

NSQF QUALIFICATION FILE GUIDANCE

Version 6: Draft of 08 March 2016

NSDA Reference

To be added by NSDA

CONTACT DETAILS OF THE BODY SUBMITTING THE QUALIFICATION FILE

Name and address of submitting body:

West Bengal State Council of Technical & Vocational Education and Skill Development
Karigari Bhavan (5th Floor), Plot-B/7, Action Area-III
New Town, Kolkata-700160

Name and contact details of individual dealing with the submission

Name: Sri Rathindra Nath Bandyopadhyaya

Position in the organisation: Chairman, Board of Studies and Skilling

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List of documents submitted in support of the Qualifications File

1. Curriculum and Course Content
2. MoM with Industries/ Employers to establish need of the qualification
3. Assessment strategy
4. Industry Validation

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SUMMARY

Qualification Title	Vermi Composter
Qualification Code	STC-AGR/NSQF-2017/801
Nature and purpose of the qualification	Short term Certificate Course To become wage employed in Organic manure Production farms or self-employed i.e. entrepreneurs in organic inputs sub sectors
Body/bodies which will award the qualification	West Bengal State Council of Technical & Vocational Education and Skill Development
Body which will accredit providers to offer courses leading to the qualification	Committee on Recognition under the West Bengal State Council of Technical & Vocational Education and Skill Development
Body/bodies which will carry out assessment of learners	Board of Examination under the West Bengal State Council of Technical & Vocational Education and Skill Development
Occupation(s) to which the qualification gives access	Vermi Composter
Licensing requirements	No
Level of the qualification in the NSQF	Level 3
Anticipated volume of training/learning required to complete the qualification	650 hours
Entry requirements and/or recommendations	Class VIII pass
Progression from the qualification	Wage Employment: Vermi Composter → Sr. Composter (in large Farm Houses /Organic Manure Mfg. Organisations). Entrepreneur: Basic Composter → Senior Composter in Organic Manures → Advisor in Composting & Organic Manures
Planned arrangements for the Recognition of Prior learning (RPL)	RPL will consist of four stages 1. Counselling- To inform, advise and guide the candidates regarding RPL 2. Pre-Assessment- To assess the current competencies of the candidates and identifying the gap between the full qualification and current competencies. 3. Orientation & Bridge Training- To train the candidates for bridging the gap. 4. Final assessment & Certification- To assess the candidate for full qualification and certify.
International comparability where known	N/A
Date of planned review of the qualification.	Every 3 years

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Formal structure of the qualification				
After completion of course the passed out trainee will be able to handle both macro & micro fertilisers, to produce organic inputs for agricultural farming system, to produce quality crops by using organic inputs and organic farming, to develop small entrepreneurship.				
Title of component and identification code.		Mandatory/ Optional	Estimated size (learning hours)	Level
<u>I. Theory</u>				
i.	Theory component of the course is to develop relevant basic technical information & knowledge about importance, selection of materials, preparation procedure and application methods of vermicomposting.	Mandatory	100	3
<u>II. Practical</u>				
i.	Practical component of the course is to impart relevant basic technical skills to select raw materials, earthworm species, decomposing system harvesting, sieving, testing and packaging of vermicompost.	Mandatory	450	3
i.	<u>III. Employability Skills</u> Employability Skills component of the course is to impart Soft skills which include Communication Skills, Behaviour, IT literacy, Entrepreneurship Skills, Safety, Hygiene etc.	Mandatory	100	3
Total (I+II+III)			650	

Curriculum Document is attached in Annexure-1.

Assessment Strategy Component wise distribution of marks is given in the Annexure No. 2

MoM attached in Annexure-3

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SECTION 1 **ASSESSMENT**

Body/Bodies which will carry out assessment:

Board of Examination under West Bengal State Council of Technical & Vocational Education & Skill Development, constituted under the ACT XXVI of 2013 under Department of Technical Education, Training & Skill Development, Govt. of West Bengal.

How will RPL assessment be managed and who will carry it out?

