:

Agriculture Skill Council of India (ASCI)
6th floor, GNG Building, Plot No – 10, Sector- 44,
Gurugram, Haryana – 122004

Name and contact details of individual dealing with the submission

Name: Ms Priyanka Prakash

Position in the organisation: Senior Manager – Standards & QA

Address, if different from above

Tel number(s): 0124 – 4670029/ 4814673/ 4814659

E-mail address: priyanka@asci-india.com

List of documents submitted in support of the Qualifications File

1. Qualifications Pack – Annexure 1
2. Model Curriculum – Annexure 2
3. Affiliation Protocol- Annexure 3
4. Industry Validations- Annexure 4

Model Curriculum to be added which will include the following:

- Indicative list of tools/equipment to conduct the training
- Trainers qualification
- Lesson Plan
- Distribution of training duration into theory/practical/OJT component

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• SUMMARY

1	Qualification Title	Rice Transplanter Machine Operator Cum Mechanic
2	Qualification Code, if any	AGR/Q1113, v2.0
3	NCO code and occupation	NCO-2015/ NIL
4	Nature and purpose of the qualification (Please specify whether qualification is short term or long term)	Nature of the qualification - a Qualification Pack (QP) The main purpose of the qualification is - - to train incumbent for preparing and operating a rice transplanter machine to plant rice seedlings in paddy fields.
5	Body/bodies which will award the qualification	Agriculture Skill Council of India (ASCI)
6	Body which will accredit providers to offer courses leading to the qualification	Agriculture Skill Council of India (ASCI)
7	Whether accreditation/affiliation norms are already in place or not, if applicable (if yes, attach a copy)	Yes (Annexure 3)
8	Occupation(s) to which the qualification gives access	Farm Machinery, Equipment Operation and Maintenance
9	Job description of the occupation	A Rice Transplanter Machine Operator cum Mechanic is responsible for preparing and operating a rice transplanter machine to plant rice seedlings in paddy fields. The individual also carries out repair and maintenance of the rice transplanter.
10	Licensing requirements	NA
11	Statutory and Regulatory requirement of the relevant sector (documentary evidence to be provided)	NA
12	Level of the qualification in the NSQF	Level 4
13	Anticipated volume of training/learning required to complete the qualification	390 hours (Theory: 90, Practical: 150, ES: 60, OJT- 90)
14	Indicative list of training tools required to deliver this qualification	Attached herewith

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15	Entry requirements and/or recommendations and minimum age	Minimum Educational Qualification: 12th grade pass OR Completed 2nd year of 3-year diploma (after 10th) and pursuing regular diploma OR 10th grade pass plus 2-year NTC OR 10th grade pass plus 1-year NTC plus 1 year NAC OR 8th pass plus 2-year NTC plus 1-Year NAC plus CITS OR 10th grade pass and pursuing continuous schooling OR 10th Grade Pass with 2-year relevant experience OR Previous relevant Qualification of NSQF Level 3.0 with minimum education as 8th Grade pass with 3- year relevant experience OR Previous relevant Qualification of NSQF Level 3.5 with 1.5- year relevant experience Min Age: 18 years
16	Progression from the qualification (Please show Professional and academic progression)	Agriculture Machinery Demonstrator (L5)
17	Arrangements for the Recognition of Prior learning (RPL)	RPL assessment will be as per normal ASCI assessment process. (ASCI recognizes that there may be candidates who have prior learning experience in the Agriculture Sector and are desirous of being certified. Such candidates can apply to ASCI for testing and certification of their skills. Training Partners will be responsible for identifying and counselling candidates for RPL through mobilization camps and advertisements. The details of the RPL process have been defined by ASCI under the document- Guidelines for Recognition of Prior Learning under PMKVY).

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18	International comparability where known (research evidence to be provided)	Not done as yet			
19	Date of planned review of the qualification.	25-11-2024			
20	Formal structure of the qualification Mandatory components				
	Title of component and identification code/NOSs/Learning outcomes	Estimated size (learning hours)			Level
		Theory	Practical		
(i)	Introduction (Bridge Module)	5	0		4
(ii)	AGR/N1143: Prepare the rice transplanter machine for operation	20	35		
(iii)	AGR/N1144: Operate the rice transplanter machine	20	40		
(iv)	AGR/N1145: Carry out repair and maintenance of the rice transplanter machine	15	45		
(v)	AGR/N1146: Raise rice seedlings in the nursery	15	15		
(vi)	AGR/N9903.Maintain health and safety at the workplace	15	15		
(vii)	DGT/VSQ/N0102: Employability Skills (60 Hours) v1.0	60			
	Total	150	150		
	OJT	90 hours			

