

NSQF QUALIFICATION FILE

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

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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	Spice Crop Cultivator (Electives: Herbal Spices/ Seed Spices/ Tree Spices/ Rhizomatous Spices/ Oil Yielding Spices/ Pod(Cardamom) Spices)
2	Qualification Code, if any	AGR/Q0603
3	NCO code and occupation	NCO-2015/6111 Occupation-Agriculture Crop Production
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 - This is a short term course to train the learners to cultivate spice crops as per the recommended package of practices for a particular agro climatic zone
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	Spice Crop Cultivator (Electives: Herbal Spices/ Seed Spices/ Tree Spices/ Rhizomatous Spices/ Oil Yielding Spices/ Pod(Cardamom) Spices)
9	Job description of the occupation	A Spice Crop Cultivator is responsible for cultivating spices crop on a given piece of land as per the package of practices recommended for a particular agronomic climatic condition. The individual is expected to achieve the yield as per the genetic potential of given variety and sell the produce as per the competitive market prices without any distress sale.
10	Licensing requirements	N/A
11	Statutory and Regulatory requirement of the relevant sector (documentary evidence to be provided)	N/A
12	Level of the qualification in the NSQF	Level 4
13	Anticipated volume of	200 hours (Theory: 60 hours, Practical: 140 hours)

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	training/learning required to complete the qualification		
14	Indicative list of training tools required to deliver this qualification	Embedded in the Model Curriculum	
15	Entry requirements and/or recommendations and minimum age	Ability to read and write Experience: NA	
16	Progression from the qualification (Please show Professional and academic progression)	Farm Supervisor, Spices Exporter	
17	Arrangements for the Recognition of Prior learning (RPL)	RPL assessment will be as per I ASCI assessment process inline with the PMKVY guidelines. (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)	
18	International comparability where known (research evidence to be provided)	Not done as yet	
19	Date of planned review of the qualification.	31/10/2022	
20	Formal structure of the qualification		
	Mandatory components		
	Title of component and identification code/NOSs/Learning outcomes	Estimated size (learning hours)	Level
(i)	Introduction (Bridge Module)	5	4
(ii)	AGR/N0601 Soil fertility management in spice crops	15	
(iii)	AGR/N0602 Weed management in spice	10	

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	crops		
(iv)	AGR/N0603 Integrated pest and disease management in spice crops	35	
(v)	AGR/N0604 Irrigation management in spice crops	15	
(vi)	AGR/N9901 Basic Farm Management	20	
(vii)	AGR/N9902 Assimilating market information	15	
(viii)	AGR/N9903 Maintain health and safety at the workplace	15	
	Sub Total (A)	130	
Elective components: Elective 1- Herbal Spices:			
	Title of component and identification code/NOSs/ Learning outcomes	Estimated size (learning hours)	Level
	1. AGR/N0611 Selection of seed/planting material for herbal spices cultivation	10	4
	2. AGR/N0612 Soil preparation and sowing/planting of herbal spices	20	
	3. AGR/N0613 Harvest and Post-harvest management of herbal spices	40	
	Sub Total (B)	70	

Total (A+B)	200	
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Elective components: Elective 2- Seed Spices:			
	Title of component and identification code/NOSs/ Learning outcomes	Estimated size (learning hours)	Level

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	1. AGR/N0614 Seed selection and nursery management for seed spices	10	4
	2. AGR/N0615 Land preparation and sowing of seed spices	20	
	3. AGR/N0616 Harvest and Post-harvest management of seed spices	40	
	Sub Total (C)	70	

Total (A+C)	200	
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Elective components: Elective 3- Tree Spices:			
	Title of component and identification code/NOSs/ Learning outcomes	Estimated size (learning hours)	Level
	1. AGR/N0617 Selection of planting material and nursery management in tree spices	10	4
	2. AGR/N0618 Land preparation, planting and management of tree spices	20	
	3. AGR/N0619 Harvest and Post-harvest management of tree spices	40	
	Sub Total (D)	70	

Total (A+D)	200	
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Elective components: Elective 4- Rhizomatous Spices:			
	Title of component and identification code/NOSs/ Learning outcomes	Estimated size (learning hours)	Level
	1. AGR/N0620 Seed selection and seed preparation for rhizomatous spices	10	4

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	2. AGR/N0621 Land preparation and planting of rhizomatous spices	20	
	3. AGR/N0622 Harvest and Post-harvest management of rhizomatous spices	40	
	Sub Total (E)	70	

Total (A+E)	200	
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Elective components: Elective 5- Oil Yielding Spices:			
	Title of component and identification code/NOSs/ Learning outcomes	Estimated size (learning hours)	Level
	1. AGR/N0623 Planting material preparation and nursery management for oil yielding spices	10	4
	2. AGR/N0624 Land preparation and transplanting of oil yielding spices	20	
	3. AGR/N0625 Harvest and Post-harvest management of oil yielding spices	40	
	Sub Total (F)	70	

Total (A+F)	200	
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Elective components: Elective 6- Pod(Cardamom) Spices:			
	Title of component and identification code/NOSs/ Learning outcomes	Estimated size (learning hours)	Level
	1. AGR/N0626 Seed/sucker selection and nursery management in	10	4

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	cardamom(small/large)		
	2. AGR/N0627 Land preparation and planting of cardamom(small/large)	20	
	3. AGR/N0628 Harvest and Post-harvest management of cardamom(small/large)	40	
	Sub Total (G)	70	

	Total (A+G)	200	
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SECTION 1 **ASSESSMENT**

21	<p>Body/Bodies which will carry out assessment: ASCI affiliated assessment bodies.</p> <ol style="list-style-type: none">1. Aspiring Minds Pvt Ltd2. Anant Learning & Development Pvt Ltd3. Assess People Services India Pvt Ltd4. Trendsetters Skill Assessors Pvt Ltd5. Manipal City & Guilds6. Mettl7. SP Institute of Workforce Development8. Multi Skill Assessor Guild <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 ASCI assessment process inline with the PMKVY guidelines. RPL is undertaken in a Project mode under PMKVY. Organizations (including Government entities) are required to submit a project proposal to MSDE, through NSDC, for approval and sanction for release of funds to undertake the RPL. The Training Partner or any other authority as approved by the Steering Committee, will identify and counsel candidates eligible for RPL through mobilization camps and advertisements. The mobilized candidates will 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 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 trainees 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 the qualification” in the Summary.

