

**GOVERNMENT OF INDIA  
MINISTRY OF SCIENCE AND TECHNOLOGY  
DEPARTMENT OF SCIENCE AND TECHNOLOGY  
LOK SABHA  
UNSTARRED QUESTION No. 496  
TO BE ANSWERED ON 1/12/2021**

**STI HUBS**

**496. SHRI D.K. SURESH:**

**Will the Minister of SCIENCE AND TECHNOLOGY** विज्ञान और प्रौद्योगिकी मंत्री **be pleased to state:**

**(a) whether it is a fact that the Government proposes to set up Science Technology and Innovation (STI) Hubs in different parts of the country for Scheduled Tribes (STs) by the end of 2022;**

**(b) if so, the details thereof;**

**(c) the salient features of the STI Hubs proposed to be set up for STs;**

**(d) whether the Government has earmarked any funds for the said program; and**

**(e) if so, the details thereof along with the targets fixed to be achieved under the program?**

**ANSWER**

**MINISTER OF STATE (INDEPENDENT CHARGE) OF THE MINISTRY OF SCIENCE  
AND TECHNOLOGY AND EARTH SCIENCES**

**(DR. JITENDRA SINGH)**

विज्ञान और प्रौद्योगिकी तथा पृथ्वी विज्ञान मंत्रालय के राज्य मंत्री (स्वतंत्र प्रभार)  
(डॉ. जितेंद्र सिंह)

**(a) Yes Sir.**

**(b) The Department of Science and Technology (DST) had already initiated this programme during 2019-2020 for holistic development of Scheduled Caste (SC) and Scheduled Tribe (ST) Communities through systemic interventions by establishing Science Technology and**

**Innovation (STI) Hubs in different regions of the country. Seven STI Hubs for ST were already established during the last two years in different regions of the country. The details of these STI Hubs and their activities are given in Annexure-I.**

**(c) The STI Hubs will develop, nurture and ensure the delivery of appropriate and relevant technologies for inclusive socio-economic development through creation of sustainable livelihoods for the ST population in tune to their growing aspirations with the following objectives:**

**(i) Address the weakest linkages in the predominant livelihood systems through Science & Technology (S&T) interventions.**

**(ii) Creation of social enterprises based on the strengths in livelihood systems.**

**(iii) Improve the Indigenous Knowledge Systems (IKS) through inputs of S&T for strengthening the livelihoods.**

**(d) & (e) The expenditure for establishing STI Hubs would be met from the budget allocated under the Tribal Sub Plan (TSP) Component of DST.**

**ANNEXURE-I****Science Technology and Innovation (STI) Hubs for Scheduled Tribes (ST)**

<b><i>Sl. No.</i></b>	<b><i>Project Title and Details of Implementing Organization</i></b>	<b><i>Details of STI Hubs/Activities</i></b>
<b>1</b>	<b>STI Hub in Sidho-Kanho-Birsha University, Purulia, West Bengal for the Socioeconomic Upliftment of ST Communities of Eastern Region West Bengal, Jharkhand Odisha through Science and Technology Intervention</b>  <b>Prof. Subrata Raha, Department of Botany, SidhoKanhoBirsha University, Ranchi Road, Purulia, West Bengal – 723 104.</b>	<b>The Hub is catering to 34 villages belonging to 15 blocks of 7 districts of West Bengal, Jharkhand and Odisha. 1526 beneficiaries so far have been covered under the project. The major issues being addressed are:</b> <b>(1) Provision of safe drinking water (technologies for filtering, manufacturing of candles using nano materials)</b> <b>(2) Technologies related to aquaculture</b> <b>(3) Production of Aromatic oils (Lemon grass oil extraction)</b> <b>(4) Manufacturing of low cost sanitary napkins</b> <b>(5) Establishment of germplasm (<i>Bixa sp.</i>, <i>Cymbopogon</i>, medicinal plants etc)/mushroom spawn etc to develop niche products.</b> <b>(6) Women Health and Hygiene</b> <b>As on date, 48 awareness, 22 training and 10 skill development programs have been carried out with training of 305 ST persons and employment of 11 youth. 22 Forest wood pickers have been converted into farmers. 450 households with 2296 persons have access to Clean and Safe Drinking Water. 485 families with 1410 persons have access to Health care facilities/Improved Nutrition. Several Technology user Group have been formed and they have opened bank accounts.</b>
<b>2</b>	<b>Science Technology and Innovation Hub for development of Scheduled Tribe in MedchalMalkajgiri district of Telangana state</b>  <b>Dr. Suresh Merugu, CMR College of</b>	<b>The Hub is operating in Yellampet, Pudur, Ravalkole, Kistapur and Rajbollaram villages of Medchal Mandal of MedchalMalkajgiri district of Telangana State covering a total of 854 households.</b> <b>The STI Hub is providing technical services that include continuous R&amp;D activities, Product development, Re-engineering, testing facilities, Quality assurance and Market Research, Workshops and Capacity Building</b>

