
ANNUAL REPORT 2019-20



ENVIRONMENTAL PLANNING & COORDINATION ORGANISATION (EPCO)

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Chapter-1

INTRODUCTION

1.0 The Environmental Planning & Co-ordination Organization (EPCO) was founded on World Environment Day, June 5, 1981, as a registered society, sponsored by the Department of Housing and Environment to act as the principal advisory body to the Government of Madhya Pradesh on environmental matters.

Over the years, EPCO has further expanded its activities and strengthened its technical, managerial and financial capabilities for taking up broad-based field oriented programs of environmental research, training and planning. Management of affairs of the EPCO is entrusted to its Governing Council (GC), the current composition of which is as follows :

Governing Council (As on 31.03.2020)

1.	Director General, EPCO	Chairman
2.	Principal Secretary, Environment Deptt., Govt of M P, Bhopal	Member
3.	Secretary, Forest Deptt., Govt. of M P Bhopal	Member
4.	Secretary, Finance Deptt. Govt. of M P Bhopal	Member
5.	Chairman, MPPCB, Bhopal	Member
6.	Vice Chancellor, Barkatullah University, Bhopal	Member
7.	Director, Town & Country Planning, Bhopal	Member
8.	Director NEERI, Nagpur	Member

9.	Director, Indian Institute of Forest Management, Nehru Nagar, Bhopal	Member
10.	Director, National Law University Institute, Bhadbhada Road, Bhopal	Co-opted Member
11.	Executive Director, EPCO, Bhopal	Member Secretary
12.	Engineer-in-Chief, Public Health Engineering Deptt.	Member

EPCO is organized in following Divisions:-

- 1. Research & Training Division**
- 2. Planning Division**
- 3. Climate Change Cell**
- 4. SEIAA**
- 5. General Services Division**
- 6. EPCO Rural (at Rewa)**

EPCO is located in its own campus in South Bhopal, in its own building, which came up in 1987. Its Rural Division is Located at Rewa (M.P.).

Chapter-2

RESEARCH & TRAINING DIVISION

2.0 The Research Division takes up multidisciplinary integrated environmental studies, not as a purely academic exercise but as scientific inputs to governmental decision making processes, environmental protection, and project formulation and monitoring.

2.1 Biosphere Reserve Project

The main objectives of the Biosphere Reserve Project are conservation of the Biodiversity, promotion of the development scheme for socio-economic up-liftment of the local people and also promotion of the research and awareness programmes related to conservation and management of the Biodiversity. Under the programme the Ministry of Environment and Forests, Govt. of India notified Pachmarhi Biosphere Reserve in March 1999 covering an area of 4981.72 sq km. It covers parts of Chhindwara, Betul and Hoshangabad districts. Pachmarhi Biosphere reserve has also been recognized on the world network of Biosphere Reserves by UNESCO in May 2009.

Later on Achanakmar-Amarkantak Biosphere Reserve (AABR) covering an area of 3835.51 sq. km. was also designated in March 2005 by the Ministry. Out of this 32% area falls in Madhya Pradesh and remaining in Bilaspur district of Chhattisgarh. In Madhya Pradesh almost equal area falls in two districts viz. Dindori and Anuppur. AABR is also included in the World network of Biosphere Reserves of UNESCO. Due to efforts of EPCO, Panna covering an area of 2998.98 sq km was also designated as Biosphere Reserve on 25.08.11 by Ministry. Thus it is the 3rd BR of the State and 18th

BR of the country. About 64% of the area falls in Panna district and the remaining 36% area falls in Chhattarpur district. EPCO is the Nodal Agency for these BRs.

A MAP of Achanakmar - Amarkantak (MP Part) BR

The main activities in the above project are *In-situ* conservation of plant species, habitat improvement, promotion of social welfare activities, awareness, education and training.

Management Action Plan of **Rs 265.33 lacs** for Achanakmar-Amarkantak (MP Part) Biosphere Reserve for the year 2019-2020 was sent to MoEF & CC, GoI with due approval of State Level Steering Committee (SLSC).

The Ministry of Environment, Forests & Climate Change, GoI sanction an amount of **Rs 188.63** lakhs and released Rs 37.50 lakhs as I-installments under Implementation of Management Action Plan for Achanakmar - Amarkantak (MP-Part) Biosphere Reserve for the year 2019-2020. The scheme will be 60:40 between Central and State Government. An amount of Rs 52.48 lakh released to the implementing agencies (through Collector Anuppur & Dindori) / organisation after addition of State share. The work is under progress. However, in view of Covid -19 pandemic the work did not carry out timely, hence the Ministry was requested for revalidation of MAP –AABR : 2019-2020 so that the remaining work shall be completed in the financial year 2020-2021.

B Inclusion of Panna BR on UNESCO's World Network of Biosphere Reserves

As per the direction of the Ministry of Environment, Forest and Climate Change, GoI a draft report has been prepared for inclusion of Panna Biosphere Reserve on the World Network of Biosphere Reserves (WNBR)

of UNESCO. The draft report was send to the concerned District Collector, link departments/ organisations for suggestions/ comments. Thereafter, the comments received from the district level incorporate din the report and the same to the Ministry for suggestion/ comments. The suggestions of Ministry were incorporated in the report and the final report for inclusion of Panna BR on the World Network of Biopshere Reseve (WNBR) of UNESCO has been submitted to the Ministry after the due approval of State Level Monitoring Committee and State Level Steering Committee. The ministry forwarded the report to UNESCO for futher action.

C Designation of Kanha, Bandhavgarh and Pench areas as Biopshere Reserve

In view of the direction of MoEF & CC, the State Level Steering Committee decided to prepare a project document for Kanha, Bandhavgarh and Pench areas as Biopshere Reserve. The NIT for RFP was published in the leading Newspapers and on the basis of the tenders received three firms have been choosen to prepare the Project Document for designating Kanha, Bandhavgarh and Pench areas as Biopshere Reserve.

D Periodic Review of Pachmarhi BR on UNESCO's World Network of Biosphere Reserves

Pachmarhi Biosphere Reserve was included on WNBR in the year 2009. As per the procedure a periodic review report of the BRs recognised on WNBR has to be submitted time to time.

In view of the direction of MoEF & CC the work for preparation of Periodic review report for Pachmarhi BR has been initiated in collaboration with M.P. Council of Science and Technology, Bhopal. The maps of Landuse/ Landcover, Mining, Drainage, Tourist spots etc. based on GIS & Remote

Sensing technology is under preparation and draft report will be submitted to the ministry at the earliest.

E MAP of Pachmarhi Biosphere Reserve

The main activities under the above project includes habitat improvement, promotion of Eco-tourism, Conservation of the Plant species, promotion of non-conventional energies, promotion of activities for crop protection, promotion of livelihood projects, promotion of social welfare activities and also project related to awareness education and training.

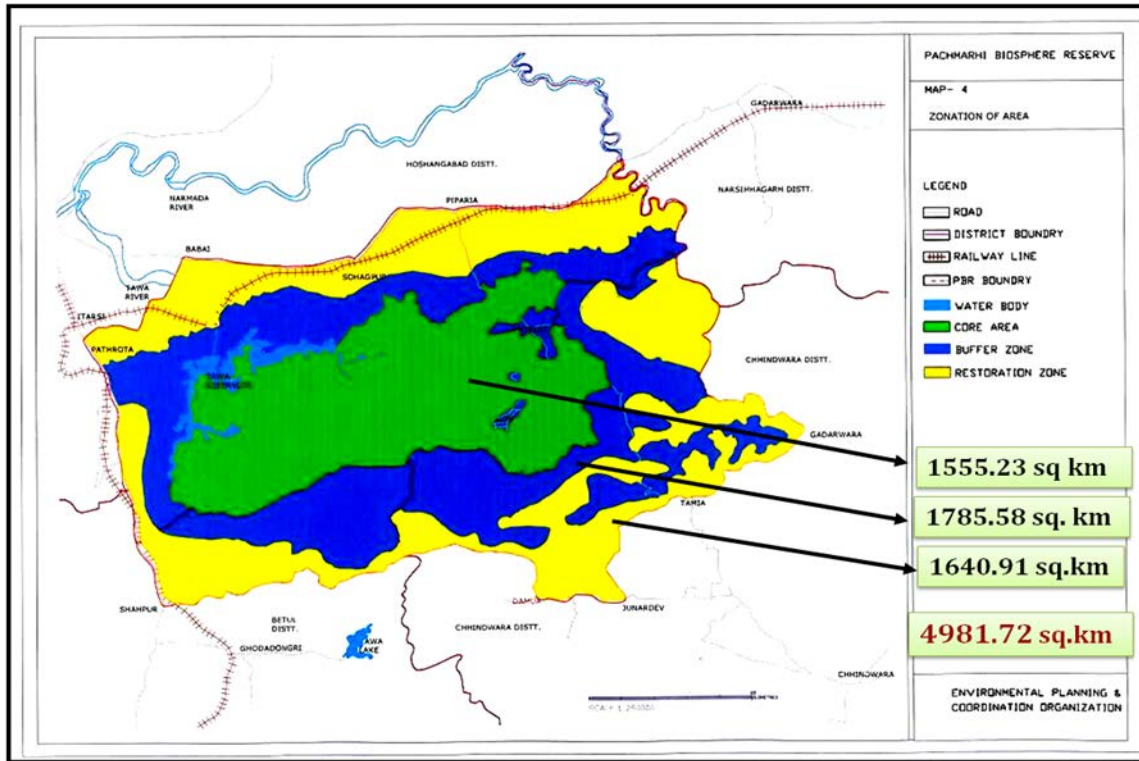
Ministry of Environment, Forests & Climate Change, GoI sanction an amount of Rs 126.17 lakhs and released Rs 45.421 lakhs as I – instalment and Rs 12.50 lakhs as II- installment on 60:40 basis between Central and State Government under the Implementation of Management Action Plan for Pachmarhi Biosphere Reserve. An amount of Rs 107.85 lakh released to the implementing agencies (through Collector Hoshangabad & Betul) / organisation after addition of State share.

The Management Action Plan of Rs **178.919** lakhs for Pachmarhi Biosphere Reserve for the year 2019-2020 has been sent to MoEF & CC, GoI. However, the sanction awaited from the ministry.

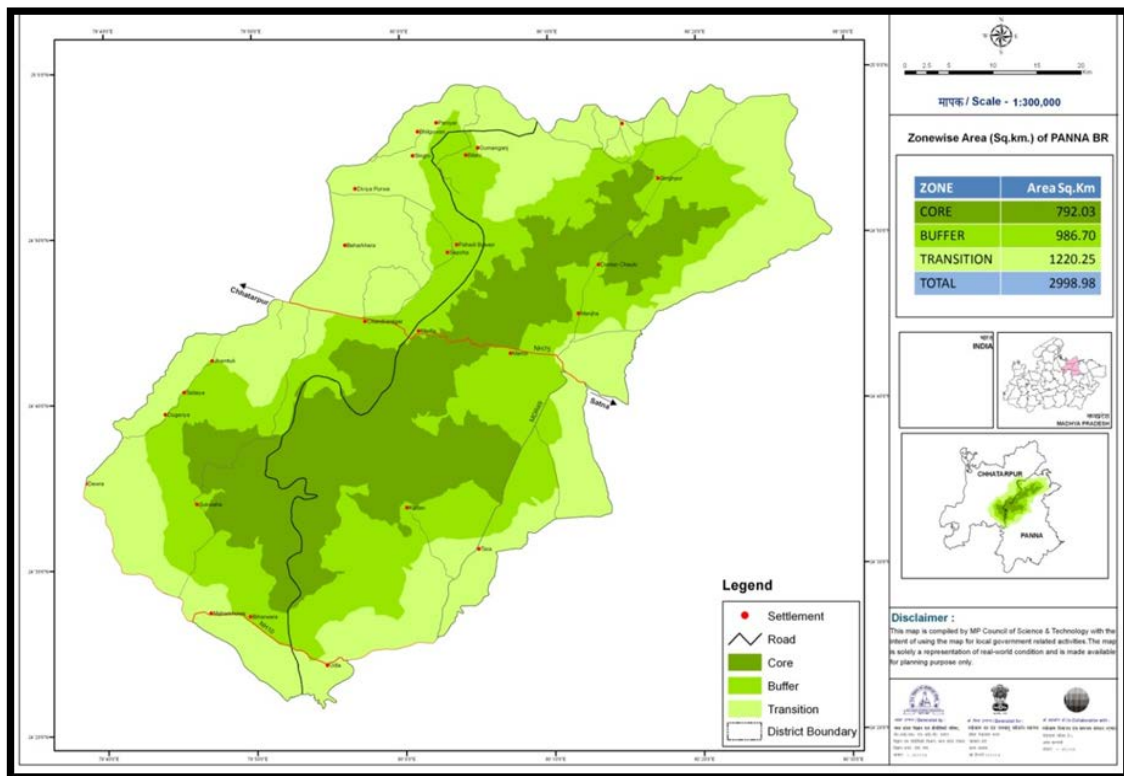
F Panna Biosphere Reserve

The Management Action Plan of Rs **193.514** lakhs for Pachmarhi Biosphere Reserve for the year 2019-2020 has been sent to MoEF & CC, GoI. However, the sanction awaited from the ministry.