RPL will consist of four stages

1. Counselling- To inform, advise and guide the candidates regarding RPL
2. Pre-Assessment- To assess the current competencies of the candidates and identifying the gap between the full qualification and current competencies.
3. Orientation & Bridge Training- To train the candidates for bridging the gap.
4. Final assessment & Certification- To assess the candidate for full qualification and certify.

RPL assessment will be managed by PBSSD (Paschim Banga Society for Skill Development) under Department of Technical Education, Training & Skill Development, Govt. of West Bengal.

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.

Assessment will be carried out by Board of Examination under West Bengal State Council of Technical & Vocational Education & Skill Development, under Department of Technical Education, Training & Skill Development, Govt. of West Bengal.

The Council has all necessary infrastructure and pool of qualified Assessors/ Examiners to carry out such assessments. Presently the Council is conducting all examinations for all courses which includes Diploma Courses, Vocational Courses in VIII+ level and X+2 level & other Short term Courses. Council also conducts all State Level Entrance tests like JEXPO for admission to Diploma Courses in Polytechnics, VOCLET for lateral entry to Diploma Courses in Polytechnics and CET (Common Entrance Test) for admission to NCVT courses in ITIs.

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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 – ie Learning Outcomes to be assessed, assessment criteria and the means of assessment.

Title of Component:

Outcomes to be assessed	Assessment criteria for the outcome
1. Identify the species of earthworm capable for producing vermi compost from agriculture waste.	Candidate should be able to identify earthworm through morphological and physiological examination.
2. Construct the compost pit and bed with Pit method.	Candidate should be able to make compost pit and bed with measurement set by assessor.
3. Prepare vermin and other compost.	Assessors check the physical characteristics like colour, appearance, odour, etc.
4. Collect the vermiwash and apply to the field	Candidate can explain the method of collection of vermiwash and the application procedure in the field.
5. Analyse the composition of the vermi compost.	Candidate should be able to collect samples from field, able to measure pH and NPK ratio.
6. Pack vermi compost and other compost for transportation	Candidate should be able to select packing materials and pack vermicompost as per weight and type.
7. Apply the compost fertiliser in agricultural field according to the composition of the soil.	Candidate can calculate the quantity of vermicompost and frequency of application on the basis of crop type and soil condition for agricultural field.
<p>Means of assessment 1</p> <p>There will be two types of Assessments viz. Formative and Summative. The Formative Assessment will be carried out continuously during the conduct of course and Summative Assessment will be carried out at the end of the course. Details are mentioned under means of Assessment-2. Written test, Practical examination/ Skill test & Viva voce</p>	
<p>Means of assessment 2</p> <p>I. Means of Formative Assessment (Total marks allotted- 300)</p> <p>i) Assignments for each module of Theory component</p> <p>ii) Assignments for each module of Employability Skills component</p> <p>iii) Continuous evaluation of each module of Practical component</p> <p>II. Means of Summative Assessment (Total marks allotted- 700)</p> <p>i) Written test for Theory component</p> <p>ii) Written test for Employability Skills component</p> <p>iii) Practical Test & Viva-voce for Practical Component.</p> <p>Component wise distribution of marks is given in the Annexure 2</p>	
Pass/Fail	

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Pass/Fail

Passing criteria is based on marks obtained in Formative and Summative Assessment taken together as mentioned in Annexure No-1

- i) Minimum Marks to pass Theory component- 60%
- ii) Minimum Marks to pass Employability Skills component- 60%
- iii) Minimum Marks to pass practical component- 70%
- iv) Minimum attendance required to appear in the final examination- 75%

