

**RAJYA SABHA**

*Friday, The 20th December, 1991/29  
Agrahayana, 1913 (Saka)*

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

**ORAL ANSWERS TO QUESTIONS****Use of Agricultural and Industrial waste for construction work**

\*421. SHRIMATI KAMLA SINHA: Will the Minister of URBAN DEVELOPMENT be pleased to state:

(a) whether it is a fact that HUDCO 'has identified use of agricultural and industrial waste as a thrust area for promoting building materials; and

(b) whether the new technique is cost-effective and if so, the details thereof?

THE MINISTER OF STATE IN THE MINISTRY OF URBAN DEVELOPMENT (SHRI M. ARUNACHALAM): (a) es, Sir.

(b) Products suitable for commercial production have been developed with respect to Wastes like fly ash, phosphogyp-sum bagasse and cotton stalk.

The price of the product to the consumer may not be cheaper than the conventional material in all places. However, the building material from these wastes helps to transform them into a resource and also solve problems of environmental pollution and degradation which also has a cost reduction implication.

SHRIMATI KAMLA SINHA: As we all know, the United Nations' Declaration of Human Rights in 1948 gave each one of us a right to a decent living. In December, 1982 the United Nations General Assembly declared 1987 as the 'International Year of shelter for Homeless.' The Government of India accepted this declaration of International Year for Homeless and the Central Building Research Institute Roorkee developed in collaboration with International Board of

Building Research a new low cost technique by using industrial, mining and agricultural waste. The Central Glass and Ceramic Research Institute, Calcutta, has developed a low cost appropriate technology for production of low cost blocks made of mixtures containing only 50 per cent of common clay and other 50 per cent of waste material like fly ash, rice ash cinders etc. Has the Government gone through the reports of the Central Glass and Ceramic Research Institute, particularly the technology that they have developed? Would the Government like to give a new thrust in this area at least in Uttar Kashi area where the houses have been demolished by a devastating earthquake? It is cost effective. It is a low cost building material. So, I would like to know whether the Government would like to give a new thrust in this area. This is my first supplementary.

THE MINISTER OF URBAN DEVELOPMENT (SHRIMATI SHEILA KAUL):

Sir, the hon. Member mentioned about the waste and I would like to explain that the waste can be classified in two categories. One is the industrial waste and the other is agricultural waste. Industrial waste, which is found suitable for conversion into building material, includes fly ash, blast furnace slag, phosphogyp-sum, lime slag and this is found in good number. From fly ash we get Portland pozzolana cement and fly ash brick which is used as building material. As agricultural waste we use banana leaves, bagasse, cotton stalks, sawmill waste, rice straw, used stalk and they are the substitute to timber doors, shutters and they can also be used for furniture. Now, you have mentioned about the Institutes in Roorkee and Calcutta and asked whether we have worked out new technologies. We are in constant touch with these Institutes and they are bringing out new technologies which are being used. So we want that the new technologies developed in the CSIR laboratories the Roorkee Institute and other laboratories should be used in the earthquake-hit area of Uttar kashi. We have also sent a HUDCO team to Uttarkashi to find out how best help could be provided to the people living there.

SHRIMATI KAMLA SINHA: Sir, in 1988 there was a conference which was addressed by the then Minister of Urban Development, Mrs. Mohsina Kidwai. In that conference she emphasized the need for developing and using these low-cost housing materials but, I am sorry to say, up till now nothing has been done in this direction. The honourable Minister for Urban Development has said that they are in constant touch with the CBRI and CSIR and that she has sent a HUDCO team to the Uttarkasri area, but I am sorry to say that they are not using this new, appropriate, technology. She has said—and I agree with her—that fly ash, rice husk, cinder, agricultural wastes and other industrial wastes have the potentiality of bringing out low-cost building materials. I have some papers with me which say that the blocks are cost-effective and the bricks that are made are also cost-effective; the kilns are efficient in respect of fuel consumption and they do not create much pollution.

MR. CHAIRMAN: What is your question?

SHRIMATI KAMLA SINHA: She has said that phosphogypsum and other materials are used. They can substitute wood also. So I would like to know whether the Government is going to start it immediately, at least where the Government has to start building new houses. There at least the Government should try it and then other people will follow it. So, what is the Government going to do in that direction?

SHRIMATI SHEILA KAUL: Sir, we are also using the new technologies in our CPWD works. We have started this, and the DDA is also trying to find out whether they would be helpful. We think it is a new thing which we are trying to do but, for the information of the honourable Member, I would like to say that in the USA, in the whole of Europe and in China, all these new technologies with fly ash are being used—65 per cent of this material is being used. Only in India we think it is new, but really it is not new.

