

# Technology Interventions For Addressing Societal Needs (TIASN)

To develop and facilitate research and application of S&T based solutions to identified problems and societal needs in different parts of the country. Some specific programmes/schemes covered have targeted objectives as follows:

## I. Technology Interventions for Elderly (TIE)

- To promote research, development and adaptation of technology for improving quality of life for benefit of Elderly population in the country.

## II. S&T Interventions Involving Jawahar Navodaya Vidyalayas (JNVs)

- To promote active participation of the young ignited minds of students of Jawahar Navodaya Vidyalayas (JNV) in action projects for village development using S&T based solutions.

## III. Scheme for Young Scientists and Professionals (SYSP)

- To encourage motivated young scientists and technologists to work and apply their expertise to solutions of problems through socially relevant action research projects.

## I. TECHNOLOGY INTERVENTIONS FOR ELDERLY-TIE

Keeping in view the National Policy on Older People (NPOP), DST under its Science and Society Programme has launched a new programme on “*Technology Interventions for Elderly (TIE)*” to create an enabling environment for the elderly. The TIE programme has evolved through a series of consultations involving various stakeholders (geriatric specialists, designers, architects, social scientists, senior citizens, etc.). Five thematic workshops were also organized to deliberate on specific themes. Under this innovative programme, project proposals are supported on conceptualization, research and development for finding technological solutions to address the problems faced by the elderly population and to improve their quality of life. Prestigious academic and research institutions (AIIMS, IITs, IISc, SPA, AIIPMR, National Institute of Social Defence) and NGOs (HelpAge India) are actively associated with the TIE programme.

Possible interventions under TIE include **design and development of enabling devices, designs of homes, use of ICT in networking, recreation and entertainment, and health and nutritious food**. Academic/R&D institutions in collaboration with NGOs or industry can undertake projects under this programme. The initial focus of the programme will be through projects covering areas such as:

- a. S&T interventions on short term and long term needs of elderly population.
- b. Development of assistive/enabling devices, good designs and systems for elderly persons.
- c. Formulation of bench marks/standards and Package of Practice (POP)/Best Management Practices (BMP) for effective realization of the technology applications for elderly.

### **Some projects already supported by DST under this programme are:**

- Development of devices (gait assessment system for fall prediction)
- Compilation of a guidebook on nutritious recipes for healthy eating in old age
- Development of guidelines on residential standards for elderly
- Development of audio-visual infotainment package
- Assessment of technology status of elder helplines in Mumbai, Bangalore, Chennai and Pune
- Mobile multipurpose elderly care unit
- Instituting fellowships at master's level to attract young minds to work on special designs for elderly
- Development of a web portal capturing technologies for elders and related matters
- Technology interventions for health and psycho-social well being of elderly in NCR



## **II. S&T Interventions Involving Jawahar Navodaya Vidyalayas (JNVs)**

This is an initiative for active participation of the students and teachers of Jawahar Navodaya Vidyalayas (JNV) in action projects for rural development using S&T based solutions. The concept of this new programme is based on the premise that majority of Navodaya Vidyalayas are located in rural settings covering different agro-ecological regions in the country, and are residential. These Vidyalayas provide a good setup for motivating and implementing S&T projects with involvement of local community. Through such activities, it is hoped that students and teachers will find good opportunities and feel motivated for community based works. Also, the young ignited minds of budding scientists will find a platform to implement their ideas.

S&T interventions under this programme are expected on the following:

1. Development of a selected area near the JNV, using S&T based tools, technologies and approaches, which ultimately lead to income generation and livelihood improvement for the local community.
2. Development of an equipment/machine or a process by students and/or teachers having innovative ideas, with support from nearby research/academic organizations and experts.

The projects under this programme are expected to be a good working model for involvement of young students in solving real life problems in rural areas, and are designed as partnership effort among students, teachers and villagers. The project will have a mentor, who will provide the necessary guidance in achieving the project deliverables/outcomes.



### **III. Scheme for Young Scientists and Professionals (SYSP)**

Science & Society Division (SSD) of the Department of Science & Technology (Govt. of India) has the broad mandate of providing opportunities to motivated scientists to take up action oriented projects aiming towards socio-economic upliftment of poor and disadvantaged sections of the society through appropriate science and technology interventions. Under programmes of this Division, efforts are made to associate academic institutions, national labs and other S&T institutions (including voluntary organizations) for grassroots development initiatives.

The SYSP scheme is aimed at providing support to young scientists to pursue their bright ideas in undertaking socially relevant action research projects. Young scientists and professionals can either attempt field implementation of an idea which is already known or develop techniques for solving problems which do not have any solutions at present. This is also to encourage academic institutions, national labs and other S&T institutions (including voluntary organizations) to develop societal projects involving young scientists.

Under this scheme, the upper limit for duration of the project is 3 years. Young scientists not drawing any fellowship/salary are eligible for a consolidated monthly stipend apart

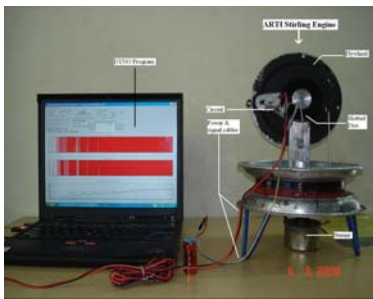
from grants for travel, contingency, consumables, minor equipments and for hiring field staff. The institute that hosts the project on approval gets a part of project grant as overheads.

### **OBJECTIVES**

- To provide opportunities to young scientists for pursuing innovative research ideas which have direct bearing on societal problems.
- To provide opportunities for interaction and exchange of ideas with scientific community.
- To involve young scientists in national S&T development process through internships in selected NGOs

### **ELIGIBILITY CONDITIONS:**

The scheme is open to young scientists, upper age limit being 35 years (40 years in case of women, SC/ST/OBC and physically handicapped candidates) and having a minimum qualification of graduation in Engineering/Medicine or Post graduation in Science.



## IV. Co-ordinated Programme on Non-Edible Oils (NEO)

This is a coordinated programme for gainful utilization of Non-Edible Oil (NEO) bearing plants by community based organizations leading to generating employment opportunities at different locations in the country (viz.-Mandi (H.P.), Medinipur (W.B.), Chhindwara (M.P.), Aizwal (Mizoram), Kharagpur (W.B.), Dehradun (Uttaranchal), Kanyakumari (T.N.), Koraput (Orissa), Churu (Rajasthan).

The activities under this programme include the following:

- ▶ Networking of rural/forest-based beneficiaries for collection and processing of TBO seeds and aromatic plants
- ▶ Location/species-specific adaptation and standardization of the generic technology package
- ▶ Field-testing and demonstration of the technology and enterprise model
- ▶ Training and capacity-building of beneficiaries and NGO partners
- ▶ Trial production -cum- marketing
- ▶ Assessment of viability, income/employment generation
- ▶ Establishing S&T linkages for each field Project and the programme as such thus evolve a viable, replicable technology package and enterprise model for dissemination throughout the country

