

## RAJYA SABHA

Thursday, the 18th March, 1976/the 28th  
Phalgun, 1897 (Saka)

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

### ORAL ANSWERS TO QUESTIONS

#### Celebration of Centenary of Aryabhata

\*211. SHRI NRIPATI RANJAN CHOU-  
DHURY:†

SHRI SWAISINGH SISODIA:

SHRI HARSH DEO MALAVIYA:

SHRI SARDAR AMJAD ALI:

Will the Minister of PLANNING be  
please to state:

(a) whether Government are aware that  
the 1500th centenary of the famous mathe-  
matician, Aryabhata falls in the year  
1976;

(b) whether Government propose to cele-  
brate the occasion; and

(c) if not, what are the reasons therefor?

THE MINISTER OF STATE IN THE  
MINISTRY OF PLANNING (SHRI I. K.  
GUJRAL): (a) and (b) Yes, Sir. Details  
of proposed celebrations are indicated in  
the statement laid on the Table of the  
House.

(c) Does not arise.

#### Statement

The programme of celebration of the  
1500th birth anniversary of Aryabhata  
under the auspices of the Indian National  
Science Academy, New Delhi is as follows:

(1) A two day seminar under the  
following four sessions:

Session I—Critical Problems on History of  
Mathematics and Astronomy at  
the time of Aryabhata.

Session II—Mathematics and Astronomy at  
the time of Aryabhata in different  
cultural areas.

Session III—Aryabhata Schools and Deve-  
lopment of Indian Astronomy.

Session IV—Science and Society in India in  
the Classical period.

A number of Indian Scholars will parti-  
cipate in the above Seminar. In addition  
arrangements are being made for participa-  
tion of a few historians of astronomy and  
mathematics from Middle-East and Western  
countries and possibly Japan.

(2) The following publication relating  
to Aryabhata's life and work will be  
released on the opening day of the cele-  
brations:

A Critical edition of the *Aryabha-  
tiya* in about thousand pages in three  
parts viz.

(i) The Sanskrit text of *Aryabhatiya*  
with English translation, introduction,  
glossary etc.,

(ii) the Bhashya of Bhaskara II on  
the *Aryabhatiya* and

(iii) Suryadeva Yajvan's Commen-  
tary on the *Aryabhatiya* with critical  
introduction, notes etc.

A book in Hindi on the work of  
Aryabhata and a booklet in English  
on the life of the astronomer will also  
be printed and published as part of the  
celebrations.

(3) A proposal to organise some lec-  
tures on history of Indian Astronomy at  
some of our Universities is also being  
considered.

(4) The proposal to issue a com-  
memorative stamp on Aryabhata is also  
being explored.

(5) A few TV/Radio programmes of  
history of Indian Astronomy in general  
and Aryabhata in particular are con-  
templated.

The Department of Science and Techno-  
logy will provide sufficient funds to the  
Indian National Science Academy to carry  
out the celebrations of 1500th birth anni-  
versary of Aryabhata as envisaged above.

† The question was actually asked on  
the floor of the House by Shri Nripati  
Ranjan Choudhury.

**SHRI NRIPATI RANJAN CHOU-DHURY:** Sir, from the statement that has been laid on the Table we find that in the programme that has been taken up by the Indian National Science Academy, there is little scope for mass participation and it is of academic and intellectual interest only. May I know what is the object of such celebration? May I know whether they have any object in mind and, if so, what is their object?

**SHRI INDER KUMAR GUJRAL:** I may tell my hon. friend that I am under the impression that Aryabhata was an intellectual and the celebrations should be participated by intellectuals in a big way. He was to a large extent one of the fathers of Indian mathematics and astronomy. About what is being done, the details have been given and preparations are made for mass participation, but Government also hope that, since his birth-place is Patna, my friends from Bihar will take it up and if a public meeting has to be held, it should be held, because national pride should be built on that basis.

**SHRI NRIPATI RANJAN CHOU-DHURY:** What I understand is that the object of such celebrations is to involve the masses. Aryabhata was a great scientist and mathematician. The object of celebrating the 1500th birth anniversary of Aryabhata should be—I do not know whether the Minister would agree with me or not—to orient the masses towards scientific and industrial progress. To bring about that orientation such celebration is necessary. Also, in such celebrations mass participation is necessary.