SHRIMATI KAMLA SINHA: If it is not new and when a new technology is developed in India why are you not using it then?

SHRIMATI SHEILA KAUL: That is what I said—that we are trying to do it. Our own people are trying to do it.

श्री राघवजी : सभापति जी, हिन्दुस्तान की बहुत बड़ी जनसंख्या ग्रामीण क्षेत्रों में रहती है और वह मकान विहीन है। सीमेंट के, लोहे के और लकड़ी के दाम बढ़ जाने से मकानों की कीमतों में बेहद वृद्धि हो गई है और इसलिए यह उनकी सामर्थ्य में नहीं है कि वे मकान बना सकें। “हुडको” ने कुछ प्रयोग किए हैं सस्ते मकान के और मैंने “विदिशा” में इंजीनियरिंग कालेज में एक सेमिनार देखा था, उसकी भी कीमत बहुत कम नहीं थी केवल 25 प्रतिशत ही कम हो पाती है। तो क्या “हुडको” इस प्रकार के मकान बनाने की तैयारी करेगा जो ग्रामीण क्षेत्रों में उपयोगी हों और जहां पर मिट्टी का उपयोग ज्यादा हो परन्तु उसमें इंडस्ट्रियल और एग्रीकल्चरल वेस्ट मिलाकर दीवारों का काम हो और टिम्बर के स्थान पर कुछ और चीजों का रिप्लेसमेंट हो जाए जिससे कि ग्रामीण क्षेत्रों में सस्ते मकान बन सकें और वह राज्यों की जो ग्रामीण एजेंसियां हैं उनके सामन उनका प्रदर्शन करके उनको बताएं। ऐसी कोई योजना “हुडको” के पास है क्या ?

श्रीमती शीला कौल : सभापति महोदय, मैं बताना चाहती हूँ कि “हुडको” का काम घर बनाना नहीं है। घर के बनाने में क्या-क्या चीज और कैसे करनी चाहिये, उसकी वह राय देता है। घर बनाने का काम स्टेटों का है। जो कोई स्टेट अपना प्रोजेक्ट दे और “हुडको” से पूछे तो “हुडको” उसको मदद कर सकता है, लेकिन वह उसको बना नहीं सकता।

श्री सोमपाल : उन्होंने यह पूछा है कि उसका प्रचार करने की कोई योजना है ?

श्री सभापति : वह कहती हैं कि हुडको मकान नहीं बनाता ।... (व्यवधान)

**श्री राघवजी :** उसका वह गांवों में प्रदर्शन करें ।

SHRI JAGMOHAN: I want to know whether the hon. Minister is aware that the Building Material and Technology Promotion Centre was set up with a seed capital of Rs. 5 crores and whether it is a fact that its only achievement during the last one-and-a-half years has been to produce a brochure, a pamphlet.

MR. CHAIRMAN: One brochure in one-and-a-half crores of rupees!

SHRI JAGMOHAN: No, no. The point is that Rs. 5 crores was made available as seed capital to promote inexpensive building material and to promote inexpensive construction for housing and other things, but, its only achievement during the last one-and-a-half years has been the production of one pamphlet. So, if there is any concrete achievement on its behalf, that can be intimated, number one.

Part two, I want to know whether the hon. Minister is aware that quite a lot of fly ash is being pumped out by the NTPC and it is not being allowed to be used by entrepreneurs who can mix it up with other materials like gypsum and phosphate and build very nice building bricks out of it. It is really being pumped out. In fact, the NTPC etc. are spending a lot of money for pumping it out.

It is also environmentally highly hazardous because this fly ash goes into the air and then goes into the lungs. It is very fatal for the individual who inhales it. It settles down in the lungs.

SHRIMATI SHEILA KAUL: As the hon. Member has said, the BMTPC was established, and it was given Rs. 1 crore, not Rs. 5 crores.

MR. CHAIRMAN: She says it was Rs. 1 crore.

SHRIMATI SHEILA KAUL: Fly ash plants are being set up with the help of this Council. We are very keen that the fly ash that is produced actually in Delhi is used. The hon. Member knows that we have got so many thermal plants here

where fly ash is produced, and we want that this fly ash must be utilised. In some places it is being utilised. Yet the number of plants is not enough. We also want that this fly ash must be used in the manufacturing of bricks as he has mentioned. But there are certain things that come in the way, and we are trying to find out how we can help these people to make bricks of the fly ash because the fly ash that is available locally, would be cheaper in making bricks. If we have to get it from outside, it will be more expensive. So, we are very keen to use this. Six such units that will use the fly ash are coming up in Delhi alone.