SECTION 1

ASSESSMENT

21	<p>Body/Bodies which will carry out assessment:</p> <p>ASCI affiliated assessment bodies.</p> <ol style="list-style-type: none">1. SHL India (Pvt.) Ltd2. Trendsetters Skill Assessors Pvt Ltd3. Mercer-Mettl4. SP Institute of Workforce Development(SPIWD)5. MSAG SI LLP <p>More Assessment Agencies are being empanelled to cover wider geographical area</p>
22	<p>How will RPL assessment be managed and who will carry it out?</p> <p>RPL will be based on the same approved Qualification Pack and Assessment Criteria mentioned in the Qualification Pack and will be carried out as per normal ASCI assessment process. The Training Partner or any other authority as prescribed by the Steering Committee will identify and counsel candidates eligible for RPL through mobilization camps and advertisements. The mobilized candidates can be counselled, oriented about the standardized NSQF framework and basis their existing competency will be mapped against the suitable level of the concerned Job role for assessments. The candidates enrolled will be assessed by the Assessment Agency affiliated with the Sector Skill Council on the basis of assessment criteria decided by Sector Skill Council (SSC). The candidate will need to pass in the minimum assessment criteria of a particular QP decided by the SSC. Successfully assessed candidates with a valid Aadhaar or alternate ID (as per process) will be eligible for QP-NOS based Certification.</p>
23	<p>Describe the overall assessment strategy and specific arrangements which have been put in place to ensure that assessment is always valid, reliable and fair and show that these are in line with the requirements of the NSQF.</p> <p>A robust technology enabled assessment methodology has been designed keeping in mind the geographical/Physical constraints and target segment which assess a trainee's knowledge and skill set through three methods:</p> <ol style="list-style-type: none">a. An offline Tablet based test through the use of Multiple-Choice Text and Picture based questions in vernacular languagesb. Actual demonstration on the fieldc. Viva

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	<p>ASCI's assessment strategy:</p> <ul style="list-style-type: none">• Question sets are developed as per the weightage of each NOS of the Qualification Pack.• Assessment criteria for each Qualification Pack developed, in which each Performance criteria (PC) assigned marks based on NOS• Question Bank is developed to assess the theoretical and practical knowledge. To ensure the quality, each trainee get different set of question• Empanelment of subject matter expert as assessor primarily from the Industry to assess trainee specifically on practical skills as per Industry demands <p>Assessments are preferably conducted on tablets or pen or papers in regional languages according to the requirement.</p>
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Please attach most relevant and recent documents giving further information about assessment and/or RPL.

Give the titles and other relevant details of the document(s) here. Include page references showing where to find the relevant information.

ASSESSMENT EVIDENCE

Complete a grid for each component as listed in “Formal structure of the qualification” in the Summary.

NOTE: this grid can be replaced by any part of the qualification documentation which shows the same information – i.e. Learning Outcomes to be assessed, assessment criteria and the means of assessment.

24. Assessment evidences

Title of Component:

Outcomes to be assessed/ NOSs to be assessed	Assessment criteria for the outcome
Means of assessment 1	
Pass/Fail	

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Job Role: Rice Transplanter Machine Operator Cum Mechanic**Qualification Pack:** AGR/Q1113, v2.0**Sector Skill Council:** Agriculture Skill Council of India**Assessment Guidelines:**

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. Assessment will be conducted for all compulsory NOS, and where applicable, on the selected elective/option NOS/set of NOS.
4. Individual assessment agencies will create unique question papers for theory part for each candidate at each examination/training center (as per assessment criteria below).
5. Individual assessment agencies will create unique evaluations for skill practical for every student at each examination/training center based on this criterion.
6. To pass the Qualification Pack, every trainee should score a minimum of 70% of aggregate marks to successfully clear the assessment.
7. In case of unsuccessful completion, the trainee may seek reassessment on the Qualification Pack.

