

NSQF QUALIFICATION FILE

CONTACT DETAILS OF THE BODY SUBMITTING THE QUALIFICATION FILE

Name and address of submitting body:

Ministry of Environment, Forest & Climate Change (MoEF&CC)
Indira Paryavaran Bhawan, Jor Bagh Road,
New Delhi- 110003

Name and contact details of individual dealing with the submission

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List of documents submitted in support of the Qualification File

- 1. Curriculum with training plan (Annexure-I)**
- 2. Documentary Evidence of Need (Annexure-II)**

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SUMMARY

1	Qualification Title:	Certificate course in Value Addition & Marketing of Non-timber forest products (NTFPs)- (Plant Origin)
2	Qualification Code, if any: -	-
3	NCO code and occupation: -	-
4	Nature and purpose of the qualification (Please specify whether qualification is short term or long term):	<p>Nature of the qualification: Value Addition & Marketing of Non-timber forest products (NTFPs)- (Plant Origin)</p> <p>Purpose of the qualification: NTFP includes all the non- industrial forest products that are harvested from trees, shrubs and other plants in the forests. Main purpose of the qualification is to increase livelihood opportunities for unskilled population and build up entrepreneurial skills through systematic training on collection, processing, value addition and post-harvest methods of NTFPs viz. Bamboo; coconut shells & fibres; lantana camara (invasive weed) and other NTFPs.</p> <p>Short Term</p>
5	Body/bodies which will award the qualification:	MoEF&CC
6	Body which will accredit providers to offer courses leading to the qualification:	MoEF&CC
7	Whether accreditation/affiliation norms are already in place or not, if applicable (if yes, attach a copy)	Training programmes would be undertaken as part of the Green Skill Development Programme (GSDP) under the ENVIS Scheme. The courses would be run by the ENVIS Hubs (hosted by the respective State Government /UT Administration) and ENVIS Resource Partners (RPs)- (hosted by environment-related governmental and non-governmental organizations/ institutes of professional excellence) and other institutes. The assessment of the training programmes would be a regular exercise as part of the Memorandum of Cooperation signed with ENVIS Hubs and RPs and Memorandum of Understanding (MoU) between the ENVIS Hubs/RPs and other

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		GSDP Partners. The courses would also be run by the Autonomous Bodies/Institutes under the Ministry for which no MoC is required.		
8	Occupation(s) to which the qualification gives access:	Handicraft industries, Bamboo Industries, Bamboo Boards, Bamboo Research and Training Centre, Self employment		
9	Job description of the occupation:	Handicraft Assistant/Handicraft Maker/Bamboo Craft worker/Demonstrator/Eco-friendly Entrepreneur/Trainer		
10	Licensing requirements:	Permission from DFO/CCF, Forest Department in the States/UTs concerned		
11	Statutory and Regulatory requirement of the relevant sector (documentary evidence to be provided):	-		
12	Level of the qualification in the NSQF:	Level 5		
13	Anticipated volume of training/learning required to complete the qualification:	This is an umbrella course. The anticipated volume of training hours ranges between 140-400 hours (Depending on the type of specialization opted by the trainee)		
14	Indicative list of training tools required to deliver this qualification:	Mentioned in the curriculum attached.		
15	Entry requirements and/or recommendations and minimum age:	No minimum qualification to XII Pass/ Minimum age of 18 years		
16	Progression from the qualification:	Master Trainer/Self-sustainable Entrepreneur		
17	Arrangements for the Recognition of Prior learning (RPL):	There is no arrangement of RPL as of now		
18	International comparability where known (research evidence to be provided): NA	Not known		
19	Date of planned review of the qualification:	March 2020		
20	Formal structure of the qualification Mandatory/Optional components			
	Title of component and identification code/NOSs/Learning outcomes	Mandatory /Optional	Estimated size (learning hours)	Level
	I. Lantana Furniture and Crafts	O	360	5
(i)	Introduction to the course	M	8	
(ii)	Collection of Lantana	M	24	