**MR. CHAIRMAN:** Please put your question.

**SHRI NRIPATI RANJAN CHOU-DHURY:** Here in the statement we find a seminar is to be held on certain subjects and there is scope only under one item. There is a proposal to organise some lectures on the history of Indian astronomy in some of our universities. It is also being considered. From the statement we find that the programme is only to celebrate it and it will not serve any useful purpose. In view of that I would like to know from the Minister what steps the Ministry is going to take to involve the masses at

least at the college and school levels throughout the country.

**SHRI INDER KUMAR GUJRAL:** I might explain to my hon. friend that he might draw a distinction between utility and celebration. I do not contribute to his thinking that there is going to be no benefit out of it. Commentaries on Aryabhata's writings are going to be written. Also, some of his Sanskrit writings are being translated. This is going to update a legend in the history of mathematics, algebra, trigonometry and astronomy, in which he was a great specialist, in the present day context. Secondly, I may tell him that, if he will have a look at the statement he will find that a book, in Hindi and English, on Aryabhata is also being written. For the masses, of course, lectures will be arranged. The celebration of joy should be there and I am for it. The aim of functions like this, from the mass point of view, is to spread scientific education and I hope my colleague, the Deputy Minister of Information and Broadcasting, who is sitting next to me, will take this occasion to see that the further propagation of a scientific temper in the country is also taken on hand.

**MR. CHAIRMAN:** The Government has no objection to students arranging such functions.

**SHRI INDER KUMAR GUJRAL:** No objection and we would welcome it. If any support is needed, we will be very glad to extend it.

**SHRI BHUPESH GUPTA:** Sir, I am glad you have asked a supplementary.

**SHRI N. G. GORAY:** It is a suggestion for action.

**श्री सवाई सिंह सिसोडिया :** भारतीय राष्ट्रीय विज्ञान अकादमी के तत्वावधान में आर्यभट्ट की 1500वीं शताब्दी समारोह मनाने का जो कार्यक्रम आपके मंत्रालय ने निश्चित किया है, निर्धारित किया है, वह सचमुच प्रशंसनीय है और मैं माननीय मंत्री जी की भी प्रशंसा करना चाहता हूँ कि जो निर्णय उन्होंने लिया

है वह बड़ा सूझबूझ भरा और सराहनीय है। लेकिन मैं दो बातें आपसे इसके बारे में जानना चाहूंगा। एक तो यह है कि इसमें कोई निश्चित तारीखें नहीं दी गई हैं और कहां कहां ये समारोह मनाये जायेंगे इसका उल्लेख नहीं किया गया है। दूसरे, मंत्री महोदय यह भी बतलाने की कृपा करें कि अगर हमारे देश के कुछ शासकीय संस्थान या विश्व-विद्यालय अथवा दूसरी शैक्षणिक संस्थायें इस प्रकार का आयोजन करना चाहे तो क्या उनको आप किसी प्रकार की आर्थिक मदद देने के लिये भी तैयार है? मंत्री महोदय इन सारी बातों पर प्रकाश डालें तो उत्तम होगा।

**SHRI INDER KUMAR GUJRAL:** So far as the celebration date is concerned, it is fortunate that the date of birth of Aryabhata is known with precision. He was born on the 13th April 469. One minute. He was born on the 13th April 476. Therefore, we know what day to celebrate. Naturally, seminars etc. that are being organised at different places will take into account this date. I will be very happy if other organisations come forward to participate in the celebrations. We will definitely be glad to encourage them. So far as the general, mass participation is concerned, I do consider this as a national celebration and we are very proud that this great man who gave so much to mathematics was born in this country.

**श्री हर्षदेव मालवीय:** मान्यवर, यह बड़ी प्रसन्नता की बात है कि अभी तक हमारे विद्यार्थी केवल कौपरनिकस, गैलीलियो और न्यूटन ही पढ़ते थे। अब आपने आर्यभट्ट की तरफ ध्यान दिया और उनकी 1500वीं शताब्दी समारोह मनाने जा रहे हैं, यह बड़ी प्रसन्नता की बात है और मैं भी योजना मंत्री को इसके लिये धन्यवाद देता हूँ।

