

say the loan will be given only against the bank deposit. This complaint is about every bank in Gujarat ...*(Interruptions)* Whether the hon. Minister will send instructions to bank managers not to insist on deposits in clearing the loan cheques and also disburse full amount of loan. The operation of small touts be stopped.

[English]

SHRI KINJARAPPU YERRANNAIDU : Sir, I will call a meeting of the concerned officers and give the necessary directions to them. This type of complaints are coming from so many States that there is some problem with the banks.

[Translation]

#### Launching Satellites

\*203. DR. SAHEBRAO SUKRAM BAGUL : Will the PRIME MINISTER be pleased to state :

(a) the number of Satellites launched by India so far;

(b) the details of cost and achievements by each of these Satellites;

(c) whether the Government propose to launch more Satellites in future; and

(d) if so, the details of progress made in this regard?

[English]

THE MINISTER OF STATE OF THE MINISTRY OF PLANNING AND PROGRAMME PLEMENTATION AND MINISTER OF STATE OF THE MINISTRY OF SCIENCE AND TECHNOLOGY (SHRI YOGINDER K. ALAGH) : (a) to (d). A statement is laid on the Table of the Lok Sabha.

(a) Twenty-five satellites have been launched by India so far.

(b) Details of cost and achievements of these satellites are given in the Annexure.

(c) Yes, Sir.

(d) The follow-on satellites in the INSAT series, INSAT-2D and INSAT-2E. Planned for launch by the end of 1996 and 1997, respectively, are in an advanced stage of development and fabrication.

The follow-on satellites in the IRS series, IRS-1D and IRS-P4, planned for launch during 1997/1998, are under fabrication.

Two experimental communication satellites, namely, GSAT-1 and GSAT-2 are planned for launch by first two developmental launches of Geosynchronous Satellite Launch Vehicle (GSLV) during 1997/98 and 1998/99, respectively.

#### ANNEXURE

##### Details of cost and achievements of satellites launched by India

S.No.	Satellites	Cost (in Crores)	Launch Date	Achievements
1	2	3	4	5
1.	Aryabhata	5.09	19.04.1975	Successful. First Indian satellite. Provided technological experience in building and operating a satellite system. Launched by Russian launch vehicle Intercosmos. Free launch.
2.	Bhaskara-I	7.95	07.06.1979	Successful. First experimental remote sensing satellite. Carried TV and microwave cameras. Launched by Russian launch vehicle Intercosmos. Free launch.
3.	Bhaskara-II		20.11.1981	Successful. Second experimental remote sensing satellite similar to Bhaskara-I. Provided experience in building and operating a remote sensing satellite system on an end-to-end basis. Launched by Russian launch vehicle Intercosmos. Free launch.
4.	Ariane Passenger Payload Experiment (APPLE)	17.97	19.6.1981	Successful. First experimental communication satellite. Provided experience in building and operating a three-axis

