or Continuation of the Ongoing Scheme: 'Environmental Information System (ENVIS)'

- 1. Scheme Outline
- 1.1 Title of the Scheme: "Environmental Information System"
- 1.2 Sponsoring Agency (Ministry/ Department/Autonomous Body or Undertaking): Environmental Information Division, Ministry of Environment, Forest & Climate Change
- 1.3 Total Cost of the proposed Scheme:

The total cost of proposed scheme would be ₹ 72.82 crore.

- **1.4 Proposed duration of the Scheme:** The proposed duration of the Scheme will be for three years (2017-18 to 2019-20) initially, to align it with the remaining period of the 14th Finance Commission period (2015-16 to 2019-20).
- 1.5 Nature of the Scheme: Central Sector Scheme / Centrally Sponsored Scheme: Central Sector Scheme
- 1.6 For Central Sector Schemes, sub-schemes/components, if any, may be mentioned. For Centrally Sponsored Schemes, central and state components, if any, may be mentioned.

There is no sub-scheme/component under Environmental Information System (ENVIS) Scheme.

1.7 Whether a New or a Continuing Scheme? In case of a Continuing Scheme, whether the old scheme was evaluated and what were the main findings?

<u>Continuing Scheme</u>. The scheme has been evaluated by a duly constituted Committee forevaluation and review of the XII Plan Schemes of the MoEF&CC. The observations and recommendations of the Committeein its report submitted during October 2016 pertaining to the Scheme were as follows:

- i. The mandate does not give thrust to data analysis and research and the information brought out by ENVIS Centres does not flow into the Ministry's decision making process.
- ii. There is duplication in the thematic areas of some Centres.
- iii. The performance of some Centres has not been commensurate with the funding and work allocated.
- **iv.** It is reported that there is difficulty in getting the information for ISBEID software from the line Departments by some State ENVIS Centres.
- v. The main reason for the shortfall in expenditure is non receipt of the proposals from the ENVIS Centres and due to pending UCs of Host Institutes pertaining to other Divisions of the Ministry.
- vi. Most Centres, on an average, got less than ₹ 10 lakh as grants-in-aid. There is also delay in release of the funds due to pending UCs pertaining to some other Division of the Ministry.

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- vii. The linking of these Centres to the Green Platform initiative is under active consideration in the Ministry.
- **viii.** ENVIS Centres are engaged in collecting, collating and disseminating information through websites as well as through awareness programmes, special publications, newsletters etc., and the reach of ENVIS is very wide as it has 1.5 crore visitors both national and international.
- **ix.** There is lot of scope in ENVIS to become a self-sustaining network. Some of the ENVIS Centres are now generating revenue by conducting workshops/seminars and from priced publications.
- **x.** The vision is to develop the ENVIS Centres as a south Asian hub of Environmental Information.
- xi. This scheme has the potential to be restructured and upgraded so as to function as a multi-utility arm of the MoEF&CC.In this context, all related environmental education/awareness/information schemes (NGC, NEAC, NNCP, GLOBE and ENVIS) may be merged into a single Environmental Knowledge and Information Programme (EKwIP) from 2017-18, for greater synergy and to enable focused approach to this important function of the Ministry.

1.8 Whether in-principle approval is required? If yes, has it been obtained?

'In-principle' approval for the continuation of the scheme would be obtained from Secretary, MoEF&CC.

1.9 Whether a Concept Paper or a Detailed Paper has been prepared and stakeholders consulted? In case of new Centrally Sponsored Schemes, whether the State Governments have been consulted?

Not Applicable, as this is an ongoing Central Sector Scheme.

1.10 Which existing schemes/sub-schemes are being dropped, merged or rationalized?

No existing scheme or sub-scheme are being dropped and merged. However, the ENVIS scheme has been rationalised and broad-based as per the recommendations of the Committee constituted for evaluation of the Plan Schemes.

1.11 Is there an overlap with an existing scheme/sub-scheme? If so, how duplication of effort and wastage of resources are being avoided?

There is no overlap with any existing scheme/sub-scheme. The existing scheme is being revamped, strengthened and improvised. This is being proposed to strengthen ENVIS scheme and utilise their resources, i.e. products, services and manpower of ENVIS Centres more efficiently and effectively, in meeting the requirements of MoEF&CC.As per recommendation of the Evaluation Committee constituted for evaluation of various plan schemes of the Ministry the environmental education/awareness/information schems (NGC, NEAC, NNCP, Globe and ENVIS) may be merged into single Environmental Knowledge and Information Program (EKwIP) from 2017-18 for greater synergy and to enable focused approach to this important function of the Ministry. In addition to this, the committee constituted for review of status of SFC/EFC proposal, in

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its meeting, held on 19.04.2017 directed EI Division to review the possibility of merging of EEAT with ENVIS. The detailed note on the same may be seen at **Annxure-10**.

1.12 In case of an umbrella scheme (program) give the details of schemes and subschemes under italong with the proposed outlay component-wise.

ENVIS falls under umbrella scheme "Decision Support System for Environmental Awarness, Policy, Planning and Outcome Evaluation".

1.12.1Existing Structure and mandate:

Environmental information plays a vital role not only in formulating environmental management policies but also in the decision making process aiming at environmental protection and improvement of environment for sustaining good quality of life for allliving beings. Realizing such a need the Ministry set up an Environmental Information System (ENVIS) in 1983 as a plan programme to bea comprehensive network of environmental information collection, collation, storage, retrieval and dissemination to differentusers, which includes decision-makers, researchers, academicians, policy planners research scientists and general public, etc. ENVIS was conceived as a distributed information network with the subject-specific centres to carry out the mandates and to provide the relevant and timely information to all stakeholders. ENVIS network at present consists of a chain of 69 network partners out of which 39 are on -specific thematic areas and 30 on State/UT environment and related issues. These network partners are called ENVIS Centres and are located in the notable organizations/institutions/State/UT Government Departments/Universities throughout the country. The focal point of ENVIS is located in the Ministry and assists the Environment Information (EI) Division in coordinating the activities of all the ENVIS network partners by making ENVIS a web-enabled comprehensive information system.

India State-Level Basic Environmental Information Database (ISBEID) has been developed to help State Government/ UT Centres to collect, compile and disseminate information on a centralised server. It is used especially to fill their environment data gaps. There are **17 modules** covering air and water pollution, forestry, land resources, flora, fauna, etc.. Further there are **48 sub-modules** on which information is captured. The list of modules and sub-modules is at <u>Annexure 1</u>. ISBEID has two components, namely, Management Information System (MIS) and Geographic Information System (GIS) that have been developed by NIC in collaboration with ENVIS Cell.

1.12.2 Benefits already accrued:

(i) ENVIS, by providing scientific, technical and semi-technical information on various environmental issues, has served in facilitating policy formulation and environment management in both the Centre as well as the States. Its other users include institutes and individual scientists carrying out research projects and agencies carrying out environmental impact assessment of projects and programmes.

(ii) ENVIS Centres are tasked with performance of environmental informationrelated activities on an annual basis. These broadly cover database development that

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includes descriptive information and numerical data, creating information products, maintaining and upgrading ENVIS website on NIC platform, and disseminating stored information through newsletters, reports, reprints, special thematic publications, news digests, abstracting services, etc. Each Centre brings out 4 Newsletters and/or a Special Annual thematic publication, based on updated information on environmental parameters.

(iii) Many of the ENVIS centres have contributed to creating awareness and disseminating knowledge through other schemes of the Ministry such as, National Green Corps (NGC-eco-clubs) etc.

(iv) Query-Answer Service is one of the major responsibilities of ENVIS Network. ENVIS Focal Point and ENVIS Centres together responded to more than 1,14,749 queries during the Twelfth Plan up to 31.12.2016. It provided substantive information on climate change, ozone layer, environmental conservation, water and air pollution, waste management, environmental standards, applicable laws, environmental education and awareness, forestry and wildlife, etc. Wherever information was not readily available, referral service was provided at the focal point.

(v) A new user-interface - India State-Level Basic Environmental Information Database (ISBEID) was developed for generation of MIS report on different environmental parameters which assists in developing State of Environment Reports.

(vi) Workshopswere organised on restructuring and cyber security audits of identified 36 ENVIS websites in Phase-I with a view to identifying and removing their vulnerability to cyber-attacks and cyber-crimes. These websites have been transferred to a common Content Management System (CMS) platform in conformance with the Guidelines for Indian Government Websites (GIGW). The websites are bilingual i.e., English and Hindi or a regional language and have features like auto-archival system, dedicated sections for events/ announcements, State of Environment (SoE) Reports and Photo Gallery, besides giving a secure control panel for each ENVIS Centre for uploading their monthly reports, publications, etc.Process of inclusion of remaining Centres' Websites in Phase-II is underway.

(vii) ENVIS Portal (URL: <u>http://www.envis.nic.in</u>) has been developed, connecting all ENVIS Centres. The Portal was launched by the then Minister of State (Independent Charge) for Environment, Forest and Climate Change on 19th February, 2016 at New Delhi during the 2-day National Evaluation cum Interactive Workshop of ENVIS Centres. It acts as a catalyst for inter-centre interaction and disseminating information across all subject categories, major events, activities and updates of the entire network. It also conducts Online Monitoring and Evaluation on day-to-day basis for ENVIS Centres, based on a prototype developed for the purpose of evaluating online the 36 Centres whose websites have been upgraded, so far. The scope is being extended to cover all Centres. The restructured ENVIS portal is serving as a central hub of all the ENVIS network websites and is providing centralised query-response service to the users.



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(viii) A Google search of the 'Best Environmental Information System in the world' throws up ENVIS on top, thus showing its uniqueness.Post-restructuring of the ENVIS websites the number of visitors has registered a continuous growth from 0.76 crore in 2013-14 to 2.23 crore in 2014-15 and is expected to touch 2.50 crore mark by the end of FY 2016-17. (as shown in figure below):



(vii) **Download Status**: During the XII Plan period, the number of reports/documents downloaded by various stakeholders from ENVIS Netwrok is more than 7.47 Lakh.

(viii) **International Cooperation:** There is a proposal for India and Australia executing a MoU on environment, and the Environmental Information System was proposed as one of the discussion points for joint working group meeting scheduled to be held in the first week of March 2017 (Refer <u>Annexure-2</u>); the joint working group meeting has been postponed.

1.12.3 Proposed structure and mandate:

The ENVIS Scheme has completed 35 years of existence and is now an established environment knowledge repositoryand continues to support collection and dissemination of knowledge and information. In the remaining years of the 14th Finance Commission period, it is proposed to strengthen the scheme and increase its outreach. The revamped ENVIS schemeis in sync with the Government's Flagship Program - **Digital India-** and will also facilitate in achieving Sustainable Development Goals (SDGs). The ENVIS is presently under umbrella Scheme 'Environemental Awarness, **Protection and Monitoring'** and from 2017-18 it will come under a new umbrella scheme, 'Decision Support System for Environmental Awarness, Policy, Planning and Outcome Evaluation'.

Thus the mandate of the ENVIS from 2017-18 to 2019-20 is to develop a robust decision support system for environmental policy, planning and outcome evaluation. In order to build a robust decision support system and to achieve the desired mandate the ENVIS Resource Partners (previously thematic ENVIS Centers) would carry out grid-



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wise survey in a phased manner. The country would be divided into grids of 50 km x 50 km for effective survey of various environmental parameters such as air,water,noise, soil quality, solid, hazardous & e-waste, forest & wildlife, flora & fauna, wetlands, lakes, rivers & other water bodies,public health etc. Since the grid size is large and could cover over 2 or more districts, it is proposed to survey all districts by taking samples from smaller grids, which would then be brought into the 50x50 grid.

In order to monitor (*Ground Truth Verification*) the actual implementation of the Central Sector Scheme (CS) and Centrally Sponsored Schemes (CSS) of the Ministry, the ENVIS plus Hubs (previously State ENVIS Centers) would be part of the independent monitoring machinery of the Ministry. This combination of ENVIS Hubs and Resource Partners focused on specified area/grid would give concrete results. The information so generated would help the Centre, State as well as district administrations in policy planning, decision making and output and evaluation of various environmental schemes. It would also help the E+ Hubs to update India State-Level Basic Environmental Information Database (ISBEID) Software and come out with State of Environment Reports/Atlases of districts/hotspots etc.

The MoEF&CC is the nodal and sub-agency for attaining some of the Sustainable Development Goals (SDGs) and the INDCs. The ENVIS Centres will be engaged to facilitate the achievement of these goals. In order to extend outreach in villages and for village sensatization, it is proposed that the ERPs would serve as subject/technical experts for implementing the environmental development agenda under Saansad Adarsh Gram Yojana (SAGY) and Member of Parliament Local Area Development Scheme (MPLADS). These activities will be coordinated with the local district administrations by the E+ Hubs. The modalities for enaging ENVIS Centers in the above program would be worked out in consulation with ESC, EAB , M/o Rural Development, Panchayati Raj, Drinking Water and Sanitation (for SAGY) and Ministry of Statistics and Programme Implementation (for MPLADS).

The ENVIS network is already a repository of environmental knowledge. In the coming years emerging environmental themes are proposed to be added in ENVIS repository, and all websites would be restructured on CMS based system with better searchability and accessibility options. It is now proposed to make it a south Asian E-Hub.

Thus, the ENVIS would contribute in creating National Knowledge Base on Environment and serve as a Decision Support System for Environmental Policy, Planning and Outcome Evaluation and include the following additional work.

- i) Monitor various Schemes of the Ministry by ENVIS Centres as per requirement of the Divisions.
- ii) Monitoring of districts (grid-wise) in a phased manner to collect information on various environmental parameters.
- iii) Prepare environmental education kits for use in EEAT and similar schemes.
- iv) Prepare SoE Reports of Nation and States/ UTs/ Metro cities/ 'Hot-Spots'.

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- v) Partner in the new Green Skill Development Programme to skill 10th/12th class pass/dropouts in fields such asnature guides, para-taxonomists, and other environment fields. They can also be employed in the grid-survey activities by ENVIS Centres.
- vi) Facilitate environmental development agenda under Saansad Adarsh Gram Yojana (SAGY) and the Member of Parliament Local Area Development Scheme (MPLADS) by servingas subject/technical experts.
- vii)Build repository of films to be telecast in the proposed Environment Channel, and enable effective dissemination of environmental information.
- viii) Develop into a south Asian E-Hub.
- ix) Facilitate in achieving the SDGs/INDCs.
- x) Any other item of work which may be brought under the purview of the Scheme.

1.12.4 Structure of Environmental Information System (ENVIS)



2. Outcomes and Deliverables

2.1 Stated aims and objectives of the Scheme

i. Grid Based Decision Support System (GRIDSS)- for Sustainable Management of Natural Resources : ENVIS Resource Partners would carry out survey of all the districts in a phased manner. The country would be divided into grids of 50 km x 50 km for effective survey of various environmental parameters such as air, water, noise, soil quality, solid, hazardous & e-waste, forest & wildlife, flora & fauna, wetlands, lakes, rivers & other water bodies, public health etc. Since the grid size is large and could cover over 2 or more districts, it is proposed to survey all districts by taking samples from smaller grids, which would then be brought into the 50 kmx50 km grid. For the survey the data already collected by various agencies would be taken as a base information and if required primary data would also be collected for further analysis. The grid based survey

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of the districts would result in 1) avalibility of information on various environmental parameters grid-wise, 2) support in development of District level Status of environment report, 3) ranking of districts, 4) valuation of eco-system services, 5) assessing the carbon sequestiration potential of the districts, 6) documenting the best environental practices of the districts, 7) expanding the ISBEID database from State level to district level for all 337 parameters and 8) serve as on job training platform for candidates of Green Skill Development Program. In this context, discussions between Chairman, CPCB and Sr. Economic Adviser and other officers of CPCB and EI Division of the Ministry, were held to ensure that there was no over lap/duplication of grid based activities related to pollution. Minutes of the meeting are in Annexure-11.

- **ii. Monitoring (Ground Truth Verification) of Schemes:** ENVIS Plus Hubs would carry out ground truth verification of various Central Sector (CS) and Centrally Sponsored Schemes (CSS) being implemented by the Ministry, as and when required. The detailed monitoring may also be assigned to ENVIS Resource Partners & ENVIS Hubs as per requriment of the Ministry.
- **iii. Repository of Environmental Knowledge:** To serve as a repository of environmental knowledge, both thematic and State ENVIS Centers would work in coordination to collect information pertaining to their respective themes/grid/schemes assigned to them for monitoring, maintain and update the subject-specific database, produce value-added information such as educational-kits on various themes including international protocols/conventions/agreements,mobile apps, environmental videos, photo bank, research papers/publications, compendium, abstracts and journals, case studies, success stories and directories of information on State/regional/ National level, CD, atlases etc.The information thus collected would be disseminated through their respective websites and ENVIS Portal.

To increase the accessibility and security features of ENVIS websites, the existing ENVIS websites would be restructured as per requirement of GIGW Guidelines and to comply with DeitY guidelines to make the website accessible to all and to create unhindered access for Persons with Disability (Refer <u>Annexure-3</u>). The ENVIS websites would be restructured on CMS System to provide the users a better searchability and accessibility options. The restructured websites would be able to capture even those keywords searched for by users, which did not yield information from the system. This would help the ENVIS Centres to fill the data gaps and knowledge gaps in the specified subject areas and take action to providerelevant informationto various stakeholders.

Note: In the meeting held on 29.11.2016 under the chairmanship of Hon'ble Minister (EF&CC) it was decided to build ENVIS as a repository of (environmental) Knowledge. (Refer <u>Annexure-4</u> for MoM)

- **iv. International Cooperation:** To build linkages with information sources in the country and abroad for relevant and comprehensive information contents and to develop national ENVIS Secretariat as a South Asia Hub.
- v. Environment Channel: To launch a dedicated TV Channel for wider dissemination of Environmental Information.

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- vi. Green Skills Development: Green Skills Development Programme (GSDP) proposed to be taken up on pilot basis in 2017-18 to skill 10th and 12th class pass/dropouts in various fields like nature guides, para-taxonomists, and other environment fields. The para-taxonomists would be trained in field identification of flora and fauna, botanical surveys, processing of herbarium and raw drug voucher specimen, vegetation monitoring, data digitization, Nature photography, preparation of PBRs for BMCs, Ethno-Botanical Documentation, Gardening, nursery, landscaping techniques, Green pharmacy (skills to prepare basic forms of traditional medicine and semi-processing value added products, production assistance at industrial scale, marketing). They can also be employedin gridwise monitoring by the ENVIS Centres. The funding would be from the exsisting budget of ENVIS and from the training budget of BSI/ZSI who undertake such training. A detailed note is given in Annexure-8. The programme was launched and training modules were released by Hon'ble Minister (EF&CC) on 4 June 2017.
- vii. Ranking of States/Districts on Environmental and related parameters.
- viii. To help the Ministry in achieving INDCs targets and SDGs Control of Pollution; Conservation and Management of Natural Resources; Combating Climate Change etc.

2.2 Outcome and Impact of the Scheme:

2.2.1Outcomes:

- 1. Effective third party monitoring and evaluation of the various Schemes of the Ministry.
- 2. Third party survey of the districts (grid-wise) would help the Central and State governments in policy framing, decision making and planning.
- 3. Enhancing skills of youth in environmental activities
- 4. A repository of value-added information such as educational-kits, mobile Apps, environmental videos, photo bank, research papers/publications, compendium, abstracts and journals, case studies, research papers, thematic maps,directories of information on State/regional/ National level, CD, atlases, thematic database etc., will be created.
- 5. Implementation of the environment development activities under Saansad Adarsh Gram Yojana (SAGY) and Member of Parliament Local Area Development Scheme (MPLADS) will be achieved
- 6. Achieve INDCs and SDGs of MoEF&CCas targetted.

2.2.2 Impacts:

- 1. Effective implementation and proper fund management of various environmental Schemes being implemented by the Ministry.
- 2. Grid based third party survey of the districts would sensitize the State and district administration to take early steps to address the various environmental & public health issues and ultimately resulting in a sustainable environment and good quality of life for general public.
- 3. The environmental best practices at village and district level would help in the development of effective environmental policies at the State and National level.

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- 4. Bring about attitudinal changes in people with respect to environmental conservation and protection.
- 5. Reduce environmental degradation, pollution and lead to 'cleaner' India and achievement of INDCs and SDGs.
- 6. Theme based environmental information and value added information products would greatly benefit all stakeholders/policy planners in the Ministry and researchers, students, scientists etc.

2.2.3 Indicate year-wise outputs/deliverables in a tabular form.

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2019-2020	 Schemes of the Ministry. Establishing 4 ENVIS Plus Hubs/Resource Partners To prepare SoER for 10 States viz. Jammu & Kashmir, Chhattisgarh, Himachal Pradesh, Uttarakhand, Maharashtra, Rajasthan, Orissa, Gujarat, Haryana, Delhi . To produce 380 value-added information products including newsletters, books, theme based special publications, e-books, e- bulletins, booklets, environment calendars, brochures, pamphlets, educational kits etc. To Develop 7 Mobile Apps. Development of thematic maps. Upgrading ISBEID Application. Based on XII Plan period data of reports downloaded, number of downloads on the ENVIS Network is estimated to be more than 1.5 Lakh. Survey of 60 Districts 	 Financial Support for monitoring of 30 Districts. Financial Assistance to support the restructuring of the ENVIS websites, ISBEID and Monitoring Tool. Financial assistance for third party monitoring and theme based projects. Financial Assistance would be
	 Third party monitoring of various Schemes of the Ministry. Establishing 3 New ENVIS Plus Hubs/Resource Partners To prepare SoER for 10 States viz. Kerala, Bihar, Rajasthan, Goa, West Bengal, and Daman & Diu, Telangana, Tamil Nadu, Puducherry, Jharkhand and Punjab. To produce 400 value-added information products including, newsletters, books, theme based special publications, e-books, e- bulletins, booklets, environment calendars, brochures, pamphlets, educational kits etc. To Develop10 Mobile Apps. Based on XII Plan period data of reports downloaded, number of downloads on the ENVIS Network is estimated to be more than 2.0 Lakh. 	 provided to 61 ENVIS Centers. Financial Support for monitoring of 60Districts. Financial Assistance to support the restructuring of the ENVIS websites, ISBEID and Monitoring Tool. Financial assistance for third party monitoring and theme based projects.

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2.3 Indicate Outcomes of the Scheme in the form of measurable indicators which can be used to evaluate the proposal periodically. Baseline data or survey against which such outcomes should be benchmarked should also be mentioned.

2.3.1 Outcome Indicators

- i. Changes in pattern of funding in districts/states/centre after monitoring
- ii. Increase in skills of youth in environmental activities and increasing their employability
- iii. Increase in usage of environmental kits in schools and improvement in the awareness of children with respect to the environment.
- iv. Increase in number of villages funded under SAGY for environmental development activites and improvements in their living standards.

2.3.2 Output Indicators

- 1. Number of Districts actually surveyed
- 2. Number of CS & CSS Schemes monitored
- 3. Number of information products developed such as Newsletters/ Publications/Reports/ educational kits/ books etc.
- 4. Number of Mobile Apps developed
- 5. Number of websites restructured as per GIGW guidelines.
- 6. Number of websites restructured for making them disabled friendly as per instructions of the Ministry of Social Justice and Empowerment for implementation of the Accessible India Campaign.
- 7. Number of SoER published.
- 8. Number of National SoEAtlases published.
- 9. Number of thematic maps developed.

Additional Measurable indicators for Online Evaluation and Monitoring of ENVIS websites such as Website *updation*, Subject-specific Database Updation (Numerical Database, Other Database, Total Number of Visits, Number of Unique Visits, Reports Downloaded/Read, Total Number of Queries received, Number of Queries responded to. etc.

2.5 Indicate other schemes/sub-schemes being undertaken by Ministries/Departments which have a significant outcome overlap with the proposed scheme. What convergence frameworks have been evolved to consolidate outcomes and save public resources?

EI Division discussed the revamped ENVIS Scheme with the representatives of the Ministry of Skill Development and Entrepreneurship. They confirmed that Green Skill Development Program proposed by EI Division is not yet registered with National Skill Development Authority (NSDA). Further, the concept was discussed with Director ZSI and BSI and who are of view that there is huge shortage of taxonomist in the country and this program would reduce the gap. The Grid based Survey and Skill Development Program was also discussed with Chairman, CPCB and other officials of the CPCB dealing with air and water quality monitoring. They supported the idea and ready to

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contribute in development of course module for Green Skill Development Program (GSDP) and also ready to leverage the facility of CPCB and SPCBs for on job training of candidates selected for GSDP. The CPCB in near future expanding its network of air,water and noise quality monitoring and would definitely need trained manpower. The GSDP would provide the trained manpower to CPCB and SPCB. In addition to this, as per recommendation of the Evaluation Committee constituted for evaluation of various plan schemes of the Ministry the environmental education/awareness/information schems (NGC, NEAC, NNCP,Globe and ENVIS) may be merged into single Environmental Knowledge and Information Program (EKwIP) from 2017-18. Also, the committee constituted for review of status of SFC/EFC proposal, in its meeting, held on 19.04.2017 directed EI Division to review the possibility of merging of EEAT with ENVIS. The detailed note on the same may be seen at Annxure-10.

3. Target Beneficiaries

The target beneficiaries would include Central & State Governments, District Administration, policyplanners, decision-makers, researchers, students, scientists, school dropouts and the general public. Sharing and exchange of knowledge products with other South Asian countries with a view to establish a South Asian Environmental Knowledge Hub.

3.1 If the scheme is specific to any location, area and segment of population, please give the details and basis for selection.

Not applicable.

3.2 Please bring out specific interventions directed in favour of social groups, namely SC, ST, differently-abled, minorities and other vulnerable groups.

Specific interventions would be made as and when required.

3.3 If the scheme has any gender balance aspects or components specifically directed at welfare of women, please bring them out clearly?

There is no gender based budgeting in the Scheme, however based on the information available for 2016-17, out of 190 ENVIS staff more than 42% were women employees. Efforts will be made to cover eligible female School paas-outs/ drop-outs under the Green Skill Development Programme.

3.4 Please bring out special interventions, if any, in North East, Himalayan, LWE, Island territories and other backward areas.

ENVIS has a strong network in the North Eastern States. The ENVIS Centre at GB Pant Institute of Himalayan Environment and Development pertains to Himalayan ecosystem. The State ENVIS centres in Raipur, Chhattisgarh (LWE affected) Agatti, Lakshadweep (Island) and other backward areas like Patna, Bihar, Ranchi, Jharkhand etc. focus on 'Status of Environment and Related Issues''.

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In case of beneficiary oriented schemes, indicate the mechanism for identification 3.5 of target beneficiaries and the linkage with Aadhaar/UID numbers.

ENVIS Plus Hubs and ERPs would act as implementing agencies for the ENVIS Scheme. Aadhaar seeding of ENVIS staff as well as other target beneficiaries isbeing done, as directed by DBT Mission, Cabinet Secretariat.

Wherever possible, the mode of delivery should involve the Panchayati Raj 3.6 Institutions and Urban Local Bodies. Where this is intended, the preparedness and ability of the local bodies for executing the proposal may also be examined.

Not applicable.

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4.0 Cost Analysis

4.1 Cost estimates for the scheme duration: both year-wise, component-wise segregated into non-recurring and recurring expenses.

4.1.1Cost Estimate Year Wise:

Three Year Plan	Year	Outlay (₹ Lakh)
Fourteenth Finance Commission Period (2017-18 to 2019-20)	2017-18	2200.00
	2018-19	2419.22
	2019-20	2663.01
	Total	7282.23

4.1.2 Cost Estimate Component Wise:Note: Refer <u>Annexure-5</u> for justification of cost of ENVIS Scheme.

	Budget/ Object Head of Expenditure	Amount (₹ lakh)
01.00.05	Rewards	40.00
01.00.11	Domestic Travel Expenses	50.00
	Foreign Travel	100.00
01.00.13	Office Expenses	37.00
01.00.16	Publications	50.00
01.00.20	Other Administrative Expenses	80.00
01.00.26	Advertisement and Publicity	60.00
01.00.28	Professional Services	60.00
01.00.31	Grants-in-Aid	6805.23
	a) ENVIS Plus Hubs	1518.45
	b) ENVIS Resource Partners	1857.03
	c) Hardware (Non-recurring)	60.00
	d) ENVIS Secretariat/Cell/Focal Point	181.78
	e) SoE Report	662.00
	f) Special Publication	24.00
	g) National/Regional Evaluation Workshops	105.00
	h) ENVIS Portal/IT/Mobile App etc.	200.00
	i) District Grid Survey /Monitoring of CS &	2196.98
	CSS Schemes/Skill Development Programme/	
	Environment Channel	
		7282.23

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4.1.3 Cost Estimates for ENVIS Secretariat/Cell/Focal Point

Annual Allocation (for 2017-18): Recurring:

	Head of Expenditure	Amount in ₹
А.	Manpower	
	National Program Coordinator (NPC)	59711.00
	Statistician/GIS Expert	53111.00
	Sr. Information Officer	46079.00
	Program Offcer-(GSDP)	44000.00
	Content Writer/Copy Editor	38500.00
	Sr.Web Developer	34799.00
	Office Attendent	16182.00
	Total per month	2,92,382.00
	Total for One Year (2,92,382×12)	35,08,585
B.	Others	
	Contingencies, consumables, stationery, miscellaneous	2,00,000.00
	Hardware/ equipment, AMC, internet charges, photography equipment, Training/workshops,software and licence fees for software.	10,00,000.00
	Total	12,00,000.00
с.	Travel	4,00,000.00
D.	Institutional Service Charges (to be decided with the approval of the competent authority) presently (a) 7.5 % of actual expenditure	3,83,144.00
Gran	d Total (A + B + C +D)	54,91,729.00

Three Year Plan	Year	Total (₹ Lakh)
Fourteenth Finance	2017-18	54.92
Commission Period (2017-18 to 2019-20)	2018-19	60.41
	2019-20	66.45
	Total	181.78

Note: Refer <u>Annexure-5</u> for justification of cost of ENVIS Cell. The emoluments for ENVIS Cell Staff is calculated considering 10% annual increment over 2016-17 value. The amount proposed above may change in future if fresh proposals are called for setting up ENVIS Cell in the Ministry.

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6.1.5 Cost Estimate for ENVIS Plus Hubs & ENVIS Resource Partners: (Recurring for 2017-18)

	Head of Expenditure	Amount in ₹	#Amount in ₹
A.	Manpower		
	Programme Officer	35,079.00	35,079.00
	Information Officer	29,299.00	29,299.00
	IT Officer	23,696.00	23,696.00
	Data Entry Operator /Para-Taxonomist	11,000.00	11,000.00
	Total for one Centre per month	99,074.00	99,074.00
	Total for one Centre per year (99,074×12)	11,88,884.00	11,88,884.00
В.	Others (for one Centre per year) (database development, website maintenance, printing of Newsletters& Prakritii Map, contingency, stationery, consumables, AMC, Internet charges, training, inter-center interaction workshops, expenses on monitoring, ISBEID Database Development, Mobile App Development)	4,65,300.00	4,65,300.00
C.	Travel(for one Centre per year)	55,000.00	3,00,000.00
	Total for One Centre per year (A+B+C)	17,09,184.00	19,54,184.00
Gi	rand Total for 55 Centres per Year((17,09,184×46 + 19,54,184 x 9)	9,62,10	0,142.00

Costing for ENVIS Centers located in North-Eastern Region, Lakshadweep and Andaman and Nicobar Island which requires higer funding in travel head up to 3 lakh. The allocation under Trvael Head would be need based.

Note: At present there are 69 ENVIS Centers. The proposed Steering Committee of the ENVIS Scheme would examine the PD proposal for closure, change of theme of exsisting ENVIS Centers and establishing of new ENVIS Centers. The above calculation is by considering 55 ENVIS Centers for continuation during 2017-18 but theactual number may vary and depends on the decision of Sterering Committe. The funding for the F.Y 2017-18 and subsequent years is calculated considering 10% annual increment over 2016-17. It is also proposed to continue theabove funding pattern initially for three year i.e 2017-18 to 2019-20. Thereafter, the funding would be project based.

.4.1.5.1 Cost Estimate for ENVIS Plus Hubs & ENVIS RPs : (2017-18 to 2019-20)

Three Year Plan	Year	No. of ENVIS Centers	Total (₹ Crore)
Fourteenth Finance Commission Period (2017-2020)	2017-18	55	9.62
	2018-19	59	11.31
	2019-20	61	12.82
	Total	61	33.75

Note: Refer Annexure-5 for justification of cost of ENVIS Plus Hubs and Resource Partners

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4.1.6 Annual Allocation: Non-Recurring:

Funding support for equipment once in 3 years would be provided to ENVIS Centres (ENVIS Plus Hubs and ENVIS Resource Partners) for purchase of equipments/softwares on case to case basis as per requirement of the ENVIS Centers during 2017-18 to 2019-20 and following may be considered in non-recurring grant:

- PCs/Laptop with internet connectivity & UPS 4
- Scanners 2
- Printers 2
- Digital Cameras -1
- Fax Machines -1
- Photocopier-1

Other items necessary for carrying out the functional activities integral to the Scheme by the ENVIS Centers. The amount will be non-recurring and allocation made under this head is ₹ 60 Lakh, which may be enhanced as and when required with concurrence of Integrated FinanceWing of the Ministry. Funds would be provided to ENVIS Centers for procuring equipment as per DGS&D rate contract/ Government of India guidelines.

4.1.7 State of Environment (SoE) Report: ENVIS Centres have to be supported for preparing the SoE Reports. SoE Reports are to be published with a periodicity of two per State over a five year period, followed by a National SoE Report. An amount of \gtrless 6.62 crore has been estimated for preparation of 30 SoE Reports with 10 Reports in each of the years (2017-18 to 2019-20) by the ENVIS Centres. In addition to this other publications and SoE Reports may also be published for Metro Cities/Hot-Spots.

4.1.8 Grids Based Decision Support System (GRIDSS)- for Sustainable Management of Natural Resources/ Primary Data Collection/Skill Development/Environmetal Channel/ Monitoring of CS&CSS Schemes:

In the meeting held under the chairmanship of Secretary(EF&CC) for reviewing the proposal of ENVIS Scheme for continuation during 2017-18 to 2019-20, it was suggested by the Secretary (EF&CC) that ENVIS Centers (ENVIS Resource Partners and ENVIS Hubs) may be involved in the monitoring of various Schemes of the Ministry and other aspects of the environment as they are experts and have vast experience in their respective themes. Thus it is proposed that ENVIS Centers may be involved in ground truth verification as per requirement of the Ministry. The fund required would be around Rs 50 Lakh.

GRIDSS: In order to ascertain the Status of environment at district level it has decided to conduct district survey by dividing the country into grid of 50 Km x 50 Km. Thus, it is proposed to monitor the Districts by dividing the country into grids of 50km x 50km (or less) for collection of information on various environmental parameters and status of environment. As this is an additional mandate for ENVIS Scheme, it is proposed to take 100 Districts in three years. As the budget for F.Y 2017-18 has already been finalized, the number of parameters may vary from Districts to District , Grid to Grid and theme to theme and hence, it would be difficult to asceratin the cost at this stage. The ENVIS Advisory Comittee would finanlise the parameters for monitoring and initially 11 Distircts in Bio Geographic

Region/Zone would be taken on pilot basis during F.Y 2017-18. The fund requirement for the GRIDSS would be around Rs 10.00 Cr

Green Skill Development Program: Most of the Skill Development Programs in the country focus on Industrial Skills such as electrician, welder, carpenter, fitter etc. There is very less focus on Green Skill Development which would be essential for sustainable environment. The Ministry has not been involved in this sphere of activity. In this context, during the F.Y 2017-18 to 2019-20 the Green Skill Development Programme would be taken up to develop, inter alia, a team of 1) Para-Taxonomists who would be trained on field identification of flora and fauna, botanical surveys, processing of herbarium and raw drug voucher specimen, vegetation monitoring, data digitization, Nature photography, preparation of Peoples' Biodiversity Register (PBR) for Biodiversity Management Committees (BMCs) Ethno-Botanical Documentation, Gardening nursery & landscaping techniques, skills to prepare basic forms of traditional medicine and semi-processing value added products, 2) Soil & Water Quality Analyst/Technicians who would be trained in collection and analysis of soil and water samples, 3) Cleaner Production and Effluent Treatment Plant Operator would be trained in safe and environemt friendly operation of Sewage Treatment Plant (STP) and Effluent Treatment Plant (ETP) and 4) Air Quality Monitoring and Testing Analyst/Technician would be trained in skills required for air quality monitoring such as maintenance of air quality monitoring stations, sampling, analysis and record keeping . The EI Division would explore more skills for Green Skill Development Programme and it is estimated that around 200 youth would be trained during 2017-18 to 2019-20. A detailed note is given in Annexure-8. The target for skilling under various categories like Biodiversity Conservationists, Para-Taxonomists, Effluent Treatment Plant Operator, Air Quality Monitoring and Testing Analyst/Technician and other relevant areas would be decided in consultation with NSDA. The fund requrment for GSDP would be Rs 10.00 Cr in three years.

Environmental Channel: Under ENVIS Scheme for wider dissemination of Environment Information Environment Knowledge an Environmental Channel would be established by 2019-20. This would involve development of environmental content/films, recording, dubbing, transmission via Doordarshan etc. The fund required for Environmental Channel would be Rs 1.46 Cr.

Note: The total budget for above activities would be \gtrless 21.96 Cr for three years which may be enhanced with the approval of IFD and competent authority.

4.1.7 National and Regional Evaluation Workshops: Third-Party Evaluation (by a Committee with independent experts) of ENVIS Centres through National and Regional Evaluation Workshops would be conducted. Not more than four Regional Evaluation Workshops (North, South, North-East and West regions) may be held in any year. Regional and National Workshops possiblily may be organized in alternate years. The cost estimate of the workshops for three years is estimated tobe ₹105 lakh. In addition to this worokshop would be organized for launch of Skill Development and Grid Based Survey Program.

4.1.8 Special Publications: ENVIS Centerswould also come out with valuable reports/books/journals/publications. Annual cost would be approximately ₹ 8-9 lakh per year.

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Total allocation during 2017-18 to 2019-20 for Special Publication would be ₹ 24 Lakh.

4.1.9 ENVIS Portal /IT Infrastructure for ENVIS: ENVIS Secretariat would undertake the maintenance and up-gradation of ENVIS portal and technical management of ENVIS websites.EI Division is currently under process of revamping the ENVIS websites as well as the ISBEID website by including more accessibility options, changing structure/themes, developing central monitoring mechanism. Therefore, for future development of the ENVIS websites/ISBEID and GIS facility under ENVIS Secretariat, development of online monitoring portal of MoEFCCfunds would be allocated for up-gradation, development and annual maintenance contract amounting to ₹ 2 crore.Amount for development may be enhanced with the approval of IFD without enhancing the total outlay of the ENVIS Scheme during 2017-18 to 2019-20.

In August, 2016, an email was received from Department of Electronics & Information Technology (DeitY), Ministry of Communications & Information Technology, Government of India in reference to the GIGW based website compliance testing of ENVIS Centers websites, being done by DeitY. DeitY has initiated the Website Quality Evaluation project to test and certify around 1500 Government Websites as per the Guidelines for Indian Government Websites (GIGW). The project is being executed by Standardization Testing and Quality Certification (STQC) Directorate, an attached office to DeitY having mandate to provide quality assurance services in the area of Electronics & Information Technology.

In a recent court case, Hon'ble Madras High Court has directed that all government websites shall be GIGW compliant. In this context, NIC has informed that all ENVIS websites including ENVIS portal is currently hosted on shared server. As there were many recent cases of hacking Government websites and needs urgent action. All ENVIS websites need restructuring as per recent guidelines issuedby DeitY and these may be migrated on to the cloud server/Virtual machine (VM) a highly secured environment at the earliest.

The communication received from Secretary, Ministry of Social Justice & Empowerment regarding implementation of Accessible India Campaign (AIC) which is also monitored by Hon'ble Supreme Court of India makes it mandatory for all the government websites to be accessible to all. (Refer Annexure-3)

The basis of these cost estimates along with the reference dates for normative 4.2 costing.

The basis of cost estimates for recurring and non recurring grant for ENVIS Centre (ENVIS Plus Hubs and ENVIS Resource Partners) is calculated considered 10% normative increment from F.Y 2016-17. The cost of software development, primary data collection, Gren Skilling, Grid Survey, Environemntal Channel and CS&CSS monitoring would depend on the proposals from ENVIS Resource partners, ENVIS Plus Hubs and NIC. Thus, the amount proposed is tentative as per requirement of the revamped ENVIS scheme and may increase in future as per requirement of the Scheme.

4.3 In case pre-investment activities or pilot studies are being carried out, how much has been spent on these?

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Not applicable.

4.4 In case the scheme involves payout of subsidy, the year wise and component wise expected outgo may be indicated.

Not applicable.

4.5 In case the land is to be acquired, the details of cost of land and cost of rehabilitation/resettlement, if any.

Not applicable.

