

# RAJYA SABHA

Thursday, the 8th August, 1985|17  
 Sravana, 1907 (Saka)

The House met at eleven of the clock,  
 Mr. Chairman in the Chair.

## ORAL ANSWERS TO QUESTIONS

### "INSAT-IC"

\*241. SHRIMATI MAIMOONA  
 SULTAN:†

DR. H. P. SHARMA:

Will the PRIME MINISTER be pleased to state what is the cost involved in the manufacturing the INSAT-IC?

THE MINISTER OF STATE IN THE DEPARTMENT OF POWER (SHRI ARUN NEHRU): The procurement cost of the INSAT-IC satellite is about U.S. Dollar 51.5 Million.

SHRI R. RAMAKRISHNAN: Maiden speech (*Interruptions*).

MR. CHAIRMAN: Maiden answer.

SHRIMATI MAIMOONA SULTAN: Mr. Chairman, Sir, I shall be very brief, lest I should be stopped by you.

MR. CHAIRMAN: I am glad you are taking lessons properly. (*Interruptions*)

SHRIMATI MAIMOONA SULTAN: The Annual Report on the Department of Space states on page 12 (last para) that relating to INSAT-IC new design features have been incorporated to overcome the difficulties experienced in the orbit raising phase of INSAT-IB. May I know what is the nature of these difficulties experienced in the working of INSAT-IB and what new design features have been incorporated in INSAT-IC to overcome it?

†The question was actually asked on the floor of the House by Shrimati Maimoona Sultan.

SHRI SHIVRAJ PATIL: There was difficulty in spreading the solar array? We have tried to modify the INSAT-IC to overcome that difficulty.

MR. CHAIRMAN: Secpnd supplementary.

SHRIMATI MAIMOONA SULTAN: Sir, the INSAT programme represents India's first step towards implementing operational space system for identical national requirement. Now again, reading from the Annual Report one gathers that the distribution of fund going to this Department is going down from year to year. May I know the reasons for slashing down the expenditure, as it will in any way delay the goal of self-reliance in this particular field?

MR. CHAIRMAN: Not relevant. This relates to the cost of procurement of INSAT-IC.

SHRIMATI MAIMOONA SULTAN: Sir,....

MR. CHAIRMAN: No. Please sit down, Mr. Ramachandra Rao.

PROF. B. RAMACHANDRA RAO: Mr. Chairman, Sir, the cost of INSAT-IC satellite is about U.S. Dollars 51.5. (*Interruptions*) Is it more than that of INSAT-IB? If it is more, I would like to know whether it is due to the fact that there are additional facilities provided or whether it is due to cost escalation. It is understood that there are three facilities: long distance tele-communication, matereological observations and direct satellite. Both of them have a number of channels.

SHRI SHIVRAJ PATIL: Sir, the INSAT-IC is going to be identical with the INSAT-B. No new facilities are added to it. To manufacture INSAT-IB a contract was entered into in 1978. To manufacture INSAT-IC the contract has taken place in 1983. So the five year period is there in between the two INSATs. So the escalation which has taken place in all respects has also been taken into account. There are certain modifications suggested by our scientists to overcome

the difficulties. And then when INSAT-IB was manufactured, we had ordered for two satellites. At the time of INSAT-IC manufacture order only one was ordered. And these are custom made things which are not manufactured on a large scale.

MR. CHAIRMAN: Mr. Gupta.

SHRI VISHWA BANDHU GUPTA: I would like to know from the hon. Minister whether the cost of INSAT-IC is more or less, as compared to similar satellites...

MR. CHAIRMAN: You are repeating the question. Anything else to ask?

SHRI VISHWA BANDHU GUPTA: This question has not been asked. I am asking whether the cost has been more than the cost of satellites manufactured in other countries, and...

MR. CHAIRMAN: The question has been asked and the reply has been given that there has been cost escalation during five years and that...

SHRI VISHWA BANDHU GUPTA: That is not the question. I am asking whether it is more than what other countries are spending on similar satellites. The other is that when we are spending millions of dollars on satellites, the main question that arises is whether this is going to be proportionately utilized by us and when do you think this money will come back to us?

