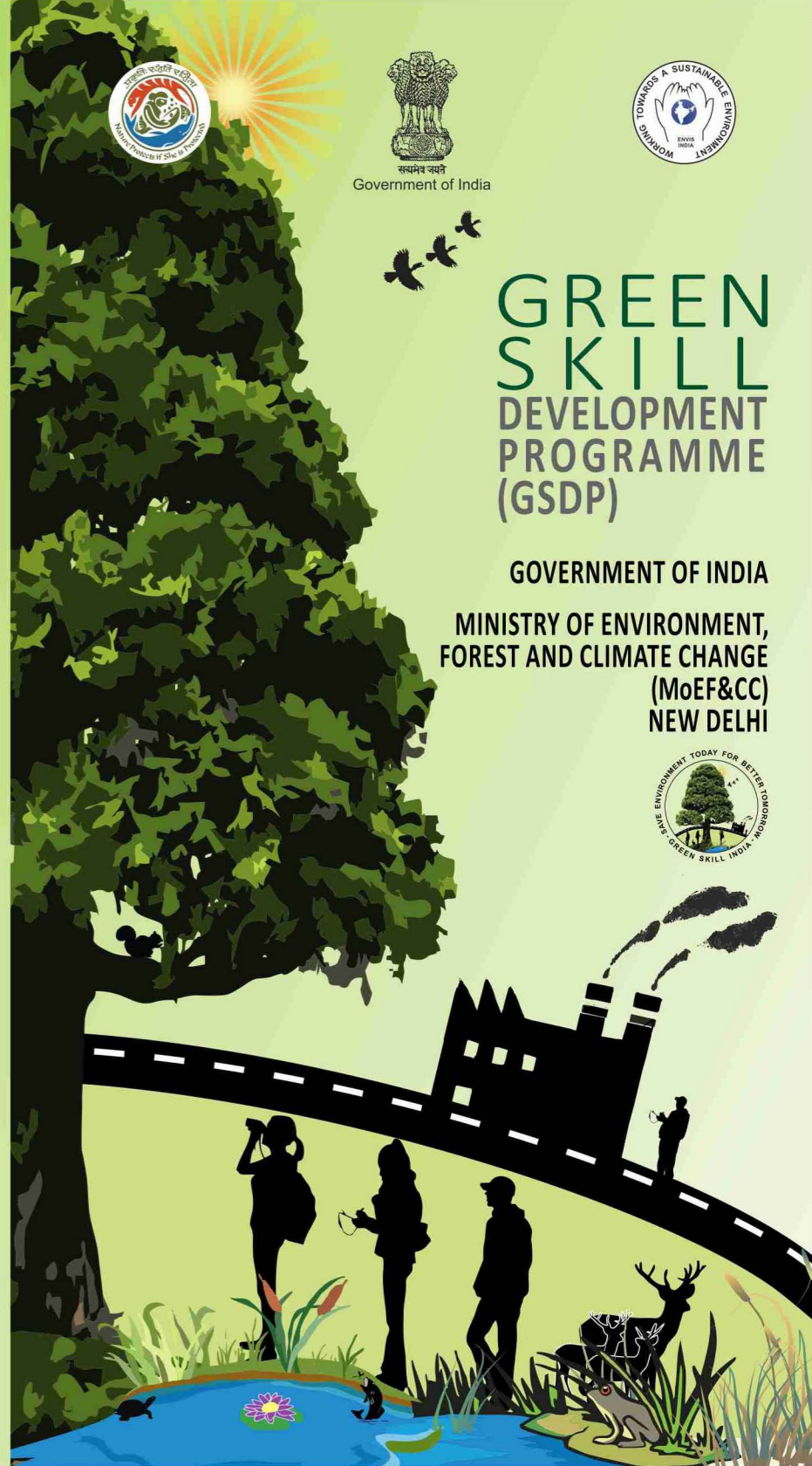


Proposed Certificate Courses/Training programmes under GSDP for Master Trainers (MTs)/ Specialists to commence in July, 2018