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(iii)	Processing raw material	M	16	
(iv)	Bending, cutting	M	16	
(v)	Assembling	M	16	
(vi)	Small products like stool, baskets	M	56	
(vii)	Medium products like chairs, tea pot	M	56	
(viii)	Bigger products like Sofa set	M	64	
(ix)	Independent assembling of the products	M	32	
(x)	Finishing of the products	M	32	
(xi)	Marketing of the products	M	40	
II. Coconut Shells & Fibre Handicrafts		O	200	5
(i)	Introduction to the course	M	10	
(ii)	Collection and Processing of raw material	M	40	
(iii)	Zero cost production	M	20	
(iv)	Finishing of the Products - Coconut shell - Coconut Fibre	M	110	
(v)	Marketing of the products	M	20	
III. Bamboo Crafts		O	360	5
(i)	Introduction of bamboo industry	M	10	
(ii)	Preservation of bamboo	M	40	
(iii)	Conversion & primary processing	M	30	
(iv)	Agarbatti stick making	M	10	
(v)	Bamboo composites	M	60	
(vi)	Product making	M	96	
(vii)	Furniture making	M	54	
(viii)	Finishing/Seasoning of products	M	10	
(ix)	Low cost bamboo housing	M	50	
IV. Other NTFPs including medicinal plants		O	100	5
(i)	Introduction on good collection and harvesting practices of important NTFPs and medicinal plants as per WHO/NMPB guidelines	M		
(ii)	Introduction to various post harvest methods viz. preservation, processing, drying and storage methods of important NTFPs	M		
(iii)	Value addition of fruits/other NTFP	M		

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	available			
(iv)	Broom Making	M		
(v)	Equipments usage in NTFP processing	M		
(vi)	Herbal Gulal preparation	M		
(vii)	Agarbatti stick making	M		
(viii)	Pattal Dona (Leaf Plate) making	M		
Common Modules		M	40	
(i)	Importance of NTFPs and locally available NTFPs	M	10	
(ii)	Importance of Handicrafts and livelihood generation	M	10	
(iii)	Entrepreneurship Skill development programmes including interaction session with Banks/Industry/successful entrepreneurs and bank schemes and latest marketing techniques	M	20	

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SECTION 1 ASSESSMENT

21	<p>Body/Bodies which will carry out assessment:</p> <p>The assessments will be carried out by the evaluators of BNHS, Mumbai; AFRI, Jodhpur; CERC, Ahmedabad; Centre for Sustainable Future, Amrita Vishwa Vidyapeetham, Coimbatore; Department of Environment & Forest (DoE&F), Itanagar; DoE&F, Kavaratti; FRI, Dehradun; Forests & Environment Department, Ranchi; HFRI, Shimla; IPIRTI, Bengaluru; IWST, Bengaluru; Kerala State Council for Science, Technology & Environment; RFRI, Jorhat; and TFRI, Jabalpur at their respective locations. These evaluators would be chosen from the panel of experts who are not part of the trainers. Based on the evaluation, certificates will be issued.</p>
22	<p>How will RPL assessment be managed and who will carry it out?</p> <p>No RPL in this programme</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>The assessment will be done through theory, practical and viva exams at the end of the course. Moreover, students will be assessed regularly through questionnaires on every module in the classroom.</p> <p>For practical examination, the trainers as well as course supervisors will constantly keep a vigil on the trainees. Any errors committed by the trainees will be corrected immediately; learning by doing technique will be adopted for practical assessment.</p> <p>In theory, a final examination will be conducted at the end of the course, in which 50% scoring will be considered to be as qualifying marks. The Assessments will be conducted through English/Hindi/Regional language Questionnaires. However, the invigilators (not Trainers/Supervisors) will be empowered to explain/translate the question to the trainees in their regional language, if required. The trainers will not be involved in the assessment, whatsoever, at any point.</p>

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24. Assessment evidences

Title of Component:

