

(b) if so, what are the details in this regard?

THE MINISTER OF STATE IN THE DEPARTMENTS OF SCIENCE AND TECHNOLOGY, ELECTRONICS AND ENVIRONMENT AND OCEAN DEVELOPMENT (SHRI CHANDRA PRATAP NARAIN SINGH): (a) and (b) Sree Chitra Tirunal Institute for Medical Sciences & Technology, Trivandrum has shown high degree of competence in the development of following important bio-medical devices:

- (i) plastic bags for the collection fractionation and storage of blood;
- (ii) cardiotomy reservoir.
- (iii) vascular grafts.
- (iv) prosthetic heart valve.
- (v) disposable blood oxygenator.

The detailed stage of development of these items are given in the Annual Report 1980-81 of Sree Chitra Tirunal Institute for Medical Sciences and Technology, Trivandrum which was placed on the House on 18-3-1982.

Energy tree

668. SHRI M. BASAVARAJU: Will the PRIME MINISTER be pleased to state:

(a) whether Government have received any information to the effect that Scientists in Philippines have discovered a new 'energy' whose nut can be used as a torch or lamp;

(b) if so, what are the details thereof;

(c) whether Government propose to cultivate the said tree in our country, and

(d) if not, the reasons therefor?

THE MINISTER OF STATE IN THE DEPARTMENTS OF SCIENCE AND TECHNOLOGY, ELECTRONICS AND ENVIRONMENT AND OCEAN DEVELOPMENT (SHRI CHANDRA PRATAP NARAIN SINGH): (a) and (b) Government is aware of the

tree in Philippines whose nuts have been used to yield an oil similar to kerosene. The common name of the plant is "Wax Tree" and the botanical name is 'Alerurites-moluccane' (family Euphorbiaceae). It is a native of Philippines, Malaysia and some other countries in the Pacific Islands. The nuts of the tree yield an oil called 'Tung Oil' which is rich in Hydrocarbons. The oil is used for lighting purposes and for manufacture of paints and varnishes.

(c) and (d) The tree is also cultivated and grows wild in South India and Assam. This species, in addition to other fast-growing and hydrocarbon-yielding species has been identified for further details investigation including field trials under the programme on production of Biomass sponsored by the Commission for Additional Sources of Energy.

Promotion of solar research

669. SHRI M. BASAVARAJU: Will the PRIME MINISTER be pleased to state:

(a) whether it is fact that the solar research and promotion budget of the U.S. Government is bigger than the entire Research and Development Budget of India; and

(b) if so, what steps Government propose to take provide adequate support to the country's solar scientists, both morally and financially?

THE MINISTER OF STATE IN THE DEPARTMENTS OF SCIENCE AND TECHNOLOGY, ELECTRONICS AND ENVIRONMENT AND OCEAN DEVELOPMENT (SHRI CHANDRA PRATAP NARAIN SINGH): (a) and (b) No, Sir, However, funds allocated in India for new and renewal sources of energy, including solar energy, have been modest; though with the setting up of the Commission for Additional Sources of Energy last year, allocation and utilization have significantly increased, as compared with the previous years. It is expected that the allocations would in-