SI No.	Title of Certificate Course with required Minimum Qualification	ENVIS Hubs/RPs and Institutions/Entities concerned	Prospective Employment Opportunities in
1.	Value addition & marketing of NTFPs (Plant Origin) (a) Lantana Furniture and Crafts (b) Coconut Shells & Fibre Handicrafts (c) Bamboo Crafts (d) NTFP Products / Medicinal Plants {(a, b, c) No minimum qualification, (d) Class 12th Pass}	1. AFRI, Jodhpur (d) 2. BNHS, Mumbai (c) 3. CSF, AVV, Coimbatore (a,d) 4. DoE&F, Itanagar (c,d) 5. DoE&F, Kavaratti (b) 6. FRI, Dehradun (c,d) 7. F&ED, Ranchi (c) 8. HFRI, Shimla (c) 9. IPIRTI, Bengaluru (c) 10. IWS, Bengaluru (d) 11. KSCSTE, TVM (c) 12. RFRI, Jorhat (c) 13. TFRI, Jabalpur (d)	Self-employment / Master Trainer
2.	Community based conservation of Mangroves Ecosystem {Class 10th Dropout}	1. CASMB, Parangipettai, Tamil Nadu 2. GEC, Gandhinagar 3. BSI, Pune	Govt./Nurseries/Forest Departments
3.	Value addition & marketing of NTFPs (Animal Origin) (a) Wild Bee Keeping and Processing (b) Lac & Tassar Cultivation {Class 10th Pass}	1. ASTEC, Guwahati (a) 2. IFP, Ranchi (b)	Self-employment / Master Trainer
4.	Nature Conservation & Livelihood: (a) River based - Ganga Prahari (b) Nature Interpretation (c) Eco-tourism (d) Scuba Diving for marine life conservation # {Class 10th pass}	1. WII, Dehradun (a, b) (b) 2. DoE&F, Kavaratti (d) 3. GBPNIHESD, Almora 4. SCSTS, Gangtok (c)	Self-employment / Master Trainer
5.	Quality Planting Material Producer {Class 10th pass}	IFGTB, Coimbatore	Self-employment / Master Trainer
6.	Sustain and Enhance Technical Knowledge in Solar Energy Systems {Class 12th dropout}	1. EPTRI, Hyderabad 2. TERI, Patna 3. Department of Environment – Chandigarh 4. DoEERS, J&K	Self-employment / Private Firms / Govt. bodies
7.	Propagation and Management of Bamboo {Class 12th Pass}	1. FRI, Dehradun 2. HFRI, Shimla 3. IFP, Ranchi 4. IWS, Bengaluru 5. KSCSTE, Thiruvananthapuram 6. RFRI, Jorhat 7. TFRI, Jabalpur 8. F&ED, Ranchi	Self-employment / Nurseries / Botanical Gardens / Master Trainer
8.	Management of Small Botanical Gardens {Class 12th Pass}	1. CPREEC, Chennai 2. FRI, Dehradun 3. F&ED, Ranchi 4. AFRI, Jodhpur 5. TFRI, Jabalpur 6. KSCSTE, Thiruvananthapuram	Self-employment/Nurseries/ Botanical Gardens/Households/ Corporates/ Govt./University campuses
9.	Plantation Techniques and Utilization of Renewable Energy in Arid Zone {Class 12th pass}	ICAR-CAZRI, Jodhpur	Self Employment / Research Institutions related to the theme
10.	Forest Fire Management {Class 12th pass}	DMI, Bhopal	Forest Departments
11.	River Dolphin Conservation {Class 12th pass}	ZSI, Patna	ZSI / Research Institutions related to the theme
12.	Forest Entomology & Pest Control {Graduate}	1. FRI, Dehradun 2. KSCSTE, Thiruvananthapuram 3. TFRI, Jabalpur	Pest Control Agencies/ Companies/ Forest Departments/ Research Institutions
13.	Valuation of Ecosystem Services and Green GDP {Graduate}	1. BNHS, Mumbai 2. EPTRI, Hyderabad 3. IISc, Bengaluru 4. KSCSTE, Thiruvananthapuram	GRIDSS/ Research Institutions etc.
14.	Water Budgeting & Auditing {Graduate}	1. ADRI, Patna 2. EPTRI, Hyderabad	Urban local bodies/ Panchayats in rural areas/ Industries/ Water treatment plants/ Research Institutions etc.
15.	Paralegal Practices : (a) Forestry Acts and Policy (b) Environmental Laws {Graduate}	1. ICFRE, Dehradun (a) 2. NEHU, Shillong (b) 3. NLSIU, Bengaluru (b)	Facilitation Centres in State Forest Departments/ Law Firms
16.	ETP/STP/CETP Operation and Maintenance {Science Graduate}	1. CECB, Raipur 2. CSIR-NEERI, Nagpur 3. EPTRI, Hyderabad 4. GCPC, Gandhinagar	ETP/STP/CETP Plants in industries/Municipal Corporations/ Councils/Boards