1	2	3	4	5
				stabilised communication satellite. Launched by the European Ariane launch vehicle. Free launch.
5.	Rohini Technology Payload (RTP)		10.08.1979	Unsuccessful. Intended for measuring in flight performance of first experimental flight of SLV-3, the first Indian launch vehicle. Could not be placed in orbit due to launch vehicle failure. Indigenous developmental launch.
6.	Rohini (RS.-1)	2.62 (Total cost of Rohini series)	18.07.1980	Successful. Used for measuring in-flight performance of second experimental launch of SLV-3. Indigenous developmental launch.
7.	Rohini (RS.-D1)		31.05.1981	Successful. Used for conducting some remote sensing technology studies using a landmark sensor payload. Launched by the first developmental launch of SLV-3. Indigenous developmental launch.
8.	Rohini (RS.-D2)		17.04.1983	Successful. Identical to RS-D1. Launched by the second developmental launch of SLV-3. Indigenous developmental launch.
9.	Stretched Rohini Satellites Series (SROSS-I)		24.03.1987	Unsuccessful. Carried payload for launch vehicle performance monitoring and for Gamma Ray astronomy. Could not be placed in orbit due to failure of first developmental flight of Augmented Satellite Launch Vehicle (ASLV). Indigenous developmental launch.
10.	Stretched Rohini Satellite Series (SROSS-2)	13.26 (Total cost of SROSS series)	13.07.1988	Unsuccessful. Carried a remote sensing payload of German space agency in addition to Gamma Ray astronomy payload. Could not be placed in orbit due to failure of the second developmental flight of ASLV. Indigenous developmental launch.
11.	Stretched Rohini Satellite Series (SROSS-C)		20.05.1992	Successful. Launched by third developmental flight of ASLV. Carried Gamma Ray astronomy and aeronomy payload. Indigenous developmental launch.
12.	Stretched Rohini Satellite Series (SROSS-C2)		04.05.1994	Successful. Launched by fourth developmental flight of ASLV. Identical to SROSS-C. Still in service. Indigenous developmental launch.
13.	Indian National Satellite (INSAT-1A)		10.04.1982	First operational multi-purpose communication and meteorology satellite procured from USA. Worked only for six months. Launched by US Delta launch vehicle.
14.	Indian National Satellite (INSAT-1B)	468.57 (Total cost of INSAT-1 series)	30.08.1983	Successful. Identical to INSAT-1A. Served for more than the design life of seven years. Launched by US Space Shuttle.
15.	Indian National Satellite (INSAT-1C)		21.07.1988	Same as INSAT-1A. Served for only one and a half years. Launched by European Ariane launch vehicle.

1	2	3	4	5
16.	Indian National Satellite (INSAT-1D)		12.06.1990	Successful. Identical to INSAT-1A. Launched by US Delta launch vehicle. Still in service.  The cost of Rs. 468.57 crores includes launch services and insurance for INSAT -1 series of satellites.
17.	Indian National Satellite (INSAT-2A)	527.94 (Total cost of INSAT-2A & INSAT-2B)	10.07.1992	Successful. First satellite in the second generation Indian-built INSAT-2 series. Has enhanced service capability compared to INSAT-1 series. Launched by European Ariane launch Vehicle. Still in service.
18.	Indian National Satellite (INSAT-2B)		23.07.1993	Successful. Second Satellite in INSAT-2 series. Identical to INSAT-2A. Launched by European Ariane Launch vehicle. Still in service.  The cost of Rs. 527.94 crores includes launch services and insurance.
19.	Indian National Satellite (INSAT-2C)	1265.80 (Total cost of INSAT-2C, INSAT-2D & INSAT-2E)	07.12.1995	Successful. Has additional capabilities such as mobile satellite service, business communication and television outreach beyond Indian boundaries. Launch by European launch vehicle. Still in service. The cost of Rs. 1765.80 crores includes launch services and insurance. INSAT-2D and 2E are yet to be launched.
20.	Indian Remote Sensing Satellite (IRS-1A)		17.03.1988	Successful. First operational remote sensing satellite. Launched by a Russian Launch Vehicle Vostok.
21.	Indian Remote Sensing Satellite (IRS-1E)	105.29	29.08.1991	Successful. Same as IRS-1A. Launched by a Russian Launch Vehicle, Vostok. Still in service.
22.	Indian Remote Sensing Satellite (IRS-1E)		20.09.1993	Unsuccessful. Carried remote sensing payloads. Could not be placed in orbit due to failure of first developmental launch of PSLV.  The cost of Rs. 105.29 crores includes the foreign procured launch cost of IRS-1A and IRS-1B. IRS-1E was launched indigenously by PSLV.
23.	Indian Remote Sensing Satellite (IRS-P2)	17.90	15.10.1994	Successful. Carries remote sensing payload. Launched by second developmental flight of PSLV. Still in service.
24.	Indian Remote Sensing Satellite (IRS-1C)	235.85	28.12.1995	Successful. Carries advanced remote sensing cameras. Launched by Russian Molniya launch vehicle. Still in service.  Cost of Rs. 185.85 Crores shown includes that of IRS-1D satellite which is yet to be launched. The cost also includes the foreign procured launch cost of Rs. 50 crores of IRS-1C.