4.6 In case committed liabilities are created, who will or has agreed to bear the legacy burden? In case assets are created, arrangements for their maintenance and upkeep?

Assets created with the funds released by Government of India would be vested with the Ministry which will take decisions thereon as deemed fit.

- 5. Scheme Financing
- 5.1 Indicate the sources of finance for the Scheme: budgetary support, extrabudgetary sources, external aid, state share, etc.

From budgetary support

5.2 If external sources are intended, the sponsoring agency may indicate, as also whether such funds have been tied up?

Not applicable.

5.3 Indicate the component of the costs that will be shared by the State Governments, local bodies, user beneficiaries or private parties?

Not applicable.

6. Approvals and Clearances

Requirement of mandatory approvals and clearances from various local, state and national bodies and their availability may be indicated in a tabular form (land acquisition, environment, forestry, wildlife etc.)

S.No.	Approvals/ Clearances	Agency concerned	Availability (Y/N)

Not applicable.

7. Human Resources

7.1 Indicate the administrative structure for implementing the Scheme. Usually creation of new structures, entities etc. should be avoided

There is no change in adminstrative structure of the Scheme.

7.2 Manpower requirement, if any. In case posts, permanent or temporary, are intended to be created, a separate proposal may be sent on file to Pers. Division of

Department of Expenditure (such proposals may be sent only after the main proposal is recommended by the appraisal body)

Not applicable

7.3 In case outsourcing of services or hiring of consultants is intended, brief details of the same may be provided.

At present there is no consultant for ENVISScheme. But as the scope of the scheme widens, consultants may be appointed as and when required.

8. Monitoring and Evaluation

8.1 Please indicate the monitoring framework for the Scheme and the arrangements for statutory and social audit (if any).

8.1.1 Internal Monitoring:

a) Internal monitoring of the ENVIS Scheme would be done by ENVIS Secretariat and EI Division on regular basis and assessment-cum evaluation during visit to the respective ENVIS Centres.

b) ENVIS Steering Committee (ESC):ESC, chaired by the Secretary (EF&CC), is the highest body envisaged in the Scheme to review the overall functioning of ENVIS Scheme and for mid course corrections .It would consist of another 4 officials [Director General of Forests & Special Secretary or his representative, Senior Adviser dealing with EI Division, Additional Secretary &Financial Adviser and Economic Adviser (EI Division) who acts as Member Secretary].

c) ENVIS Advisory Board (EAB): The EAB is proposed to be set up which may be chaired by Senior Adviser dealing with EI Division and consist of 5 non-official member experts selected with the approval of the Chair.

Terms of Reference (TOR) of EAB

The Board shall oversee, monitor and review the overall operation and management as well as functioning and performance of ENVIS Network in all aspects with a view to attain the objectives laid down for the Scheme and improving the system operation. It shall lay down guidelines for evolving concept, structure and work procedure for ENVIS, with a view to effectively implement the Scheme, including laying down the time schedule for its implementation at different stages of its operation as well as suitable designs and formats for information collection, storage ,retrieval and monitoring.

- It shall lay down guidelines for framing the Memorandum of Understanding (MOU) to be entered between the ENVIS Centres (ENVIS Resource Partners and ENVIS Plus Hubs) and ENVIS Focal Point indicating therein responsibilities and functions of these Centres, while carrying out the mandated activities.
- It shall suggest new areas in the field of Environmental Sciences and identify appropriate institutions for setting up ENVIS Centres for a comprehensive webenabled information system network. It shall formalise inter-institutional link-ups, coordination and linkages with other institutes, in India and abroad, for sourcing their information and databases. The Committee may co-opt other members or

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panel of experts, as deemed necessary, with the concurrence of Chairperson for recommending mid-course corrections as appropriate and for general improvement of the ENVIS Network and for future improvements.

- The tenure of the Committee will be two years from the date of issue of its constituting Notification.
- The Committee may meet twice in a year or earlier as and when necessary as deemed fit by the Chairperson in New Delhi or elsewhere in India.
- Expenditure on TA/DA and sitting fee of non-official members will be borne by the Ministry, as admissible under the relevant Government of India rules.

8.1.2 External Monitoring: Performance Review of ENVIS Centres: This review is based on each Centre's evaluation at a National/ Regional Workshop by Independent Expert Committee concerned, coupled with physical visit by senior Officers of the Ministry for onsite assessment of facilities and operations as per applicable Evaluation Matrix, for determining each Centre's eligibility to receive the recurring grant-in-aid.

8.2 Please indicate the arrangement for third party/independent evaluation. Please note that evaluation is necessary for extension of scheme from one period to another.

As mentioned in Sl. No 8.1.2 above.

9.0 Approval sought for continuation of ENVIS Scheme during 2017-18 to 2019-20 and a budgetary provision of ₹ 72.82 Crore.

Annexure -1	List of ISBEID Modules & Sub-Modules	Page No: 23-31
Annexure -2	O.M of IC&SD Division regarding India and Australia MoU on environment	Page No: 32-34
Annexure- 3	Communication pertaining to compliance of GIGW Guidelines and Accessible India Campaign	Page No: 35-40
Annexure- 4	MoM held on 29.11.2016 under the chairmanship of Hon'ble Minister (EF&CC).	Page No: 41-47
Annexure- 5	Justification for Additions in ENVIS Scheme and Cost Justifications	Page No: 48-98
Annexure- 6	SFC Note of 12 th Plan Period	Page No: 99-274
Annexure– 7	MoM of Scientific Advisory Commitee (XIIth Plan Period)	Page No:275-292
Annexure– 8	Detailed Note on Skill Development Programme	Page No:293-299
Annexure– 9	Extracts of Report of Evaluation Committee on XII Plan Scheme of MoEF&CC,2016	Page No:300-307

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oM with Chairman, CPCB	Page No:314-316

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ISBIED Modules, Sub Modules and Fields

MODULES	SUB MODULES	FIELDS	UNIT
I. ADMINISTRATIVE	1.General	Name	
		No. of District (With Name)	
		No. of Mandals/Thasils/Talukas	
		(With Name)	
		No. of Blocks (With Name)	
		No. of Municipalities (With Name)	
		No. of Panchayats	
		No. of Cities with million plus	
		population (With Name)	
		No. of Tribal Settlements	
		Elevation above mean sea	М
		level(Maximum)	
		Elevation above mean sea	М
		level(Minimum)	
		Total Geographical Area	M. Ha.
		GDP of state (Sector Wise)	
		-Primary	
		-Secondary	
		-Tertiary	
	2. Socio-Economics	No. of BPL household in millions	
		% of Household below poverty line	
	3. Climate	Average mean monthly	°C
		Temperature (Maximum)	
		Average mean monthly	°C
		Temperature (Minimum)	
		Total Annual Rainfall	mm
		Relative Humidity	
	4. Demography	Population (for last 4 decades-	
		1961-71-81-91-2001)	
		Total Population	
		Male Population	
		Female Population	
		Density	/Km ²
		Area In	/Km ²
		No. of females/thousands male (sex	
		ratio)	
		% of Literacy	
		% of Population attending school	
		Crude Birth Rate (Nos. per 1000	
		population)	
		Crude Death Rate (Nos. per 1000	
		population)	
MODULES	SUB MODULES	FIELDS	UNIT

II. INFRASTRUCTURE	1.Housing	Permanent	
II. INTRASTRUCTURE	1.110using	Semi- Permanente	
		Temporary	
		Average Household Size (Person	
		per Household)	
	2. Medical and	No. of Government Hospitals	
	Health Services	-	
		No. of Registered Private	
		hospitals/Nursing Homes	
	3. Transport	No. of Railway Station	
		Length of Railway Line	Km
		Length of National Highway	Km
		Length of of State Highway	Km
		Length of other roads	Km
		No of Domestic Airports	
		No of international Airports thereof	
III. ENERGY	1.Non-Renewable	Coal Power Generation	M.Kwh/A
		Installed Capacity	MW
		Gas Power Generation	M.Kwh/A
		Installed Capacity	MW
		Oil based Power Generation	M.Kwh/A
		Installed Capacity	MW
		Atomic Power Generation	M.Kwh/A
		Installed Capacity	MW
	2.Renewable	Hydel Power Generation	M.Kwh/A
		Installed Capacity	MW
		Windmill Power Generation	M.Kwh/A
		Installed Capacity	MW
		Solar photovoltaic power generation	M.Kwh/A
		Installed Capacity	MW
		Biogas Power Generation	M.Kwh/A
		Installed Capacity	MW
		Other Biomass Power Generation	M.Kwh/A
		Installed Capacity	MW
	3.Electric	Industrial and Commercial	M.Kwh/A
	Consumption	A am outure	M V1-/A
		Agriculture	M.Kwh/A
	4 En anov	Domestic	M.Kwh/A
	4.Energy Consumption	LPG	t/a
	Consumption	Other Petroleum Products	t/a
		Coal	t/a
		Natural Gas	t/a
		Others	t/a

MODULES	SUB MODULES	FIELDS	UNIT
IV. AGRICULTURE	1.Agriculture Area	Total agriculture area	Ha.
	Classification	Area under non-agriculture use	Ha.
		Barren and uncultivable land	Ha.
		Permanent pasture /grazing unit	Ha.
		Net Irrigated land	Ha.
		New Sown area	Ha.
		Plantation Crop	Ha.
		Area Under organic farming thereof	Ha.
	2. Agricultural	Total Production of Crops	t/a
	Production	Yield of Kharif Crop %	
		Yield of Rabi Crop %	
		Yield of Other Crop %	
	3. Crop Production	Name	
	(Plantation crops)	Production	M. t/a
	(in million tons per	Rice	
	annum)	Sowing Area	M.Ha
		Production	M. t/a
		Wheat	
		Sowing Area	M.Ha
		Production	M. t/a
		Pulses	
		Sowing Area	M.Ha
		Production	M. t/a
		Total Food Grain	
		Sowing Area	M.Ha
		Production	M. t/a
		Cotton	
		Sowing Area	M.Ha
		Production	M. t/a
		Jute & Mesta	
		Sowing Area	M.Ha
		Production	M. t/a
		Sugarcane	
		Sowing Area	M.Ha
		Production	M. t/a
		Tobacco	
		Sowing Area	M.Ha
		Production	M. t/a
		Oil Seeds	
		Sowing Area	M.Ha
		Production	M. t/a
		Others	
		Sowing Area	M.Ha
		Production	M. t/a

MODULES	SUB MODULES	FIELDS	UNIT
	4. Fertilizer	Nitrogen	M. t/a
	Consumption	Phosphate	M. t/a
		Potash	M. t/a
		Others	M. t/a
	5. Pesticides	Insecticides	M. t/a
	Consumption	Fungicides	M. t/a
		Weedicides	M. t/a
		Rodenticide	M. t/a
		Fumingants	M. t/a
		Others	M. t/a
V. INDUSTRIES	1.Category of	Total No. of Large Scale Industries	
	Industry	Total No of Medium Scale	
		Industries	
		Total No of Small Scale Industries	
		Total No of Red Categories	
		Industries	
		Total No of Orange Categories	
		Industries	
		Total No of Green Categories	
		Industries	
	2. Mining &	Iron	000 t/a
	Quarrying	Copper	000 t/a
		Lead	000 t/a
		Zinc	000 t/a
		Nickel	000 t/a
		Manganese	000 t/a
		Bauxite	000 t/a
		Coal	000 t/a
		Others (Chromites)	000 t/a
		Name of the Mineral Resources	
VI. TOURISM &	1. Tourism &	Name and location of Heritage	
HERITAGE	Heritage	Sites	
		Name and location of Religious	
		places/centres	
		Name and location Archaeological	
		monuments/sites	
		Name and location of Scenic Sites	
		Name and location of Tourist	
		Resorts	

MODULES	SUB MODULES	FIELDS	UNIT
VII. NATURAL	1. Land Use	Total Geographical Area	M.Ha
RESOURCES	Classification	Forest	M.Ha
		Non-Agriculture use	M.Ha
		Barren and uncultivable land	M.Ha
		Permanent Pastures and other	M.Ha
		grazing land	
		Miscellaneous tree crop and groves	M.Ha
		Cultivable wasteland	M.Ha
		Fallow land other than current	M.Ha
		fallow	
		Current fallow Net Area Sown	M.Ha
		Gross cropped area	M.Ha
		Area sown more than once	M.Ha
		Net Irrigated area	M.Ha
		Gross Irrigated Area	M.Ha
	2. Land	Degraded land area	000 ha
	Degradation	Degraded Irrigated Area	000 ha
		Area affected by shifting	000 ha
		cultivation	
		Deforestation rate	000 ha
		Total Salt affected land	000 ha
		Salinisation rate	000 ha
		Area effected by desertification	0000 ha
	3.Waste Land	Gullied & or Ravenous Land%	
		Upland with or without Scrub%	
		Water Logged & marshy Land%	
		Land affected by Salinity Alkanity	
		Coastal/inland%	
		Under utilised degraded Notified	
		Forest Land%	
		Shifting Cultivation Area%	
		Degarded Land under Plantation	
		Crop%	
		Degraded Pastures/Grazing Land%	
		Mining Industrial Wasteland%	
		Sand-Deserted Coastal%	
		Steep Slopping Area%	
		Barren Rocky/Stony Waste/Sheet	
		Rocky Area%	
		Snow Covered and/or Glacial	
		Area%	
	4. Types of	Name of wetland of National	
	Wetlands	Importance	
		Name of wetland of international	
		Importance	
		Coastal/Estuaries	Ha.
		Fresh Water Lakes	Ha.
		Tanks/Ponds/Reservoirs/Dams	Ha.

MODULES	SUB MODULES	FIELDS	UNIT
		Marshes (Tidal/Non-Tidal)	Ha.
		Swamps	Ha.
		Mangroves	Ha.
		Flood Plains	Ha.
		Total Area of Wetland	Ha.
		Others	Ha.
	5. Soil Type	Black Soil	M. Ha.
		Red Soil	M. Ha.
		Desert Soil	M. Ha.
		Grey & Brown Soil	M. Ha.
		Saline & Alkaline Soil	M. Ha.
		Laterite Soil	M. Ha.
		Alluvial Soil	M. Ha.
		Mountain Soil	M. Ha.
		Mix Red & Black Soil	M. Ha.
		Peaty Soil	M. Ha.
VIII. FOREST	1. Distribution of	Dense Forest	Ha.
RESOURCE	Forest Cover	Open Forest	Ha.
		Mangroves	Ha.
		Tree Outside Forests	
		Numbers	
		Area in	Ha.
		Non Forest	Ha.
	2. Recorded Forest	Reserved Forest	Ha.
		Protected Area	Ha.
		Unclassed Forest	Ha.
	3. Mining in	Bauxite	Ha.
	Forests	Chromites	Ha.
		Copper	Ha.
		Iron	Ha.
		Manganese	Ha.
		Others	Ha.
	4. Actual Forest	Dense Forest (Crown density Cover	Ha.
	Cover by	Area above 40%) (in Ha.)	
	Density Class	Open Forest (Crown Density 10%	Ha.
		to 40% in ha.)	
		Mangrove (in ha.)	Ha.
	5. Forest Produce	Timber Poles	M. m^3/a .
		Fuel Wood	M t/a
		Pulp & Match Wood	M t/a
		Sal Seeds	M t/a

MODULES	SUB MODULES	FIELDS	UNIT
		Kandu/Bedi leaves	M t/a
		Gums & Resins	M t/a
		Cane/Rattan & Bamboo	M t/a
		Grass/Fodder	M t/a
		Drug/Tannins	M t/a
		Spices	M t/a
		Lac	M t/a
		Others	M t/a
		Name of District	
		No. of JFMC	
IX. WATER	1. Source of Water	Name of Rivers	
RESOURCE		Total Length	Km
		Catchment Area	Km2
		Seasonality (Perennial/Seasonal)	
		Canals(Length)	Km
		Reservoir	Mcm
		Tanks, Lakes & Ponds	Ha.
		Brackish Water	Ha.
		Govt. Owned Canals	Ha.
		Private Canals	Ha.
		Tanks	Ha.
		Wells	Ha.
		Tube Wells	Ha.
X. GROUND	1. Status of	Total replenishable Ground Water	MHaM/Yr
WATER	Ground Water	Provision for Industrial, Domestic and	MHaM/Yr
RESOURCE		other use	
		Available Ground Water Resource	MHaM/Yr
		Net Draft	MHaM/Yr
		Balance Ground Water	MHaM/Yr
		Level of Ground Water Development (%)	MHaM/Yr
		Utilisation Ground Water Resources for irrigation in Net terms	MHaM/Yr
		Gross Draft Estimated on Pro-data basis	MHaM/Yr
	2. Categorisation of Water Level	Pre-Monsoon average depth to water level	М
		Post Monsoon average depth to water level	М
		No. of Over Exploited Area	
	3.Use of Ground	Total Ground Water Resource	Ha m
	Water	Quantity of Ground water for irrigation	Ham

MODULES	SUB MODULES	FIELDS	UNIT
		Available ground water for irrigation	Ha m
		Utilisation ground water for irrigation	Ha m
		Net ground water draft	Ha m
XI ECOLOGY	Ecological Areas (of State)	Name of Biogeographically Zones	
	1. Physiographical	Name of National Parks	
	Features	Name of Wildlife Sanctuaries	
		Name of Bird Sanctuaries	
		Name of Tiger Reserves	
		Name of Elephant Reserves	
		Name of Biosphere Reserves	
		Name of Protected Mangroves area (Private & Public)	
		Length of coastline	Km
	2. Botanical Gardens	Name of Botanical Garden	
	2. Bowiniour Gurdens	Area of Botanical Garden	
		Location	
		Uniqueness	
	3. Zoological Parks	Name of Zoological Park	
	er Zeologiour i unite	Area of Zoological Park	
		Location	
		Uniqueness	
XII SANITATION		No of Town covered	
		No. of Town not covered	
		Total No. of treatment plants	
XIII. WATER	1.Water Pollution	Rivers/Lakes/Canals/Tanks/Wells	
POLLUTION		Settlement and Land Use Activity along the Coastline	
		Length of Coastline (KM)	Km
		Area (Sq. km)	Km2
		Population (lac)	Lac
		No of Coastal City/Towns	
		Dependent Coast Land Use	
		Preferring Coast Land Use	
		Water based land use	
		Municipal and domestic Waste%	
		Industrial Waste%	
		Toxic Metals%	
		Oil Pollution %	
		Fertilizer %	
		Dredging & Reclamation %	
		Siltation%	
		Discharge of Coolant water%	
		Toxic Chemicals%	
		Offshore Mining%	

MODULES	SUB MODULES	FIELDS	UNIT
	2. Health	Type of Disease	
		Name of Disease	
		No of Death	
XIV. AIR POLLUTION	1. Industrial	SO2x	Mg/m3
		NO2x	Mg/m3
		Suspended Particulate Matter (SPM)	Mg/m3
		Respirable Suspended Particulate Matter (RSPM)	Mg/m3
	2. Residential	SO2x	Mg/m3
		NO2x	Mg/m3
		Suspended Particulate Matter (SPM)	Mg/m3
		Respirable Suspended Particulate Matter (RSPM)	Mg/m3
	3. Vehicular	No of Vehicles	
	Pollution	Type of Vehicles	
	4. Health	Name of Disease	
		No of Death	
XV. BIODIVERSITY	1. Flora	Total Species	
		Redbook Species No.	
	2. Fauna	Total Species	
		Redbook Species No.	
XVI. WASTE	1. Type of Waste	Hazardous Waste (HW) n t/a	t/a
		E-Waste thereof in t/s	t/a
		Biomedical waste (BMW)	t/a
		Municipal Solid Waste (MSW)	t/a
		Plastic Waste	t/a
		Waste Water	t/a
		Treatment /Disposal (for all 5)	
	2. Clean	Type of Industries	
	Technology	Name of Tech. used	
	3. Effluent	Name of District	
	Treatment Plant /CEPT	N. of Plants	
XVII. DISASTER	1. Disaster	Type of Disaster	
		Year	
		Affected district in nos.	
		Population affected (in millions)	
		Damage in crore INR	

(total 337 parameters)

Most Immediate

F.No.5(12)/1/2015-IC.II(Part) Government of India Ministry of Environment, Forest and Climate Change **IC&SD** Division

.....

3rd Floor, Jal Wing, Indira Paryavaran Bhawan, Jorbagh Road, New Delhi

Dated: 15th February, 2017

OFFICE MEMORANDUM

Subject: Preparatory Meeting in connection with the visit of India Delegation led by HMEFCC to Australia from 1-4 March, 2017 to sign an MOU in the field of Environment with Australia and to attend 1st Meeting of India-Australia Joint Working Group.

An Indian delegation, led by HMEFCC, is visiting Australia from 1st to 4th, 2017 for signing of India-Australia Memorandum of Understanding (MoU) in the field of Environment followed by the 1st Meeting of India-Australia Joint Working Group. The JWG shall discuss the following topics:

- (i) Control of air pollution
- (ii) Control of water pollution
- Waste Water Management, Treatment and re-use of treated effluents (iii)
- Conservation and recovery of threatened species (iv) (v)
- Climate Change-Blue Economy
- Addressing Illegal trade in fauna and flora (vi)
- Environmental information system (vii)

Brief material as well as talking points is required to be submitted to 2. HMEFCC on the above topics immediately. In this connection, a preparatory meeting will be held under the chairmanship of Shri Arun Kumar Mehta, Joint Secretary in his chamber, 3rd Floor Prithvi Wing, IPB at 3.00 PM on 17th February, 2017. Kindly make it convenient to attend the meeting or nominate an officer of appropriate level conversant with the subject matter to participate in the meeting.

Vogent Pl. put up. Contd.2/-Yash 'M 15/2/17 DD (AV)

3. It is also requested to kindly send in advance a copy of background/ briefing material (at <u>rakesh.68@gov.in; kaushik.rishi@nic.in</u>) on the above topic concerning you in addition to bringing the same in the meeting.

Rahmh Kr

(Rakesh Kumar) Director (IC&SD) Tel: 24695368 Email: rakesh.68@gov.in

TO:

- 1. Shri R. S. Prasad, Joint Secretary
- 2. Dr. M. Hota, Adviser (CP)
- 3. Shri Yashvir Singh, Economic Adviser
- 4. Shri Brijesh Sikka, Adviser (NRCD)
- 5. Shri S. P. Vashishth, DIG(WL)
- 6. Shri A. K. Pateshwary, Director (CP)

7. Shri Manoj Kumar Gangya, Director (HSMD)

- 8. Shri A. B. Akolkar, MS, CPCB
- 9. Shri Rishi Kaushik, Section Officer (IC&SD)

Copy for information to:

- 1. PPS to JS(AKM)
- 2. PPS to Director (IC&SD)

https://mail.gov.in/iwc_static/layout/shell.html?lang=en-US&3.0.1.2.0_15121607

Subject: Visit of India Delegation led by HMEFCC to Australia from 1-4 March, 2017-Reg From: "Amit Vashishtha" <amit.vashishtha@nic.in>

To: rakesh.68@gov.in, kaushik.rishi@nic.in

 Back Ground Note for MoEF&CC.doc (48kB)
 Talking Points for HMEFCC for Australia MoU.docx (18kB)

 ISBEID Modules.xlsx (20kB)
 List-envis-centres.doc (461kB)

Dear Sir,

This has reference to IC&SD Division's O.M No. 5(12)/1/2015-IC.II (Part) dated 15.02.2017 on the above mentioned subject. In this connection, please find the attached soft copy of information pertaining to Environmetal Information Division to be submitted to HMEFCC.

Amit Vashishtha Scientist 'C' MoEF&CC
No. C-30013/2/2017-Ad.IVA Government of India Ministry of Finance Department of Revenue Central Board of Excise and Customs

5th floor, HUDCO Vishala Building, Bhikaji Cama Place, New Delhi Dated HFebruary, 2017

То

All Pr. Chief Commissioners/Chief Commissioners/All Commissioners/Directors General under CBEC.

Sub: Implementation of Guidelines for Indian Government Websites (GIGW).

Sir/Madam,

I am directed to forward herewith a copy of OM No.16011/01/2012e.Gov(B) dated 06.01.2017 received from Ministry of Personnel, Public Grievances & Pensions, Department of Administrative Reforms & Public Grievances on the subject mentioned above for information and necessary action.

Yours faithfully,

Encl. As above.

(Rajpal Singh) Under Secretary to the Govt. of India

Copy to:

The DG (Systems), New Delhi with the request to kindly upload this circular on the Website of CBEC.

(Rajpal Singh) Under Secretary to the Govt. of India



BY)FTS=375771

F. No. O-21030/1/2017-Coord. Government of India **Ministry of Finance** Department of Revenue

New Delhi, dated ³⁰ ¹ January, 2017

OFFICE MEMORANDUM

Subject : Implementation of Guidelines for Indian Government Websites (GIGW).

The Undersigned is directed to enclose a copy of Office Memorandum No- N-16011/01/2012-e.Gov(B) dated 6th January, 2017 received from Ministry of Personnel Public Grievances and Pensions (Department of Administrative Reforms & Public Grievances) on the above mentioned subject for information.

Encl: As Above

Novenotra Kuman (Narendra Kumar) Under Secretary (Coord) Telefax No: 23095539

- Chairman (CBEC) ·Л.
 - Chairman (CBDT) 2.
 - Director, Enforcement Directorate 3.
 - DG, CEIB 4.
 - Director, FIU-IND 5.
 - Director (Hqrs), Revenue Hqrs 6.
 - Director (NC), Revenue Hqrs 7.
 - Deputy Secretary (Admn), Revenue Hors 8.
 - USCGAR 9.

Copy to :

- Commissioner (Coord & system), CBDT
- 1. Commissioner (Coord.), CBEC 2.

Ch (EC) in why Member (Admn)

JSKA) - M riverlati (Adtiv



 $\sum_{i=1}^{\infty} (i+i) = i$

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No.N-16011/01/2012-e.Gov(B) Government of India Ministry of Personnel, Public Grievances & Pensions Department of Administrative Reforms & Public Grievances



5th Floor, Sardar Patel Bhawan, Sansad Marg, New Delhi – 110001

Dated the 6th January, 2017

OFFICE MEMORANDUM

Implementation of Guidelines for Indian Government Websites Subject: (GIGW).

The undersigned is directed to send herewith a copy of the interim judgment delivered by Hon'ble High Court of Judicature at Madras on the above subject for information and necessary action.

GIGW are available on both the websites of Department of Administrative 2. Reforms & Public Grievances (www.darpg.gov.in) and Department of Electronics & Information Technology (www.deity.nic.in).

(Anurag Srivastava) Deputy Secretary to the Govt. of India Tel. No.23362325

Ц Encl: 19-1-17 Encl:

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Secretaries of all Ministries/ Departments of Government of India Wall & All & Alfonnoval We all subject to Andrea Marine & Marin 2011/113

IN THE HIGH COURT OF JUDICATURE AT MADRAS

(SPECIAL ORIGINAL JURISDICTION)

FRIDAY THE NINETH DAY OF DECEMBER

TWO THOUSAND AND SIXTEEN

PRESENT :

THE HONOURABLE MR.SANJAY KISHAN KAUL, THE CHIEF JUSTICE AND THE HONOURABLE MR.JUSTICE M. SUNDAR

WP.NO.29214 OF 2015

[PETITIONER

A.Syed Ansari S/o.Akbar Ali 1/6 Stelin Street Periyar Nagar Avadi Chennai-71

Vs

Union of India Rep. by its Secretary Ministry of Communications & Information Technology Electronics Niketan 6 CGO Complex Lodhi Road New Delhi-110 003

Department of Administrative Reforms & Public Grievance Rep. by its Director Ministry of Personnel Public Grievance & Pensions Sardar Patel Bhavan Parliament St New Delhi-1.

National Informatices Centre Rep. by its Director Genl Dept of Electronics & I.T Ministry of Communications & I.T A Block CGO Complex Lodhi Road New Delhi-1

The Chief Commissioner for Persons with Disabilities Sarojini House 6 Bhaqwan Dass Road New Delhi-110 001.[RESPONDENTS]

Appetition u/a.226 of the Constitution of India, praying that in the circumstances stated therein, and in the affidavit filed therewith the High Court will be pleased to issue a Writ of Mandamus, directing the respondent to forthwith ensure that all Government Websites are made complaint with the Guidelines for Indian Government Websites (GIGW) incorporating the World wide Web Consortium (W3C) content accessibility guidelines within a time frame fixed by this Honourable Court may deem

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fit, proper and necessary in the facts and circumstances of the case.

ORDER: This Writ Petition coming on for hearing on this day, upon perusing the petition and the affidavit filed in support thereof the order of the High Court dt.14.6.16 and 9.12.2016 upon hearing the arguments of Mr.A.Yogeswaran, Advocate for the Petitioner, and Mr.Venkataswamy Babu SPCCG for R1 to R4 the Court made the following order:

Memo has been filed by the first two respondents showing the progress.

The Central Government may write to the State Government of Tamil Nadu to facilitate the State Government also to proceed in the same way.

List for further compliance on 03.02.2017.

Sd/-Asst.Registrar (CS-CCC)

) Sub Asst. Registrar

/true.copy/

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The Secretary, Govt of India, Ministry of Communications & Information Technology Electronics Niketan 6 CGO Complex Lodhi Road New Delhi-110 003

The Director, Department of Administrative Reforms & Public Grievance Ministry of Personnel Public Grievance & Pensions Sardar Patel Bhavan Parliament St New Delhi-1.

The Director General, National Informatices Centre Dept of Electronics & I.T Ministry of Communications & I.T A Block CGO Complex Lodni Road New Delhi-1

The Chief Commissioner for Persons with Disabilities Sarojini House 6 Bhagwan Dass Road New Delhi-110 001.

The section Officer, Writ Section, High Court, Madras. (To list the case on 3,2,2017)

1 cc to Mr. Venkataswamy Babu Senior Panel Cousnel, Se. 72575

DATED : 9.12.2016

ORDER

WP.No.29214/2015

Giving direction etc. as stated therein.

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Minutes of Meeting to review infrastructure facilities in respect of Air, Water, Industrial and Noise Pollution under the Chairmanship of Hon'ble Minister of Environment, Forest and Climate Change

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A meeting was held under the Chairmanship of Shri Anil Madhav Dave, Hon'ble Minister of Environment, Forest and Climate Change (MEF&CC), with the officials of MEF&CC, Ministry of Earth Sciences (MES), Ministry of Water Resources (MWR), Central Water Commission (CWC), Indian Institute of Tropical Management (IITM), Indian Meteorological Department (IMD), Central Pollution Control Board (CPCB), National Environmental Engineering Institute, State Pollution Control Boards (SPCBs) of Haryana and Uttar Pradesh and Delhi Pollution Control Committee (DPCC) at 06.00 PM on 29th November, 2016 at Indira Paryavaran Bhawan, Jor Bagh Road, New Delhi to review infrastructure facilities for monitoring of Air, Water, Industrial and Noise Pollution. The list of participants is annexed.

At the outset, Hon'ble MEF&CC, welcomed all participants and asked the Secretary, EF&CC to explain the purpose of the meeting.

Shri Ajay Narayan Jha, Secretary, EF&CC while explaining the purpose of the meeting stated that there is an absence of convergence and synergy amongst different departments who are engaged in monitoring of pollution in the country and each department is using different measurement and reporting systems. He expressed his concern regarding need for co-ordination to find common ground to tackle increasing levels of pollution. He explained that the purpose of the meeting was to discuss the existing monitoring facilities of air, water, industrial and noise pollution and strategy to expand the network in view of emerging challenge.

Hon'ble Minister, EF&CC in his opening remarks stressed the need to generate pollution related data by the Government of India. He stated that other countries are entering the picture and exploiting data deficit in the country. He highlighted the need for round the clock, 365 days' surveillance system data, which can be used for planning, management and control of pollution as well as a reference point in the future even after 10 years. He informed that this meeting was a beginning of a process and comprehensive and detailed discussions will be held in the next meeting. He suggested that all the stakeholders, who can be part of the project should be invited and a concept note be finalized by January / February, 2017. He said that proposed project should focus on pollution in four metro cities and State Capitals and can be further extended to 700-1000 more cities, if found economically viable. Another component should be to measure

the impact of pollution on flora and fauna including microorganism, avi-fauna, marine ecosystem. He also advised monitoring network comprising 50 Km x 50 Km blocks for the entire country including the coastal region and boundaries of the country. He stated that the data generated shall be useful for awareness and sensitization of the public. Hon'ble MEF&CC expressed his concern over environmental loss and Climate Change and urged the participants to think of entire India and not limited to few places.

Dr. A.B. Akolkar, Member Secretary, CPCB made a brief presentation on existing as well as proposed infrastructure required for monitoring. He explained that water quality monitoring is being carried by the CPCB in association with SPCBs & PCCs under the National Water Quality Monitoring Programme at 2500 location. He informed that complete physico-chemical and bacteriological analysis is being carried out in 28 locations. Trace metals and bio-monitoring is not being done due to lack of infrastructure for monitoring these parameters with state pollution control boards. He informed that CPCB has proposed another 2000 monitoring location across the country for which an amount of Rs. 15 crore is required. He informed that CPCB is carrying Ambient Air Quality Monitoring through network of 638 operating stations in 271 cities/towns in 29 States and 5 Union Territories (184 districts). He explained that another 208 monitoring locations covering 92 districts were planned in 2017 and 1230 monitoring locations covering 410 districts by 2020 with a fund requirement of Rs. 32 crores. He explained about plan for setting up of CAQMS and AQI for all 46 million plus cities and 21 State Capitals, UTs (Total 67 Cities). He informed Noise Monitoring is being carried in 07 Metropolitan Cities covered out of 46 Metropolitan Cities and proposed that remaining 39 metropolitan cities with 04 stations may be covered by 2017.

Shri M. Nair Rajeevan, Secretary, Ministry of Earth Sciences stated that MoES has monitoring network for air pollution in 3 Cities viz. Delhi, Kolkata and Mumbai and establishment of another monitoring station in Ahmadabad also is under process. MoES generates data for Research & Development including forecast and not for public dissemination. Currently, MoES forecasts pollution levels for 3 days but accuracy of the forecast is good for 2 days only. However, infrastructure is being developed to forecast for 4th day also. He said that the calibration of instruments is a major challenge and the calibration of instruments must be carried out every 1-2 years to avoid error in data by different departments, which also gives chance to the

public to point fingers. He stated that MoES carries out Coastal Water Quality Monitoring as a part of its mandate and informed that next year MoES will set up 3 coastal observatories in the East coast and 3 coastal observatories in the West coast to monitor marine pollution. Secretary, MoES observed that there is a need for monitoring both PM_{2.5} and PM₁₀ at all places. He said that PM_{1.0} (aerosol particles) is more significant from health perspective and should be included in monitoring of PM_{1.0} at few places by CPCB as being carried by MoES in Mumbai. He emphasised the need to calculate the sources of pollution more accurately in a scientific manner. Secretary, MoES further stated that the measurement system and calculation of AQI by MoES in future will be same as CPCB as to avoid different results. MoES has no objection in sharing the data on daily basis, however in order to ensure quality check, the data cannot be shared directly from the station. Further, MoES can also share raw data on submission of an undertaking to this effect. He informed that efforts are needed to ascertain the sources of air pollution and their role especially the pollution caused by stubble burning in the neighbouring states of Delhi viz. Haryana, Punjab, etc. He also noted that, the identification of sources of air pollution in Delhi was very important in terms of the quantum of pollution contributed by them, however, source apportionment studies should also be carried on all India basis, with focus on cities where Air Pollution is high.

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Shri Arun Kumar Mehta, Joint Secretary, EF&CC pointed out that while CPCB monitors 8 parameters for arriving at the Air Quality Index, MoES monitors only 5 parameters. CPCB and MoES should adopt similar parameters for the air quality monitoring. The Joint Secretary stated that none of the above cities in the country meets the noise pollution standards. Most of rivers in the country do not meet the standards in relation to faecal colifoms. Few river stretches meet the BOD standards. There are more than 30,000 industries in the country coming under the red category. There is a need to have a protocol to ensure quality of the equipment and data. Further the data is not being published every month. There is a need for improvement of the quality of data being collected for water, air, noise, municipal solid waste and e-waste etc. and wherever required, necessary protocol should be developed and these should be published monthly so that they can be used.

Shri S.P.S. Parihar, Chairman, CPCB noted that the matter relating to data on pollution in Delhi was raised recently in the Supreme Court as well, where the Hon'ble Court desired CPCB to compile the data of different agencies for calculating AQI. The Chairman, CPCB also noted that the undertaking as desired by IMD can be provided. He clarified that in view of courts order, data on air pollution was to be made available. While CPCB's data was provided, the data from the IMD was not made available. It is necessary that the data of Delhi and NCR should be the same in view of court's order so that the air quality of Delhi can be ascertained correctly. IMD can share their data with the CPCB on furnishing of an undertaking that it would not be diverted for any purpose other than the authorized use, IMD may also like to monitor and share the forecasting of air quality. However, the Air Quality Index will be generated by CPCB only. CPCB is getting data of IMD on E-mail. The exercise is under way in consultation with the technical services provider, IMD and the SPCBs so that air quality data can be shared amongst the stakeholders. This is being done in case of Delhi. Hon'ble MEF&CC desired that efforts should be undertaken to ensure flow of air quality data on all India basis and not merely for Delhi and calculation of Air Quality Index covering the entire country.

The Member Secretary, DPCC informed that 6 new stations have been set up and another 20 stations for monitoring PM_{10} and $PM_{2.5}$ are in pipeline. Consultations between CPCB, DPCC and other stakeholders like IMD should be held for developing a protocol for sharing of air pollution data amongst them.

The, Member Secretary, Haryana Pollution Control Board (HSPCB) informed that HSPCB have set up 4 air quality stations one each in Rohtak, Panchkula, Gurgaon and Faridabad and 9 more stations are likely to be set up at various locations in the State of Haryana in addition to 6 manual stations. He informed that, HSPCB has issued directions to 101 industries for setting up of Online Monitoring Devices, of which, 73 industries have installed the devices and 28 will be installed in due course. He also informed that the services of Haryana Space Application Centre are also being obtained to monitor crop residue burning. He stated that the Deputy Commissioners / District Collectors are being sensitized in this regard.

Secretary (Environment), Delhi informed that Ambient Air Quality monitoring at 20 new locations has been planned in Delhi. These monitoring stations will be the 'State of Art' stations and will monitor noise pollution also. He stated that it was necessary that the instruments / machinery used for monitoring are of high quality and of proper calibration.

Shri S.S. Negi, Director General of Forests, MoEF&CC suggested the use the Space Technology to detect stubble burning on the similar lines to track forest fires by Forest Division.

Shri S.K. Goyal, informed that NEERI was also monitoring Air Quality in Maharashtra and the data generated by them is huge. Generation of quality data needs not only the instruments of higher quality but also trained manpower having proper qualification and expertise for this purpose. Presently the instruments / machinery being used by different agencies are also of different.

The representative of Central Water Commission informed that CWC has 800 stations to measure discharge, water level, rainfall etc. which are being regularly upload on their website for use of stakeholders. He suggested that there should be a single agency which compiles and forecasts data for air, noise and water pollution.

Secretary (EF&CC) noted that there are ENVIS Centres in the Ministry which have some useful data. A team should be formed from CPCB, MoES, M/o Health etc. to extract information already available in ENVIS Centres.

After detailed deliberations, following decisions were taken:

- The stakeholders in the field of Air / Water / Noise Quality Monitoring should be clearly identified, who may be engaged as knowledge partners of MoEF&CC / CPCB such as MoES, NEERI, IMD, MoH&FW, IIT, ICMR, etc.
- 2. CPCB should formulate its proposal expeditiously. CPCB will make a Power Point presentation bringing out the concept clearly and the objectives within next 10 days.
- Every part of the country should be covered for monitoring of pollution.

 The country should be divided into 50 Km X 50 Km grid for monitoring of pollution levels. Each part of India and 7000 Km long Sea shore should be covered under this monitoring including far flung areas of North-East.

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- 5. One category of monitoring in the country should be of industrial areas. It should be ensured that only the particular defaulting / non-confirming unit are penalized and not the entire industry.
- 6. Standards for industrial units should be finalized urgently and attempt should be made that parameters adopted by different agencies are same for facilitating the data flow uninterruptedly.
- The monitoring infrastructure should include real time as well as manual devices. The infrastructure should be of high quality for continued relevance in future.
- 8. Science Students across colleges / Universities / Institutes in the country should also be associated with the exercise so that results at grass root level are ensured.
- 9. An integrated approach with national perspective rather than departmental view should be developed. Efforts should be made to find solution. The detailed project, implementation mechanism, equipment and the time limit should be identified clearly with a holistic approach. It may be ensured that quality data is not only generated but also used for desired results.
- 10. The total expenditure involved will be considered separately
- 11. Next meeting should be held in the second week of December. Representatives of IIT's, Dept. of Space and M/o Health may also be invited.
- 12. The ENVIS centres working in the Ministry should be developed as a repository of knowledge. They should work in collaboration with the MoES, CPCB and other Boards to provide information.

The meeting ended with vote of thanks to Chair.