AGR/N1143: Prepare the rice transplanter machine for operation					
PC	Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Perform daily checks</i>		15	20	-	14
PC1.	check the beaks and apron/ beaks and R-forks/ centre and side floats for the prescribed gap and free movement	-	-	-	-
PC2.	check the v-belt and 128-link chain for the prescribed level of tension	-	-	-	-
PC3.	check the gear lever/ clutch lever/ planting lever and hydraulic machinery for free movement and correct engagement/disengagement	-	-	-	-
PC4.	check the engine oil, transmission oil and fuel for the prescribed level	-	-	-	-

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PC5.	examine the fan cover for clogging	-	-	-	-
PC6.	check all the nuts and bolts are secured tightly	-	-	-	-
PC7.	check that seedling tray, guards and all moving parts are installed and positioned correctly	-	-	-	-
PC8.	test the headlight for expected functioning	-	-	-	-
PC9.	examine the tyre and wheels for any wear and tear or damage	-	-	-	-
PC10.	clean the air filters as per the SOP	-	-	-	-
PC11.	apply grease on the machine surface and greasing points	-	-	-	-
	<i>Apply the necessary adjustment</i>	15	20		16
PC12.	adjust the centre and side floats according to the field conditions	-	-	-	-
PC13.	set the marker in the correct position as per the operator's manual	-	-	-	-
PC14.	modify various operational settings for optimum performance such as lateral feed amount, planting speed, spacing and depth, etc.	-	-	-	-
PC15.	maintain the record of pre-start checks	-	-	-	-
NOS Total		30	40		30
AGR/N1144: Operate the rice transplanter machine					
	<i>Check the condition of paddy farm and seedlings</i>	10	15		10
PC1.	check the wetness of the soil, quality of puddling and surface levelling at the paddy farm for their suitability to operate the rice transplanter	-	-	-	-
PC2.	check that rice seedlings and their roots are damage-free and healthy with the prescribed level of moisture	-	-	-	-
	<i>Operate the rice transplanter</i>	10	15		10
PC3.	operate the rice transplanter machine at a speed suitable to the seedlings and field conditions while avoiding a sudden change of direction	-	-	-	-
PC4.	use the gear lever/ clutch lever/ planting lever/ hydraulic system as per the operator's manual	-	-	-	-
PC5.	transplant the rice seedling in the recommended pattern to achieve machine efficiency	-	-	-	-
PC6.	use the rice transplanter machine according to its recommended capacity	-	-	-	-

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PC7.	use the appropriate Personal Protective Equipment (PPE) during the machine operation	-	-	-	-
PC8.	maintain the record of rice transplanter operation	-	-	-	-
	<i>Undertake safety measures during machine operation</i>	10	10		10
PC9.	ensure that all the guards are placed firmly before operating the rice transplanter machine	-	-	-	-
PC10.	maintain a safe distance from the rice transplanter's moving parts during operation	-	-	-	-
PC11.	ensure that nobody comes near the operational rice transplanter	-	-	-	-
PC12.	park the rice transplanter on a flat surface for any inspection, repair and maintenance during operation	-	-	-	-
PC13.	carry out any repair, maintenance and adjustments after shutting down the rice transplanter	-	-	-	-
PC14.	clean all straw and flammable waste near the engine and fuel tank to reduce the fire hazard	-	-	-	-
NOS Total		30	40		30
AGR/N1145: Carry out repair and maintenance of the rice transplanter machine					
	<i>Examine the machine parts</i>	5	10		5
PC1.	station the rice transplanter machine at a safe place	-	-	-	-
PC2.	switch off the engine and allow it to cool down	-	-	-	-
PC3.	detach the removable parts as per the manufacturer's instructions	-	-	-	-
PC4.	check the beaks/ R-forks/ shooters/ planter case/ centre and side floats/ feeder belt/ tyres/wheels/ hydraulic cylinder/ sliding tray for wear and tear or damage	-	-	-	-
PC5.	examine the chain-case and sub-assembly/clutch lever wire/ hydraulic control wire/accelerator wire/ gear control wire for bends	-	-	-	-
PC6.	examine the engine, hydraulic hoses and pump for leakage	-	-	-	-

