

**BUILDING MATERIALS & TECHNOLOGY  
PROMOTION COUNCIL  
(BMTPC)**

**OUTCOME BUDGET 2016-2017**

**Chapter – I**

The Building Materials & Technology Promotion Council (BMTPC), registered as Society in 1990, is an organisation fully supported by the Ministry of Housing & Urban Poverty Alleviation, Govt. of India with the objective of bridging gap between the laboratory development and large scale field application of cost effective, sustainable building materials and housing technologies including disaster resistant construction practices.

**Chapter – II**

Sr. No	Name of Scheme/ Programmes	Objective/ Outcome	Outlay 2016-17 (in Rs. Crore)	Quantifiable Deliverables / Physical Outputs	Projected Outcomes	Processes/ Timelines	Remarks/ Risk Factors
1	2	3	4	5	6	7	8
			4(ii) Plan Budget				
1.	Building Materials & Technology Promotion Council	<ul style="list-style-type: none"> <li>▪ To promote development, standardization and large scale field application of proven innovative and emerging building materials and technologies.</li> <li>▪ To work as a Training Resource Centre for capacity building and promotion of good construction practices</li> <li>▪ To promote methodologies and technologies for natural disaster mitigation and management</li> <li>▪ Project Management &amp; Consultancy</li> </ul>	Rs. 15 crore	<ul style="list-style-type: none"> <li>• Identification, evaluation and promotion of 7 emerging housing technologies, construction of demonstration structures at 2 locations for mainstreaming of technologies</li> <li>• Documentation of success stories of the projects using emerging technologies in 5 States</li> <li>• Skill upgradation of 200 workers and capacity building of 200 professionals</li> <li>• Preparation of third edition of Vulnerability Atlas of India for 36 States/UTs</li> <li>• Scrutiny of projects under Housing for All, appraisal of revised DPR's, monitoring &amp; TPIM review of projects, capacity building of functionaries of state local bodies and monitoring of projects under RAY and 10% lump sum provision for NE Region.</li> </ul>	<ul style="list-style-type: none"> <li>• Availability of different proven and emerging technologies for construction of houses with speed and quality at affordable cost.</li> <li>• Saving in high energy conserving materials</li> <li>• Availability of skilled manpower</li> <li>• Vulnerability reduction by adopting disaster resistant technologies</li> <li>• Promote sustainable habitat design practices.</li> </ul>	March, 2017	<ul style="list-style-type: none"> <li>• Quality in form of output with respect to its usability.</li> <li>• Non Availability of free land for the projects from the States.</li> <li>• Lack of sensitivity among stakeholders.</li> </ul>

### **Chapter – III**

BMTPC has reoriented its approach towards promotion of not only sustainable technologies through intensive evaluation, dissemination but also looking at emerging prefabricated housing technologies from within the country and abroad for social mass housing. Various Committees have been constituted for smooth and harmonious functioning of the Council.

### **Chapter – IV : Review of Past Performance**

During the years 2014-15 and 2015-16, the Council has undertaken the following major activities:

#### **Performance during 2014-15**

1. The Council has identified five more emerging technologies for further study and evaluation. Development of a multi-attribute evaluation matrix containing various parameters is in progress. Detailed Technology profiles have been prepared for the eight potential technologies. Also developed Schedule of Rates (SOR) and Code of Practice for GFRG Panel System in association with IIT Chennai. SOR for Monolithic Concrete Construction using aluminium/plastic formwork is in progress. BMTPC organized one seminar on “Green Building Materials & Construction Technologies” in August, 2014, one Brain Storming Session and interactive meet on Emerging Technologies at New Delhi and Hyderabad. In order to facilitate inclusion of new technologies into tender by State Govts, a model tender for technology neutral construction has been prepared. Also initiated a process for creating a portal, where technology providers can place information on new emerging technologies. Also prepared a Compendium of Prospective Emerging Technologies for Mass Housing. Under Performance Appraisal Certification Scheme, the Technical Assessment Committee (TAC) approved award of PACs for two technologies/products and renewal of one technology. In addition, the five more technologies/products are under various stages of evaluation.
2. Two Indo-Norwegian Training Programme on Seismic Design of Multi-storey Buildings: IS 1893 vs. Eurocode 8 was organized in May and October, 2014 jointly with IIT Roorkee and NORSAR, Norway at New Delhi. During the year, two batches of TOTs were organised at BIPARD Campus, Patna. Also organized two days Capacity Building Programme for Engineers & Architects on Earthquake Resistant Structures and Retrofitting of Buildings for NCR region. Completed preparation of updated Earthquake Hazard Zoning Map for the whole country upto district level based on the Survey of India. The updated Earthquake hazard maps are being redeveloped based on Census data.
3. Under “Building Artisan Certification System” Programme of BMTPC, training cum orientation programmes were conducted for artisans from various five trades in Ahmedabad. The Council organised two Training Programme on Bamboo Structures for Housing and Construction at Haflong Assam and at Kochi. Two training programmes for engineers and architects on Cost-effective and Disaster Resistant Technologies