1	2	3	4	5
25.	Indian Remote Sensing Satellite (IRS-P3)	28.75	21.03.1996	Successful. Carries remote sensing payload and an X-ray astronomy payload. Launched by third developmental flight of PSLV. Still in service.

## [Translation]

DR. SAHEBRAO SUKRAM BAGUL : Mr Deputy-Speaker, Sir, may I know from the hon. Minister whether all the satellites launched so far were made in India and if not how many of them were made in India and whether India possesses the technical know-how there of, and also the names of the satellites developed abroad ?

SHRI YOGINDER K. ALAGH : Initially four out of twenty five satellites were developed in foreign countries. Now we have developed 21 satellites indigenously.

DR. SAHEBRAO SUKRAM BAGUL : May I know the number of satellites out of them, for which foreign assistance was received.

SHRI YOGINDER K. ALAGH : Sir, we import some components for these satellites and some components are indigenously developed. If the hon. Member wants I can give details about four satellites developed many years ago....(Interruptions).

SHRI VIJAY ANNAJI MUDE : The question is whether foreign assistance was obtained in the development of satellites made in India ?

SHRI PRABHU DAYAL KATHERIA : The hon. Member wants to know the amount of foreign assistance involved in the satellites developed by India.

SHRI YOGINDER K. ALAGH : When sophisticated equipments like satellites and launch vehicles are developed it is necessary to import some components from abroad.

SHRI VIJAY ANNAJI MUDE : May I know whether foreign technique was made use of in the indigenously developed satellites and if so, in how many satellites it was made use of ?

SHRI YOGINDER K. ALAGH : In the four satellites developed earlier....(Interruptions)

DR. MURLI MANOHAR JOSHI : This is a very vital question and it will be better if the hon. Prime Minister enlightens the House on the subject because I feel, the hon. Minister has not done his home work properly. This is a very important question....(Interruptions).

MR. DEPUTY-SPEAKER : Please speak one by one.

DR. MURLI MANOHAR JOSHI : He is not able to give proper answer. Had he given satisfactory answer I would not have felt concerned. I have some knowledge of science and this satellite science. I will therefore,

request him to give information to this House. The Minister is not replying to the question relevantly. The reply is totally different from the question asked.

SHRI YOGINDER K. ALAGH : This is not so.

DR. MURLI MANOHAR JOSHI : The question is : what percentage of components Government imports. This can be replied, but he does not want to reply it.

SHRI YOGINDER K. ALAGH : The four old satellites ....(Interruptions).

DR. MURLI MANOHAR JOSHI : He wants information about 21 satellites Government has now launched and not about the old ones. The details about these old ones has already been published in the press. The simple question is the percentage of components imported the percentage developed indigenously and whether any foreign assistance was obtained for launching these satellites ? He should give a straight reply to thier questions.

SHRI YOGINDER K. ALAGH : I want to give the answer to his question. The four old satellites were made by Ford Aerospace....(Interruptions). You are asking question and I am answering. You must listen to me.

We spent Rs. 300 crore on them. If the hon. Member has the courtesy to see the answer it is given in Annexure-1. Information has been given therein in respect of the satellites we have launched so far.

SHRI GEORGE FERNANDES (Nalanda) : He has said that Rs. 300 crore were spent on the first four satellites....(Interruptions).

SHRI YOGINDER K. ALAGH : Please see column-3.

SHRI GEORGE FERNANDES : He means to say that Rs. 300 crore were spent on the first four satellites. The break up of expenditure involved in them is Rs. 5.9 crore, Rs. 7.95 crore, Rs. 17 crore....(Interruptions).

SHRI YOGINDER K. ALAGH : In the first four ones ....(Interruptions).

SHRI GEORGE FERNANDES : I am also talking about the first four satellites which were launched in 1975, 1979, 1981 and 1981.

SHRI YOGINDER K. ALAGH : The hon. Member should note that we are discussing 21 satellites ....(Interruptions)

SHRI GEORGE FERNANDES : He says that Rs. 300 crore were spent on the first four satellites but the question is about all the satellites....(Interruptions).

