

| 1     | 2                | 3          | 4          | 5          | 6          |
|-------|------------------|------------|------------|------------|------------|
| 9.    | Goa              | 4738382    | 4930897    | 2243344    | 641054     |
| 10.   | Gujarat          | 207456865  | 153292998  | 304077699  | 32372308   |
| 11.   | Haryana          | 44377242   | 55524354   | 59701796   | 37194619   |
| 12.   | Himachal Pradesh | 0          | 8104863    | 12976506   | 0          |
| 13.   | Jharkhand        | 42845000   | 20000000   | 0          | 0          |
| 14.   | Karnataka        | 51342000   | 44504543   | 153292863  | 27825153   |
| 15.   | Kerala           | 10636562   | 22312274   | 10783951   | 4809616    |
| 16.   | Madhya Pradesh   | 50828000   | 34985000   | 47329000   | 26713273   |
| 17.   | Maharashtra      | 328086195  | 411353561  | 313235858  | 96654801   |
| 18.   | Meghalaya        | 284776     | 248335     | 0          | 0          |
| 19.   | Orissa           | 41400000   | 41550000   | 69136683   | 41660806   |
| 20.   | Puducherry       | 249349     | 0          | 0          | 0          |
| 21.   | Punjab           | 148143174  | 255663714  | 181296566  | 89986827   |
| 22.   | Rajasthan        | 171144143  | 79821197   | 139637832  | 45039436   |
| 23.   | Tamil Nadu       | 81668175   | 87358926   | 99632956   | 51952201   |
| 24.   | Uttaranchal      | 25767183   | 40680209   | 48150408   | 30008141   |
| 25.   | Uttar Pradesh    | 435975582  | 383191063  | 580393325  | 260456479  |
| 26.   | West Bengal      | 212781949  | 176946087  | 156477260  | 77520688   |
| TOTAL |                  | 2201865980 | 2261917576 | 2617341425 | 1067444942 |

#### **Environmental impact of marble slurry**

2040. SHRI SANJAY RAUT: Will the Minister of ENVIRONMENT, FORESTS AND CLIMATE CHANGE be pleased to state:

(a) whether Government has conducted any environment study/research on health and environmental impact due to haphazard disposal of marble slurry, particularly in Rajasthan;

(b) if so, the details of study report and its recommendations thereon;

(c) whether Government has found any environment friendly methods for economic and technical solutions of the problems occurring at marble quarries, processing plants, polishing facilities and machineries, if so, the details thereof; and

(d) the details of steps taken or proposed to be taken by Government for adopting clean environment methods by various marble industries in the country ?

THE MINISTER OF STATE OF THE MINISTRY OF ENVIRONMENT, FORESTS AND CLIMATE CHANGE (SHRI PRAKASH JAVADEKAR): (a) and (b) As reported by the Indian Council of Medical Research, Central Pollution Control Board (CPCB) and Rajasthan State Pollution Control Board (RSPCB), no environment study/research has been conducted on health and environmental impact due to haphazard disposal of marble slurry, particularly in Rajasthan.

(c) The RSPCB has found following environment friendly solutions of the problems occurring at marble quarries, polishing plants, polishing facilities and machineries:

- (i) The RSPCB has given a project for recycling of marble slurry waste of two plants at Udaipur for practical training to use marble slurry in bricks and tiles manufacturing. Two units at Udaipur and one unit at Kota were setup by M/s Indian Environmental Society to give demonstration.
- (ii) A study regarding reuse of marble slurry in road, canal construction etc. was undertaken through the National Council for Cement and Building Materials (NCCBM), New Delhi. The results of study indicate that marble slurry acts as a good binder in road and canal construction and also may be used as raw material in cement manufacturing.
- (iii) The NCCBM has been asked to conduct study for utilization of marble slurry as raw mix compound and/or additive for the manufacturing of ordinary portland cement.

(d) The RSPCB has taken following steps for adopting clean environmental methods by various marble industries in the State of Rajasthan:

- (i) The State Government has asked Public Works Department (PWD) and Irrigation Department to take necessary action for uses of slurry.
- (ii) National Highway Authority of India has also been requested to use marble slurry for the construction of the 120 km stretch of four lane road from Gomati to Udaipur.
- (iii) Central Road Research Institute, New Delhi has executed a project for utilization of marble slurry dust for construction of 750 metre road in Rajasthan.
- (iv) The CPCB has been requested trial permission authorization for manufacturing chemical gypsum by use of wastes mixes of Jarosit/ Jerofix and marble dust etc.
- (v) The RSPCB is imposing conditions on marble processing unit to take steps to reuse/reprocess the slurry generated.