SI No.	Title of Certificate Course with required Minimum Qualification	ENVIS Hubs/RPs and Institutions/Entities concerned	Prospective Employment Opportunities in
17.	Pollution Monitoring : Air and Water Pollution {Science Graduate/ Diploma in Engg.} Soil Pollution {Science Graduate/ Diploma in Engg.}	1. ADRI, Patna 2. CPCB, Delhi 3. EPTRI, Hyderabad 4. IIT-ISM, Dhanbad 5. IITM, Pune 6. MPCB, Aizawl 7. NPCB, Dimapur 8. Puducherry PCC 9. TSPCB, Agartala 10. UEPPCB, Dehradun 11. CPCB-RD, Bhopal 12. CPCB-RD, Bengaluru 13. CPCB-RD, Kolkata 14. CPCB-RD, Lucknow 15. CPCB-RD, Shillong 16. CPCB-RD, Vadodara 17. NBRI, Lucknow	CPCB/SPCB/ Municipal Corporations/ Councils
18.	Laboratory Technicians / Technical Assistants for electrical testing for environmental criteria {ITI (Electrician/Wireman)/ Diploma/Degree (Electrician/Wireman)}	CERC, Gujarat	Private firms/Govt. certifying institutions/bodies
19.	Emission Inventory {Graduate / Post Graduate / Engineering background}	IITM, Pune	CPCB/SPCB/ Municipal Corporations/ Councils
20.	Para-Taxonomy [including Peoples Bio-diversity Register (PBR)] {Science Graduate only (with Bio Science)}	1. ASTEC, Guwahati 2. BNHS, Mumbai 3. BSI, Kolkata 4. BSI, Allahabad 5. BSI, Coimbatore 6. BSI, Dehradun 7. BSI, Gangtok 8. BSI, Itanagar 9. BSI, Jodhpur 10. BSI, Port Blair 11. BSI, Pune 12. CASMB, Parangipettai, Tamil Nadu 13. CES, Bhubaneswar 14. DESKU, Nadia, W. B. 15. DoE, Imphal 16. DoE&F, Itanagar 17. EPTRI, Hyderabad 18. GBPNIHESD, Almora 19. GEC, Gandhinagar 20. HIMCOSTE, Shimla 21. IOM, Chennai 22. SACON, Coimbatore 23. ZSI, Kolkata 24. ZSI, Dehradun 25. ZSI, Itanagar 26. ZSI, Jodhpur 27. ZSI, Kozhikode 28. ZSI, Port Blair 29. ZSI, Pune	GRIDSS / BSI / ZSI / FRI / ICFRE / SACON / Zoos / wildlife sanctuaries/ national parks / biosphere reserves / Botanical Gardens/ Bird Sanctuaries/ Nurseries/ wetland sites/WCCB Regional Offices/ State Biodiversity Boards/ Biodiversity Management Committees
21.	Bird Identification and basic ornithology {Class 10th Dropout}	1. BNHS, Mumbai 2. SACON, Coimbatore	
22.	Bird Migration and Migration study techniques {Graduate with basic knowledge of birds}	BNHS, Mumbai	
23.	Wildlife Management using Geospatial Techniques {Science Graduate}	WWF, Delhi	
24.	Monitoring Ecosystem Health using Invertebrates {Science Graduate (Zoology / life sciences)}	ZSI, Chennai	ZSI / Research Institutions related to the theme
25.	Plant Tissue Culture Techniques and its Applications {Science Graduate}	1. BSI, Dehradun 2. BSI, Shillong 3. BSI, Yercaud 4. DESKU, Nadia, W. Bengal 5. EPTRI, Hyderabad 6. KSCSTE, TVM 7. TFRI, Jabalpur	Research Institutions related to the theme
26.	Waste Management: (Solid Waste, Biomedical Waste, Plastic Waste, E-Waste, Construction and Demolition Waste) {Science Graduate}	1. AFRI, Jodhpur 2. CPREEC, Chennai 3. CSIR-NEERI, Nagpur 4. DESKU, Nadia, W.Bengal 5. DzUM, Chennai 6. EPTRI, Hyderabad 7. FRI, Dehradun 8. F&ED, Ranchi 9. IISc, Bengaluru 10. KSCSTE, TVM 11. NEHU, Shillong 12. TCE, Madurai 13. TFRI, Jabalpur 14. TSPCB, Agartala	Municipal Corporations/ Councils
27.	Laboratory Assistant for Eco-friendly Food testing Laboratory {Science Graduate}	1. CERC, Gujarat 2. NIOH, Gujarat	Eco-friendly Food Testing Labs
28.	Cleaner Production Assessment {Science Graduate}	GCPC, Gujarat	Industries
29.	Greenbelt Development for Industries {Science Graduate}	NBRI, Lucknow	Self-employment / Private Firms / Govt. bodies
30.	City Environmental Surveyor {Science Graduate/ B.Tech (Env. Engg.) / B.Planning}	SPA, Delhi	Environmental Cell in States/ UTs/Development Authorities/ Municipal Corporations/ Councils