-6-

Annexure

Meeting held at 6.00 P.M on 29th November ,2016 at Mahanadi Conference Hall, 4th Floor, IPB under the Chairmanship of Hon'ble MEF&CC to review infrastructure facilities in respect of Air, Water, Industrial and Noise Pollution

- 1. Hon'ble Minister of State (I/C), EF&CC
- 2. Shri Ajay Narayan Jha, Secretary, MoEF&CC
- 3. Shri M. Nair Rajeevan, Secretary, Ministry of Earth Sciences
- 4. Dr. M.M. Kutty, Additional Secretary , MoEF&CC
- 5. Shri A. K. Mehta, Joint Secretary, MoEF&CC
- Dr. Manoranjan Hota, Adviser, MoEF&CC
- 7. Shri Yashvir Singh, Economic Adviser, MoEFCC
- 8. Shri Manoj Kumar Singh, Joint Secretary, MoEF&CC
- 9. Shri S. M. Ali, Member Secretary & Special Secretary, Delhi Pollution Control Committee
- 10. Shri Chandraker Bharti, Secretary, Environment and Forest, Government of NCT of Delhi
- 11. Shri Narendra Kumar, Member Central Water Commission, Ministry of Water & Resources
- 12. Dr. M. Mohapatra, Scientist G, Indian Meteorological Department
- 13. Dr. Sunil Peshin Scientist 'G', Indian Meteorological Department
- 14. Dr. V.K. Soni, Indian Meteorological Department
- 15. Shri Paras Nath, Regional Officer, Uttar Pradesh Pollution Control Board.
- 16. Dr. Prashant Gargava, Scientist 'E' CPCB
- 17. Shri Sharath Kumar Pallerla, Director, MoEF&CC
- 18. Shri A.B. Akolkar, Member Secretary, CPCB-
- 19. Shri N.A. Siddiqui, Deputy Secretary, MoEF&CC
- 20. Shrimati Mita Sharma, Scientist 'E', CPCB
- 21. Shri R.M. Bhardwaj, Scientist 'E' CPCB
- 22. Dr. D. Saha, Scientist 'E', CPCB
- 23. Dr. Sanjeev Agarwal, Additional Director, CPCB
- 24. Shri Sunil Dave, Scientist 'E', CPCB
- 25. Shri Dinabandhu Gauda, Scientist 'E', CPCB
- 26. Dr. S.K. Goyal, Sr. Principal Scientist and Head, Delhi Zonal Centre, NEERI
- 27. Dr. Sunil Kalia, Delhi Zonal Centre, NEERI
- 28. Dr. M.P. George, Scientist 'D', Delhi Pollution Control Committee
- 29. Shri S. Narayanan, Member Secretary, Haryana State Pollution Control Board
- 30. Dr. B.B. Awasthi, Regional Officer, Uttar Pradesh Pollution Control Board
- 31. Shri S.S Negi, Director General of Forests, MoEF&CC
- 32. Shri Dinesh Runiwal, Scientist 'D', MoEF&C
- 33. Shri R. N. Pankaj, Scientist 'C', MoEF&CC
- 34. Shri Rajesh Makkar, US, MoEF&CC
- 35. Shri Sushil Thakur, ASO, MoEF&CC



Justification for Deletion or Addition of Activities in Appraisal & Approval Note of ENVIS Scheme

The appraisal note was put up for concurrence of IFD on 23.02.2017 and a presentation was also made before the Secretary (EF&CC) on 23.02.2017. The other Senior officials of the Ministry present during the presentation were Shri Rajani Ranjan Rashmi, Special Secretary, Shri P.K Dash, AS&FA, Dr. Anandi Subramanian, Senior Adviser, Shri Anil Kumar, ADG (FC) and Shri Yashvir Singh, Economic Adviser. It was suggested during the presentation that ENVIS Centers may be involved in the monitoring activities as they are hosted by eminent institutes having wide experience in their respective themes.

2.Further, during a meeting held to review infrastructure facilities in respect of Air, Water, Industrial and Noise Pollution under the Chairmanship of Hon'ble Minister of Environment, Forest and Climate Change on 29.11.2016. Some of the decisions taken during the meeting were as follows:

- a) The country should be divided into 50 Km X 50 Km grid for monitoring of pollution levels. Each part of India and 7000 Km long Seashore should be covered under this monitoring, including far flung areas of North-East.
- b) Science Students across colleges / Universities / Institutes in the country should also be associated with the exercise so that results at grass root level are ensured.
- c) The ENVIS centers working in the Ministry should be developed as a repository of knowledge. They should work in collaboration with the MoES, CPCB and other Boards to provide information.

3. Considering the above decisions and suggestions the major additions in the ENVIS Scheme are as follows:

a) Survey of Districts by dividing the country into grids of 50 km x 50 km (or less) and monitoring (ground truth verification) of the various Central Sector and Centrally Sponsored Schemes of the Ministry. The monitoring of the Districts in Grid would give concrete results as the entire ENVIS network would focus on same grid/District to monitor the various thematic areas pertaining to environment.

As the scheme continues, a substantial amount of information (District Wise & Grid Wise) would be available for various stakeholders and to help in policy making and serve as decision support system. To start with, initially 10 Districts would be taken on pilot basis. The pilot study would help the EI Division to estimate the cost of District Monitoring (grid-wise) and to identify the parameters to be monitored. The results of pilot study would also help in building a strong decision support system in coming years.

b) The Ground Truth Verification of various CS and CSS Schemes, as per requirement of the Ministry, would help the various Divisions of the Ministry to take necessary steps for effective implementation and fund management for various schemes being implemented by them.

c)The other addition in the Scheme is Green Skill Development Program.The main objective of this program is to develop a set of trained persons in Green Skills. This would help them to find better job opportunities in the field of environment and improve their quality of life. The persons trained in the Green Skill would be engaged in District Monitoring which would not only provide them hands on experience but also reduce the cost of monitoring.In addition to this, the students of various colleges and universities would also be involved in Grid/District Survey.

d)The other addition in the scheme is establishing an Environmental Channel on TV for wider dissemination of Environmental Information & Knowledge.

4. In order to achieve the above additional mandate, thefollowing are required:

- a) Strengthening of Environmental Information Division
- b) Strengthening of ENVIS Cell
- c) Strengthening of ENVIS Centers (ENVIS Resource Partners and ENVIS Plus Hubs)
- d) Training of Officials dealing with ENVIS Scheme
- e) Training of ENVIS Centers Staff

5. Cost Justification

Budget/ Object Head of Expenditure		XII Plan Period	Proposed	
		Amount (₹	Amount (₹	
		lakh)	lakh)	
01.00.01	Salaries	500.00	0.00	
01.00.03	Over Time Allowances	1.00	0.00	
01.00.05	Rewards	1,20.00	40.00	 Rationalization of various Awards of the Ministry is under process, so provision is kept for IGPP 2013 and 2014 for which nominations has alreadybeen received. Best ENVIS Center Award (2 Nos each of Rs 1 Lakh)
01.00.06	Medical Expenditure	0.00	0.00	
01.00.11	Domestic Travel Expenses	1,00.00	50.00	Physical verification of ENVIS Centers and for attending Domestic Training Program and Workshops.
	Foreign Travel	0.00	100.00	New Budget Head : It is proposed to make ENVIS as a South Asian Hub by 2019-20 and requires traveling abroad.
01.00.13	Office Expenses	19.00	37.00	
01.00.16	Publications	1,30.00	50.00	For publication of Annual Report of the Ministry, Green Skill Development Brochure etc.
01.00.17	Banking Cash Transaction Tax	0.00	0.00	
01.00.20	Other Administrative Expenses	25.00	80.00	Officials dealing with ENVIS Scheme would attend Domestic/ International trainings
01.00.26	Advertisement and Publicity	50.00	60.00	Advertisement for inviting proposals for establishing new ENVIS Centers and for publicity of ENVIS Scheme.
01.00.28	Professional Services	5.00	60.00	Hiring of Consultants as per requirement of the Scheme and for sitting fees of experts of Advisory Board of ENVIS Scheme
01.00.31	Grants-in-Aid	60,50.00	8811.34	
	a) ENVIS Plus Hubs	48,00.00	1518.45	Recurring Grant to State ENVIS Centers/ ENVIS Plus Hubs
	b) ENVIS Resource Partners		1857.03	Recurring Grant to thematic ENVIS Centers/ ERPs
	c) Hardware (Non-recurring)	1,00.00	60.00	Non-recurring Grant to ENVIS Centers once in three years
	d) ENVIS Secretariat/Cell/Focal Point	2,00.00	181.78	Strengthening of ENVIS Cell (Increase in emoluments of ENVIS Cell Staff and hiring of two additional staff).
	e) SoE Report	9,00.00	662.00	For Publication of 18 SoE Reports
	f) Special Publication	25.00	24.00	
	g) National/Regional Evaluation Workshops/Other Workshops/Training Programs	105	105	Workshop for evaluating the performance of the ENVIS Centers; Workshop for roll out of revamped ENVIS Scheme.
	h) ENVIS Portal/IT/Mobile App etc.	25.00	200.00	Development of Software, Up-gradation of ENVIS Websites and ISBEID, AMC for ISBEID and ENVIS websites.
	 i) District Monitoring(Grid wise) /Monitoring of CS &CSS Schemes/Skill Development/Environment Channel 	0.0	2196.98	Additional Mandate for ENVIS Scheme: Grant-in –Aid would be provided to ENVIS Centers on case to case basis for Monitoring of various Schemes of the Ministry and for District Monitoring (Grid Wise) and other activities in project mode.
	Total	7000.00	7282.23	

5.1 Addition of New Budget Head: Foreign Travel

- a) One of the mandate of the ENVIS Scheme is **international cooperation.** During the financial year 2015-16EI Division initiated the process of signing of MoU with Sudan, Qatar, Germany, Egypt, Bangladesh, Brazil, and Australia.
- b) During 2016-17, EI Division received communication from IC&SD Division that MoEF&CC is signing a MoU with Australian Government on environment and one of the discussions pointof the Joint Working Group on environment is **Environment Information System**. (Refer Annexure-1)
- c) To develop ENVIS as a South Asian Hub.
- d) Opportunities would be provided to officials dealing with the ENVIS Scheme to attend international training programs/Workshops as per requirement of the Scheme.

All the above may require visit to various countries and thus new budget head for Foreign Travel is proposed.

6. Strengthening of ENVIS Cell/ Secretariat/ Focal Point

It was envisaged that since in a dynamic information system, information analysis is a very essential component. Thus, an ENVIS Cell on information analysis with specialists on information analysis, environmental statistics and system studies, using application of modelling techniques wherever appropriate, was set up for ENVIS. As the ENVIS Scheme is going to be revamped from financial year 2017-18, the function, role and responsibilities of the ENVIS Cell are also revised to achieve desired mandate of the Scheme. The functions assigned are:

- (i) Coordination and network development
- (ii) Compilation of information pertaining to Grid Monitoring.
- (iii) Compilation of the Information pertaining to monitoring of the Central Sector and Centrally Sponsored Schemes being implemented by MoEF&CC
- (iv) Information collection and data preparation of popular-level data that could be put out in the public domain, as well as generating high-end research-level data.
- (v) Generic Database development, including projects, studies and R&D works
- (vi) Distributed Network Websites development and maintenance
- (vii) Library and Documentation
- (viii) Liaison with relevant international and national information systems in order to realise the potential for improving the country's information repository and databases through international cooperation and exchange of environment-related information, especially on climate change and other cross-border environmental parameters.
- (ix) Information analysis, environmental statistics and system studies
- (x) Information dissemination and technical enquiry services (querybased support) through different modes as well as different types of publications among various target user groups.
- (xi) Preparation of SoE Reports of the Nation and coordination and dissemination of SoE Reports of States/ UTs/ Metro cities/ 'Hot-

Spots'.

- (xii) Preparation of the Report to the People on Environment.
- (xiii) Preparation of Annual Report of the Ministry.
- (xiv) Monitoring, review, evaluation and performance appraisal of ENVIS Plus Hubs and ENVIS Resource Partners, as well as ENVIS as a whole.
- (xv) Assisting ENVIS Steering Committee (ESC) and ENVIS Advisory Board (EAB) with inputs as well as other Secretarial help.
- (xvi) Organising and supporting trainings and capacity building workshops, etc.
- (xvii) Any other item which falls under the purview of the Scheme.

The ENVIS Cell, set up in the Ministry in a project mode, to carry out the coordination of and provide information technology support to, initially 25 ENVIS Centres (and now 69), would also maintain and upgrade the ENVIS Portal apart from assisting in the preparation of the Annual Report of the Ministry, National SoE Report, Report to the People on the Environment, and any other publication authorised by ESC and EAB. ENVIS Cell would also collect, manage and maintain the photo-library for the Ministry and provide relevant photographs both in print and digital format to the officials as and when requested. It is responsible for providing Information Computing Technology (ICT) knowledge to ENVIS Centres in order to make them familiar with the latest technological developments. It maintains a close liaison with NIC for implementing GIGWs in respect of all websites under the Scheme. During 2017-18 to 2019-20 ENVIS Cell would support ENVIS Plus Hubs and ENVIS Resource Partners, would assist the EI Division in development of new tool for ENVIS websites as per GIGW guidelines and as per requirement of Accessible India Campaign (Sugamya Bharat Abhiyan) to make the websites accessible for Persons with Disabilities (PwDs). ENVIS Cell would also assist in conversion of already collected information in geo-spatial form.

SAC has recommended that the ENVIS Cell may be co-terminus with the Scheme

EI Division, headed by the Economic Adviser, has 02 Deputy Directors, 01 Section Officer, 01 Assistant and 01 Office Assistant. As no regular staff has been provided for ENVIS Cell/ Focal Point, 03 Staff have been contracted through an outsourced agency (01 National Programme Coordinator (NPC); 01 Web Developer; and 01 Office Assistant) during 2016-17. The post of Statistician and Information officer were lying vacant during 2016-17 as no suitable candidate was found. As the additional mandate of monitoring is added to ENVIS Scheme there is a need to strengthen the ENVIS Cell by providing additional manpower and increasing the emoluments of the existing staff.

Sl. No.	Previous	Proposed	Remarks
1.	National Program Coordinator –(NPC)	(NPC)	Continue with the same NPC
2.	Statistician	Statistician/ GIS Analyst	Presently post is vacant, but during 2017-18 either Statistician/GIS Analyst would be hired as per requirement of the Scheme
3.	Sr. Information Officer	Information Officer	Presently post is vacant, but would be filled during 2017-18
4.	Web Developer	Sr.Web Developer	As per recommendation of SAC (Refer p. Annexure-8)
5.	Office Attendant	Office Attendant	No Change
6.		Program Officer	New Post
7.		Content Writer/Co py Editor	New Post: As suggested by AS&FA during the meeting held on 24.04.2017 (refer p.

6.1 Additional Manpower for ENVIS Cell.

6.2 Increment in the emoluments of the existing ENVIS Cell Staff:

Presen	Present: (During 2016-17) (Amount in ₹)			
Sl. No.	Designation	Monthly	Remarks	
		Emoluments		
1.	National Program Coordinator –(NPC)	54283	Working in ENVIS Cell since 2010	
2.	Statistician	48283	Post Vacant	
3.	Sr. Information Officer	41890	Post Vacant would be filled with an Information Officer at lower emoluments	
4.	Web Developer	31635	Working in ENVIS Cell since 2004 and SAC in its meeting held on 7.07.2014 recommended change in designation of web developer as Sr. Web Developer.	
5.	Office Attendant	11622	Working in ENVIS Cell since 2012	

agant. (During 2016 17)

Proposed:

(Amount in ₹)

			(
Sl. No.	Designations	Monthly Emoluments	Remarks
1.	National Program Coordinator –(NPC)	59711	10% increment over 2016-17 value
2.	Statistician/GIS Analyst	53111	10% increment over 2016-17 value
3.	Sr. Information Officer	46079	10% increment over 2016-17 value
4.	Program Officer- (GSDP)	44000	New Post: Additional Mandate of ENVIS Scheme is Green Skill Development Program, Grid Based Survey and ground truth verification of CS and CSS Schemes and requires additional Manpower in ENVIS Cell.
5.	Content Writer/Copy Editor	38500	New Post: ENVIS Cell need to publish reports and post content on ENVIS Portal and require Content Writer for managing the publication and ENVIS Portal.
6.	Sr.Web Developer	34799	10% increment over 2016-17 value
7.	Office Assistant	16500	As per rate of minimum wages notified by Govt of Delhi

Note: The increment for the subsequent year would be 10% annually for Sl. No 1 to 6 and 10% annually/minimum wages as per Govt. of Delhi, whichever is higher for Sl. No.7.

6.3 Total Budget for ENVIS Cell:

	Head of Expenditure	Amount in ₹
A.	Manpower	
	NPC-cum-Senior Programme Officer	52,000/-
	Statistician	46,000/-
	Senior Information Officer	40,000/-
	Web Developer	30,000/-
	Office Attendant	8,000/-
	Total	1,76,000/-
	Total for One Year (1,76,000×12)	21,12,000/-
В.	Others	
	Contingencies, consumables, stationery, hardware/ equipment, AMC,	1,00,000/-
	internet charges, miscellaneous	
	Trainings/ workshops	7,00,000/-
	Total	8,00,000/-
C.	Travel	2,00,000/-
D.	Institutional Service Charges (to be decided with the approval of the	93,043/-
	<i>competent authority)</i>	
Е.	Expenses towards IGPP, Annual Report, etc.	37,54,957/-
Gran	d Total (A + B + C +D + E)	69,60,914/-

Annual Allocation (for 2013-14): Recurring:

Annual Allocation (for 2017-18): Recurring:

	Head of Expenditure	Amount in ₹
A.	Manpower	
	NPC	59711.00
	Statistician/GIS Expert	53111.00
	Senior Information Officer	46079.00
	Program Officer- (GSDP)	44000.00
	Content Writer/Copy Editor	38500.00
	Sr. Web Developer	34799.00
	Office Assistant	16182.00
	Total	2,92,382.00
	Total for One Year (2,92,382×12)	35,08,585.00
B .	Others	
	Contingencies, consumables, stationery, miscellaneous	2,00,000.00
	Hardware/ equipment, AMC, internet charges, photography	10,00,000.00
	equipment, Training/workshops, software and licence fees for	
	software.	
	Total	12,00,000.00
C.	Travel	4,00,000.00
D.	Institutional Service Charges (to be decided with the approval of the	3,83,144.00
	competent authority) presently @ 7.5 % of actual expenditure	
Gran	d Total (A + B + C +D)	54,91,729.00

Note: The total amount proposed for ENVIS Cell for 2017-18 is less than that proposed during F.Y 2013-14. The amount in Others and Travel head is increased due to increase in number of manpower, addition of mandate in ENVIS Scheme which requires frequent travel .The amount for subsequent years for Other and Travel head is calculated considering 10% annual increment.

Functional Responsibilities:

NPC-cum-Senior Programme Officer will report to the Deputy Director (EI) for all functions, which will include the following:

- (i) Online monitoring of performance and technical assistance to entire ENVIS Network.
- (ii) Implementation of Annual Action Plan of Activities of the ENVIS Cell.
- (iii) Coordination of ENVIS Plus Hubs and Resource Partners and addressing horizontal issues.
- (iv) Overall in-change for District Monitoring, monitoring of CS & CSS Schemes of the Ministry, Environmental Channel and Green Skill Development Program.
- (v) Coordination and bringing out four ENVIS newsletters every year on the basis of material received from ENVIS Network.
- (vi) Any other special publication to be brought out as in Annual Action Plan.
- (vii) Maintenance and upgrading of ENVIS Portal website and technical management of ENVIS network.
- (viii) Coordination in respect of development of new ENVIS Websites, Monitoring tool of MoEF&CC, GIS Cell, up-gradation of ISBIED and other project assigned to NIC or other agencies.
- (ix) Management of databases developed by ENVIS Plus Hubs, GIS Cell and ENVIS Resource Partners.
- (x) Any routine matters relating to Websites.
- (xi) All residual matters regarding ENVIS Cell.
- (xii) Coordination and bringing out SoER and National SoE Atlas.
- (xiii) Monitoring of various Scheme of the Ministry if required.
- (xiv) Liasoning with Ministry of External Affairs (MEA) for development of South Asia Environment Knowledge Hub.
- (xv) Coordination for collection of district level expenditures on environmental activities under various schemes, such as SAGY, MPLADS, MNREGA etc.
- (xvi) Link Officer to Program Officer-GSDP

Statistician will be responsible for all the statistical activities of the ENVIS Cell.

GIS Analyst will be responsible for all the GIS related activities of the ENVIS Cell.

Sr. Information Officer will be responsible for

- (i) Coordination, monitoring of performance and technical assistance to ENVIS Resource Partners engaged in Grid based survey of the Districts lying in Northern, Eastern and Western part of the Country.
- (ii) Coordination, monitoring of performance and technical assistance to ENVIS Plus Hubs engaged in monitoring of various Schemes of the Ministry lying in Northern, Eastern and Western part of the Country.
- (iii) Verification and Validation of information provided by ENVIS Network.
- (iv) Compilation of Information provided by various ENVIS Resource Partners and ENVIS Plus Hubs.
- (v) Assist the ENVIS Cell in organising the meeting of Steering Committee and Advisory Board.
- (vi) Monitoring of the ISBEID programme of the Ministry, including coordination and liaising with different line departments, ENVIS Plus Hubs and NIC for uploading information pertaining to State/UTs falling under Northern, Eastern and Western part of Country.
- (vii) Coordination and monitoring of activities pertaining to Green Skill Development Program in the State/UTs falling under Northern, Eastern and Western part of the Country.
- (viii) Assist the ENVIS Cell in Monitoring of various Scheme of the Ministry if required.
- (ix) Link Officer to NPC-cum-Senior Programme Officer.

Program Officer-GSDP will be responsible for

- (i) Coordination, monitoring of performance and technical assistance to ENVIS Resource Partners engaged in monitoring of the Districts falling under Central, North- Eastern and Southern part of the Country.
- (ii) Coordination, monitoring of performance and technical assistance to ENVIS Plus Hubs engaged in monitoring of various Schemes of the Ministry pertaining to Central, North- Eastern and Southern part of the Country.
- (iii) Monitoring of the ISBEID programme of the Ministry, including coordination and liaising with different line departments, ENVIS Plus Hubs and NIC for uploading information pertaining to State/UTs falling under Central, North- Eastern and Southern part of the Country.
- (iv) Coordination and monitoring of activities pertaining to Green Skill Development Program in the State/UTs falling under Central, North-Eastern and Southern part of the Country.
- (v) Verification and Validation of information provided by ENVIS Network.
- (vi) Link Officer to Sr. Information Officer.

Sr. Web Developer will be assigned duties as follows:

- (i) Website designing, including banners, and editing of images/videos for the website.
- (ii) Managing the digital photo-library of ENVIS.
- (iii) Assisting in preparation of Reports/ publications/e-publications of ENVIS/ EI Division, including the Annual Report of the Ministry
- (iv) Assist the ENVIS Plus Hubs and Resource Partners in the matter related to Public Financial Management System and NGO Portal.
- Maintenance and updation of ENVIS Portal Website, including conformance with GIGW and its security audit (as link officer to NPC and Program Officer).
- (vi) Compilation of information provided by various ENVIS Centres.

- (vii) Assist the GIS Analyst in conversion of information already available with various ENVIS Centres in geo-spatial form.
- (viii) Assist in Conducting National/Regional Evaluation Workshops
- (ix) To resolve the technical queries pertaining to websites and database of various ENVIS Centres.
- (x) Coordinate with ENVIS Centres for Development of Mobile Apps
- (xi) Maintenance of Virtual Private Network (VPN) facility.
- (xii) Transfer of existing data on the Cloud Server.

Content Writer/Copy Editor will be responsible for

- Monitoring the performance of the websites of ENVIS Network (presently 65 websites) and develop quarterly performance report of each ENVIS Centre.
- (ii) Developing linkages with various Universities/Colleges for District Survey.
- (iii) Assist the National Program Coordinator for establishing Environmental Channel.
- (iv) Coordinate with various agencies including ENVIS Centres for collection of Environmental Films and contents for environmental channel.
- (v) Coordination and liaison with Ministry of Skill Development.
- (vi) ISBEID programme of the Ministry, including co-ordination and liaising with different State/ UT Centres and also NIC.
- (vii) Assist the ENVIS Cell in compilation of information, preparation of database and preparation of Annual Report pertaining to Green Skill Development Program.
- (viii) Resolving technical queries raised by ENVIS Centres.
- (ix) Assist the GIS Analyst for development of Green Skill Development information on geo-spatial platform.
- (x) Coordination with ENVIS Centres for development of value added Environmental Information Products and Kits.
- (xi) Link Officer to Programme Officer-GSDP.

Office Attendant will assist ENVIS Cell/EI Division in performing day-today activities.

Recruitment

The activities of the ENVIS Cell would be outsourced to an experienced organization/ institute or ENVIS Centre, preferably in Delhi. The outsourced agency will be responsible for operation, management and functioning of ENVIS Cell/ Focal Point. The recruitment of staff for ENVIS Cell will be done by the outsourced agency in a transparent manner in consultation with the Ministry. Performance of outsourced agency, including ENVIS Cell staff, will be evaluated annually by the Processing Division.

Qualification and Experience

Post	Essential Qualification and Experience	Age limit
NPC-Senior Programme Officer	M.Sc. (Natural Sciences/ Environmental Science)/ MCA/ B.Tech./ BE, well versed in computer applications/ Web Development with at least 3 years' experience	45 Years
Statistician/GIS Analyst	M.Sc. in Statistics/ Mathematics with Statistics as subject at graduation level with at least 3 years' experience or M.Sc. in Remote Sensing with at least 3 years' experience	45 Years
Senior Information Officer	M.Sc. (Natural Sciences/ Environmental Science)/ MCA/ B.Tech./ BE, well versed in computer applications/ Web Development with at least two year's experience	35 Years
Program Officer	M.Sc. (Natural Sciences/ Environmental Science)/ MCA/ B.Tech./ BE, well versed in computer applications/ Web Development with at least one year's experience	35 Years
Content Writer/Copy Editor	P.G/U.G with one/three years experience in Content Management, Content Editing, Content Management, Content Strategy, Article Writing	30 Years
Web Developer	Graduate, good knowledge of Web Development/ Designing and Computers Applications such as print-publishing, software like Photoshop/Corel Draw/ PageMaker, etc. with one year's experience in Web Designing, including content management.	35 Years
Office Attendant	Class XII passed	30 Years

Note: EI Division may change the Qualification and Experience criteria as per requirement of the Scheme It is also proposed that in order to strengthen the ENVIS Cell, the existing National Program Coordinator (NPC) who is working in ENVIS Cell since 2010 may be recruited against a vacant post of the Scientist 'C' in the Ministry. Since, the Department of Biotechnology, a Scientific Department of the Government of India, also recruits Scientists from different fields, the eligibility prescribed by that Department has been referred, in order to broad-base the eligibility criteria. Accordingly, the incumbent NPC fulfils the eligibility conditions and has relevant qualifications to be considered for this vacancy.

Infrastructure

ENVIS Cell/ Focal Point will be located in the Ministry and the Ministry will provide the necessary physical infrastructure.

Enclosures:

- a) Annual Increment to ENVIS Cell Staff since 2004 (Refer Page No. 84)
- b) RFP and Minutes of Meeting for selection of Agency for setting up of ENVIS Cell. (Refer p. 85)

7. Strengthening of ENVIS Centers (ENVIS Resource Partners & ENVIS Plus Hubs):

Role: The role of an ENVIS Centers is to act as a single-window information provider on various areas/themes related to environment, assist the Ministry in monitoring various schemes and status of environment as set out in the Memorandum of Understanding (MOU) to be executed by the Host entity with the Ministry. Each Centre is a part of a country-wide web-enabled network on which environment-related information collated and updated by each Center is made publicly available on a single e-platform.

Functions: Each ENVIS Center updates and maintains an information database that includes descriptive information, numerical data and spatial data for suitable dissemination. Descriptive information is maintained in the form of bibliographies, libraries, copies/ reprints/ abstracts of reports, articles, and research notes, and links to other databases/ networks, while numerical and spatial data on the subject/ theme assigned to the Centre is collected, collated, compiled, processed and analyzed, and information products are developed for online dissemination or in the form of publications, reports and maps. All information thus compiled is made available on the ENVIS Centers website, which can also be accessed through the ENVIS Portal. The ENVIS Centers also assist the Ministry in monitoring of Districts (Grid Wise) and various schemes being implemented by the Ministry in project mode. The main functions of ENVIS Centers, in detail, are as follows:

- To maintain and update a databank on all aspects of assigned subject area/ status of environment and related issues, and to host and maintain a website for its dissemination.
- To develop an inventory of authentic and reliable information, and collect books, reports, journals and maps for collation, retrieval, processing and analysis, and dissemination of information and database creation.
- To produce value-added information products including directories of information at State/regional/ National level (e.g. NGO databases,

expertise rosters in various sectors, biodiversity registers); CD or website-based map atlases, e.g. using forest maps as base, information products could be developed on parks and sanctuary, desertification maps, species distribution maps or map atlases, and so on.

- To build linkages with information sources in the country and abroad for relevant and comprehensive information contents.
- To identify data gaps and knowledge gaps in the specified subject area and take action to fill these gaps.
- To collect primary data, as mandated.
- To respond to queries and information sought by stakeholders in the form of copies of published reports, documents, abstracts and research papers.
- To bring out newsletters and other publications in assigned subject.
- To help the ENVIS Focal Point in gradually developing the inventory of all information materials available at the Centre and in analysis of information in subject area of the Centre.
- ENVIS Plus Hubs would publish the newsletter for Districts highlighting the achievements and environmental best practices implemented by the Districts Administrations.
- Assist Ministry in launching a dedicated Environmental TV Channel by collecting and creating environmental films and content (separate funding would be provided for this on case to case basis).
- To undertake Green Skill Development Program as per their thematic areas (separate funding would be provided for this on case to case basis).
- Monitoring of various Districts and CS & CSS Schemes as per requirement of the Scheme (separate funding would be provided for this on case to case basis)

Responsibilities/ Deliverables:

- To build up an inventory of authentic and reliable updated information in assigned subject (District-wise and grid-wise), in descriptive numeric and spatial modes as well as anticipatory information.

- To develop databases on parameters relevant to the subject area/ theme, and process and analyse them; State/ UT ENVIS Centres would collect, collate, compile, process, analyse and disseminate State/ UT, District and Village specific data.
- To identify data gaps at State, District and village level and take action to fill these gaps.
- To disseminate the relevant information to each user comprehensively and as quickly as possible through various mediums and instruments.
- To coordinate with the Ministry for supplying relevant, adequate and timely information to different users.
- To coordinate with the District and Village level authorities for supplying relevant, adequate and timely information to different users.
- To coordinate with District Administration to collect information pertaining to Ministry of Rural Development, Ministry of Drinking Water and Sanitation, specific Schemes like MNREGA, MPLADS and SAGY.
- To develop a user-friendly, open, dynamic website that serves as a webenabled system for online dissemination of information to users and provides an interactive exchange of information with other websites/ networks/ databases.
- To formulate its Strategic Plan that would, *inter alia*, serve to generate sources of funds from the corporate sector and/ or through subscriptions of its Newsletter/ other publications.
- To undertake all activities set out in each Centre's Annual Plan.

Accountability:

- Each Centre is accountable to the Ministry of Environment, Forest and Climate Change, Government of India.
- Each Centre would also be partly accountable to its Host (Department of State Government/ UT Administration or institute/organization) as per the MOU.

- Prudent spending of the Grant-in-Aid given by the Ministry.
- Towards users, based on dissemination of authentic and verifiable information, with feedback on users' satisfaction.
- Quarterly feedback will be given by ENVIS Centres to the Ministry.
- Regular reporting of the work carried out by the Centres to the Ministry.
- -

7.1 Financial Assistance to ENVIS Centers:

Manpower

All ENVIS Centres will employ a maximum of four (4) technical core staff for smooth running and management of the ENVIS Centres. Financial support up to the limits specified in the tabular statement below will be considered to be extended to the ENVIS Centres towards meeting the emoluments of the four technical core staff: The financial support towards emoluments may be enhanced annually for each of the four Staffup to 10%.

SI	Present		Proposed	
SI. No.	Designation	Emoluments (₹ p.m.)	Designation	Emoluments (₹ p.m.)
1.	Programme Officer	31890/-	Programme Officer	35079/-
2.	Information Officer	26635/-	Information Officer	29299/-
3.	IT Officer	21542/-	IT Officer /GIS Expert	23696/-
4.	Data Entry Operator (New Post)	-	Data Entry Operator /Para Taxonomist (New Post)	11000/-
Total		80067/-	Total	99074/-

Note:The increment in the emoluments is 10% of 2016-17 value. The amount for subsequent years is calculated considering 10% normative increment.

Qualification and Experience

Post	Essential Qualification and Experience	Age limit
Programme	Programme M.Sc. (Natural Sciences/ Environmental Science)/ MCA/	
Officer	B.Tech./ BE, well versed in computer applications/ Web	
	Development with at least 3 years' experience	
Information	Information Graduate in science or equivalent; good knowledge of	
Officer computers; PG Diploma in RS/GIS);two year working		
	experience in relevant areas	

Post	Essential Qualification and Experience	Age limit
IT Officer	PG Diploma in RS/GIS) with at least 1 years' experience/	30 Years
/GIS Expert	Graduate, good knowledge of computer technology	
	(website development, designing, internet, publication	
	etc.);twoyear's experience	
Data Entry	Graduate, good knowledge of computer technology	30 Years
Operator	(website development, designing, internet, publication	
/Para	etc.); one year's experience/ XII Passed with good	
Taxonomist	knowledge of computer technology with two year	
(New Post)	experience/ Certified Para-Taxonomist	

Note: Note: EI Division may change the Qualification and Experience criteria as per requirement of the Scheme.

	Present		Proposed	
Sl. No.	Designation	Amount Rs./Annu m during 2016-17	Designation	Amount Rs./Annu m
1.	Others :database development, website maintenance, printing of Newsletters, contingency, stationery, consumables, AMC, Internet charges, training, inter-centre interaction workshops	4,23,000/-	Others:database development, website maintenance, printing of Newsletters &Prakriti Map, contingency, stationery, consumables, AMC, Internet charges, training, inter-centre interaction workshops, expenses on monitoring, ISBEID Database Development, Mobile App Development)	4,65,300/-
2.	Travel	50,000/-	Travel	55,000/-
	Total	4,73,000/-	Total	5,20,300/-

7.2 Database Development & Travel:

Note: The amount proposed for 'Other'& 'Travel' Heads for 2017-18 to 2019-20 is calculated considering 10% normative increment over 2016-17 values. The Centers may be given flexibility to use the fund from 'Other' head to 'Travel'Head and vice versa as per requirement of the ENVIS Center without crossing the total ceiling i.e Rs 5,20,300/- in the extant case. Further, the ENVIS Centers in North Eastern Region may be provided with additional funds under 'Travel' Head up to Rs3,00,000/- as per requirement of the ENVIS Centers.
8.0 Internal Monitoring:

Previous (During XII Plan Period):

Scientific Advisory Committee (SAC):

SAC, chaired by Secretary (E&F), is the highest bodyenvisaged in the Scheme. It is required to be constituted every three years by the Ministry. Itconsists of another 4 official (Director General of Forests & Special Secretary or his representative, Additional Secretary dealing with EI Division, Additional Secretary &Financial Adviser and Economic Adviser (EI Division) who acts as Member Secretary), and 5 non-official Members or experts selected with the approval of Minister for Environment & Forests.

Terms of Reference (TOR) of SAC

- The Committee shall oversee, monitor and review the overall operation and management as well asfunctioning and performance of ENVIS Networkin all aspects with a view to attain the objectives laid down for the Scheme and improving the system operation.
- It shall lay down guidelines for evolving concept, structure and work procedure for ENVIS, with a view to effectively implement the Scheme, including laying down the time schedule for its implementation at different stages of its operation as well as suitable designs and formats for information collection, storage and retrieval.
- It shall lay down guidelines for framing the Memorandum of Understanding (MOU) to be entered between the ENVIS Cell/ Focal Point and the ENVIS Centres indicating therein responsibilities and functions of these Centres.
- It shall suggest new areas in the field of Environmental Sciences and identify appropriate institutions for setting up ENVIS Centres as new network partners to make ENVIS a comprehensive web-enabled information system network.
- It shall formalise inter-institutional link-ups, coordination and linkages with other institutes, in India and abroad, for sourcing their information

and databases.

- The Committee may co-opt other members or panel of experts as necessary with the concurrence of Chairperson for recommending midcourse corrections as appropriate and for general improvement of the ENVIS Network and for future improvements.
- The tenure of the Committee will be three years from the date of issue of its constituting Notification.
- The Committee may meet twice in a year or earlieras and when necessary and deemed fit by the Chairperson in New Delhi or elsewhere in India.
- Expenditure on TA/DA and sitting fee of non-official members will be borne by the Ministry as admissible under the relevant Government of India rules.

Proposed (During 2017-18 to 2019-20):

ENVIS Steering Committee (ESC): ESC, chaired by the Secretary (EF&CC), is the highest body envisaged in the Scheme to review the overall functioning of ENVIS Scheme and for mid course corrections .It would consist of another 4 officials [Director General of Forests & Special Secretary or his representative, Senior Adviser dealing with EI Division, Additional Secretary & Financial Adviser and Economic Adviser (EI Division) who acts as Member Secretary].

ENVIS Advisory Board (EAB): The EAB is proposed to be set up which may be chaired by Senior Adviser dealing with EI Division and consist of 5 non-official member experts selected with the approval of the Chair.

Terms of Reference (TOR) of EAB

The Board shall oversee, monitor and review the overall operation and management as well as functioning and performance of ENVIS Network in all aspects with a view to attain the objectives laid down for the Scheme and improving the system operation. It shall lay down guidelines for evolving concept, structure and work procedure for ENVIS, with a view to effectively implement the Scheme, including laying down the time schedule for its implementation at different stages of its operation as well as suitable designs and formats for information collection, storage ,retrieval and monitoring.

- It shall lay down guidelines for framing the Memorandum of Understanding (MOU) to be entered between the ENVIS Centres (ENVIS Resource Partners and ENVIS Plus Hubs) and ENVIS Focal Point indicating therein responsibilities and functions of these Centres, while carrying out the mandated activities.
- It shall suggest new areas in the field of Environmental Sciences and identify appropriate institutions for setting up ENVIS Centres for a comprehensive web-enabled information system network. It shall formalize inter-institutional link-ups, coordination and linkages with other institutes, in India and abroad, for sourcing their information and databases. The Committee may co-opt other members or panel of experts, as deemed necessary, with the concurrence of Chairperson for recommending mid-course corrections as appropriate and for general improvement of the ENVIS Network and for future improvements.
- The tenure of the Committee will be two years from the date of issue of its constituting Notification.
- The Committee may meet twice in a year or earlier as and when necessary as deemed fit by the Chairperson in New Delhi or elsewhere in India.
- Expenditure on TA/DA and sitting fee of non-official members will be borne by the Ministry, as admissible under the relevant Government of India rules.

10.0 Guidelines for Establishment of New ENVIS Centres

- (i) Identify subject-gap areas based on feedback from Centres in consultation with subject Divisions of the Ministry and State Governments/ UT Administrations, with due ratification of SAC.
- (ii) Invite proposals from State/ UT Governments/ reputed institutions/ NGOs concerned through the Ministry's website.
- (iii) EI Division, MoEF will scrutinize proposals as per criteria and shortlist 1-2 institutions.
- (iv) Shortlisted institutions will be invited to present their proposals before the ESC.
- (v) Recommendation of ESC will be placed for consideration of Secretary (E&F).MOU will be entered into with approved host institutions by ENVIS Focal Point.

Necessary infrastructure, an essential perquisite for any ENVIS Centre, will be provided by Host Institution/NGOs/State/UT Governments. The Centres will be located in the space provided by the Host Institutions. The Host Institute will have to satisfy the Ministry with regard to infrastructure before setting/establishing the Centre. The Ministry will discontinue the ENVIS Centre at any point of time if infrastructure is found to be in adequate and unsatisfactory.

Notwithstanding the above, a Centre may be opened with the approval of the competent authority.

Criteria for Selection of New ENVIS Centres

- (i) New subject area/ identified gap areas as ratified by EAB and ESC.
- (ii) Preference to geographical areas where there are no ENVIS Centres.
- (iii) Reputed institution/ organization/ Department.
- (iv) Host Institute should have necessary expertise and capability to run Centre.
- (v) Interest and willingness of Host Institute to serve user community with substantive information as and when required.
- (vi) Appropriate physical infrastructure, as physically verified by EI Division, MoEF to be incorporated in MOU.
- (vii) EI Division, MoEF will prepare a comparative statement of its observations on the proposals received for new ENVIS Centres which shall be placed before ESC for consideration.

