

Revised Application Documentation: Version 5 /25 May, 2015

QUALIFICATION FILE – CONTACT DETAILS OF SUBMITTING BODY

Name and address of submitting body:

Agriculture Skill Council of India

304-305 Bestech Chambers,
Block B, Sushant Lok 1,
Gurgaon-122002
P: 0124-4288322

Name and contact details of individual dealing with the submission

Name: Priyanka Prakash

Position in the organisation: Manager

Address if different from above

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List of documents submitted in support of the Qualifications File

1. Qualifications Pack
2. Industry Engagement Certificate
3. Occupational Map

4. QUALIFICATION FILE SUMMARY

Qualification Title	Banana Farmer (AGR/Q0301)		
Body/bodies which will assess candidates	Agriculture Skill Council of India (ASCI)		
Body/bodies which will award the certificate for the qualification.	Agriculture Skill Council of India (ASCI)		
Body which will accredit providers to offer the qualification.	Agriculture Skill Council of India (ASCI)		
Occupation(s) to which the qualification gives access	Horticulture Crops Cultivation		
Proposed level of the qualification in the NSQF.	4		
Anticipated volume of training/learning required to complete the qualification.	140 Hours		
Entry requirements / recommendations.	5 th Standard Pass preferable.		
Progression from the qualification.	Organic Grower, Farm Produce Exporter		
Planned arrangements for RPL.	RPL assessment will be as per normal ASCI assessment process.		
Formal structure of the qualification			
Title of unit or other component (include any identification code used)	Mandatory/Optional	Estimated size (learning hours)	Level
AGR / N0301 - Planting Material Preparation in Banana Cultivation	Mandatory	22	4
AGR / N0302 - Land preparation and Plantation in Banana Cultivation	Mandatory	18	
AGR / N0303 - Integrated Nutrient Management in Banana cultivation	Mandatory	25	
AGR / N0304 - Integrated Pest and Disease Management in Banana cultivation	Mandatory	20	
AGR / N0305 - Irrigation Management and Other Operations in Banana Cultivation	Mandatory	20	
AGR / N0306 - Harvesting and Post Harvest Management in Banana Cultivation	Mandatory	20	
AGR/N9903 Maintain health & Safety at the work place	Mandatory	15	

Please attach any document giving further detail about the structure of the qualification – eg a Curriculum or Qualification Pack.

Give details of the document here:

Qualification pack of Banana Farmer attached as Annexure 1

SECTION 1

ASSESSMENT

Name of assessment body:

If there will be more than one assessment body for this qualification, give details.

ASCI affiliated assessment bodies.

1. Aspiring Minds Pvt Ltd
2. Anant Learning & Development Pvt Ltd
3. Assess People Services India Pvt Ltd
4. Trendsetters Skill Assessors Pvt Ltd

More Assessment Agencies are being empanelled to cover wider geographical area.

Will the assessment body be responsible for RPL assessment?

Yes

Give details of how RPL assessment for the qualification will be carried out and quality assured.

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.

Describe the overall assessment strategy and specific arrangements which have been put in place to ensure that assessment is always valid, consistent and fair and show that these are in line with the requirements of the NSQF:

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:

- a. An offline Tablet based test through the use of Multiple Choice Text and Picture based questions in vernacular languages
- b. Actual demonstration on the field
- c. Viva

ASCI's assessment strategy:

- 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
- Assessments are preferably conducted on tablets or pen or papers in regional languages according to the requirement.
- Questions are uploaded in the tablets only on the day of assessment
- It is ensured that TP/trainer are not present during assessment

Please attach any documents giving further information about assessment and/or RPL.

Give details of the document(s) here:

ASSESSMENT EVIDENCE

Complete the following grid for each grouping of NOS, assessment unit or other component as per the assessment criteria. Insert the required number of rows.

CRITERIA FOR ASSESSMENT OF TRAINEES

Job Role: Banana Farmer

Qualification Pack Code: AGR/Q0301

Sector Skill Council: Agriculture Skill Council of India

Guidelines for Assessment

1. Criteria for assessment for each Qualification Pack will be created by the Sector Skill Council. Each Performance Criteria (PC) will be assigned marks proportional to its importance in NOS. SSC will also lay down proportion of marks for Theory and Skills Practical for each PC.
2. The assessment for the theory part will be based on knowledge bank of questions created by the SSC.
3. Individual assessment agencies will create unique question papers for theory part for each candidate at each examination/training 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 criteria
5. To pass the Qualification Pack , every trainee should score a minimum of 40 % in each NOS & 60% in aggregate
6. In case of successfully passing only certain number of NOS's, the trainee is eligible to take subsequent assessment on the balance NOS's to pass the Qualification Pack.
7. The marks are allocated PC wise, however, every NOS will carry a weight age in the total marks allocated to the specific QP.

