

Identification of social castes in Jammu and Kashmir

*434. PROF. SAIF-UD-DIN SOZ: Will the Minister of SOCIAL JUSTICE AND EMPOWERMENT be pleased to state:

- (a) whether the Ministry would organize a survey to identify social castes that suffer the same stigma as SCs/STs, in Jammu and Kashmir; and
- (b) if so, the time-frame thereof, and if not, the reasons therefor?

THE MINISTER OF SOCIAL JUSTICE AND EMPOWERMENT (SHRI THAAWAR CHAND GEHLOT): (a) and (b) Processing of proposals for modifications in the list of Scheduled Castes (SCs) and Scheduled Tribes (STs) is done as per with the modalities approved by the Government in June, 1999 as modified in June, 2002. As per the extant Modalities, it is the responsibility of the concerned State Government/ Union Territory Administration to make a proposal along with ethnographic report/survey of a community for inclusion in and exclusion from the lists of SCs and STs of the State/ Union Territory. The Ministry does not get such studies/surveys done.

Models to predict energy security

*435. SHRI A.U. SINGH DEO: Will the Minister of PLANNING be pleased to state:

- (a) whether the Planning Commission has developed models to predict energy security named as India Energy Security Scenarios (IESS) 2047;
- (b) if so, the details of various scenarios and projections; and
- (c) in what manner Government plans to use the projections, and the cost involved in various scenarios?

THE MINISTER OF STATE OF THE MINISTRY OF PLANNING (SHRI INDERJIT SINGH RAO): (a) Yes, Sir.

(b) and (c) The Planning Commission has developed, the "India Energy Security Scenarios 2047" (IESS-2047), an Excel based web tool which explores a range of potential future energy scenarios for India, for several energy demand and supply sectors leading up to 2047. This tool is available to the public through an interactive, web interface as well as an Excel-based model with extensive sector-wise documentation. It is hosted on the website of the Planning Commission.

The IESS 2047 explores India's energy future across energy supply sectors such as solar, wind, biofuels, oil, gas, coal, and nuclear, and energy demand sectors such as transport, industry, agriculture, cooking, and lighting and appliances. The model allows users to interactively make energy choices, and explore a range of possible outcomes for the country - from carbon dioxide emissions and import dependence to land-use. The details of various scenarios developed are given in statement (*See below*).

The projections of energy demand and supply under different scenarios up to the year 2047 is expected to inform Government policy in attaining higher levels of energy security. It will also help in communicating available energy choices to the general public to obtain willing co-operation in adopting sustainable energy pathways. The IESS-2047 is planning tool which will guide energy consuming and producing sectors of the economy in making better energy choices.

The IESS-2047 calculator launched in February, 2014 by Planning Commission, doesn't include the cost parameter in various scenarios.

Statement

Details of various scenarios developed under IESS-2047

Level 1, Least Effort Scenario: The '**Least Effort**' scenario in the demand sector (Level 1) offers projections assuming past trends continue. Similarly, in supply sectors, the '**Least Effort**' scenario (Level 1) is of poor domestic output of energy, and is likely to follow the past trends, should there not be any major policy announcement, or any other trigger in generating energy supply.

Level 2, the 'Determined Effort' scenario: Level 2, the '**Determined Effort**' scenario describes the level of effort which is deemed most achievable by the implementation of current policies and programmes of the Government. This scenario indicates that existing and committed policies maintain the same trend in future also.

Level 3, the 'Aggressive Effort' scenario: Level 3, the '**Aggressive Effort**' scenario describes the level of effort needing significant change which is hard but deliverable.

Level 4, the 'Heroic Effort' scenario: Level 4, the '**Heroic Effort**' scenario describes the level of effort equivalent to the 'world's best' scenario which has been realised in some countries. On the demand side, the 'Heroic Effort' scenario, (Level 4) indicates heightened efficiency numbers, leading up to the physically best attainable in due course. On the other hand, on the supply side, the 'Heroic Effort' scenario gives us the physical limits, which would guide the growth of that particular energy supply up to the year 2047.

Various estimates/projections under different scenarios

The range of options available to the user for these subsectors, on the demand side and supply side can be captured by the following table:

Units in Tera Watt hours

Demand			
Sector	Baseline 2012	'Least Effort' Scenario (2047)	'Herioc Effort' Scenario (2047)
Domestic Lighting and Appliances	169.7	2,204.5	1,121.4
Commercial Lighting and Appliances	69.8	970.6	761.6
Lighting and Appliances	239.5	3,174.6	1,805.9
Industry	2,278.8	11,326.4	7,960.7
Road transport	787.1	5,691.6	2,790.6
Rail transport	40.5	128.8	125.8
Domestic aviation	20.3	264.9	118.6
Transport	847.9	6,085.3	3,035.0
Green Building Design and Envelope Savings	(0.0)	(0.4)	(77.1)
Agriculture	237.2	1,047.8	533.1
Telecom	82.7	237.0	101.0
Household Cooking	1,153.7	1,069.2	616.0
Commercial Cooking	64.8	739.0	680.4
Cooking	1,218.5	1,808.2	1,296.5
TOTAL	4,905	23,679	14,732
Supply			
Nuclear fission	94	168	990
Solar	2	107	1,663
Wind	19	161	1,462
Hydro	156	207	641
Bioenergy	959	993	3045
Coal reserves	2,704	2,878	7,306
Oil reserves	443	401	907
Gas reserves	449	769	2,115