11.0 Guidelines for Closure of Existing ENVIS Centres

- (i) Absence of proper physical infrastructure as defined in MOU.
- (ii) Centres graded "B" will be kept on a watch list for a one year period. During this period an action plan will be worked out with the Ministry for removing lacunae

and infirmities in performance. The performance of the Centre will be reviewed after one year. However, if the Centre is graded "B" consecutively for three years, one-time cut in grant by 10% (excluding emoluments paid to manpower) or, for administrative reasons, closure of the Centre may be considered with the approval of competent authority.

- (iii) Centres graded "C" will be kept on watch list for 6 months during which concerted efforts would be made jointly by Host Institute and Ministry towards addressing the lacunae and infirmities in performance. Every 6 months the action plan will be reviewed along with performance of the Centre. However, if the Centre is graded "C" consecutively for 2 years, or for administrative reasons, its closure may be considered with the approval of competent authority.
- (iv) Any other administrative reasons, with the approval of competent authority.
- (v) MOU will include a suitable clause on disposal of assets, including equipment and prototypes of databases and value-added information products, with reference to GFR 2017 and related instructions. As per the instructions, Government also will have discretion to gift the assets to the grantee organization if it considers the same to be appropriate.
- (vi) MOU will include mechanism for periodic transferring to the ENVIS Focal Point of the databases/ substantive work on documentation and prototypes, including of databases and information products, developed by ENVIS Centre. In the event of closure of a Centre, these would be suitably passing over to another ENVIS Centre on the subject.

Note: EI Division may change the guidelines and criteria for closure ENVIS Centres in consultation with EAB and ESC.

12.0 Infrastructure-related Obligations of Host Institution

- (i) Appropriate physical and human infrastructure, as physically verified by EI Division, MoEF will be incorporated in the MOU. MoEF will also periodically review infrastructure needs, and may consider providing funds for procurement of hardware and software to the Centres, and also for suitable upgrading/ replacement of hardware/ software as per applicable norms of the Government.
- (ii) Host institute will provide office space, with basic amenities, and satisfy MoEF in this regard before Centre is established.
- (iii) Website for the ENVIS Centre will be developed on NIC platform.
- (iv) Regular cyber-security audit and review for conformance with GIGW will be done by ENVIS Cell/ Focal Point. Financial support for de-bugging may be considered to be extended to deserving Centres.

Year	Plan/Non-Plan	BE	RE	Actual Expenditure
2012-13	Plan	7.86	6.86	6.37
2012-15	Non-Plan	0.65	0.60	0.41
2013-14	Plan	10.39	10.29	8.48
2015-14	Non-Plan	0.63	0.61	0.50
	Plan	11.00	10.47	10.01
2014-15	Non-Plan	0.65	0.61	0.50
2015-16	Plan	12.50	12.45	8.43
2013-10	Non-Plan	0.65	0.10	0.00
2016-17	Plan	18.0	11.3	8.65
2010-17	Non-Plan	0.10	0.00	0.00

Expenditure in XII Plan Period: (2012-13 to 2016-17)

No.11/4/2011-EI Government of India Ministry of Environment & Forests (EI Division)

STANDING FINANCE COMMITTEE(SFC) NOTE For Continuation of the Ongoing Scheme: 'Environmental Information System (ENVIS)'

1. Project identification

1.1. Title of the Project/ Scheme:

Environmental Information System (ENVIS) Scheme.

1.2. Sponsoring Agency (Ministry/Department/Autonomous Body/Central PSE): Ministry of Environment & Forests, Government of India.

1.3. Proposed duration of the Project:

On-going Scheme to be continued in Twelfth Five Year Plan (2012-13 to 2016-17).

1.4. Total cost of the project over the proposed duration:

Out oftotal Twelfth Plan Outlay of \gtrless 17,874/- crore (current prices) for the Ministry, approved Plan outlay ENVIS Scheme is \gtrless 70 crore.Annual Plan 2012-13 outlay is \gtrless 7.36 crore (RE), and for Annual Plan 2013-14, \gtrless 10.39 crore has been allocated at BE stage.

2. **Project Status:**

2.1. Please indicate which category the project belongs to:

- (a) Continuing Central Sector Scheme from past Plan periods and included in current Plan period.
- (b) New Plan Scheme included in the current Plan period.
- (c) New Plan scheme not included in the current Plan period.
- (d) RCE proposal.

2.2. If project pertains to category 2.1(a), please summarise the benefits already accrued and expenditure already incurred along with an independent evaluation of the past performance of the project/ scheme.

Purpose and Objectives of the Scheme: ENVIS is a decentralized system of Centres mandated to develop a web-based distributed network of subject-specific databases. Its purpose is to integrate country-wide efforts in environmental information collection, collation, storage, retrieval and dissemination to all concerned, including policy planners, decision-makers, researchers, scientists and public. Its long-term objectives are:

- To build up a repository and dissemination centre in Environmental Science and Engineering.

- To enable application of modern technologies of acquisition, processing, storage, retrieval and dissemination of information of environmental nature.
- To support and promote research, development and innovation in environmental information technology.

Its short-term objectives are:

- To providenational environmental information services relevant to present needs and those capable of development to meet future needs of users, originators, processors and disseminators.
- To build up storage, retrieval and dissemination capabilities, with the ultimate objective of disseminating information speedily to the users.
- To promotenational and international cooperation and liaise with agencies concerned for exchange of environment related information.
- To promote, support and assist education and personnel training programmes designed to enhance environmental information processing and utilising capabilities.
- To promote exchange of information amongst developing countries.

ENVIS, initiated in 1981-82, was set up as a Central Scheme in December 1982 (Sixth Plan). 04 Centres were set up by 1983-84, the first in Central Pollution Control Board (CPCB) on 28.09.1983. Involvement of State Governments/ UT Administrations and specialized and reputed institutions country-wide on various themes/ subject areas was also felt to be necessary to achieve comprehensive coverage of information. The scope was expanded gradually and the network consisted of 25 Centres and 61Nodes by 2004.After consolidation and system strengthening these were reduced to 76 in EleventhPlan. Another 9 non-performing Centres were closed in 2011-12.

The network presently consists of 67 Centres (as in **Appendix-1**), of which 28 Centres which deal with "*State of the Environment and Related Issues*" are hosted by the Environment/ Forest Department of State Governments/ UT Administrations. Remaining 39 Centres, hosted by environment-related governmental and non-governmental organisations/ institutes of professional excellence, have a thematic mandate.

ENVIS Secretariat/ Focal Point, located in EI Division,coordinates activities of ENVIS Centres and develops and maintains an ENVIS Portal and Ministry's website with a view to making ENVIS a one-stop web-enabled comprehensive information system.

Benefits already accrued:

(i) ENVIS, by providing scientific, technical and semi-technical information on various environmental issues, serves as the backbone of policy formulation and environment management at all levels of Government as well as decision-making aimed at environmental protection and its improvement for sustaining good quality of life of all living beings. Its major users also include institutes and individual scientists carrying out research projects and agencies carrying out environmental impact assessment of projects and programmes.

- (ii) ENVIS Centres are tasked with performance of environmental informationrelated activities on an annual basis. These broadly cover database development that include descriptive information and numerical data, creating information products, maintaining and upgrading ENVIS website on NIC platform, and disseminating stored information through newsletters, reports, reprints, special thematic publications, news digests, abstracting services, etc. Each Centre typically brings out 4 Newsletters and/or a Special Annual thematic publication, based on updated information on environmental parameters.
- (iii) Query-Answer Service is one of the major responsibilities of ENVIS Network. ENVIS Focal Point and its partners together responded to more than 1,50,000 queries during the Eleventh Plan. In 2012-13 (as on 31.01.2013), 29,865 queries were addressed by ENVIS Focal Point and 51 Centres alone. It provided substantive information mainly on climate change, ozone layer, environmental conservation, water and air pollution, waste management, environmental standards, applicable laws, environmental education and awareness, etc. Wherever information was not readily available, 'Referral Service' was provided.
- (iv) India State-Level Basic Environmental Information Database (ISBEID) is being developed to help State Government/ UT Centres to collect, compile and disseminate information on a centralised server. It is used especially to fill their environment data gaps. Initially, a pilot project was taken up in two phases covering 23 modules based on 9 States/ UTs. Based on its results, it was decided to review these modules in consultation with extant 28 State/UT ENVIS Centres and to extend ISBEID to all States/UTs. Following a Workshop with them (Hyderabad; 7-8 June, 2010), the number of modules were reduced to 17 (covering air and water pollution, forestry, land resources, flora, fauna, etc.).

Management Information System (MIS) software has been developed by NIC in collaboration with ENVIS Focal Point. It is primarily intended to provide (a) internet-based GIS application, (b) one-stop information source to users, (c) interactive maps capable of handling operations like zoom in/out, pan, print, measure etc., and (d) querying ISBEID interactively. A two-day user workshop was organized (New Delhi, 12-13 May, 2011) with all State/UT ENVIS Centers, experts and officials from the Ministry, in order to familiarize them with the use of MIS and GIS modules of ISBEID software.

A follow-up Workshop on ISBEID was held with all State/ UT Centres on 18 February, 2013 at New Delhi, jointly hosted by the Ministry and NIC, when it was observed that the Project has now been advanced through concerted efforts

and almost daily programmatic monitoring since November 2012 to make good the delay (project duration was initially 15 months). It was found that 23 State ENVIS Centres have now advanced to the stage of entering data into the 17 modules. Accordingly, a target of one month was set for 10 well-performing Centres,9 of which have also benefitted from the pilot projects,to complete data upload in two priority environment modules "Forest Resources" and "Water Pollution" and to take up the third module "Air Pollution" also if possible. Remaining 15 Centres are to complete data entry in "Forest Resources" module in one month. Data in all 17 modules is to be keyed in within 6 months at most by all 23 active Centres. With regard to 5 Centres that have not reached this stage of preparedness, it was decided to revive their activities with the assistance of other State Centres that are performing well and also through meetings.

- (v) A two-day user consultation workshop on restructuring and cyber security audits of identified 36 ENVIS websites was organized (New Delhi; 4-5 May, 2011) with a view to identifying and removing their vulnerabilities to cyber-attacks and cyber-crimes. The template for ENVIS Centers' websites was finalized. A follow-up Workshop was held on 19 February, 2013 at New Delhi, jointly organised by the Ministry and NIC, when it was observed that audit and upgrading of 36 ENVIS Centres' websites, taken up en bloc in Phase-I, has been completedin 2012-13 for 35 Centres. These Websites have been transferred to a common CMS platform in conformance with the Guidelines for Indian Government Websites (GIGW). The Websites are to be bilingual i.e., English and Hindi or a regional language, have features like archival process, dedicated sections for events/ announcements, State of Environment (SoE) Reports and Photo Gallery, besides having secure control panel for each ENVIS Centre to submit their monthly reports, publications, etc. Process of inclusion of remaining Centres' Websites in Phase-II is underway. At this Workshop, the concept of Generic Database Application Development Mechanism was introduced and 5Centres (World Wide Fund for Nature-India, Zoological Survey of India, and State Centres at Chandigarh, Karnataka and Kerala) selected to extensively test it.
- (vi) ENVIS Focal Point in the Ministry maintains and continuously updates the Ministry's website (URL: <u>http://www.moef.gov.in</u>), which has been linked with its various Divisions of the Ministry in order to have up-to-date information on the subjects concerned. Besides, information on new updates of the Ministry, responses to media reports and other important issues of the Ministry are regularly uploaded on the Website with the objective of disseminating such information to all concerned. The website, which records a huge number of national and international users (for instance in 2011-12, an average of 1.2 lakh hits per month were recorded on the Ministry's website alone), was upgraded in

2012-13 and transferred to an open-source Content Management System (CMS), for conformance with GIGWand to render it more transparent, user friendly, database-driven and dynamic with modern features such as browser independence and compatibility with mobile devices.

- (vii) ENVIS Portal (URL: <u>http://www.envis.nic.in</u>) has been developed, connecting all ENVIS Centres. It acts as a catalyst for inter-Centre interaction and disseminating information across all subject categories, major events, activities and updates of the entire network. It also conducts Online Monitoring and Evaluation on day-to-day basis for ENVIS Centres, based on a prototype developed for the purpose of evaluatingonline the 35 Centres whose Websites have been upgraded so far. The scope is being extended to cover all Centres. ENVIS is one of the largest information systems on environment in the world.
- (viii) ENVIS Cell coordinates the development, publishingand dissemination of the Ministry's Annual Reports; the last publication was the Annual Report 2011-12. Annual Report 2012-13, which has been finalised, is under printing.
- (ix) In 2009 Governmentdecided to publish 5 sets of Reports to the People in order to generate national debate leading to suitable revision in the policy framework, wherever required. One such Report would be on Environment. So far, two 'Reports to the People on Environment and Forests' for2009-10 and 2010-11 have been published. The Report for 2011-12 would be published shortly.
- (x) Since the Tenth Plan, 100% Central Assistance is being provided to States/UTs to prepare their State of Environment (SoE) Reports, highlighting upstream and downstream linkages with environmental issues, besides creating a baseline document in each State/UT. SoE reporting was merged with ENVIS Scheme in 2008-09. Since 2004, one National SoE Report and 29 States/ City/ Hot Spots Reports have been published, as per details tabulated below. Reports for Karnataka and Lakshadweep are likely to be published in 2012-13. Reports are also under preparation for Jammu & Kashmir and Tripura.

Year	State / UT
2004	Assam, Chandigarh
2005	Andaman & Nicobar Islands, Chhattisgarh, Daman & Diu, Dadra & Nagar Haveli, Delhi, Gujarat, Haryana, Jharkhand, Meghalaya, Mizoram, Nagaland, Puducherry, Tamil Nadu
2006	Kerala, Madhya Pradesh, Manipur
2007	Bihar, Maharashtra, Odisha, Punjab, Rajasthan, Sikkim
2008	Himachal Pradesh

SFC Note for ENVIS Scheme

Year	State / UT
2009	National SoE Report
2011	Andhra Pradesh, Hyderabad City, Uttar Pradesh
2012	Chennai Metropolitan Area; (Under preparation – Karnataka and Lakshadweep; Jammu & Kashmir and Tripura)

(xi) Periodically, inputs were provided to various Committees of the Government, including those on 'Development of Database on Climate Change' and 'Issues in the Estimation of GDP of Forestry Sector' constituted by Ministry of Statistics & Programme Implementation. The Division also provided information for periodic publications produced by the Central Statistical Organisation (CSO) as per the recommendations of the National Statistical Commission, including the Compendium of Environmental Statistics and Statistical Abstracts.

Five		Outlay	Evnanditura	No. of	Average	per Centre
Year Plan	Year	(₹ lakh)	(₹ lakh)	Centres/ Nodes	Allocation (₹ lakh)	Expenditure (₹ lakh)
Fifth	1981-82	5	3	0	-	-
	Total	5	3			
Sixth	1982-83	10	2	0	-	-
	1983-84	30	27	4	7.50	6.79
	1984-85	40	39	7*	5.71	5.52
	1985-86	60	35	7*	8.57	5.01
	1986-87	100	82	10	10.00	8.18
	Total	240	184		7.95	6.37
Seventh	1987-88	45	41	10	4.50	4.08
	1988-89	45	45	10	4.50	4.53
	1989-90	35	86	10	3.50	8.57
	1990-91	40	61	10	4.00	6.13
	1991-92	70	69	13	5.38	5.32
	Total	235	302		4.38	5.73
Eighth	1992-93	90	93	17	5.29	5.47
	1993-94	100	103	17	5.88	6.08
	1994-95	110	113	20	5.50	5.67
	1995-96	150	151	21	7.14	7.18
	1996-97	135	124	21	6.43	5.88
	Total	585	584		6.05	6.06
Ninth	1997-98	150 ^{\$}	166	24	6.25	6.92
	1998-99	180 ^{\$}	200	25	7.20	7.99
	1999-00	180\$	189	25	7.20	7.57

Annual outlays and expenditure incurred (in current prices), since inception:

SFC Note for ENVIS Scheme

Five		Outlass	E	No. of	Average	per Centre
Year Plan	Year	Outlay (₹ lakh)	Expenditure (₹ lakh)	Centres/ Nodes	Allocation (₹ lakh)	Expenditure (₹ lakh)
	2000-01	125 ^{\$}	200	25	5.00	8.00
	2001-02	189 ^{\$}	192	25	7.56	7.70
	Total	824	947		6.64	7.64
Tenth	2002-03	200\$	220	25 [@]	8.00	8.82
	2003-04	250	246	25 [@]	10.00	9.84
	2004-05	550	529	72#	7.64	7.35
	2005-06	435	497	78	5.58	6.37
	2006-07	500	487	76	6.58	6.41
	Total	1935	1979		7.56	7.76
Eleventh	2007-08	526	487	76	6.92	6.41
	2008-09	600	573	76	7.89	7.54
	2009-10	650	624	76	8.55	8.22
	2010-11	750	613	76	9.87	8.07
	2011-12	650	547	67	9.70	8.16
	Total	3176	2845		8.59	7.68
Twelfth	2012-13	736	565 ^{&}	67	10.99	12.28
	2013-14	1039		69	15.06	
	2014-15 to 2016-17	5225		75	23.22 [£]	
	Total	7000	565*		16.42	12.28

* Could not be verified.

^{\$} Funds released through the Sustainable Development Network Programme (SDNP) are not included.

^(a) 61 Nodes were funded upto 30.06.2004 through Environmental Management Capacity Building Technical Assistance (EMCBTA) Project funded by the World Bank, for which allocation and expenditure under ENVIS Scheme separately are not available.

[#] While data is available for 25 Centres, separate data for the funding of 61 Nodes under ENVIS Scheme till June 2004 through EMCBTA Project is not available.

[&] Expenditure as on 28.02.2013 on 46 Centres. Proposals for ₹ 124 lakh for 15 Centres are under submission.

[£] Excluding non-Grant-in-Aid components would amount to ₹ 20.08 lakh per Centre, which may also nevertheless be on the higher side, since other expenditures on SoE reporting, etc. are met from Grants-in-Aid.

Independent Evaluation:

 (i) Functioning of Network Partners is evaluated in National/ Regional Workshops by Independent Expert Committees: Atthe National Interaction-cum-Evaluation Workshop for ENVIS Centres organized by the Ministry (Bhopal;29-30 August, 2012) to review the functioning of the Scheme and evaluate the performance of ENVIS Centres, two independent National Evaluation Committees of Experts were constituted, on subject-specific matters and Status of Environment and Related Issues respectively. Their Reports are at **Appendix-II.**In brief, their observations/ recommendations for further improvement in the activities of Centres and betterment of the Scheme as a whole were as follows:

- (a) Although no constraints were expressed by participants, there should be clear-cut guidelines issued by the Ministry on extension of appropriate infrastructure facilities/ working environment so that the activities of the Centre could be performed smoothly. Regular updating of hardware and software support is needed for each ENVIS Centre. The Ministry may consider sending a letter to the Head of the host organization / institutions in this regard.
- (b) Since most of the Centres expressed constraints in continuation of hired manpower, ranging from 02 to 04 in numbers, 03 regular staff should be hired in each Centre. The Ministry could suggest hiring one Statistician and one Computer Expert to maintain the ENVIS activities.
- (c) The fund and budgetary requirements as proposed by various Centres need to be realistically and critically examined by the Ministry. Remuneration currently paid seems to be not at par with similar post-holders elsewhere.
- (d) Each Centre should identify its thrust area as per its objectives. If it finds any related/ allied activity with its core activity, the same should be endorsed by its advisory committee, which may provide guidelines in this regard. Due to poor data structure, time series have not been developed in most Centres hosted by organizations/ institutes. Few Centres have developed numeric and descriptive databases. Sensitization workshop in their respective thematic area may be held. Appropriate mechanism should be adopted by each Centre for periodic updating of data, etc.
- (e) Annual output/ activities, achievements and shortcomings should be discussed in the Centre's advisory committee and may be made part of the progress report of the Centre. The Centres should also try to separate organizational activities from ENVIS goals.
- (f) Centres may reduce the printed version and increase the softcopy/ e-version of their outputs (newsletters, periodic reports, books etc.).
- (g) Although some Centres presented various parameters on hits, visitors, etc., there is need for compilation of the feedback received from various stakeholders and incorporation of the same in their present working and information sharing.
- (h) Networking of ENVIS Centres which are similar in nature and may have

complementary database should be done by providing links between them.

- (i) While the performance of ENVIS Centres on "Status of Environment and Related Issues" was found to be satisfactory, they were advised to improve their performance. NE State ENVIS Centres (except Sikkim) were advised to interact with each other for further improvement in their activities.
- (ii) ENVIS Scientific Advisory Committee (SAC), chaired by Secretary (E&F), inter alia, reviews the functioning of the Scheme. Initially constituted every two years, presently itstenure is of three years, SAC is composed of 5 official and 5 non-official Members. It may co-opt others or a panel of experts for recommending mid-course corrections to the Scheme and for general improvement of ENVIS Network.SAC has been meeting periodically, and its recommendations have been duly considered and course-correction of the Scheme carried out.

SAC held its last meeting on 05.11.2012, the minutes of which are at **Appendix-III**. The meeting reviewed the Scheme and recommended revisions to the Guidelines for Operation of the Scheme, including Evaluation parameters. In drawing up its recommendations, SAC took into consideration the February 2011 Report of the Sub-Committee to review the functioning of the Scheme constituted by the previous meeting of the SAC (25.06.2010) as well as results of the independent evaluation carried out by the two experts-basedNational Evaluation Committees at the National Workshop held at Bhopal (29-30 August 2012).

- (iii) Performance Review of ENVIS Centres: This review is based on each Centre's evaluation at a National/ Regional Workshop by Independent Expert Committee concerned coupled with physical visit by senior Officers of the Ministry for onsite assessment of facilities and operations as per applicable Evaluation Matrix, for determining each Centre's eligibility to receive the recurring grant-in-aid for financial years 2011-12 and 2012-13.Each Centre has thus been graded as category A:Very Good (≥80), B:Good (≥50 and <80) and C:Non-Performing (<50). 09 Centres categorised as non-performing were closed during 2011-12. The process of evaluation of Centres for 2012-13 is continuing.</p>
- (iv) Online Monitoring and Evaluation System on day-to-day basis for ENVIS Centres, has been taken up for development. A prototype is presently being used to evaluate the 36 Centres whose Websites are being upgraded presently.

2.3. If the project pertains to category 2.1(c), please indicate steps initiated for obtaining approval of Full Planning Commission.

Not applicable.

3. Justification for the Project.

3.1. The justification for taking up/ continuing the project or scheme may be provided.

EFC first approved the Scheme in 1983-84 (Sixth Five Year Plan). Briefly, its justification lies in the fact that environment management plays an important role in effecting a balance between the demands and resources available, thereby also keeping environmental quality at a satisfactory level. For any rational management of the environment that comprises of environmental planning, appraisal and applicable law, availability of verifiable knowledge on state-of-environment is a pre-requisite. ENVIS, by helping in decision-making in environmental planning and management, including environmental impact assessment of projects, and serving the needs of scientific research by individuals and institutions, is the backbone of environmental governance.

Over the course of time, and in recognition of the fact that environment and ecology are multi-disciplinary fields, new subject areas emerged which assumed importance. Further, with the advent of the Internet and other new mechanisms in information technology, the ENVIS scheme has had to rapidly metamorphose and stay apace with developments. The biggest challenge has been to build and open up environmental scientific repositories, such as the digital databases on flora and fauna of BSI and ZSI,correlating them with geo-spatial tools and information, and connecting them into a large unified network making information available and accessible globally.

Especially since 2001, with the assistance provided by the World Bank's EMCBTA project, 61 Nodes were added (to the then 25 ENVIS Centres) in premium institutions country-wide which were repositories of information on specific themes/ subject areas; the project had envisaged setting up a total of 90 Nodes/ Centres, 35 of which would be hosted by State Governments/ UT Administrations. Infrastructure support was extended to ENVIS Centres/ Nodes with a view to enabling them to set up websites and make available secondary information on their website also. After this project concluded on 30.06.2004, the Scheme was modified in 2004 authorising continuation of support to 75 Centres (consolidated from 86 Nodes/ Centres). Under the provisions for adding new Centres, the Centre on 'Biospheres' was added thereby taking the total number of ENVIS Centres country-wide to 76 in 2004-05. One-time infrastructure support was also provided in 2004-05 to the Departments/ organisations/ institutesthat hosted the ENVIS Centres. The justification and relevance of the Scheme was also established when the Scheme was considered by the SFC in 2004-05 (Tenth Five Year Plan). A copy of the SFC Note is at **Appendix-IV**.

SAC of the ENVIS Scheme during its meeting on 25th June, 2010 deliberated on various issues pertaining to the functioning and strengthening of ENVIS Centres. On its recommendation, a Sub-Committee was constituted to review the functioning of ENVIS Centres on various aspects in the light of short and long-term objectives of ENVIS Scheme in the changed scenario, whose report was submitted in February

2011(**Appendix-V**). The Sub-Committee,*inter alia*, recommended that in order to revisit the functioning of ENVIS Centres, the present SFC may be revised. On the basis of the report of the Sub-Committee, the performance of Centres is also being evaluatedcategorising them as 'A' (Very Good), 'B' (Good), and 'C' (Non-performing). With the closure of 09 non-performing Centres, 67 Centres are presently being funded by the Ministry. Evaluation, which is a continuing annual process, is done broadly on the basis of the monitoring mechanism set out in the February 2011 Report of the Sub-Committee.

Since then also, as may be seen from the benefits and quantifiable achievements of the Scheme outlined above, the dynamic information system includes both descriptive and numerical data as well as anticipatory information, with library performance being an important but not sole function. This Scheme provides a unique system in the country where environment-related information, covering also domestic rules and regulations notified by the Government, Parliament Questions answered by the Minister, activities of various Divisions, international conventions/ agreements/ protocols, and national and international activities and developments therein such as at Summits/ Conventions/ Symposia/ Workshops, is available country-wide and globally on a single web-enabled platform. Besides, links to libraries, databases, books and articles, relevant organisations, research work such as case studies are also provided, in addition to numeric databases on various environmental themes. Presently, it covers the following work areas:

- (i) Coordination and network development, country-wide, web-enabled
- (ii) Information collection and data preparation
- (iii) Database development, including of projects, studies and R&D works
- (iv) Distributed Network Websites development and maintenance
- (v) Information processing, analysis and dissemination through different modes, including different types of publications among various target user groups.
- (vi) Updation and dissemination of States'/ UTs' related environmental information through GIS interface under ISBEID programme.
- (vii) Preparation of SoE Reports of Nation and States/ UTs/ Metro cities/ 'Hot-Spots'.
- (viii) Preparation of the Annual Report to the People on Environment.
- (ix) Preparation of Annual Report of the Ministry.
- (x) Financially supporting the award of Indira Gandhi ParyavaranPuraskar (IGPP) annually to specified number of individuals and organisations.
- (xi) Any other item which falls under the purview of the Scheme.

3.2. The alternatives that have been considered before firming up the design of the project may be stated. (This should also include alternate modes of project delivery, e.g. outsourcing PPP etc. that have been considered).

This is a continuingScheme which already envisages outsourcing of the hosting of ENVIS Centres to private institutions and non-governmental organisations. All the aspects had been taken into account before formulating the Scheme. As per the

conceptualisation of the Scheme, translation facilities in Indian regional languages and foreign languages since several useful reports, reprints, etc. of scientific literature are available only in non-English languages had been envisaged to be set up in ENVIS Cell. However, the alternative of outsourcing the fulfilment of this need is desirable.

3.3. Please state whether the project proposal has objectives and coverage which overlap with projects/ schemes being implemented by the same or another agency (Ministry/ Department/ State governments). In cases of overlap, please state why the project scheme needs to be considered as a separate stand-alone effort.

No.Does not arise.

4. **Project Objectives and targets.**

4.1. The objectives of the project may be mentioned. These objectives should flow from the project justification.

Long-term and short-term objectives remain as comprehensively determined in 1982-83 and stated in Section 2.2. above.

4.2. The expected date of project/ scheme completion may be stated. This should be realistic and supported with a chart indicating timelines for the important activities, with a critical path analysis, identifying the main constraints.

The duration of the Scheme is intrinsically linked to the need for authentic and verifiable information in decision-making in environmental governance, including environmental planning and management and environmental impact assessment of projects, as well as the needs of scientific research by individuals and institutions.

The Scheme, on-going since Sixth Plan, would be continued through the Twelfth Plan. The nature of its major activities, which includes providing environmental information services to users based on updated databases, is not amenable to sustenance by ENVIS Centres without governmental support. Where feasible 'priced' information products would continue to be encouraged to be developed by Centres, the financial proceeds from which would be duly taken into account in extension of governmental support.

4.3. The specific targets proposed to be achieved of the project/ scheme may be mentioned. These targets should be necessary measurable. These should also be monitorable against baseline data. The baseline may be indicated.

By the end of the Twelfth Plan, the Scheme would be extended to comprehensively cover all State/ UTs related environmental information against the present network of 67 Centres out of which 39 are on subject-specific and 28 are on State/ UT related issues. ISBEID, which presently covers 28 States/ UTs, would be similarly extended to all States/ UTs. Thematic coverage would be extended in accordance with developments in environmental sciences. Tie-ups with domestic and international databases would be done as per emerging requirements.Based on the annual evaluation of ENVIS Centres, action would be taken with regard to non-performing Centres as per the guidelines

approved by SFC. New Centres would be created as per guidelines.

5. Project design.

5.1. Briefly explain the project design. This should include all components of project.

The objectives of the Scheme are being andwould continue to be realized through a framework which includes (i) Scientific Advisory Committee; (ii) ENVIS Cell/ Secretariat/ Focal Point; (iii) ENVIS Centres; (iv) SoE Reporting/ Report to the People on the Environment/ Annual Report of the Ministry; (v) ISBEID/ ENVIS Portal/ other IT initiatives; (vi) IGPP; (vii) any other new initiative within the purview of the Scheme.

5.1.1. Scientific Advisory Committee (SAC):

SAC, chaired by Secretary (E&F), is the highest bodyenvisaged in the Scheme. It is required to be constituted every three years by the Ministry. Itconsists of another 4 official (Director General of Forests & Special Secretary or his representative, Additional Secretary dealing with EI Division, Additional Secretary &Financial Adviser and Economic Adviser (EI Division) who acts as Member Secretary), and 5 non-official Members or experts selected with the approval of Minister for Environment & Forests.

Terms of Reference (TOR) of SAC

- The Committee shall oversee, monitor and review the overall operation and management as well asfunctioning and performance of ENVIS Networkin all aspects with a view to attain the objectives laid down for the Scheme and improving the system operation.
- It shall lay down guidelines for evolving concept, structure and work procedure for ENVIS, with a view to effectively implement the Scheme, including laying down the time schedule for its implementation at different stages of its operation as well as suitable designs and formats for information collection, storage and retrieval.
- It shall lay down guidelines for framing the Memorandum of Understanding (MOU) to be entered between the ENVIS Cell/ Focal Point and the ENVIS Centres indicating therein responsibilities and functions of these Centres.
- It shall suggest new areas in the field of Environmental Sciences and identify appropriate institutions for setting up ENVIS Centres as new network partners to make ENVIS a comprehensive web-enabled information system network.
- It shall formalise inter-institutional link-ups, coordination and linkages with other institutes, in India and abroad, for sourcing their information and databases.
- The Committee may co-opt other members or panel of experts as necessary with the concurrence of Chairperson for recommending mid-course corrections as appropriate and for general improvement of the ENVIS Network and for future improvements.
- The tenure of the Committee will be three years from the date of issue of its constituting Notification.

- The Committee may meet twice in a year or earlieras and when necessary and deemed fit by the Chairperson in New Delhi or elsewhere in India.
- Expenditure on TA/DA and sitting fee of non-official members will be borne by the Ministry as admissible under the relevant Government of India rules.

No change is proposed to composition, terms of appointment and TOR of the SAC.

5.1.2. ENVIS Cell/ Secretariat/ Focal Point

It was envisaged that since in a dynamic information system, information analysis is a very essential component. Thus, an ENVIS Cell on information analysis with specialists on information analysis, environmental statistics and system studies, using application of modelling techniques wherever appropriate, was set up for ENVIS. A small but self-contained Publication Division was also envisaged. The functions assigned are:

- (i) Coordination and network development
- (ii) Information collection and data preparation of popular-level data that could be put out in the public domain, as well as generating high-end, perhaps research-level data.
- (iii) Generic Database development, including of projects, studies and R&D works
- (iv) Distributed Network Websites development and maintenance
- (v) Library and Documentation
- (vi) Liaison with relevant international and national information systems n order to realise the potential for improving the country's information repository and databases through international cooperation and exchange of environment-related information, especially on climate change and other cross-border environmental parameters.
- (vii) Information analysis, environmental statistics and system studies
- (viii) Informationdisseminationand technical enquiry services (query-based support) through different modes as well as different types of publications among various target user groups.
- (ix) Preparation of SoE Reports of the Nation and coordination and dissemination of SoE Reports of States/ UTs/ Metro cities/ 'Hot-Spots'.
- (x) Preparation of the Annual Report to the People on Environment.
- (xi) Preparation of Annual Report of the Ministry.
- (xii) Financially supporting the award of Indira Gandhi ParyavaranPuraskar (IGPP) annually to specified number of individuals and organisations.
- (xiii) Monitoring, review, evaluation and performance appraisal of ENVIS Centres, as well as ENVIS as a whole.
- (xiv) Assisting SAC with inputs as well as other secretarial help.
- (xv) Organising and supporting trainings and capacity building workshops, etc.
- (xvi) Any other item which falls under the purview of the Scheme.

The ENVIS Cell set up in the Ministry in a project mode to carry out the coordination of, and provide information technology support to, initially 25 ENVIS Centres (and now 67), would also maintain and upgrade the ENVIS Portal and Ministry's website apart

from assisting in the preparation of the Annual Report of the Ministry, National SoE Report, Report to the People on the Environment, and any other publication authorised by SAC. ENVIS Cell would also collect, manage and maintain the photo-library for the Ministry and provides relevant photographs both in print and digital format to the officials as and when requested. It is responsible for providing Information Computing Technology (ICT) knowledge to ENVIS Centres in order to make them familiar with the latest technological developments. It maintains a close liaison with NIC for implementing GIGWs in respect of all websites under the Scheme.

SAC has recommended that the ENVIS Cell may be co-terminus with the Scheme. No change has been recommended to its assigned functions.

Sl. No.	Post (scales as on 10.12.1982, date of sanction)	Sanctioned Strength	Presently filled
1.	Director (₹ 2,000-2,500)	2	-
2.	Joint Director (originally sanctioned as Under Secretary (₹ 1,200-1,600))	1	-
3.	Deputy Director (originally sanctioned as Principal Scientific Officer (₹ 1,500-2,000))	2	2
4.	Scientist 'B'/ Environmental Officer (₹ 1,100-1,600)	4	1
5.	Senior Documentation Officer (₹ 1,100-1,600)	1	-
6.	Research Assistant (₹ 500-900)	8	2
7.	Accountant (₹ 500-900)	1	-
8.	Senior Microfiche Assistant (₹ 550-900)	1	-
9.	Junior Technical Assistant (₹ 425-700)	1	-
10.	PA (₹ 650-1,040)/ UDC (₹ 330-560)/ Steno 'C' (₹ 425-800)/ Steno 'D' (₹ 330-560)	5	-
11.	LDC (₹ 260-400)	3	-
12.	Daftry (₹ 200-250)	2	-
13.	Messenger/ Peon/ MTO (₹ 196-232)	5	1 (½ day)
14.	Total	35	5 ½

Manpower

Presently, against its sanctioned staff strength, EI Division, headed by the Economic Adviser, has 02 Deputy Directors, 01 Research Assistant and 02 MTOs. As no regular staff has been provided for ENVIS Cell/ Focal Point, 04 Staff have been contracted through an outsource agency (01 National Programme Coordinator (NPC); 01 Programme Officer; 01 Web Developer; and 01 Office Assistant).

SAC has recommended that besides filling up the vacant posts in EI Division and Focal Point, (i) a Statistician may be inducted in ENVIS Cell to manage the statistical data as ENVIS has also been designated by Ministry of Statistics and Programme Implementation (MoS&PI) to provide data on environment related areas for the requirements of National Statistical Commission, etc.; (ii) existing and proposed outsourced staff alongwithtotal manhour emoluments, their academic qualifications and experience, may be as tabulated below; and (iii) the manhours may be enhanced annually for each of the five categories of outsourced staff by the absolute value of the annual increment permissible in the comparable pay scale or inflation as measured by the declared increase in Dearness Allowanceby the Central Government for the comparable pay scale, whichever is lower.

SI.	Present		Proposed	
No.	Designation	Manhour (₹ p.m.)	Designation	Manhour (₹ p.m.)
1.	NPC	46,000/-	NPC-cum-Senior Programme Officer	52,000/-
2.	_	_	Statistician	46,000/-
3.	Programme Officer	28,750/-	Senior InformationOfficer	40,000/-
4.	Data Entry Operator	17,250/-	Web Developer	30,000/-
5.	Office Assistant	6,900/-	Office Attendant	8,000/-

Qualification and Experience

Post	Essential Qualification and Experience	Age limit
Senior	M.Sc. (Natural Sciences/ Environmental Science)/ MCA/	45 Years
Programme	B.Tech./ BE, well versed in computer applications/ Web	
Officer	Development with at least 3 years' experience	
Statistician	M.Sc. in Statistics/ Mathematics with Statistics as subject	45 Years
	at graduation level with at least 3 years' experience	
Senior	M.Sc. (Natural Sciences/ Environmental Science)/ MCA/	35 Years
Information	B.Tech./ BE, well versed in computer applications/ Web	
Officer	Development with at least one year's experience	
Web	Graduate, good knowledge of Web Development/	35 Years
Developer	Designing and Computers Applications such as print-	
	publishing, software like Photoshop/Corel Draw/	
	PageMaker, etc. with one year's experience in Web	
	Designing, including content management.	
Office	Class XII passed	30 Years
Attendant	Class All passed	

Functional Responsibilities:

NPC-cum-Senior Programme Officer will report to the Deputy Director (Websites) for all functions, which will include the following:

- (i) Online monitoring of performance, and technical assistance to, 31 thematic ENVIS Centres (other than Delhi-based Centres).
- (ii) Providing enquiry services on matters concerning 31 thematic Centres directly or through ENVIS Centres.
- (iii) Implementation of Annual Action Plan of Activities of the ENVIS Cell.
- (iv) Coordination of ENVIS Centres and addressing horizontal issues.

- (v) Coordination and bringing out four ENVIS newsletters every year on the basis of material received from various ENVIS Centres.
- (vi) Any other special publication to be brought out as in Annual Action Plan.
- (vii) Maintenance and upgrading of ENVIS Portal website and technical management of ENVIS network (ENVIS centres)
- (viii) Coordination in respect of redesigning and cyber security audit project assigned to NIC.
- (ix) Management of databases developed by ENVIS Centres.
- (x) Any routine matters relating to Websites.
- (xi) All residual matters regarding ENVIS Cell.
- (xii) Link Officer to Senior Information Officer (except on Ministry's Website).

Statistician will be responsible for all the statistical activities of ENVIS Cell.

Senior Information Officer will be responsible for

- (i) Online monitoring of performance, and technical assistance to, 28 State/ UT ENVIS Centres and 8 Delhi-based thematic Centres.
- (ii) Providing enquiry services on matters concerning 28 State/ UT and 8 Delhi-based thematic Centresdirectly or through ENVIS Centres.
- (iii) ISBEID programme of the Ministry, including co-ordination and liaising with different State/ UT Centres and also NIC.
- (iv) Concept and all implementation aspects of generic database under development.
- (v) Maintenance and updation of Ministry's website, including conformance with GIGW and its security audit.
- (vi) Maintenance of Virtual Private Network (VPN) facility.
- (vii) Resolving technical queries raised by ENVIS Centres.
- (viii) Link Officer to NPC-cum-Senior Programme Officer.

Web Developer will be assigned duties as follows:

- (i) Website designing, including banners, and editing of images/videos for the website.
- (ii) Managing the digital photo-library of ENVIS.
- (iii) Assisting in preparation of Reports/ publications/e-publications of ENVIS/ EIDivision, including the Annual Report of the Ministry
- (iv) Management and upkeep of ENVIS files.
- (v) Maintenance and updation of Ministry's website, including conformance with GIGW and its security audit (as link officer to Senior Information Officer.

Office Attendant will assist ENVIS Cell/EI Division in performing day-to-day activities.

Recruitment

Performance of all computer programming and web-based activities of ENVIS Cell, as well as support staff, will be outsourced to an experienced organization/ institute having

an ENVIS Centre located preferably in Delhi. The outsourced agency will be responsible for operation, management and functioning of ENVIS Cell/ Focal Point. The recruitment of staff for ENVIS Cell will be done by the outsourced agency in a transparent manner in consultation with the Ministry. Performance of outsourced agency, including ENVIS Cell staff, will be evaluated annually by the Processing Division.

Infrastructure

ENVIS Cell/ Focal Point will be located in the Ministry and the Ministry will provide the necessary physical infrastructure.