were organised at Trichi and Jaipur. Similarly, two training programmes for masons were organised at Village Oraiya, Jharkhand and at village Paithani, Uttrakhand.

6. The Council is actively involved in appraisal, monitoring and TPIM Review of various projects under RAY, JNNURM, Affordable Housing in Partnership (AHP) and 10% Lump-sum Provision for NER States including Sikkim. A book entitled “Best Practices : Habitat Planning and Design for the Urban Poor” has been published in association with Ministry.

### **Performance during 2015-16 (upto December, 2015)**

1. BMTPC has identified and evaluated nine more construction systems under PACS. Eight more technologies are under evaluation. The development of knowledge portal on emerging technology is in progress. Two projects on development of design guidelines for EPS building system is in progress.

2. Demonstration housing project at Saraswathi Nagar, Chowtaplem Villagr, Venkatachalam Mandal, SPS Nellore District for construction of 36 houses with GFRG technologies have been initiated. The State Governments of Odisha and Telengana have also identified the land for implementation of the projects and the sites were found suitable after the visit. A tender has been floated in News Papers for appointment of an agency for construction of 32 houses.

3. BMTPC organized two conference/seminar and three capacity building programmes on Emerging Technologies at New Delhi, Vadodara, Jaipur and Bhubaneswar. Conducted five batches of Training of Trainers (TOTs) on Earthquake Resistant Design and Construction at BIPARD Campus, Patna. Organised two Indo-Norwegian Training Programme on “Seismic Design of Multi-storey Buildings: IS 1893 vs. Eurocode 8” at New Delhi. The Council completed preparation of updated Earthquake Hazard Zoning Map for the whole country upto district level based on Census data. The final Maps and Atlases have been submitted to NDMA. The process of printing has been initiated. The Council has also initiated preparation of third edition of Vulnerability Atlas of India. A Peer Group has been constituted by the Ministry.

4. The Council is actively involved in appraisal, monitoring and TPIM Review of various projects under RAY, JNNURM, Affordable Housing in Partnership (AHP) and 10% Lump-sum Provision for NER States including Sikkim.

5. BMTPC is working as secretariat of the Technology Sub-Mission. The Council has been designated as one of the agencies for Scrutiny of the projects.

## **Chapter – V**

### **Financial Review**

The Ministry of HUPA sanctioned grants-in-aid amounting to Rs.550 lakhs, Rs.500 lakhs, Rs.500 lakhs, Rs.499 lakhs and Rs.750 lakhs (till December 2015) for the years 2011-12, 2012-13, 2013-14, 2014-15 and 2015-16 respectively and the Utilization Certificates upto 2014-15 have been submitted to the Ministry. The overall expenditure relating to the activities is Rs.822 lakhs, Rs.839 lakhs, Rs.1027 lakhs, Rs 821 lakhs and Rs.617 lakhs (upto December 2015) for the years 2011-12, 2012-13, 2013-14, 2014-15 and 2015-16 respectively.

## **Chapter – VI**

### **Review of Performance**

The Council, with the aim of assessing its impact and evolving an appropriate strategy for its growth and improving efficiency in its delivery of expected services, has subjected itself to four Reviews.

The last review was held under the chairmanship of the then Joint Secretary (Housing), MoUE&PA with members from Ministry and other organizations for review of BMTPC as per Expenditure Reforms Commission regarding Autonomous Institutions in 2003. The major recommendation of the Committee includes that BMTPC has made an impact in the construction and building materials industry and the same need to be continued to improve overall productivity and cost efficiency in this sector. The Assessment of work and performance clearly suggest that the BMTPC fully qualify for the type of assistance envisaged in the Expenditure Reforms Commission (ERC) recommendations on Autonomous Bodies. BMTPC should also work in the rural sector.