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PC7.	check the engine oil, transmission oil, chain-case oil, drive case oil, planter arm oil for the prescribed levels	-	-	-	-
<i>Carry out repair and maintenance</i>		10	10		10
PC8.	remove dust, waste straw, crop stems, and mud from the machine and its parts using the manufacturer-approved cleaning methods and chemicals	-	-	-	-
PC9.	tighten the nuts and bolts, hydraulic hoses, pump and its fittings	-	-	-	-
PC10.	apply the recommended grade of grease/ lubricant on the nuts and bolts, chains and other greasing points	-	-	-	-
PC11.	set the gear lever/ clutch lever/ planting lever/ hydraulic machinery/ beaks/ R-forks/ shooters in the correct position	-	-	-	-
PC12.	adjust the tension of v-belt, 128-link chain and other chains to the prescribed level	-	-	-	-
PC13.	refill the engine oil, transmission oil, chain-case oil, drive case oil, planter arm oil as per the requirement	-	-	-	-
PC14.	replace the air cleaner/ clutch lever wire/gear control wire/ hydraulic control wires/accelerator wires/ v-belt/ chains/ beaks/ R-forks/ shooters/ centre and side floats as per the manufacturer's instructions	-	-	-	-
PC15.	maintain the record of repair and maintenance activities	-	-	-	-
PC16.	schedule the next maintenance as per the maintenance schedule	-	-	-	-
<i>Optimise resource utilisation</i>		10	10		10
PC17.	optimise the usage of various material in different tasks/ activities/ processes	-	-	-	-
PC18.	optimise the usage of water/ electricity/energy in various tasks/ activities/ processes	-	-	-	-
PC19.	connect electrical tools and equipment safely and turn off when not in use	-	-	-	-
<i>Perform waste management</i>		5	10		5
PC20.	segregate waste into different categories	-	-	-	-
PC21.	dispose non-recyclable waste appropriately	-	-	-	-
PC22.	deposit recyclable and reusable material at the identified location	-	-	-	-
NOS Total		30	40		30

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AGR/N1146: Raise rice seedlings in the nursery					
<i>Raise rice seedlings in the mat-type wet method nursery</i>		8	10	-	8
PC1.	select an appropriate field for the mat-type wet method nursery with the required dimensions	-	-	-	-
PC2.	ensure the field is level without waterlogging problems and has proximity to a source of quality water for irrigation purposes	-	-	-	-
PC3.	carry out levelling in the field after irrigating it with the recommended quantity of water	-	-	-	-
PC4.	prepare puddled and raised seedbed of the recommended dimensions	-	-	-	-
PC5.	prepare the soil mixture using recommended quantity of soil, well-decomposed pressmud/ bio-gas slurry/ Farm Yard Manure (FYM), rice hull, powdered di-ammonium phosphate, and appropriate fertilizers	-	-	-	-
PC6.	apply a cover of banana leaves with the mid-rib removed/ polyethylene sheets on the soil surface to prevent seedling roots from penetrating the bottom soil layer	-	-	-	-
PC7.	set up sliced banana bracts or other appropriate material on the sides of the seedbed to prevent the soil and seeds from being washed away	-	-	-	-
PC8.	set up the wooden or metallic frame of recommended dimensions and place it appropriately above the polyethylene sheet for preparing nursery cakes	-	-	-	-
PC9.	fill in the recommended quantity of soil from the surrounding field, into the frame and level it, as required	-	-	-	-
PC10.	pre-germinate the rice seeds following the appropriate seed soaking method	-	-	-	-
PC11.	sow the recommended quantity of pre-germinated/ sprouted seeds on the seedbed, maintaining the recommended planting density	-	-	-	-
PC12.	cover the seedbed with the recommended quantity of dry soil or rice straw or gunny bags/ net to protect the seedlings from birds, ensuring the soil or rice straw is disease and insect free	-	-	-	-
PC13.	water the seedbed with the recommended quantity immediately after sowing	-	-	-	-

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PC14.	remove the dry soil/ rice straw after the recommended period when seedlings germinate and attain the appropriate growth not to be eaten by birds	-	-	-	-
PC15.	carry out regular irrigation of the seedbed appropriately as per the recommended irrigation schedule, maintaining the recommended water level	-	-	-	-
PC16.	tap the seedlings lightly as recommended to ensure the rice seeds come in contact with the base of the seedbed	-	-	-	-
<i>Raise rice seedlings in the mat-type dry method nursery</i>		8	12	-	6
PC17.	select an appropriate field for a dry nursery with the required dimensions	-	-	-	-
PC18.	ensure the field has loamy soil with an effective drainage capacity	-	-	-	-
PC19.	check the field has recommended exposure to sunlight along with access to a reliable supply of quality water	-	-	-	-
PC20.	carry out ploughing in the field as recommended to achieve fine tilth	-	-	-	-
PC21.	carry out levelling in the field and apply the recommended quantity of FYM and relevant fertilisers	-	-	-	-
PC22.	prepare the seedbed of recommended dimensions and ground surface for appropriate levelling	-	-	-	-
PC23.	apply a cover of plastic sheet on the levelled surface	-	-	-	-
PC24.	prepare a mixture of sieved soil and vermicompost, ensuring it is free from stones and debris	-	-	-	-
PC25.	set up a frame using square pipes of the recommended size	-	-	-	-
PC26.	fill in and spread the sieved soil mixture in the frame	-	-	-	-
PC27.	level the soil mixture as per the height of the frame, ensuring the seedbed has the recommended height	-	-	-	-
PC28.	water the soil in the seedbed through sprinkling with the recommended quantity	-	-	-	-
PC29.	sow the recommended quantity of sprouted rice seeds in the nursery bed, using a manual seeder or through manual broadcasting, maintaining the recommended planting density	-	-	-	-