Outcomes to be assessed/NOSs to be assessed	Assessment criteria for the outcome
<p>Lantana Furniture and Crafts</p> <ul style="list-style-type: none"> • Understanding of invasive weed Lantana camara and the need to control the invasion of the weed in forest • Collection of Lantana, processing of raw material and assembling • Lantana craft and furniture making • Marketing knowledge and Entrepreneurship Skill development 	<p>By conducting Evaluation Test- visual/demonstration skill test</p>
<p>Coconut Shells & Fibre Handicrafts</p> <ul style="list-style-type: none"> • Understanding of locally available resources, zero cost resources • Trainees would be able to describe importance of handicrafts • Production of handicrafts from coconut shells and fibres • Marketing knowledge and Entrepreneurship Skill development 	<p>By conducting Evaluation Test- practical exam, demonstration and written test</p>
<p>Bamboo Crafts</p> <ul style="list-style-type: none"> • Understanding of species and products range of bamboo • Operation of processing machine • Conversion of bamboo • Product making & Product design • Bamboo boards preparation • Mud reinforced wall preparation • Roof design • Furniture making 	<p>By conducting Evaluation Test- practical exam, skill test (preparation & quality assessment, techniques implemented) and written test</p>
<p>Other NTFPs including medicinal plants</p> <ul style="list-style-type: none"> • Understanding of locally available NTFPs including medicinal plants and their importance • Introduction to various post harvest methods viz. preservation, processing, drying and storage 	<p>By conducting Evaluation Test- practical exam, demonstration and written test</p>

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<p>methods of important NTFPs</p> <ul style="list-style-type: none">• Value addition of fruits/other NTFP available• Equipments usage in NTFP processing• Product making & Product design	
<p>Means of assessment 1 Theory and Practical exam on field and through Viva-voce</p>	
<p>Means of assessment 2 Set up of relevant and qualitative questions, Multiple Choice Questions (MCQ) for theory assessment. Conducting practical exams on selective Modules.</p>	
<p>Pass/Fail The pass mark for Theory exam (Multiple Choice Questionnaire) will be 50 out of 100. In Practical, 75 marks for Practical exam and 25 marks for viva-voce. Pass mark will be 50 marks but in Practical exam, Trainee should score at least 40 marks out of 75.</p>	

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SECTION 2

25. EVIDENCE OF LEVEL

OPTION A

Title/Name of qualification/component: Certificate course in Value Addition & Marketing of NTFPs (Plant Origin)			
Level: 5			
NSQF Domain	Outcomes of the Qualification/Component	How the outcomes relate to the NSQF level descriptors	NSQF Level
Process	Trainee would get an advanced knowledge of either lantana craft, coconut shells & fibre handicrafts, bamboo crafts or other NTFP products. They would be able to understand the locally available NTFPs, their importance, post harvest methods, collection, processing techniques and their conversion into final product/furniture making.	The trainees should possess an advanced knowledge of NTFPs and their collection. They can execute standard operating procedures pertaining to NTFPs processing and final product/furniture making. They are required to be skilled in their field and would be able to act as master trainers at the end of the course or become entrepreneur.	5
Professional knowledge	Trainees would get a factual knowledge of NTFP identification, utilization, preservation, processing of raw material, operating processing machines, independent assembling of the products, value addition of NTFP for handicrafts and furniture making and their marketing.	The trainee displays professional knowledge for NTFP (lantana /coconut shells & fibre /bamboo/ other NTFP) processing, machine operation and value added products making. This would also create entrepreneurship among them and help them to form Self Help Groups (SHGs). They would have full responsibility for product value addition.	5
Professional skill	The trainees should have hands on skill on processing and utilization of NTFPs into final products. They are able to independently undertake conversion of raw material into final	The trainee has professional skill to operate processing machines and making quality products from locally available NTFPs.	5

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Title/Name of qualification/component: Certificate course in Value Addition & Marketing of NTFPs (Plant Origin) Level: 5			
NSQF Domain	Outcomes of the Qualification/Component	How the outcomes relate to the NSQF level descriptors	NSQF Level
	products through usage of modern machinery. They may also become Master trainers in their field.		
Core skill	In terms of core skills, trainees would gain advanced knowledge of entrepreneurship Skill development, bank schemes and latest marketing techniques. They would also get exposure with the successful entrepreneurs in the related fields.	The trainee should be able to perform, execute and manage the activities related to processing of NTFP, operating modern machines, product value addition and marketing of the product.	5
Responsibility	Trainees are able to independently initiate the processing of NTFPs, equipment handling, market oriented design & product development and their marketing.	The trainees would be responsible for quality improvement in product development by using processing machines as an handicraft maker/entrepreneur and would also be responsible for the development of group as master trainers/specialists.	5