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

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24. Assessment evidences

Title of Component:

Outcomes to be assessed/NOSs to be assessed	Assessment criteria for the outcome
Means of assessment 1	
Means of assessment 2 Add boxes as required.	
Pass/Fail	

Title of Component: Spice Crop Cultivator

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Job Role: Spice Crop Cultivator
Qualification Pack: AGR/Q0603
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).
4. Individual assessment agencies will create unique evaluations for skill practical for every student at each examination/training center based on this criterion.
5. To pass the Qualification Pack, every trainee should score a minimum of 70% of aggregate marks to successfully clear the assessment.
6. In case of *unsuccessful completion*, the trainee may seek reassessment on the Qualification Pack.

Compulsory NOS		Marks Allocation			
Total Marks: 390					
Assessable outcomes	Assessment criteria for outcomes	Total Marks	Out of	Theory	Skills Practical
1. AGR/N0601 Soil fertility management in spice crops	PC1. familiarize with the role of soil nutrients and their functions	90	25	13	12
	PC2. ensure testing of soil from authorized laboratory to determine its nutrient and fertilizer needs		15	7	8
	PC3. interpret the soil test report		5	0	5
	PC4. select appropriate soil nutrients/amendments		15	10	5
	PC5. prepare organic manure including farm yard manure for its application		20	10	10
	PC6. apply soil nutrients/amendments/input at recommended dosage and time		10	5	5

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			90	45	45
2. AGR/N0602 Weed management in spice crops	PC1. identify the types of weed in the field	60	5	2	3
	PC2. maintain records/photos of the weeds and share them with experts		10	5	5
	PC3. employ suitable weed management strategies at appropriate time and intervals		10	5	5
	PC4. familiarize with the type of formulations of herbicides along with their active ingredients		15	8	7
	PC5. prepare and apply correct dosage of herbicide for weed management		10	5	5
	PC6. identify and select suitable method for herbicides application		10	5	5
			60	30	30
3. AGR/N0603 Integrated pest and disease management in spice crops	PC1. identify different types of pests in spice crops	90	10	5	5
	PC2. identify stages of crop and pest incidence		6	3	3
	PC3. diagnose symptoms and extent of damage		6	3	3
	PC4. Identify abiotic factors leading to pests		5	2	3
	PC5. identify diseases in specific spice crops		6	3	3
	PC6. identify susceptible crop stages and assess disease incidence		6	3	3
	PC7. identify different modes of disease spread/transmission		4	2	2
	PC8. Identify abiotic factors leading to diseases		5	2	3
	PC9. use resistant/tolerant varieties		4	2	2
	PC10. scout at regular intervals to prevent pest incidence		8	4	4

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	PC11. perform crop rotation with suitable crops		6	3	3
	PC12. use various types of traps and trap crops		6	3	3
	PC13. use various types of biological, mechanical and chemical control with their advantages and disadvantages		10	5	5
	PC14. use recommended pesticides as per the approved Package of Practices (PoP) by state agricultural university/institutes		8	4	4
					0
			90	44	46
4. AGR/N0604 Irrigation management in spice crops	PC1. assess the water requirement of the spice crop	60	5	2	3
	PC2. understand different irrigation methods and their advantages and disadvantages and select suitable irrigation methods		10	5	5
	PC3. interact with irrigation experts for effective water usage		5	3	2
	PC4. decide the layout of suitable irrigation method		10	5	5
	PC5. ensure appropriate water supply at critical stages of crop growth		10	5	5
	PC6. ensure adequate water supply for entire crop		5	3	2
	PC7. ensure proper water retention and drainage		10	4	6
	PC8. ensure judicious irrigation practices to avoid disease incidence		5	3	2
			60	30	30
5. AGR/N9901 Basic Farm Management	PC1. choose the crop based on agro-climatic condition of the region	30	2	1	1
	PC2. take sample of the soil for testing		1	0	1

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PC3. perform intercropping with suitable and recommended crops (as per the main crop cultivated)	2	1	1
PC4. perform crop rotation with suitable crops	2	1	1
PC5. interact with agriculture / extension expert for crop planning	1	1	0
PC6. choose crop based on the economic advantage	2	1	1
PC7. maintain crop production activity record	1	1	0
PC8. maintain crop calendars	1	1	0
PC9. maintain calendars of weed	1	1	0
PC10. maintain insect and pest calendar	2	1	1
PC11. ascertain total cost of production (land, production practices, labour, equipment, fuel, administrative cost etc.)	2	1	1
PC12. maintain records of investment and expenditure	2	1	1
PC13. maintain necessary books of accounts	2	1	1
PC14. identify government schemes and their eligibility for availing themselves of the same	2	1	1
PC15. identify the nearest market	2	1	1
PC16. identify local traders, mandis in the villages and nearby and compare the rates	2	1	1
PC17. identify market rates of the produce season wise	2	1	1
PC18. arrange cost-effective transportation of produce to the market	1	0	1
	30	16	14