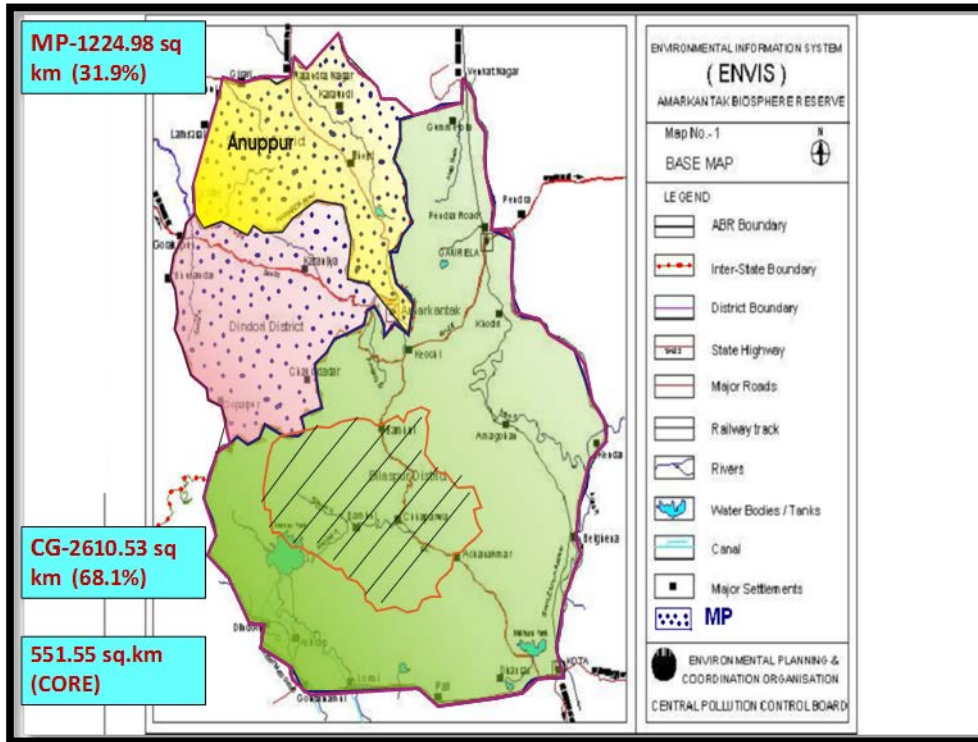
Pachmarhi Biosphere Reserve



Panna Biosphere Reserve



Achanakmar-Amarkantak Biosphere Reserve



Fauna of Panna Biosphere Reserve



Boselaphus tragocamelus (Blue Bull)



Tetracerus quadricornis
(Four Horned Antelope)



Panthera pardus (Leopard)



Melursus ursinus (Sloth Bear)



Hyaena hyaena (Striped Hyaena)



Cuon alpinus (Wild Dog)

Avians of Panna Biosphere Reserve



Magalaima zeylanica (Brown-headed Barbet)



Phalacrocorax carbo (Great Cormorant)



Rhipidura aureola (White-browed Fantail)



Dicrurus macrocerus
(Black Drongo)



Cursorius coromandelicus
(Indian Courser)



Anas poecilorhyncha (Spot-billed Duck)



Copsychus saularis (Oriental Magpie Robin)



Saxicola torquata
(Common Stonechat)



Upupa epops
(Common Hoopoe)



Casmerodius albus (Great Egret)

Trees of Panna Biosphere Reserve



Cassia fistula (linn)



Buchanania lanzan



Emblica Officinalis (Gaertn.)



Diospyros melanoxylon (roxb)

Pandav Caves – Pachmarhi Biosphere Reserve



Dhoopgarh – Pachmarhi Biosphere Reserve



2.2 National Plan for Conservation of Aquatic Ecosystems (NPCA)

Centrally Sponsored Schemes (Central 60%, State 40%+ Additional Cost)

National Plan for Conservation of Aquatic Ecosystems (NPCA) was launched in 2013 by merging two erstwhile schemes viz. National Lake Conservation Plan (NLCP) and National Wetlands Conservation Programme (NWCP) to run a single integrated programme for promoting better synergy and avoid overlapping of schemes. The main objectives are to have holistic and integrated approach for pollution control and restoration of lakes, wetlands & their biodiversity. The Comprehensive Management Action Plans includes core and non core works such as delineation of boundary, protection by way of fencing, plantation, de-weeding, de-silting, nalla diversion, solid waste management, lake front development, aeration ; capacity building, public awareness, water quality monitoring etc. M.P State Government has declared EPCO as Nodal agency for the scheme. The implementing agencies are the concerning Municipal bodies. Under the scheme following projects are in the various stages of implementation during the year 2019-20 :-

1. Sirpur Wetland, Indore :

Sirpur Wetland Indore has been identified as Wetland of National Importance by MoEF&CC, GoI. Implementation of Management Action Plan (MAP) for the same started in 2016-17. The Total cost of the project sanctioned by GoI is Rs. 831.00 Lakhs. For the year 2019-20 Annual plan an amount of Rs 337.41 Lakhs has been sanctioned by GoI. The cost sharing is 60% GoI and 40% GoMP. The conservation works include fencing, Strengthening and bund channelization, habitat development of birds, plantation, de-weeding, purchase of weed harvester, research studies, public

awareness, monitoring etc. Implementing Agency is Nagar Nigam Indore. Works are under progress.

MoEF&CC, GoI has undertaken initiatives for restoration of wetlands as part of transformative ideas of GoI. Sirpur Wetland has been identified in the Phase-I program including 100 Wetlands all over the country. As per the guidelines of MoEF&CC, GoI for implementation of Wetland rules 2017, EPCO/SWA prepared Brief Document, Health card, Wetland Mitra & 05 year integrated Management plan for Sirpur Wetland costing Rs. 3229.51 Lakhs and submitted to MoEF&CC, GoI for funding.

2. Bhoj Wetland, Bhopal :

Bhoj Wetland, Bhopal was declared as a Ramsar Site in 2002. The Annual Management Action Plan was prepared and submitted to MoEF&CC, GoI. For the Annual Plan 2019-20 an amount of Rs. 432.03 Lakhs has been sanctioned by GoI. The cost sharing is 60% GoI and 40% GoMP. The project includes Fringe area development, installation of fountains, Solid Waste Management, repairing of old ghats, visarjan kund, boundary wall etc, Monitoring of Upper Lake using remote sensing GIS technique. The implementing agency for the project is Nagar Nigam Bhopal. The Project works are ongoing.

MoEF&CC, GoI has undertaken initiatives for restoration of wetlands as part of transformative ideas of GoI. Bhoj Wetland has been identified in the Phase-I program including 100 Wetlands all over the country. As per the guidelines of MoEF&CC, GoI for implementation of Wetland rules 2017 EPCO/SWA prepared Brief Document, Health card, Wetland Mitra & 05 year integrated Management plan for Bhoj Wetland costing Rs. 1482.00 Lakhs and submitted to MoEF&CC, GoI for funding.

3. Amrit Sagar Talab, Ratlam:

The project for conservation and management for Amrit Sagar Talab, Ratlam costing Rs. 2284.324 Lakhs has been sanctioned by MoEF&CC, GoI in December 2019 under the NPCA scheme. The cost sharing is 60% Central & 40% State. GoI has released an amount of Rs. 685.29 lakhs. Proposal for approval SFC has been sent to GoMP. The core and non core works included in the project are lake boundary protection, de-weeding, de-silting, nalla diversion, community toilet blocks, solid waste management, beautification, public awareness, water quality monitoring slope protection, construction of in-situ wetlands for waste water treatment in two drains, fringe area development etc. EPCO/SWA is the Nodal Agency for the project and implementing agency is Nagar Nigam Ratlam.

4. Shivpuri lakes, Shivpuri:

The total revised cost of Shivpuri lakes scheme is Rs. 9200.00 Lakhs. The Central share of this project Rs. 2904.00 Lakhs and the state share Rs. 6296.00 Lakhs. The scheme includes:

- a) **Core components:** 97590.00 Mts Sewage pipeline have been laid down till date and only 3000 Mts of main pipeline is remaining, installation of STP (20 mld) 88% civil works have been completed and rest is in progress. **Implementing Agency: Public Health Engineering Department, Khand Shivpuri (M.P.)**
- b) **Non-core components:** De-weeding, De-silting, Catchment Area Treatment, Lake Front Development, Bathing Ghats, Low Cost Sanitation/toilet, Chain link fencing, Floating fountain, Monitoring of waste water quality, Public participation works have been completed. **Implementing Agency: Municipal Council, Shivpuri.**

5. Sindh Sagar lake Isagarh, Ashoknagar: The total project cost sanctioned by MoEF&CC, GoI is Rs.1078.00 Lakhs for Environmental Improvement and Conservation of Sindh Sagar Lake at Isagarh, District Ashoknagar. The Central share (60%) of this project Rs. 647.00 lakhs and the State share (40%) Rs. 431.00 lakhs.

Implementing Agency: Municipal Corporation, Isagarh District Ashoknagar. The scheme includes:

- a) **Core components:** Retaining Structure (strengthening/ repairing of retaining wall) and De-weeding works are completed. Interception & Diversion works, Waste Water treatment (33.12%), De-silting, Storm water management, Catchment area treatment etc works are under progress.
- b) **Non Core components:** Construction of Idol immersion kund, Bathing Ghats, Fencing -2 (On retaining wall), Footpath on Earthen Bund, works are completed. Development of park, Development of fisheries, Public Toilets, Boating facilities, Fencing -1 (Near Plantation), Public awareness & participation and Water quality monitoring works are under progress.

2.3 Consultancy Service

The professional studies and consultancy cell provides consultancy services in environment related areas to enhance the activities and to make organization self sustainable.

The Important areas include preparation of Detailed project report (DPR) for conservation and management of water bodies, Environmental management plans, monitoring and evaluation of environmental components in various projects being implemented by States, Centre or International funding agencies etc. During year, following major works were undertaken:

-
- Safeguard Monitoring Reports (EMR,SMR,IEE,RP) of Sub Project-Feeder Separation prepared by EPCO for Madhya Pradesh Kshetra Vidyut Vitran Company Ltd. under Asian Development Bank (ADB) Loan No. 2764 and 2830 IND: Madhya Pradesh Energy Efficiency Improvement (Investment Program- Tranche-1 and 2). Similarly, Safeguard Monitoring Reports (EMR, SMR, IEE, RP) of subproject-Construction of New 33/11 KV Substations, Installation of 33 KV Lines, 11 KV Lines and 11 KV 1500 KVAR Capacitor Bank prepared by EPCO for MPMKVCL under ADB Loan No. 3066 IND: Madhya Pradesh Power Distribution System Improvement Project.
 - Preparation of Master plan of Zoo rescue centre of White Tiger Safari, Mukundpur District Satna (M.P.). Under this project stage I to IV works have been completed and remaining work is under progress.

2.4 Indira Gandhi Fellowship

Indira Gandhi Fellowship - a prestigious fellowship is awarded every year to the residents of the State by Govt. of Madhya Pradesh through EPCO. The objective of the fellowship is to promote the research study on Environmental Conservation and Management in the state.

The selection of the candidate is done by way of inviting proposals through advertisements in News Papers. Selection is done by the jury committee. On the basis of recommendations of jury, approval is granted by Standing Sanction Committee under the chairmanship of Hon'ble Chief Minister of GoMP. The fellowship provides scholarship of Rs. 25,000/- per month for two years and contingency grant of Rs. 1.00 Lakhs maximum. Processing for award of fellowship for the year 2018-19 and 2019-20 has been done. Approval of standing sanction committee is awaited.

Wetland Conservation & Management Training Program

Date: 17 – 18 December 2019

(Brief Document, Wetland Health Card, Wetland Mitra)



Inaugural session: Lighting of Lamp



**Address by Shri Jitendra Singh Raje
ED, EPCO**



**Workshop Briefing by Dr. Vinita
Vipat, CSO, EPCO**



**Importance of Wetland Conservation
& Management by Dr. Pradeep
Shrivastav**



Group photograph of all invitees form different districts of Madhya Pradesh

**World Wetland Day -2020 : Wetland & Biodiversity
(Wetland & Biodiversity Run, Drawing-Painting Competition, Environmental Quiz
and Expert talk)**



Guest Welcome



Brochure for Bhoj Wetland



Flag off for the Run



Run for Wetlands and Biodiversity



Drawing and Painting Competition



Quiz Competition

Wetland Conservation & Management Training Program Phase-1

Date: 4– 7 March 2020

(Brief Document, Wetland Health Card, Wetland Mitra)



Introduction & Briefing of program by Dr. Vinita Vipat, CSO, EPCO



Describing about Brief Document



Training on Wetland Health Card



Discussion on concept of Wetland Mitra



Photograph of participants

2.5 Chief Minister's Scholarship for PhD on Climate Change

SKMCCC is anchoring & coordinating a prestigious scheme of Chief Minister's Scholarship for PhD on Climate Change, making MP one of the leading states in the country. This scholarship now been extended to 17 premier universities/ research institutes located in Madhya Pradesh viz. IIFM Bhopal; MANIT Bhopal; SPA Bhopal; IISER, Bhopal; RGPV Bhopal; IIT Indore; IIM Indore; DAVV Indore; Vikram University, Ujjain; JNKVV Jabalpur; NDVSU Jabalpur; TFRI Jabalpur; BRAUSS Mhow; RVSKVV Gwalior; IIITM Gwalior; Jiwaji University, Gwalior and Dr. Hari Singh Gour Central University Sagar. To give a push to the program, a meeting under the chairmanship of ED EPCO, a meeting with all the partner institutions was also convened requesting them all to send more and quality

research proposals on climate change subject for obtaining the scholarship to the PhD candidates. Till FY 2018-19, total 9 candidates have been awarded the scholarships. In the FY 2019-20, EPCO has received total of 7 nominations from the partner institutes. In the meeting of Expert Committee, 2 candidates have been awarded with CM's Scholarship for PhD on Climate Change. The first instalment of the scholarship worth Rs. 1.50 lakhs along with contingency grant worth Rs. 0.50 lakhs has been disbursed to the candidates.

Sr	Name	Institute	Title of PhD
1	Mr. Rahul Chouhan	IIT Indore	Development of Dye-sensitised solar cells using algal natural dyes for climate change mitigation
2	Dr. Shivangi Sharma	NDVSU Jabalpur	Studies on prevalence and molecular characterization of Leptospirosis in cattles in Jabalpur region

2.6 EPCO Institute of Environmental Studies

EPCO Institute of Environmental Studies (EIES) of the organization is implementing a Post Graduate Diploma in Environmental management (PGDEM) since 2011-12. The course has been designed to familiarize the students about various environmental issues and key challenges, rules and acts for environmental conservation, solid and liquid waste management, EIAs, pollution and environmental quality management etc. Because of its uniqueness, the course has proved to be of immense use for the people

desired to obtain jobs in industries, laboratories, academic institutes, social welfare organization, environmental legal cells, ETPs, STPs, WTPs and sanitation & hygiene sectors. In last couple of years students from multidiscipline backgrounds including basic sciences, engineering, commerce & management, urban planning etc. have successfully completed their Post Graduate Diploma and many of them have already established themselves in various fields of their interests.

In last three academic sessions i.e. from 2017-18 to 2019-20 about 127 students have successfully completed their Post Graduate Diploma from the institute.

Status of PGDEM Course during 2017-18 to 2019-20 :

Year	2017-18	2018-19	2019-20	TOTAL
No of students passed out	31	45	51*	127

*Appeared

Besides conducting the PGDEM course, EIES has also been regularly organizing various short term training & capacity building programme for different target groups of the society. The mandate is to create a strong and effective pool of human resources involving students, teachers, college and university professors, administrators and common men through various educational activities, training and environmental awareness programme, outreach activities, field exposure so as to produce an environment of ecological sustainability and social harmony towards development of the society. Till now more than 500 students have obtained their PG diploma. Apart from this about 900 school teachers, 800 college students, 700 college professors and representatives from reputed NGOs and officials have

successfully completed various training, capacity building and awareness programme being conducted by the Institute.



2.7 National Green Corps (NGC)

National Green Corps (NGC) a nationwide initiative of the Ministry of Environment, Forest & Climate Change (MoEF&CC), Government of India. EPCO is appointed as State Nodal Agency for NGC Scheme in M.P. The

objectives are: to

impart

knowledge;

hands-on

experience;

requisite skills

of observation,

experimentation,

survey,

recording,

analysis and

reasoning for

conserving the environment through various awareness and action oriented activities. All the NGC activities are implemented at three levels viz. Awareness, Observation, Documentation & Action Projects.



Outreach of NGC Programme in Madhya Pradesh, 2019-20

Since 2019-20 there are 25500 eco clubs are formed in 51 districts @ 500/ schools per district. During the current financial year EPCO has received grant for 16 500 eco clubs only. Hence, EPCO has released the grant to 16,500 schools accordingly; however rest of 9,000 eco clubs were also active during the period in organizing different awareness activities and environmental days.

Particulars	School	Colleges
Number of districts covered	51	50
Number of Schools (Eco-clubs)	25,500	100
Number of Teachers (Eco-club in-charges) / College Professors	25,500	100
Number of Nodal Officer	51	50
Number of Master Trainers	51	50
Number of Students - Eco-club Members (@ 50 per school	12,75,000	5000

Under the scheme EPCO conducted training programmes for Master trainers, Quiz masters, College Professors/Asst. Professors, district specific Ecoclub Incharge teachers and students. Coordination, monitoring and evaluation with different departments along with implementation of environmental activities with schools at grass root with the aim to build cadres of young children working towards environmental conservation for a more secure and sustainable planet.

Following activities have been organised during 2019-20:

State Level Events:

- **State Level Workshop:** One day state level workshop was organised at EPCO, Bhopal. for Master Trainer & Quiz Master at EPCO Auditorium, Bhopal on 22 October, 2019.
- **Sate Level Mowgli Bal Utsav:** Quiz Competition for Students & Teachers and facilitate participants during Nature trail, Safari and tracking organised at Pench National Park, Seoni on 27-29 November, 2019. More than 530 participants attended the programme. Winners of quiz were awarded with prizes and certificates.
- **Swachhta Action Plan:** Under the Swachhta Action Plan EPCO implemented the activities at three levels. The first is through own by visiting schools and conducted activities viz. lectures, rally and prize distribution. At the second level the activities like lectures, workshops, rally, plantation, cleaning drives, hand washing, waste disposal, plantation, interaction with communities and mass pledges etc were conducted by Ecoclub Schools of Madhya Pradesh. At the third level EPCO selected 20 districts of M.P. and conducted swachhta activities. The major activities at these districts were: Plantation Drive; Bring waste from Nature; Environmental Film Festival; ODF Awareness; Riverfront and water bodies Cleaning; Adoption of Natural areas where needs to clean up; Awareness on biodiversity, wildlife and plastic pollution; Single use plastic awareness etc. The other programmes on training and workshops along with rallies, various competitions viz. drawing, slogan writing, swachhta quiz, Essay, poster making etc.

District Events:

- **One Day District Level program:** One day orientation programme on Swachhta for Eco club incharge teachers and eco-club students of Alirajpur and Dhar district of M.P. were organised. The objective is to implement action oriented activities on swachhta with students. After the successful implementation of activities reports were shared with MoEFCC.
- **Globe Program-** The Global Learning and Observations to Benefit the Environment (GLOBE) Program is an international science and education program that provides students and the public worldwide with the opportunity to participate in data collection and the scientific process. One day two orientation workshop on GLOBE protocols - Atmosphere, Biosphere, Hydrosphere and Lithosphere was organised at EPCO Bhopal on 20-21 September, 2019. In the workshop 150 selected teachers from 20 were participated. Dr. Ritesh Joshi, Joint Director, EE Division, MoEFCC addressed the participants on the GLOBE Programme. Shri Jitendra Singh Raje, Executive Director, EPCO was also present during the programme. On successful completion of the workshop GLOBE kit and certificates were distributed to the teachers.

Under the GLOBE programme two days orientation workshop was organized for State Nodal Agencies (earlier SNAs-06 and newly added SNAs-9) at EPCO Bhopal on 17-18 February, 2020. In this programme 13 SNAs were attended the meeting. Consequently the second day Globe teachers were oriented by experts on Globe protocols. This programme was jointly organized by MoEFCC and EPCO. Shri Jitendra Singh Raje, Executive Director, EPCO was the chief guest.

Monitoring of Eco club Schools: The monitoring of programme was conducted through three tier system. All the communication was circulated through emails, phones and whats app message. The District Education Officers (42 districts)/ Assistant commissioners, Tribal Work Department (09 Districts) conducted monitoring of Eco club from time to time. EPCO did random monitoring during the visit to the respective districts along with its other programme (eg. Swachhta Programme, NNCP and Capacity Building programme etc.). Ministry of Environment officials have also visited and monitored the programme from time to time. This year a team of National Productive Council under guidance of Ministry of Environment, Forest & Climate Change visited three districts viz. Bhopal, Gwalior and Indore and monitored more than 30 schools.

Celebration of Environmental Days:

- World Earth Day, 22 April 2019
- World Biodiversity Day, 22 May 2019
- World Environment Day, 5 June 2019
- World Ozone Day, 16 September 2019
- World Wetland Day 2 February 2020
- World Sparrow Day, 20 March 2020

From time to time EPCO organized Environmental Campaigns with different stakeholders especially eco-club students and teachers. Some of the major activities under this head are as follows:

- Single Use Plastic Campaign.
- Green Ganesh Awareness Campaign.
- Eco-friendly Holi Celebrations.
- Plantation Drive.
- Swachhta Campaign.

EPCO as a Nodal agency has printed and distributed NGC resource materials viz. NGC Guidelines, Green Good Deeds (in a folder) and Environmental calendar. Printed materials are distributed to all 12750 Ecoclub schools and 100 colleges.

Reward and Contribution

Apart from this EPCO is always endeavoring to enhance the knowledge of Ecoclubs through various means. EPCO subscribes the "Down to Earth" environmental magazine and circulate to 510 Ecoclub schools (Best 10 schools from 51 districts) and 100 colleges of Madhya Pradesh.

As per instruction of MoEFCC to celebrate Diwali festival as "Harit Diwali and Swachh Diwali"; EPCO invited entries from Eco-club and general public for observance of "Harit Diwali Swachh Diwali". The contest was based on online submission on portal of MPMYGOV. EPCO evaluated the entries through a panel of experts and first five entries were awarded with prizes and certificates. Their names were also displayed on the website of MPMYGOV.

Recognition

- Received recognition from Secretary, MoEFCC as outstanding work in implementation of NGC Scheme during the SNAs Annual meet at Kewadia, Gujarat on 20-21 December, 2019.
- National Working Committee of NGC – EPCO is one of the member of NGC Working Committee of National Green Corps (NGC) programme under EEAT scheme.
- Electronic transfer of NGC grants since 2017-18 to 12,750 to Eco-club schools and colleges.
- Random monitoring of NGC School by National Productivity Council in accordance with MoEFCC.
- Highest number of Eco-clubs in India.
- Host GLOBE SNA meeting for new and old SNAs at Bhopal.

Glimpses of Photographs (2019-20)



Release of NGC Resource materials by Shri Jitendra Singh Rajee (ED), EPCO and MoEFCC Team, New Delhi



Welcome Address by ED, EPCO on SNA meet



Certificate distribution during Master trainer Workshop



Award to EPCO during Annual meet of SNAs at Kewadia, Gujarat



Quiz competition during Mogli Bal Utsav- 2019



Demonstration of GLOBE Protocols by MoEF&CC team, New Delhi during workshop at EPCO, Bhopal



Plantation campaign by NGC Gwalior team, M.P.



Monitoring of NGC by MoEF&CC team at College, Indore



Swachhta Awareness programme by Narmada College Ecoclub, Hoshangabad



Swachhta Awareness workshop with Eco-club teachers at Alirajpur.

Chapter-3

M.P. STATE WETLAND AUTHORITY - EPCO

3.0 M.P. State Wetland Authority-

1. MoEF&CC, GoI has identified Wetland rules in **September 2017**. In compliance to the rules **M.P. State Wetland Authority** was constituted under the chairmanship of hon'ble minister for environment. EPCO is working as secretariat of the Authority and ED, EPCO is nominated as MS. of the Authority.
2. In compliance of the rules a Technical Committee & a Grievances committee have been constituted.
3. Prepared **District-wise Wetland Inventory & Web portal** of MP for the Wetlands having area >2.25 ha on the basis of GIS data. The field verification of Wetlands is in progress. 6 districts have submitted the complete information, while partial information has been received from 24 districts. Follow up for field verification from remaining districts is in progress.
4. Prepared proposal for conservation of Sirpur Wetland Indore in coordination with N.N. for the annual plan of year 2019-20 and received sanction of Rs. 337.41 Lakhs from MoEF&CC, GoI. Monitoring and Follow up with I.A. for implementation of Sirpur Management Action Plan 2019-20 is continued.
5. Follow up with the Nagar Nigam Bhopal for 2019-20 for Bhoj Wetland, Bhopal. Preparation of Annual Plan and sanctioned of MoEF&CC, GoI received for Rs. 4.32 Crores.
6. MoEF&CC, GoI has started Wetland Rejuvenation Program under the

transformative ideas of GoI. In the first phase **100 Wetlands** in the country have been identified for conservation and restoration. From M.P. 2 Wetlands i.e. **Bhoj Wetland** Bhopal and **Sirpur Wetland**, Indore are included in phase 1 list. For the purpose prepared Brief Document, Health cards & 5 year Management Action Plan for Sirpur Wetland Indore (Rs 32.29 Crores) & Bhoj Wetland, Bhopal (Rs. 14.82 Crores) for funding.

7. For the **Phase-2** of the above program **1000 Wetlands** are to be taken up by MoEF&CC, GoI. From MP a list of **113 Wetlands** have been identified and sent to MoEF&CC, GoI for inclusion in Phase – 2 program.
8. MoEF&CC, GoI has nominated, SWA/EPCO as **Knowledge Partner** for other states.
9. Coordinated with Nagar Nigam, Indore for preparation of Brief Document & Health Cards for 20 Lakes of Indore.
10. Based on digital GIS data a Web Portal of Wetlands of MP was prepared in collaboration with MAP-IT. It includes more than 15000 Wetlands. Coordination with District Collectors/Nodal Officers for submission of field verification report of Wetland Inventory and Brief documents for notification of Wetland under Wetland Rules 2017.
11. **World Wetlands Day (2020)** organized Awareness Programs on the theme **Wetland & Biodiversity** and organized following events near Boat Club Bhoj Wetland, Bhopal:
 - Wetland & Biodiversity Run
 - Drawing/Painting

-
- Open Quiz for School & College students
 - Wetland and Biodiversity talk by expert,

More than **800 participants** attended the event.

12. Organized 2 days Training program (17-18 December 2019) for stakeholder departments & educational institutes etc. regarding implementation of Wetland Conservation & Management Rules 2017. Hands on training was given for preparation of Brief Documents, Health Cards & Wetland Mitras. The workshop was inaugurated by ED, EPCO.
13. Organized 4 days (04 to 07 March 2020) hands on training program for preparation of Brief Documents, Health Cards & Wetland Mitras. Officials from 23 Districts attended the program.
14. Organized 1 day Workshop for Nagar Nigam Indore, at Indore for preparing Brief Documents, Health Cards & IMP for Sirpur Wetland under the program transformative ideas for conservation of Wetlands by MoEF&CC, GoI dated 03.09.2019.

Chapter-4

CLIMATE CHANGE CELL

4.0 M.P. State Knowledge Management Centre on Climate Change (MP SKMCCC)

State Knowledge Management Centre on Climate Change (MP SKMCCC) bagged two prestigious awards in the year 2019-20. First, it was chosen as the winner for the **JSW – Times of India, Earth Care Awards 2019** under the category "**Leadership in Urban Climate Action**" for the project titled "**Enhancing Adaptive Capacity to Climate Change through Conservation of Traditional Water Supply Sources (Wells and Bawadies) of Indore city.**"



The second award was conferred to SKMCCC, EPCO by the Department of Water Resources, River Development & Ganga Rejuvenation, Ministry of Jal Shakti under the National Water Mission Awards 2019 for doing exemplary work in the field of conservation of water, minimising its wastage

and water management. EPCO has been awarded as winner under the category "**Assessment of the impact of Climate Change on Water Resources**". In the award ceremony convened on 25 Sept 2019 at Vigyan Bhawan, New Delhi, Hon'ble Union Minister of Ministry of Jal Shakti Shri Ganjendra Singh Shekhawat distributed the prize to the awardees. Shri Rattan Lal Kataria, Hon'ble Minister of State, Ministry of Jal Shakti and Shri UP Singh, Secretary, Ministry of Jal Shakti were also present in the ceremony as special invitee. EPCO received the award money of Rs. 2.00 lakhs which has been deposited in the CM's Relief Fund towards the flood victims in the state of MP.

Climate Change Vulnerability Assessment report gives a comprehensive & scientific projections in the sectors like water resources, forest, agriculture & human health with regard to climate change. Taking the inferences from the report, new projects related to climate change adaptation are being formulated by EPCO. The inferences are also being used by young professionals & researchers. Currently, EPCO is implementing three projects based on the results of the report.



State Knowledge Management Centre on Climate Change (MP SKMCCC) has been established in EPCO. MP SKMCCC is one of the first Knowledge Management Centre on Climate Change in the country to be set up at the state level. SKMCCC has secured financial & technical support from Department of Science & Technology (DST), GoI for a period of 5 years starting from 2013-14 to 2018-19. SKMCCC is working in line with the National Mission for Strategic Knowledge on Climate Change (NMSKCC) and is also the state unit for NMSKCC.

Objectives

The objectives of SKMCCC are to integrate climate change concerns into development planning process through:-

- Connecting science with policy and practice
- Carrying out research studies on climate change
- Formulate and implement pilot projects on CC adaptation aspects
- Organize Training and capacity building and awareness programs
- Provide scholarships and internships to research scholars and students
- Create Strategic Knowledge networks and institutional partnerships

Projects at SKMCCC

1. DST support to SKMCCC

Establishment of SKMCCC was mentioned in the Madhya Pradesh State Action Plan on Climate Change (MP SAPCC). SKMCCC functions with an objective to create, collate, compile, synthesise and disseminate knowledge related to climate change in MP. In 2018-19, DST granted a no-cost extension to the project for one year viz. for June 2018 to May 2019. EPCO received Rs. 32.00 lakhs as the fourth tranche of grant in March 2019. DST has rated the progress of project & activities as

"**Excellent**" in their national review meetings. The progress reports, statement of expenditure and utilisation certificates have been presented to DST in March 2019.

A fresh project proposal worth Rs. 300.00 lakhs for next 5 year viz. FY 2019-24 has been approved by DST. The National Steering Committee of DST has found the work of EPCO as excellent and has extended the project for another 5 years. EPCO is the first in the country to get such an extension.

2. Enhancing Adaptive Capacity to Climate Change through Developing Climate Smart Villages in Three Vulnerable Districts of Madhya Pradesh

SKMCCC has formulated and implementing a project on developing 60 climate smart villages in three vulnerable districts of Madhya Pradesh, namely, Rajgarh, Satna and Sehore(20 villages each) and got it sanctioned by MoEFCC under National Adaptation Fund on Climate Change (NAFCC). An amount of INR 4.93 crores has been received by EPCO from NABARD, which is the National Implementing Entity. The execution of the project is being done in association with Department of Farmers Welfare & Agriculture Development (FW&AD), Govt. of MP. At the district level project is being implemented by Deputy Director FW&AD of the respective three districts. The main objectives of project is to enhance adaptive capacity of farmers and agriculture sector to make them climate resilient, participatory implementation of various climate-smart interventions and converging them with other community development activities and ongoing missions of NAPCC and SAPCC and also developing opportunities to reduce GHG emissions from agriculture sector. The project has total 6 components viz seeds and crop

management, water smart intervention, weather smart intervention, energy smart intervention, nutrients and soil carbon smart activities and training and capacity building activities.



In this ongoing project, total of 12,870 farmers in the year 2018-19 and 28,254 farmers in year 2019-20 are being benefitted directly as per DPR, a total of 81,866 farmers will be benefitted with the support like drought tolerant seeds, lined farm pond, leaf colour chart, mulching, saplings of plants for agro-forestry, mulching, fodders banks, distribution of macro and micronutrients for soil, Blue green Algae and agriculture machineries for zero tillage, crop residue management, happy seeder and training and capacity building etc.



3. Enhancing Adaptive Capacity to Climate Change through Conservation of Traditional Water Supply Sources (Wells and Bawdies) of Indore City

The project was sanctioned under Climate Change Action Programme (CCAP) of MoEFCC. EPCO had received the entire amount of INR 5.00 crores from MoEFCC as grant-in-aid, and in turn, released the amount of INR 4.06 crores to Indore Municipal Corporation (IMC) for execution of project activities. The project envisages to get completed by Dec 2020.

Work orders have been issued for all the 330 water sources by IMC and physical



work has been completed in more than 270 sources. In addition, IMC has decided to restore all the 600+ sources falling within IMC limits using their own funds. Up-scaling of this project shows the commitment on the part of the govt. towards climate change adaptation and the success of pilot demonstration project.

4. EPCO-UNDP Project Phase-III

This phase of EPCO-UNDP partnership completed in August 2019 with the completion of the project "*Strengthening State Strategies on Climate Actions*". UNDP in collaboration with SDC supported the project on strengthening three states (Madhya Pradesh, Sikkim and Uttarakhand) for implementation of SAPCC. The project in MP aims to assist the state on climate change in the implementation of the SAPCC with focus on water sector. Following activities as part of the project outcomes have been carried out:-

- Training modules developed for Climate Change Vulnerability & Adaptation planning in Water Sector and Climate Finance and imparted "Training of Trainer" program on Climate Change Vulnerability Assessment and Climate Finance.
- Training has been imparted to 12 government officials from MPWRD for mainstreaming climate change in the DPR preparation of Medium Irrigation projects guidance document.
- Implemented the project on Participatory Ground Water Management in Ratlam and Burhanpur (demand and supply side interventions). This project has also been showcased in the CoP 24, Katowice, Poland by MoEFCC, Government of India and UNDP. Video Documentation of this pilot project has also been carried out.



- Development & Deployment of a Climate Change Decision Support System (CCDSS) in Samrat Ashok Sagar Dam in Madhya Pradesh.
- A training on Climate Finance was organized at Hotel Lake View on 22-23 July 2019.
- Following training modules and manuals have been published as part of the project:
 - PGWM Training modules for community level training
 - CCDSS Training modules (6) and Operational & Reference manuals are being prepared
- Enhanced user-interface developed climate analytics and district vulnerability profiles to the climate change knowledge portal <http://climatechange.mp.gov.in/>
- Prepared Sectoral Policy briefs on Climate Change Vulnerability Assessment of the state and prepared process documentation of the vertical recharge shaft's implementation for artificial groundwater recharge.

5. Enhancing Adaptive Capacity to Climate Change through Conservation of Traditional Water Supply Sources (Wells and Bawdies) of Burhanpur City

MoEFCC has sanctioned EPCO's second project under Climate Change Action Programme worth Rs. 5.00 crores. MoEFCC has released the 1st instalment of the grant-in-aid of Rs. 2.50 crores. The specific objectives of the project are:-

- Inventorize traditional water supply sources (well, bawadies, etc.) of the Burhanpur.
- Promote traditional water conservation system by restoration and renovation of 71 traditional water storing bodies viz. wells and bawadies in Burhanpur.
- Expedient implementation of catchment treatment of khundi bhandara network including activities such as plantation, grassland development, soil moisture conservation etc.
- Rainwater harvesting and promote artificial recharge in areas near to traditional water bodies viz. wells and bawadies.
- Facilitate community engagements for effective management of traditional water conservation system.



The execution of the activities of the project are being carried out by Burhanpur Municipal Corporation (BMC) along with Forest Department, Burhanpur. As per the decisions made in the meeting of Project Monitoring Committee chaired by Principal Secretary, GoMP, Department of Environment, the partial amount of Rs. 1,27,79,419/- has been released to Commissioner, BMC and partial amount of Rs. 97,53,500/- has been released to DFO, Burhanpur. A visit to Burhanpur has been made by the team of SKMCCC in March 2020. The restoration work has been started in the wells and the treatment activities like fencing, etc have been started in the catchment area of Kundi Bhandara.

Activities at SKMCCC

1. Revision of State Action Plan on Climate Change

As per the advise of Ministry of Environment, Forest & Climate Change (MoEFCC), the state of Madhya Pradesh has started to work on the revision of State Action Plans on Climate Change (SAPCC) synergising with the Nationally Determined Contributions (NDCs). MoEFCC has also extended support of Rs. 20.00 lakhs to all the states through which EPCO has received the first instalment of amount Rs. 12.00 lakhs.

WRI India, GHG Platform India and UNDP have agreed to technically support the initiative. The first meeting of the core group has been organised in June 2019 and the second meeting has been organised in November 2019. A meeting under the chairmanship of Additional Secretary, Climate Change, MoEFCC was convened in May 2019 for reviewing the preparation of the SAPCCs. The draft of the SAPCC has been prepared by SKMCCC and will be shared, consulted and finalised

with the concerned department. It has been envisaged that the revised MP SAPCC will be published by Dec 2020.



2. Faculty Development Program on Climate Change

Faculty Development Programme on Climate Change is being jointly organised by CCC&SD and SKMCCC, EPCO. The training module has been developed and it is being in-house imparted by SKMCCC professionals. The training focuses on various aspects of climate change, environment and sustainable development to the faculties of 23 universities located in the state of Madhya Pradesh. Each batch of training program consists of 35-40 participants.



Till March 2020, we had received confirmation from 8 universities & 1 college and 9 training programs have been conducted in Indore, Bhopal, Gwalior, Ujjain, Amarkantak, Chitrakoot & Jabalpur.

3. Gandhi Prasang

On the occasion of 150th birth anniversary of Mahatma Gandhi, SKMCCC organized a series of programmes under the banner of ‘**Gandhi Prasang**’ from 02 October 2018 to 02 October 2019. The theme of the Gandhi Prasang was ‘*Gandhian Philosophy viz-a-viz Sustainable*



Development, Environment Conservation, and Peace’. The key programmes part of Gandhi Prasang series were Gandhian Environmentalism Talk Series and Gandhian Eco-Philosophy Fellowship.

Gandhian Environmentalism Talk Series: Talk Series was organized throughout the year wherein practitioners and eminent experts of Gandhian Philosophy and environment were invited to deliver public talks on the subject. EPCO organized four such talks (Feb. 2019 - Oct. 2019). The series culminated on 02 Oct. 2019.

21 Feb. 2019	Shared experience & journey of Barefoot College	Shri Bunker Roy
05 June 2019	Leadership, Environment Sustainability and peace : Gandhi as a role model	Prof. Himanshu Rai
26 Aug. 2019	Gandhi : An innate environmentalist	Dr. Ashok Khosla
02 Oct. 2019	Gandhian Philosophy and environment	Shri Jai Ram Ramesh

Gandhian Eco-Philosophy Fellowship: SKMCCC had designed this fellowship program to offer an experience of deep study of the Gandhian Philosophy and its relevance in today's environmental crisis. The programme is being conducted through vivid experiences from guided visits to sustainable project sites/villages, knowledge centres of Gandhian philosophy (Wardha, Sabarmati Ashram etc.), sessions with experts and scholars of Gandhian Philosophy which would lead towards writing a



high quality research paper with high impact. The idea is to provide a platform that intends to support and stimulate scholarly deliberations on the relevance of Gandhian Philosophy in context of sustainable development, environment and climate change. 17 applicants from all over the country were selected and inducted as associates under this fellowship programme. An orientation workshop was organised with the fellows from 22-24 March 2019.

Visits to places associated with Gandhi's Life, his philosophy and principles formed a major component of the Gandhian Eco-Philosophy Fellowship Programme apart from the many other components research assignment, interactions with Gandhian Thinkers and environmentalist. A three day experiential visit to Sevagram and Wardha in Maharashtra was conducted for 17 fellows by Environmental Protection and Coordination

Organisation (EPCO), Bhopal from July 25 to July 27, 2019 to Sevagram, Wardha. During the visit, the fellows were taken to various places in Sevagram and Wardha associated with Mahatma Gandhi's life and organizations and institutes working on Gandhian Philosophy and principles. Interactions with Gandhian thinkers and practitioners of Gandhian Philosophy were also arranged for the fellows in Sevagram.

17 individuals who successfully completed the journey of Gandhian Eco-Philosophy Fellowship, graduated as GEPF Fellows on 02 October 2019. On the occasion of 150th Birth anniversary of Mahatma Gandhi the 17 fellows were awarded certificate of completion by Hon'ble Member of Parliament (Rajya Sabha) Shri Jairam Ramesh. PS Department of Environment, Shri Malay Shrivastava (IAS) and Executive Director, EPCO, Shri Jitendra Singh Raje (IAS) were also present at the occasion.

4. Research Studies commissioned by SKMCCC

SKMCCC is coordinating following three research studies commissioned to 3 premier research institutes. ED EPCO reviewed the progress of the projects on 18 July 2019. The studies would get completed in the year 2020-21. The details of the projects are as follows:-

Sr.	Institute	Title of the project	Budget	Name of PI	Amount released
1.	ICAR – Indian Institute of Soil Science, Bhopal	Assessing the potential impact of climate smart technologies on soil health and nutrient accounting in selected vulnerable districts of MP	INR 24.93 lakhs	Dr. Sangeeta Lenka, Principal Scientist	INR 12.465 lakhs

2.	State Forest Research Institute, Jabalpur	Sequestered carbon in roadside plantations: an assessment of potential contribution to climate mitigation in Jabalpur smart city	INR 16.00 lakhs	Dr. Pratibha Bhatnagar	INR 16.00 lakhs
3.	Indian Institute of Forest Management, Bhopal	Developing M&E framework of climate smart interventions in 3 districts of MP for Climate Smart Village project	INR 35.76 lakhs	Dr. Jigyasa Bisariya, Asst. Professor	INR 23.84 lakhs

5. Climate Smart Cities Assessment Framework

Under the Smart Cities Mission, the Ministry of Housing & Urban Affairs, GoI has initiated the “*Climate SMART Cities Assessment Framework (CSC-AF)*” for the existing 100 smart cities, which is a



“first-of-its-kind public assessment framework on climate relevant parameters”.

EPCO has partnered with World Resources Institute (WRI) India, for preparing Climate Action Plans of Smart Cities of MP. With the technical support of WRI India, EPCO has extended voluntary support to

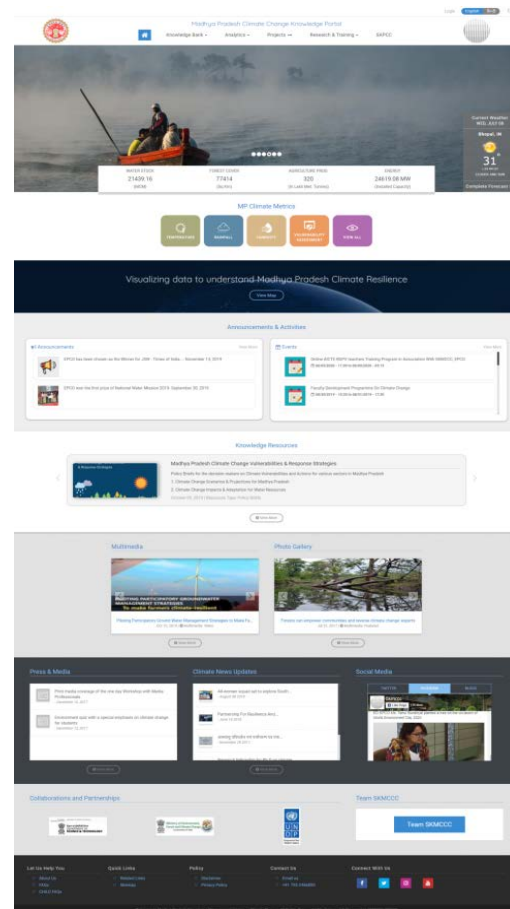
Smart Cities to further strengthen their planning in line with the Climate Smart Cities Assessment Framework (CSC-AF).

6. MP Climate Change Knowledge Portal

Climate Change knowledge portal which facilitates wide dissemination of climate change information, improves knowledge access & transfer and serves the overall objective of managing climate change knowledge as an asset. The portal is an interactive moderated website that has been established to meet the needs of major categories of user groups: policy makers and Implementers, practitioners and experts; and civil society and communities. And also offers information, publications and other knowledge resources related to climate change issues of MP.

The broader objectives of the portal are:

- The portal includes some unique features like dynamic analysis of observed & projected data, assessing vulnerabilities of districts, rainfall & temperature trends, a variety of static and interactive maps and map-based tools based on latest research which is extended analytical capabilities. An online GIS based dashboard providing all kinds of information related to the action projects being coordinated by SKMCCC-EPCO is under



formation with the support of MAP_IT, the dashboard is being continuously updated by feeding of data. Components of State Action Plan on Climate Change, Research & Training and Knowledge Resources Bank etc.

- To take the knowledge creation and dissemination work on climate change to a larger audience in the MP state.
- The portal is meant to act as an updated knowledge e- repository on climate change and host locally, nationally and globally relevant knowledge.
- To create an interactive, bilingual & user friendly knowledge portal on specific issues around climate change.

The portal has been hosted on the server of State Data Centre (SDC) with URL www.climatechange.mp.gov.in.

Chapter-5

5.1 PLANNING DIVISION

The Planning Division strives to attain a better environment for human beings through environmentally conscious micro-level planning and designing. The division provides services in the fields of architecture, urban design, urban planning, landscape designs, interiors, graphic design and structures and allied engineering services. The Division also has the advantage of being able to draw upon in-house expertise from other disciplines in the fields of ecology, water management, economic and social planning, environmental sciences and environmental management. The Division has full-fledged studios staffed by experienced professionals. Some important works undertaken during the year 2017-18 are as follows:

Vallabh Bhavan Extension Complex Building

The five storied Vallabh Bhawan building was planned, looking to the then strength of Hon'ble Ministers/Secretaries/Officers and staff. Therefore, the Government of M.P planned to build an extension complex building for the present Secretariat building, commonly known as Vallabh Bhawan in the same vicinity. EPCO was entrusted to provide architectural services and Capital project Administration was the executing agency.

The main criteria set for the project was that the overall design should merge aesthetically and harmoniously with existing Vallabh Bhavan, with a beautiful landscape in the whole complex. M/s C.P. Kukreja Associates was selected as Consultant Architect for this prestigious project. The New Blocks are organized with Existing Block in such a manner that could provide a very high level of secured work environment along with Integration of New

Blocks with Existing Block with department-wise planning. The total built-up area is, 84000 sq.mtr approx. and the final project cost as per revised administrative approval accorded is approx. Rs. 600 corers. The project was completed in June 2018 and Inaugurated by Hon'ble CM in December 2018.

With the completion & inauguration of new blocks, various departments' have been shifted from Old - Existing block. It was therefore decided to Renovate/Redesign the existing block too, so as to provide similar type of facilities and interior designing as in the new blocks. EPCO was again entrusted to provide services and select an Architect Consultant. As per EPCO's internal selection policy and in coordination with CPA, EPCO arranged for a Design Idea presentation to the committee constituted by state government which was chaired by Chief Secretary. The Committee finally selected M/s ARCONS, Bhopal as the Consultant Architect for Renovation/Upgradation works of Existing old Vallabh Bhawan block in Sept. 2018.

The main aim of Design is to Retrofit Old Block and upgrades the areas & services at par with New Block, so as to holistically group the 3 Building Block around the new landscaped court yard. The proposed design is to preserve Building Form & Façade and restore Existing Building with minimum disturbance along with retaining the well maintained interior areas. Complete Design / DPR for the project has been submitted for Administrative approval. A Budget provision of Rs. 100 corers has been presently earmarked for this work.

National Institute for Research in Environmental Health, Bhopal

The Indian Council of Medical Research (Department of Health Research-Government of India) plans to develop & build infrastructure for the National Institute for Research in Environmental Health (NIREH) at Bhopal. The project is being executed by Gas Rahat Division of Capital Project Administration Bhopal. On behalf of NIREH, EPCO invited Concept Design proposals from 7 short listed empanelled Architectural firms and selected the Architect Consultant, M/s ARCONS, Bhopal for the project.

The Land available for this is 20.0 acres at Bhauri, Bhopal and the Main Campus of NIREH is designed as a high performance, low maintenance, and cost effective, Biomedical Research centre. A site sensitive, functionally appropriate, architectural design has been generated with buildings based on spatial criteria specified. The Design for NIREH Complex has been developed according to best green building design principles to maximize energy savings and achieve sustainable goals. The total built-up area is 26360 sqm. which includes high class Laboratory blocks supported by Admin Block, Auditorium, Library, Residential and Service Block & Adequate parking spaces.

All Academic's area of campus was completed, handed over to NIREH and Operational, while work of Residential area is going on site. The project cost is approximately Rs. 112.00 corers.

Directorate of Social Justice (SPARSH), Bhopal

The Directorate of social justice plans to construct a new office building which is named as SPARSH, A Special Project for assistance, Rehabilitation & strengthening of handicapped. As the name itself suggests, SPARSH is

not only a typical office building project but also a Centre for the disabled, old and destitute.

EPCO has been entrusted to select an Architectural Consultant and provide comprehensive architectural services for the project. For this EPCO through its internal process conducted an design competition and selection committee of EPCO has selected the Architect Consultant, M/s ARCONS, Bhopal for the project in May 2013.

The design of SPARSH has two buildings blocks - one as Administrative office for Directorate of Social Justice Department and the other as Resource centre, based on Barrier free architecture and includes Indoor and outdoor activity areas for disabled people.

The Directorate Building has lower ground and five floors above with a landscaped court at podium level. The office interior has been designed on a modular basis for their departmental activities with cross ventilation, north light and central court. The Resource Centre comprises of a 200 seated Auditorium with special provision for wheel chair and audio disability, Therapy rooms – like speech therapy, occupational therapy, physiotherapy etc, Audiology lab and recording studio, Skill development Activity – art & crafts, Embroidery & stitching, jewelry making, baking etc.

The site area is 3.0 acres and the total Built up Area of project is 9970 sq.mt. Administrative Approval accorded is of Rs.40.74 corers. The construction of both the blocks started on site in Feb 2020.

100 chamber District Court Building, Jabalpur

The existing district court building at Jabalpur is very old and in dilapidated state and no extension/modification was possible. For new building; which has to be of 100 court room, site was finalized in PSM Campus Jabalpur.

EPCO floated EoI and through its selection process selected M/s Suresh Goel & Associates, New Delhi for the project. Concept plan was finalized after detail discussion with official of Hon. High Court Jabalpur in July 2013. The Design comprises of mainly 4 blocks which includes Administrative block, Annex cum MLCP & Lockup block, Auditorium block and Facilities block. DPR was prepared and administrative approval of Rs. 157.05 corers was accorded in August 2013. Contractor of the project was M/s Montecorlo, Ahmadabad. The project was completed and inaugurated by Hon. Chief Justice of India in June 2018.

Vikas Bhawan, Bhopal

Panchayat and Rural Development department of MP comprises of various offices for various project schemes and all these are located at various places. To bring all these offices under one roof a site was finalized at Arera Hills. Requirements of these various scheme offices were collected and provided to EPCO for selecting an architectural firm. EPCO through its internal process selected M/s Mehta & Associates, Indore for the project. After rigorous discussion with deferent departments and client the concept design of estimated cost of Rs. 80 corers is finalized by the department, though administrative approval of Rs. 53.38 corers is only accorded in first phase and construction is almost completed. DPR for balance work was also prepared and submitted but revised AA is awaited. Due to this the construction work on site is on hold.

Auditorium & Staff Quarters at Raj Bhawan premises, Bhopal

A need of Auditorium & other works was felt by Raj Bhawan authorities and EPCO was entrusted to provide architectural consultancy. As per EPCO's internal policy M/s Shailendra Sharma & Associates, Bhopal was selected in

May 2013. Construction of Auditorium block with enhanced cost of Rs. 9.14 corers is completed and Inaugurated in November 2019, while VIP Guest House was Completed/Inaugurated in April 2015 only. Also requirement of various staff quarters was received & Design – DPR costing Rs. 10.92 corers was approved in June 2018 only. The Phase-I work of staff quarters is almost completed. EPCO again received a work of Lal Kothi Extension (Governor’s Residence) for which Design / DPR submitted & Administrative Approval of approximate Rs.1.89 crores was accorded. Work of this part is in progress on site.

Atal Bihari Vajpayee Hindi Vishvavidhyalaya, Bhopal.

Atal Bihari Vajpayee Hindi Vishvavidhyalaya, Bhopal (ABVHV, Bhopal) has been established at Bhopal and now plans to build its own University Campus. The Government of Madhya Pradesh has allotted a land of about 50.00 acres at Mugalia Kot, tehsil Hujur, Bhopal. Capital Project Administration is the Executing Agency. EPCO has been entrusted to select an Architectural Consultant and provide comprehensive architectural services for the project. For this EPCO has conducted an open architectural design competition, in which selection committee of EPCO has selected M/s. Mehta and Associates, Indore as the Architect for the above mentioned project on November 2014. The Concept Design is approved by University authorities and Chief Secretary which will be constructed in phases. Total Built up Area of Phase-I project is 57916 sq.mt. with estimated cost is 46.36 crores (as per Administrative Approval accorded). Construction at site is 80% completed an rest stand still due to budgetary provisions.

New Construction & Renovation works of 8 Colleges of Bhopal under RUSA

EPCO had been entrusted with the job of providing Architectural Consultancy services by CPA for the construction in 8 College of Bhopal for M.P. State Higher Education Department under World Bank Project. It includes new construction, renovation and some upgradation works with barrier-free design. The cost of each College ranges from Rs. 6.00 crores to Rs. 8.00 crores approximately. Existing facilities of each College along with Building structural strength were required to be evaluated by doing Gap Analysis before preparing the design proposal. DPR of all Colleges have been submitted and Administrative Approval obtained.

Construction of Guru Govind Singh Memorial Museum at Burhanpur.

On the instance of the then Hon'ble Minister of Mahila Evam Baal Vikas, M.P, on the 350th birth anniversary of Shri Guru Govind Singh Ji, a Memorial Museum was proposed to be constructed in the Religious, Historical, Mythological and Cultural City of Burhanpur. Estimated cost of civil works is Rs.13.98 crores approximately. Executing Agency for this project is M.P. Housing Infrastructure Development Board.

Upgradation & Development of 5 Museums + Conservation, Upgradation & Development of 6 Museums for the Directorate of Archaeology, Archives & Museums.

Archaeology has desired DPRs of total 6 Museums from EPCO in first go in which 3 Museums at Indore, Jabalpur & Raisen are related to Upgradation & Development works and 3 Museums are related to Conservation Upgradation & Development works at Dhubela–Chattarpur, Golghar-Bhopal

& Vyankat Bhawan–Rewa. First Stage DPRs of all 6 Museums have been submitted to Archaeology. Chattarpur Museum is being taken on priority by Archaeology Department.

Renovation and Interior work of Board Office Building, Bhopal

MP Madhyamik Shiksha Mandal, Bhopal had desired to Renovate and Upgrade their existing Main Board Office Administration Building along with other small ancillary buildings in Board Office Parisar in a phased manner such as : Press, Vigyan Bhawan, Dormitory, Guest House, etc. Total project cost of 2 Phases was Rs.33.64 crores. At present Administrative Approval has been obtained for renovation of porch, reception lobby and additional lift.

Shaurya Smarak at Arera Hills, Bhopal

Shaurya Smark was constructed on the initiative of our Hon'ble CM, Shri Shivraj Singh Chauhan. EPCO, working under Environment Department, was entrusted with the job of designing this project. EPCO selected the Mumbai based firm, M/s UCJ architecture & environment by conducting a National Level Competition. The Memorial was inaugurated by the Hon'ble Prime Minister of Indian, Shri Narendra Modiji on 14th October 2016. After inauguration, due to incoming of large crowd of visitors, the Culture Department felt the need to include some additional requirements such as ticket counter, baggage scanner, intercom, HHMD, DFMD, CCTV Camera, extra seating facility near cafeteria for excess visitors along with additional toilet facility, 4- wheeler/2-wheeler parking, barricading for stambh and sculptures, compost pit, UG Tank, Canopy above museum entrance, etc. Cost of these additional works is Rs. 10.00 crores approximately. Tender

drawings for these additional works are ready with the Consultant but approval is yet awaited.

New Van Bhawan Complex at Main Road no. 2, Tulsi Nagar, Bhopal

Forest deptt, Govt. of M.P. intended to develop 'New Van Bhawan Complex' at Tulsi Nagar, Bhopal to accommodate 4 major existing offices of the deptt. viz.:

1. M.P. Forest Deptt including Chief, Wild Life Urban Office (MPFD, Major Office).
2. M.P. Minor Forest Produce Federation.
3. M.P. Rajya Van Vikas Nigam
4. M.P. Eco-Tourism Board

These wings are located at different places in the capital. To streamline & to improve interactions within the department, all the 4 wings are proposed to be accommodated at one place. The proposed site admeasures an area of about 4.72 hectares. Consultant Architect, M/S In FORM Architects, Bangalore was selected through Limited Competition, by inviting design ideas from the Architects of National repute. At present, approved cost of the project is Rs 86.78 crores approx. for an area of about 28,000sqm. Construction of Van Bhawan started in March 2014. Civil work of all blocks has almost completed on site. The Chief Secretary, Govt. of M.P in the meeting on 24th February 2020 instructed to limit the Building cost to Rs.130.00 crores only. Estimate has to be revised accordingly.

School of Good Governance & Policy Analysis, “Sushasan Bhawan”, Bhopal

Director General of School of Good Governance and Policy Analysis had envisaged developing a new Institution of their own, near Prempura Ghat, Bhadbhada Road with a vision to provide equal opportunity to all through Good Governance, geared to improve the quality of lives of people. KAIR (Knowledge and Information Repository) Block is the focus of the Institution. Other related facilities such as Guesthouse, D.G’s and Directors’ bungalows and residences for employees were in the proposed program to be taken up in the 2nd phase. EPCO had selected the Architect Consultant, M/s ARCONS, Bhopal for this project. Phase-I and Phase-II works have been completed and handed over. The total cost of project is Rs.24.00 crores approx. Some additional works of interiors and renovation have also been completed.

1500 capacity New Auditorium at Ravindra Bhawan Parisar, Bhopal.

During the Bhoomi-Poojan of 1000 capacity auditorium at Ravindra Bhawan Parisar on Madhya Pradesh Foundation Day, 1st November 2015, Hon'ble CM had announced to convert it into 1500 capacity auditorium to hold various programs of different stature such as Conferences, Seminars, Cultural programs, workshop etc. Construction of 1500 capacity New auditorium has completed. Interior works of Convention Centre and Meeting halls of different capacities, proposed in the basement (lower ground floor) is under way. Estimated Cost of the project is Rs. 41.00 crores approximately. Development of plaza is in progress on site.

Rajswa Bhawan, Gwalior

The Architectural Consultancy Services of Rajswa Bhawan, Gwalior is being provided by EPCO. The proposed project is a construction of Composite office complex for Commissioner, Land Records & Settlements and Revenue Board Gwalior / Chambal division Gwalior. The Site is situated in village Mahalgaon near Raja Man Singh College and Dr. Ambedkar Polytechnique College, Gwalior. The Project cost is Rs. 60.83crores. The Execution work is under progress.

Architectural services for Building Works to be executed by P.I.U, PWD (Projects of Health & Tribal deptt.)

EPCO had been entrusted with the job of providing architectural services to M.P PWD for all works of newly constructed cell of P.I.U, after March 2011. EPCO was assigned with the task of 50 District Hospitals for Health Deptt. under 13th Finance Commission and 11 Eklavya Model Residential Schools for Tribal department (total 68 projects) costing Rs 365 crores approximately. These works had been distributed among 30 Architects of M.P. empanelled with EPCO. Later on MCH Bhawans of 60-bedded/100-bedded, costing Rs. 5.85 crores and Rs. 9.75 crores respectively were also proposed at 9 districts which were required to be integrated with the maternity. Most of the works have been completed, few of them with expanded scope of work are in progress on site.

Medical College Projects

The Medical Education Department of Madhya Pradesh intended to Strengthen and upgrade existing Government Medical Colleges all over M.P. because of seats enhancement in post graduation courses and construction of new wards. The Project was allotted to EPCO through PIU,

PWD. The various projects of these Medical Colleges undertaken by EPCO were allotted to various National level Architectural firms by the selection Committee of EPCO are as follows:

1) Upgradation of Maharaja Tukojirao Holkar (MTH) hospital campus, Indore –

The various blocks/ wards proposed are MTH Hospital Block, Admin Block, Residential Block have been proposed in MTH campus in which the Architectural Consultancy are being provided by EPCO through the Architectural firm—“Prem Chaudhary and Associates”, New-Delhi . The total cost of the project is 17.00 crores. The project is completed in all respects.

2) Construction of 1000 seated Auditorium at MGM hospital Campus Indore

An Auditorium of 1000 seater capacity is proposed in MGM College Campus, which will be used by the college students. The Architectural services for this project are being provided by Architectural Firm “Behal Joshi and Associates”, New-Delhi. The Civil work of the project is nearing completion. For the interior works, section is awaited from PIU, PWD the estimate have been submitted.

Proposed Administrative and Cultural Centre Building for Tribal Affairs Department, Bhopal.

The project for Tribal Affairs Department consists of Administrative Building for the staff, Art and Craft gallery, display space for exhibits along with Cultural Centre for 200 persons seating capacity. This work is being carried out by EPCO in which M/s Shailendra Sharma & Associates, Bhopal is the Consultant Architect.

The site is at Arera Hills with an area of approx. 1.50 hectares adjoining “Chief Election Commission Office” building and “NVDA Office” building. The project cost is around Rs. 18.50 crores in the first phase.

Five factors which have been taken into consideration while designing this building are as follows:

1. Natural light
2. Quiet working spaces
3. Bright colors
4. Live indoor plants
5. Outside view while working inside

The design includes clusters of independent blocks formed around a common focal point, Central Water Body reminiscent of Historical buildings of M.P. Murals & Tribal Art works adorn the building. Zoning of building blocks have been done with respect to the site contours and existing vegetation to ensure bare minimum disturbance to the existing topography/setting of the site.

Some other projects on-going in EPCO are as follows:

- Memorial Complex for Bhopal Gas Tragedy Victims, Bhopal
- 300-bedded Hospital at Vidisha was completed & inaugurated in November 2019.
- Construction of new Head Office Building for Excise Deptt., Gwalior.
- New Composite Collectorate Office building at district Sagar.
- Renovation & Upgradation of existing Vindhyachal & Satpura Bhawan, Bhopal.
- Chandrashekhar Azad Nagar College Building (Bhabhra), district Alirajpur.
- Additional works proposed at Govt. Gitanjali Girls PG College, Bhopal.

-
- Shahid Smark at Bhind.
 - Construction of Commercial Complex cum Community Centre at Narsinghpur.
 - Additional Building & Development works at NLIU Campus, Bhopal.
 - Construction of College Building for Govt. Benazir College at Kolar, Bhopal.
 - Interior Designing for Law and Legislative Department office at Vindhyachal Bhawan, Bhopal.
 - Infrastructure Development works of 8 Training Institutes of SIRD in M.P.
 - Interior Designing & Renovation works at Directorate Medical Education, Satpuda Bhawan, Bhopal.
 - Interior Designing & Renovation works of Corporation & Registrar Corporation Department, Vindhyachal Bhawan, Bhopal.
 - Commercial cum Community Centre at Narsinghpur.
 - 40 Staff Quarters (20 'H' & 20 'I' Type quarters) at MLA Rest House Campus, Bhopal.
 - Global Skill Park City Campus, ITI Govindpura, Bhopal was completed in December 2018.
 - Construction of Hostel building at 50m Shooting Range Premises, Bisen Khedi, Bhopal.
 - Construction of Sports related Multipurpose Hall at T.T. Nagar Stadium, Bhopal.
 - Extension of 50 m Shooting Range at Bisen Khedi, Bhopal.
 - Construction of New Fisheries Building for Department of Fisheries at Fish Farm, Bhadbhada Road, Bhopal
 - Construction of Hostel Building for MP Govt. Sports and Youth Welfare Department, Bhopal
 - Interior Designing and Renovation of Fourth & Fifth Floor of Existing Amarkantak Bhawan for Real Estate Appellate Tribunal, Bhopal

5.2 Engineering Services

Project Management Consultancy:

- **Extension of Mantralaya Bhawan** Project Management Consultancy (PMC) for extension of Mantralaya Bhawan, Bhopal is being provided by EPCO. Project has been completed.
- **SQC of Vikas Bhawan** Supervision and quality control services for Vikas Bhawan Complex are being provided by EPCO. Work is in progress.
- **Global Skill Park, Bhopal** Supervision and quality control services for Global Skill Park was provided by EPCO. The project has been completed.
- **Supervision & Quality Control Consultancy** EPCO has provided Supervision & Quality Control Consultancy services through empanelled project management consultants for various buildings of MPPWD. Total cost of the project is about Rs. 1000 Cr.

Construction of Green Buildings:

- **New Van Bhawan Complex Building, Bhopal.** Work of this building is in progress. This building has been conceptualized on Green Building concept.
- **Office Building Ujjain Municipal Corporation Ujjain** Work of converting the office building of Ujjain Municipal Corporation into a Green Building has been started. Concept plan has been submitted. Approval awaited.

Structural Vetting:

- Projects of MPPWD: Structural vetting of various construction projects, being constructed by MPPWD, is being done by EPCO. Work is in progress. Apart from above structural vetting work, structural designing work of various in house projects of EPCO is also being done.

Structural Designing Work:

- EPCO has completed Structural Analysis of various under construction buildings. Benazir College Second Phase, Security Barrack cum Record Room Mantralaya, Skating Rink Bhopal, Community Center cum Commercial Complex Narsinghpur are some of the major projects under Structural Designing.

Preparation of DSoR:

- The State Archives and Museums Department had engaged EPCO to prepare DSoR for conservation and restoration of heritage buildings situated in the State. The DSoR has been prepared and submitted to the client Department.

Apart from these following works are in progress now

- **Preparation of SoR for Horticulture Department:** For preparation of Sor, a workshop with the stakeholders has been done to gather their suggestion. Based on these suggestions the work of collecting market rates and analysis of rates of various items is in progress.

Shivna River, Mandsour:

- The State Government has engaged EPCO to prepare DPR for cleaning and enviornmental upgradation of Shivna River in

Mandsour. Works of water quality testing and Physical Survey have been completed and the drafting of report is in its final phase.

Renovation of Jaltarang Interpretation Centre:

- Tender for renovation of Jaltarang Interpretation Centre has been finalized and work awarded. Work in progress.

River Kalisindh, Sonkach, Dewas

- Preliminary report has been prepared and placed for the authorized approval of Environmental Upgradation of River Kalisindh. After approval of the said report a Detailed Project Report (DPR) would be drafted.
- **Conservation of Urban Water Bodies (CUW)** Conservation works of water bodies like desilting, dewatering, landscaping, watershed development, construction of ghats, garden development, pitching and fencing, public awareness programmes and beautification are done. Of Rs. 152 lakh received in the financial year 2019-20, six projects have been financed in which 3 are new projects and 3 are old projects.

Simhastha 2028:

- Government of Madhya Pradesh had engaged EPCO as Nodal agency to Prepare Comprehensive Mela Plan (CMP) for Simhastha 2016 at Ujjain. Comprehensive Mela plan was prepared by EPCO and accordingly infrastructure was developed. Simhastha 2016 was organized successfully. Looking at the unprecedented success of this Mela EPCO has posed a proposal to the State Government to prepare Mela Plan of Simhastha 2028.

Chapter-6

STATE LEVEL ENVIRONMENT IMPACT ASSESSMENT AUTHORITY (SEIAA)

6.0 Prior Environmental Clearance - SEIAA

The Ministry of Environment & Forests GoI (vide SO1533) has issued Environment Impact Assessment Notification on 14.09.2006 under Environment Protection Act, 1986. Under this certain restriction and provision on new project or activities, or expansion or modernization of existing projects or activities based on their potential environmental impacts as indicated in the Schedule to the notification require Prior Environmental Clearances.