आपने अपने लिखित उत्तर में जवाब दिया है कि आप आर्यभटीय का

प्रकाशन करेंगे तो मैं निवेदन करना चाहता हूँ कि आर्य भट्ट की जो रचना है और आर्य भट्ट की एक ही रचना प्राप्त है जिसका नाम आर्यभटी है। उस आर्यभटीय के छोटे से ग्रंथ में करीब 121 श्लोक हैं और इनके चार भाग हैं, गीतिका पाद, गणिका पाद, कालक्रिया पाद और गोत्रपाद जो तो यह आप अनुवाद करने जा रहे हैं, अंग्रेजी और हिन्दी में उसमें आर्यभटीय के तीन भाग लेंगे या दो भाग लेंगे? मंत्री महोदय इस संबंध में कुछ प्रकाश डाल तो बड़ा अच्छा है।

**श्री इन्द्र कुमार गुजराल :** जो इस वक्त फैसला हुआ है उसके अनुसार हम आर्यभटीय की तीन कमेंटारियों का ट्रांसलेशन करने जा रहे हैं। एक संस्कृत टीका से आर्यभटीय का इंग्लिश ट्रांसलेशन करने जा रहे हैं, दूसरा भास्कर सेकिंड का और तीसरा सूर्यदेव की कमेंटरी को लिया जा रहा है। इसमें....

**श्री हर्षदेव मालवीय :** आपने अपने जवाब में यह लिखा हुआ है कि आप आर्यभटीय प्रकाशित करेंगे कमेंटरी के...

**श्री इन्द्र कुमार गुजराल :** जी हाँ, इसका पूरा ट्रांसलेशन (आर्यभटीय का) वह भी करने जा रहे हैं। हमारी तरफ से कोशिश यही होगी कि उसका सारा ट्रांसलेशन करें।

**SHRI N. G. GORAY:** I congratulate the Minister for having decided to celebrate this anniversary of Aryabhata. We have had a glorious tradition of mathematicians in India. But I would like to ask him one question. The hon. Minister has said that his works will be translated into English and Hindi. Without doubting the primacy of Hindi, I would like to know whether he would get these translated into all the national languages so that all people will know the greatness of this scientist.

SHRI INDER KUMAR GUJRAL: It is a good suggestion. I will get it examined.

श्रीमती लक्ष्मीकुमारी चूंडावत : क्या आर्यभट्ट के बारे में कोई डाक्युमेंटरी बनाई गयी है ?

श्री इन्द्र कुमार गुजराल : यह मेरे ख्याल में श्री धर्मवीर जी बतायेंगे।

श्री इन्द्रदीप सिंह : मंत्री महोदय ने कहा है कि आर्यभट्ट की सैटीनरी के संबंध में बिहार सरकार को विशेष ध्यान देना चाहिए। मैं मंत्री महोदय से जानना चाहूंगा कि क्या केन्द्रीय सरकार ने इस संबंध में बिहार सरकार को कोई परामर्श दिया है। क्या बिहार सरकार ने इस संबंध में कोई योजना आपके पास रखी है? और बिहार में सेलीब्रेशन का क्या प्रोग्राम है?

श्री इन्द्र कुमार गुजराल : इसके मुतालिक तफसील तो मैं नहीं बता सकूंगा इस वक्त, लेकिन मुझे पूरा यकीन है कि बिहार सरकार इसका पूरा ध्यान करेगी। आखिरकार बिहार की धरती है जिसमें इतने महान लोग पैदा हुए हैं, तो बिहार सरकार को जरूर पता होगा उनको क्या करना चाहिए।

SHRI D. N. DWIVEDI: Sir, the satellite, "Aryabhatta", was catapulted into space and it was an event which was hailed the world over as a major technological achievement. During the last one year or so, our scientists must be receiving valuable information and data from this satellite and I wonder whether any detailed examination or study of this information has been made by our scientists and whether we are co-operating with the other countries in exchanging knowledge in the realm of space technology.

DR. V. B. SINGH: Sir, is it a relevant question?

MR. CHAIRMAN: It does not pertain to the main question. But, if the honourable Minister wants to reply, he can do so.

SHRI INDER KUMAR GUJRAL: Sir, I would not like to reply to his question offhand like this.

DR. V. B. SINGH: Sir, the outline that the honourable Minister has given about the programme of celebration of the 1500th anniversary of the famous mathematician, Aryabhatta, is not comprehensive and rich compared to the richness of the contribution made by this mathematician and, therefore, I would request the honourable Minister to enrich the celebration part of it. Further, Sir, I would like to know whether there is any thinking in his Ministry or in the Ministry of Education to see that the contributions of great personalities like Aryabhatta are made known even at the primary stage of education and whether some chairs are going to be established in our universities to be named after Aryabhatta.