5.1.3. ENVIS Centres (Presently 67):

Role: The role of an ENVIS Centre is to act as a single-window information provider on various areas related to environment as set out in the Memorandum of Understanding (MOU) executed by the Host entity with the Ministry. Each Centre is a part of a countrywide web-enabled network on which environment-related information collated and updated by each Centre is made publicly available on a single e-platform.

Functions: Each ENVIS Centre updates and maintains an information database that includes descriptive information and numerical data for suitable dissemination. Descriptive information is maintained in the form of bibliographies, libraries, copies/ reprints/ abstracts of reports, articles, and research notes, and links to other databases/ networks, while numerical data on the subject/ theme assigned to the Centre is collected, collated, compiled, processed and analysed, and information products are developed for online dissemination or in the form of publications and reports. All information thus compiled is made available on the Centre's website, which can also be accessed through the ENVIS Portal. The main functions of ENVIS Centres, in detail, are as follows:

- To maintain and update a databank on all aspects of assigned subject area/ status of environment and related issues, and to host and maintain a website for its dissemination.
- To develop an inventory of authentic and reliable information, and collect books, reports and journals for collation, retrieval, processing and analysis, and dissemination of information and database creation.
- To produce value-added information products include directories of information at State/regional/ National level (e.g. NGO databases, expertise rosters in various sectors, biodiversity registers); CD or website-based map atlases, e.g. using forest maps as base, information products could be developed on parks and sanctuary, desertification maps, species distribution maps or map atlases, and so on).
- To build linkages with information sources in the country and abroad for relevant and comprehensive information contents.
- To identify data gaps and knowledge gaps in the specified subject area and take

action to fill these gaps.

- To collect primary data, as mandated.
- To respond to queries and information sought by stakeholders in the form of copies of published reports, documents, abstracts and research papers.
- To bring out newsletters and other publications in assigned subject.
- To help the ENVIS Focal Point in gradually developing the inventory of all information materials available at the Centres, and in analysis of information in subject area of the Centre.

Responsibilities/ Deliverables:

- To build up an inventory of authentic and reliable updated information in assigned subject, in descriptive and numeric modesas well as anticipatory information.
- To develop databases on parameters relevant to the subject area/ theme, and process and analyse them; State/ UT ENVIS Centres would collect, collate, compile, process, analyse and disseminate State/ UT-specific data.
- To identify data gaps and take action to fill these gaps.
- To disseminate the relevant information to each user comprehensively and as quickly as possible through various mediums and instruments.
- To coordinate with the Ministry for supplying relevant, adequate and timely information to different users.
- To develop a user-friendly, open, dynamic website that serves as a web-enabled system for online dissemination of information to users and provides an interactive exchange of information with other websites/ networks/ databases.
- To formulate its Strategic Plan that would, *inter alia*, serve to generate sources of funds from the corporate sector and/ or through subscriptions of its Newsletter/ other publications.
- To undertake all activities set out in each Centre's Annual Plan.

Accountability:

- Each Centre is accountable to the Ministry of Environment & Forests, Government of India. Each Centre would also be partly accountable to its Host(Department of State Government/ UT Administration orinstitute/organization) as per the MOU.
- Prudent spending of the Grant-in-Aid given by the Ministry.
- To users based on dissemination of authentic and verifiable information, with feedback on users' satisfaction. Quarterly feedback will be given by ENVIS Centres to the Ministry.
- Regular reporting of the work carried out by the Centre to the Ministry.

Monitoring Mechanisms

- Periodic review of the functioning of the Scheme, including consideration of recommendations of the Independent Expert Committees, for mid-course corrections to the Scheme and for general improvement of ENVIS Networkby SAC.
- Third-Party Evaluation of the Scheme as a whole and Performance of ENVIS Centreson an annual basis through National and Regional Evaluation Workshopsby separate Independent Expert Committees for State/ UT and Thematic Centres. Not more than four Regional Evaluation Workshops (North, South, North-East and West regions) may be held in any year. Regional and National Workshops may be organized in alternate years.
- Performance Review of ENVIS Centres annually based on each Centre's evaluation at a National/ Regional Workshop by Independent Expert Committee concernedcoupled with physical visit by senior Officers of the Ministry for onsite assessment of facilities and operations at least once every two years, as per applicable Evaluation Matrix, for determining each Centre's eligibility to receive the recurring grant-in-aid for forthcoming financial year.
- Online Monitoring and Evaluation System on day-to-day basis based on the prototype developed for the purpose for all ENVIS Centres, gradually extending the coverage from the 36 Centres whose Websites have been restructured and upgraded to all Centres as their websites are similarly restructured and upgraded.
- All the Centres will be evaluated concurrently, both continuously and annuallyby the Processing Division. The release of grant to a Centre will depend on the performance appraisal subject to the satisfaction of Processing Division.
- As per the comments of IFD at the meeting of SAC held on 05.11.2012, grading of ENVIS Centres shall be done on the basis of total points earned by any Centre as category A:Very Good (≥80), B:Good (≥50 and <80) and C:Non-Performing (<50). 70 points would be earmarked for online monitoring of each Centre by the ENVIS Cell/ Focal Point. Balance 30 points would be earmarked for evaluation by Processing Division, which would also be based on the determination in the field visit to be undertaken at least once every two years as well as performance evaluation by the Independent Expert Committee. The parameters for monitoring with weights are given in the table below:
 - 1. Assessment by Online Evaluation (Total Weightage 70)

and action taken to fill them

1.1.

Website updation	
1.1.1. Frequency of updating	10
1.1.2. Subject-specific Database Updation	
1.1.2.1. Numerical Database	5
1.1.2.2. Other Database(s)	5
1.1.3. Identification of information data gaps and knowledge gaps	5

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1.1.4. Newsletters/Publications/Reports	10
1.1.5. Production of value-added information products	15
Sub-Total	50
1.2. User engagement and interaction	
1.2.1. Total Number of Visits	2
1.2.2. Number of Unique Visits ¹	3
1.2.3. Reports Downloaded/Read	5
1.2.4. Total Number of Queries received	3
1.2.5. Number of Queries responded to	7
Sub-Total	20
Total	70
2. Assessment by Processing Division (Total Weightage 30)	
2.1. Implementation of Strategic Plan/ Annual Action Plan	5
2.2. Any new initiative	5
2.3. Quality of website updates ²	5
2.4. Quality of newsletters/publications/reports	5
2.5. Assessment of Centre (such as through visit by MoEF	5
official, regular interaction with Centres, etc.)	
2.6. Utilization of Funds	5
Total	30
Grand Total	100

Incentives and Disincentives

The funding pattern will be linked to performance of Centres. Incentives will be given to category"A"Centres if their performances are graded "A" for two consecutive years. These may be in the form of enhancement of overall budget by upto 15%(excluding manhours paid to manpower) and/or grant for upgrading physical infrastructure.

Centres graded "B" will be kept on a watch list for a one year period. During this period an action plan will be worked out with the Ministry for removing lacunae and infirmities in performance. The performance of the Centre will be reviewed after one year. However, if the Centre is graded "B" consecutively for three years, one-time cut in grant by 10% (excluding emoluments paid to manpower) or, for administrative reasons, closure of the Centre may be considered with the approval of competent authority.

Centres graded "C" will be kept on watch list for 6 months during which concerted efforts would be made jointly by the host institute and the Ministry towards addressing the lacunae and infirmities in performance.Every 6 months the action plan will be reviewed along with performance of the Centre.However, if the Centre is graded "C" consecutively for 2 years, or for administrative reasons, closure of the Centre may be considered with the approval of competent authority.

¹ Number of unique visits signifies total number of unique visitors regardless of their repeat/return sessions over a period of time.

² Web-based evaluation of updates (1.1.) takes into account the quantity, frequency and regularity of updates, while quality of updates is evaluated by the Processing Division.

Evaluation of ENVIS Scheme

Evaluation of ENVIS Scheme will be doneas per Planning Commission's guidelines for Central Sector Schemes once in 5 years or earlier as per recommendations of SAC.

Guidelines for Establishment of New ENVIS Centres

- (i) Identify subject-gap areas based on feedback from Centres in consultation with subject Divisions of the Ministry and State Governments/ UT Administrations, with due ratification of SAC.
- (ii) Invite proposals from State/ UT Governments/ reputed institutions/ NGOs concerned through the Ministry's website.
- (iii) EI Division, MoEF will scrutinize proposals as per criteria and shortlist 1-2 institutions.
- (iv) Shortlisted institutions will be invited to present their proposals before the SAC.
- (v) Recommendation of SAC will be placed for consideration of Secretary (E&F).MOU will be entered into with approved host institutions by ENVIS Focal Point.

Necessary infrastructure, an essential perquisite for any ENVIS Centre, will be provided by Host Institution/NGOs/State/UT Governments. The Centres will be located in the space provided by the Host Institutions. The Host Institute will have to satisfy the Ministry with regard to infrastructure before setting/establishing the Centre. The Ministry will discontinue the ENVIS Centre at any point of time if infrastructure is found to be in adequate and unsatisfactory.

Notwithstanding the above, a Centre may be opened with the approval of the competent authority.

Criteria for Selection of New ENVIS Centres

- (i) New subject area/ identified gap areas as ratified by SAC.
- (ii) Preference to geographical areas where there are no ENVIS Centres.
- (iii) Reputed institution/ organization/ Department.
- (iv) Host Institute should have necessary expertise and capability to run Centre.
- (v) Interest and willingness of Host Institute to serve user community with substantive information as and when required.
- (vi) Appropriate physical infrastructure, as physically verified by EI Division, MoEF to be incorporated in MOU.

EI Division, MoEF will prepare a comparative statement of its observations on the proposals received for new ENVIS Centres which shall be placed before SAC for consideration.

Guidelines for Closure of Existing ENVIS Centres

(i) Absence of proper physical infrastructure as defined in MOU.

- (ii) Centres graded "B" will be kept on a watch list for a one year period. During this period an action plan will be worked out with the Ministry for removing lacunae and infirmities in performance. The performance of the Centre will be reviewed after one year. However, if the Centre is graded "B" consecutively for three years, one-time cut in grant by 10% (excluding emoluments paid to manpower) or, for administrative reasons, closure of the Centre may be considered with the approval of competent authority.
- (iii) Centres graded "C" will be kept on watch list for 6 months during which concerted efforts would be made jointly by Host Institute and Ministry towards addressing the lacunae and infirmities in performance.Every 6 months the action plan will be reviewed along with performance of the Centre. However, if the Centre is graded "C" consecutively for 2 years, or for administrative reasons, its closure may be considered with the approval of competent authority.
- (iv) Any other administrative reasons, with the approval of competent authority.
- (v) MOU will include a suitable clause on disposal of assets, including equipment and prototypes of databases and value-added information products, with reference to GFR 2005 and related instructions. As per the instructions, Government also will have discretion to gift the assets to the grantee organization if it considers the same to be appropriate.
- (vi) MOU will include mechanism for periodic transferring to the ENVIS Focal Point of the databases/ substantive work on documentation and prototypes, including of databases and information products, developed by ENVIS Centre. In the event of closure of a Centre, these would be suitably passing over to another ENVIS Centre on the subject.

Infrastructure-related Obligations of Host Institution

- (i) Appropriate physical and human infrastructure, as physically verified by EI Division, MoEF will be incorporated in the MOU. MoEF will also periodically review infrastructure needs, and may consider providing funds for procurement of hardware and software to the Centres, and also for suitable upgrading/ replacement of hardware/ software as per applicable norms of the Government.
- (ii) Host institute will provide office space, with basic amenities, and satisfy MoEF in this regard before Centre is established.
- (iii) Website for the ENVIS Centre will be developed on NIC platform.
- (iv) Regular cyber-security audit and review for conformance with GIGW will be done by ENVIS Cell/ Focal Point. Financial support for de-bugging may be considered to be extended to deserving Centres.

Manpower

All ENVIS Centres will employ a maximum ofthree (3) technical core staff for smooth running and management of the ENVIS Centre. Financial support upto the limits specified in the tabular statement below will be considered to be extended to the ENVIS Centres towards meeting the emoluments/ manhoursof the three technical core staff: The

financial support towards manhours may be enhanced annually for each of the three categories by the absolute value of the annual increment permissible in the comparable pay scale or inflation as measured by the declared increase in Dearness Allowance by Central Government for the comparable pay scale, whichever is lower.

Sl. No.	Designation	No. of posts	Manhours (₹ p.m.)
1.	Programme Officer	1	30,000/-
2.	Information Officer	1	25,000/-
3.	IT Assistant	1	20,000/-

Qualification and Experience

Post	Essential Qualification and Experience	Age Limit
Programme Officer	M.Sc. in specific subject related to subject areas for thematic Centres; M.Sc. for States/UT Centres along with good computer knowledge; 3 years' experience for all.	45 Years
Information Officer	Graduate in science or equivalent; good knowledge of computers; one year working experience in relevant areas	35 Years
IT Assistant	Graduate, good knowledge of computer technology (website development, designing, internet, publication etc.); one year's experience	35 Years

Functional responsibilities and duties:

Programme Officerwill prepare a comprehensive annual plan of activities/ work as well as Strategic Plan for the forthcoming year in consultation with the ENVIS Coordinator, identifying work components for the project keeping in view the objectives, identification of data sources, data gaps, knowledge gaps, and verification and authentication of collected data with appropriate tabulations. The activities will include development of value added information products. ENVIS Coordinator will be a person from Host Institute concerned and he will be paid by the organization. The Programme Officer will be the overall technical head of the Centre under the ENVIS Coordinator.

Information Officer will be responsible for data collection on the assigned subject from different authenticated sources. He will be also responsible for all data related matters such as collection, compilation, storage, processing and dissemination of information along with Programme Officer.

IT Assistant will be responsible for designing, development of website and for keeping the website up-to-date through data entry, links with other databases, etc. He will maintain the website. He will be responsible for all IT related matters.

Recruitment

The Centres will recruit staffs on contractual basis in a transparent manner strictly following the rules and regulations of the host institutions. The terms and conditions of service of such staffs will be governed by the rules prevailing in the organization/

institute hosting the ENVIS Centre. The Ministry will have no liability what so ever.

5.1.4. STATE-OF-THE-ENVIRONMENT (SoE) REPORTING

During the Tenth Plan the Ministry initiated a Scheme for preparation of SoE Report for States/UTs, with consolidation in a National Environment Report. The Scheme was extended during the Eleventh Plan, and allocation for SoE Reporting of ₹ 0.50 crore was merged with ENVIS Scheme in 2008-09. So far, the Ministry has brought out 29SoE Reports for States/UTs/ Hot Spots/ etc. It published the 3rd National SoEReport in 2009. So E Reporting for Metro Cities/Hot-Spots/ etc.has also now been taken up.

Presently, it has been envisaged that the State/ UT ENVIS Centres, which now have the capability of collecting data from the line departments of the States/UTs, will be entrusted with the job of preparing SoE Report of the respective States/UTs (earlier these Reports were prepared by some State Host Institutes under guidance from National Host Institute). ISBEID programme will form the baseline data for SoE Reports. SoE Reports will be published with a periodicity of two per State over a five year period, followed by a National SoE Report.

5.2. In case the project or scheme is location specific, please state the basis for selection of such location.

ENVIS Centres will be located in reputed institutions/organizations/universities, NGOsandState/UT GovernmentDepartments. Theirselection will be mainly based on extending coverage to important thematic areas, and capacity of host entity to perform duties as per guidelines. The Centres will be set up after scrutiny and recommendation of SAC under Secretary (E&F). State/UT Centres are located in State Government Departments in consultation with the respective State/UT Governments.

5.3. If the project involves creation/ modification of structural and engineering assets or change in land use plans, disaster management concerns as brought out in OM no. 37(4)/PF-II/2003 dated 19-06-2009 should be assessed. A self-certification in this regard may be enclosed with the EFC memo.

Not applicable.

5.4. In case of beneficiary oriented project/ scheme, the mechanism for identification of the beneficiary and the linkage of beneficiary identification with UID numbers may be indicated as advised in O.M. No. 1(3)/PF-II/2001 dated 09.08.2010.

Not applicable.

5.5. Wherever possible, the mode of delivery should involve Panchayati Raj Institutions and Urban Local Bodies. Where this is intended, the preparedness and ability of the panchayats for executing the project may be indicated. If exceptions are to be made, the reasons may be explained.

Not applicable.

5.6. In case the project involves land acquisition or environmental clearances, the specific requirements and the status in this regard may be indicated.

Not applicable.

5.7. The legacy arrangements after the scheduled project duration may be mentioned. In case the project creates assets, arrangements for their maintenance and upkeep may be stated. (For example the project assets may be taken over and maintained by the State Government/ PRIs; ULBs).

Assets created will be of the Ministry which will take decisions thereon as deemed fit.

5.8. Whether the guidelines of Bureau of Energy Efficiency and other related guidelines for energy efficient buildings etc. have been considered / complied with.

Not applicable.

5.9. Whether the project is secured against natural/ man-made disasters like floods, cyclones, earthquakes, tsunamis etc.

Not applicable.

- 6. **Project/Scheme cost.**
- 6.1. Please provide project cost estimate for its scheduled duration alongwith break-up of year-wise, component-wise expenses segregated into non-recurring and recurring expenses. It may also be indicated whether land is needed, if so whether which agency is providing for it, and in case the cost of land is to be booked to the project, whether it has been included in the estimates.
- I. ENVIS CELL

Existing Heads		Proposed Heads	
1.	Manpower	1. Manpower	
2.	Contingencies,	2. Others (Contingencies, Consumables, Stationery,	
	Consumables, Stationery &	hardware/equipment, AMC, Internet Charges,	
	hardware etc.	Training/ workshops etc.)	
3.	Travel	3. Travel	
4.	Institutional Charges	4. Institutional Service Charges	

Annual Allocation (for 2013-14): Recurring:

	Head of Expenditure	Amount in ₹
A.	Manpower	
	NPC-cum-Senior Programme Officer	52,000/-
	Statistician	46,000/-
	Senior Information Officer	40,000/-
	Web Developer	30,000/-
	Office Attendant	8,000/-
	Total	1,76,000/-
	Total for One Year (1,76,000×12)	21,12,000/-
В.	Others	
	Contingencies, consumables, stationery, hardware/	1,00,000/-
	equipment, AMC, internet charges, miscellaneous	
	Trainings/ workshops	7,00,000/-

SFC Note for ENVIS Scheme

	Total	8,00,000/-
C.	Travel	2,00,000/-
D.	Institutional Service Charges (to be decided with the approval of the competent authority)	93,043/-
E.	Expenses towards IGPP, Annual Report, etc.	37,54,957/-
Grand Total (A + B + C +D + E)		69,60,914/-

II. ENVIS CENTRES

Existing Heads		Proposed Heads *	
1.	Manpower	1. Manpower	
2.	Database development	2. Others (database development, website	
3.	Website maintenance	maintenance, printing of Newsletters,	
4.	Printing of Newsletters	contingency, stationery, consumables,	
5.	Contingency(stationery,	AMC, Internet charges, training, inter-	
	consumables, AMC, internet charges)	centre interaction workshops)	
6.	Travel & Training	3. Travel	

* Items 2 to 5 in existing heads have been merged into one head 'Others' as it gives the Centres more flexibility in utilization of funds, and prevents proliferation of carry-over of funds to next year which makes ENVIS Centres complacent in carrying out their activities.

Annual Allocation (for 2013-14): Recurring:

	Head of Expenditure	Amount in ₹	
A.	Manpower		
	Programme Officer	30,000/-	
	Information Officer	25,000/-	
	IT Assistant	20,000/-	
	Total for one Centre per month	75,000/-	
	Total for one Centre per year (75,000×12)	9,00,000/-	
В.	Others (for one Centre per year)(database development,	3,30,000/-	
	website maintenance, printing of Newsletters, contingency,		
	stationery, consumables, AMC, Internet charges, training,		
	inter-centre interaction workshops)		
C.	Travel(for one Centre per year)	30,000/-	
	Total for One Centre per year (A+B+C)	12,60,000/-	
Gr	Grand Total for 67 Centres per Year (12,60,000×69*)		

* In the light of decisions taken by SAC (meeting held on 05.11.2012) regarding closure of existing Centres and setting up of new Centres, the expenditure has been calculated for 69 Centres.

Annual Allocation (for 2013-14): Non-Recurring:

Funding support for equipment was provided to ENVIS Centres at different point of times, the last in 2004-05. Looking to the need to upgrade obsolete hardware/ software, the Centres would be provided with:

- PCs with internet connectivity & UPS -2
- Scanner 1
- Printer 1

The amount will be non-recurring and allocation made under this item is ₹1.00crore, which may be enhanced as and when required with concurrence of Finance. Funds would be provided to State/ UT Centres for procuring equipment as per DGS&D rate contract/

Government of India guidelines.

III. STATE OF ENVIRONMENT (SoE) REPORTING

In preparing the SoE Report by 28 State/UT ENVIS Centres, the Centres have to be supported. SoE Reports are to be published with a periodicity of two per State over a five year period, followed by a National SoE Report. An amount of \gtrless 8.7 crore has been estimated for preparation of 58 SoE Reports. In addition, SoE Reports may also be published for Metro Cities/Hot-Spots.The allocation, if felt necessary, may be enhanced with the approval of the Competent Authority.

Financial Implications

The expenditures for ENVIS Centres, ENVIS Cell, SoER, ISBEID, ENVIS Portal etc. are being met out from ENVIS Grants-in-Aid Sub-Head. Thetotal allocation approved for Twelfth Plan for ENVIS Scheme is ₹ 70.00 crore, as perObject Head-wise details covering also award of IGPP, and all components such as rewards, office expenses, other administrative expenses, salaries etc.,as tabulated below.While taking the approved allocations for 2012-13 (₹ 7.36 crore) and 2013-14 (₹ 10.39 crore), the expenditures for remaining 3 years of Twelfth Plan have been made by applying inflation of 10% wherever applicable and reaching a total of 75 ENVIS Centres during Twelfth Plan as per the recommendation of the SAC (meeting held on 05.11.2012).

Allocation for Twelfth Five Year Plan as per Object Head-wise details

	Budget/ Object Head of Expenditure	Amount (₹ lakh)
01.00.01	Salaries	5,00.00
01.00.03	Over Time Allowances	1.00
01.00.05	Rewards	1,20.00
01.00.06	Medical Expenditure	0.00
01.00.11	Domestic Travel Expenses	1,00.00
01.00.13	Office Expenses	19.00
01.00.16	Publications	1,30.00
01.00.17	Banking Cash Transaction Tax	0.00
01.00.20	Other Administrative Expenses	25.00
01.00.26	Advertisement and Publicity	50.00
01.00.28	Professional Services	5.00
01.00.31	Grants-in-Aid	60,50.00
	ENVIS Centres	48,00.00
	Hardware (Non-recurring)	1,00.00
	ENVIS Cell	2,00.00
	SoE Report	9,00.00
	Special Publication	25.00
	ISBEID/ENVIS Portal/IT	25.00
		70,00.00

Notwithstanding the above, keeping in view the necessity the budget head amountscould be altered within the overall budget of Scheme with approval of the competent authority.

ENVIS Centres will be located in the space provided by the Host Institutions and ENVIS Cell will be located in the Ministry. No additional land is required for the project.

6.2. Estimated expenditure on project administration (including expenses on consultants, etc.) may be separately indicated.

Not applicable.

6.3. The basis of these cost estimates along with the reference dates for normative costing may be provided. The firmness of the estimate may be indicated along with the cost components that can vary, the factors that could cause the variation and the extent of the expected variation.

The cost estimates are kept at bare minimum.

6.4. In case the project/ scheme involves payout of subsidy, the year wise expected outgo, up to the last year of payout, may be indicated.

Not applicable.

6.5. In case the project/ scheme intends to create capital assets, employ specialised manpower or involves other activities that necessitate a Recurring Cost of Capital Expenditure (RCCE) (e.g., maintenance and upkeep costs of assets, salary costs of manpower, etc.) over the lifetime of the asset, such expenditures, on an annual basis, may be indicated in the project proposal.

Not applicable.

6.6. It may also be stated whether the agency which would be assigned this legacy responsibility has been consulted and has agreed to bear the continuing recurring expenditure. (e.g., the State governments may need to incur the maintenance and upkeep costs of assets created under Plan schemes.

Not applicable.

6.7. The cost towards salary/ fees/ emoluments of the project human resources as being proposed should be indicated (procedure for seeking approval of the human resource requirements is however detailed at para-7 below).

As given.

6.8. The component of the costs mentioned at 6.1-6.7, that will be shared by the State governments may be indicated.

The project will be fully sponsored by the Central Government.

6.9. In the event of fund transfer being made to State Governments/ local bodies or other organisations, "grants for creation of capital assets" may be indicated separately.

Not applicable.

- 7. **Project Human Resources.**
- 7.1. Please indicate whether the nodal officer directly in charge of the project has been identified. Details about his status, past experience in executing similar projects and

balance tenure left for steering the project may also be mentioned.

The scheme will be run by the Ministry under supervision of Head, EI Division. Balance tenure of present Economic Adviser is 4 years, 2 months. Described in detail under 5.1.

7.2. In case posts (permanent or temporary) are intended to be created, such proposal may be sent on file to Personnel Division of Department of Expenditure separately. Such proposals may be sent only after the overall project proposal is recommended by the appropriate appraisal body (SFC, EFC, etc.).

Not applicable.

7.3. In case outsourcing of services or hiring of consultants is intended, brief details of the same may be indicated. It may also be certified that the relevant GFR provisions will be followed which engaging the agency/ consultant.

Details given at 5.1 under the head "ENVIS Cell". It is hereby certified that relevant GFR provisions will be followed while engaging the institute.

7.4. In case additional manpower requirement, please indicate the phased requirement over the project timeline (i.e. year-wise break-up of the manpower requirement) Not applicable.

8. **Project financing.**

8.1. The source of financing for the project may be indicated. In case of project already included in the FYP, the specific earmarking may be mentioned. In case of any deviations from this quantum, the sponsoring agency may indicate how the gap will be addressed.

The EFC Memo for ENVIS Scheme was first approved during the Sixth Plan, with an approved total allocation of \gtrless 40 crore, and implemented during Seventh Plan. Subsequently, the EFC was modified by an SFC during 2004-05. Instant SFC Memo is a modification of the existing scheme. Funding will be from Ministry's budget allocation.

8.2. The availability of funds in the budget of present year and requirements projected may be mentioned. In case of any deviations, please indicate how the gap will be addressed.

The project is an on-going scheme. Funding will be as mentioned above. The allocation for ENVIS for the financial year 2012-13 is ₹ 7.36 crore (RE) including ₹ 50 lakh for North-East Region component. The revised estimate under the object head for ENVIS Scheme for 2012-13 including details of all components is tabulated below.

	Budget Head	Budget Estimates 2012-13	
		Plan	Non-Plan
3435.03.102.			
01.00.01	Salaries	1,00.00	45.00
01.00.03	Over Time Allowances	0.25	-

Estimated Budget (RE) for 2012-13 as per Object Head-wise details
	Budget Head		Estimates 12-13
		Plan	Non-Plan
01.00.05	Rewards	20.00	-
01.00.06	Medical Expenditure	-	-
01.00.11	Domestic Travel Expenses	13.00	-
01.00.13	Office Expenses	8.00	-
01.00.16	Publication	20.00	9.00
01.00.20	Other Administrative Expenses	4.00	-
01.00.21	Supplies & Materials	-	-
01.00.26	Advertising and Publicity	10.00	-
01.00.28	Professional Services	0.75	-
01.00.31	Grants-in-Aid-General	5,10.00	11.00
01.00.35	Grants for Creation of Capital Assets	-	-
	Total	6,86.00	65.00
2552.00.110.			
02.00.31	For North Eastern Areas(Grants-in-Aid-General)	50.00	-
	Grand Total	7,36.00	65.00

The revised Scheme with increased budget allocations for each ENVIS Centre may be implemented in a full-fledged manner from the next financial year 2013-14.

8.3. If external sources are intended, the sponsoring agency may indicate whether such funds have been tied up. In case firm commitment is not available, alternate plans for arranging funds may be indicated.

Not applicable at this stage.

8.4. Whether the funding requirements have been fully tied up with Planning Commission may be indicated.

Yes.

- 9. Project viability.
- **9.1.** In case of projects which have identified stream of financial returns, the financial internal rate of return may be calculated. The hurdle rate is considered at 12%. Not applicable.
- 9.2. In case of projects where financial returns are not readily quantifiable (typically social development projects), the economic rate of return may be estimated.

A comprehensive upgraded Environment Information Network will be in place which will be immensely useful for stakeholders including Policy planners in Government.

- **10.** Project implementation and monitoring.
- 10.1. The administrative structure for implementing the project may be stated. In case new structures/ entities etc. is by and large to be avoided. In case new structures are intended to be created for administering the scheme, the details of such structures and specific justification for the same may be provided. Such new structure should be proposed only it is has been established after due analysis, that existing

structures cannot be levered for the proposed/additional work.

Not applicable as it is a continuing Plan scheme.

- **10.2.** A flow chart for intended fund flow mechanism may be indicated. Funds flows for all schemes/ projects in States should ordinarily be through the State Government. Not applicable.
- 10.3. The monitoring framework for the project/ scheme may be indicated. The arrangements for audit of the project may also be stated.

These have been stated at 5.1. above.

11. Project/Scheme sensitivities.

11.1. Any foreseeable constraints/ uncertainties which can affect the technical design, costing and implementation of the project may be indicated.

Not applicable.

- 11.2. The likely impact of these constraints/ uncertainties on the project parameters may be stated. In particular, the sensitivity of the project cost, project schedule and project viability towards the possible constraints/ uncertainties may be mentioned. Not applicable.
- 12. Project period.
- 12.1. The expected date of project completion may be stated. This should be realistic and supported with PERT chart of the important activities, with a critical path analysis, identifying the main constraints.

It is an on-going scheme for Twelfth Five Year Plan.

12.2. The project closure date should be also indicated beyond which further government support/ disbursal of funds will not be required.

It is an on-going scheme for Twelfth Five Year Plan.

12.3. A time line for the project deliverables (i.e. measurable deliverables phased yearwise) may be included.

Benefits will commence with immediate effect. A comprehensive upgraded Environment Information Network will be in place which will be immensely useful for stakeholders including Policy planners in Government sector.

13. RCE proposals

13.1. Details of physical progress achieved and expenditure incurred and commitment made so far may be given.

Not applicable.

13.2. Date of latest approved, revised and proposed completion schedule of the project along with time overrun and reasons thereof may be elaborated.

Not applicable.

13.3. Item-wise cost variance between approved (latest) cost and revised cost as propose may be given.

Not applicable.

13.4. Reasons of increase in cost may be given in the following manner.

Not applicable.

13.5. The underlying justification for increases in cost due to various factors may be explained.

Not applicable.

13.6. Effect of revision in capital cost estimates on cost of production and profitability / viability with reference to earlier approved capital cost of the project.

Not applicable.

13.7. Report of Standing Committee to fix the responsibility for cost and time overrun along with action taken report on its recommendations may be appended with the EFC/PIB memo.

Not applicable.

Concurrent comments of IFD are at Appendix-VI. Responding thereto, the revisions have been carried out in relevant Sections of this Memo.

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Appendix-I

SI. No.	Name	Communication Linkage (Head of Organisation/Coordinator/Address)	Subject Area
	IS Institutional Centr		
1.	Central Pollution Control Board (CPCB)	Shri G. Ganesh, ENVIS Coordinator PariveshBhavan, East Arjun Nagar, Delhi – 110 032 Phone: 011-22301932, 43102258; 09213828705 Fax: 011-22304948, 22301932, 43102258 Email: <u>cpcb-envis@nic.in</u> URL: <u>www.cpcbenvis.nic.in</u>	Control of Pollution (Water, Air and Noise)
2.	Indian Institute of Toxicology Research (IITR)	Dr. K.C. Gupta, Director; ShriShailendra Kumar Gupta, ENVIS Coordinator Post Box No.80, Mahatma Gandhi Marg, Lucknow –226 001, Uttar Pradesh Phone: +91-522-2284591, +91-522-2627586, 2613786 (Ext. 308); 09839533951 Fax: +91-522-2628227, 2611547 Email: <u>itrc@envis.nic.in; envis@iitr.res.in; director@iitrindia.org</u> URL: <u>www.itrcenvis.nic.in</u>	Toxic Chemicals
3.	National Institute of Occupational Health (NIOH)	Dr. P.K. Nag, Director; Dr. Sunil Kumar, ENVIS Coordinator Meghani Nagar, Ahmedabad, Gujarat – 380016 Phone: 079-22688842; Mobile: 09426395738 Fax: 079-22686361,22686110 Email: <u>nioh@envis.nic.in</u> ; <u>sunilnioh@yahoo.com</u> URL: <u>www.niohenvis.nic.in</u>	Environmental and Occupational Health
4.	Centre for Ecological Sciences - Indian Institute of Science (IISc)	Prof. R. Sukumar, Chairman; Dr. T.V. Ramachandran, ENVIS Coordinator Bengaluru, Karnataka–560012 Phone: 080-22933099/23600985/22932506 Fax: 080-23601428/23600085/23600683 Email: <u>envis@ces.iisc.ernet.in; cestvr@ces.iisc.ernet.in</u> URL: http://ces.iisc.ernet.in/biodiversity	Western Ghats Ecology and Biodiversity
5.	Centre for Advanced Study in Marine Biology (CASMB)	Prof.Dr. T. Balasubramanian, Dean & Director, ENVIS in-Charge Annamalai University, Parangipettai – 608502, Tamil Nadu Phone: 04144-243223, 243533, 253089, 09443330214 Fax: 04144- 243555/243641 Email: <u>stbcas@nic.in</u> ; <u>stbcas@gmail.com</u> URL: <u>http://casmbenvis.nic.in</u>	Mangroves, Estuaries, Lagoons, Coral Reefs
6.	Zoological Survey of India (ZSI)	Dr. K. Venkataraman, Director; Dr. A. Chattopadhyay ENVIS Coordinator PraniVigyanBhavan, M Block, New Alipore, Kolkata – 700 053, West Bengal Phone: 033-24002360 (Extn. 292); 09339382386 Fax: 033-24006893 Email: <u>zsi@envis.nic.in;drachatto@yahoo.com</u> URL: <u>zsienvis.nic.in</u>	Faunal Biodiversity
7.	Centre for Mining Environment (CME)	Prof. D. C. Panigrahi, Director; Dr.Asim Kumar Pal, Prof & ENVIS Coordinator Indian School of Mines, Dhanbad – 826 004, Jharkhand Phone: 0326-2296624 / 25, 09939160256 Fax: 0326-2296624, 2296603 Email: <u>ism@envis.nic.in</u> , <u>palasim2003@yahoo.co.in</u> URL: <u>http://ismenvis.nic.in/</u>	Environmental Problems of Mining

Network of ENVIS Centres

Sl. No.	Name	Communication Linkage	Subject Area
NO. 8.	Nation -1	(Head of Organisation/Coordinator/Address)	Hazardous Waste
ð.	National Environmental	Shri Prakash Kumbhare, ENVIS Coordinator	Hazardous waste
	Engineering	Nehru Marg, Nagpur – 440 020, Maharashtra Phone: 0712-2226026, 2226071, 2249885, 2249782; 09423063927	
	Research Institute		
	(NEERI)	Fax: 0712-2225191, 2249782, 2249900	
	(1(2211))	Email: <u>neeri@envis.nic.in.ps_kumbhare@neeri.res.in</u> URL: neerienvis.nic.in	
0			
9.	G.B. Pant Institute	Dr. L.M.S. Palni, Director; Dr. P.P. Dhyani, ENVIS Coordinator	Himalayan Ecology
	of Himalayan Environment and	Kosi-Katarmal, Almora – 263 643, Uttarakhand	
	Development	Phone: 05962-241041, 241153 (Extn.54), 241015; 09412092189	
	(GBPIHED)	Fax: 05962-241014 / 15, 241150, 241153	
	(GDI IIILD)	Email: <u>gbpihed@envis.nic.in,himenvis@gbpihed.nic.in</u>	
1.0		URL: gbpihed.nic.in	
10.	Botanical Survey	Dr.Paramjit Singh, Director (BSI); Dr. P. Lakshminarasimhan,	Floral Biodiversity
	of India (BSI)	Project In-Charge, ENVIS Centre	
		CNH Building, 3 rd Floor, AJC Bose Indian Botanic Garden, P.O. Botanic Garden, Howrah – 711 103, West Bengal	
		Phone: 033-26683235, 26680667	
		Fax: 033-26686226	
		Email: <u>bsi@envis.nic.in</u> , <u>bsi_headquarter@rediffmail.com</u> ,	
		envis@cal2.vsnl.net.in	
		URL:bsienvis.nic.in	
11.	Forest Research	Dr. S.S. Negi, Director; ShriShailendraKaushik, ENVIS	Forestry
11.	Institute (FRI)	Coordinator	rolesuy
	montute (PRI)	National Forest Library & Information Centre, Indian Council of	
		Forestry Research Education (ICFRE), New Forest, P.O., Dehradun	
		– 248 006, Uttarakhand	
		Phone: 0135-2756414	
		Fax: 0135-2756865	
		Email: fri@envis.nic.in,kaushikshail@yahoo.com,	
		kaushiks@icfre.org	
		URL: <u>frienvis.nic.in</u>	
12.	Wildlife Institute	Dr. P.R. Sinha, Director; Dr. V.B. Mathur, ENVIS Coordinator	Wildlife and
	of India (WII)	PO Box No. 18, Chandrabani, Dehradun – 248 001, Uttarakhand	Protected Area
		Phone: 0135-2040111-15 (Extn.202); 09412054648	Management
		Fax: 0135-2640117	
		Email: wii@envis.nic.in, envis@wii.gov.in	
		URL: wiienvis.nic.in	
13.	State Council of	Shri A.K. Srivastava, Secretary, Department of Science &	Eco-Tourism
	Science and	Technology, State Government of Sikkim	
	Technology for	ShriDorjiThinlayBhutia, ENVIS Coordinator	
	Sikkim (SCSTS)	Deorali, Gangtok - 737 102, Sikkim	
		Phone: 03592-208940, 205551, 09434188242	
		Fax: 0359-2208764, 2228764	
		Email: scsts@envis.nic.in, dthinlay@hotmail.com,	
		dthinlay@yahoo.co.in	
		URL: scstsenvis.nic.in	
14.	Central Arid Zone	Dr. M.M. Roy, Director; ShriTirth Das, ENVIS Coordinator	Desertification
	Research Institute	Dr.Raheja Library, Jodhpur – 342 003, Rajasthan	
	(CAZRI)	Phone: 0291-2788706; 09829586846	
		Fax: 0291-788706	
		Email: cazri@envis.nic.in, tdas@cazri.res.in	
		URL: <u>cazrienvis.nic.in</u>	
15	Department of	Col. Dr. G. Thiruvasagam (Vice-Chancellor); Prof. N.	Microorganisms
15.	2 optiment of	Munuswamy, Hon. Director & ENVIS Coordinator	and environmental

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SI.	Name	Communication Linkage	Subject Area
No.	TT • •, 0	(Head of Organisation/Coordinator/Address)	
	University of Madras	Life Sciences Building, Guindy Campus, Chennai – 600 025, Tamil Nadu	management
	141401 45	Phone: 044-22300899; 09884171947	
		Fax: 044-22300899	
		Email: dzum@envis.nic.in, enviscoordinator@gmail.com,	
		munuswamynm@yahoo.com	
		URL: <u>dzumenvis.nic.in</u>	
16.	Institute for Ocean	Prof. R. Ramesh, Director & ENVIS Coordinator	Coastal Regulation
	Management	Koodal Building, Anna University, Chennai – 600 025, Tamil Nadu	Zone Management
	(IOM)	Phone: 044-22330108, 22200159, 22203408; 09840966299	and Coastal Shelter Belts
		Fax: 044-22200158	Dens
		Email: <u>iom@envis.nic.in, rramesh_au@yahoo.com,</u> ramesh@annauniv.edu	
		URL: iomenvis.nic.in	
17.	Indian Institute of	Prof. B.N. Goswami, Director; Dr.GufranBeig, Scientist-F &	Acid Rain and
17.	Tropical	ENVIS Coordinator	Atmospheric
	Meteorology	Dr.HomiBhabha Road, Pashan, Pune – 411 008, Maharashtra	Pollution
	(IITM)	Phone: 020-25904200, 25893825 (Extn. 261, 212); 09423018580	
		Fax: 020-25893825	
		Email: iitm@envis.nic.in, goswami@tropmet.res.in,	
		beig@tropmet.res.in	
10		URL: <u>iitmenvis.nic.in</u> , <u>envis.tropmet.res.in</u>	D
18.	Indian Institute of Chemical	Dr. J.S. Yadav, Director; Dr. U. Suryanarayana Murthy, ENVIS Coordinator	Bioinformatics - Vector Control
	Technology (IICT)	Habsiguda, Uppal Road, Hyderabad – 500 007, Andhra Pradesh	Vector Control
	reemongy (mer)	Phone: 040-27193134; 09440802794	
		Fax: 040-27193227	
		Email: iict@envis.nic.in, usnmurty@iict.res.in	
		URL: <u>iictenvis.nic.in</u>	
19.	Central Building	Prof. S.K. Bhattacharya, Director; Dr. L.P. Singh, ENVIS	Fly Ash
	Research Institute	Coordinator	
	(CBRI)	Roorkee – 247 667, Uttarakhand	
		Phone: 01332-283442, 272391, 2722432; 09837031050	
		Fax: 01332-272272, 272543 Email: <u>cbri@envis.nic.in</u> , <u>lpsingh.cbri@nic.in</u> , <u>lpsingh@cbri.in</u>	
		URL: cbrienvis.nic.in	
20.	National Botanical	Dr. C.S. Nautiyal, Director; Dr. Nandita Singh, ENVIS Coordinator	Indicators of Plant
20.	Research Institute	RanaPratapMarg, Lucknow – 226 001, Uttar Pradesh	Pollution
	(NBRI)	Phone: 0522-2205847, 2205839, 2297931; 09415110314	
		Fax: 0522-2205847	
		Email: <u>nbri@envis.nic.in</u> , <u>n.singh@nbri.res.in</u> ,	
		nanditasingh8@yahoo.com	
0.1		URL: <u>nbrienvis.nic.in</u>	
21.	Gujarat Cleaner Production Centre	Shri Bharat P. Jain, Member Secretary; Ms.Neerja Desai, Coordinator	Cleaner Production
	(GCPC)	Block No. 4, 3rd Floor, UdyogBhawan, Sector-11, Gandhi Nagar –	& Technology
		382 017, Gujarat	
		Phone: 079-23244147; 09879277018	
		Fax: 079-23244306	
		Email: gcpc@envis.nic.in, gcpc11@yahoo.com	
		URL:gcpcgujarat.org/envis	
22.	Department of	Prof. Alok Kumar Banerjee; Prof. S.C. Santra, ENVIS Coordinator	Environmental
	Environmental	University of Kalyani, Kalyani, District Nadia, West Bengal – 741	Biotechnology
	Sciences (DES)	235.	

