

GOVERNMENT OF INDIA
MINISTRY OF SCIENCE AND TECHNOLOGY
DEPARTMENT OF SCIENCE AND TECHNOLOGY
RAJYA SABHA
UNSTARRED QUESTION NO. 610
ANSWERED ON 21.07.2022

SUPPORT FOR WEAKER COMMUNITIES IN KARNATAKA

610. SHRI IRANNA KADADI:

Will the Minister of SCIENCE AND TECHNOLOGY be pleased to state:

- (a) whether Government has instituted any organisation/nodal agency to provide and coordinate science and technology (S&T) support to rural and weaker communities in the State of Karnataka;
- (b) if so, the details thereof;
- (c) the amount allocated and spent during each of the last three years for application of S&T for the weaker sections in the country;
- (d) whether Government has taken steps to motivate scientists and research fellows for applying knowledge for the promotion of weaker communities; and
- (e) if so, the initiatives taken by Government in this regard so far?

ANSWER

MINISTER OF STATE (INDEPENDENT CHARGE) OF THE
MINISTRY OF SCIENCE AND TECHNOLOGY & EARTH SCIENCES
(DR. JITENDRA SINGH)

(a) & (b) Yes Sir. Under the State Science and Technology Programme, 31 State Science and Technology Councils (28 States and 3 Union Territories) are being supported for catalysing Science Technology Innovation (STI) ecosystem through Centre – State Science and Technology (S&T) Cooperation mechanism for assessing, developing and delivering appropriate solutions to state-specific challenges. The State S&T Councils also strengthen the STI ecosystem for socio-economic development of rural and weaker communities at State and National levels through development, dissemination and deployment of various S&T solutions. Karnataka State Council for Science and Technology (KSCST) founded in the year 1975 is the one among the first State council to be established in the country. During the last 47 years, KSCST has been pro-actively engaging itself to identify, propose and implement S&T based solutions to location specific needs/problems in the broad areas of Water, Education, Energy, Environment, Housing, Geo-Information Communication Technologies, IOT/Cyber Security and Infrastructure for development of rural and weaker communities in the State of Karnataka. Taking into advantage the prominent presence of State Science and Technology Councils in all the States and Union Territories, a new programme on Establishment of Scheduled Caste and Scheduled Tribe Cells in State Science and Technology Councils has also been initiated for planning of development strategies, identification of technological gaps including mapping of technological needs, formulation of research/demonstration/ projects as well as specific programmes leading to socio-economic development of the community by utilizing local resources and skills of target communities. A SC/ST Cell has been established in Karnataka State Council for Science and Technology, Bengaluru.

(c) The details of amount allocated and spent during the last three years for application of S&T for weaker sections in the country by the Department of Science and Technology is given below:

<i>Sl. No.</i>	<i>Year</i>	<i>Amount Allocated (Rs. Crore)</i>	<i>Amount Spent (Rs. Crore)</i>
1.	2021-22	278.13	266.90
2.	2020-21	283.26	254.51
3.	2019-20	327.72	324.08

(d) Yes.

(e) The initiatives (Schemes and Programmes) taken by various departments to motivate scientists and research fellows for applying knowledge for the promotion of weaker communities are given below:

Department of Science and Technology

(i) The Scheme Scheduled Caste Sub Plan and Tribal Sub Plan promotes research, development, transfer, dissemination and adoption of emerging technologies to solve the problems of economically weaker Scheduled Caste (SC) and Scheduled Tribe (ST) communities, especially in rural areas. 198 projects were supported during the last three years under Scheduled Caste Sub Plan and Tribal Sub Plan Schemes for delivery of science led solutions and development & deployment of location specific appropriate technologies for creation of sustainable livelihoods, primarily for SC and ST communities. 6 Such projects were supported in Karnataka.

- The Department of Science and Technology (DST) had initiated setting up of Science Technology and Innovation (STI) Hubs for holistic development of Scheduled SC and ST Communities through systemic interventions in different regions of the country to address the weakest linkages in the predominant livelihood systems through Science & Technology (S&T) interventions, creation of social enterprises based on the strengths in livelihood systems and to improve the Indigenous Knowledge Systems (IKS) through inputs of S&T. 33 such STI Hubs were established in various regions of the country for improving the quality of life of SC and ST Communities. An STI Hub has been established in Challakere campus of Indian Institute of Science, Bengaluru at a cost of Rs.5.79 Crore for development of SC Communities belonging to Chitradurga district of Karnataka.

- DST is supporting “Establishment of Scheduled Caste (SC)/Schedule Tribe Cells” for mapping (gathering) information on livelihood system (weakest linkages and strengths), local and indigenous knowledge and ingesting it with technological information to help in development of specific strategies for development of target beneficiaries and define policies for implementation. 11 such Cells have been established in various states including Karnataka State.

- A project “SHG/FPO enterprises to address malnutrition and provide rural livelihoods in Yadgir District, Karnataka” had been supported at a total cost of Rs.4.75 Crore to address the malnutrition status through establishment of SHG/FPO enterprises and provide rural livelihoods

(ii) The Empowerment and Equity Opportunities for Excellence in Science (EMEQ) scheme implemented by Science and Engineering Research Board (SERB) is aimed at providing research support to researchers belonging to the Scheduled Caste and Scheduled Tribe in undertaking research in frontier areas of science and engineering. Approximately 100 projects were supported to researchers and faculty belonging to SC and ST communities under this Scheme.