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6. AGR/N9902 Assimilating market information	PC1. understand the different sources of information at village-level through other farmers, neighbours, relatives, agricultural extension workers, agriculture specialists, concerned government and private departments like gram panchayat, co-operative societies and SHGs etc.		1	1	0
	PC2. identify different sources of information at market level through commission agents, mandi samitis and input dealers		1	1	0
	PC3. identify different sources of information through media sources like radio, newspapers, television, magazine internet, SMS in mobile phones etc.		1	0	1
	PC4. identify the appropriate sources of specific market information and proper ways to collect the required information		1	0	1
	PC5. identify the reliable source of information		1	0	1
	PC6. ascertain methods of collecting information through personal visit, telephone, internet and published reports, magazines and articles, workshops, attending seminars and training by agriculture extension service providers	30	2	1	1
	PC7. ascertain periodicity and cost of assessing market information		2	1	1
	PC8. ascertain availability and non-availability of specific market information		1	0	1
	PC9. perform documentation for analysing market information		1	0	1
	PC10. evaluate the authenticity of information received		2	1	1
	PC11. analyse the information for taking decision		2	1	1
	PC12. utilize market information for taking cost effective production decisions		2	1	1

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	PC13. understand quality-wise and variety-wise prices of different products such as seeds, pest, fertilizer, etc		2	1	1
	PC14. use market information and decide on crop and area to be sown which could result in better productivity for the season		2	1	1
	PC15. utilize market information for taking effective pre-harvesting decisions like seed preparation, land preparation, nutrition management, weed management, pest and diseases management and irrigation management		2	1	1
	PC16. utilize market information for appropriate post-harvesting decision like drying, grading, bagging, transportation, processing and storage		2	1	1
	PC17. decide on marketing parameters like where to sell, when to sell, to whom to sell and what quantity to sell etc. which leads to profit		2	1	1
	PC18. understand benefits derived from market information		1	0	1
	PC19. make projections/future price movements through information sources		1	1	0
	PC20. understand price fluctuations in markets and take appropriate decision		1	1	0
			30	14	16
7. AGR/N9903 Maintain health and safety at the workplace	PC1. undertake basic safety checks before operation of all machinery, vehicles and hazards are reported to the appropriate supervisor	30	2	1	1
	PC2. identify and use appropriate protective clothing or equipment required in performing these duties in accordance with workplace policy.		2	1	1
	PC3. read and understand the hazards of use and contamination mentioned on the labels of pesticides/fumigants etc		2	1	1

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PC4. assess risks prior to performing manual handling jobs, and work according to currently recommended safe practice.	2	1	1
PC5. use equipment and materials safely and correctly and return the same to designated storage when not in use	2	1	1
PC6. dispose of waste safely and correctly in a designated area	2	1	1
PC7. recognise risks to bystanders and take action to reduce risk associated with jobs in the workplace	3	2	1
PC8. perform the work in a manner which minimizes environmental damage by following all procedures and work instructions for controlling risk	2	1	1
PC9. report any accidents, incidents or problems without delay to an appropriate person and take necessary immediate action to reduce further danger.	1	0	1
PC10. follow procedures for dealing with accidents, fires and emergencies, including communicating location and directions to emergency.	2	1	1
PC11. follow emergency procedures to company standard / workplace requirements	2	1	1
PC12. use emergency equipment in accordance with manufacturers' specifications and workplace requirements	2	1	1
PC13. provide treatment appropriate to the patient's injuries in accordance with recognized first aid techniques	2	1	1
PC14. recover (if practical), clean, inspect/test, refurbish, replace and store the first aid equipment as appropriate	2	1	1
PC15. report details of first aid administered in accordance with workplace procedures.	2	1	1

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			30	15	15
			30	15	15
ELECTIVES					
ELECTIVE 1: Herbal Spices					
Total Marks: 200				Marks Allocation	
Assessable Outcomes	Assessment Criteria	Total Marks	Out Of	Theory	Skills Practical
1. AGR/N0611 Selection of seed/planting material for herbal spices cultivation	PC1. identify various herbal spices	50	5	3	2
	PC2. explain the characteristics of various herbal spices		10	5	5
	PC3. illustrate the “produce of commerce” and commercial and nutraceutical uses of various herbal spices		10	5	5
	PC4. classify the various agro climatic zones		10	5	5
	PC5. select suitable herbal spices based on the prevailing agro-climatic conditions		15	5	10
			50	23	27
2. AGR/N0612 Soil preparation and sowing/planting of herbal spices	PC1. identify and select suitable soil type and location	70	5	2	3
	PC2. ensure soil-testing at authorized centre and follow soil amendment measures on the basis of the soil test report		5	3	2
	PC3. carry out soil solarization/withering of soil		5	2	3

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	PC4. apply manures and fertilizers based on soil test report as and when required		5	2	3
	PC5. ensure proper drainage system		5	2	3
	PC6. select and employ suitable method of sowing/planting in nursery/mainfield		5	2	3
	PC7. prepare seed / planting material (herbaceous cuttings/ sucker etc)		5	2	3
	PC8. carry out pre-sowing/planting treatment		5	2	3
	PC9. prepare nursery area to a fine tilth		5	2	3
	PC10. remove the broken parts of the previous crop		2	0	2
	PC11. give pre-sowing irrigation before land preparation		2	1	1
	PC12. plant the seed/planting material at recommended depth and spacing		2	1	1
	PC13. choose suitable season/time of sowing/planting		4	2	2
	PC14. irrigate the nursery at right time and proper method		3	1	2
	PC15. identify crop canopies		4	2	2
	PC16. carry out sowing/planting as main crop / intercrop as recommended		8	4	4
			70	30	40
3. AGR/N0613 Harvest and post-harvest management of herbal spices	PC1. harvest the crop at appropriate stage and time	80	5	2	3
	PC2. select and employ suitable harvesting method (clipping of tender leaves/ shoots; plucking along with roots; cutting of top shoots) based on produce of commerce		20	5	15
	PC3. carry out cleaning and sorting based on commercial purpose		10	4	6