SHRI INDER KUMAR GUJRAL: Sir, I am grateful to my honourable friend for his suggestion. But I must confess that these aspects have not been attended to. But I will take whatever he has said as a suggestion and look into it.

श्री जगदीश जोशी : माननीय मंत्री जी ने अपने उत्तर में कहा कि आर्यभट्ट के सार्वजनिक उत्सव पटना में किए जा सकते हैं। तो क्या माननीय मंत्री जी बताने की कृपा करेंगे कि क्या 1500 वर्ष के बाद भी आर्यभट्ट को केवल पटना वाले ही मानते हैं, क्योंकि वह तो राष्ट्र की संपत्ति हैं? तो जिस पैमाने पर पटना में हो क्या उसी पैमाने पर और जगहों में भी करने की कोई योजना सरकार सोच सकती है? 1500 वर्ष बाद, उनको राष्ट्रीय महत्व का मानकर, क्या हर जगह इसी प्रकार के आयोजन नहीं किए जा सकते हैं?

SHRI INDER KUMAR GUJRAL: Sir, I think that we in India can take pride in

the fact that Aryabhata is not just a national figure alone or just belongs to Patna, but he is universal and I think he belongs to the world of intellect and all the rich heritage of the world today is, to a great deal, owed to him. So, the celebrations should not be confined to any one place or even to a single country. That is why, on our suggestion, the UNESCO has already included the celebration of the 1500th anniversary of Aryabhata in its programme treating it as an event of world celebration.

MR. CHAIRMAN: Next question.

#### Supply of coking coal to steel enterprises

‡\* 212. SHRI HARSH DEO MALAVIYA†

SHRI NRIPATI RANJAN CHOUDHURY:

SHRI SARDAR AMJAD ALI:

SHRIMATI LAKSHMI KUMARI CHUNDAWAT:

Will the Minister of ENERGY be pleased to state:

(a) the present position with regard to the supply of coking coal to the steel enterprises;

(b) whether it is proposed to keep the supply of the coking coal to the steel enterprises continuous and adequate; and

(c) if so, what steps Government have taken in this regard?

THE MINISTER OF ENERGY (SHRI K. C. PANT): (a) The present actual supply of coking coal to the steel plants is of the order of 40,000 tonnes per day against the estimated daily consumption of 35,600 tonnes. The coal stock position of the steel plants has reached a record level of 6,71,000 tonnes equivalent to 19.3 days consumption.

(b) Yes, Sir.

‡Transferred from the 12th March, 1976. Previously numbered as S.Q. No. 122.

†The question was actually asked on the floor of the House by Shri Harsh Deo Malaviya.

(c) The coal requirements of the individual steel plants have been assessed for the Fifth and Sixth Plan periods and linked to coal mines/washeries, for supply. The record increase in the stock of coking coal at the steel plants is a reflection of the improved performance of the coal-mines/washeries. The coal industry is fully geared to meet the requirement of coking coal to the steel plants.

SHRI HARSH DEO MALAVIYA: Sir, I would like to know what the stock position of coking coal was, comparatively speaking, on 1st February 1975 and on 1st February 1976.

SHRI K. C. PANT: Sir, the stock position of coking coal on the 1st February 1975 was 2,06,300 tonnes and on the 1st February 1976, 4,64,000 tonnes.

MR CHAIRMAN: Yes, Mr. Malaviya, put your second question.

SHRI HARSH DEO MALAVIYA: No question, Sir.

MR. CHAIRMAN: Yes, Mr. Choudhury.

SHRI NRIPATI RANJAN CHOUDHURY: No Supplementary, Sir.

श्रीमती लक्ष्मी कुमारी चंडावत :  
क्या माननीय मंत्री जी बताने की कृपा करेंगे कि यह कोकिंग कोल कौन कौन सी इंडस्ट्रीज को दिया जाता है, और क्या यह सही है कि साल दो साल में इसकी क्वालिटी डाऊन हुई है? क्या थर्मल प्लांटवालों ने इसकी शिकायत की है कि उसकी क्वालिटी खराब है?

श्री के० सी० पंत : कोकिंग कोल थर्मल प्लांट्स को नहीं दिया जाता है। कोकिंग कोल स्टील प्लांट्स को दिया जाता है और कुछ फाउंडरीज वगैरह को दिया जाता है। थर्मल प्लांट्स को नान-कोकिंग कोल जो अच्छे किस्म का होता है वह दिया जाता है और उन्हें कोकिंग कोल नहीं दिया जाता है। क्योंकि