Importance of Skilling India's Youth

India's youthful manpower, a result of the demographic dividend, need to be provided with skills and ability to tackle global challenges. The more we give importance to skill development the more competent youth will be. It is important to predict the possibilities of the future, and prepare for them today itself. We have to make India the skill capital of the world.

- **Shri Narendra Modi**,
Prime Minister of India

To protect the environmental right of our future generations, all of us have a green social responsibility. The fast evolving and emerging technologies in dynamic world to combat the menace of environmental degradation need to be complemented by specially trained and skilled manpower in various field at all levels. Imparting skill sets for greener transformation will generate employment opportunities and strengthen our resolve to conserve and preserve the priceless environment."

- **Dr. Harsh Vardhan**, Minister,
Environment, Forest and Climate Change

India's youth needed to be empowered with skill development with focussed training in their areas of interest. For instance, there is need for skill development at the grassroots to meet the challenges of hospitality and tourism industry in order to better harness India's tourism potential.

- **Dr. Mahesh Sharma**, Minister of State,
Environment, Forest and Climate Change

Green Skill Development Programme

The Ministry of Environment, Forest & Climate Change (MoEF&CC) has been implementing a Central Sector Scheme titled ENVIS since 1982-83. ENVIS, by providing scientific, technical and semi- technical information on various environmental issues, has served in facilitating policy formulation and environment management at all levels of Government as well as in decision-making aimed at environment protection and its improvement for sustaining good quality of life for all living beings. ENVIS is a decentralized network of 66 centres of which 31 Centres dealing with "State of the Environment and Related Issues" are hosted by State Government /UT Administrations, called ENVIS Hubs and remaining 35 Centres are hosted by environment-related governmental and non-governmental organisations/ institutes of professional excellence, with varied thematic mandates pertaining to environment, called the ENVIS Resource Partners (RPs).