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PC30.	cover the planted seeds with the mixture of sand and finely powdered FYM	-	-	-	-
PC31.	remove the frame appropriately after the recommended period, ensuring the nursery cake is formed, as required	-	-	-	-
PC32.	remove any extra soil mixture from the corners of the nursery cake	-	-	-	-
PC33.	cover the bed with straw and drench it with the recommended quantity of water, and remove the straw when seeds germinate	-	-	-	-
PC34.	maintain the recommended water level in the seedbed	-	-	-	-
<i>Raise rice seedlings in the tray-type dry method nursery</i>		8	10	-	8
PC35.	select an appropriate field for a tray-type dry method nursery with the required dimensions, ensuring adequate space for placing trays in the field	-	-	-	-
PC36.	ensure the field is level without waterlogging problems and has proximity to a source of quality water for irrigation purposes	-	-	-	-
PC37.	carry out ploughing and level the field, as required	-	-	-	-
PC38.	prepare a raised seedbed of the recommended dimensions, creating nursery bed ground and channels	-	-	-	-
PC39.	ensure the nursery bed has adequate space for placing seed trays	-	-	-	-
PC40.	use an appropriate number of plastic trays for nursery operations as per the requirement	-	-	-	-
PC41.	prepare a mixture of sieved soil and vermicompost and fill the plastic trays with it manually or using the automatic soil filling machine	-	-	-	-
PC42.	water the soil mixture in the trays through sprinkling	-	-	-	-
PC43.	spread seeds on plastic tray manually or using the seeder machine, maintaining the recommended density	-	-	-	-
PC44.	apply a cover of topsoil on trays and sprinkle dry soil/media on the seeds in the recommended quantity	-	-	-	-
PC45.	carry the trays to the field and place the trays on the nursery bed	-	-	-	-

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PC46.	use black net/ paddy straw to protect sprouted seeds from direct sunlight and heavy rain	-	-	-	-
PC47.	maintain water in the channel below or up to the tray surface, as appropriate, along with appropriate water levels in the field soil	-	-	-	-
PC48.	remove black net after the recommended period when seeds germinate	-	-	-	-
<i>Maintain, harvest and store the rice seedlings</i>		6	8	-	8
PC49.	apply the recommended organic/ inorganic fertilisers to the rice seedlings in the recommended quantity for their healthy growth	-	-	-	-
PC50.	identify the signs of pest and disease infestation in the rice seedlings	-	-	-	-
PC51.	apply the recommended insecticides/ pesticides to the rice seedlings in the prescribed quantity to protect them from pests and insects	-	-	-	-
PC52.	maintain the rice seedlings for the recommended duration in the nursery bed	-	-	-	-
PC53.	identify the signs of maturity of rice seedlings and harvest them using the appropriate tools and equipment	-	-	-	-
PC54.	apply the recommended pesticides/ insecticides in the storage area to remove pests/ insects before storing the harvested rice seedlings	-	-	-	-
PC55.	store the harvested rice seedlings at the recommended temperature and humidity	-	-	-	-
NOS Total		30	40	-	30
AGR/N9903: Maintain health and safety at the workplace					
<i>Maintain personal hygiene</i>		10	5		10
PC1.	wash hands, legs and face with soap/alcohol-based sanitizer at reasonable intervals	-	-	-	-
PC2.	wash the worn clothes with soap and sun-dry before use next time	-	-	-	-
PC3.	ensure the face is covered with mask or three layers of cloth-piece	-	-	-	-
PC4.	follow the workplace sanitisation norms including distancing from sick people	-	-	-	-
<i>Maintain clean and safe workplace</i>		15	15		15

