PSLV. The 125 tonne solid propellant booster, the third largest booster of its kind in the world, was tested successfully. A 37.5 tonne liquid rocket engine having the heritage of Ariane Launch Vehicle has been indigenously realised and successfully tested. The first developmental flight of PSLV is scheduled for 1991-92.

- 7. In order to achieve self-reliance in the launching of INSAT Class satellites, development of Geosynchronous Launch Vehicle (GSLV)) and a Cryogenic Engine & Stage has been envisaged. With the succesful accomplishment of the Polar Satellite Launch Vehicle (PSLV) Project, capability to launch Indian Remote Satellites (IRS) can Sensing be achieved and the development of Geostationary Satellite Launch Vehicle (GSLV) will help to achieve capability to launch IRS/INSAT satellites, around the mid-nineties.
- 8. The sounding rocket launch station at Thumba and Balasore are being used for conducting space science experiments. The national rocket launching station at Sriharikota has been developed for launching of SLV-3 ASLV PSLV already.
- Expertise and facilities have been established in the country for tracking, commanding and controlling Geosynchronous satellites, Polar Synsynchronous satellite and Lowearth orbiting satellites.
- 10. The Indian industry, in the public and private sectors, has been involved as a major partner in the Indian Space Programme. Indigenous capability has been established in critical high technology areas like Maraging Steel, Propellant materials, Inertial Systems, Space-craft Mechanisms. Optical Sensors etc. A number of technologies developed by the Department of Space have been successfully transferred to industry for commercial exploitation.
- 11. It has been possible to build up and sustain a competent, dedicated and trained manpower in this high tech-

nology area. Innovative management system have been evolved for the management of complex space projects.

12. Space research is a continuous process of Research & Development. Self reliance and a high degree of self-sufficiency in the various application areas can be achieved with the successful accomplishment of the projects and programmes mentioned above.

Import of High Technology in the Field of Science and Technology

2334.SHRI VITHALRAO MADHAV-RAO JADHAV:

SHRI H. HANUMANTHAPPA:

## SHRI PRABHAKAR B. KORE:

Will the PRIME MINISTER be pleased to state:

(a) what are Government's plans for the import of high technology in the field of Science and Technology;

(b) what has been the percentage of contribution of Science and Technology Department especially by CSIR, to provided indigenous high technology to our sophisticated and modern industries; and

(c) what amount of foreign exchange is spent per year for importing new technology?

THE MINISTER OF STATE IN THE MINISTRY OF SCIENCE AND TECH-NOLOGY (PROF. M. G K. MENON): (a) As per the Technology Policy of the Covernment, in the acquisition of knowhow from abroad, the import of technology is permitted on a selective basis where need has been established: technology does not exist within the country: and the time taken to generate technology indigenously would delav the achievement of development targets. Technology acquisition from outside shall not be at the expense of national interest. In the acquisition of technical know-how, consideration is given to the choice and source of technology, alternative means of acquiring it and its role in meeting a major felt need.

(b) Major research organisations such as CSIR, Departments of Space, Atomic Energy and Electronics as also DRDO, ICAR and ICMR have made significant contributions in building a strong S&T infrastructure in the country. Indigenous high technology inputs have been provided to some of our sophisticated and modern industries. A large number of items in areas such as electronics, catalysis, pesticides, chemicals etc. can be cited in this regard. In addition, the S&T infrastructure has also contributed in the indigenisation of the imported technology over a period of time. It has been estimated that the total industrial production attributable to the indigenous and indigenised technologies could be of the order of about 50 per cent. It is not possible to indicate a separate percentage of high technology as that would involve definitions of sectors and of technologies within these.

(c) The payments approved for import of technology during the last three years is of the order of about Rs. 650 Cr annually.

## Generation of Power by Means of Atomic Energy

## 2335. SHRI VITHALRAO MADHAV-RAO JADHAV·

SHRI H. HANUMANTHAPPA:

SHRI PRABHAKAR B. KORE:

Will the PRIME MINISTER be pleased to state what would be the total atomic power generated at the end of 8th Five Year Plan?

THE MINISTER OF STATE IN THE MINISTRY OF SCIENCE AND TECHNOLOGY (PROF. M. G. K. MENON): The total installed nuclear power capacity by the end of 8th Five Year Plan is expected to grow to 2170 MWe भारतीय सांख्यिकीय लेवा का काडर नियंत्रण करने वाले ग्राधिकारी

2336. श्री अनन्तराम जायसवाल : क्या प्रधान मंद्री यह बताने की कृपा करेंगे कि :

(क) भारतीय सांख्यिकीय सेवा का काडर-नियंत्रण कितने ग्रधिकारियों को सौंप: गया है तथा क्या वर्तमान ग्रधिकारी इस काडर का सही प्रकार से प्रबध करने में समर्थ है ;

(ख) यदि नहीं, तो क्या सरकार इन म्रधिकारियों की संख्या में वृद्धि करने का विचार रखती है ;

(ग) इनमें से प्रत्येक ग्रधिकारी कितने वर्षों से यह कार्य कर रहा है तथा क्या उसका सामान्य ग्राधारों पर तबादला नहीं किया जा रहा है; यदि हां, तो उसके क्या कारण हैं ; ग्रोर

(घ) क्या सरकार इस व्यवस्था के सुचारू रूप से कार्यकरण के लिये इस विषय पर विचार करने का विचार रखती है?

योजना मंत्रालय में राज्य मंत्री ग्रौर कार्यक्रम कार्यान्वयन मंत्रालय में राज्य मंत्री (श्री भागेय गोवर्धन) ः (क) से (घ) सांख्यिकी विभाग के सचिव की भारतीय सांख्यिकीय सेवा के संवर्ग नियंत्रण कार्यों में सहायता एक उप सचिव तथा एक ग्रवर सचिव द्वारा की जाती है । इन ग्रधिकारियों को कार्य की ग्रन्य मदें भी सौंपी गई हैं। उप सचिव इस कार्य को लगभग 1 वर्ष ग्रौर 10 महीनों से तथा ग्रवर सचिव लगभग 5 वर्ष म्रीर 10 महीनों से इस कार्य को कर रहे हैं । व्यवस्था संतोषजनक ढंग से कार्य कर रही है तथा किसी तत्काल परिवर्तन पर विचार नहीं किया जा रहा है ।