SHRI SHIVRAJ PATIL: Our satellite is a unique satellite. (Interruptions)

SHRI DIPEN GHOSH: Obviously. (Interruptions)

SHRI SHIVRAJ PATIL: It helps us in telecommunication, TV propagation and meteorology. All these functions are being done by only one satellite. It is a multi-purpose satellite. So this kind of satellite, as far as my knowledge goes, has not been manufactured by any other country. Therefore, there cannot be a comparison between the two. (Interruptions)

Sir, the functions which are to be done by the satellite were done within a short period. But Hon'ble Prime Minister got the programme prepared and now by the end of this year all the programmes will be available to us with the help of this satellite—telecommunication, TV and Radio. As far as counting the benefits coming out of the satellites are concerned, Sir, this is a very, very difficult and tricky question. It is very difficult to quantify the benefits which may come out of it. This satellite helps us by giving disaster warning, and if a warning is not given in time and if lives are lost, what is the cost of lives?—that is a question. Now, this satellite helps us in assuring telecommunication at the places far away from important places. Now, we have cable communication, the microwave communication and this kind of communication which has assured communication facilities. Now, in certain periods when there are difficulties, if the assured communication facility is available, what is the cost of the benefit which we derive from this?—this is also a question. Education is given importance through this facility. What is the cost of education?

So, Sir, I would humbly like to submit to this honourable House that in all cases, in cases like these, the cost benefit ratio becomes very difficult to arrive at. I would simply say that the cost is going to be too less compared to the facilities provided by conventional methods. And if we count in terms of money which we have spent also, this is going to be a very, very cost effective. I would say that the cost of the facilities provided by conventional methods is going to be a hundred times more than the benefits which are actually provided to the people with this modern technology.

SHRI SUKOMAL SEN: There is a report that while we launched INSAT-IB we entered into a joint research project on weather with the U.S.A. And it is reported that it contains some sensitive data which can be utilized by the U.S. Government for strategic purpose. I would like to know whether this Press

report is correct that the U.S. Government is not fully cooperating with the Indian Government in giving their satellite data?

SHRI SHIVRAJ PATIL: Sir, we have not entered into any kind of contract for this purpose with the USA. This satellite is available over the Indian Ocean region. This is only one satellite and we are collecting the data with the help of this satellite, and the countries in the region are interested in knowing this data. Wherever it is possible, we are helping them. We have helped Bangladesh and Pakistan also at the time of cyclone with the help of this data which is available to us.

DR. LOKESH CHANDRA: In view of the escalation of cost of INSAT-IC, will the Minister kindly enlighten the House whether the INSAT-IC will be in operation while the INSAT-IB goes out, as its EOL is exhausted by the end of this year? And if it is not go, what will happen in the intervening six or seven months before the INSAT-IC is launched in the middle of 1986?

SHRI SHIVRAJ PATIL: Sir, INSAT-IB is going to be in the orbit upto 1989 or it may be there beyond 1989 also. INSAT-IC is going to be launched next year. In the first half of the next year, it will be launched. So, the capability of INSAT-IB will be available to us. The arrangement is to have two satellites in the orbit so as to make the facilities dependable.

SHRI VITHALRAO MADHAVRAO JADHAV: Sir, the work on INSAT-IC is progressing satisfactorily. Its delivery is presently projected slightly ahead of the stipulated delivery date of 31st January, 1986. Its launch is scheduled in July, 1986 by Flight 61-M of the US-NASA space shuttle. And Indian payload specialist is also scheduled to fly with INSAT-IC on the space shuttle flight No. 61-M. A successful launching and operationalisation of INSAT-IC in the third quarter of 1986 will complete the initial INSAT-I space segment consisting of two identical multipurpose satellites, one as primary satellite and the other as an active spare  
... (Interruptions)

MR. CHAIRMAN: He has not exhausted two minutes. That is why I am allowing him.

SHRI VITHALRAO MADHAVRAO JADHAV: Sir, INSAT-I and INSAT-II, that is, the new generation of satellites, will be launched in 1990 or 1991. So, in view of that Sir, I would like to ask as to what is the TV and telecommunication capacities utilised by the new generation satellites. And secondly, Sir, an Indian payload specialist is also scheduled to fly along with INSAT-IC. What studies will be carry by this space flight?

MR. CHAIRMAN: I do not know if you have understood all the questions which he has put.

SHRI VITHALRAO MADHAVRAO JADHAV: Sir, should I repeat it?

MR. CHAIRMAN: No, no.

SHRI SHIVRAJ PATIL: Sir, 166 TV stations are serviced by the INSAT-IB. The same capacity is available on INSAT-IC also. But we do not intend to use the capacity on INSAT-IC fully because that satellite is to give a backing to INSAT-IB and to see that the facilities are available for all the time if some defects develop in some of the satellites. As far as the capacity of INSAT-II is concerned, roughly it is going to be one-half times of the capacity available in INSAT-IB. As far as the experiments the scientists would carry on the space shuttle are concerned, they would be of different nature. They are going to fix the parameters, and within the parameters the experiments will be carried on. The first thing that would be observed is the metabolic effect on the body of the scientists who would be launched. Then he would be taking some imageries also and so many other things, details of which can be given in writing to the hon. Member.