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PC5.	carry out basic safety checks before operation of all tools, implements, and machinery and report identified hazards to the supervisor	-	-	-	-
PC6.	wear appropriate Personal Protective Equipment (PPE) while performing work in accordance with the workplace policy	-	-	-	-
PC7.	follow the instructions mentioned on the labels of chemicals/pesticides/fumigants etc. to avoid hazards	-	-	-	-
PC8.	assess risks prior to performing manual handling jobs, and work according to currently recommended safe practices	-	-	-	-
PC9.	sanitize equipment, tools and machinery before and after use	-	-	-	-
PC10.	use equipment and materials safely and correctly and return the same to designated storage after use	-	-	-	-
PC11.	dispose waste safely and correctly in the designated area	-	-	-	-
PC12.	recognize risks to bystanders and take required action to reduce the risks	-	-	-	-
PC13.	work in a manner which minimizes environmental damage, ensuring all procedures and instructions for controlling risks are followed	-	-	-	-
PC14.	report any accidents, incidents or problems without delay to an appropriate person and take necessary immediate action to reduce further danger	-	-	-	-
PC15.	follow government / workplace advisories in case of outbreak of any disease/disaster	-	-	-	-
<i>Administer appropriate emergency procedures</i>		15	5		10
PC16.	follow procedures for dealing with accidents, fires and emergencies, including communicating location and directions to the location of emergency, as per the workplace requirements	-	-	-	-
PC17.	use emergency equipment in accordance with manufacturer's specifications and workplace requirements	-	-	-	-
PC18.	report provide treatment appropriate to the patient's injuries in accordance with recognized first aid techniques	-	-	-	-

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PC19.	recover (if practical), clean, inspect/test, refurbish, replace and store the first aid equipment as appropriate	-	-	-	-
PC20.	report details of first aid administered in accordance with workplace procedures	-	-	-	-
	NOS Total	40	25		35
DGT/VSQ/N0102: Employability Skills (60 Hours)					
	<i>Introduction to Employability Skills</i>	1	1	-	-
PC1	identify employability skills required for jobs in various industries	-	-	-	-
PC2	identify and explore learning and employability portals	-	-	-	-
	<i>Constitutional values – Citizenship</i>	1	1	-	-
PC3	recognize the significance of constitutional values, including civic rights and duties, citizenship, responsibility towards society etc. and personal values and ethics such as honesty, integrity, caring and respecting others, etc.	-	-	-	-
PC4.	follow environmentally sustainable practices	-	-	-	-
	<i>Becoming a Professional in the 21st Century</i>	2	4	-	-
PC5	recognize the significance of 21st Century Skills for employment	-	-	-	-
PC6	practice the 21st Century Skills such as Self- Awareness, Behaviour Skills, time management, critical and adaptive thinking, problem-solving, creative thinking, social and cultural awareness, emotional awareness, learning to learn for continuous learning etc. in personal and professional life	-	-	-	-
	<i>Basic English Skills</i>	2	3	-	-
PC7	use basic English for everyday conversation in different contexts, in person and over the telephone	-	-	-	-
PC8.	read and understand routine information, notes, instructions, mails, letters etc. written in English	-	-	-	-
PC9.	write short messages, notes, letters, e-mails etc. in English	-	-	-	-

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	<i>Career Development & Goal Setting</i>	1	2	-	-
PC10	understand the difference between job and career	-	-	-	-
PC11	prepare a career development plan with short- and long-term goals, based on aptitude	-	-	-	-
	<i>Communication Skills</i>	2	2	-	-
PC12	PC12. follow verbal and non-verbal communication etiquette and active listening techniques in various settings	-	-	-	-
PC13	PC13. work collaboratively with others in a team	-	-	-	-
	<i>Diversity & Inclusion</i>	1	2	-	-
PC14	communicate and behave appropriately with all genders and PwD	-	-	-	-
PC15	escalate any issues related to sexual harassment at workplace according to POSH Act	-	-	-	-
	<i>Financial and Legal Literacy</i>	2	3	-	-
PC16	select financial institutions, products and services as per requirement	-	-	-	-
PC17	carry out offline and online financial transactions, safely and securely	-	-	-	-
PC18	identify common components of salary and compute income, expenses, taxes, investments etc	-	-	-	-
PC19	identify relevant rights and laws and use legal aids to fight against legal exploitation	-	-	-	-
	<i>Essential Digital Skills</i>	3	4	-	-
PC20	operate digital devices and carry out basic internet operations securely and safely	-	-	-	-
PC21	use e- mail and social media platforms and virtual collaboration tools to work effectively	-	-	-	-
PC22	use basic features of word processor, spreadsheets, and presentations	-	-	-	-
	<i>Entrepreneurship</i>	2	3	-	-