SI.	Name	Communication Linkage	Subject Area
No.		(Head of Organisation/Coordinator/Address)	
		Phone: 033-25808749; 09433215100	
		Fax: 033-25828282	
		Email: <u>scsantra@yahoo.com</u> , <u>desku@envis.nic.in</u>	
		url: <u>deskuenvis.nic.in</u>	
23.	School of Planning	Prof. A. K. Sharma, Director; Prof.MeenakshiDhote, ENVIS	Human Settlement
	and Architecture		
	(SPA)	4-B Block, Indraprastha Estate, New Delhi – 110 002	
		Phone: 011-23702393; 09313508547 Fax: 011-23702383	
		Email: spa-env@nic.in, spa@envis.nic.in, m.dhote@spa.ac.in	
		URL:spaenvis.nic.in	
24.	School of	ShriSandeepChatterjee, Registrar; Prof.Sudha Bhattacharya, Dean,	Dia Gaaahamistru
24.	School of Environmental	School of Environmental Sciences, JNU & ENVIS Coordinator;	Bio-Geochemistry
	Sciences	Dr.Yadav, ENVIS In-Charge,	
	Jawaharlal Nehru	New Delhi -110067	
	University (JNU)	Phone: 011-26704315; 09968077736	
	• 、 /	Fax: 011-26741502	
		Email: envis@mail.jnu.ac.in	
		URL:jnuenvis.nic.in	
25.	Environment	ShriIndrajit Pal, Director General; Dr.Razia Sultana, Director &	Ecology of Eastern
	Protection	ENVIS Coordinator	Ghats
	Training and	91/4, Gachibowli, Hyderabad – 500 032, Andhra Pradesh	
	Research Institute	Phone: 040-2323180103, 23180114; 09848475506	
	(EPTRI)	Fax: 040-23180135	
		Email: eptri@envis.nic.in, razia@eptri.com	
		URL: <u>eptrienvis.nic.in</u>	
26.	International	Dr. F. Ram, Director; Dr. R.B. Bhagat, ENVIS Coordinator	Population, Human
	Institute for	Govandi Station Road, Deonar, Mumbai – 400 088, Maharashtra	Settlement and
	Population Sciences (IIPS)	Phone: 022-42372412, 42372473; 09869947264	Environment
	Sciences (III S)	Fax: 022-25563257	
		Email: <u>iip@envis.nic.in</u> , <u>director@iips.net</u> , popenvis123@rediffmail.com, rbbhagat@iips.net	
		URL: iipsenvis.nic.in	
27.	The Freezeway	Dr. R.K. Pachauri , Director General; Shri P.K. Bhattacharya,	Renewable Energy
21.	The Energy Resources	ENVIS Coordinator	and Environment
	Institute (TERI)	Darbari Seth Block, Habitat Centre, Lodi Road, New Delhi – 110	and Environment
	,	003	
		Phone: 011-24682100, 24682111, 41504900; 09811873580	
		Fax: 011-246821 44/45	
		Email: teri@envis.nic.in, envis@teri.res.in, pkbhatta@teri.res.in	
		URL: terienvis.nic.in	
28.	World Wide Fund	Shri Ravi Singh, Secretary General & CEO; Shri G. Areendran,	NGOs and
	for Nature – India	ENVIS Coordinator	Parliament
	(WWF)	Indira Gandhi Conservation Monitoring Centre (IGCMC), 172-B,	
		Lodhi Estate, New Delhi – 110 003	
		Phone: 011-41504791, 41504793; 09968061056	
		Fax: 011-41504779, 24691226	
		Email: <u>wwf@envis.nic.in</u> , <u>gareendran@wwfindia.net</u> , <u>ravisingh@wwfindia.net</u> , <u>rkumar@wwfindia.net</u>	
		URL: wwfenvis.nic.in	
29.	Centre for	ShriKartikeya V. Sarabhai, Director; Ms.SaritaThakore, ENVIS	Environmental
<i>∠</i> 7.	Centre for Environment	Coordinator	Education
			Laucation
	Education (CEE)	Nehru Foundation for Development, TaltejTekra, Ahmedabad –	

SI.	Name	Communication Linkage	Subject Area
No.		(Head of Organisation/Coordinator/Address)	
		Phone: 079-26844795, 26858002-05, 26858011; 09879209214 Fax: 079-26858010	
		Email: cee@envis.nic.in, cee.envis@ceeindia.org,	
		sarita.thakore@ceeindia.org, rajeswari.namagiri@ceeindia.org	
		URL: greenteacher.org	
30.	Centre for Media Studies (CMS)	Dr. N. BaskaraRao, Chairman; Mr. Anand A. Jha, ENVIS Coordinator	Communication and Electronic
		Research House, B-34, Community Centre, Saket, New Delhi – 110 017, Delhi	Media
		Phone: 011-26851660, 26522255, 26522244, 26856429; 09582254615	
		Fax: 011-26968282	
		Email: <u>cms@envis.nic.in</u> , <u>cmsenvis@cmsindia.org</u> URL: <u>cmsenvis.nic.in</u>	
31.	Bombay Natural	Dr.Asad R. Rahmani, Director & ENVIS Coordinator	Avian Ecology
	History Society	Hornbill House, Dr.Salim Ali Chowk, SaheedBhagat Singh Road,	
	(BNHS)	Mumbai – 400 001, Maharashtra	
		Phone: 022-22818967; 022-22821811 Fax: 022-22837615	
		Email: <u>bnhs@envis.nic.in</u> , <u>envis@bnhs.org</u>	
		URL: bnhsenvis.nic.in	
32.	Consumer	ShriKalyan Bose, Hon. Director (Admn.); Ms.GauriWagenaar,	Eco-Labeling and
	Education and	ENVIS Coordinator	Eco-Friendly
	Research Centre	SurakshaSankool, Thaltej, Sarkhej-Gandhinagar Highway,	Products
	(CERC)	Ahmedabad – 380 054, Gujarat Phone: 079-27489945-46, 27450528, 27451097	
		Fax: 079-27489947	
		Email: <u>cerc@envis.nic.in</u> , <u>cerc@cercindia.org</u>	
		URL: enviscerc.org	
33.	CPR Environmental	Dr. (Mrs.) Nanditha C, Krishna, Hon. Director; Shri P. Sudhakar, ENVIS Coordinator	Conservation of Ecological Heritage
	Education Centre	1, Eldams Road, Alwarpet, Chennai – 600 018, Tamil Nadu	and Sacred Sites in
	(CPREEC)	Phone: 044-24346526, 24337023, 24341778; 094442 54831	India
		Fax: 044-24320756	
		Email: cpreec@envis.nic.in, cpreec@vsnl.com, cpreec@gmail.com	
		URL: <u>cpreecenvis.nic.in</u>	
34.	Foundation for	Dr. Padma Venkat, Director; Ms. Suma TS, ENVIS Coordinator	Conservation of
	Revitalization of Local Health	74/2, JarakbandeKaval, Yelahanka, via Attu PO, Bengaluru – 560 064, Karnataka	Medicinal Plants
	Traditions	Phone: 080-28565847, 28568007, 28565873, 28568000;	
	(FRLHT)	09448937066	
		Fax: 080-28565895, 28567926	
		Email: frlht@envis.nic.in, envis@frlht.org,	
		suma.tagadur@frlht.org URL: frlhtenvis.nic.in	
35.	International	Dr.Namita Mathur, Head & ENVIS Coordinator	Hygiene,
	Institute of Health	SulabhBhawan, Mahavir Enclave, New Delhi – 110 045, Delhi	Sanitation, Sewage
	and Hygiene	Phone: 011-25058941; 09810055105	Treatment Systems
		Fax: 011-25034014	and Technology
		Email: <u>sulabh@envis.nic.in</u>	
26	Indian Cratas fr	URL: <u>sulabhenvis.nic.in</u>	Managament of
36.	Indian Centre for Plastic in the	Shri K.G. Ramanathan, President Shri T.K. Bandopadhyay, ENVIS Coordinator	Management of Plastic, Polymers
	Environment	Olympus House, 2 nd Floor, 25, RaghunathDadaji Street (Near Fort	and Biopolymers

SI.	Name	Communication Linkage	Subject Area
No.	(1 (1))	(Head of Organisation/Coordinator/Address)	
	(ICPE)	House - Formerly Handloom House), Fort, Mumbai – 400 001 Phone: 022-22617137, 22617165, 40022491	
		Fax: 022-22617168, 09323296499	
		Email: icpe@envis.nic.in, icpe@vsnl.net	
		URL:icpeenvis.nic.in	
37.	Salim Ali Centre	Dr. P.A. Azeez, Director; Dr.GoldinQuadros, ENVIS Coordinator	Wetland Ecosystem
57.	for Ornithology	Anaikatty P.O., Coimbatore – 641 108, Tamil Nadu	(including Inland
	and Natural	Phone: 0422-2203100 / 2203109; 0422-2203101; 2203128,	Wetlands)
	History (SACON)	2203130; 09869183412	
		Email: sacon@envis.nic.in, salimalicentre@gmail.com,	
		goldinq@yahoo.com	
		URL:wetlandsofindia.org	
38.	Indian	Dr. Desh Bandhu, President & ENVIS Coordinator	Role of Panchayats
	Environmental	Vidhata House, VikasMarg, Shakarpur, Delhi – 110 092	in Environment
	Society (IES)	Phone: 011-22046823, 22450749; 09810180133	
		Fax: 011-22523311	
		Email: <u>iesenro@vsnl.com</u> , <u>iesindia@gmail.com</u>	
2.0		URL: <u>iesenvis.nic.in</u>	
39.	National Solid Waste Association	Dr.Amiya Kumar Sahu, President & ENVIS Coordinator	Municipal Solid
	of India (NSWAI),	B-703, Customs Colony A, Marol, Military Road, Andheri (E), Mumbai – 400 059	Waste Management
	Mumbai	Phone: 022-24375363, 29207577	
		Telefax: 022-29202951, 29202951	
		Email: <u>nswai@envis.nic.in, econpcpl@gmail.com</u> ,	
		sahu amiya@rediffmail.com	
		URL: <u>nswai.com</u>	
State	ENVIS Centres		
40.	Environment	ShriIndrajit Pal, Director General; Dr.Razia Sultana, Director &	Status of
	Protection	ENVIS Coordinator	Environment and
	Training and Research Institute	91/4, Gachibowli, Hyderabad – 500 032, Andhra Pradesh	Related Issues
	(EPTRI),	Phone: 040-23180103, 23180114, 09848475506	
	Hyderabad	Fax: 040-23180135	
		Email: ap@envis.nic.in, soeapri.eg@gmail.com, emailrazia@yahoo.com	
		URL: apenvis.nic.in	
41.	Assam Science,	Dr.Satyendra Kumar Choudhury, Director; ShriJaideepBaruah,	Status of
	Technology and	ENVIS Coordinator	Environment and
	Environmental	BigyanBhawan, G.S. Road, Guwahati – 781 005, Assam	Related Issues
	Council, Guwahati	Phone: 0361-2464621 / 2464619; 09435032706, 09435102089	
		Telefax: 0361-2464617	
		Email: asm@envis.nic.in, astec-asm@nic.in,	
		nverma2000@gmail.com, j.baruah@nic.in	
		URL: <u>asmenvis.nic.in</u>	
42.	Bihar State	Prof.Subhash Chandra Singh, Chairman; Shri Anil Kumar, ENVIS	Status of
	Pollution Control		Environment and Related Issues
	Board, Patna	BeltronBhawan, 2 nd Floor, LalBhadurShastri Nagar,	Actaica Issues
		Patna – 800 023, Bihar Phone: 0612 2281250, 2291709, 2281050: 09771433445	
		Phone: 0612-2281250, 2291709, 2281050; 09771433445 Fax: 0612-2291709, 2281050	
		1 1 0 A. WILLELLATINT, LLOINN	
		Email: <u>bh@envis.nic.in</u>	
43	Chhatticoarh	Email: <u>bh@envis.nic.in</u> URL: <u>bhenvis.nic.in</u>	Status of
43.	Chhattisgarh Environment	Email: <u>bh@envis.nic.in</u>	Status of Environment and

SI.	Name	Communication Linkage	Subject Area
No.		(Head of Organisation/Coordinator/Address)	
	Board,	Phone: 0771-2443923 / 24; 2425523; 09685095435; 08656070712	
	Raipur	Fax: 0771-2443924, 2425585	
		Email: <u>cht@envis.nic.in</u>	
		URL: enviscecb.org/links.htm	
44.	Goa State Council	Shri Joseph D'Souza, Chief Scientist & ENVIS Coordinator	Status of
	of Science &	Saligao Plateau, Saligao, Bardez – 403 511, Goa	Environment and
	Technology	Telefax: 0832-2407012; 09623255354	Related Issues
		Email:josephste@rediffmail.com	
		URL: goaenvis.nic.in	
45.	Gujarat Ecology	Shri C.H. Pandya, Director; ShriNischal Joshi, Sr. Project Manager/	Status of
10.	Commission	Coordinator	Environment and
	(GEC),	Block No.18/1, UdyogBhavan, Sector-11, Gandhinagar – 382 017,	Related Issues
	Gandhinagar	Gujarat	
		Phone: 079-23257658, 23257659; 09825030698; 09825021373	
		Fax: 079-23257656	
		Email: guj@envis.nic.in, gec_icef@rediffmail.com	
		URL: gujenvfor.gswan.gov.in	
46.	State Council for	Shri E. Vikram, Jt. Member Secretary (EC); Dr.Alka Sharma,	Status of
40.	State Council for Science,	ENVIS Coordinator	Environment and
	Technology and	B-34, SDA Complex, Kasumpti, Shimla – 171 009, Himachal	Related Issues
	Environment	Pradesh	Related Issues
	(SCSTE), Shimla	Phone: 0177-2621992,2620998, 2622923, 2633923; 09816462200	
	(50512), 511111	Fax: 0177-2620998	
		Email: <u>hp@envis.nic.in</u> URL: hpenvis.nic.in	
47			
47.	Directorate of	Shri Suresh Chugh, Director; Mrs.Mutaharra A. W. Deva, ENVIS	Status of
	Environment and	Coordinator	Environment and Related Issues
	Remote Sensing	SDA Complex, Bemina, Srinagar	Related Issues
	J&K	Telefax: May-Oct: 0194-2490823, 2454847; 09419015370	
		GladniNarwal, Jammu	
		Phone: Nov –Apr; 0191-2490020	
		Email: jk@envis.nic.in, mutaharradeva@gmail.com,	
		jkenviscentre@gmail.com	
		URL: jkenvis.nic.in	
48.	Forests &	Shri A. K. Singhi, Principal Chief Conservator of Forests;	Status of
	Environment	ShriShashiNandkeolyas, Conservator of Forests, Plantation	Environment and
	Department, Govt.	Research and Evaluation & ENVIS Coordinator	Related Issues
	of Jharkhand	Forests & Environment Department, Doranda, Ranchi – 834 002,	
		Jharkhand	
		Phone: 0651- 2482294; 09431140743, 09431707214	
		Fax: 0651-2480655	
		Email: jhar@envis.nic.in, akm_1954@yahoo.co.in	
		URL: jharenvis.nic.in	
49.	Environment	Shri R.M.N. Sahai, Director General; Shri Shiva Subramanya S,	Status of
	Management &	ENVIS Coordinator	Environment and
	Policy Institute	Department of Forests, Environment and Ecology, State	Related Issues
	(EMPRI)	Government of Karnataka, HasiruBhawan, Doresanipalya, Forest	
		Campus, Vinayaka Nagar Circle, J.P. Nagar, 5th Phase, Bengaluru –	
		560 078, Karnataka	
		Phone: 080-26490746 / 47; 09448059518	
		Fax: 080-26490745	
		Email: empri@envis.nic.in, empri.envis@gmail.com	
		URL: parisaramahiti.kar.nic.in, karenvis.nic.in	
50.	Kerala State	Prof. V N RajasekharanPillai, Ex. Vice President;	Status of

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Sl.	Name	Communication Linkage	Subject Area
No.		(Head of Organisation/Coordinator/Address)	
	Council for Science, Technology and Environment (KSCSTE), Thiruvananthapur am	Dr.KamalakshanKokkal, Principal Scientific Officer & ENVIS Coordinator SasthraBhawan, Pattom P.O., Thiruvananthapuram – 695 004, Kerala Phone: 0471-2548210 / 99, 2543701 / 05; 2548213; 09447489587, Fax: 0471-2543558, 2540085 Email: ker@envis.nic.in, kscste@gmail.com, mailto@kscste.org, drkokkal@yahoo.com, envkerala@gmail.com URL:kerenvis.nic.in	Environment and Related Issues
	Disaster Management Institute (DMI)	ShriManoharDubey, Executive Director; Dr. Rakesh Dubey, ENVIS Coordinator & Director, DMI, Housing & Environment Department ParyavaranParisar, E-5, Arera Colony, P.B. No. 563, Bhopal – 462 016, Madhya Pradesh Phone: 0755-2466715, 2461538, 2461348, 5293592; 09893250923 Fax: 0755-2466653 Email: mp@envis.nic.in, dmibpl@sancharnet.in, rakeshddubey@hotmail.com URL:mpenvis.nic.in	Environment and Related Issues
	State Environment Department, Maharashtra	Mrs.Valsa R. Nair Singh, Secretary, Environment Department, State Government of Maharashtra; Dr. B.N. Patil, ENVIS Coordinator New Administrative Building, 15 th Floor, Madam CamaMarg, Mantralaya, Mumbai – 400 032, Maharashtra Phone: 022-22854707, 22855082; 09869942395 Fax: 022-22025946, 22813947 Email: <u>mah@envis.nic.in</u> , <u>envis.maharashtra@gmail.com</u> URL: <u>mahenvis.nic.in</u>	Status of Environment and Related Issues
	Dept. of Environment and Forests, Manipur	Dr. M. Homeshowor Singh, Chairman, Project Implementation Committee, Senior Scientific Officer; Dr. Y. Nabachandra Singh, ENVIS Coordinator Porompat (Near DC Imphal-East), Imphal (East) – 795 010, Manipur Phone: 0385-2227625; 09436035880, 09436038970 Fax: 0385-2227625, 2446670 Email: <u>man@envis.nic.in</u> , <u>brajakumar_t@yahoo.com</u> URL: <u>manenvis.nic.in</u>	Status of Environment and Related Issues
	Mizoram Pollution Control Board,Aizwal	Shri R.C. Thanga, Chairman, Mizoram Pollution Control Board; Shri C. Lalduhawma, Member Secretary & ENVIS Coordinator Silver House, Tuikhuahtlang, Aizwal – 796 001, Mizoram Phone: 0389-2316591, 2326173, 231184, 09436142012; 0919436142012 Fax: 0389-2316591, 2316590 Email: <u>miz@envis.nic.in</u> , <u>mpcb_azl@yahoo.com</u> URL: <u>mizenvis.nic.in</u>	Status of Environment and Related Issues
	Nagaland Institute of Health, Environment and Social Welfare, (NIHESW,	Dr.InakheSumi, Hon. Director and Senior Program Officer; ShriVitsuYhome, ENVIS Coordinator Opposite Commissioner's Office, Old Secretariat Complex, Kohima – 797 001, Nagaland Phone: 0370-2292086; 08974519317; 09402992786 Fax: 0370-2240626, 2245615, 2240180	Status of Environment and Related Issues
	Kohima)	Email: <u>nag@envis.nic.in</u> , <u>nihesw@yahoo.com</u> , <u>vitsu84@yahoo.com</u> URL: <u>nagenvis.nic.in</u>	

SI.	Name	Communication Linkage	Subject Area
No.		(Head of Organisation/Coordinator/Address)	
	Environmental Studies (CES),Bhubanesw ar	ENVIS Coordinator Forest & Environment Department, State Government of Odisha, N-1/247, IRC Village, Nayapalli, Bhubaneswar – 751 015, Odisha Phone: 0674-2551853, 2551853; 09438186037 Fax: 0674-2553182 Email: <u>ori@envis.nic.in, cesorissa@rediffmail.com,</u> <u>pravatmohandash@gmail.com</u> URL: <u>orienvis.nic.in</u>	Environment and Related Issues
57.	Punjab State Council for Science and Technology (PSCST),Chandig arh	Ms.NeelimaJerath, Executive Director; ShriGurharminder Singh, ENVIS Coordinator MGSIPA Complex, Second Floor, Adj. Sacred Heart School, Sector-26, Chandigarh – 160 019, Punjab Phone: 0172-2792325,2795001, 2793300, Ext. 140; 09815655801 Fax: 0172-2793143 Email: pun@envis.nic.in, harminder1978@gmail.com, neelimajerath@pscst.com, ravleenmarwah@gmail.com URL: punenvis.nic.in	Status of Environment and Related Issues
58.	Rajasthan State Pollution Control Board, Jaipur	Dr. V. S. Singh, Chairman; Shri Ashok Puri, Sr. Environmental Engineer & ENVIS Coordinator 4, Institutional Area, JhalanaDoongari, Jaipur – 302 004, Rajasthan Phone: 0141-2705731, 2707285, 2711263; 09413340882, 09667575991 Fax: 0141-2709980 Email: <u>raj@envis.nic.in</u> , <u>member-secretary@rpcb.nic.in</u> URL: <u>rajenvis.nic.in</u>	Status of Environment and Related Issues
59.	Forests, Environment & Wildlife Management Department, Sikkim	Shri. Arvind Kumar, PCCF-cum-Addl. Chief Secretary; Shri. B. K. Tewari, Conservator of Forests (Environment) & ENVIS Coordinator ENVIS Centre Sikkim, Forest Secretariat Annex-II, Ground Floor, Room No. 1101/1102, Deorali, Gangtok – 737 102, Sikkim (East) Phone: 03592-280381; 09434109635 Fax: 03592-281778 Email: sik@envis.nic.in URL: sikenvis.nic.in	Status of Environment and Related Issues
60.	Department of Environment, Chennai, Tamil Nadu	Dr. H. Malleshappa, Director of Environment; Shri J.D. Marcus Knight, ENVIS Coordinator #1, Jeenis Road, 4 th Floor Down, Panagal Building, Saidapet, Chennai – 600 015, Tamil Nadu Phone: 044-24331243, 24336421; 09884338406 Fax: 044-24336594 Email: <u>tn@envis.nic.in</u> , <u>tndoe@tn.nic.in</u> URL: <u>tnenvis.nic.in</u>	Status of Environment and Related Issues
61.	Tripura State Pollution Control Board. Agartala	Prof.Mihir Deb, Chairman; ShriManas Mukherjee, ENVIS Coordinator PariveshBhawan, Pandit Nehru Complex, Gorkhabasti, P.O. Kunjaban, Agartala – 799 006, Tripura Phone: 0381-2322462, 2306233; 09436122197 Fax: 0381-2225421 Email: <u>mukherjee_manas@rediffmail.com</u> , <u>trippcb@sancharnet.in</u> , <u>trp@envis.nic.in</u> , <u>tripuraenvis@rediffmail.com</u> URL: <u>trpenvis.nic.in</u>	Status of Environment and Related Issues
62.	Directorate of Environment, Lucknow - Uttar	Shri O.P. Verma, Director (I/C); Shri R.K. Sardana, Jt. Director- cum-Chief Appraisal & ENVIS Coordinator Vinit Khand-1, Gomti Nagar, Lucknow – 226 020, Uttar Pradesh	Status of Environment and Related Issues

SI.	Name	Communication Linkage	Subject Area
No.		(Head of Organisation/Coordinator/Address)	
	Pradesh	Phone: 0522-2300541; 09450777908; 09415549690	
		Fax: 0522-2300543	
		Email: <u>up@envis.nic.in</u> , <u>doeuplko@yahoo.com</u> , <u>vikascagrawal@yahoo.com</u>	
		URL: upenvis.nic.in	
62	II44 and block and		Status of
63.	Uttarakhand Environment	Shri Jai Raj, Member Secretary; ShriAmarjeet Singh Oberai, ENVIS Coordinator	Status of Environment and
	Protection &	E-115, Nehru Colony, Hardwar Road, Dehradun – 248 011,	Related Issues
	Pollution Control	Uttarakhand	100000
	Board (UEPPCB),	Phone: 0135-2668922; 09412085568	
	Dehradun	Fax: 0135-2668092	
		Email: <u>ms.ueppcb@gmail.com, utr@envis.nic.in</u> ,	
		asoberai@yahoo.com	
		URL: <u>utrenvis.nic.in</u>	
64.	Department of	Shri S.S. Chaudhary, PCCF; Shri George Jacob, ENVIS	Status of
	Environment and	Coordinator	Environment and
	Forest - Andaman	Van Sadan, Haddo P.O., Port Blair – 744 102, Andaman and	Related Issues
	and Nicobar	Nicobar	
		Phone: 03192-233233,234430,	
		Fax: 03192-230113, 244664	
		Email: <u>an@envis.nic.in</u>	
		URL: as.and.nic.in/envis	
65.	Forest	Shri Richard D'Souza, Chairman; Dr. N. Palanikanth	Status of
	Department (Wildlife Division),	Deputy Conservator of Forests (WL) & ENVIS Coordinator (07567676668,)	Environment and Related Issues
	Union Territories	Van Bhavan, Opp. Gujarat Industrial Bank, Silvassa, Union	
	of Dadra & Nagar	Territory of Dadra and Nagar Haveli – 396 230	
	Haveli and Daman & Diu	Phone: 0260-2643048, 02638-2230963, 2230524, 09825515965	
	& Diu	Fax: 02638-2230804	
		Email: <u>dd@envis.nic.in</u> , <u>envisddd@gmail.com</u> ; vetpalani@gmail.com	
66.	Donoutment of	ShriIshwar Singh, Director; Shri P.J.S. Dadhwal, ENVIS	Status of
00.	Department of Environment –	Coordinator	Environment and
	Chandigarh	Chandigarh Administration, Addl. Town Hall Building, 2 nd Floor,	Related Issues
	Chundigurn	Sector 17-C, Chandigarh – 160 001, Punjab	
		Phone: 0172-2700065, 2700311, 09646712399	
		Fax: 0172-2700149	
		Email: ch@envis.nic.in, dadhwalpjsd@gmail.com	
		URL: <u>chenvis.nic.in</u>	
67.	Puducherry	Shri M. Dwarakanath, Director, Department of Science,	Status of
	Pollution Control	Technology & Environment; Dr. N. Ramesh, ENVIS Coordinator	Environment and
	Committee	IIIrd Floor, Pondicherry Housing Board Building, Anna Nagar,	Related Issues
		Puducherry – 605 005	
		Phone: 0413-2201256; 09443329141	
		Fax: 0413-2203494	
		Email: <u>pon@envis.nic.in</u> , <u>envis.pon@nic.in</u> , <u>dste.pon@nic.in</u>	
		URL: <u>dstepuducherry.gov.in/envis1.htm</u>	

Appendix-II

RECOMMENDATIONS OF NATIONAL WORKSHOP FOR ENVIS CENTRES, HELD AT DISASTER MANAGEMENT INSTITUTE, BHOPAL, ON 29-30 AUGUST, 2012

RECOMMENDATIONS FOR STATES /UTs THEMATIC CENTRES

A. Infrastructure:-

- i. Physical space: No constraints expressed by the presenters. However, there can be a clear cut guideline issued by the MoEF on the space and office furniture to run the ENVIS Centres.
- ii. Manpower: Most of the presenters expressed constraints in continuation of the hired manpower, which is ranging from 2-4 in numbers. Constraints of lack of fund and wage rate are the other issues.
- iii. We suggest to go for three regular manpower instead of so many in numbers. The MoEF can suggest the centre to hire one statistician and one computer expert to maintain the ENVIS activities. The coordinator and standing committee members of the respective centres provide technical guidelines to carry the Data collation and updation of the website.
- iv. Hardware: Regular updation of equipment and software support is needed.
- B. ENVIS Website:
 - I. Website updation is in the process. The initial difficulty of the ENVIS Centres uploading into NIC platform should be resolved by one-to-one interaction with NIC personnel.
 - i. Database updation: There are few centres developed numeric and descriptive database. It seems the centre should be revised with sensitization workshop towards their respective thematic area, level of data/ information maintained.

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- ii. Due to poor data structure, availability of time series data and information is found to be lacking in most of the Centres.
- iii. Many Centres are able to produce Newsletters, periodic reports, books etc. Looking to the fund constraints they may reduce the printed version and increase the soft copy/ electronic version of the outputs.
- II. User engagement and interaction : Centres presented the various parameters on hits, visitors etc. but there is further need of compilation of the feedback received and incorporation of the same in the present working and information sharing.

GENERAL OBSERVATIONS

- A. Each Centre should divide their activities into thrust area as per the objectives of the Centre. If they find any related allied activity with their core activity should be endorsed by advisory committee of the Centre which may provide guideline in this regard to overcome with the overlapping activities of different Centres.
- B. Networking of similar nature of ENVIS Centres and complimentary database may be done by providing links (inter).
- C. Output/activities as per the year of activity, achievement and short comings should be discussed in the Centres advisory committee and may be the part of progress report of the Centre.

(Dr. M.N.V. Prasad) 30.8.12 Expert

(Rajesh Pachgade) Expert

13018/12

(Devesh Lal) Expert

in peakase (Omprakash Madguni)

mprakash Madgun Expert

RECOMMENDATIONS FOR STATES /UTs ENVIS CENTRES

- 1. The performance of the ENVIS Centres on "Status of Environment and Related Issues" located at various States/UTs is satisfactory. However, they are advised to improve their performance further.
- 2. North- Eastern State ENVIS Centres (other than Sikkim) are advised to interact with each other for further improvements of their respective Centres.
- 3. Also the fund and budgetary requirement as proposed by various Centres need to be examined by MoEF very critically keeping in view of their realistic problems.
- 4. Salaries currently to ENVIS officials seems to be not as per with the other similar post holder elsewhere, and that is the reason why many persons are leaving after acquiring some experience and also ENVIS centre find difficult to attract competent persons.
- 5. MoEF may seriously consider sending letter to HOD of host institution of ENVIS Centres requesting them to extend appropriate infrastructure facilities /working environment so that the activities of centre could be performed smoothly.
- 6. The Centres should try to separate the organizational activities from the ENVIS goals.
- 7. Appropriate mechanism should be adopted for periodical updation of data etc.

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Expert

(Dr. D.K. Belsare) Expert

Appendix-III

Minutes of the Meeting of Scientific Advisory Committee (SAC) on Environmental Information System (ENVIS) held on 5th November, 2012 at 3.30 PM in Room No. 403, Ministry of Environment & Forests, ParyavaranBhavan, New Delhi

The Meeting of the Scientific Advisory Committee (SAC) on Environmental Information System (ENVIS) was held under the chairpersonship of Secretary, M/o Environment & Forests, on 5th November, 2012 at 3.30 p.m. in Committee Room No. 403, ParyavaranBhavan, New Delhi, to consider the Agenda Note circulated by EI Division, M/o Environment & Forests (MoEF) vide letter No. 11/2/93-ENVIS/EI dated 31.10.2012. The list of participants is annexed.

Agenda Item 1:Welcome by Secretary (E&F)-cum-Chairperson of SAC

2. Secretary (E&F)-cum-Chairperson of the Committee welcomed all the members, and considering that this is the first meeting of the Committee as reconstituted, gave a brief background on the ENVIS Scheme and functions of ENVIS Network and observed that greater clarity is needed regarding setting up new Centres, on the performance evaluation mechanism and closure of Centres. In order to reduce their dependence on governmental assistance, Centres have also not explored the potential for raising revenue, for instance through the database needs of corporates for Environmental Impact Assessment. These and other matters should be kept in view while considering the revision in the guidelines of the ENVIS Scheme during the relevant Agenda Item.

3. Noting also that the present meeting is being held after about two-and-a-half years, it was decided that EI Division, MoEF may ensure that the meetings of this Committee are convened at shorter intervals and periodicity set out in its terms of reference is adhered to.

(Action: EI Division, MoEF)

Agenda Item 2: Brief presentation by Member-Secretary (Head of EI Division) on ENVIS Scheme

4. Member-Secretary, SAC gave a brief presentation on the ENVIS Scheme, which, *inter alia*, included its functioning, objectives, budget, current projects and initiatives towards consolidation of the Scheme. On a query from Secretary (E&F) regarding the status of preparation of State-of-Environment (SoE) Reports, it was stated that so far since 2004, 26 States/ UTs have prepared their SoE reports and the reports of 2 States/ UTs (Karnataka and Lakshadweep Islands) are under preparation. Through the guidelines, it is now proposed to increase the periodicity of SoE Reports to two per State over a five year period, followed by a National SoE Report.

5. Regarding the short-term and long-term objectives of the ENVIS Scheme, it was felt that no specific action has been taken so far towards promoting international cooperation. However, in order to realise the potential for improving the country's information repository and databases through international cooperation and exchange of environment-related information, especially on climate change and other cross-border environmental parameters, it was, accordingly, decided that a small committee of experts may be set up to report on the mechanisms and means that may be realizable through various existing multilateral, regional and bilateral agreements to which India is a party.

(Action: EI Division, MoEF)

Agenda Item 3: Confirmation of Minutes of last meeting of SAC held on 25.06.2010

6. The Minutes of the last meeting of previous SAC held on 25.06.2010 were discussed. As there were no comments from Members of the Committee, the Minutes were confirmed.

7. Member-Secretary stated that this practice of confirmation of the Minutes in a subsequent meeting of the Committee posed certain administrative difficulties, including regarding the status of the unconfirmed decisions taken by it, delay in implementation, and risk of reconstitution of the Committee,

as was seen in the present instance. Accordingly, it was decided that henceforth, EI Division may circulate the draft minutes of a meeting to the Members of SAC, preferably by email, and after incorporating their comments, place them before Secretary-cum-Chairperson for final approval.

(Action: EI Division, MoEF)

Agenda Item 4: Consideration of Action Taken Report on the recommendations of SAC at its last meeting held on 25.06.2010

8. The Action Taken Report on the recommendations of SAC at its last meeting held on 25.06.2010 was discussed and approved by the Committee. EI Division was directed to take further suitable follow-through actions.

(Action: EI Division, MoEF)

Agenda Item 5:Consideration of the Report dated 09.02.2011 of Sub-Committee to review
the functioning of ENVIS Centres

9. The Committee discussed the Report of the Sub-Committee dated 09.02.2011 along with its recommendations. Secretary (E&F) desired to know whether ENVIS Centres were structured vertically, or horizontally thereby covering all the subjects, observing that the scope of work of an ENVIS Centre should not be narrow. Secretary (E&F) also observed that database development by ENVIS Centres was inadequate and desired to know whether time series data are being collected or the focus is on secondary data, and felt that consideration may be given to generation of useful primary data by ENVIS Centres on their respective subjects in future. It was stated that generation of quality data, for instance, baseline data for Hot Spot areas, may be useful for Environmental Impact Assessment (EIA) studies and monitoring of development projects, and could also serve to generate revenues for the Centre.

10. Additional Secretary, MoEF suggested to categorize ENVIS Centres into those that could be tasked for generating baseline data and those that would generate information for all users and provide public interface. Member-Secretary clarified that there are 28 State ENVIS Centres which cover all environment-related subjects of the particular State/ UT, while the remaining are thematic Centres which cover all information related to the specific subject/ theme. Presently, the mandate of ENVIS Centres is to collect, collate and disseminate information on the basis of secondary data from various available sources including in published form. Under the present guidelines, the Centres are not authorized nor sponsored by the Government to collect primary data. In the ensuing discussion, some Members felt that the budgetary needs for generating such data would be high. Prof.Sharad Gaur stated that the Ministry could revisit the original mandate and objectives of ENVIS Scheme when it was announced to various institutions, and see whether the major objectives centered around generation and dissemination of popular-level data that could be put out in the public domain, or were they aimed at generating high-end, perhaps research-level data. Further, in almost all cases, the level of funding support (especially for staff time and hardware) have been good enough only to retain very small, 1-person or 2-person cells within respective institutions, and that too at office assistant level. With such a background, it may not be realistic to expect these Centres to produce and disseminate high-end data. Moreover, such data generation may not be at par with already existing research Centres that have much higher quality of research-oriented data available. ENVIS Scheme should focus on encouraging its Centres to generate public-utility data and focus on qualitative improvement. It was also stated that those ENVIS Centres that have expertise in resource material generation could be supported to produce value-added information products. These could be either for free distribution (with funding for adequate quantities) or for sale and generating some revenue to augment the project. Some examples that were discussed could include directories of information at State/ regional/ National level (e.g. NGO databases, expertise rosters in various sectors, biodiversity registers); CD or website-based map atlases, e.g. using forest maps as base, information products could be developed on parks and sanctuary, desertification maps, species distribution maps or map atlases, and so on. Similarly, the larger ENVIS Centres could be supported to produce copyright-free material for public domain (e.g. image libraries, map atlases, news feature services, etc.). The Committee decided that the Expert Members of the Committee may forward their considered views on this matter in light of the long term objectives of the ENVIS Scheme, which may be

assessed and placed before the next meeting of the Committee.

11. The Committee also discussed the monitoring mechanism for ENVIS Centres. Additional Secretary, MoEF, while referring to the National Evaluation Workshop for ENVIS Centres held at Disaster Management Institute (DMI), Bhopal during 29-30th August, 2012 suggested that Regional Evaluation Workshops should also be organised especially since 70% weight is given to performance evaluation by National/ Regional Evaluation Committee. Director (IFD), representing the Additional Secretary & Financial Adviser, suggested to limit such workshops to not more than four Regional Workshops (North, South, North East and West regions). Further, Regional and National Workshops may be organized in alternate years.

12. Secretary (E&F) suggested introducing decentralised and concurrent third-party evaluation of ENVIS Centres by accredited evaluators using a common format. Instances of invalid data sent by ENVIS Centres were cited in support. Member-Secretary clarified that the Regional and National Evaluation Committees are composed of independent experts. Further, there is provision for on-line concurrent evaluation based on a common format. It was added that it was vital to identify data gaps and ensure authenticity/ validation of the data, and that these elements were incorporated in the proposed revised guidelines, which also require the ENVIS Centre to formulate its Strategic Plan that would, inter alia, serve to generate sources of funds from the corporate sector and / or through subscriptions of its Newsletter / other publications. Prof.Barik stated that some discontinuity has set in, which has adversely affected the provision of information products sought by users. It was cited that the development of directories by WWF ENVIS Centre, for instance, was very much appreciated and found useful. However, since then, most Centres have lost track of use-based information products' development, which could have facilitated revenue generation, and are now largely geared towards research for internal servicing. Statistical Adviser felt that the cost of evaluation by third party accredited evaluators may be prohibitive, and, therefore, the viability of such evaluation may need deliberation.

13. With regard to evaluation criteria for consideration of release of annual recurring grant to ENVIS Centres, the Committee recommended modifying the weightage of 80 points for online evaluation proposed by the Sub-Committee to 70 points (with balance 30 points earmarked for evaluation by Processing Division). Director (IFD) also suggested that grading should be done on the basis of total points earned by any Centre as A:Very Good (\geq 80), B:Good (\geq 50 and <80) and C:Non-Performing (<50), which was agreed to by the Committee.