SHRI YOGINDER K. ALAGH : I would like to tell hon. Members...(Interruptions)

SHRI GEORGE FERNANDES : More than Rs. 1000 crore have been spent on all the satellites. How can he say Rs. 300 crore ? Each satellite has cost Rs. 300 crore. What reply he is giving ? The hon. Prime Minister is not responding, it is his portfolio.

[English]

SHRI YOGINDER K. ALAGH : The hon. Member wants information on 25 satellites....(Interruptions)

SHRI G.G. SWELL : Have you received the cryogenic engines and technology from Russia in order to launch a satellite into the geosynchronous orbit? ... (Interruptions). There is no time for you to give reply to my question. You should be relevant.

SHRI YOGINDER K. ALAGH : The hon. Member wants information on 25 satellites. Out of 25 satellites, we have got four satellites with major import. They were got fabricated abroad. They have been got from abroad. ....(Interruptions).

SHRI G.G. SWELL : Did you understand my question?

SHRI YOGINDER K. ALAGH : They do not have this technology.

12.00 hrs.

SHRI G.G. SWELL : Have you got a cryogenic engine from Russia as promised in order to launch the satellite into the geo-synchronous orbit? I think you did not understand my question.

SHRI YOGINDER K. ALAGH : Can I answer that question?....(Interruptions).

SHRI G.G. SWELL : Do you know what the cryogenic engine is for ? Everybody talks and nobody cares about it....(Interruptions).

SHRI YOGINDER K. ALAGH : If the hon. Member sits down, I will answer that question.

## WRITTEN ANSWERS TO QUESTION

### New Drugs to Treat Cancer

\*204. SHRI VINAY KATIYAR : Will the PRIME MINISTER be pleased to state.

(a) Whether the Department of Science and Technology, the Indian Institute of Chemical Technology, Hyderabad and the Ranbaxy Research Laboratories have signed an agreement to jointly undertake a project for development of new drugs to treat cancer; and

(b) If so, the details thereof?

THE MINISTER OF STATE OF THE MINISTRY OF PLANNING AND PROGRAMME IMPLEMENTATION AND MINISTER OF STATE OF THE MINISTRY OF SCIENCE AND TECHNOLOGY (SHRI YOGINDER K. ALAGH) : (a) Yes Sir.

(b) The Agreement was signed in May, 1996 to undertake jointly a project to develop a new drug for treating cancer. The agreement incorporates clauses such as modalities of collaboration, financial arrangements, duration of the project, monitoring of the project.

The estimated expenditure on the project is of the order of Rs. 89.70 lakhs.

### Clearance to Power Projects

\*205. SHRI SANDIPAN THORAT :

SHRI SANAT MEHTA :

Will the PRIME MINISTER be pleased to state :

(a) Whether a large number of power projects including fast track projects are languishing far behind the schedule in the process of final clearance of the Government;

(b) if so, the details thereof, project-wise and State-wise;

(c) the steps taken/proposed to be taken to ensure speedy clearance and timely implementation; and

(d) the proposed/projected and actual foreign investment in power sector ?

THE MINISTER OF STATE IN THE MINISTRY OF POWER AND MINISTER OF STATE IN THE MINISTRY OF NON-CONVENTIONAL ENERGY SOURCES (DR. S. VENUGOPALACHARI) : (a) to (c). For 29 power projects including the fast track Visakhapatnam Thermal Power Station, detailed project reports have been received by the Central Electricity Authority (CEA) for obtaining the statutory techno-economic clearance. A list of such projects is enclosed in the given statement. For according techno-economic clearance, CEA has sought details of other clearances/inputs from the project-developers. For public sector projects, the investment approval is usually accorded after the techno-economic clearance is granted, while for private projects, the final Power Purchase Agreements and Central Government Counter Guarantees wherever already assured, are given thereafter. Several steps have been initiated to streamline the procedures for grant of various clearances including techno-economic clearance by CEA.

(d) 50 expressions of interest from foreign investors, including NRIs, involving an investment of about Rs. 1,40,000 crores have been received and are under various stages of consideration.