Department of Biotechnology

To facilitate biotech-based development in the North Eastern Region (NER) of India through conceptualization, implementation, mentoring and monitoring of biotechnology intervened programs for holistic development, the Department has earmarked 10% of its annual budget every year for

promoting and strengthening biotechnology related activities in the region. These region-specific programmes focus on developing local capacities to address regional challenges and harness endemic bioresources for economic development of the region through frontier research in the area of Biotechnology. About 650 Twinning projects have been supported since inception of the scheme in 2010, addressing issues in emerging areas of Biotechnology with specific relevance to developmental needs of the region. During the last three years several projects were supported which had benefitted 3000 women in projects on emerging technologies for livelihood development.

Council for Scientific and Industrial Research (CSIR)

(i) CSIR through its constituent laboratories is actively working to promote advanced Scientific & Technological interventions for the development and support to the weaker sections of the society. Some of the significant initiatives taken by CSIR for the benefit of people especially from weaker section are given below:

- CSIR Aroma Mission for Catalysing Rural Empowerment through Cultivation, Processing, Value Addition and Marketing of Aromatic Plants.
- CSIR Floriculture Mission for Enhancing farmers' income and entrepreneurship development through high value floriculture utilizing CSIR technologies.
- CSIR proposal on Gaon Ka Pani Gaon Me – Har Ghar Ko Nal Se Saph Jal under Jal Jeevan Mission of Ministry of Jal Shakti aims at customized development and deployment of innovative technologies for drinking water and wastewater treatment in rural India to fulfill the objectives of Jal Jeevan Mission of providing safe water supply to households and safely manage grey water/wastewater.

(ii) The constituent laboratory of Council of Scientific & Industrial Research namely Central Food Technological Research Institute (CSIR-CFTRI), Mysuru, Karnataka is the State Nodal Agency for implementation of Pradhan Mantri Formalization of Micro-Food Enterprises (PMFME) Scheme of Government of India. The primary objective of PMFME scheme is to enhance the competitiveness of micro-enterprises in the food processing industry and promote formalization of this sector. The Institute has undertaken the following activities for rural and weaker communities under this scheme which are given below:

- Supports Farmer Producer Organizations (FPOs), Self Help Groups (SHGs) and Producers Cooperatives along with their entire value chain through PMFME scheme for economically weaker sections.
- Nearly 400 farmers were trained in various areas of food processing to become entrepreneurs. 200 farmers/beneficiaries/FPOs were trained on specific areas of food processing in Hassan, Kodagu, Chamaraajanagara, Tumkuru, Ramanagara and Belagavi districts.
- Developed Mobile Food Processing and Demonstration Unit to train farmers by taking the mobile unit to the field on-site training at large numbers.
- CSIR-CFTRI has supported socio-economic empowerment of SC/ST communities of Karnataka through National SC/ST Hub (NSSH) supported training programmes at CSIR-CFTRI.

(iii) CSIR- Central Institute of Medicinal and Aromatic Plants Bengaluru center is carrying out research and extension activities on medicinal and aromatic plants, and also conducting training and awareness programmes for the farmers, rural and weaker communities.

Indian Council of Agricultural Research (ICAR)

(i) To support resource poor small and marginal farmers of the country, ICAR is conducting research in farmers' participatory mode for developing location specific, cost effective, eco-friendly, socially acceptable scientific farming practices. Low-cost technologies are being developed and promoted for the farming community including weaker sections.

- The important thrust areas include development of high yielding, disease, insect pest and climate resilient crop varieties and technologies, soil health management, agricultural water management, watershed management, enhancement of nutrient and water use efficiency, resource conservation, crop diversification, integrated weed management, conservation agriculture.

- Development of Integrated Farming System integrating dairy, goat and sheep farming, piggery, apiary, fisheries, agro forestry with the traditional crop farming keeping in view the farmers' resource availability, traditional knowhow and grassroots farm innovations coupled with emerging innovations and technologies.

- Benefits of successful research are being popularized among the farmers throughout the country through training and Front-Line Demonstrations (FLDs) through Krishi Vigyan Kendra's (KVKs) and Institute Extension System.

(ii) ICAR-Indian Veterinary Research Institute, Bengaluru Campus, Bengaluru is involved in setting up of goat units by giving the inputs (goats, water, feeder and feed etc.) along with training on Scientific management practices on goat husbandry to ST Communities in remote area of Chamarajanagar district of Karnataka. Further the scientists are involved in scientific rearing of different species by giving the inputs [poultry cages and other veterinary aids] along with the training on scientific management practices on calves rearing and fodder production to SC in and around Bengaluru.

Indian Agricultural Research Institute (IARI)

To address the issues of malnutrition among weaker sections, initiatives taken by IARI are given below:

- Classification of nine nutrition rich millets as 'Nutricereals' and help promote their consumption along with better returns to the farmers.

- Development of Biofortified crops with improved nutrition is also being taken up and seventeen such crops were dedicated to nation by Honorable PM, on world food day 2020.