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PC23.	identify different types of Entrepreneurship and Enterprises and assess opportunities for potential business through research	-	-	-	-
PC24.	develop a business plan and a work model, considering the 4Ps of Marketing Product, Price, Place and Promotion	-	-	-	-
PC25.	identify sources of funding, anticipate, and mitigate any financial/ legal hurdles for the potential business opportunity	-	-	-	-
	<i>Customer Service</i>	1	2	-	-
PC26.	identify different types of customers	-	-	-	-
PC27.	identify and respond to customer requests and needs in a professional manner.	-	-	-	-
PC28.	follow appropriate hygiene and grooming standards	-	-	-	-
	<i>Getting ready for apprenticeship & Jobs</i>	2	3	-	-
PC29.	create a professional Curriculum vitae (Résumé)	-	-	-	-
PC30.	search for suitable jobs using reliable offline and online sources such as Employment exchange, recruitment agencies, newspapers etc. and job portals, respectively	-	-	-	-
PC31.	apply to identified job openings using offline /online methods as per requirement	-	-	-	-
PC32.	answer questions politely, with clarity and confidence, during recruitment and selection	-	-	-	-
PC33.	identify apprenticeship opportunities and register for it as per guidelines and requirements	-	-	-	-
	NOS Total	20	30	-	-

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Title/ Name of qualification/ component: Rice Transplanter Machine Operator Cum Mechanic Level: 4			
NSQF Domain	NSQF Domain	NSQF Domain	NSQF Domain
Process	<ul style="list-style-type: none">• Perform daily checks• Apply the necessary adjustments• Operate the rice transplanter	A Rice Transplanter Machine Operator cum Mechanic is responsible for preparing and operating a rice transplanter machine to plant rice seedlings in paddy fields. The individual also carries out repair and maintenance of the rice transplanter.	4
Professional knowledge	<ul style="list-style-type: none">• Examine the machine parts• Perform waste management• Practice inclusion at the workplace• Administer appropriate emergency procedures	<p>The job holder should have the knowledge to explain and demonstrate the various equipment and tools related to the agricultural machineries, explain scope of work, describe the progress made parameters, how to detach the removable parts as per the manufacturer's instructions, the engine, hydraulic hoses and pump for leakage the chain-case and sub-assembly, station the rice transplanter machine at a safe place.</p> <p>The job holder should also have the knowledge to follow procedures for dealing with accidents, fires and emergencies, use emergency equipment in accordance with manufacturer's specifications provide treatment appropriate, maintain a</p>	4
		conductive environment, where to deposit recyclable and reusable material at the identified location.	

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Professional skill	<ul style="list-style-type: none">• Undertake safety measures during machine operation• Optimise resource utilisation• Effective communication at the workplace• Mentor apprentice• Maintain clean and safe workplace	The job holder should ensure that all the guards are placed firmly before operating the rice transplanter machine, carry out any repair, maintenance and adjustments after shutting down, clean all straw and flammable waste near the engine and fuel tank to reduce the fire hazard, optimise the usage of various material, provide information in the desired format and frequency, report accidents and incidents as per procedure, carry out basic safety checks before operation of all tools, wear appropriate Personal Protective Equipment (PPE) while performing work, follow the instructions mentioned on the labels of chemicals/pesticides/fumigants etc., assess risks prior to performing manual handling jobs, recognize risks to bystanders and take required action, usage equipment and materials safely and correctly, working in a effective manner to minimizes environmental damage, ensuring all procedures and instructions for controlling risks are followed.	4
Core Skills	<ul style="list-style-type: none">• Check the condition of paddy farm and seedlings• Carry out repair and maintenance	The job holder should check the check the wetness of the soil, quality of puddling and surface levelling at the paddy farm for their suitability to operate the rice transplanter, check that rice seedlings and their roots are damage-free and healthy with the prescribed level of moisture, maintain the record of repair and	4

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		maintenance activities, schedule the next maintenance as per the maintenance schedule, modify various operational settings for optimum performance, adjusting the required external equipment as per the manual provided by the manufacturer, adjust the tension of v-belt, 128-link chain and other chains to the prescribed level, approved cleaning methods and chemicals to be used on a rice transplanter.	
Responsibility	<ul style="list-style-type: none">• Preparation of RTP• Operating a machinery to plant rice seedlings in paddy fields.• Repair and maintenance	A Rice Transplanter Machine Operator cum Mechanic is responsible for preparing and operating a rice transplanter machine to plant rice seedlings in paddy fields. The individual also carries out repair and maintenance of the rice transplanter.	4

