

**GOVERNMENT OF INDIA  
SCIENCE AND TECHNOLOGY  
LOK SABHA**

UNSTARRED QUESTION NO:4986  
ANSWERED ON:25.04.2013  
TECH. VILLAGES  
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**Will the Minister of SCIENCE AND TECHNOLOGY be pleased to state:**

- (a) whether the Council of Scientific and Industrial Research (CSIR) has decided to concentrate on rural areas and small towns to implement latest technologies and to create awareness about their use and benefits and also depute its scientists to villages to identify technologies that would help people earn some extra income;
- (b) if so, the details thereof;
- (c) whether the CSIR is also setting up Tech. villages across the country to provide indigenous technologies in villages; and
- (d) if so, the details thereof for the 11th and 12th Plan periods and the extent to which it will help the economic growth of rural people across the country including Andhra Pradesh?

**Answer**

MINISTER OF SCIENCE AND TECHNOLOGY AND MINISTER OF EARTH SCIENCES (SHRI S. JAIPAL REDDY)

(a)&(b) Yes Madam. Council of Scientific & Industrial Research (CSIR) has been providing the S&T knowledgebase needed for the socio-economic development in the country CSIR's scheme namely, 'CSIR-800' is focused at bringing in desired S&T interventions for improving the quality of life, removing drudgery and augmenting income of the people at the base of the economic pyramid. CSIR's Technology-enabled Villages (TECHVIL) initiative through this scheme is for relevant technological interventions, skill development and upgradation for 1 million people at the base of economic pyramid.

CSIR has been adopting villages to promote employment generation and income augmentation. It has thus catalyzed commercial cultivation of Geranium in Uttaranchal and Lavender in Jammu & Kashmir through community participation. In these end to end missions, farmers have been trained not only for cultivation of Geranium and Lavender but also for extraction of oil, augmenting thus their income. Likewise CSIR has made efforts for development of niche Mentha varieties and their propagation for mass cultivation. Such efforts have contributed to economic growth and achieving global leadership position in Menthol mint oil production and export.

CSIR has set up post-harvest centres in Mizoram (Aizawl) and Arunachal Pradesh (Pashighat). These centres are focused at helping the local farmers in the region for value addition to their agricultural produce. The centres house technology for high efficiency drying and processing of ginger, cardamom, turmeric, chillies etc. The CSIR Post Harvest Technology Centres help augmenting income generating and employment opportunities.

CSIR technology development efforts aimed at socio-economic and development have led to (i) empowering people at Kashmir Valley through creation of aromatic industry; development of bio-inoculants for enhancing plant productivity and its dissemination in UP to the farmers in partnership with the State Government on a very large scale (ii) development of mushroom technology, its transfer and training benefitting economically the rural women in North East States and (iii) development of the ethnic products and their promotion for economic development of the women entrepreneurs of Manipur.

CSIR has developed indigenous substitute of Ukraine clay in granite ceramic tiles which has reduced the Ukraine clay requirement from 20% to about 1%, reducing thus the foreign material import and associated costs. This has made major economic difference and benefitted small and medium scale enterprises in Gujarat.

Over the years CSIR has developed technologies for: food and food processing; building and construction; enhancing potability of water; environment and sanitation; cultivation and processing of economic plants; rural roads; farm machinery; solar rickshaw (soleckshaw), leather; pottery etc. The technologies developed have been gainfully utilized in several states and contributed in improving quality of life and economic growth of focused villages and small towns.

CSIR is partnering with the National Innovation Council (NInC) to provide S&T interventions needed for enhancing the technological base of Micro, Small and Medium Enterprises (MSME). CSIR has adopted six clusters for the purpose. They are (i) Mango Cluster, Krishnagiri; (ii) Brass Cluster, Moradabad; (iii) Bamboo Cluster, Agartala; (iv) Auto Cluster, Faridabad; (v) Ayurveda Cluster, Thrissur; and (vi) Life Sciences Cluster, Ahmedabad. As a part of this focused effort, CSIR has developed: for Mango Cluster, Krishnagiri, a protocol for enhancing the storage life of Krishnagiri mangoes from 7 days to 35 days; for Brass Cluster, Moradabad, a lacquer has been developed to give more shine to Moradabad Brass artifacts vis-a-vis Chinese Products; and for Agartala Bamboo Cluster, cheaper alternative to Jiget binding material for making Agarbatties has been developed. These S&T interventions are contributing

towards economic growth of the targeted MSME clusters.

Under CSIR-800, technology focus areas are: (i) Affordable health and Nutrition; (ii) Potable Water and Sanitation; (iii) Affordable Housing; (iv) Sustainable Energy, (v) Value-added agriculture; (vi) Energy Efficiency; and (vii) Waste to Wealth.

CSIR scholars pursuing their PhD research in recently established AcSIR, have a mandatory requirement to undertake 4 Credit practical course of 8 weeks duration for addressing and solving a rural problem. Several hundreds of such scholars will act as a work force in implementation of S&T intervention (lab to land program) for economic value addition.

Thus CSIR scientists have been working in rural settings. These efforts will be further scaled up through TECHVILs to fulfill the desirable objectives of the CSIR-800 scheme.

(c)&(d) Strategic implementation of the CSIR-800 scheme is focused on CSIR's new initiative of several geographically distributed CSIR Technology-enabled Villages` (TECHVIL) to take fruits of S&T to footsteps of the rural people by integrating S&T solutions with people`s needs. TECHVILs form the platforms where CSIR technologies, as needed by the village communities, are focused for economic growth and improvement in quality of life.

CSIR-800 scheme has identified the districts that were declared backward by the Planning Commission in 2001 and 2010 and also figure in the list identified for joint action with the UN under UNDAF (UN Development Assistance Framework); RGF (Rajiv Gandhi Foundation); and/or PACS (Poorest Areas Civil Society).