

(c) whether this land is also being used as a dumping ground for garbage thereby making it filthy and if so, by when the work of constructing boundary wall and park would be done?

THE MINISTER OF STATE OF THE MINISTRY OF HOUSING AND URBAN AFFAIRS (SHRI HARDEEP SINGH PURI): (a) to (c) Information is being collected and will be laid on the Table of the House.

Recommendations of Committee headed by Bibek Debroy

1968. SHRI MAJEED MEMON: Will the Minister of HOUSING AND URBAN AFFAIRS be pleased to state:

(a) the details of recommendations made by the Committee headed by Bibek Debroy in January, 2017;

(b) the methodology for ascertaining which households would be automatically included or excluded for certain welfare benefits in urban areas;

(c) which households are eligible for State benefits; and

(d) whether Government is planning to refine the methodology so as to target larger number of actual households, availing benefits?

THE MINISTER OF STATE OF THE MINISTRY OF HOUSING AND URBAN AFFAIRS (SHRI HARDEEP SINGH PURI): (a) to (d) The Report is under consideration of the Government.

Prefab industry for promoting affordable housing

1969. SHRI T. RATHINAVEL: Will the Minister of HOUSING AND URBAN AFFAIRS be pleased to state:

(a) whether it is a fact that Government is considering to give a big push for the prefab industry for promoting affordable housing;

(b) whether it is also a fact that the prefab is going to solve the housing shortage in the country;

(c) whether with prefab products a house can be built in just two hours; and

(d) if so, the steps taken by Government in this regard?

THE MINISTER OF STATE OF THE MINISTRY OF HOUSING AND URBAN AFFAIRS (SHRI HARDEEP SINGH PURI): (a) Towards expediting the housing delivery process for meeting the target of 'Housing for All by 2022', the Ministry

of Housing and Urban Affairs is actively promoting the use of prefab technologies in housing construction.

(b) Prefab construction is one of the options which can help in addressing the housing shortage in the country through provision of quality housing in lesser time. Off site construction involving manufacturing of building component in factory and installation at site also helps in reducing dust pollution and optimizes use of natural resources as the prefab component are generally lighter than the conventional technologies.

(c) Use of prefab technologies considerably reduce the time of construction which is normally 50% to 60% lower than the conventional system of construction. There are various technologies which enable small houses to be fully constructed in factory with basic services and assembled at site in a very short span of time. A 10 storie building in Mohali was also erected within 48 hours using steel construction technologies.

(d) The Government has been promoting the use of prefab technologies extensively to all stakeholders. In the recently published National Building Code (NBC) 2016 by the Bureau of Indian Standards (BIS), the provisions have been updated to ensure utilization of number of prefab building materials and technologies to provide for innovation in the field of building construction. The updated provisions on new alternate technologies for speedier construction have also been included in the NBC 2016.

The Building Materials and Technology Promotion Council (BMTPC) has so far identified 16 emerging technologies and building materials for faster and quality construction of houses. List of technologies identified by the BMTPC is given in the Statement-I (*See below*).

The Central Public Works Department (CPWD) has published Schedule of Rates (SoR) for seven technologies towards promoting use of these technologies. List of technologies for which SoR has been published is given in the Statement-II (*See below*).

The Hindustan Prefab Limited (HPL) has developed a Housing Technology Park at Jangpura, New Delhi showcasing alternate housing construction prefab technologies, which could be utilized for construction of housing units. The technology park provides stakeholders an option to assess and compare all the technologies for identifying the most appropriate technologies for their respective use.

In order to create confidence amongst the architects, engineers and other stakeholders, the Ministry of Housing and Urban Affairs through the BMTPC is constructing Demonstration Houses in various States. Besides, the BMTPC and the HPL are organizing Sensitization/Capacity Building Programmes in various States on prefab and emerging technologies.

Statement-I

*List of emerging technologies identified and evaluated by BMTPC
for Mass Housing Construction*

Formwork Systems

1. Formwork for Monolithic Concrete Construction
2. Modular Tunnel form
3. Sismo Building Technology

Precast Sandwich Panel Systems

1. Advanced Building System – EMMEDUE
2. Rapid Panels
3. Reinforced EPS Core Panel System
4. Quick Build 3D Panels
5. Concrete wall Panel System
6. Glass Fibre Reinforced Gypsum (GFRG) Panel System

Light Gauge Steel Structural Systems

1. Light Gauge Steel Framed Structure (LGSFS)
2. Light Gauge Steel Framed Structure with Infill Concrete Panels (LGSFS-ICP)

Steel Structural Systems

1. Factory Made Fast Track Building System
2. Speed Floor System

Precast Concrete Construction Systems

1. Waffle-Crete Building System
2. Precast Large Concrete Panel System
3. Industrialized 3-S system using cellular light weight concrete slabs and precast columns

Statement-II

Details of seven new technologies for which Schedule of Rates (SoR) has been notified by Central Public Works Department (CPWD)

Sl. No.	Name of New Technology	Item already included in Delhi Schedule of Rates (DSR)-2016
1.	Light Gauge Steel Framed Structure (LGSFS)	26.41
2.	External and Internal wall Systems on LGSFS	26.42 and 26.43
3.	Expanded Polystyrene Core (EPS core) Panels	26.46 and 26.47
4.	Monolithic Concrete Construction by using Aluminium Formwork	26.48
5.	Prefab Technology	5.50 to 5.57
6.	Bamboo Technology	26.1 to 26.6 and 26.6A to 26.6E
7.	EPS Cement sandwich light weight solid core panels	26.49

Extension of metro lines

1970. SHRI T. RATHINAVEL: Will the Minister of HOUSING AND URBAN AFFAIRS be pleased to state:

(a) whether it is a fact that Government has approved an extra 313 km. of metro lines involving nine cities across the country;

(b) if so, the details thereof;

(c) whether it is also a fact that a total of 537 km. of metro sections are under construction;

(d) whether to speed up metro expansion, Government has increased the budgetary provisions for metro projects; and

(e) if so, the details thereof?

THE MINISTER OF STATE OF THE MINISTRY OF HOUSING AND URBAN AFFAIRS (SHRI HARDEEP SINGH PURI): (a) to (c) The Government of India has approved more than 820 kilometres of metro lines in twelve cities for providing Central financial assistance. More than 690 km. of metro lines are under construction in various cities.