SHRI PAWAN KUMAR BANSAL: Mr. Chairman, Sir, I would like to know from the hon. Minister as to whether the Indian payload specialist who has to fly has been selected for the purpose and if so, what is the total cost that has been incurred on the training.

**SHRI SHIVRAJ PATIL:** Sir, we have selected two scientists and they will be trained and they would be launched. As far as the cost is concerned, Sir, I may need notice. But it is roughly in the vicinity of one or two crores of rupees.

**श्री रामानन्द यादव :** मैं मंत्री महोदय से जानना चाहता हूँ कि इन्सैट-1 सी के फ़ैब्रीकेशन में भारतीय कितनी मात्रा में हैं ? हमारा इन्सैट-1 बी से इन्सैट-1 सी में कितना फर्क है, दोनों में क्या फर्क है ? तीसरा यह कि इन्सैट-1 सी की लाइफ कितने दिनों की है और इससे क्या फायदा है ?

**श्री शिवराज पाटिल :** हमारे जो सेटेलाइट्स हैं उसकी जो कल्पना है वह पूरी-पूरी भारतीय कल्पना है। किसी भी चीज को बनाने में सबसे पहली चीज आती है जो महत्व की चीज होती है वह है कल्पना। तो एक ही सेटेलाइट पर तीन प्रकार के काम करने की क्षमता की कल्पना और अन्य कल्पनाएँ पूरी तरह हमारी हैं और बाकी की चीजें हमने दूसरे देशों की मदद से की हैं। इनसैट-1ए, 1बी और 1सी में क्या अंतर है इस का जवाब मैंने पहले ही दिया है। सिर्फ इतना ही अंतर है कि सौर पट्टी के खुलने में जो मुश्किल आयी थी वह मुश्किल न आयी इसलिए उसके अंदर कुछ अंतर किया गया है, उसके अंदर कुछ फर्क किया गया है और इसका क्या उपयोग हो सकता है इसके बारे में बहुत कुछ हमने पहले ही बताया है। अगर आप की इजाजत हो तो यह कहना चाहूँगा कि इसके संबंध में हमने 12 और 13 तारीख को लोक सभा और राज्य सभा के सारे सदस्यों को विनती की है कि हमारे ये इनसैट किस काम के हैं और उनका क्या उपयोग होता है वे कैसे काम करते हैं इस के बारे में 5 मिनट में नहीं बल्कि दो घंटे में फिल्म और स्लाइड्स की सहायता से हम कुछ बताने की कोशिश कर रहे हैं। मैं इतना ही कहूँगा कि इसकी बजह सहम टो० बी० का उपयोग कर सकते हैं और वातावरण की मालूमत दे सकते हैं और संचार के लिए भी उसका उपयोग होता है और शिक्षण के लिए भी हम उसका उपयोग कर

रहे हैं और जो आपन यूनिवर्सिटी की कल्पना है वह हमसे साकार हो सकेगी और जो अच्छे टीचर्स है सारे देश के लिये सुलभ हो सकें वह कल्पना भी साकार हो सकेगी और बहुत-सी ऐसी चीजें हैं जो थोड़ी देर में नहीं कही जा सकतीं।

#### Investment in Karnataka

\*242. DR. BAPU KALDATE: Will the PRIME MINISTER be pleased to state:

(a) whether Government have taken a decision that no Central or major Private sector investment should be allowed in Karnataka as alleged by the Chief Minister of Karnataka; and

(b) if so, what are the reasons therefor?

THE MINISTER OF STATE IN THE MINISTRY OF PLANNING (SHRI K. R. NARAYANAN): (a) No, Sir.

(b) Does not arise.

MR. CHAIRMAN: What is your supplementary on that?

DR. BAPU KALDATE: Yes, Sir, I have got a supplementary. Just because the Central Government thinks that a question does not arise, does not mean that there is no question. The questions are very much there and they are irritating the people of Karnataka. Sir, the Government must be responsive to the aspirations of the people. If you are responsive, then the people are responsible. But if you do not respond to the aspirations of the people then there is always the danger of the people being irresponsible.

AN HON. MEMBER: What is your question?

DR. BAPU KALDATE: Yes, yes, I am asking it and two minutes are given for that. You know that when the Government becomes irresponsible what happens is what we have seen in Punjab and Assam.

MR. CHAIRMAN: No, no.

DR. BAPU KALDATE: O. K. Sir, Sir, the Karnataka people are very responsible. (Interruptions). I know, Madam, the Karnataka people are responsible.