**SECTION 3
EVIDENCE OF NEED**

<p>26</p>	<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="352 472 636 595">Basis</th> <th data-bbox="636 472 1370 595">In case of other Awarding Bodies (Institutes under Central Ministries and states departments)</th> </tr> </thead> <tbody> <tr> <td data-bbox="352 595 636 1115">Need of the qualification</td> <td data-bbox="636 595 1370 1115"> <p>NTFPs constitute an integral part of the population who live in or near the tropical forests and have huge potential for livelihood opportunities. An article published in Research Journal of Forestry is attached. The article highlights the multiplier effects of the NTFP extraction in the economy by generating employment and income in downstream processing and trading activities.</p> <p>Another article in Journal of Botanical Sciences shows the role of NTFPs in development and livelihood of tribal people.</p> </td> </tr> <tr> <td data-bbox="352 1115 636 1675">Industry Relevance</td> <td data-bbox="636 1115 1370 1675"> <p>The curriculum/course syllabus has been jointly prepared by the Scientists/Experts in the institutions/Govt. Departments viz. BNHS, Mumbai; AFRI, Jodhpur; CERC, Ahmedabad; Centre for Sustainable Future, Amrita Vishwa Vidyapeetham, Coimbatore; Department of Environment & Forest (DoE&F), Itanagar; DoE&F, Kavarratti; FRI, Dehradun; Forests & Environment Department, Ranchi; HFRI, Shimla; IPIRTI, Bengaluru; IWST, Bengaluru; Kerala State Council for Science, Technology & Environment; RFRI, Jorhat; and TFRI, Jabalpur, undertaking the course in their respective locations.</p> </td> </tr> <tr> <td data-bbox="352 1675 636 1776">Usage of the qualification</td> <td data-bbox="636 1675 1370 1776"> <p>This course has been designed under GSDP for the first time.</p> </td> </tr> <tr> <td data-bbox="352 1776 636 1854">Estimated uptake</td> <td data-bbox="636 1776 1370 1854"> <p>An uptake of 25-30 students at each location is envisaged.</p> </td> </tr> </tbody> </table>	Basis	In case of other Awarding Bodies (Institutes under Central Ministries and states departments)	Need of the qualification	<p>NTFPs constitute an integral part of the population who live in or near the tropical forests and have huge potential for livelihood opportunities. An article published in Research Journal of Forestry is attached. The article highlights the multiplier effects of the NTFP extraction in the economy by generating employment and income in downstream processing and trading activities.</p> <p>Another article in Journal of Botanical Sciences shows the role of NTFPs in development and livelihood of tribal people.</p>	Industry Relevance	<p>The curriculum/course syllabus has been jointly prepared by the Scientists/Experts in the institutions/Govt. Departments viz. BNHS, Mumbai; AFRI, Jodhpur; CERC, Ahmedabad; Centre for Sustainable Future, Amrita Vishwa Vidyapeetham, Coimbatore; Department of Environment & Forest (DoE&F), Itanagar; DoE&F, Kavarratti; FRI, Dehradun; Forests & Environment Department, Ranchi; HFRI, Shimla; IPIRTI, Bengaluru; IWST, Bengaluru; Kerala State Council for Science, Technology & Environment; RFRI, Jorhat; and TFRI, Jabalpur, undertaking the course in their respective locations.</p>	Usage of the qualification	<p>This course has been designed under GSDP for the first time.</p>	Estimated uptake	<p>An uptake of 25-30 students at each location is envisaged.</p>
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Usage of the qualification	<p>This course has been designed under GSDP for the first time.</p>										
Estimated uptake	<p>An uptake of 25-30 students at each location is envisaged.</p>										
<p>27</p>	<p>Recommendation from the concerned Line Ministry of the Government/Regulatory Body. To be supported by documentary evidences.</p> <p>NA</p>										