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	PC4. carry out drying and packing based on the customer requirement		15	5	10
	PC5. ensure proper transportation and storage of herbal spice based on market demand		10	5	5
	PC6. maintain ideal storage condition		5	2	3
	PC7. identify the niche market for sale of produce		5	2	3
	PC8. analyze the right time for sale considering the demand for the produce		5	3	2
	PC9. coordinate and negotiate with the buyer for competitive price		5	2	3
			80	30	50
ELECTIVES					
ELECTIVE 2: Seed Spices					
Total Marks: 200				Marks Allocation	
Assessable Outcomes	Assessment Criteria	Total Marks	Out Of	Theory	Skills Practical
1. AGR/N0614 Seed selection and nursery management for seed spices	PC1. identify various seed spices and select suitable variety based on agroclimatic condition	50	15	7	8
	PC2. identify certified /authorised seed producers/vendors / suppliers (including government nurseries /department)		5	2	3
	PC3. procure seeds in appropriate quantities based on sowing /farming method		5	1	4
	PC4. prepare nursery (poly bag and bed for fennel and coriander)		10	4	6
	PC5. sow the seeds in the poly bag and bed		5	2	3
	PC6. ensure after care management		10	4	6
			50	20	30

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2. AGR/N0615 Land preparation and sowing of seed spices	PC1. select appropriate soil type for cultivation	70	5	3	2
	PC2. ensure soil-testing at authorized centres and follow the recommendations given		5	2	3
	PC3. plough the land to get appropriate tilth		5	2	3
	PC4. ensure proper drainage		5	2	3
	PC5. apply recommended dosage of manures and fertilizers		10	5	5
	PC6. select appropriate season for timely sowing/ transplanting		5	2	3
	PC7. employ techniques to enhance germination (splitting /soaking etc)		5	2	3
	PC8. treat seeds (seed dressing/ pelleting) using recommended fungicides/bioagents		5	2	3
	PC9. employ suitable sowing method (broadcasting/line sowing/ drilling, transplanting etc)		10	4	6
	PC10. maintain optimum plant density		5	2	3
	PC11. ensure proper after care measures		10	4	6
			70	30	40
3. AGR/N0616 Harvest and post-harvest management of seed spices	PC1. harvest the crop at physiological maturity stage (like the colour of the seed etc)	80	5	2	3
	PC2. employ suitable harvesting method(picking /pulling etc) of plants/umbels		20	5	15
	PC3. carry out precleaning activities-threshing, winnowing, etc		10	4	6
	PC4. carry out drying of seed spices		5	2	3
	PC5. carry out grading of the seed spices		10	4	6
	PC6. carry out packing of the seed spices		10	4	6
	PC7. maintain ideal storage condition		5	2	3

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	PC8. identify the right market for sale of produce		5	2	3
	PC9. analyse the right time for sale considering the periodical demand for the produce		5	3	2
	PC10. coordinate and negotiate with procurement assistant of the buyer for best price		5	2	3
			80	30	50
ELECTIVES					
ELECTIVE 3: Tree Spices					
Total Marks: 200				Marks Allocation	
Assessable Outcomes	Assessment Criteria	Total Marks	Out Of	Theory	Skills Practical
1. AGR/N0617 Selection of planting material and nursery management in tree spices	PC1. identify various sources / suppliers (including government nurseries /department) of the planting material	60	2	1	1
	PC2. identify suitable varieties of tree spices adaptable for specific agro-climatic conditions		2	1	1
	PC3. select suitable mother plant (stock/scion).		2	1	1
	PC4. collect seeds/ vegetative propagules(bud/shoot)		2	1	1
	PC5. identify market rates for tree spices planting materials		2	1	1
	PC6. procure planting material as per the requirement		2	1	1
	PC7. select suitable site for tree spice nursery		4	2	2
	PC8. develop the required infrastructure (pillars/shade nets/wires, fencing materials)		5	2	3

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	PC9. establish irrigation facilities (pipelines, pump, filter, sprinkler, drip, micro irrigation)		2	1	1
	PC10. collect items for preparing potting mixture (portray/polybag/manure/sand/ soil / bioagents)		2	1	1
	PC11. establish humid chamber		2	1	1
	PC12. prepare nursery bed/ poly bags for tree spices		5	1	4
	PC13. develop primary/ secondary nursery using suitable techniques		5	2	3
	PC14. employ suitable vegetative propagation methods (budding/grafting/layering etc)		10	4	6
	PC15. plant the planting material in mist chamber / polybag / shade net at appropriate spacing		2	1	1
	PC16. irrigate the planting materials as per requirement.		2	1	1
	PC17. carry out hardening of planting materials		5	1	4
	PC18. seek guidance from the agricultural experts		2	1	1
	PC19. market the excess planting materials		2	1	1
			60	25	35
2. AGR/N0618 Land preparation, planting and management of tree spices	PC1. carry out clearing of land, shade regulation, ploughing as per requirement	60	5	2	3
	PC2. prepare land according to the terrain as per the required soil and water conservation measures		5	2	3
	PC3. ensure soil-testing at authorized centres and follow soil amendment measures on the basis of the soil test report		2	1	1
	PC4. select suitable planting system		5	2	3
	PC5. prepare pits of appropriate size at		5	2	3