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SECTION 2

EVIDENCE OF LEVEL

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OPTION A

Title/Name of qualification/component: Asst. Electrician and Motor Winder		Level: 3	
NSQF Domain	Outcomes of the Qualification/Component	How the outcomes relates to the NSQF level descriptors	NSQF Level
Process	<ul style="list-style-type: none"> Prepare vermiculture with earthworm and construct bed for Vermicomposting with specific measurement 	<ul style="list-style-type: none"> User/individual on the job needs to know and understand: Plan and organize work of vermiculture and vermicomposting and analyze analyse the components of compost. Basic concepts of related to work productivity including waste reduction, efficient material usage and optimization of time. 	3
Professional knowledge	<ul style="list-style-type: none"> Explain and Demonstrate Professional Knowledge includes vermicomposting method, compost collection and packaging, application of compost in agricultural field. 	<ul style="list-style-type: none"> User/ individual needs to have an understanding of basic principles and knowledge about the preparation of vermicompost and application of the compost in the agricultural field. 	3
Professional skill	<ul style="list-style-type: none"> Record expenses incurred during construction and procurement of materials. Document work related activities in appropriate work-sheet, register, etc. on number of beds, stage of work completed, dimensional and quantitative details of bed preparations, quantity of worms, stage of work completed, volume of feeds, watering duration, temperature monitoring etc. Record details of work related problems/observations and maintain pit of corrective measures. 	<ul style="list-style-type: none"> User/ Individual demonstrate the practical skill about vermicomposting and their application range in agricultural field. 	3

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Title/Name of qualification/component: Asst. Electrician and Motor Winder		Level: 3	
NSQF Domain	Outcomes of the Qualification/Component	How the outcomes relates to the NSQF level descriptors	NSQF Level
	<ul style="list-style-type: none"> Record expenses incurred during maintenance of unit and procurement of earthworms. Record details of work related problems/observations and maintain track of corrective measures. 		
Core skill	<ul style="list-style-type: none"> Communicate effectively with subordinates/coworkers and convey and share work related information clearly using appropriate language. Fundament knowledge of computer and basic understanding personal banking 	<ul style="list-style-type: none"> User / Individual gathers knowledge of soft skill and fundamental knowledge of computer which enable the user/ individual to work in a team in a collaborative manner. 	3
Responsibility	<ul style="list-style-type: none"> Check-up procedures to ensure that project objectives are finished within specified time frames are developed. Read and interpret warnings/instructions given on tools and materials such as chemical fertilizer or insecticide. Read circulars/notifications issued by appropriate authority or concerned agency on information related to work. Comply with occupational health and safety requirements relevant to worker. Assess possible risks and hazards in the work environment and exercise safety. 	<ul style="list-style-type: none"> User / Individual is required to carry out functions such as interpreting warnings/instructions given on tools and materials needed in vermicomposting. In these activities user / individual is doing the task under supervision. 	3

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Title/Name of qualification/component: Asst. Electrician and Motor Winder		Level: 3	
NSQF Domain	Outcomes of the Qualification/Component	How the outcomes relates to the NSQF level descriptors	NSQF Level
	<ul style="list-style-type: none">• Precautions to minimize injury to self and others comply with relevant safety practices while handling sharp tools and equipment		

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OPTION B

Title/Name of qualification/component: Enter the title here		Level: Add level number	
NSQF Domain	Key requirements of the job role	How the job role relates to the NSQF level descriptors	NSQF Level
Process			
Professional knowledge			
Professional skill			
Core skill			
Responsibility			

SECTION 3

EVIDENCE OF NEED

What evidence is there that the qualification is needed?

By establishing vermiculture unit entrepreneurs can recycle their own resources and create an effective fertilizer in the process. The advantage of this technology includes:

- Recycling of organic waste.
- Reduction of environmental pollution.
- Improvement of soil pH.
- Improvement of water holding capacity in sandy soils.
- Improvement of nitrate and phosphate levels in soil.

There is a dearth of skilled man power in the sector. A large chunk is required for agricultural field work. Several fertiliser industries have also indicated that there is a requirement for persons having basic skills in vermicomposting in the rural and semi urban. There is a huge opportunity for self-employment of the skilled persons in this sector. West Bengal has a major agro based economy for which this qualification is extremely relevant.

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

The estimated uptake of the qualification in the state of West Bengal as on date is around 4000 per year. This would grow exponentially from a nation-wide perspective. These estimates have been arrived at after detailed consultation with domain experts (Progressive Enterprise, Haque Agrbio Tech, Purba Medinipur Farmer and Welfare Association) etc.