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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>National Qualifications Register was searched to assess if there was any similar qualification and no overlap was found with the existing qualifications.</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>Feedback would be taken from experts, students and teachers regarding the course content, structure and timeline of the programme. Feedback will also be taken from the Centres conducting the course. Changes suggested will be assessed by the Ministry before incorporating them in the curriculum. Next review will be done in March 2020.</p>

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>The course is designed in such a way that it will include major portion of NTFP (Plant) Identification and processing and craft making. This can be base for studies / courses where NTFP processing is involved. This may further lead to becoming an entrepreneur.</p> <p>Handicraft Assistant/Maker --- On the Job Training --- Master Trainer/Self-sustainable Entrepreneur</p>
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Curriculum with training plan

Course Contents		Estimated size (learning hours)
I. Lantana Furniture and Crafts		360
(i)	Introduction to the course	8
(ii)	Collection of Lantana	24
(iii)	Processing raw material (boiling, seasoning, cutting, etc)	16
(iv)	Bending, cutting	16
(v)	Assembling	16
(vi)	Small products like stool, baskets	56
(vii)	Medium products like chairs, tea pot	56
(viii)	Bigger products like Sofa set	64
(ix)	Independent assembling of the products	32
(x)	Finishing of the products	32
(xi)	Marketing of the products	40
II. Coconut Shells & Fibre Handicrafts		200
(i)	Introduction to the course	10
(ii)	Collection and Processing of raw material	40
(iii)	Zero cost production	20
(iv)	Finishing of the Products - Coconut shell - Coconut Fibre	110
(v)	Marketing of the products	20
III. Bamboo Crafts		360
(i)	Introduction of bamboo industry Introduction of bamboo Selection of bamboo species Availability of bamboo species Selection of species for variety of products	10
(ii)	Preservation of bamboo Introduction Durability of bamboo Types of preservative Preservative preparation Quantification of preservatives Qualitative testing of preservatives	40

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	<p>Preservative Treatment</p> <p>Non pressure treatments</p> <p>Prophylactic treatment Diffusion treatment Sap displacement Hot and cold</p> <p>Pressure treatments</p> <p>Full cell process Empty cell process Modified boucherie process Retention of preservative</p>	
(iii)	<p>Conversion & primary processing</p> <p>Operation and working of bamboo processing machine Node removal Cross cutting Splitter Sliver making Splinters making Weaving of mat and patterns</p>	30
(iv)	<p>Agarbatti stick making</p> <p>Square stick making Round stick making</p>	10
(v)	<p>Bamboo composites</p> <p>Introduction to composites Definitions Types of bamboo composites Methods for preparations of composites Qualitative and quantitative testing Adhesives and types Application of adhesives on bamboo mat Mat pressing Bamboo boards and composites</p>	60
(vi)	<p>Product making</p> <p>Basketry Design making, Decorative products Finished Products</p>	96
(vii)	<p>Furniture making Design and Joinery</p>	54
(viii)	<p>Finishing/Seasoning of products</p>	10
(ix)	<p>Low cost bamboo housing</p> <p>Conversion of bamboo Mud reinforced walls</p>	50

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	Panelling Roof making Floor making	
IV. Other NTFPs including medicinal plants		100
(i)	Introduction on good collection and harvesting practices of important NTFPs and medicinal plants as per WHO/NMPB guidelines	
(ii)	Introduction to various post harvest methods viz. preservation, processing, drying and storage methods of important NTFPs	
(iii)	Value addition of fruits/other NTFP available	
(iv)	Broom Making	
(v)	Equipments usage in NTFP processing	
(vi)	Herbal Gulal preparation	
(vii)	Agarbatti stick making	
(viii)	Pattal Dona (Leaf Plate) making	
Common Modules		40
(i)	Importance of NTFPs and locally available NTFPs	10
(ii)	Importance of Handicrafts and livelihood generation	10
(iii)	Entrepreneurship Skill development programmes including interaction session with Banks/Industry/successful entrepreneurs and bank schemes and latest marketing techniques	20

(Theory component: 30%, Practical component: 70%)

Indicative list of training tools: Sizing machine, grinding machine, sanding machine, bamboo cutter, bamboo slicer, Tool kit, material for furniture making, cane wire, nails, varnish, paint, etc.