Assessable Outcome	Assessment criteria	Total Mark (600)	Out Of	Marks Allocation	
				Theory	Skills Practical
1. AGR / N 0301 - Planting Material Preparation in Banana Cultivation	PC.1 Identify the Agro-climatic zone in which cultivation is taken up	60	5	2	3
	PC.2 List the varieties that are suitable to the zone		5	3	2
	PC.3 Identify various vendors / suppliers (including government nurseries / department) of the planting material		5	1	4
	PC.4 Ascertain the quality of seedling and material from each source in terms of 'free from pests and diseases', 'survival rate' etc.		5	3	2
	PC.5 Ascertain the prevailing market rates for the planting material		5	2	3
	PC.6 Procure the planting material		2	1	1
	PC.7 Identify an appropriate storage space (free of infestation and having congenial climatic conditions for the planting material)		4	3	1
	PC.8 Store the planting material (if there is time lag between procurement and planting)		2	1	1
	PC.9 Ascertain the prevalent pests and diseases of banana in a given Agro-climatic zone		5	2	3
	PC.10 Ascertain the appropriate pesticides available for Planting treatment		5	3	2
	PC.11 Treat the planting as per the dosage recommended by the State Agriculture University / Department or as prescribed by the pesticide manufacturer		5	2	3

	PC.12 Read the safety precautions in the reading material provided with the pesticide		2	1	1
	PC.13 Keep ready with all the necessary first aids as suggested in the safety measures		5	3	2
	PC.14 Use all the necessary safety material and follow all the preventive measures to avoid any injury during use / application of pesticide		5	3	2
	TOTAL		60	30	30
2. AGR / N 0302 - Land preparation and Plantation in Banana Cultivation	PC.1 Clear the ground, cut up the existing planting material, stack them and burn them		2	1	1
	PC.2 Dig a ditch for wet soil that will carry away all the water as per the recommendation		2	1	1
	PC.3 Plough the soil deep, use rotavator to make soil fine as per the recommendation		2	1	1
	PC.4 Demarcate with white powder or by small sticks over the recommended spacing for plantation as per the soil type		2	1	1
	PC.5 Perform mulching by putting down of dry grass and leaves at the end of the rainy season plough the land for 4 -6 times	60	2	1	1
	PC.6 Use wheat straw and banana straw as a mulch material for increasing the bunch weight and conservation of soil moisture		2	1	1
	PC.7 Use of plastic Mulch instead of trash mulch as per feasibility, requirement & recommendation		2	1	1
	PC.8 Allow the soil to weather for 2 weeks		3	1	2
	PC.9 Get the land levelled using blade harrows		5	2	3

	PC.10 Make furrows in the soil length wise and breadth wise		5	3	2
	PC.11 Dig pits at the intersection of rows and furrows		5	3	2
	PC.12 Select generic / specific nematicides to a given agro-climatic zone		2	1	1
	PC.13 Choose appropriate methods for applying nematicides and fumigants		3	1	2
	PC.14 Apply Nematicides and Fumigants		3	1	2
	PC.15 Use the tissue culture seedlings for plantation from defined source; select the healthy, disease free plants		2	1	1
	PC.16 Plant the suckers simultaneously with basal dose of fertilizers.		5	3	2
	PC.17 Dip suckers in water in which potassium permanganate is mixed with recommended dosage		5	2	3
	PC.18 Place the Suckers in hole		5	3	2
	PC.19 Put compost round the young plant		3	2	1
	TOTAL		60	30	30
3. AGR / N 0303 - Integrated Nutrient Management in Banana cultivation	PC.1 Take soil sample as per the recommended sampling procedure from the field	90	10	5	5
	PC.2 Dry the soil and prepare samples as per procedure		5	2	3
	PC.3 Pack, label and submit to nearby soil testing laboratory for analysis		10	5	5