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SECTION 3

EVIDENCE OF NEED

26	What evidence is there that the qualification is needed? What is the estimated uptake of this qualification and what is the basis of this estimate?
Basis	
Need of the qualification	<p>While collecting data from the companies for the occupational map, we also took feedback from industry, training institutions which was collected with respect to roles for which qualification packs development, was to be prioritized. This was largely based on volume of people required, quantitative and qualitative shortfall which the industry feels they face. Governing council of ASCI and Occupational Standards Committee which comprises of experts & senior leaders gave final approval and endorsement for the same. According to industry interactions held, agricultural machinery market in India is estimated to grow at a CAGR of over 12 percent during the period 2018-23.</p> <p>The agriculture and allied sector continue to be significant for the inclusive and sustainable growth of the Indian economy, Farm mechanisation in India is in the initial stages, with the mechanisation level ranging from 40–45%, which is very low mechanisation of Indian agriculture, in the light of its commitment to transform the agriculture sector and double farmers' income by 2022–23.</p>
Industry Relevance	<p>Validations have been received from VST Tillers, CLASS Agricultural Machinery Pvt. Ltd, Tracton Automotives Sales and Repairs Pvt. Ltd., Sonali Krishi Vigyan Kendra, JNKVV Krishi Vigyan Kendra, JNKVV Krishi Vigyan Kendra Dindori, Krishi Vigyan Kendra Bhadrak, Kisankraft Ltd., North Eastern Region Farm Machinery Training & Testing Institute, Krishi Vigyan Kendra Betul, Directorate of Agriculture Engineering, Bhopal, CNH Industrial (India), Agricultural Machinery Manufacturers' Association, VST tillers tractors, Kalyani Gorakshan Trust, Mahindra & Mahindra Ltd, Central Farm Machinery Training & Testing Institute, KVK Jahangir, KVK Jalandhar, College of Agricultural Engg & Technology Ludhiana, Univeristy of Agricultural Sciences, Kerala Agricultural University, College of Agricultural Engg & Technology OUAT, Agriculture Engg College & research institute Tamil Nadu.</p>
Usage of the qualification	<p>An NSQF aligned training to the persons involved in grooming of– Rice Transplanter Machine Operator Cum Mechanic shall provide opportunities to the incumbents for horizontal and vertical career progression. Competency-based training shall imbibe professionalism in the job-role. Being an important and ever-expanding job, the job-role of Rice Transplanter Machine Operator</p>

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	<p>Cum Mechanic may well be included in the vocational education stream of school education.</p> <p>The Qualification Pack shall also be helpful in conducting Recognition of Prior Learning of the Rice Transplanter Machine Operator Cum Mechanic</p>			
Estimated uptake	QP/Job Role Name	"States where Demand exist	"District where Demand exist	Projections for the next 3 years
	Rice Transplanter Machine Operator Cum Mechanic	PAN India	Various District	3000
27	<p>Recommendation from the concerned Line Ministry of the Government/Regulatory Body. To be supported by documentary evidences</p> <p>Have received concurrence from the M&T Division, MoA & FW</p>			
28	<p>What steps were taken to ensure that the qualification(s) does (do) not duplicate already existing or planned qualifications in the NSQF? Give justification for presenting a duplicate qualification</p> <p>This is the revised version of the already NSQC approved QP. The revision has been undertaken as the QP is going to expire soon</p>			
29	<p>What arrangements are in place to monitor and review the qualification(s)? What data will be used and at what point will the qualification(s) be revised or updated? Specify the review process here</p> <p>Any institution or individual is welcome to send the feedback, which is recorded and considered during next review cycle. Communication will be sent for any feedback to all the main stakeholders/users one month prior to the review of the qualifications pack. A formal review is scheduled in three years.</p>			

Please attach most relevant and recent documents giving further information about any of the topics above.

Give the titles and other relevant details of the document(s) here. Include page references showing where to find the relevant information.

SECTION 4

EVIDENCE OF PROGRESSION

30	<p>What steps have been taken in the design of this or other qualifications to ensure that there is a clear path to other qualifications in this sector? <i>Show the career map here to reflect the clear progression</i></p> <p>Career path in the agriculture sector is generally in terms of activities done & ownership of responsibility because they are primarily self-wage employment/ entrepreneurship roles.</p> <p>However, there are occupations in the organized segment (Agri Industries) in which career pathway has been identified as illustrated below (Annexure 1)</p> <p>Annexure 1: Career Map of Rice Transplanter Machine Operator Cum Mechanic</p>
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Level 6

Farm Workshop/Service Manager

Level 5

Agriculture Machinery Demonstrator

Level 4

Rice Transplanter Machine Operator
Cum Mechanic

Level 3

Farm Worker

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Give the titles and other relevant details of the document(s) here. Include page references showing where to find the relevant information.