NSQF QUALIFICATION FILE

	recommended spacing				
	PC6. apply manures and basal doses of fertilizers		5	2	3
	PC7. ensure viability of seeds using suitable methods		2	0	2
	PC8. carry out planting of tree spices in appropriate season		3	1	2
	PC9. carry out staking, mulching of tree spices in appropriate season		5	1	4
	PC10. provide adequate shade and protection to plants		2	1	1
	PC11. carry out gap-filling whenever required		2	1	1
	PC12. remove sprouts from the root stock		2	1	1
	PC13. carry out pruning, coppicing etc as and when required		5	1	4
	PC14. practise proper inter-cultural operations as recommended at suitable time		5	1	4
	PC15. carry out manuring / fertigation / weeding		5	1	4
	PC16. carry out liming as and when required		2	1	1
			60	20	40
3. AGR/N0619 Harvest and post-harvest management of tree spices	PC1. harvest the economically important spice plant part/sat appropriate stage and time	80	5	2	3
	PC2. employ suitable harvesting methods depending on the spice crop like – plucking poles with netbags (nutmegs); special peeling technique (cinnamon); manual picking with ladder (clove); manual collection (cambodge) etc		20	5	15
	PC3. follow good harvesting practices (GHP) and transportation methods		5	3	2
	PC4. carry out crop specific processing of tree spices using improved methods		5	1	4

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	PC5. carry out grading of the tree spices		5	1	4
	PC6. carry out packing of the tree spices		10	4	6
	PC7. maintain ideal storage condition		5	2	3
	PC8. assess the quality of the produce for better price realization		5	3	2
	PC9. discover different markets for sale of produce		5	2	3
	PC10. analyse the right time for sale considering the demand for the produce		4	2	2
	PC11. identify buyers and negotiate for the best price		4	2	2
	PC12. provide basic inputs for traceability of the produce		5	2	3
	PC13. ensure suitable transportation mode		2	1	1
			80	30	50
ELECTIVES					
ELECTIVE 4: Rhizomatous Spices					
Total Marks:				Marks Allocation	
Assessable Outcomes	Assessment Criteria	Total Marks	Out Of	Theory	Skills Practical
1. AGR/N0620 Seed selection and seed preparation for rhizomatous spices	PC1. identify different varieties of the crop	60	5	3	2
	PC2. select the suitable variety adaptable to the agro-climatic conditions having demand in market		5	2	3
	PC3. identify well managed and healthy mother garden for sourcing seed material		5	2	3
	PC4. select pest free rhizomes with optimum size and weight		5	2	3
	PC5. procure the required quantity of		2	1	1

NSQF QUALIFICATION FILE

	selected rhizomes				
	PC6. ensure safe transport and handling of the procured seed material		2	1	1
	PC7. identify suitable method of storage		2	1	1
	PC8. treat the seeds where ever required using recommended dose of pesticides by adopting the prescribed practices		5	2	3
	PC9. store the seeds in ideal conditions		1	0	1
	PC10. inspect stored seeds at fixed intervals for managing the incidence of storage pests and diseases		2	1	1
	PC11. prepare the seed rhizomes for field planting as recommended		5	2	3
	PC12. seek guidance from the agricultural experts		1	0	1
	PC13. cure, treat and prepare the seed rhizomes for rapid multiplication		5	2	3
	PC14. raise the prepared single bud rhizome in protrays		5	2	3
	PC15. schedule the required aftercare and maintain the sprouted buds till transplanting to the main field		10	4	6
			60	25	35
1. AGR/N0621 Land preparation and planting of rhizomatous spices	PC1. select appropriate soil type for cultivation	60	5	2	3
	PC2. carry out soil amelioration based on the soil-test at authorized centres		5	2	3
	PC3. plough the land to get appropriate tilth		5	2	3
	PC4. prepare raised bed for planting wherever required		5	2	3
	PC5. apply organic manure and basal dose of fertilizers		5	2	3

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	PC6. plant the seed rhizome at appropriate timetake proper care to save the sprouting portion		5	2	3
	PC7. plant in rows with recommended spacing		2	1	1
	PC8. protect the planted seed rhizomes with suitable mulch material		3	1	2
	PC9. ensure aftercare for establishment of the seed rhizome		5	2	3
	PC10.transplant the seedlings at the appropriate time		5	2	3
	PC11. carry out mulching		5	2	3
	PC12.ensure aftercare for establishment of the crop		10	4	6
			60	24	36
3. AGR/N0622 Harvest and post-harvest management of rhizomatous spices	PC1. identify the right stage of harvest of the crop depending upon the variety and nature of the final produce	80	5	2	3
	PC2. employ suitable harvesting method - manual and mechanical		15	5	10
	PC3. carry out processing of the produce (cleaning/washing, boiling, peeling, slicing, drying, polishing etc)		20	5	15
	PC4. carry out grading and packaging considering domestic and export markets		20	5	15
	PC5. maintain ideal storage condition		5	2	3
	PC6. identify the right market for sale of produce		5	2	3
	PC7. analyse the right time for sale considering the periodical demand for the produce		5	2	3
	PC8. coordinate and negotiate with procurement assistant of the buyer for best price		5	2	3