	PC.4 Collect the soil analysis report from the lab		5	2	3
	PC.5 Collect the recommended organic and inorganic fertilizer dosage from Agriculture Department based on the soil analysis report.		5	3	2
	PC.6 Select appropriately decomposed Farm Yard Manure for soil application		10	5	5
	PC.7 Apply the FYM to the soil as per recommended dosage and procedure before planting and during crop cultivation (if required)		10	5	5
	PC.8 Adopt various cultural practices that enhances the soil nutrient status for the benefit of banana crop stand		10	5	5
	PC.9 Apply organic and inorganic fertilizers for macro and micro nutrients as per the recommended dosage, timing, placement locations and method of application		10	5	5
	PC.10 Remove weeds manually		5	3	2
	PC.11 Take up mulching as per recommended methods / procedures		10	5	5
	TOTAL		90	45	45
4. AGR / N 0304 - Integrated Pest and Disease Management in Banana cultivation	PC1. Identify the types of pests associated (banana weevil, thrips, nematodes, etc)	120	10	5	5
	PC2. Identify the stage of crop and pest incidence – pest calendar		5	2	3
	PC3. Identify the signs and symptoms of damage		5	2	3
	PC4. Identify the pest life cycle – estimate the duration		5	3	2

	PC5. Identify the natural enemies of the pests (naids/dragon flies, trichogramma, mirid bug, lady bird beetles, spiders, preying mantids etc)		10	5	5
	PC6. Identify the types of diseases associated (Sigathoka, Bunchy top, Panama wilt, Bacterial Blight, Cercospora leaf sport etc.,)		10	5	5
	PC7. Identify the crop stage and disease incidence – disease calendar		10	5	5
	PC8. Identify the signs and symptoms of different diseases (leaf spots, discoloured areas, leaf margins drying, stunted growth)		10	5	5
	PC9. Identify the mode of transmission (implements, vectors, water, rain, wind)		5	2	3
	PC10. Clear stubbles to drive away the diapausing larvae		5	3	2
	PC11. Use of resistant varieties		8	4	4
	PC12. Take up seedling / planting material treatment		5	3	2
	PC13. Use various traps (light, pheromone etc)		7	3	4
	PC14. Erect bird perches		5	3	2
	PC15. Do Pest and disease control			0	0
	a. Chemical approaches		10	5	5
	b. Non-chemical approaches		10	5	5
	TOTAL		120	60	60

5. AGR / N 0305 - Irrigation Management and Other Operations in Banana Cultivation	PC1. Use of Irrigation Method based on the availability of the resource and soil type	120	15	7	8
	PC2. Adopt methods of precision farming (Drip Irrigation)		30	15	15
	PC3. Use of existing resource efficiently say use fertigation		15	7	8
	PC4. Prune / remove of dry leave, water shoots as per requirement and procedures		15	9	6
	PC5. Protect the plantation from strong winds by growing tall plants along the farm border or stacking of plants by wooden stick tide or bamboo poles, based on the availability of such material and resource use efficiency		15	7	8
	PC6. Earthing up as per the recommended procedures and timing		15	7	8
	PC7. Remove of female hands		15	8	7
	TOTAL		120	60	60
6. AGR / N 0306 - Harvesting and Post Harvest Management in Banana Cultivation	PC1. Harvest the crop at the appropriate time recommended such as when fingers are fairly evenly rounded etc.,	90	20	10	10
	PC2. Keep the bunch out of light, in cool and shady place		10	5	5
	PC3. Place harvested bunch in well padded basket before transporting to the collection site		15	8	7
	PC4. Keep Bananas refrigerated to delay the process of ripening		5	2	3

	PC5. Store as per the recommended procedures		15	7	8
	PC6. Use Wooden or cardboard boxes / plastic crates / bamboo baskets / gunny bags or any other material as per the market requirement and demand and for handle in an efficient and effective manner		5	3	2
	PC7. Choose means for transportation, say by trucks/lorries / rail wagons for distant markets based on the requirement and cost dynamics involved.		10	5	5
	PC8. Decide on storage or sale based on the prevailing market rates across the markets and the cost of storage		10	5	5
	TOTAL		90	45	45
7. AGR / N 09903 - Maintain Health & Safety at the workplace	PC1. undertake basic safety checks before operation of all machinery and vehicles and hazards are reported to the appropriate supervisor		2	1	1
	PC2. work for which protective clothing or equipment is required is identified and the appropriate protective clothing or equipment is used in performing these duties in accordance with workplace policy.		2	1	1
	PC3. read and understand the hazards of use and contamination mentioned on the labels of pesticides/fumigants etc		5	2	3
	PC4. assess risks prior to performing manual handling jobs, and work according to currently recommended safe practice.	60	5	3	2
	PC5. use equipment and materials safely and correctly and return the same to designated storage when not in use		5	2	3
	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		5	3	2

