GOVERNMENT OF INDIA MINISTRY OF PANCHAYATI RAJ RAJYA SABHA UNSTARRED QUESTION NO. 1389 ANSWERED ON 30.07.2021

RURAL TECHNOLOGY ACTION GROUP

1389 Dr. Amee Yajnik:

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 details of Gram Panchayats where upgradation of technology to ease convenience of people requires;
- (c) the planning and schemes suggested by RuTAG to Government to meet the technology need of rural India; and
- (d) if so, the details thereof?

ANSWER

THE MINISTER OF STATE FOR PANCHAYATI RAJ (SHRI KAPIL MORESHWAR PATIL)

As informed by the Principal Scientific Adviser Office, Rural Technology Action (a) Group (RuTAG), is supported by the Office of the Principal Scientific Adviser, to develop demand driven proto-type technologies for application in rural areas. Presently, **RuTAG** projects are being supported in seven **IITs-Madras**, Guwahati, Kharagpur, Roorkee, Delhi, Bombay and Kanpur.

(b) The list of the 52 demand driven technologies developed by RuTAG centres in various sectors is at **Annexure**. The list is also placed on website of Ministry of Panchayat Raj.

(c) The needs for the technology are identified by Central and State Governments, Public Sector Undertakings and Non-Government Organizations. The prototype technologies developed under RuTAG project can be adopted by stakeholders at the central as well as state level.

(d) Eri Cocoon opener and Hank to bobbin winding machine in textile sector; Feed Block Machine, Puffed Rice Making machine, Fish Cage Structure, Chaff Cutter (Mushroom) in agriculture sector; Biomass dryer in engery sector and Potter's Wheel in artisan sector have been disseminated in North East Region, through Science & Technological Intervention for North East India (STINER) supported by Ministry of Development of North Eastern Region:

Annexure referred to in reply to part (b) of the Rajya Sabha Unstarred Question No. 1389 answered on 30.07.2021 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. Charka: Foot-Driven Ambar Charkha
- 41. Charka: New Model
- 42. Charka: Modified Bageshwari Wool Charka
- 43. Charkha: Switch-at-Will Dual Drive
- 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)