NSQF QUALIFICATION FILE

			80	25	55
ELECTIVES					
ELECTIVE 5: Oil yielding Spices					
Total Marks: 170				Marks Allocation	
Assessable Outcomes	Assessment Criteria	Total Marks	Out Of	Theory	Skills Practical
1. AGR/N0623 Planting material preparation and nursery management for oil yielding spices	PC1. identify various and appropriate varieties of oil yielding spice crops	50	5	2	3
	PC2. select the appropriate time for preparing/procuring planting materials		3	1	2
	PC3. prepare field for production of suckers required for nursery (in case of oil yielding crops which use suckers as planting materials for raising nursery)		10	4	6
	PC4. identify various vendors / suppliers (including government nurseries /department) of the seed/planting materials		2	1	1
	PC5. identify market rates of planting materials of oil yielding spice crops		2	1	1
	PC6. procure quality seeds/planting material in appropriate quantity		2	1	1
	PC7. treat the seeds /planting material (after chopping in required size) prior to sowing/planting		5	2	3
	PC8. prepare nursery area to a fine tilth		5	2	3
	PC9. remove the broken parts of the previous crop		2	1	1
	PC10. prepare humid chamber (in case of early mint technology, wherever required)		3	1	2
	PC11. give pre-sowing irrigation before land preparation		3	1	2

NSQF QUALIFICATION FILE

	PC12. plant the seed/planting material at recommended depth and spacing		3	1	2
	PC13. irrigate the nursery at right time and proper method		3	1	2
	PC14. seek guidance from the progressive farmers/ subject matter specialists		2	1	1
			50	20	30
2. AGR/N0624 Land preparation and transplanting of oil yielding spices	PC1. select appropriate soil type for cultivation		5	2	3
	PC2. carry out soil amendments as per the soil test report		10	4	6
	PC3. apply required farm yard manure		5	2	3
	PC4. prepare the land to fine tilth and divide into beds of convenient sizes		10	4	6
	PC5. ensure enough moisture in the field		5	2	3
	PC6. ensure that the seedling are of optimum size		5	2	3
	PC7. ensure timely transplanting of seedling		5	2	3
	PC8. transplant seedlings in rows with proper spacing		5	2	3
	PC9. employ ridges and furrow method of planting to minimise water use		10	4	6
			60	24	36
3. AGR/N0625 Harvest and post-harvest management of oil yielding spices	PC1. harvest the crop at appropriate stage for distillation using recommended methods	60	15	5	10
	PC2. carry out distillation in improved distillation tank		15	5	10
	PC3. ensure use of standard containers for proper storage of oil		5	2	3
	PC4. test for quality of the spice oil		10	4	6
	PC5. identify the right market for sale of		5	2	3

NSQF QUALIFICATION FILE

	produce				
	PC6. analyse the right time for sale considering the demand for the produce		5	2	3
	PC7. coordinate and negotiate with procurement assistant of the buyer for best price		5	2	3
			60	22	38
ELECTIVES					
ELECTIVE 6: Pod (Cardamom) Spices					
Total Marks: 220				Marks Allocation	
Assessable Outcomes	Assessment Criteria	Total Marks	Out Of	Theory	Skills Practical
1. AGR/N0626 Seed/sucker selection and nursery management in cardamom(small/large)	PC1. identify suitable varieties of cardamom(small/large) for specific agroclimatic condition/location	60	5	2	3
	PC2. identify various vendors / suppliers (including government nurseries /department/research institute) of the seed/sucker that are certified		2	1	1
	PC3. identify market rates for cardamom(small/large)seeds/sucker		2	1	1
	PC4. procure seeds/sucker in appropriate quantity		2	1	1
	PC5. employ acid scarification technique for better germination of seeds		5	2	3
	PC6. treat the seeds/ suckers with suitable bioagents/fungicides		5	2	3
	PC7. select suitable nursery site and clear the land from previous crop residue and debris		5	2	3
	PC8. prepare primary and secondary nursery beds/ polybags for seedling/ sucker multiplication bed		5	1	4

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	PC9. employ soil solarisation/fumigation techniques to destroy harmful microbes		5	2	3
	PC10. provide adequate shade through suitable trees/agroshade net/thatched pandal		5	2	3
	PC11. provide pre-sowing irrigation and introduce suitable biocontrol agents		5	2	3
	PC12. plant the seed/sucker at appropriate depth and spacing		2	1	1
	PC13. apply recommended dose of organic manure/fertilizer		4	2	2
	PC14. carry out mulching in the nursery beds		4	2	2
	PC15. irrigate the nursery beds at proper intervals		2	1	1
	PC16. seek guidance from the cardamom crop experts		2	1	1
			60	25	35
2. AGR/N0627 Land preparation and planting of cardamom(small/large)	PC1. identify appropriate soil type for cultivation	70	5	2	3
	PC2. ensure soil-testing at authorized centres and follow the recommendations given		5	2	3
	PC3. practise suitable soil terracing methods and contour planting		10	4	6
	PC4. carry out opening of pits at recommended space and depth		6	2	4
	PC5. apply recommended quantity of organic manure / fertilizers in the pits with suitable biocontrol agents		5	2	3
	PC6. plant seedlings/suckers in appropriate month in the season		5	1	4
	PC7. treat the seedlings/suckers with bioagents/fungicides		6	2	4
	PC8. plant the seedlings/suckers at		8	3	5