Industries, Employers, Associations have validated need and estimated requirement of the qualification in a meeting organised by the Council. (Annexure-3)

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

This qualification is being conducted under the West Bengal State Council of Technical & Vocational Education & Skill Development under Department of Technical Education, Training and Skill Development since the academic year 2005 in Vocational Training Centres spread all over West Bengal for class- VIII+ pass dropout youths. In the state of West Bengal the Council is affiliating and awarding body for this qualification. Thus there is no other existing or planned qualification (Short term courses) in the state aligned with NSQF.

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?

The council has three well defined sub-committees namely Board of Studies and Skilling, Board of Examination and Recognition Committee. These committees monitor and review the progress of all qualifications under its purview on a regular basis.

This qualification will be reviewed and revised at an interval of three years on the basis of the outcome of the trainees, placement and self employment data and feedback from concerned industries/employers.

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

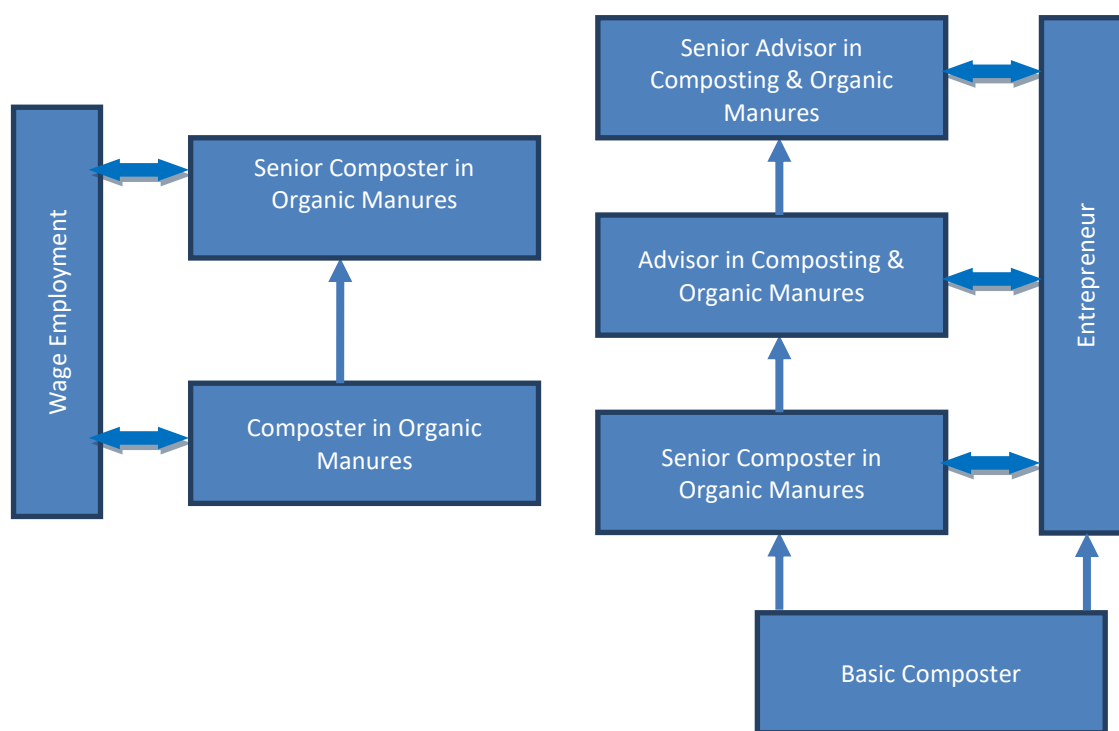
Give the titles and other relevant details of the document(s) here. Include page references showing where to find the relevant information.

SECTION 4

EVIDENCE OF PROGRESSION

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?

The trainee on completion of the course can work as a basic composter and after gaining filed knowledge he/she can work as an independent authority. Thereafter, he becomes eligible to work as a Senior Composter in Organic Manure. He/ she can become either an employee of an organization or become self-employed. In case of employment under an employer, he can progress to various level-wise designations, based on either experience or on obtaining subsequent qualifications. This is as shown below.



Wage Employment

Entrepreneur

Please attach any 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.

Annexure – I

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