

## **RAJYA SABHA**

*Thursday, the 19th August, 2004/28 Sravana, 1926 (Saka)*

The House met at eleven of the clock,

MR. CHAIRMAN *in the Chair.*

### **ORAL ANSWERS TO QUESTIONS**

DR. ALLADI P. RAJKUMAR (Andhra Pradesh): Mr. Chairman, Sir, before starting the Questions Hour. ...*(Interruptions)*...

SHRI RAVULA CHANDRA SEKAR REDDY (Andhra Pradesh): We have a problem in Andhra Pradesh ...*(Interruptions)*... Last time we had raised this issue... *(Interruptions)*...

MR. CHAIRMAN: You can speak after the Question Hour is over. ...*(Interruptions)*... You can speak after the Question Hour is over. ...*(Interruptions)*...

SHRI RAVULA CHANDRA SEKAR REDDY: Sir, the situation is very grave. ...*(Interruptions)*... Every day people are being killed. ...*(Interruptions)*...

MR. CHAIRMAN: Certainly, I agree with you. The matter is very serious, no doubt, but I will allow you after the Question Hour.

SHRI RAVULA CHANDRA SEKAR REDDY: The other day, the hon. Home Minister had assured us. ...*(Interruptions)*...

MR. CHAIRMAN: That is enough. Question No. 341.

### **Meteorological forecasting system**

\*341. SHRI R. P. GOENKA: Will the Minister of SCIENCE AND TECHNOLOGY be pleased to state:

(a) whether Government have analysed the shortcomings in the present meteorological forecasting system;

(b) if so, the details thereof;

(c) whether it is a fact that a proposal has been formulated to procure some hi-tech world class equipment worth Rs. 500 crores to secure better overall meteorological forecasting and even for district-wise predictions; and

(d) if so, the details thereof and its present status?

THE MINISTER OF STATE OF THE MINISTRY OF SCIENCE AND TECHNOLOGY (SHRI KAPIL SIBAL): (a) to (d) A Statement is laid on the Table of the House.

### **Statement**

(a) and (b) Yes, Sir. Monsoon rainfall over the Indian peninsula is a result of several natural phenomena occurring across the globe. With the present day observational infrastructure and technology the world over, it is not possible to make predictions on spatial and temporal variations of the monsoon activity. However, on the basis of observations, patterns of rainfall across the country can be identified for making useful forecasts. The Indian Meteorological Department has been monitoring rainfall across the country since a long time and has already evolved models for forecasting the total seasonal rainfall as well as making short range forecast for meteorological sub-divisions. These forecasts have given important guidance to our operations, in particular, the agriculture operations. For improving forecasts, new models are always being introduced and used.

(c) and (d) The process of upgradation of the observational systems is continuous. Better observations will help in improving the modeling for better forecasts. But as this process is evolutionary in nature, no time frame can be fixed for the same. Indian Meteorological Department (IMD) has come out with a proposal for investing Rs. 500 Crores in some important areas for improving observations and the forecast system. The proposal is being submitted for consideration of the Government. As already stated complexities of weather patterns over the Indian sub continent make it extremely difficult to make forecasts about small geographical regions like Districts.

श्री आरूपीगोयनका: सभापति महोदय, आपके थ्रू मुझे दो सवाल और पूछने हैं। मंत्री जी ने जो जवाब दिए, ये सवाल उसी में से निकलते हैं। मंत्री जी कह रहे हैं कि "...new

models are always being introduced and used..." मेरा उनसे यह सवाल है कि यह जो 1500 करोड़ की मांग डिपार्टमेंट ने की है, उसमें क्या प्रोग्रेस है और कब यह करेंगे? दूसरा सवाल यह है कि मंत्री जी कहते हैं कि डिस्ट्रिक्ट लेवल पर फोरकास्ट करना मुश्किल है, लेकिन मेरा ऐसा मानना है कि आजकल जो इक्विपमेंट्स available हैं, उसमें डिस्ट्रिक्ट से छोटे एरिया का भी फोरकास्ट करना पॉसिबल है।

**SHRI KAPIL SIBAL:** Mr. Chairman, Sir, I just want to explain very briefly the reason why we have asked for Rs. 500/- crores and more. The proposal is yet being prepared. We have not actually, formally, submitted it to the Planning Commission. We propose to do it very quickly. Sir, it is very easy to forecast the long-term average of the South-West monsoon. In other words, from June to September, it is easy to say what the total rainfall is going to be. But that does not really solve the problem of our country because every year even though the total rainfall may be a hundred per cent and meets the average, yet there may be certain areas in our country, which are drought prone. What then is the requirement? Our requirement is that we should be able to tell farmers that on a particular day, in a particular district, it is not going to rain till seven days from now, or, ten days from now, so that he knows that there is going to be no rain and he can adjust his cropping patterns accordingly. We should also be able to predict to him that there is going to be no rain for 15 days. That kind of equipment requires refurbishing the Meteorological Department in a big way.