Utilising the vast network and expertise of ENVIS Hubs/RPs, the Ministry for the first time, has taken up an initiative for skill development in the environment and forest sector to enable India's youth to get gainful employment and/or self employment, called the **Green Skill Development Programme (GSDP)**. The programme endeavours to develop green skilled workers having technical knowledge and commitment to sustainable development, which will help in the attainment of the Nationally Determined Contributions (NDCs), Sustainable Development Goals (SDGs), National Biodiversity Targets (NBTs), as well as Waste Management Rules (2016).

1. Background: India being the second most populous country in the world is bestowed with a large working population. India has advantage of reaping this demographic dividend. However, high drop-out rates from school coupled with poor vocational skills may hinder in reaping this dividend. There exists a demand-supply gap of skill sets, both cognitive and practical, at various levels in the Environment/ Forest fields in India.

Green skilling is crucial for making a transition from energy and emissions – intensive economy to cleaner and greener production and service patterns. It also prepares people for green

jobs that contribute to preserving or restoring the quality of the environment, while improving human well-being and social equity. Hence activities under GSDP include process-based green skills such as, monitoring and managing activities such as waste, energy efficiency, impact minimization and assessment, etc. Facilitating the employment/self-employment of the skilled manpower is major goal of GSDP.

Realizing the demand for green skilled youth, the Green Skill Development Programme (GSDP) has been conceptualised and developed in MoEF&CC in consultation with the National Skill Development Agency (NSDA), the nodal agency for synergizing skill development initiatives in the country, under the Ministry of Skill Development & Entrepreneurship (MSDE). All skilling modules would be NSQF compliant. For more information on National Skill Qualification Framework (NSQF) and Common Norms please follow the link: <http://www.nsda.gov.in/nsqf.html>

2. Present Status: The first GSDP course was formulated for skilling Biodiversity Conservationists (**Basic Course: 3 months- Completed**) and Para-taxonomists (**Advanced Course: 3 months - Ongoing**) and is running on pilot basis in **ten** select districts (covering nine bio-geographic regions). The pilot course has received positive feedback from all stakeholders. For more information on Training Module and Success stories please follow the link: <https://goo.gl/PzUTvy>

3. Way Forward: With the success of the pilot programme, the next step is to take the skilling programme to an all India level and for all the courses to commence in July, 2018.

List of courses currently offered along with the prospective employment opportunities and ENVIS Hubs/RPs and Institutions/ Entities imparting the courses is given overleaf. The list is not finite and will be increased depending on the demand for the same.

Master Trainers/Specialists:

The list of the courses indicated above would be carried out by the respective ENVIS Hubs/RPs and Institutions/Entities. To expand the skill development programme at a larger scale, there is a requirement to train a pool of **Master Trainers/Specialists** who can further train youth across the country. Hence, the Ministry would initially create a pool of master trainers in each of the above mentioned courses. As per the requirement of the skilling programme, Graduates in Science/Arts and even drop-outs would be trained to become master trainers.

These courses would commence from July, 2018 across India. These Master Trainers/Specialists would in turn then help in training participants in various States/UTs. These Master Trainers would form the backbone of the entire programme in the years to come. The frequency of conducting each programme in a year would depend on the total duration of each course which would vary from course to course and accordingly the number of skilled persons would increase. Duration of these courses ranges from 80 to 560 hours.

Project Mode: Skilling in Air/Water/Soil Pollution monitoring and management of STP / ETP / CETP operation and maintenance and waste management will be undertaken in project mode in specific stretches of rivers.

Collaborations:


The Ministry has held deliberations with various stakeholders and welcomes any collaboration/ participation/ partnership in the programme from national and international organisations/ institutes/ agencies etc. to build a strong network which can be utilised for green skilling under GSDP for sustainable conservation and management of our natural resources.

For any queries/feedback please feel free to contact us at:


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