## New Organisational set up for Nehru Yuvak Kendras

177. PROF. NARAIN CHAND PARASHAR: Will the PRIME MINISTER be pleased to state:

- (a) whether a new organisational set up the streamline the functioning of Nehru Yuvak Kendras has since been introduced; and
- (b) if so, the main features of the new set up and the date from which it has been introduced?

THE MINISTER OF STATE IN THE DEPARTMENT OF YOUTH AFFAIRS AND SPORTS (SHRI R.K. JAICHANDRA SINGH): (a) No, Sir.

(b) Does not arise.

## Development of Solar Energy

178. SHRI AMARSINH
RATHAWA: Will the PRIME
MINISTER be pleased to state:

- (a) the details of the achievement made in regard to development of solar energy in the country;
- (b) how far it is helpful for the rural areas and particularly in adivasi areas; and
- (c) the steps being taken to popularise it in the country?

MINISTER OF STATE THE IN THE MINISTRY OF SCIENCE AND TECHNOLOGY AND IN THE DEPARTMENTS OF **OCEAN** DEVELOPMENT, ATOMIC ENERGY. SPACE AND ELECTRONICS (SHRI SHIVRAJ. V. PATIL): (a) Solar Energy is a natural source particularly for decentralised uses in the form of heat and electricity in rural, hilly and tribal areas. The Department of Non-Conventional Energy Sources is implementing a country-wide programme in the areas of solar thermal and solar

photovoltaics covering Research Development, Prototype Development, Training, Demonstration and Extension. As a result of R&D efforts, several solar thermal devices and systems have been developed and are now commercially available in the country. Among these are solar water heaters, solar air heaters, solar stills, solar kilns, solar crop dryers and solar cookers. These are being increasingly used. R&D efforts are continuing in the fields of solar passive systems, solar refrigeration and air-conditioning systems, solar thermal power generation systems etc. Several Solar thermal systems have been installed in the country with special emphasis on rural and tribal areas.

photovoltaic technology which enables the direct conversion of so'ar energy into electricity also has potential for various applications in the country. Among the applications which have been demonstrated in the country are water pumping for irrigation and drinking water supply, community and Street lighting, community TV and radio Sets, etc. R&D projects are being implemented at various institutions in the country on various aspects of photovoltaic technology. A major National Solar Photovoltaic Energy Demonstration Programme is currently being implemented by the Department of Non-Conventional Energy Sources in association with the Central Electronics Limited, B.H.E.L. and other organisations.

So far, about 50 villages have been electrified through the photovoltaic system under a programme being implemented in cooperation with Rural Electrification Corporation and State Electricity Boards.

(b) The Utilisation of solar energy can help in solving social, economic and environmental problems by preserving the forests, stopping or slowing down migration of rural population to urban areas, by making available communication and entertainment facilities, increasing agricultural productivity and creating additional employment in rural