NSQF QUALIFICATION FILE

	appropriate depth with proper staking				
	PC9. carry out mulching with dried leaves and other trashed plant materials		5	1	4
	PC10. identify suitable shade trees and their shade pattern		5	2	3
	PC11. ensure shade regulation in the mainfield as per the recommendation		10	4	6
			70	25	45
3. AGR/N0628 Harvest and post-harvest management of cardamom (small/large)	PC1. carry out picking at appropriate stage with hand for small cardamom and with suitable knife for large cardamom	90	10	4	6
	PC2. carry out pickings at regular and specified intervals incase of small cardamom and single harvest at right time for large cardamom		5	2	3
	PC3. separate the capsules from the harvested spike, in case of large cardamom		5	1	4
	PC4. practise Good Handling Practices (GHP)		10	4	6
	PC5. carry out drying of cardamom using suitable methods like improved cardamom curing/conventional curing for small cardamom and use local/modified batti/ improved curing system for large cardamom		10	4	6
	PC6. carry out tail cutting procedure for large cardamom and rubbing and polishing methods for small cardamom		10	4	6
	PC7. carry out grading of cardamom (small/large) by adopting standard sieves manually or with suitable machinery.		10	4	6
	PC8. carry out packing of the cardamom (small/large) in polythene lined gunnybags and maintain ideal storage condition		10	4	6
	PC9. identify the right market for sale of produce through manual /e-auction platform.		5	2	3

NSQF QUALIFICATION FILE

	PC10. analyse the right time for sale considering the demand for the produce and market fluctuation pattern over a period of time		5	2	3
	PC11. illustrate artificial colouring and pesticide residual toxicity problems in the final produce		10	4	6
			90	35	55

NSQF QUALIFICATION FILE

NSQF QUALIFICATION FILE

SECTION 2

25. EVIDENCE OF LEVEL

OPTION A

Title/Name of qualification/component: Enter the title here			Level: Add level number
NSQF Domain	Outcomes of the Qualification/Component	How the outcomes relates to the NSQF level descriptors	NSQF Level
Process			
Professional knowledge			
Professional skill			
Core skill			
Responsibility			

NSQF QUALIFICATION FILE

OPTION B

Title/Name of qualification/component: Spice crop Cultivator		Level: 4	
NSQF Domain	Key requirements of the job role	How the job role relates to the NSQF level descriptors	NSQF Level
Process	Individual at this job role is responsible for cultivating spice crops on a given piece of land, which encompasses procurement of seed material from the market, site selection, nursery raising, application of manure & nutrients, pest and disease management, harvesting of produce, sale of produce in the market. The individual has to make decisions pertaining to purchase of quality inputs and sale of output.	Spice crop Cultivator works in familiar, predictable, routine, situations many of which require him to undertake decision where there are situations of clear choice. Some situations are given as examples in the adjacent cell. Hence NSQF Level is 4.	4
Professional knowledge	The individual should have factual knowledge of good agricultural practices used in spice crops cultivation, transplanted techniques, different types of propagation methods and their uses, selection of good quality seeds and planting material, types of diseases in spice crops and treatment methods used, integrated pest control management techniques, various harvesting methods and the parts harvested, processing, drying, storing or transporting	Spice crop Cultivator is required to have factual knowledge of field of knowledge or study pertaining to production, storing packing and quality management of produce. Some situations are given as examples in the adjacent cell. Hence NSQF Level is 4.	4
Professional skill	The individual manages the operations and functions of farms such as sowing, weeding, irrigating, harvesting, marketing farm produce etc. This requires use of different tools and machineries focused on raising quality output. In addition, the person monitors seedling for signs of stress and diseases in accordance with	Recall and demonstrate practical skill, routine and repetitive in narrow range of application, using appropriate rule and tool, using quality concepts. Some situations are given as examples in the adjacent cell.	4

NSQF QUALIFICATION FILE

Title/Name of qualification/component: Spice crop Cultivator			Level: 4
NSQF Domain	Key requirements of the job role	How the job role relates to the NSQF level descriptors	NSQF Level
	good agricultural practices, undertake good harvesting practices such as selecting appropriate season and time for harvesting; maturity of plant; etc; Follows approved cutting techniques while using tools to harvest	Hence NSQF Level is 4.	
Core skill	The individual has to perform the tasks related to soil sampling, application of recommendation on Soil Health card, assessment of market price, calculation of B:C ratio, selling of produce etc.	Language to communicate written or oral, with required clarity, skill to basic arithmetic and algebraic principles, basic understanding of social political and natural environment. Some situations are given as examples in the adjacent cell. Hence NSQF Level is 4.	4
Responsibility	The person is responsible for the following on their own and they work independently. The individual has to decide which crops to undertake, adopt preventive measures for pest & disease management, undertake different measure for ensuring quality output	The individual works independently and is responsible for own work & learning. They are not supervised by anyone else (required under Level 3), nor do they have any responsibility of supervision for others' work and learning (as required under Level 5).	4