	PC8. perform your work in a manner which minimizes environmental damage all procedures and work instructions for controlling risk are followed closely.		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.		2	1	1
	PC10. follow procedures for dealing with accidents, fires and emergencies, including communicating location and directions to emergency.		5	2	3
	PC11. follow emergency procedures to company standard / workplace requirements		5	2	3
	PC12. use emergency equipment in accordance with manufacturers' specifications and workplace requirements		5	3	2
	PC13. provide treatment appropriate to the patient's injuries in accordance with recognized first aid techniques		5	3	2
	PC14. recover (if practical), clean, inspect/test, refurbish, replace and store the first aid equipment as appropriate		6	3	3
	PC15. report details of first aid administered in accordance with workplace procedures		4	2	2
	TOTAL		60	30	30
	Grand Total	600	600	300	300

SECTION 2

EVIDENCE OF NEED

What evidence is there that the qualification is needed?

While collecting data from the companies for the occupational map, we also took feedback from industry, training institutions & farmer groups 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.

What is the estimated uptake of this qualification and what is the basis of this estimate?

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. Working closely with NSDA would indicate precise requirements.

What steps were taken to ensure that the qualification(s) does/do not duplicate already existing or planned qualifications in the NSQF?

NSDC list of Approved and Under-Development QPs was checked prior to commissioning the work and also our occupational map/QPs are put on ASCI & NSDC websites.

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?

- 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 one year time

Please attach any documents giving further information about any of the topics above.

Give details of the document(s) here:

SECTION 3

SUMMARY OF DIRECT EVIDENCE OF LEVEL

Level of qualification: **4**

Summary of Direct Evidence (from learning outcomes):

Farmers manage the operations and functions of farms mostly routine & predictable, such as growing crops, and marketing farm products. The individual works independently and is responsible for own work & learning. He/She is the decision-maker in hiring farm workers; and in determining amounts and kinds of crops to be grown and livestock to be raised, and in purchasing farm machinery, livestock, seed, feed and other supplies. He/She exhibits basic understanding of social, political & natural environment and communicate clearly with the workers and market agents.

Though the farmer may be involved in supervision of the hired workers but these are casual hiring and do not involve structured supervision and most of the farm activities are independent activity.

Banana Farmer					
AGR/Q0301					
Process required	Professional Knowledge	Professional Skills	Core Skills	Responsibility	Level
Individual at this job role is responsible for cultivating banana crop on a given piece of land, which includes all predictable & routine processes from procurement of seed material from the market to the sale of farm produce in the market. The individual is able to make decisions pertaining to their area of work, and work in situations of clear choice	The individual need factual knowledge of banana plantation, and related matters such as quality of seeds, irrigation methods, pest & diseases, soil health, harvest & post-harvest methods, market prices, climatic conditions and so on.	The individual manage the operations and functions of farms mostly routine & predictable, such as sowing, weeding, irrigating, harvesting, marketing farm produce etc. using appropriate rule & tool keeping in consideration the quality aspects	In order to correctly perform the tasks related to soil sampling, testing, selecting pesticides, decide on sale based on market rates, etc. and to ensure health and safety, individual requires communication skills with required clarity, basic arithmetic skills and basic understanding of social, political and natural environment.	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 for others' work and learning (required under Level 5).	4
Level : 4	Level : 4	Level : 4	Level : 4	Level : 4	

OTHER EVIDENCE OF LEVEL [This need only be filled in where evidence other than primary outcomes was used to allocate a level] (**Optional**)

Summary of other evidence (if used):

SECTION 4

EVIDENCE OF RECOGNITION OR PROGRESSION

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?

Career path in agri sector is generally in terms of activities done & ownership of responsibility because they are primarily wage & self employment/entrepreneurship roles.

However, there are occupations in the organized segment (Agri Industries) in which career pathway has been identified as illustrated in the Occupational Map attached as Annexure sl.no. 3

Please attach any documents giving further information about any of the topics above.
Give details of the document(s) here: