**Country Paper:**

Environmental Audit Forum on Featured Practices

**SAI India**

**Introduction:**

Ecology and environment have been a pivotal concern for policy makers, intellectuals, economists, media, NGOs and the public at large. Environmental concerns have been an integral part of all policy issues and debates especially in the context of issues relating to global warming and climate change. Fully aware of the significance of environmental issues in contemporary governance, the Supreme Audit Institution of India headed by the Comptroller and Auditor General of India (C&AG) has a dedicated wing for Environmental Audit under the office of Principal Director of Audit of Scientific Departments, New Delhi. In recent year, office of C & AG published a number of reports covering the initiatives of the Government of India (GoI) for preservation and protection of environment and ecology. The environmental audits covered a variety of issues on bio diversity, forest management, waste management, coastal zone management, renewable energy, environmental clearances, flood management, water pollution and river rejuvenation. Besides, implementation of Sustainable Development Goals (SDGs) framed by the United Nations are also evaluated during the Performance Audits covering the subjects relating to SDGs for their achievement in a time bound manner.

**Achievement of SAI:**

All India Performance Audit Reports brought out by C & AG of India during the five-year period are as follows:

* Report No. 21 of 2013 - Compliance Audit on *Compensatory Afforestation in India*, Ministry of Environment and Forests.
* Report No. 34 of 2015 - Performance Audit on *Renewable Energy Sector in India*, Ministry of New and Renewable Energy.
* Report No. 39 of 2016 - Performance Audit on *Environmental Clearance and Post Clearance Monitoring*, Ministry of Environment, Forest and Climate Change.
* [Report No.10 of 2017 - Performance Audit on *Schemes for Flood Control and Flood Forecasting*, Ministry of Water Resources, River Development and Ganga Rejuvenation](http://www.cag.gov.in/content/report-no10-2017-performance-audit-union-government-schemes-flood-control-and-flood).

Report No.39 of 2017 on Performance Audit on *Rejuvenation of River Ganga- Namami Gange,* Ministry of Water Resources, River Development and Ganga Rejuvenation is scheduled for laying before the Parliament during December, 2017.

Further, SAI India has conducted *Performance Audit on Acceleration Irrigation Benefits Programme* and *Performance Audit on National Projects* during 2017-18, covering the Ministry of Water Resources, River Development and Ganga Rejuvenation. The reports are scheduled for laying in the budget session of the Parliament.

**Promoting Green Development model:**

After 200 years of industrial expansion, the issue of human development is at a historic crossroads necessitating fundamental changes to deal with the serious environmental challenges that we face. The concept of green development acquires salience, gradually opening up a modern path of development.

First, as India surges along its projected growth trajectory, environmental sustainability could become the next major challenge

Second, a low-emission, resource-efficient greening of the economy should be possible at a very low cost in terms of GDP growth. While a more aggressive low-emission strategy comes at a slightly higher price tag for the economy it promises to deliver greater benefits.

Third, for an environmentally sustainable future, need for valuing our natural resources and ecosystem services acquires more salience today than ever before.

**Specific cases of Environmental Audits in recent years**

1. **Compensatory Afforestation in India**

The Hon’ble Supreme Court of India directed (October 2002) that a ‘Compensatory Afforestation Fund’ (CAF) shall be created in which all the monies received from the user-agencies towards compensatory afforestation, additional compensatory afforestation, penal compensatory afforestation, net present value of forest land, catchment area treatment plan funds, etc. shall be deposited. CAF was to compensate for the loss of tangible as well as intangible benefits from the forestland, diverted for non-forest use. The Hon’ble Court directed the use of such fund for natural assisted regeneration, forest management, protection, infrastructure development, wildlife protection and management, supply of wood and other forest produce saving devices and other allied activities. The Court observed that the fund would not be part of general revenues of the Union, of the States or part of the Consolidated Fund of India.

Union Ministry of Environment and Forests (MoEF) notified the Compensatory Afforestation Management Funds Management and Planning Authority (CAMPA) in April 2004 for the management of the compensatory afforestation fund as per direction (October 2002) of the Hon’ble Supreme Court of India (the Court).

Subsequently, the Court ordered the constitution of an ad-hoc body (known as ‘Ad-hoc CAMPA’), till CAMPA becomes operational. The Hon’ble Court ordered transfer of all monies recovered on behalf of the CAMPA to Ad-hoc CAMPA and audited by an auditor appointed by the C & AG of India. We conducted the audit of Compensatory Afforestation during 2012. The Compensatory Afforestation Funds with Ad-hoc CAMPA grew from `1,200 crore to `23,607.67 crore during the period 2006 and 2012.

We noticed serious shortcomings in regulatory issues relating to diversion of forestland, the abject failure to promote compensatory afforestation, unauthorized diversion of forestland in the case of mining and the attendant violation of the environmental regime.

The Ad-hoc CAMPA was ineffective in ensuring complete and timely transfer of all monies collected by States/Union Territories (UT)s towards Compensatory Afforestation Fund to the Ad-hoc CAMPA accounts. Out of `2,925.65 crore released by Ad-hoc CAMPA during the period 2009-10 to 2011-12, only `1,775.84 crore was utilized by the State/ UTs leaving an unutilized balance of `1,149.81 crore.

The institutional design for incurring expenditure from the funds under Ad hoc CAMPA and by State CAMPA is somewhat distinct from the expenditure being incurred by the both the Union Government and State Government. There was no legislative authorization for incurring of such expenditure. Further, while receipts and expenditure have been significant, there exists no system devised by the Ministry to report incomes and outgoings regarding CA funds to either Parliament or the State Legislature.

As a remedial measure, the existing systems are sought to be revised in terms of the Compensatory Afforestation Fund Act 2016, which has been notified on 3rd August 2016. The Rules for implementation of the provisions of the Act are under framing.

1. **Renewable Energy Sector in India**

The Renewable Energy (RE) potential in India is 8,89,508 Mega Watt. The Government of India, in pursuit of energy security and for minimizing impact on environment, has been prioritizing the development of RE sector through its policies and programmes.

Performance audit of the RE sector was conducted to primarily assess the extent to which contribution of RE to the energy mix in the country had increased and whether RE had succeeded in improving access to electricity in the remote and rural areas. We found that the exploitation of the two largest components i.e. solar energy and wind energy potential was only 0.35 and 21 *per cent* respectively, with significant variations across the States. While the overarching policy and incentives offered by the Government of India to promote RE remained uniform for the country, the varied development of the sector in States was a result of State specific factors such as the State’s RE development policy, the State tariff regime and the conduciveness of the State’s implementation environment. Inadequate evacuation and transmission infrastructure was a bottleneck. Problems in maintaining grid stability caused by infirm and variable nature of wind energy remained unaddressed. Renewable Purchase Obligation mechanism designed as a policy instrument to demonstrate commitment and create a demand incentive for the development of RE resources in India was not effectively enforced.

Audit recommended that a transmission infrastructure, which was critical to meet the needs of large-scale RE deployment. GoI is implementing a Green Energy Corridor project in renewable resource rich states for completion by the year 2019-20.

1. **Environmental Clearance and Post Clearance Monitoring**

Ministry of Environment, Forest and Climate Change (MoEF&CC) is the nodal Ministry for planning, promotion, co-ordination and overseeing of the implementation of India's environmental and forestry policies and programmes. In recognition of the need for ensuring protection of the environment, MoEF&CC has taken various regulatory and promotional measures, which includes establishment of procedures for Environmental Impact Assessment (EIA) and granting Environmental Clearance (EC) for various types of projects. During EIA, the Ministry systematically examines the beneficial and adverse effects of proposed projects for considering these while designing the project.

EIA is very important for harmonizing developmental efforts with conservation of environment and ecology. The Convention on Biological Diversity (CBD) recognizes impact assessment as an important tool for ensuring development with biodiversity in mind. Over the years, there were a number of issues regarding delay in grant of ECs, quality of the EIA reports, assessment of impact of the projects on environment, effectiveness of public consultation, monitoring of the compliance of the environment clearance conditions. There have also been a number of Court Judgments, Parliamentary questions and amendments to the EIA notification with regard to the EC process and post clearance monitoring.

In performance audit, we examined the issue of timeliness and transparency in grant of EC during the calendar years 2011 to 2015. We also ascertained the effectiveness of monitoring of compliance with the EC conditions by the concerned agencies for the clearances granted during the calendar years 2008 to 2012.

We found that EIA process suffered from various procedural deficiencies leading to delays in grant of ECs. There were independent evaluations of projects, without cumulative assessment of various projects. There were lack of compliance of EC conditions by the Project Proponents (PPs). We also noticed weaknesses in monitoring by State Pollution Control Boards/Union Territory Pollution Control Committees and Regional Offices of MoEF&CC in compliance of EC conditions. There was lack of monitoring in the Critically Polluted Areas. A National Regulator for looking at the entire process of grant of EC and its monitoring is under consideration by MoEF&CC. The action taken notes awaited from the executive.

1. **Schemes for Flood Control and Flood Forecasting**

India is highly vulnerable to floods. Out of the total geographical area of 329 million hectares, about 45.64 million hectares is flood prone. Floods are a recurrent phenomenon, which cause huge loss of lives and damage to livelihood systems, property, infrastructure and public utilities. As per the report of the Working Group on Flood Control Management Programme (December 2006) for the XI Five Year Plan (2007-2012), on an average, every year, 7.55 million hectares of land is affected, 1,560 lives are lost and the damage caused to crops, houses and public utilities due to floods is estimated at Rs.1,805 crore.

During performance audit on “Schemes for Flood Control and Flood Forecasting”, we examined whether schemes for flood control and flood forecasting were efficient and effective; and whether the review and oversight mechanisms were effective. We found that there were long delays in approval of Detailed Project Reports leading to technical designs becoming irrelevant at the time of actual funding. The Ministry did not take up the Flood management works in an integrated manner covering entire river/tributary or a major segment of rivers/tributaries. There were delays in completion of the projects under Flood Management Programme. We found a large number of non-functional telemetry stations as such real time data for most of the period was not available. There were huge delays in completion of all the projects under River Management Activities and Works related to Border Areas. Emergency Action Plans prepared for only a few large dams. Ministry did not implement key recommendations of Rashtriya Barh Ayog such as scientific assessment of flood prone areas and enactment of Flood Plain Zoning Act. Ministry did not carry out Performance and concurrent evaluation as per scheme guidelines. The action taken notes awaited from the executive.