14. The Committee discussed point-by-point other elements of the proposed guidelines. It was also decided that the non-performing Centres should be closed down and their subject area should be reassigned to some other Centre. Additional Secretary, MoEF, suggested that the transfer of such archival data/ knowledge products of such Centres, which had received the Ministry's support but were subsequently found to be non-performing, to the Ministry should be ensured. This was agreed to.

- 15. The Committee's recommendations were, therefore, as below:
 - (i) EI Division, MoEF may elicit the considered views of the Expert Members of the Committee on the desirability of generation of primary data by ENVIS Centres on their respective subjects in future, which may be assessed thereafter and placed before the next meeting of the Committee.
 - (ii) EI Division, MoEF may take further necessary action with regard to the revisions in guidelines proposed by EI Division, MoEF as bulleted in the presentation made by Member-Secretary. The revisions, *ceteris paribus*, which were recommended for consideration of Government, may be as below:

Guidelines for Establishment of New ENVIS Centres

- (a) Identify subject-gap areas based on feedback from Centres in consultation with subject Divisions of MoEF and States/ UTs, with ratification of SAC.
- (b) Invite proposals from State/ UT Governments/ reputed institutions/ NGOs concerned through MoEF website.

- (c) EI Division, MoEF to scrutinize proposals as per criteria; short-list 1-2.
- (d) Recommendation of SAC based on presentation by short-listed institutions.
- (e) Approval of Secretary (E&F); signing of MoU.

Criteria for selection of new ENVIS Centres

- (a) New subject area/ identified gap areas as ratified by SAC.
- (b) Preference to geographical areas where there are no ENVIS Centres.
- (c) Reputed institution/ organization/ Department.
- (d) Host institute should have necessary expertise and capability to run Centre.
- (e) Interest and willingness of host institute to serve user community with substantive information as and when required.
- (f) Appropriate physical infrastructure, as physically verified by EI Division, MoEF to be incorporated in MoU.

Monitoring Mechanism

- (a) 10-member SAC under chairpersonship of Secretary (E&F) to oversee and monitor functioning of Scheme.
- (b) Third-Party Evaluation of ENVIS Centres through National and Regional Evaluation Workshops. Not more than four Regional Evaluation Workshops (North, South, North-East and West regions) may be held in any year. Regional and National Workshops may be organized in alternate years.
- (c) Through visit of Senior Officers of Ministry and officers from EI Division, at least once every 3 years.
- (d) Concurrent, both continuous and annual, performance evaluation by Processing Division.
- (e) Linking funding pattern to performance of the Centres.
- (f) Performance grading for consideration of release of recurring grant annually: weightage of 70 points to online evaluation, with balance 30 points earmarked for evaluation by Processing Division. Grading should be based on total points earned by any Centre as A:Very Good (≥80), B:Good (≥50 and <80) and C:Non-Performing (<50).</p>
- (g) Incentives (enhancement of overall budget up to 15%, excluding emoluments paid to manpower and/or grant for provision of hardware / software) to Centres A-Graded for two consecutive years.
- (h) Evaluation of ENVIS Scheme as per Planning Commission's guidelines for Central Sector Schemes once in 5 years or earlier as per recommendations by SAC.

Guidelines for closure of Centres

- (a) Absence of proper physical infrastructure, as defined in MoU.
- (b) B-Graded Centres to be kept on watch list for one year; guidance by Ministry for improvement; review after one year; consider for one-time cut in grant by 10% (excluding emoluments paid to manpower) or closure if B-Graded consecutively for 3 years, with the approval of competent authority.
- (c) C-Graded Centres to be kept on watch list for 6-months; guidance by Ministry for improvement; review after 6-months; consider for closure if C-Graded 2 years consecutively or for administrative reasons with the approval of competent authority.
- (d) Any other administrative reasons, with the approval of competent authority.
- (e) MoU to include the clause on disposal of assets, including equipment and prototypes, with reference to GFR 2005 and related instructions. As per the

guidelines, Government also to have discretion to gift the assets to the grantee organization if it considers the same to be appropriate.

(f) MoU to include mechanism for transferring the databases/ substantive work on documentation and prototypes, including of databases and information products, developed by ENVIS Centre to MoEF for suitable passing over to another ENVIS Centre on the subject.

Infrastructure-related Obligations of Host Institution

- (a) Appropriate physical and human infrastructure, as physically verified by EI Division, to be incorporated in MoU; MoEF to periodically review infrastructure needs. Ministry may also consider providing funds for procurement of hardware and software to the Centres, and also for suitable upgrading/ replacement of hardware/ software as per applicable norms of the Government.
- (b) Host institute to provide space, with basic amenities; satisfy MoEF before Centre is established.
- (c) Website for the ENVIS Centre on NIC platform.
- (d) Regular cyber-security audit; grant for de-bugging to deserving Centres.

Manpower

(a) 3 core staff for each Centre, with following salary structure:

a.	Programme Officer	₹ 30,000/- p.m.		
b.	Information Officer	₹25,000/- p.m.		
c.	IT Assistant	₹ 20,000/- p.m.		
5 core staff for ENVIS Call with following colony structures				

(b) 5 core staff for ENVIS Cell, with following salary structure:

a.	NPC-cum-Senior Programme Officer	₹ 52,000/- p.m.
b.	Statistician	₹ 46,000/- p.m.
c.	Senior Information Officer	₹ 40,000/- p.m.
d.	Web Developer	₹ 30,000/- p.m.
e.	Office Attendant	₹ 8,000/- p.m.

- (c) Index salary structure to relevant Consumer Price Index for Industrial Workers.
- (d) Recruitment of staff as per rules of host institution, on contractual basis; MoEF will have no liability.
- (e) Outsource servicing of ENVIS Cell to experienced institute with ENVIS Centre (preferably Delhi-based).

(Action: EI Division, MoEF)

Agenda Item 6:Consideration of the recommendations of the National Workshop for
ENVIS Centres, held at Disaster Management Institute, Bhopal on 29-30
August 2012

16. Recommendations of the National Workshop held at Bhopal during 29-30th August 2012 were discussed and, were agreed to be incorporated as suitable in the revised guidelines given in paragraph 15 above.

Agenda Item 7:Ratification of the interim arrangement for 2011-12 for release of recurring
grants to ENVIS Centres as suggested by the then AS&FA and approved by
Secretary (E&F), as well as of its continuation as approved by Secretary
(E&F) in 2012-13

17. The Committee also ratified the interim arrangement made for release of recurring grants to ENVIS Centres for 2011-12 and 2012-13.

Agenda Item 8:Ratification of closure of 09 ENVIS Centres; and consideration of closure of
the Centres at National Solid Waste Association of India (NSWAI),
Mumbai, and International Institute for Population Sciences (IIPS),
Mumbai

18. The Committee observed that some of the Centres have shown sterling performance in the past. While ratifying the closure of 9 ENVIS Centres given effect to in 2011-12, EI Division, MoEF was desired to hold consultations with the host institutions/ State Governments with a view to gauging whether there were any new critical environmental subject areas that could be taken up by them under the revised guidelines which address many of the lacunae affecting performance of ENVIS Centres. Regarding closure of ENVIS Centres at IIPS and NSWAI, it was decided that the Economic Adviser may hold consultations with the host institutions and a considered proposal for closure, if found to be the appropriate course of action, under the new guidelines may be placed before the Committee at its next meeting.

(Action: EI Division, MoEF)

Agenda Item 9: Proposals for new ENVIS Centres

19. Member-Secretary informed that MoEF had received eight proposals for opening new ENVIS Centres. Secretary (E&F) stated that at this stage the focus may be on improving the outcome and performance of existing ENVIS Centres and not on opening new ones, unless they were addressing new critical environmental subject areas or there exists a substantial information gap in the identified area. After discussion, the Committee recommended a shortlist of three new proposals for future consideration as below:

- (i) Institute of Forest Genetics and Tree Breeding, Coimbatore (IFGTB).
- (ii) Zoological Survey of India (ZSI), Andaman & Nicobar Regional Centre, Port Blair.
- (iii) Regional Centre, National Afforestation and Eco Development Board (NAEB), Jadavpur University, Kolkata.

(Action: EI Division, MoEF)

Agenda Item 10: Any other items with permission of the Chair: Two proposals for change of subject received from following two ENVIS Centres:

- (i) Centre for Environmental Education (CEE), Ahmedabad, has requested change in its subject to cover Environmental Education and Sustainable Development (EE&SD).
- (ii) Indian Institute of Tropical Meteorological (IITM), Pune, has requested change in its subject from Acid Rain and Atmospheric Pollution to Air Pollution and Climate Change.

20. Regarding the change of subject area of ENVIS Centre at CEE from Environmental Education (EE) to Environmental Education and Sustainable Development (EE& SD), the Committee decided that it has no objection for the same, subject to no loss of focus on environmental education. It was also decided that the Centre at IITM should maintain its present subject area.

(Action: EI Division, MoEF)

21. The meeting ended with a vote of thanks to the Chair.

Appendix-IV

Appendix-V

REPORT OF THE SUB-COMMITTEE

FORMED BY

THE ENVIS SCIENTIFIC ADVISORY COMMITTEE

То

Look into the various issues pertaining to ENVIS Scheme

(9th February, 2011)

Environmental Information System (ENVIS)

Environmental Information (EI) Division

Ministry of Environment and Forests Paryavaran Bhawan, C.G.O. Complex, Lodhi Road, New Delhi-110003

INTRODUCTION

ENVIS was launched in 1983 as Plan Scheme of the Ministry. ENVIS is a decentralized system using the distributed network of databases to ensure integration of national efforts in environmental information collection, collation, storage, retrieval and dissemination to policy planners, decision makers, scientists and environmentalists, researchers, academicians and other stakeholders. The first sets of 4 ENVIS Centres were established in 1984. Additional 21 ENVIS Centres were established in Specific Thematic Areas over the period of 1985 to 1999 under the ENVIS Plan Scheme. Under the World Bank Assisted Environment Management Capacity Building Technical Assistance Project (EMCBTAP), 85 Nodes (including the existing 25 Centres) were set up during the year 2002 in various organizations and State / UT Government Departments. After completion of World Bank support, the SFC for ENVIS Scheme was modified and converted 75 Nodes to ENVIS Centres during 2004 (in which 25 nodes set up in the ENVIS Centres were merged and 50 new Centres established. The non-performing Nodes (10) were closed. During 2005-06 a new ENVIS Centre was set up. ENVIS at present consists of 76 ENVIS Centres out of which 30 ENVIS Centres are on State Government Departments dealing with the "Status of Environment and Related Issues" of the concerned State Government and the remaining 46 have been set up on various environmental issues in different reputed organizations / institutions throughout the country.

ORIGIN AND NEED OF THE SUB COMMITTEE

A Scientific Advisory Committee, under the Chairmanship of Secretary (E&F) oversees and monitors the functioning of the ENVIS scheme. The Committee reviews the functioning of the scheme, provides guidelines for its implementation and other necessary mid-course corrective directives, if any, towards meeting the stated objectives of the scheme.

The meeting of the Scientific Advisory Committee of Environmental Information System (ENVIS) was held on 25th June, 2010 under the chairmanship of Shri R.H. Khwaja, Special Secretary of the Ministry. During this meeting it was recommended (Annexure-I) *inter-alia* that a Sub-committee should be constituted inter alia to look into the issues of performance criteria for the ENVIS centre, methods to incentivize their performances, need/requirement of equipment and enhancement of remuneration for the staff of the ENVIS Centres.

Accordingly, a sub-committee under the chairmanship of Statistical Adviser was constituted (Annexure-II) with the approval of competent authority to look into the recommendations of the Scientific Advisory Committee.

The first meeting of the sub-committee was held on 26th October, 2010. During the meeting, the terms of reference were discussed in detail. As regards short term & long term objectives of ENVIS Scheme, some minor modifications were suggested by the members. Furthermore, the members suggested that some Centres representing cross-section of the ENVIS Centers could be called during the next meeting to know their problems and also to ascertain their views with regard to other issues so that effective remedial measures on these are recommended by the Sub-Committee. It was suggested that all the issues may be taken up in the next meeting in which presence of other members particularly from Finance wing of the Ministry needs to be ensured (Annexure-III).

The second meeting of the Sub-Committee of the Scientific Advisory Committee for ENVIS Scheme was held on 23rd November, 2010. As per the recommendations of the earlier meeting of the Sub-Committee some Centres representing cross-section of the ENVIS Centers gave their presentations. After presentation by the ENVIS Centres the Sub-committee deliberated on the suggestions by the ENVIS Centres in the context of Terms of Reference the committee. The present Report is based on the recommendations of the Committee.

OBJECTIVES OF THE ENVIS SCHEME

Long Term

- To build up a repository and dissemination centre in Environmental Science and Technology
- To promote State-of-Art Technologies
- To support and promote research, development and innovation in environmental information technology.

Short Term

- To provide national environmental information service relevant to present needs and capable of development to meet the future needs of the users, originators, processors and disseminators of information.
- To build up storage, retrieval and dissemination capabilities with the ultimate objectives of disseminating information speedily to the users.
- To promote national and international cooperation and liaison for exchange of environment related information through Information Computing Technology (ICT).
- To promote, support and assist education and personnel training programmes designed to enhance environmental information processing and utilization capabilities.
- To promote exchange of information amongst developing countries.

ENVIS CENTRE

ROLE

The role of the ENVIS Centres is to act as a single window authentic information provider on various areas related to environment. This is a unique system in the whole country where environment related information is available on a single platform.

FUNCTION

The ENVIS Center updates and maintains an information base that includes both descriptive information as well as numerical data. Descriptive information in the form of publications, reports, reprints and abstracts on related subjects are stored for dissemination. Numerical data on the same subject are collected, compiled, processed and analyzed for the purpose of dissemination. Documentation in the form of publications and reports are brought out. All the information thus compiled and made available on the website of the respective Centres. To be more specific the main functions of the ENVIS Centres are as follows:

- To maintain data bank on relevant subject areas. The ENVIS Center hosts and maintains a website on the assigned subject.
- · To bring out newsletters and other publications in their subject areas.
- To build linkages with information sources in the country and abroad for increasing the information contents.
- To provide information on the queries referred to it, by the stake holders in the form of copies of published reports, documents, abstracts and research papers.
- To help in building up an inventory of authentic and reliable information material and collect books, reports and journals for retrieval, dissemination and database creation.

RESPONSIBILITY / DELIVERABLES

- · To build up an inventory of authentic and reliable information material.
- To disseminate the information to the user as quickest as possible through various mediums and instruments. (print as well as electronic media)
- Development of databases on selected parameters relating to the subject area and identification of gaps in the specified subject area and action to fill these gaps. State level ENVIS Centres will collect, collate and disseminate state specific data.
- Development of a user-friendly dynamic website to make it a web enabled system for online exchange of information.
- · Coordination with the Ministry for supplying relevant and adequate information to users.

ACCOUNTABILITY

- Primarily accountable to MoEF and partly to the Host Institute/NGO/Organization.
- · Prudent spending of the grant-in-aid given by the Ministry
- · To function keeping in view users satisfaction (Feedback)
- Regular reporting of the work carried out by the Centre to EI Division, MoEF.

MONITORING MECHANISM

- A Scientific Advisory Committee, under the Chairmanship of Secretary (E&F) will oversee and monitor the functioning of the scheme. The Committee will review the functioning of the scheme, provides guidelines for its implementation and other necessary mid course corrective directives, if any, towards meeting the stated objectives of the scheme.
- The performance of the ENVIS Centres will be also evaluated regularly by a team of Independent Experts through National and Regional Workshops thus providing necessary guidance towards betterment of the Scheme. Besides, the Centres are also monitored through visit of Senior Officers from the Ministry and officers from EI Division from time to time.
- All the Centres will be evaluated by the Processing Division continuously and also on an annual basis. The release of grant to a centre will depend on the performance appraisal subject to the satisfaction of Processing Division not necessarily all of them together.

EVALUATION CRITERIA

The ENVIS Centres will be evaluated on the following parameters during National/Regional Workshops:

- During Regional/National Workshops (80 pts)
 - 1. Website (25pts)
 - Web content (10pts)
 - Layout (5pts) [getup (1pts), color combination (1pts), fonts (1pts), readability (1pts), format (1pts)]
 - Updation (5pts)
 - Hit count (5pts)
 - Database (25pts)
 Updation (10pts)
 New addition (10pts)
 Analysis (5pts)
 - 3. Publications (15pts) Newsletters (10pts) [10pts for 4; 7pts for 3; 5pts for 2; and 3pts for 1] Others (5pts)
 - 4. Query Answer statistics (10pts)
 - 5. Presentation (5pts) [Interaction with Experts, other Centres etc.]
- II. Annual assessment by the Processing Division (20pts)

Parameters adopted by Processing Division

- 1. Implementation of Annual Action Plan (5pts)
- 2. Utilization of funds (5pts)
- 3. Regular updation of websites (5pts)
- 4. Timely publication of newsletters (5pts)

The gradation of the Centres will be done on the total points earned during Regional and National Workshops and assessment by the processing division and may be classified as:

- > 80 (A) Very Good
- > 50-80 (B) Good < 50 - (C) - Non-performing

The ENVIS Centres, falling in the 'A' and 'B' category will be considered as DESERVING ENVIS Centres for getting next year grant-in-aid.

In case of absence of Centre in the evaluation workshop the gradation will be done by processing Division, keeping in view above parameters.

INCENTIVES

Incentives will be provided for A category of Centres after every two years. Incentives will be in the form of any or combination of the following

- (i) Enhancing of the overall budget (10%).
- (ii) Training of ENVIS Staffs for new technologies as required.
- (iii) Organizing workshop in the sphere of work of the Centre.

DISINCENTIVE (C Category Centres)

- (i) To keep the Centre on watch list for 6 months period
- (ii) Review after 6 months and if found unsatisfactory cut in budget head or closure of the Centre as per the assessment of the processing division with the approval of competent authority.

PERSONNEL ISSUES

Manpower/Man hours, Staff Strength, Qualifications and Recruitment procedure.

All the members unanimously agreed that in view of the highly technical nature of work and considering the overall work environment enhancement of the present remuneration is required. The enhancement of enumeration may be decided by the Division in consultation of Integrated Finance Division of Ministry.

Number of Staffs

All the ENVIS Centres will employ maximum three (3) technical core staffs for smooth running and managing the ENVIS Centre as follows:

Sl.No.	Designation	
1.	Programme Officer (1 post)	
2.	Information Officer (1 post)	
3.	Web-Administrator (1 post)	

QUALIFICATIONS

Post	Qualification Required	
rogramme officer MCA/M.Sc. (3 yrs. Experience), good knowledge of computer		45 Years
Information Officer	M.Sc. in specific subject related to subject areas for 3 thematic Centres and States/UTs Centres and good computer knowledge	
Veb-Administrator BCA / Graduate, thorough knowledge in the field computer technology (website development, designin internet, publication etc. with three years experience)		35 Years

DUTIES

Programme Officer (PO)

The Programme Officer (PO) should prepare a comprehensive plan of work for the year in consultation with the Coordinator. PO is responsible for management of website and overall coordination. PO should identify work component for the project keeping in view the objectives, identification of data sources, and authentication of the collected data with appropriate tabulations. PO should also prepare the data and report materials for the Ministry of Environment and Forests and to keep liaison with national and state ENVIS Centres.

Information Officer (IO)

Information Officer (IO) should be responsible for data collection on the assigned subject from different authenticated sources. IO should also identify the data sources and would liaise with the source for collection of data. The collected data should be cross checked and tabulated in the proper format. IO should also supervise the website of the Centre and suggest for its development. IO should also maintain the ENVIS account and prepare necessary documents for MoEF.

Web Administrator (WA)

The Web-Assistant should be responsible for designing, development of websites as per the guidelines of Government of India in consultation with NIC. He should maintain the website including uploading database and other documents on the website regularly. He should constantly watch other websites and suggest for improvement of the website. WA should maintain the equipments of the Centre including internet. WA should assist in preparation of manuscripts in a computer ready copy for printing. He will also assist the coordinator in other official works as assigned by coordinator / Senior Programme Officer.

RECRUITMENT

The Centres should recruit staffs for the ENVIS Centre as per the requirement and follow the rules and regulations of the host institutions. The ENVIS Centre staffs will be recruited on contractual basis for the sanctioned period. The terms and conditions of the service of the staffs of the ENVIS Centre will be governed by the rules prevailing in the organizations/institute hosting the ENVIS Centre. The Ministry will have no liability in such matters. The Staff will not to be treated as Government servant.

The recruitment should be done by giving wide publicity through ENVIS websites and displaying it on the notice board of the host institution and other reputed institutions.

The recruitment will be done by a committee constituted with the approval of the competent authority of the host institute.

A copy of the advertisement and the joining report of the incumbent had to be sent to the Ministry invariably for records. Each Centre may give reasonable relaxation in qualification/age for long serving ENVIS staff (more than five years) in the fresh appointment of the staffs of ENVIS Centre as per requirement of the Centre.

INFRASTRUCTURE

The Centres are located in the space provided by the Host Institutions. The basic information/amenities will be provided by the host institutions. The host institute will have to satisfy the Ministry with regard to Infrastructure before setting / establishing the Centre.

EQUIPMENTS

The equipments were provided to the ENVIS Centres at different point of times, till 2004-05 to carry out the activities of the ENVIS Centre. The members agreed that the new equipments may be provided to the deserving ENVIS Centres. The equipments should be provided to the DESERVING ENVIS Centres as an incentive for performing the ENVIS activities to the satisfaction of the Ministry. The processing Division will review the requirement of Centres on regular basis and equipments may be given as per their requirement if the Centre works to be satisfaction of the Ministry. The Committee suggested some of the equipments to be given to the Centre as follows as per the requirement of the Centre:-

- PCs with internet connectivity & UPS 2
- Photocopier 1
- Scanner 1
- Printer -1
- Fax 1

The existing and the proposed heads of the grants-in-aid are as follows:

Existing Heads		Proposed Heads	Remarks
1.	Manpower/ Man-hours	1.Manpower/Man-hours	
2. 3. 4. 5.	Database development Website maintenance Printing of Newsletters Contingency (Stationary, consumables, AMC, internet charges)	2. Others (Database development, Website maintenance, Printing of Newsletters, Travel & Training, Contingency, Stationary, consumables, AMC, Internet charges, National/regional workshops)	6
6.	Travel & Training	3. Travel & Training	The centre has to be evaluated once in a year. Two participants from each

	ENVIS Centre will attend the evaluation workshop. The staffs need to be trained with the latest technology for efficient output of the centre. However, the expenditure will be on actual cost basis.
4. Special Publications	The new item has been proposed in order to disseminate the information relevant to ENVIS Scheme through print media after considering the material on a case-to-case basis.
5. Workshops/Seminars	The new item has been proposed in order to popularize the ENVIS Scheme amongst the stakeholders through various workshops/ seminars which will be considered on a case- to-case basis.

SPECIAL PUBLICATIONS

The ENVIS Centres are given funds for printing of newsletters to disseminate the information in respect of their assigned fields/subjects. It has been observed that some Centres, apart from printing of regular newsletters, sometimes comes up with request for additional fund for printing of special publications which are very important and useful in their respective areas and also serves the objectives of the ENVIS Scheme. Funds may be earmarked for the purpose also.

WORKSHOPS/ SEMINARS FOR POPULARIZATION OF ENVIS SCHEME

It has been felt that the fruit of the ENVIS Scheme has not been able to reach to the stakeholders apart from policy planners, academicians, researchers etc as per the expectations of the Ministry although this scheme has the potential of serving a wide section of stakeholders by providing environment related information as per their requirement. In order to popularize the activities of the ENVIS Scheme among stakeholders, additional funds, apart from recurring grant, may be provided for conducting knowledge sharing technical workshops, seminars etc. by the ENVIS Centres.

MONITORING MECHANISM

As stated earlier, the monitoring and evaluation of ENVIS Scheme will be done by the Scientific Advisory Committee for ENVIS Scheme, Independent Evaluation Committees during Regional and National Workshop and by visits of the MOEF officials to the ENVIS Centres. Four Regional Evaluation Workshops will be held in one year and the National Evaluation Workshop will be held after the completion of the Regional Workshops. ENVIS scheme will have budget heads for regional /national workshops every year as per requirement.

STRENGTHENING OF ENVIS CENTRES

The Centres will be strengthened, keeping in tune with the latest technologies in the IT sector (Security Audits), on the advice of the Scientific Advisory Committee and implementation of recommendations evolved through Regional and National Workshops.

STATE OF ENVIRONMENT (SOE) REPORTING

During the 10th Five Year Plan the Ministry initiated a Scheme for preparation of State of Environment Report for the States/UTs culminating to a National Environment Report. The Scheme was extended during the 11th Five Year Plan. The allocation for the Scheme for State of Environment Reporting has been merged with the ENVIS Scheme during 2008-09. The allocation for this scheme was Rs.50.00 lakhs.

So far, the Ministry has brought out 26 SoE Report for States/UTs and the rest SoE Reports are near completion. Ministry has published the 3rd National State of Environment Report during 2009. During the National Workshop on State of Environment Reporting it was recommended that two State of Environment Report for each State/UT will be prepared during every five year and subsequently, a National State of Environment Report. Further, it was also recommended that the Ministry should take-up for preparation of SoE Reporting for Metro Cities/Hot-Spots in addition to States/UTs.

Upon, merging of the SoE Reporting Scheme with the ENVIS Scheme it has been decided that the State ENVIS Centres will be entrusted with the job of preparing the State of Environment Report of the respective States/UTs. Previously the SoE Reports were prepared by some State Host Institutes (SHIs) in guidance from the National Host Institute (NHI). It has been felt that the State/UT ENVIS Centres are more capable in collecting data from the line departments of the States/UTs as they are also in the process of implementation of the India State-level Basic Environmental Information Database (ISBEID) which will form the baseline data for SoE Reports.

FINANCIAL IMPLICATIONS

In preparing the State of Environment Report by State/UT ENVIS Centres, the Centres has to be supported with some funds for analyzing the report, stakeholders meeting/workshop, printing of the Report etc. Division will assess the financial requirement for preparation of SoE Reports for States/UTs/Metro Cities/Hot-Spots and National State of Environment Report every year in their budget estimates.

CYBER SECURITY AUDITING OF WEBSITES

The representative from NIC suggested that an additional grant may be provided to the deserving ENVIS Centres for fixing of bugs identified after auditing of ENVIS website and to continue it for the successive years. This has been necessitated to comply with the guidelines given by the Government of India.



GUIDELINES FOR ESTABLISHMENT OF NEW ENVIS CENTRES

While the Processing Division may take up the job of rationalizing the functioning of the ENVIS Centres and also enhancing its efficiency by merging the subject areas of Centre, merging the Centres, relocation of the Centre, the guidelines for establishment of new Centres will be as follows:-

- 1. Identification of the gap areas where ENVIS Centre is needed.
- 2. Invite proposals from concerned reputed institutions by identifying these Institutions preferably in Central/State/UT Governments.
- Examine the proposals and identify one or two institutions.
- 4. Presentation by the Institutions
- 5. Processing by EI Division
- 6. Approval of the Chairman, SAC and Secy. (E&F)
- MoU

GUIDELINES FOR CLOSING OF EXISTING ENVIS CENTRES

- 1. In absence of proper physical infrastructure for the ENVIS Centre.
- 2. In case of non-performance the Centre will be kept on watch list for six (6) months after giving necessary guidelines for improvement
- 3. If the Centre is found non-performing during the period of review (six month), in spite of guidance from the Ministry, the centre needs to be closed.
- The Centre may be closed otherwise also due to Administrative reasons with the approval
 of the competent authority without assigning any reason to the Centre.

The member from finance wing suggested that the ENVIS Scheme may be revisited through a modified SFC/EFC and the funding pattern and other parameters may be revised through the proposed SFC / EFC.

The processing division mentioned that the enhanced allocation in the ENVIS Budget during the financial year 2009-10 has been made in order to meet the enhancement of manpower/man hour, providing new equipments, auditing of ENVIS websites and other subheads included in the ENVIS recurring grant. In case of non utilization of funds for the above purposes the fund will have to be surrendered. At this, Director, IFD, suggested that apart from staff salary, other items could be considered for releasing of funds based on objective and measurable parameters of performance evaluation. Regarding staff salary it should be considered along with the drafting of SFC/EFC. Head, El Division clarified that earlier SFC has not mentioned about the number of staffs for ENVIS Centres. Therefore, the allocation under the Scheme inter alia includes hiring of manpower/man hours which was left to different institutions/organizations where ENVIS Centre is functioning. There were no specific guidelines for remuneration to staff members of the Centres. Therefore, every parent organization/institution took decision as per their own way. Director (IFD) suggested that both the things that is processing the case of each ENVIS Centre individually as per existing guidelines and preparation of modified SFC may go side by side.

Appendix-VI

Concurrent comments of AS & FA as per para 24 of the SFC Memo

For appraisal of existing Central Sector Scheme - 'Environmental Information System'

A Central Scheme – 'Environmental Information System' was formulated in 1984 to facilitate environmental planning and management at different levels with information & data on various aspects, issues relating to 'environment'. The EFC Memo for the ENVIS Scheme was first approved during the 6th Five Year Plan and implemented during the 7th Five Year Plan. Subsequently, the EFC was modified by an SFC in 2004-04 but the SFC Memo is not available. There are no records available to indicate that the Scheme has been evaluated / appraised for continuation through the 11th Plan.

- Detailed norms for prioritization of ENVIS Centres should be indicated under Para 2 (e) of the draft Memo. Preference may be given to the areas where no such Centres exist.
- Guidelines for a transparent procedure for inviting, evaluating and sanctioning of projects and monitoring of physical and financial progress may be framed and annexed to SFC Memo.
- A suitable amendment under the heading 'Incentives' should be made for automatic closure of the Centres, if graded 'C' for two consecutive years.
- Funding for the necessary infrastructure for the ENVIS Cell in the Ministry should be covered in the Scheme.
- 5. The SFC is silent about the land for construction of the ENVIS Centres. No central funding will be provided for purchase of land. Arrangement of space as well as land should be the responsibility of the host institution. This may be indicated under the Guidelines for establishment of new ENVIS Centres.
- 6. The terms of reference for Scientific Advisory Committee (SAD) may be indicated in the SFC Memo. The ToR may include examination of proposals with reference to outcomes, to define the criteria for screening of proposals, selection of proposals for establishment of new ENVIS Centres, to oversee & monitor the functioning of the Scheme and annual evaluation of performance etc.
- The Detailed developmental outcomes / outputs may be suitably indicated in Para 2 (I) of the draft Memo.
- The Planning Commission and other line Ministries / Departments may be consulted and their second in Para 2 (i).
 - Year-wise break-up of expenditure incurred in the 11th Plan and projections for the 12th Plan should be indicated under Para 4 (a) of the draft Memo. The approval is respect of projections for the 12th Plan would be subject to availability of funds in the 12th Plan.

9.

Replies to AS & FA's concurrent comments

The EFC Memo for the ENVIS Scheme was first approved during the 6th Five Year Plan and implemented during the 7th Five Year Plan. Subsequently, the EFC was modified by an SFC during 2004-05 which is placed as Appendix-3.

- 1. Guidelines for the establishment of new ENVIS centres is given under 5.1 in SFC memo. Preference will be given to thematic areas which are not covered.
- 2. Guidelines for inviting, evaluating and sanctioning centres and monitoring mechanism are described in detail under 5.1 in SFC memo.
- 3. Amendments made under 'Incentives and Disincentives' based on the recommendations of Scientific Advisory Committee (SAC) in its meeting held on 05.11.2012.
- 4. Funding for the necessary infrastructure for the ENVIS cell will be covered by the Ministry, which has been mentioned under 5.1 in SFC memo.
- 5. It has been mentioned/added in the SFC memo under 5.1 and 6.1 that "the ENVIS Centres will be located in the space provided by the Host Institutions". It has also been explicitly mentioned under 6.1 that "no additional land is required".
- 6. ToR of SAC placed as Appendix-7
- 7. The ENVIS Scheme is a unique one and a comprehensive Environment Information Network will be in place under this scheme which will be immensely useful for stakeholders including policy planners in Government sector. The achievement made during the last year has been given in detail as Appendix-1.
- 8. The said section has not been included in the revised format for EFC Memorandum.
- 9. Year wise break up of expenditure incurred in the 11th plan have been included under 2.2. The proposed expenditure and the projection for the 12th plan are given at 6.1 and 8.2 respectively. The budget allocations for the year 2012-13 is also given at 8.2 in SFC memo.

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Government of India M/o Environment, Forest & Climate Change (EI Division)

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Minutes of the Meeting of Scientific Advisory Committee (SAC) of Environmental Information System (ENVIS) Scheme held on 12th August, 2016 at 12:15 p.m. in Indira Paryavaran Bhavan, Jor Bagh Road, New Delhi

The Meeting of the Scientific Advisory Committee (SAC) of Environmental Information System (ENVIS) Scheme was held under the chairpersonship of Secretary, M/o Environment, Forest & Climate Change (MoEF&CC) on 12th August, 2016 at 12:15 p.m. in *Kaveri*-Conference Hall, Indira Paryavaran Bhavan, Jor Bagh Road, New Delhi. The list of participants is **annexed**.

2. The Committee considered the Agenda Items as per Agenda Note circulated vide letter No. 11/2/93-ENVIS/EI (Vol.VI) dated 9th August, 2016.

Agenda Item 1: Welcome by Secretary (EF&CC)-cum-Chairperson, SAC

3. Secretary, EF&CC welcomed the Official Members of the Scientific Advisory Committee and broadly outlined the Agenda before the Committee.

Agenda Item 2:Brief presentation by Member Secretary (Head of EI Division) on
ENVIS Scheme

4. Economic Adviser, as Member Secretary of the Committee, briefly presented the contours of the Scheme, which has been approved for continuation in the XII Five Year Plan period, along with the status of progress made, both in physical and financial terms. As per the progress of the ongoing scheme, two new State/UT ENVIS Centres were set up at the Department of Environment & Forests, Itanagar, Arunachal Pradesh in 2015-16 and at Department of Environment & Forests, Kavaratti, Lakshadweep in 2016-17. The Committee was apprised that the EI Division has set up an online monitoring system and also conducting national/regional evaluation workshops for evaluating ongoing activities of ENVIS Centres. A snapshot of the instant status of databases, website and information/ knowledge products of ENVIS Websites was presented. Member Secretary also presented a booklet on "Swachh Bharat Abhiyan – A Brief Report", which contains various activities done under Swachh Bharat Mission by ENVIS Centres during the current financial year.

Agenda Item 3: Confirmation of Minutes of the last meeting of SAC held on 7th July, 2014.

5. The Minutes of the last meeting of SAC held on 7th July, 2014 were duly confirmed.

Agenda Item 4: Action Taken Report on the recommendations of SAC at its meeting held on 7th July, 2014.

6. The Committee noted the actions taken.

Agenda Item 5:Provision for annual increment in Emoluments of Manpower
working in ENVIS Centres and ENVIS Cell of the Ministry:

7. In the last meeting of the SAC held in July, 2014, it was discussed [Agenda item

6(i)] and approved that the annual increment in monthly emoluments may be a fixed amount (rather than being linked to increment coupled with inflation as is done for regular Government Service). Subsequent to that, file was moved by the EI Division for mid-course correction to implement annual enhancement in the monthly emoluments of the ENVIS Centres and the ENVIS Cell in MoEF&CC which was approved by the Hon'ble MEF&CC.

8. The Committee deliberated on the issue and accorded 'in-principle' approval for the enhancement in the remuneration of the manpower. AS&FA suggested submitting comparative table of the manpower working in ENVIS Centres and ENVIS Cell of the Ministry vis-a-vis equivalent posts (e.g., Scientist D, Scientist C, Scientist B, Research Officer, Research Associate, Technical Officer, Programmer, etc.) and their current remuneration in other Divisions of the Ministry. It was also suggested to rename the existing posts similar to scientific/technical post as per existing practice in the Ministry.

Agenda Item 6: Restructuring of Grading System for ENVIS Centres:

9. The Committee was apprised about the existing grading system followed as per the Guidelines of the ENVIS Scheme which is as follows:

Grade A: ≥80

Grade B: ≥50 and <80

Grade C: <50

The Committee Members suggested to adopt a simple and effective grading system. It was decided that Grading System may be restructured as given below:

- (a) Grade A+: 90-100
- (b) Grade A: 75-89
- (c) Grade B+: 60-74
- (d) Grade B: 50-59
- (e) **Grade C**: < 50

Agenda Item 7: Re-designation of the post of IT Assistant to IT Officer in ENVIS Centres:

10. The Committee suggested re-designating the post of IT Assistant as per Agenda Item 5.

Agenda Item 8: The ENVIS Centres may be instructed to follow the relevant provisions of GFR mandatorily.

11. The Committee Members were apprised of the factual position and the Committee directed that the proposal may be examined further by the Processing Division and instructions may be issued appropriately, wherever applicable.

Agenda Item 9: Closing of ENVIS Thematic Centre at NSWAI:

12. The NSWAI ENVIS Centre has been under scrutiny and considered for closure since 2011-12. Although, it was recorded that the Centre should be closed down as it does not satisfy most of the parameters fixed for the operation of the ENVIS Centre, it was placed on watch list in 2013-14 and given 6 months to improve.

13. In the evaluations done during 2013-14 and 2014-15 the Centre has been graded 'B' and hence was placed on the watch list during 2015-16.

14. Also, during a period of two years, the Centre has shifted from Mumbai to Gurgaon to New Delhi and to Pune recently without taking prior permission from the Ministry.

15. In January, 2016, it was suggested by Secretary to take the next course of action on the basis of grade obtained during National Evaluation Workshop for 2015-16. Now, this time also the Centre has been graded 'B' during National Evaluation Workshop held in February, 2016.

16. Member Secretary briefed the Committee Members about the above existing status of National Solid waste Association of India (NSWAI) ENVIS Centre. The Committee Members decided that thematic Centre on "Municipal Solid Waste" at NSWAI may be closed and necessary action may be taken in this regard.

Agenda Item 9: Any other item with the permission of the Chair:

17. Secretary apprised about the excellent work being done by North Eastern Hill University (NEHU), Shillong on river and mining. He shared his experience of quality of work being done by NEHU is superior than NEERI. AS&FA suggested that IIT Guwahati may also be considered for opening a new ENVIS Centre. The Committee directed that proposals may be invited for both the Institutes.

18. Secretary observed that few adverse reports in the media and those published by the NGOs were given credence in the Courts. The Ministry did not have effective counter arguments that were backed by in-house research. With a view to improve the qualitative and quantitative analytical tools available with the Ministry to effectively rebut the adverse reports, there was a need to identify areas of public policy in which the ENVIS Centres could come out with analytical reports. Further, the ENVIS Centres may also be instructed to conduct test checks or action research of the Environment Clearances and Forest Clearances given to the Industries.

In this context, Secretary also suggested that a Policy Research focus needs to be brought in the Ministry to carry out the policies on the related subjects.

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19. The meeting ended with a vote of thanks to the Chair.

Minutes of the Meeting of Scientific Advisory Committee (SAC) of Environmental Information System (ENVIS) Scheme held on 12th August, 2016 at 12:15 p.m. in Indira Paryavaran Bhavan, Jor Bagh Road, New Delhi

LIST OF PARTICIPANTS

Committee Members

1. Shri A.N. Jha, Secretary, MoEF&CC	in Chair
2. Dr. S.S. Negi, DGF&SS MoEF&CC	
3. Shri P.K. Dash, Addl. Secretary & Financial Advisor, MoEF&CC	
4. Dr. Anandi Subramanian, Sr. Economic Advisor, MoEF&CC	
5. Dr. Amita Prasad, Additional Secretary, MoEF&CC	
6. Shri Yashvir Singh, Economic Adviser, M/o EF&CC	Member-Secretary
Officials of M/o Environment, Forest & Climate Change	

, **B**

- 1. Shri Amit Vashishtha, Scientist 'C'/Deputy Director, EI Division
- 2. Ms. Sukriti Verma, Assistant Director, EI Division
- 3. Shri Kumar Rajnish, National Project Coordinator (ENVIS)
- 4. Smt. Sumana Das, Section Officer, EI Division
- 5. Shri Ravi Goswami, Sr. Web Developer (ENVIS)

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Annexure-8

Green Skill Development Programme (GSDP)

1. India being the second most populous country in the world is bestowed with a large working population. One of the biggest hurdles in availability skilled workforce is that about 31% of children drop out from School at the Secondary stage itself, as seen from the Table below. This, coupled with the shortage of skills keeps out a large segment of the Indian population out of the development story.