NSQF QUALIFICATION FILE

SECTION 3

EVIDENCE OF NEED

26	<p>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?</p> <table border="1"> <thead> <tr> <th data-bbox="339 394 635 434">Basis</th> <th data-bbox="635 394 1390 434"></th> </tr> </thead> <tbody> <tr> <td data-bbox="339 434 635 1234">Need of the qualification</td> <td data-bbox="635 434 1390 1234"> <p>There are about 63 species grown in India and almost all spices can be grown in India because of the varied climate tropical, subtropical and temperate.</p> <ul style="list-style-type: none"> • India produces spices on 2.0 million ha with an annual production of about 2.3million tones valued at about Rs. 4500 crores, contributing nearly 20% of world's production, 30 % of the trade in terms of quantity but only 10% in terms of value. • Nearly 90 - 95% of the total production is consumed locally and the rest exported. • India is the biggest exporter of spices and annually exporting about 1.9 lakh tone of different spices and spice products earning a foreign exchange of about 700 crores. • They are indispensable part of our culinary, preparations especially, used for flavouring and seasoning of food. • Most of the spices have potential medicinal values. Besides, the spices and spice products are also indirectly used as flavouring or colouring agents or as preservatives in many pharmaceutical preparations. </td> </tr> <tr> <td data-bbox="339 1234 635 1317">Industry Relevance</td> <td data-bbox="635 1234 1390 1317">Industry Validations have been completed before 5th February 2018. Details attached as Annexure 4</td> </tr> <tr> <td data-bbox="339 1317 635 1487">Usage of the qualification</td> <td data-bbox="635 1317 1390 1487">Has been developed on demand from the Spice Board India and Directorate of Arecanut and Spices Development, Ministry of Agriculture & Farmers Welfare</td> </tr> <tr> <td data-bbox="339 1487 635 1693">Estimated uptake</td> <td data-bbox="635 1487 1390 1693">It is difficult to estimate uptake of this qualification at this stage as the sector not only is highly unorganized but also no in-depth skill-gap study has been done. The QP has been developed taking feedback from industry for demand though again sample size may not lend to accurate figures.</td> </tr> </tbody> </table>	Basis		Need of the qualification	<p>There are about 63 species grown in India and almost all spices can be grown in India because of the varied climate tropical, subtropical and temperate.</p> <ul style="list-style-type: none"> • India produces spices on 2.0 million ha with an annual production of about 2.3million tones valued at about Rs. 4500 crores, contributing nearly 20% of world's production, 30 % of the trade in terms of quantity but only 10% in terms of value. • Nearly 90 - 95% of the total production is consumed locally and the rest exported. • India is the biggest exporter of spices and annually exporting about 1.9 lakh tone of different spices and spice products earning a foreign exchange of about 700 crores. • They are indispensable part of our culinary, preparations especially, used for flavouring and seasoning of food. • Most of the spices have potential medicinal values. Besides, the spices and spice products are also indirectly used as flavouring or colouring agents or as preservatives in many pharmaceutical preparations. 	Industry Relevance	Industry Validations have been completed before 5 th February 2018. Details attached as Annexure 4	Usage of the qualification	Has been developed on demand from the Spice Board India and Directorate of Arecanut and Spices Development, Ministry of Agriculture & Farmers Welfare	Estimated uptake	It is difficult to estimate uptake of this qualification at this stage as the sector not only is highly unorganized but also no in-depth skill-gap study has been done. The QP has been developed taking feedback from industry for demand though again sample size may not lend to accurate figures.
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27	<p>Recommendation from the concerned Line Ministry of the Government/Regulatory Body. To be supported by documentary evidences</p> <p>Workshop has been held at Spice Board India at Kochi for 3 days for the development of QP. The detail of the workshop has been attached herewith.</p> <p>The Concurrence letter from Directorate of Arecanut and Spices Development, Ministry of Agriculture and Spices Board India have been attached herewith.</p>										

NSQF QUALIFICATION FILE

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>NSDC list of Approved and Under-Development QPs was checked prior to commissioning the work. Also, NQR has been checked.</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 / individual is welcome to send 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' time</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.

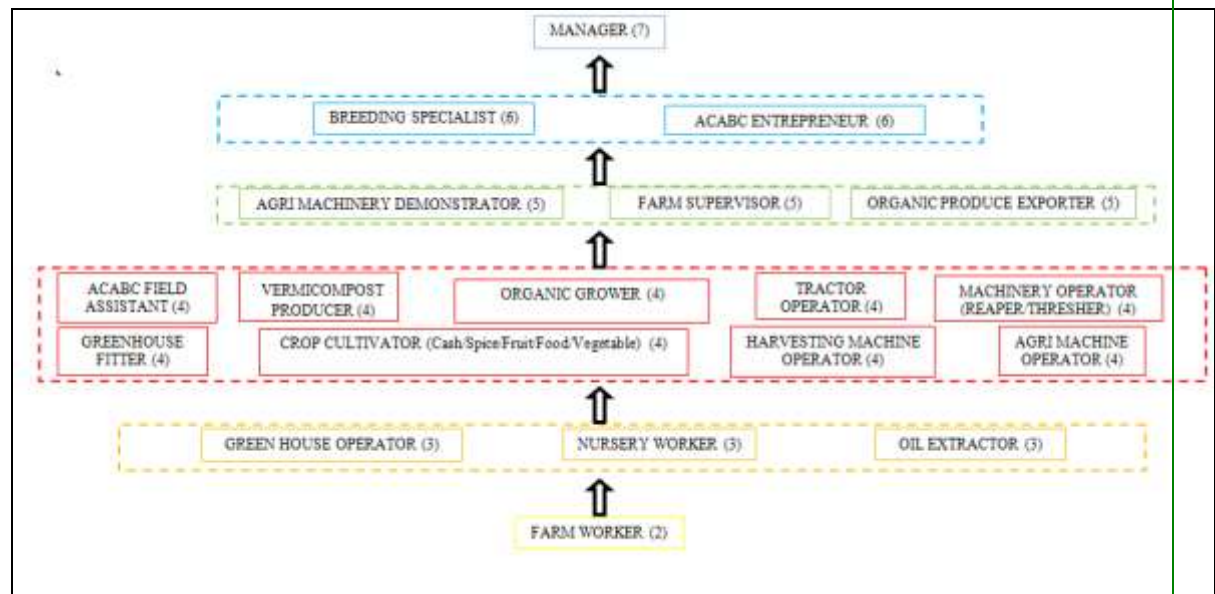
SECTION 4

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?</p> <p><i>Show the career map here to reflect the clear progression</i></p> <p>Career path in agri sector is generally in terms of activities done & ownership of responsibility because they are primarily self-wage employment/entrepreneurship roles.</p>
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NSQF QUALIFICATION FILE

Annexure 1: Career Map of Spice Crop Cultivator



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.