SHRI G. SWAMINATHAN: Sir, most of the poor people in rural and urban areas are living in mud-huts. I would like to know whether the hon. Minister can give the percentage of the people who are living in mud-huts in the countryside, in the rural side and the urban side. The question I wish to ask is this. A study has been made. Because most of the people are living in mud-huts, improved variety of mud can be used as the internal material to see that these huts are strengthened.

Sir, another suggestion has also been made that pre-cast materials, especially roofing materials, will save nearly 20 to 30 per cent in the cost of construction because it will avoid putting up props, shuttering material etc. Another suggestion has been that the artisans have to be trained. There is no training centre in India for the benefit of the artisans, masons and carpenters. They are wasting a lot of material..

MR. CHAIRMAN: So, you want to know whether she will establish training centres for them or not?

SHRI G. SWAMINATHAN: I would like to know whether the hon. Minister will look into the aspect of training of the artisans. These are the three aspects on which I would like to have the hon. Minister's reply,

SHRIMATI SHEILA KAUL: There have already been a few centres set up to teach the artisans on how to get the work done. One centre of this type is at Nazamuddin in Delhi. So many such centres

to shew the masons how to get the work done with less expenditure have been established.

SHRI G. SWAMINATHAN: May be a centre is there in Delhi, but there is no such centre at the State level.

SHRI M. ARUNACHALAM: Most of the States are having building centres. That is very successful in Kerala. We have centres in Tamil Nadu; also.

SHRI G. G. SWELL: It has been said that our, thermal plants in the country generate & lot of radio-activity. If you take all thermal plants into consideration, there is more radio-activity from our thermal plants than what it is from our nuclear plants. Much of the radio-activity may be in fly ash. Has this aspect been considered? Is it true? Has the question, of presence of radio-activity in fly ash been considered before you, use it for buildings.

SHRIMATI SHEILA KAUL: It has not been brought to my notice that there is radio-activity in the fly ash. We will have to find out.

MR. CHAIRMAN: You find out and see if there is radio-activity in it.

SHRIMATI SHEILA KAUL: The science people will do it, the technology people will do it

MR. CHAIRMAN: You ask them to find out. Mr. Swell has said that there is radio-activity in it. They should find out and you will see to it.

SHRIMATI SHEILA KAUL: Yes, Sir. I will do.

Decentralisation of Food Corporation of India

\*422. SHRI SANTOSH BAGRODIA: Will the Minister of FOOD be pleased to state:

(a) whether Government propose to decentralise the functioning of Food Corporation of India; if so, the details thereof; and

(b) whether it is a fact that most of the State Governments are un-happy with

the working of the Corporation, if so, the number of complaints received against the Corporation from the State Governments during the last two years, Statewise?

THE MINISTER OF STATE OF THE MINISTRY OF FOOD (SHRI TARUN GOGOI): (a) There is adequate decentralisation in the functioning of the Food Corporation of India.

(b) There are no complaints or expression of unhappiness from the State Governments about the working of the Corporation as a whole.

SHRI SANTOSH BAGRODIA: The hon. Minister has very briefly said about 'adequate decentralisation'. This is a well-known fact that FCI has become a white elephant. I would request him to please: elaborate what kind of decentralisation has already taken place or if there is a plan for further decentralisation. I would also like to know whether any complaints of shortages in any States have been received. If so, what are those States? Particularly in Tripura there were a lot of reports that in tribal areas there were deaths because of lack of foodgrains. During my last three or four visits there I have been told that there were shortages of foodgrains and the FCI was entirely responsible for it. I would like to know if the Minister has received such reports. What was the quantity of rice demanded by Tripura, what was the quantity was allotted to them and what was actually delivered to them in the current year? Similarly, for Rajasthan also what was the quantity desired, what was allotted and what was actually supplied?

SHRI TARUN GOGOI: So far as decentralisation is concerned, there are five zones, 19 regional offices and 169 districts. Food has to be procured in different parts of the country. We cannot have a centralised agency for the purpose of procurement. At the moment there is no plan for further decentralisation. *(Interruptions)* Powers have been delegated of the Zonal Manager, Senior Manager, Manager and District Manager also. As regards the complaints, yes, we do receive complaints.