An application seeking prior Environmental Clearance in all cases shall be made by the project proponent online in prescribed forms. The environmental clearance process for new projects will comprise of 4 stages i.e. screening, scoping, public consultation and appraisal. The first stage will entail the scrutiny of an application seeking prior environmental clearance and scoping refers to the process to determine detailed and comprehensive terms of reference addressing all relevant environment concerns for the preparation of an Environmental Impact Assessment (EIA). Public consultation refers to the process by which the concerns of local effected persons and others who have plausible stake in the environmental impact of the project or activities are ascertained with a view to taking into account all the material concerns in the project or activity design as appropriate. Appraisal means the detailed scrutiny by SEAC.

As per above notification, MoEF&CC, GoI has so far constituted three SEIAA/SEAC each of three years duration from the year 2008 to 2017, In continuation to this Ministry of Environment, Forest & Climate Change, GoI, constituted Fourth State Level Environment Impact Assessment Authority (SEIAA), Madhya Pradesh, comprising of three numbers namely Chairman, Member and Member Secretary vide notification SO 3288(E) on 10.10.2017. To assist the Authority, the Central Government in consultation with State Government of Madhya Pradesh also constituted State Level Expert Appraisal Committee (SEAC), Madhya Pradesh having nine members including Chairman and Member Secretary.

Accordingly, Environment Department, Govt. of Madhya Pradesh vide order no. F-5-1/201/18-5 dated 13.10.2017 constituted SEIAA & SEAC. The Executive Director, EPCO is the Member Secretary of SEIAA while Member Secretary, M.P. Pollution Control Board is the Member Secretary of SEAC.

Under the schedule of the EIA Notification 14.09.2006, all the Prior Environmental Clearances for the projects falling under category "B" is decided by M.P.SEIAA on the basis of the recommendation of SEAC.

A total of 7019 cases have been registered for prior Environmental Clearance, out of this, 949 new cases were registered during the current financial year. For prior EC, 75 SEIAA meetings and 74 SEAC meetings were held during the financial year 2018-2019.

Chapter-7

GENERAL SERVICES DIVISION

7.0 The General Services Division provides infrastructure support to EPCO's multifaceted activities through its various wings.

7.1 Administration

The Administrative wing of the organization looks after General Administration, Personnel and Estate Management activities. The position of staff, as on 31.03.2019 is as follows :

Staff Position During 2019-20

1.	Director General	1
2.	Executive Director	1
3.	Administrative Officer (Additional Charge)	1
4.	Chief Scientific Officers	3
5.	Chief Engineer	1
6.	Chief Architects	3
7.	System Analyst	1
8.	Superintending Engineer	1
9.	Assistant Architect	5
10.	Architect Grade 1	5
11.	Senior Scientific Officer	4
12.	Executive Engineer Grade 1	3
13.	Graphic Designer Grade 1	1
14.	Accounts Officer (Additional Charge)	1
15.	Private Secretary	2
16.	Assistant Engineer	1
17.	Senior Modeller	1

18.	Draftsman	1
19.	Assistant Admn. Officer (Admn. / Estt)	2
20.	Assistant Accounts Officer	1
21.	Personal Assistant	2
22.	Asstt Programmer	1
23.	Admn. Assistant	3
24.	Stenographers	4
25.	Asstt. Librarian	1
26.	Assistants	2
27.	Admn. Asstt. cum Word Process Operator	1
28.	Accounts Assistants	4
29.	Receptionist	1
30.	Library Assistant	1
31.	Budget Asstt	1
32.	UDC	2
33.	Inventory Asstt	1
34.	Electrician	1
35.	Junior Assistants	5
36.	Steno Typist	2
37.	Jr. Budget Asstt	1
38.	Drivers	6
39.	Peons	25
EPCO-RURAL		
1.	Auditor	1
2.	Jr. Assistant	1

7.2 Accounts

Accounts of the organisation are being maintained on computer. Audit of the final accounts of the Year 2019-20 not completed. Project receipts-expenditure statement of the year 2019-20 is as follows :

Project Receipts- Expenditure Statement 2019-20

A. State Sector Schemes

(Rs. In Lakhs)

S.No.	Project Name	Opening Balance	Received During the year	Total Received	Expenditure
1	Urban Water Bodies	690.17	218.04	908.21	223.28
2	Research Trg. & Education	1.59	466.08	467.67	429.20
3	Indira Gandhi Fellowship	23.95	5.60	29.55	7.80
4	SEIAA & SEAC	0.10	84.02	84.12	135.02
5	MP CDM Agency	0.00	27.10	27.10	27.22
6	Van Adhikar Adhiniyam	39.3	0.00	39.73	0.00
7	S K M C C	70.86	90.50	161.36	67.83
8	M P Wet land Authority	74.64	100.00	174.64	41.95
9	Shivana River, Mandsour	90.00	38.50	128.50	56.50
	Total	991.04	1029.84	2020.88	988.8

B. Central Sponsored Schemes (National River/ Lake Conservation Plan)

S.No.	Project Name	Opening Balance	Received Central Govt.	Received State Govt.	Total	Expenditure
1	NLCP Sagar Lake, Sagar	368.76	0.00	0.00	368.76	0.00
2	NLCP Shivpuri Lake Shivpuri	1354.42	0.00	0.00	1354.42	175.00
3	Sirpur lake, Indore	495.10	0.00	0.00	495.10	304.97
7	Sindh Sagar, Isagarh, Ashoknagar	341.00	0.00	0.00	341.00	93.15
5	NLCP Bhojwet Land Project	0.00	200.00	94.33	294.33	206.96
6	NRCP Beehar River, Rewa	1025.95	0.00	0.00	1025.95	0.00
7	NRCP Narmada River Hoshangabad	1161.65	0.00	0.00	1161.65	0.00
8	NRCP Mandakini River, Chitrakoot	0.15	0.00	0.00	0.15	0.00
	Total	4747.03	200.00	94.33	5041.36	696.08

C. Central Sector Schemes

S.No.	Project Name	Opening Balance	Received During the year	Total	Expenditure
1	National Environmental Awareness Campaign (NEAC)	-9.50	0.00	-9.50	0.00
2	National Green Crops (NGC)	49.03	855.00	904.03	664.76
3	MAP-AABR 2015-16	5.56	0.00	5.56	11.32
4	MAP-Panna BR 2015-16	5.61	0.00	5.61	11.82
5	MAP-Pchmarhi BR 2016-17	-3.94	12.50	8.56	9.80
6	MAP-AABR 2019-20	0.00	37.50	37.50	1.87
	Total	46.76	905.00	951.76	699.57

D. Other Schemes

S.No.	Project Name	Opening Balance	Received During the year	Total	Expenditure
1	EPCO Climate Smart Village	7.05	0.00	7.05	13.54
2	DST	29.58	55.25	84.83	42.42
3	Traditional Water Supply Scheme, Indore	4.96	83.20	88.16	0.02
4	MoEF Climate Change	0.06	0.00	0.06	225.34
5	SAP on Climate Change	0.00	12.00	12.00	10.75
6	Traditional Water Supply, Burhanpur	250.00	0.00	250.00	225.34
	Total	291.65	150.45	442.1	517.41

7.3 Computer Cell

EPCO has its own computer lab along with Local Area Network using Wi-fi technology. The cell maintains the website of organization i.e. www.epco.in as well as web site for MPSEIAA (Madhya Pradesh State Level Environment Impact Assessment Authority) i.e. www.mpseiaa.nic.in. The activities of the EPCO displayed through its website of the organization as well as social media facebook and twitter also.

7.4 Documentation cum Library

EPCO documentation is an ambitious concept combining a multidisciplinary library computerized documentation and reprographic facilities. The division compiled and edited various publications of the organization including Annual Report Year 2018-19 as well as Prashasnik Prativedan Year 2019-20 of Department of Environmental, GoMP, besides compiling the information according to the need from time to time. Division also scanned the Environmental News items from various Newspapers and maintained the clippings after the perusal of higher level officers.

Our Library had a total collection of 5173 volumes as on 31.03.2020 covering a comprehensive array of environment and its related subjects. More than 14 national journals and 8 magazines were subscribed during the year. There is also a collection of 53 video films, 326 slides and 118 CDs depicting important and interesting environmental and ecological aspects. During the year several students and researchers of the universities, colleges, schools and various institutions, besides EPCO officials were benefited from the library.

Chapter-8

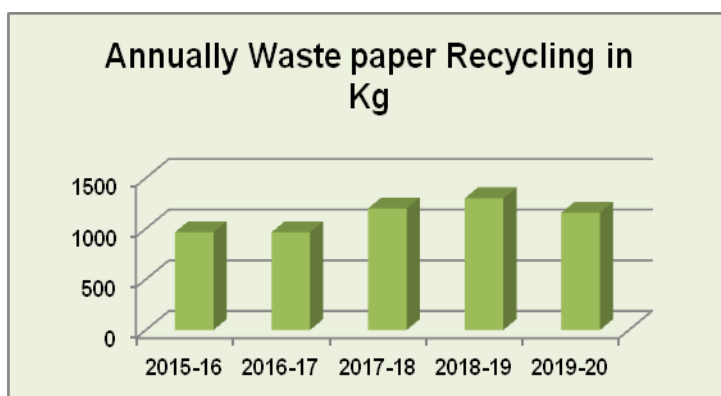
INNOVATIVE APPROACH FOR ENVIRONMENTAL CONSERVATION

8.0 Green Ganesh Campaign :

To reduce the pollution loading in water resources by idol immersion, EPCO has started Green Ganesh campaign. Objective of the campaign is to create awareness among common people, specially school going children, regarding the pollution caused by idol immersion in water bodies. 19 workshops in Bhopal, Indore, Ujjain were organized, in which more than 25000 Eco Friendly Ganesh idols were made.

8.1 Waste Paper Recycling Unit

EPCO Paper, Waste Paper Recycling Unit has been started in year 2011 at Paryavaran Parisar. This unit recycles waste papers generated by all the offices situated in the Paryavaran Parisar and sets a new and exemplary example in the field of waste management.



The unit has recycled 8 metric tons of paper till date since its inception. These recycled papers are utilized in stationery requirements of office like File Covers, File Pads,

Conference Folders, Alternative Plastic Folders, Chit Pads, Letter Heads, Envelopes and so on. This year, besides EPCO the products of recycling units have been distributed to Pollution Control Board, Barkatullah University, Regional Education Institute, Smart City and others as well.

Achievements

1. The unit caters to 95 percent of stationery needs of EPCO office.
2. Demonstration of waste management practices to students of various schools and colleges of Bhopal.
3. Encouraging other Government and Non Government bodies towards cause of Waste Management.

Being inspired by this, Carmel Convent Senior Secondary School, BHEL has installed a mini Waste Paper Recycling Plant in its premises.

Item Produce by Plant (2019-2020)		
S.No.	Item Name	Quantity
1	File Cover	3320 Nos.
2	File Pad	4370 Nos.
3	Conference Folder	2200 Nos.
4	Chit Pad	3292 Nos.

One Ton Recycled paper saves

- ❖ 25 Fully developed trees.
- ❖ 30000 Liters of Water.
- ❖ 400 Kilo Watt Electricity.
- ❖ Reduction in Air Pollution

8.2 Ban of Single Use Plastic :

All of us are well aware about the de-merits of "Single Use Plastic". In our daily life we use bottles, begs, spoons, cups, plates, folders, etc. made of plastic below permissible micron limit. Burning of single use plastic causes air pollution and its mixing with soil reduces water infiltration. Occasionally animals consume plastic (polythene) with eatable material and get injured. Looking to this EPCO had decided to ban single use plastic in his office. At present in EPCO Pots made of steel / paper is being used instead of plastic bottles. We have stopped use of plastic folder and paper folders made in our recycle unit are being used as office stationary. Besides this in most of the activities, EPCO try to refuse single use plastic.