

GOVERNMENT OF INDIA
MINISTRY OF PANCHAYATI RAJ
LOK SABHA
UNSTARRED QUESTION NO. 1446
ANSWERED ON 26.07.2022

RURAL TECHNOLOGY ACTION GROUP

1446. SHRI G.M. SIDDESHWAR:

Will the Minister of PANCHAYATI RAJ be pleased to state:

- (a) the details of rules and responsibility of Rural Technology Action Group (RuTAG);
- (b) the list of technological needs identified by RuTAG along with the details of Gram Panchayats which require up-gradation of technology to ease convenience of people; and
- (c) the planning and schemes suggested by RuTAG to the Government to meet the technological need of the rural areas in the country?

ANSWER

THE MINISTER OF STATE FOR PANCHAYATI RAJ

(SHRI KAPIL MORESHWAR PATIL)

(a) With the aim to develop demand driven proto-type technologies for application in rural areas an initiative, Rural Technology Action Group (RuTAG), is supported by the Office of the Principal Scientific Adviser (PSA) to the Government of India. Accordingly, the RuTAG centres in seven IITs namely Madras, Guwahati, Kharagpur, Roorkee, Delhi, Bombay and Kanpur are supported by the Office of the PSA. These seven RuTAG centres develop the need based technologies and the needs are identified by Central and State Government agencies, Public Sector Undertaking and Non-Government Organisations.

(b) & (c) The list of the 52 demand driven technologies for the Gram Panchayats of the country developed by RuTAG centres in various sectors is at **Annexure**. The list has also been uploaded on the website of Ministry of Panchayati Raj for the benefit of rural population.

One of the RuTAG technologies namely innovative vending carts ranging from bicycle to E-carts for fruit and vegetable vendors have been developed, based on the vendor's survey carried out by Ministry of Panchayat Raj and RuTAG centers. These innovative vending carts help in increasing the shelf life of vegetable and fruits, better income, reducing the wastage and are affordable.

Annexure referred to in reply to part (b) & (c) of the Lok Sabha Unstarred Question No. 1446 answered on 26.07.2022 regarding 'Rural Technology Action Group'.

List of Rural Technology Action Group (RuTAG) Technologies with the name of developing Institute

AGRICULTURE (13 TECHNOLOGIES)

1. Amla Pricking Machine (RuTAG IIT Kanpur)
2. Bael Cutting Machine (RuTAG IIT Kanpur)
3. Betel Nut Cutter (RuTAG NEIIT Guwahati)
4. Chaff Cutter (RuTAG NEIIT Guwahat)
5. Conical Roller Jamun Juice Extractor (RuTAG IIT Kharagpur)
6. Floating Fish Cages for Inland Aquaculture (RuTAG IIT Bombay)
7. Floating Fish Cage with Aquaculture Technology (RuTAG IIT Kharagpur)
8. Heavy Duty Bicycle (RuTAG NEIIT Guwahati)
9. Improvement in Batasha Making Process (RuTAG IIT Delhi)
10. Integrated Rice Puffing (Muri)Machine (RuTAG IIT Kharagpur)
11. Machine for Decortication of Hirda Fruits (RuTAG IIT Bombay)
12. Mechanized Dhenki (Rice Pounder) (RuTAG IIT Kharagpur)
13. Multi-nutrient Compressed Feed Block Machine (RuTAG NEIIT Guwahati)

ASSISTIVE TECHNOLOGIES (2 TECHNOLOGIES)

14. Portable Cow Lift for Assisting a Downer Cow (RuTAG IIT Bombay)
15. Tricycle for the Mobility Disabled (RuTAG IIT Madras)

DRAUGHTANIMALPOWER (3 TECHNOLOGIES)

16. Animal Driven Gear Box (RuTAG IIT Delhi)
17. Enhancing Life of Horse Shoes (RuTAG IIT Kanpur)
18. Ergonomically Designed Bullock Driven Tractor (RuTAG IIT Delhi)

ENERGY (4 TECHNOLOGIES)

19. Biomass Dryer (RuTAG NE IIT Guwahati)
20. Household Oil Expeller (RuTAG IIT Madras)
21. Solar Thermal Drier (RuTAG IIT Kanpur.
22. Kiln for Making Charcoal from Prosopisjuliflora (RuTAG IIT Madras)

ENVIRONMENT/WATER (4 TECHNOLOGIES)

23. Air Quality Measurement System Using Low Cost Sensors (RuTAG IIT Madras)
24. Ergonomically Designed Treadle Pump (RuTAG IIT Delhi)
25. Ground Water Level Measuring Device (RuTAG IIT Delhi)
26. Pump Used as Turbine for PicoHydro (RuTAG IIT Roorkee)

HANDICRAFTS (13 TECHNOLOGIES)

27. Automatic Potter's Wheel (RuTAG IIT Madras)
28. Ergonomically Designed Bead Making Device (RuTAG IIT Delhi)
29. Improved Furnace for Jointless Glass Bangles (RuTAG IIT Delhi)
30. Improved Up Draught Pottery Kiln Furnace (RuTAG IIT Delhi)
31. Microwaveable Pottery from Red Clays (RuTAG IIT Madras)
32. Modified Potter's Wheel (RuTAG NEIIT Guwahati)
33. Motorized Coir Ratt (RuTAG IIT Madras)
34. Motorized Dhoop Stick Making Machine (RuTAG IIT Kharagpur)
35. Motorized Single Twist Sutli Making Machine (RuTAG IIT Kharagpur)
36. Pedal-Driven Potter's Wheel (RuTAG IIT Kharagpur)
37. Pottery Item Dyeing Chamber (RuTAG NEIIT Guwahati)
38. Sabai Grass Rope Making Machine (RuTAG IIT Kharagpur)
39. Sisal Fiber Extractor (Pedal Operated and Motorized, RuTAG IIT Kharagpur)

TEXTILE (13 TECHNOLOGIES)

40. Charkha: Foot-Driven Ambar Charkha (RuTAG IIT Kharagpur)
41. Charkha: New Model (RuTAG IIT Delhi)
42. Charkha: Modified Bageshwari Wool Charkha (RuTAG IIT Roorkee)
43. Charkha: Switch-at-Will Dual Drive (RuTAG IIT Madras)
44. Electronic Jacquard Handloom with Design Software for Fine Korai Grass Designer Mat Weaving (RuTAG IIT Madras)
45. Eri Cocoon Opener (RuTAG NEIIT Guwahati)
46. Hank to Bobbin Machine (RuTAG NEIIT Guwahati)
47. Mechanized Roller for Making Handcrafted Woolen Felt (RuTAG IIT Roorkee)
48. Pirn Winding Machine (RuTAG NEIIT Guwahati)
49. Power Loom for Muga Silk (RuTAG NEIIT Guwahati)
50. Sectional Warping Machine (RuTAG NEIIT Guwahati)
51. Semi-automatic Pirn Winding Machine (RuTAG IIT Madras)
52. Sheep Hair Shearing Machine (RuTAG IIT Delhi)
