

(d) if so, whether Government has taken any action plan to improve the situation;

(e) whether one of the reasons for low production of the nuclear energy in India is because of the fear attached to it; and

(f) if so, the steps taken by Government to convince all about the safety of nuclear energy?

THE MINISTER OF STATE IN PRIME MINISTER'S OFFICE (SHRI V. NARAYANASAMY): (a) There is a need to increase the per capita consumption of electricity to spur economic growth in the country. Nuclear energy is a clean source of electricity generation which has huge potential and needs to be deployed in addition to other sources of electricity to meet growing demand of electricity in the country.

(b) The Government has taken steps to augment nuclear energy generation by setting up nuclear power reactors based on indigenous technology and also with foreign technical cooperation.

(c) The share of nuclear energy in the total electricity generation in the country was about 3.6% in the year 2012-13.

(d) The low share of nuclear power is on account of low installed capacity base, which is currently 4780 MW out of the total installed capacity of 223344 MW in the country. The present nuclear power installed capacity will reach to 10,080 MW by 2017 on progressive completion of projects under construction. The Twelfth Five Year Plan proposals envisage start of work on new projects totaling to 17400 MW capacity. More nuclear power plants are planned to increase the nuclear power capacity in future.

(e) and (f) The Fukushima accident in Japan led to apprehensions about safety of nuclear power in some sections of the people. A massive public outreach programme has been undertaken, adopting a multi-pronged approach, to reach out to all sections of the society and allay the apprehensions about the safety of nuclear power and all related issues in a credible manner.

Safety measures in Kudankulam Nuclear Power Plant

3879. SHRI T.K. RANGARAJAN: Will the PRIME MINISTER be pleased to state:

(a) the additional safety measures incorporated in Kudankulam Nuclear Power Plant;

- (b) the contribution of Indian Engineers for such safety;
- (c) whether there is any proposal to allot the entire power produced by Project-I to power starving Tamil Nadu; and
- (d) the cost of per unit power produced?

THE MINISTER OF STATE IN PRIME MINISTER'S OFFICE (SHRI V. NARAYANASAMY): (a) and (b) Several additional safety features have been incorporated in the Kudankulam reactors over the features in standard VVER 1000 reactors of second generation in operation after in-depth review by Indian engineers, both from the utility (Nuclear Power Corporation of India Limited) and the regulatory authority (Atomic Energy Regulatory Board). Some of the important additional features in Kudankulam reactors over earlier VVER 1000s are:—

- (i) Four safety trains instead of three
- (ii) Passive Heat Removal System
- (iii) Passive core flooding system
- (iv) Core Catcher
- (v) Passive Hydrogen Recombiners
- (vi) Double Containment
- (vii) Four Emergency Diesel Generators instead of three
- (viii) Larger number of reactor control rods
- (c) No, Sir.
- (d) The tariff of electricity from Kudankulam Units 1 and 2 is yet to be notified.

Funds for welfare of the people around Kudankulam

3880. DR. V. MAITREYAN: Will the PRIME MINISTER be pleased to state:

- (a) whether the Nuclear Power Corporation of India Limited (NPCIL) or Union Government have allocated funds or monetary package to carry out the welfare of the people around Kudankulam;
- (b) if so, the details thereof and the amount allocated so far;