National Level	2015-16 (%)
Drop out rate (Class -VIII)	9.00
Drop out rate (Secondary Level)	17.06
Transition Rate (Elementary to Secondary)	90.62
Transition Rate (Secondary to Higher Secondary)	69.04
Source: Unified District Information System for Education (UDISE)	2015 16 (Drowinianal)

Source: Unified District Information System for Education(UDISE)-2015-16 (Provisional)

- 2. It has been observed that a huge gap exists between the need (demand) and availability (supply) of skill sets, both cognitive and practical, at various levels in the Environment, Forest and Climate Change areas in India. However, most of the vocational training programmes focus on mechanical/technical skills rather than 'soft' skills or 'green' skills. These are unique skills that can be acquired through specially designed academic course curricula and on-the-job training in long-term and short-term education programmes. At present, none of the training programmes covered under various Schemes of the Ministry address the gaps in green skilling of citizens in general and stakeholders in particular.
- 3. The National Skill Development Agency (NSDA), set up by the Ministry of Skill Development and Entrepreneurship (MSDE), is the nodal agency for regulating skill development in the country. A meeting in this regard was held with Ms Ruchira Chandra, Consultant, NSDA, also the designated nodal officer for MoEF&CC, to understand the procedure for meeting the National Skilling Qualification standards. It was learnt that 21 Central Ministries had active schemes and MoEF&CC was not amongst them. Details on the guidelines for skill development issued by MSDE are at **Annexure**. During discussions with the NSDA consultant, it was decided that since this programme is unique, the MoEF&CC will develop the curriculum using the expertise of institutes/centres under it.
- 4. Accordingly, with the objective to develop green skilled workers who have knowledge of and commitment to sustainable development, as well as the requisite technical knowledge and thus help in the attainment of the INDCs and SDGs, the following are proposed:
 - i. MoEF&CC will design a specific Green Skill Development Programmes (GSDP) in consultation with MSDE. The Ministry would adopt the National Occupation

Standards (NOSs) and Qualification Packs (QPs) as mentioned in the National Skills Qualification Framework (NSQF), given in the Annexure to the Note.

- ii. ENVIS Centres work at the grass root level, and the actual requirements of the users can be ascertained by them. Therefore, the task of developing the course curriculum and training modules will be assigned to specific Resource Persons in the ENVIS Centres, in consultation with their respective host institutes, depending on the nature of 'green' skills to be developed.
- iii. Training will be provided in different regions/zones by the institutes/centres located therein. Advertisements will be issued in each region/zone by one nodal ENVIS Centre that will also coordinate the training programme. The certificates showing the skill level of the candidates, as recognised by the NSDA, will be issued by the MoEF&CC.
- iv. The eligibility condition for enrolling in the Courses may be laid down as Class XII students/pass outs. Specific courses of 6 months to 1 year duration may also be developed for Graduates in relevant fields. The candidates can also add on to their proficiency level at a later stage. Some of the successful candidates may be drawn as Master Trainers, based on their qualification and abilities.
- There is a growing shortage of taxonomists being reported by institutions such as v. the Botanical Survey of India, Zoological Survey of India as well as experts working in the field, crippling well intended schemes of the Governments related to research programmes and documentation of biodiversity and associated traditional knowledge. Since the basic qualification to become a taxonomist is an undergraduate degree in science, it closes options for many students who maybe 10th/12th class pass/dropouts, but have interest in nature and want scientific knowledge on plants and animals. It is therefore proposed to skill such youth and train them to be 'Para-taxonomists'; while they would be lesser qualified they would be as skilled as taxonomists. Data collection by para-taxonomists would represent one of the most efficient approaches to the study of species rich forests of India. Relatively high-quality biological specimens and ecological information can be generated by para-taxonomists than layman. They can help village communities in bringing up community forests. They can also be engaged in the nationwide exercise of preparation of People's Biodiversity Registers that requires immense quantity of data inputs on various aspects of biodiversity and related traditional knowledge. The implementation of Access and Benefit Sharing (ABS) provisions at local body level (Gram Panchayats, municipalities etc.) etc. is not progressing reportedly due to lack of knowledge on biodiversity related matters among the BMCs. Qualified para-taxonomists will be of immense use in assisting the Biodiversity Management Committees all over the country in the challenging preparation of People's Biodiversity Registers. As there is a huge

shortage of taxonomist it is proposed to train around 200 candidates 'parataxonomists' during 2017-18 to 2019-20.

- vi. A two level certification programme is envisaged: candidates completing a 3 months' course successfully will be certified as 'Nature Guides'; and those completing the 6 months course as 'Para-taxonomists'.
- vii. It is expected that the para-taxonomists would be engaged by the institutions of the Ministry; e.g., National Biodiversity Authority (NBA), National Parks, Botanical Survey of India (BSI), Zoological Survey of India (ZSI) and various Plantations, Eco-Resorts, Wildlife Tourism sector etc. The Master Trainers will also be posted in all the state ENVIS Centres, to further train the local youth in this field. In addition, their services would be crucial for attainment of the objectives of the revamped ENVIS Scheme in the next 3 years (2017-18 to 2019-20).
- viii. The other Green Skill Development Program/Modules includes:
 - a) Cleaner Production and Effluent Treatment Plant Operator: Proper operation of Effluent Treatment Plant (ETP)/ Sewage Treatment Plant (STP) is key to compliance to Water (Prevention & Control of Pollution) Act, 1974 and amendments made thereby. Industries have a whole team of ETP/STP operators at the bottom level who are responsible for the functioning of the pollution control systems. A training programme for young graduates would benefit the industry as trained operators can be an asset to industry in terms of operation and maintenance of ETP, saving on chemicals, energy conservations, low maintenance costs, extended operational life of ETP / STPs, hassle less legal compliance, etc.
 - b) Soil and Water Testing Skill Training: Soil, water and plant testing is an indispensable tool for research, advisory services and formulation of rational fertilizer recommendations, as well as designing appropriate soil management and agronomic practices. Soil testing in particular is also important in monitoring the various types of land degradation and the choice of measures for land improvement. Development of effective and efficient analytical services of soil, water, plant and fertilizers, therefore, is an important means for increasing and sustaining land productivity as well as crop and food production; a challenge for many developing countries. The purpose of training in this regard is to strengthen Gram Panchayats capabilities in conducting simple tests on soil, plants and water, and making sound recommendations for soil resource management. The eligibility criteria in this program will be Class XIIth passed/ dropouts as well as graduates.
 - **b)** Forest Inventory Taker: The skill sets in this category would be essential for stock taking and recording of forest inventory and ultimately valuating the

ecosystem goods and services The XIIth passed/ dropouts as well as graduates may be trained in basis (field survey, tree measurements etc) and advance techniques (use of GIS and GPS) for Forest Inventorization. It is expected that after the training the trainees would be engaged in Forest Survey of India (FSI) and other Government and Private organization.

- ix. It is proposed to fund this in project mode after determining the per candidate cost of skilling; the nodal ENVIS Centre will serve as the coordinator. A database on the green skilled personnel trained as well as their placement will be maintained in ENVIS Centers as part of their mandate. After evaluating the success of this project, GSDP may be scaled up as a separate scheme of the Ministry from 2018-19.
- ix. 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 future activities under GSDP will include process-based green skills such as, monitoring and managing activities such as waste, energy efficiency, impact minimization and assessment, etc.
 - **c)** Based on the market's demand and supply factors the candidates completing the Course(s) may be employed gainfully in the industry (involved in production/ manufacturing of green products), tourism (as Green Guides), agriculture (as organic farmers/ green practitioners) and education sectors as well as engage in waste management (in Municipal Corporations/ Councils to advise on how to improve sewage, sanitation, land use services/ tackle pollution), water management, construction related areas.
 - **d)** Awareness raising is listed as a green management skill and a policy and planning skill in the UK Pro Enviro 2008 Report, highlighting the holistic value of awareness raising. Consequently, the agencies engaged in education and awareness activities by the Ministry may be accordingly certified under the GSDP by the MoEF&CC.
 - **e)** There is a greater emphasis on the requirements of hybrid skills (generic plus green) which top-up on existing skills sets. The GSDP will provide the youth a path for continuing green skill certification and thus upgrade their employability.

The Common Norms for Skill Development Schemes implemented by Government of India

- 1. The common norms were issued by the MSDE vide Notifications dated 15.07.2015 and 20.05.2016, which inter alia, include the following:
 - Skill Development, for the purpose of any Government Scheme, is defined as any domain specific demand led skill training activity leading to employment or any outcome oriented activity that enables a participant to acquire a skill, duly assessed and certified by an independent third-party agency, and which enables him/ her to get wage/ self-employment leading to increased earnings, and/ or improved working conditions, such as getting formal certification for hitherto informal skills, and/ or moving from informal to formal sector jobs or pursue higher education/ training and shall fall in the categories as follows:
 - a. For fresh entrants to the job market, the training duration to be minimum 200 hours (including practical and/ or on the job training) except where prescribed by any Statute.
 - b. In case of re-skilling or skill up-gradation of persons already engaged in an occupation, training programmes having a minimum duration of 80 hours of trainings including practical and/ or on the job training.
 - c. In the case of persons who have acquired skills through informal, non-formal or experiential training in any vocational trade or craft, formal recognition and certification of such skill, if necessary after imparting bridge courses, to be treated as skill development.
 - All skill development courses offered under the Scheme Framework must conform to the National Skill Qualification Framework (NSQF) notified on 27.12.2013. Government funding would not be available for any training or educational programme/ course if it is not NSQF compliant. All training providers empanelled/ approved by the various Ministries/ Departments of the Government of India/ State Governments/ NSDA/ NSDC/ Sector Skill Councils would need to comply with this requirement of the NSQF failure to do which would lead to their de-listing by the concerned empanelling/ approving authority.
- 2. The objective of the National Policy on Skill Development and Entrepreneurship, 2015 is broadly to meet the challenge of skilling at scale with speed and standard (quality). It aims to provide an umbrella framework to all skilling activities being carried out within the country, to align them to common standards and link the skilling with demand centres. The national policy also provides clarity on how skill development efforts across the country can be aligned within the existing institutional arrangements. It links skills development to improved employability and productivity.

- 3. As per the NSQF the Qualification Packs (QPs) and National Occupation Standards (NOSs) for each job role corresponding to each level of the NSQF are formulated by the concerned Sector Skill Councils (SSCs). In the event of there being no SSC for a given sector, or inability on the part of the SSC to produce the NOSs/ QPs in a timely manner, this responsibility may be assigned by the National Skills Qualification Committee (NSQC) to a relevant regulatory body or other entity having experience and knowledge of the sector. Further, the competency based curriculum packages would consist of syllabus, student manual, trainers' guide, training manual, trainer qualifications, assessment and testing guidelines and multi-media packages and e-material. This may be done by such agencies as the Ministries/ Departments, SSCs and regulatory bodies may designate, or any other body, in accordance with the NSQF. NSQF curricula should be modular allowing for skill accumulation and facilitating exit and entry. Curricula design will also be aligned to a credit framework that reflects credits earned and competencies acquired. Training of trainers would also be aligned to the NSQF.
- 4. The NSQF is composed of 10 levels, each representing a different level of complexity, knowledge and autonomy required to demonstrate the competence commensurate for that level. Level 1 of the framework represents the lowest complexity while level 10 represents the highest complexity. Each NSQF level is defined by a set of descriptors expressed as learning outcomes. The level descriptors are designed to allow broad comparisons to be made between outcomes of learning. However, it is not the case that every qualification will or should have all of the characteristics set out in the level descriptors. The 5 parameters of all levels are (i) Process required; (ii) Professional knowledge; (iii) Professional skill; (iv) Core skill; and (v) Responsibility.

Annexuse -9

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SCHEME-WISE RECOMMENDATIONS

- iii. To produce value-added information products such as directories of information at State/regional/ National level (e.g. NGO databases, expertise rosters in various sectors); CD or website-based map atlases etc.
- iv. To build linkages with information sources in the country and abroad for relevant and comprehensive information contents.
- v. To identify data gaps and knowledge gaps in the specified subject area and take action to fill these gaps.
- vi. To collect primary data.
- vii. To respond to queries and information sought by stakeholders in the form of copies of published reports, documents, abstracts and research papers.
- viii. To bring out newsletters and other publications in the assigned subject.
- ix. To help the ENVIS Focal Point in the Ministry to develop an inventory of all environmental information available at the Centres, and in analysing information in subject area of the Centre.

Implementation

The 30 State/UT ENVIS Centres hosted by State Department of Environment & Forest/ Pollution Control Boards, etc. on 'Status of Environment & Related Issues' pertaining of each State/UT, are tasked with collecting data from line Departments of the States/UTs, and other sources as relevant, and updating the same into the modules of Indian State-level Basic Environmental Information Database (ISBEID) through its web application.

40 Thematic Centres are hosted by premier institutes like IISc, IITM, IICT, NBRI, IOM, BSI, ZSI, WII, FRI, CPCB, SACON, TERI, WWF, CEE, CPREEC, etc. on various themes such as,

- Biodiversity
- Ecology & Ecosystems
- Forestry/ Wildlife
- Pollution/ Waste Management/Clean Energy, Clean Water
- Health/ Human Settlements
- Renewable Energy, etc.

Monitoring Protocol

- i. Advisory Committee at Host Institute
- ii. Concurrent Evaluation of ENVIS Centres by the ENVIS Focal Point
- iii. Annual Third Party Evaluation at National/ Regional Evaluation Workshops
- Scientific Advisory Committee (SAC), which is chaired by Secretary (EF&CC) to monitor and periodically review the scheme and suggest mid-course correction

II EVALUATION OF THE SCHEME

Observations and recommendations are based on replies to the questionnaire/PPT presentations/discussions with the PD and state government officials executing the scheme as well as field visits.

Observations

i. The mandate does not give thrust to data analysis and research and the information brought out by ENVIS Centres does not flow into the Ministry's decision making process.

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SCHEME-WISE RECOMMENDATIONS

i. There is duplication in the thematic areas of some Centres

- jii. The performance of some Centres has not been commensurate with the funding and work allocated.
- iv. It is reported that there is difficulty in getting the information for ISBIED software from the line departments by some State ENVIS Centres.
 - v. The main reason for the shortfall in expenditure is non receipt of the proposals from the ENVIS Centres and due to pending UCs of Host Institutes pertaining to other Divisions of the Ministry.
- vi. Most Centres, on an average, got less than ₹ 10 lakh as grants-in-aid. There is also delay in release of the funds due to pending UCs pertaining to some other Division of the Ministry.
 - vii. The linking of these Centres to the Green Platform initiative is under active consideration in the Ministry.
 - viii. ENVIS Centres are engaged in collecting, collating and disseminating information through website as well as through awareness, special publications, newsletters etc., and the reach of ENVIS is very wide as it has 1.5 crore visitors both National and International.
 - ix. There is lot of scope in ENVIS to become a self-sustaining network. Some of the ENVIS Centres are now generating revenue by conducting workshops/seminars and from priced publications.
 - x. The vision is to develop the ENVIS Centres as a south Asian hub of Environmental Information.
 - xi. This scheme has the potential to be restructured and upgraded so as to function as a multi-utility arm of the MoEF&CC.

Scheme Specific Recommendations

- i. In this context, all related environmental education/awareness/information schemes (NGC, NEAC, NNCP, GLOBE and ENVIS) may be merged into a single Environmental Knowledge and Information Programme (EKwIP) from 2017-18, for greater synergy and to enable focused approach to this important function of the Ministry. EKwIP will have two components, Environmental Education/Awareness System (EEAS) and Environmental Information Management System (EIMS) including the Indian State-level Basic Environmental Database (ISBEID). EKwIP will be managed at the Centre by the EKwIP Secretariat (currently ENVIS Cell) functioning under the Economic Division (formed by merging the existing the Economic Cell with Environmental Information Division); and the existing state ENVIS centres will function as EKwIP Hubs, handling both components.
- As regards thematic ENVIS centres they may be used as a source for knowledge products and renamed as EKwIP Centres. The suggested structure is given in Fig.-3.
 All EKwIP Hubs may be housed in the state Department of Environment. These Hubs will
 - All EKwIP Hubs may be housed in the state Department of Environment. These Hubs will be the state environmental hubs to carry forward the Ministry's policies and programmes in each state and running the two distinct activities (EEAS & EIMS) with the help of scientists and administrators. The EEAS will seeks to build network of Eco-clubs across schools/colleges/institutes imparting environment education and spreading environmental awareness through documentaries, Swacchh Bharat campaigns, nature camps, etc. Consequently, schools can be registered online with the EKwIP Hubs. The Hubs can also set up EKwIP Spokes in major district centres. Online monitoring of the environmental education/awareness programmes can be undertaken by them under the overall oversight by Ministry.

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Fig.-3. Environmental Knowledge & Information Programme (EKwIP)

The second activity is to develop an online Environmental Information Management iv. System (EIMS), which seeks to build network of environment data centres across the country for collection of information, analysis and dissemination, can be also under these State hubs. EIMS will develop and operate an online, real time, publicly accessible environmental information system to provide all relevant information on key environmental resources and parameters, including ambient quality, as well as major point sources of pollution, and make archival data available in convenient format. It should be network where each State/UT should in turn build network of data centres to report on all environment and climate change related information. Further, promote the use of Remote Sensing data to provide valuable inputs on the extent and quality of forests, wildlife habitats, biodiversity, wastelands, wetlands, groundwater, deserts, rivers, etc., and monitor pollution and its impacts. The Eco-club students and teacher coordinators can be actively involved in data collection which in turn would feed into the EIMS. The EKwIP portal will also act as a web interface to project and highlight the best practices and notable achievements of the EEAS.

- v. The NGC programme has a State Nodal Agency (usually the State Department of Environment) under which there are District Coordinators in each district of the State under whom there are Teacher Coordinators in each Eco-club school of the district. Most of the State Nodal Agencies which oversee the NGC scheme's implementation in the State also have a State ENVIS centre in their Department. Further, most of the existing State ENVIS centres are already actively involved in NGC activities and also conduct teacher training programmes to build the capacities of the NGC coordinators.
- vi. EIMS database can also be promoted in Schools by CBSE and other State Education Boards. A standardized educational kit may be developed in the Ministry, which can then be used by the State hubs. Further, currently the students who participate in the NGC programme are doing it out of interest and there is no academic incentive in the

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SCHEME-WISE RECOMMENDATIONS

programme. Marks or credits can be introduced for the NGC cadres, similar to the National Cadet Corps (NCC). This will also encourage more student participation. Again, similar to NCC, the dress code of NGC cadres may be made uniform across India, which will distinguish them - currently a few NGC eco club schools have a dress code.

Given that EKwIP has a wide network with the potential to reach the maximum number of people, the funding needs to be augmented. There is also need to invest more in strengthening the Centres with tools such as GIS mapping and other such technological inputs, which will help them to stay ahead of the curve and act as frontlines of the Ministry. The number/levels of personnel also need to be increased.

It is also recommended that the Ministry may experiment with appointing entry level officers from organised service cadres as coordinators in a few state hubs - they will be better equipped to analyse environmental data at the state level as well as undertake monitoring and extension activities on behalf of the Ministry. The scheme thus needs to be revamped and strengthened to serve better the requirements of the Ministry in areas of environmental education and information.

Three options have emerged with respect to the thematic centres:

a. Discontinue thematic centres

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- b. Review and select only a few best of existing thematic ENVIS Centres to continue; or
- c. Discontinue the existing thematic ENVIS Centres at the end of 2016-17 and call for fresh applications.

A fresh start to establishing thematic centres is recommended. Consequently option (c) is suggested. The following are recommended:

- New EKwIP Centres may be selected after due procedure, ensuring that the selected themes are relevant to the Ministry. These Centres will operate on Project funding basis. The practice of Directors of host institutes also functioning as coordinators of the EKwIP Centres goes against the spirit of the Guidelines of the scheme and has to be discouraged. A comprehensive Memorandum of Understanding (MOU) should be executed by the Ministry with the Host entity.
- Thematic centres being located in autonomous bodies/CoEs of the Ministry and duplicating the work of the host institute has to be checked. (In this context, it is recommended the thematic ENVIS Centres located in both BSI and ZSI be merged to form a Biodiversity EKwIP to bring in convergence of their activities at one level.)
- The EKwIP Centres may undertake activities such as, (a) data analysis and research and (b) networking between Centres to bring out combined research papers that will flow towards policy making in the Ministry; (c) undertake research as per the directions of the PD in specific areas that are of importance to the Ministry. There is need for greater networking between the PD and other Divisions in the Ministry, whose inputs on the probable research areas and other requirements will enable these EKwIP Centres to function to the benefit of the Ministry. Further the outcome of such projects can be disseminated through the EKwIP Hubs. The EKwIP Centres can also aid the division/EKwIP Hubs in preparing comprehensive educational kits for dissemination to school/college students. However, they may not be directly involved in the Ministry's outreach programmes.

x. The Monitoring structure is proposed at Fig.-4.

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Sunset timeline – (•) ENVIS scheme may be revamped and renamed as Environmental Knowledge and Information Programme (EKwIP), with two components – EEAS and EIMS. (•) ENVIS centres based in state governments may be renamed as EKwIP Hubs - to handle EEAS and EIMS and continue to be supported. (•) The thematic ENVIS centres may be renamed as EKwIP Centres existing centres may be discontinued at the end of XII Plan and new centres to get project based funding from 2017-18.

25 SCHEME: INFORMATION TECHNOLOGY

Allocations for this scheme have been subsumed under ENVIS scheme. This may continue.

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PERSONAL PROFILE

Name : Ravi Goswami Email: ravigoswami@gmail.com 09818452063

Language Known : Hindi & English, Punjabi

Academic Qualification :

Class	Board/University	Month/Year	%
Matriculation	CBSE, New Delhi	March, 1993	63%
10+2	CBSE, New Delhi	March, 1995	67%
BA(P)	Delhi University, New Delhi	April, 1998	62%

Professional Qualifications :

- One year Advanced diploma in Multimedia and web-designing, Winsoft Technologies, Janakpuri, New Delhi
- One year Diploma in Desk Top Publishing from Delhi Printers Association (DPA), New Delhi.
- One year Diploma in Book Publishing from IGNOU through distance mode.
- Adobe Photoshop: 100% score This course is the ideal introduction to the skills and techniques needed to excel in graphic design and is ideal for the small business or entrepreneur keen to develop their own web presence. These lessons explored the fundamentals of design principles and examined their application using Adobe Photoshop CS3.
- Digital Photography: 80% score This online course in photography is for learners who want to improve their photographic skills by learning from a professional photographer. Karl Taylor, who has been a professional photographer for over 15 years, talks through a series of techniques and tips that greatly improved photographic skills. This course covered topics such as the six key elements in photography, understanding light, portraiture, shutter speeds, composition, black and white photography, travel

photography, fashion photography, photographic equipment and processing images for printing.

- Design Applying Design Principles: 100% score Graphics designing course to applying design elements and principles. Design elements include line, shape, form and texture, and design principles include composition, balance, contrast and hierarchy.
- Behavior-Based Safety: 92% score Equivalent to FETAC (Quality and Qualifications Ireland – QQI): Level 5 | Equivalent to QCF (UK): Level 3. This online course provides an introduction to behaviour-based safety. It is designed primarily for supervisors and team leaders. It may be of particular use to Health and Safety Auditors, Representatives and Officers or Managers.

PACKAGES KNOWN

Operating System : Windows7, WindowsVista, XP, and MS-Dos

D.T.P. : Adobe Photoshop, Corel Draw, PANDORA, Adobe Page Maker, InDesign CS MS-Office, QuarkXpress, Signa, EngView (Graphtec Ploter FC 4210-80), Delta Technology, Prinergy Evo (KODAK CTP).

Also file handling : Adobe Illustrator, Adobe Indesign

Skill Sets

- Capable web development professional with 10+ years experience in versatile fields including publishing, packaging and design.
- Good communication skills. Conversant in English, Hindi and Punjabi.
- Knowledge of web design tools as FTP, VPN, HTML, JavaScript, Flash, XML, Adobe PageMaker, DreamWeaver, Adobe Photoshop, Corel Draw, InDesign, QuarkExpress, Illustrator etc.
- Also familiar with MS Office Suite (all packages such as Word, Excel, PowerPoint, Outlook, OneNote) and Open Office Suite (Write. Calc, Base, Impress etc).
- High Quality Offset and Digital Printers of Annual Reports, Corporate Brochures, Profiles, Leaflets, Magazines, Mailers, Posters, Calendars and other Print Media related products and complete in-house services from modern Pre-Press setting with Scanning, Processing, Planning and Printing.
- Have worked in the past for DAVP, ITDC, Publications Division and presently Ministry of Environment, Forest & Climate Change

EXPERIENCE SUMMARY

 Working in Environmental Information System (ENVIS) Cell under Ministry of Environment & Forests, New Delhi as a Web-Developer since October, 2004.

- Worked as a Sr. Graphics Designer with India Offset Press, Mayapuri, New Delhi (September 2000-September 2004). My work is designing for various government, corporate & multinational customers for their advertising requirements also handling all types of packaging works.
- Worked as D.T.P Operator-cum-software tester in MUK Infotech from June 1998 to Aug.
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- Worked as D.T.P Operator in Exact Graphics from March 1997 to June 1998 at Tilak Nagar, New Delhi

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Annexure - 10

Centralization of Environmental Education/Awareness/Information

The following observations/recommendations, inter alia, have been made in the Evaluation Report of the Ministry with respect to the Environmental Education schemes

- i. Enhancing environmental awareness through appropriate educational information tools should be a priority area of intervention of the Ministry. Harmonizing patterns of individual behaviour with the requirements of environmental conservation, would minimize the demands placed on monitoring and enforcement regimes. Consequently, a strategy needs to be developed for enhancing environmental awareness among the general public, by producing basic tool kits and airing information products through diverse media catering to the different target groups.
- ii. In this context, all related environmental education/awareness/information schemes (NGC, NEAC, NNCP, GLOBE and ENVIS) may be merged into a single Environmental Knowledge and Information Programme (EKwIP), for greater synergy and to enable focused approach to this important function of the Ministry.
- iii. The objective will be to build a network across schools/colleges/institutes and ensure the spread of 'Environmental Literacy' to each and every student, by imparting environment education and spreading environmental awareness through documentaries, Swacchh Bharat campaigns, nature camps, etc. Schools/colleges/institutes will be registered online with the EKwIP Hubs. The Hubs can also set up EKwIP Spokes in major district centres in future. Online monitoring of the environmental education/awareness programmes can be undertaken by them under the overall oversight by Ministry.
- iv. Under the NEAC also many layers have been created between the Ministry and the citizens, which has possibly diluted the quality of awareness campaigns. There is need to have structured models of awareness campaigns to ensure that the message of the Ministry is conveyed without any adulteration. Further, the involvement of multiple outfits (principal-agent-agent) amplifies the agency problems.

In view of the above, there is a **need for change, and** the following **road map** is suggested

- 1. Convergence of all environmental education and information schemes of the Ministry
- 2. Bring in structured continuity in the programme
- **3.** Formulate differentiated Educational Information/Awareness Kits and activities for students and for rural and urban areas
- 4. Building Blocks Training, Learning by doing and Disseminating turning out green ambassadors for India
- 5. Strengthening the Implementation and Monitoring Structure

1. Bring in convergence of all environmental education and information schemes of the Ministry All related environmental education/awareness/information schemes (NGC, NEAC, NNCP, GLOBE and ENVIS) may be brought under a single Environmental Knowledge and Information Programme (EKwIP) from 2017-18, for greater synergy and to enable focused approach to this important function of the Ministry.

The ENVIS scheme has the potential to be restructured and upgraded so as to function as a multi-utility arm of the MoEF&CC - the existing state ENVIS centres can be restructured to function as EKwIP Hubs. The convergence will bring together government initiatives such as Digital India and Swachh Bharat Abhiyan on a single platform.

Advantages:

- i. The NGC programme has a State Nodal Agency (usually the State Department of Environment) under which there are District Coordinators in each district of the State under whom there are Teacher Coordinators in each Eco-club school of the district. Most of the State Nodal Agencies which oversee the NGC scheme's implementation in the State also have a State ENVIS centre in their Department. Of the 26 functional State Nodal ENVIS Centres, 18 are actively involved in these schemes. They can be the designated environmental hubs to carry forward the Ministry's policies and programmes in each state. The rich information within ENVIS will complement the activities of awareness and education programmes.
- ii. They can build a network of NGC across schools/colleges/institutes imparting environment education and spreading environmental awareness through various methods, including documentaries, Swachh Bharat campaigns, nature camps, etc. Consequently, schools can be registered online with the EKwIP Hubs. EKwIP Hubs can play the role of resource house and provide multilingual reading materials on various current and local issues relating to the environment. Environmental database can also be promoted in Schools. The Hubs can also set up EKwIP Spokes in major district centres.
- ENVIS (EKwIP) resource persons can be the master trainers for imparting training to teachers, local NGO and voluntary organization representatives, panchayats, municipal bodies, etc. - most of the existing State ENVIS centres currently conduct teacher training programmes to build the capacities of the NGC coordinators.
- iv. ENVIS web portal could be the one stop information centre. Existing online query response and referral service facility can be used for all the schemes and synced with e-taal or e-Gov services of the Government of India to reflect e-transactions on the national portal.Online monitoring mechanisms could be integrated in the same portal, thus facilitating monitoring of environmental education/awareness programmes by them under the overall oversight by Ministry.
- 2. Bring in continuity in the programme Including Environment curriculum in School/College Grades:

Several environment educational activities like celebrating environment calendar days, cleanliness drives, plantations, eco-competitions, street rallies etc., are undertaken by schools. However, students who participate in the NGC programme are doing it out of

interest and there is no academic incentive in the programme - these activities are mostly taken up as a co-curricular activity. Many teachers and students complain of time paucity, hectic schedules and financial limitations on taking up extra action based projects. This results in loss of interest in learning by doing.

Therefore, assigning marks or credits can be introduced for NGC activities, similar to the National Cadet Corps (NCC). This will also encourage more student participation. Again, similar to NCC, the dress code of NGC cadres may be made uniform across India, which will distinguish them – one day a week can be a 'green day'; currently a few NGC eco club schools have a dress code. To facilitate environment awareness through action amongst the school children, students could be graded on their positive environment actions as part of their assessment as suggested below:

Credit System in the Class Curriculum: To encourage environmental activities in schools and amongst students the following is suggested:

- i. Environmental activities/Eco-Clubs may be broadly categorised in three groups:
 - 1. Class V-VIII (Junior level)
- 2. Class IX-XII (Senior level)
- 3. 1st year 3rd Year (College level)
- ii. Credit System/Marks/Stars/Badges for activities: At the junior level, students, with good performance in such types of exercises as indicated above, could be incentivised by awarding them golden and silver stars every month. At the end of the year, the student with the maximum stars gets extra credits/marks to go into the next class.
- iii. At the Senior level, the total credits earned for the activities done in a calendar year may be added in the Grade Card of the Student. Top students can also be designated 'Green Monitors', and given an appropriate badge, like that of a class monitor.
- iv. At the college level, the students can be called upon to further their duty towards protecting the environment, by actively contributing to policy formulation. They can be designated as "ParyavaranSanRakshaks".
- v. Instituting scholarships to such students based on certain eligibility conditions. Rope in corporate houses and educational institutions to fund such scholarships. Further, meritorious students may be given a Green Certificate recognising their efforts in environment protection and conservation. Consequently, while choosing environment related higher education courses as well as careers this certificate can yield additional credit/preference at the time of admission/employment.
- vi. Grading of Schools and Colleges: Schools/Colleges to be graded at District/State and National level based on both quantitative and qualitative activities. Students of these schools can be part of the Republic Day Parade as 'The NGC Contingent'.
- vii. Ministry may institute an award scheme for rewarding best schools/colleges, best green teacher, best NGC student at the regional level as well as national level.

Some suggested activities, which may be adapted to suit rural and urban areas:

a. Biodiversity Register: Maintaining a biodiversity register will help students learn about their surroundings better:

- i. Each student to keep a biodiversity register and list five to ten noticeable flora and fauna within the school premise.
- ii. Biodiversity register could be further detailed by an exercise to record the life of a tree and its various parts for a year. The register could have recordings of dates/ months noticed on fruiting, leave shedding, new leaves, birds observed on that tree, nest build up or any observations.
- iii. Biodiversity register should have field exercises as per the school curriculum and formative assessment is to be done by the subject teacher who shall also be the eco-club teacher for the particular class.
- iv. Register could also be pre-designed in tabular sheets and provided to the schools.

b. Environment Activity Register: Formative assessment on subjects could have action based activities as under:

- i. For school level (Class 5-8th), students can write an essay on topics on environment calendar days. Activities conducted, observed in the school premises during celebrations of environment calendar days could be jotted in the register.
- Observations and actions on land use pattern, water conservation, energy saving & waste management practices, food habits at the school premises could be recorded. This could be supplemented with the national standards of school audit parameters as per the Green Schools manual of the Centre for Science and Environment.
- iii. Action projects like building a small terrarium for understanding the ecosystem and its interdependency, grey water treatment, traditional rain water harvesting, composting, reuse of waste, kitchen garden, etc., could be taken up and its experiences could be maintained in the register.
- iv. A related exercise could be to ask students to create environment friendly arts/crafts. Students could be asked to create something out of waste or teachers could help them create an innovative model to save energy etc. A Paryavaran Exhibition towards the end of the year could be organised in the school.
- v. At senior level, activities could include preparing carbon budgets for households where students are asked to create a carbon budget for their household. They can be asked to monitor their monthly emissions of carbon dioxide which will be accounted in the Liability side. On the Asset side, all activities undertaken to save the environment (say planting a tree or recycling their household waste or saving water) will be covered. Students can thus perform self-audit of resources used like water, waste etc., be sensitised to ensure resource efficiency.
- vi. At College Level, colleges may be encouraged to set up 'ParyavaranSanRakshak Clubs', to which the EKwIP Hubs can provide the necessary support in the form of information materials. These clubs can be proactively engaged in environment protection/conservation activities and organise field excursions to sanctuaries/parks/forests/river sites etc., to gain understanding of the environmental problems around them. The students may be asked to observe and talk to local people, then submit a detailed report on the status and the measures that need to be taken towards solving our environmental problems as well as for improving forest and

wildlife management.

3. Kits and activities for different classes of children and for rural and urban areas:

A standardized educational kit may be developed in the Ministry for each class group, with a higher content as the classes progress, which can then be used by the State hubs and schools. AnEco-Club handbook with detail guidelines of the scheme, reporting format, criteria for the State awards, monitoring mechanism etc., can be conceived. The EKwIP Secretariat can also prepare and distribute environment calendars, posters, flyers, brochures on current environmental issues. These can be discussed by the Central Advisory Body CAB (as indicated under point 5 i) during its annual meeting.

4. Building Blocks - Training, Learning by doing and Disseminating – turning out green ambassadors for India Environment Awareness amongst Youth and Public:

Though there has been a great shift in the awareness level in the general public over the years, many people still tend to refrain from positive actions due to varied behavioural nature given the situation in our country. We still need to invoke the positive behaviour and encourage healthy and eco-friendly lifestyles amongst the people of our country. Government alone cannot fulfil the tasks. Youths and local NGOs/ VOs have to be sensitized and engaged as active catalyst to bring about positive change in the society.

- a. The data and information warehouse of ENVIS could be developed as resource materials like mobile apps, newspaper column, pamphlets, brochures, public hoardings, radio and TV advertisement etc., to spread awareness amongst the youth and local public on local issues.
- b. Select local NGOs/ VOs youth representatives could be trained as resource persons.
- c. Adoption of village(s) for creating awareness and tangible structures for improvement of water, sanitation, waste management facility.
- d. Feedback and suggestion or the interactive circle initiative to reach the voice of people to the government for effective policy and decision making.
- e. Appreciation and Awards to youth/NGOs/VOs at the State/Regional/ National level.

5. Strengthening the Implementation and Monitoring Structure

- i. There can be a Central Advisory Body (CAB) chaired by MoS (EF&CC), with members from the Departments of School as well as Higher Education, state EKwIP Hubs as well as environment education experts, and the division concerned as the secretariat; this Body can meet annually to devise the curriculum and monitor the outcomes of the programme.
- ii. A National NGC Meet can be organised annually, wherein state nodal officers, green teachers (two persons), eco-club students (at least six students) from at least two best schools from each State can participate for knowledge and experience sharing and also for exposure. Their inputs can feed into the agenda of the CAB.
- iii. Simultaneously, the funding for activities under this programme needs to be augmented. There is also need to invest more in strengthening the EKwIP Hubs with tools such as GIS mapping and other such technological inputs, which will help them to stay ahead of the curve and act as frontlines of the Ministry. The number/levels of

personnel also need to be enhanced.

Additionally,

- i. There are two new programmes that are being launched this year the Green Skill Development programme (GSDP) and the Grid-based Decision Support System (GRIDSS) *for sustainable management of natural resources*. It would be pertinent to dovetail these three streams EkwIP, GSDP and GRIDSS as it will lead to convergenceand streamlining of related schemes/programmes of the Ministry.
- ii. Further, the GRIDSS programme will provide valuable inputs on the extent and quality of forests, habitats, biodiversity, wastelands, wetlands, groundwater, deserts, rivers, etc., and monitor pollution and its impacts, which would help in the preparation of the State of Environment Report (SoER) at the district and state levels.
- iii. In order to further make the division boundaries more pervious, quarterly newsletter will help in disseminating the information of the various divisions within the Ministry. Institutional mechanisms that mandate the various divisions to come together and share information periodically need to be built as this appears to be the root cause of most of the problems related to duplicity of schemes, best practices not getting shared etc. The Centralised Environmental Information & Education Division may undertake this responsibility.

A revamped and strengthened programme will thus serve the requirements of the Ministry in areas of environmental education and information in a more efficient and effective manner.

Minutes of the Meeting with Chairman, CPCB held on 15th May, 2017 at 3.00 p.m. at Parivesh Bhawan, CBD-cum-Office Complex, East Arjun Nagar, Delhi

A discussion was held by Sr. Economic Adviser, with the Chairman, CPCB, and officers dealing with air quality and water monitoring systems in CPCB, in order to understand the Grid based monitoring system that they were planning to establish, in order to avoid duplication of work that is going to be undertaken in the GRIDSS (Grid-based Decision Support System – for sustainable management of natural resources) programme to be undertaken by the ENVIS Centres of the Ministry. The list of officers present in the meeting is given in **Annex**.

- 2 The following points were discussed:
 - CPCB is planning to conduct Grid based monitoring of Air, Water and Noise Quality by dividing the country into Grids of 50 Km X 50 Km. The Chairman, CPCB explained the concept of Grid Monitoring and the steps already taken by CPCB in this regard.
 - Air Quality Monitoring: The CPCB is planning to establish air quality monitoring stations in each district. Ideally for effective air quality monitoring, at least 5 monitoring stations are required to be set up (Residential, Industrial, Vehicular, Background and one impact/exposure/research monitoring station);but in phase I CPCB is planning to install 3 manual air quality monitoring stations. In the second phase CPCB would further extend the network of monitoring stations from District to town level. Chairman, CPCB also informed that there is a requirement of 1500 additional air quality monitoring station to cover the entire country (District Level).
 - In order to ascertain the number monitoring stations required for air, water and noise quality monitoring, the CPCB is conducting a pilot study in two States viz. Chhattisgarh and Puducherry.
 - To operate 1500 monitoring stations at least 4500 trained persons would be required (@ 3 person for 3 shifts). Presently the monitoring is done by the State Pollution Control Board (SPCB) and in some cases SPCBs engage contractors for maintaining & monitoring of the monitoring Stations but the funding is from the Government of India.
 - To set up the network of monitoring stations to monitor the air, water and noise quality in 50 KM X 50 KM grid would require huge funding and require some time for financial approval, allocation of budget, procurement of equipments, selection of site for the monitoring stations and installation of monitoring stations. In addition, to this laboratory facilities would also be required for analysing the samples. CPCB therefore requires sufficient funding for grid based monitoring of air, water and noise quality.
 - The Green Skill Development Programme (GSDP) was explained in detail. It was suggested that 12th Pass/Dropout could be trained in air/water/noise quality monitoring. One major component that is core to grid monitoring of CPCB is availability of trained manpower in large numbers to undertake monitoring and also maintain the monitoring

stations. This can be taken up under GSDP and manpower trained in air, water and noise pollution can be provided.

• The CPCB officials supported the idea and suggested that for such kind of technical jobs the candidates selected for GSDP would be 12th Pass/dropout students with science background. They opined that since Science Graduate and Post Graduate students have higher aspirations, 12th Pass/dropout students with science background were best suited for this kind of job.

- CPCB would also support this program by developing the course module for training and leveraging the facilities of CPCB and SPCB monitoring stations for on the job training of the candidates selected for GSDP.
- CPCB also suggested that a MoU be executed with SPCBs for engaging these trained manpower on contract basis. This would create a placement platform for GSDP trained candidates.
- There will thus not be any duplication of efforts monitoring of all types of pollution undertaken by CPCB as well as under GRIDSS would be done by candidates trained by CPCB/SPCB. The pollution data so generated would be authenticated by CPCB/SPCB after which it would be uploaded. This same data can also feed into the green platform (for environmental clearance purposes) of the Ministry.

List of Participants

- 1) Shri S.P Singh Parihar, IAS, Chairman CPCB
- 2) Dr. Anandi Subramanian, IES, Sr. Economic Adviser, MoEF&CC
- 3) Dr. D. Saha, Scientist 'E', CPCB
- 4) Dr. R. M Bhardwaj, Scientist 'E', CPCB
- 5) Shri Amit Vashishtha, Scientist'C', MoEF&CC
- 6) Shri Kumar Rajnish, National Program Coordinator, ENVIS Cell, MoEF&CC