	<p><b>Engineering and Technology, Medchal (D), Hyderabad – 501 404</b></p>	<p>programmes for ST Communities related to the project as well as any other problems that arise and need to be solved through technological interventions. The hubs isalso facilitating grants and capital, networking and other technical resources to incubate some of the viable technologies. The Hub is also providing agricultural extension services (market linkages, weather advisory services, organic certification system etc) and capacity building of drop-out youth. Some of the technologies introduced through the programme are: Dual mode groundnut pod stripper, smart fencing system to protect agriculture, invasive plant cutter, smart crop and water management and smart agro sprayer. These have resulted in drudgery reduction, solving human-wildlife conflict and better management of resources.</p> <p>213 manpower has been trained so far under the project. Five Common Facility Centers created under the program are being used by 650 direct beneficiaries and 3408 indirect beneficiaries. Increase in agricultural productivity in the range of 20-25% with increase in household income to the range of 15-20% is envisaged due to interventions proposed under the programme.</p>
3	<p><b>Science Technology and Innovation Hub in Leh, Leh Block Ladakh District, Ladakh UT</b></p> <p><b>Mr. Chander Shekhar Sharma</b>  <b>Council of Scientific &amp; Industrial Research (CSIR), Institute of Microbial Technology (IMTECH), CSIR-IMTECH, Sector- 39A, Chandigarh, Pin-160036</b></p>	<p>The STI Hub at Ladakh is integrating IT in health diagnostics, and skill development in IT specialized domain. The center is providing local people with digital health access, IoT based PoCD( Point of Care Devices) /e-diagnostics and innovation hub to develop PoC devices prototypes from their own ideas. Further, the STI Hub is working for developing smart diagnostic technologies for transmitting real-time observations to medical experts or also the patient can approach local healthcare facility. The teachers, lecturers, academicians and officials in various departments of Ladakh Government can benefit through training of trainers' initiative of the program. They are being imparted trainings in Data Analytics, Office Automation, and system administration. One such training was held during 6-10 September, 2021.</p>

4	<p><b>STI hub up-scaling sustainable technological solution and replicable model for ensuring food and nutrition, livelihood and social security of ST in selected Gram Panchayat of Kopaput Distt. Of Odisha</b></p> <p><b>Dr. Karthik Lenka Biju Patnaik Tribal Agro-Biodiversity Centre, M. S Swaminathan Research Foundation (MSSRF), Jeypore-764002, Koraput district Odisha</b></p>	<p><b>The STI hub is covering 36 villages in the three selected blocks, namely, Boipariguda, Koraput and Kundra of Koraput district in Odisha. The Hub is introducing farm-based technologies / interventions such as improved methods of agriculture and allied activities, including bio-input production, to help the ST population to diversify their household income sources. It is Increasing awareness on soil and water management practices, restoration of village water bodies and adoption of efficient decentralized water use/reuse systems that is likely to enhance the ground water moisture level</b></p>
5	<p><b>Development of Science Technology and innovation Hub: Utilization and adaption of traditional knowledge, resources and technological advances in post-harvest management and nutrition for empowering children, women and youth in tribal Meghalaya</b></p> <p><b>Dr. Melari Shisha Nongrum, Martin Luther Christian University, Dong Ktieh, Block 1 ,Nongrah, Shillong-793 006, Meghalaya</b></p>	<p><b>The project is getting implemented in Ribhoi and East Khasi Hills district of Meghalaya and benefiting the ST Population of at least 200 villages in Umling, Umsning and Myllem blocks. The STI Hub is being established at Umsawli village, Myllem Block, East Khasi Hills District. The technologies adapted in Hub are aimed at reducing the wastage of agricultural produce by doing value addition. Apart from reducing food waste, the unemployed youth and women will be trained and capacity building programmes would be conducted in a phased manner to enhance their skills so that they can eventually sustain and manage these processing units. The skills range from food processing to management and marketing of the units. The food product use local nutritious food crops and are aimed at solving malnutrition problem in children aged 6 months to 1 year, 1 year to 3 years and above 3 years The aim is to have a nano village-based processing unit with unemployed women having nano home based processing units for making these products for the local schools or sale in the communities.</b></p>
6	<p><b>Science, Technology and Innovation Hub for</b></p>	<p><b>The project is creating sustainable livelihood opportunities for the ST population belonging</b></p>

	<p><b>creating sustainable livelihood opportunities of Scheduled Tribes in Angara block, Ranchi district, Jharkhand</b></p> <p><b>Dr. Avijit Kr. Dutta, Ramakrishna Mission Vivekananda Educational and Research Institute, Faculty Centre for Agriculture, Rural and Tribal Development, Ramakrishna Mission Ashrama, Morabadi, Ranchi, Jharkhand (Pin-834 008).</b></p>	<p><b>to Angara Block, Ranchi District, Jharkhand. The Hub promotes low-cost crop production technologies among the beneficiaries by using on-farm resources and also work towards capacity building on this particular aspect of sustainable farming. Through the proposed technological intervention on low-cost organic production practice, the farmers are being encouraged to produce their own farm inputs by utilizing locally available resources which will substantially reduce the input costs and more income will be ensured. Besides, farmers may sell surplus inputs to neighboring farmers that can be an additional income source. The project work towards reducing the yield gap between farmer's practice and proven technology to be intervened by around 50%. Farmers are being trained on organic inputs preparation, mushroom production, beekeeping, value addition to farm produce etc. to increase income and create alternate livelihood options.</b></p>
<b>7</b>	<p><b>Socio-economic empowerment and the tribal people in the Rajaborari estate Madhya Pradesh thorough scientific and technological intervention</b></p> <p><b>Dr. Anita Lakhani, Dayalbagh Education Institute, Dayalbagh, Agra, Uttar Pradesh</b></p>	<p><b>The revenue villages namely (Rajaborari, SalaiThekedari and Temrubahar) comprising 10 hamlets in Rehatgaon Block, Harda district, Madhya Pradesh State, with total population of select villages as 4,683 persons, of which, 3,997 persons (85%) belong to Scheduled Tribe Communities (Korku and the Gond tribal groups) are being intervened under the present Hub. The project looks at Value Addition to Commodities that could be produced/harnessed from the rich flora of the area (e.g. corn, amla, mango, etc) through scientific and technological approaches and Establishment of Laboratory for testing of Soil, Water and Food Products along-with training of beneficiaries. The aim is to establish a Technology-enabled Village Resource Center for the tribal people for entrepreneurial incubation and establishing sustainable rural enterprises especially in food processing and textiles related enterprises</b></p>

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