My good friend and the hon. Member has suggested that equipment is available which can forecast even the quantity of rainfall in a particular area on a given day. Well, to my knowledge, equipment is available to forecast in particular districts, but in a particular area in a district, I am not aware of, but, if the hon. Member gives me the information, I will be more than happy. But we need basically surface observatories in a very big way. Now, there are about 600 districts in our country. We have, at the moment, only 182 surface observatories. We need 1882. Now, with 182, it is impossible for us to predict. So, these are the kind of things that we are wanting to actually make investments in.

**श्री आर० पी० गोयनका:** सभापति महोदय, इन्होंने अपने जवाब में कहा है कि डिस्ट्रिक्ट का फोरकास्ट करना मुश्किल है, लेकिन इनके जवाब से तो यह महसूस होता है कि कुछ डिस्ट्रिक्ट्स में हो सकता है। कुछ डिस्ट्रिक्ट्स बहुत छोटे हैं, अगर उनमें नहीं हो सकता है तो न करें। लेकिन जहां हो सकता है, वहां तो करें।

**SHRI KAPIL SIBAL:** Sir, I have already mentioned to the hon. Member and informed this House that with the level of surface observatories available with us, which are 182 in all for 600 districts, it is impossible for us to predict district-wise what the rainfall is going to be.

**DR. K. KASTURIRANGAN:** Through you, Mr. Chairman, Sir, I want to seek some clarifications from the hon. Minister regarding the type of predictions. We have all recognised that the predictions are complex in tropical areas because of the peculiar systems of circulation. But, nevertheless, this has not been something which was unknown, and, over the years, several reviews have been conducted on the performance of the meteorological predictions and, in that context, several suggestions have been made, suggestions which relate to bringing a little more academic inputs to the role of prediction, the questions of improving instrumentation and the necessity of much more improved R&D. The third thing is with respect to installation of Doppler Weather Radar Systems across the country which, as the hon. Minister has mentioned, could considerably improve the observational capability, and, ultimately have an excellent modelling capability where we need to bring the synergy between the Medium Range Weather Forecasting Centre, the Institute of Tropical Meteorology at Pune and the main Meteorological Department. The present outlook is that these synergies do not exist at the level that one would desire. May I seek this clarification from the hon. Minister?

**SHRI KAPIL SIBAL:** The hon. Member has raised a very important question, and, in fact, just two weeks ago—because what I had been noticing in the Department was that the Meteorological Department is functioning on its own, the Medium Range Weather Forecasting, NC MRWF, is functioning on its own, the C-MAC is functioning on its own; several other organisations are functioning on their own, and this is not a healthy trend—I called a meeting of all the Departments and I said, "Let us synergise all available information." There are some institutions which do mathematical work, that is, C-MAC. So, we want to synergise that information also. I have already set up a group, creating synergy is exactly what is going to happen in the future. I am afraid this should have happened in the past, I wonder why such a meeting was not called.

**DR. M.S. GILL:** Sir, this is a question, I would say, most intimately linked with the Agriculture Ministry and Department because, the

agriculture, 60 per cent of India's crop is dependent, on the monsoon, and, therefore, your up or down is all dependent on the monsoon, and a detailed forecasting is very much possible in England, in Europe, district-wise, Cambridge-wise. I have just come from there. It is there. I have read, and the hon. Member in putting his question has said that if you spend Rs. 500 crores or thereabouts, you can do it. This Government claims that it has a major programme for agriculture. There should be a detailed, immediate forecasting possible. If there are 180 centres, make them 500 in a year or two years. It is only a question of investment. The scientists are there, and you can give district-wise or even more detailed information. It will also bring down the cost of the farmer in inputs because, if I know in Jalandhar that there is going to be rain in this week or so or in the next ten days, I won't be pumping water with diesel, with electricity, etc. Sir, this needs a serious consideration. I notice the Prime Minister is present here. They should look at it hard.

**SHRI KAPIL SIBAL:** Sir, the hon. Member has, in fact, raised a very valid point, and we, in the Government, believe that the issue is not of rainfall, the issue is of lives. The hon. Prime Minister has said this time and again.

Given the fact that lives are lost because of the fact that we are not able to tell the farmers well in advance, as to what is going to happen, I think it is very important that we make the necessary investments, not just the infrastructure; we also need to improve the quality of our human resources. We need to synergise operations. We need to do all these things together, and the Department is well on its way to doing that.

**श्री सभापति:** माननीय सदस्यगण, अगर सदन की अनुमति हो तो नेक्स्ट क्वेश्चन लेने से पहले मैं क्वेश्चन नं० 357 ले लूँ। इराक में होस्टेजस के संबंध में है।

**SHRI V. NARAYANASAMY:** Sir, question No. 350 is also related to the same issue.

**श्री सभापति:** वह ठीक है, all the questions are related.

**श्री शंकर राय चौधरी:** सभापति जी 342 भी साथ ले लें।

**श्री सभापति:** 342, 350, 357 आप मूव कर दीजिए। बोलिए।