Mr. Deputy-Speaker: Hon. Members must look around before putting questions.

Dr. P. S. Deshmukh: There is nothing new about the technique of hydroponics or soilless agriculture. Plant physiologists discovered it almost a century ago that it was possible to grow plants successfully without soil with their roots in water in which salts had been dissolved or in pure sand watered with a solution of certain salts. This technique, known as water culture, is still found very useful in investigating the requirements of plants for mineral nutrients. In fact, this technique may be regarded as the basis of modern fertilisers.

Shri V. P. Nayar: May I know, Sir whether as a result of experiments in hydroponics, it is possible for agricultural crops alao to be raised that way in our country?

Dr. P. S. Deshmukh: Yes, Sir. It is possible to do that, but the experience everywhere is that the cost is prohibitive.

Shri V. P. Nayar: May I know, Sir, the inland water area available in India for soilless cultivation?

Dr. P. S. Deshmukh: I could not say, Sir.

HEAT AND SOUND INSULATING MATERIAL

*886. **Shri Raghavaiah:** (a) Will the Minister of **Food and Agriculture** be pleased to state whether it is a fact that a process has been invented for the production of heat-and-sound-insulating material from a waste product of sugar manufacture?

(b) If so, what is the process and what is the average cost of production of one pound of the material under factory conditions?

(c) Have the Government of India any steps under contemplation for starting or encouraging the starting of a factory for the production of the above material?

(d) What are the main sources of sound-and-heat-insulating material that is consumed in India at present?

The Minister of Agriculture (Dr. P. S. Deshmukh): (a) Yes.

(b) A description of the process of manufacture is laid on the Table of House. [See Appendix V, annexure No. 24.]

The present cost of production is, however, not known.

(c) Not from bagasse. The Government have, however, under contemplation and is encouraging setting up of a hard and insulating board factory using bamboo as raw material.

(d) Major portion of the demand is met by imports from U.K. and Scandanavia. Part of the requirements of heat-insulating material is available from indigenous production also.

Shri Raghavaiah: May I know, Sir, what is the post-war cost of manufacturing 7/16" thick bagasse fibre?

Dr. P. S. Deshmukh: As I said in the reply, that cost has not been made available.

Shri Raghavaiah: In the statement laid on the Table of the House only the pre-war cost of manufacture has been given and not the post-war cost of manufacture

Dr. P. S. Deshmukh: I have not got the information.

Shri V. P. Nayar: It is seen from the statement that 500 lbs. of boric acid will be required for preservation of one stack of bagasse May I know, Sir, whether any experiments have been conducted to reduce the cost of storage of stacks of bagasse?

Dr. P. S. Deshmukh: I do not know, Sir, if any experiments were conducted.

Shri B. S. Murthy: Have Government received any information from the "Vuyyur" sugar factory whether this experiment is going on?

Mr. Deputy-Speaker: Have the Government got any information that in the "Vuyyur" sugar factory—in Madras State—this experiment is going on?

Dr. P. S. Deshmukh: I am not aware.

Shri V. P. Nayar: May I know, Sir, what is the total quantity of bagasse available?

Dr. P. S. Deshmukh: I want notice.

Shri V. P. Nayar: What is the total cost of storage of bagasse per stack?

Dr. P. S. Deshmukh: The total cost is known to the mills, Sir. I do not tivink I can reply to that.

HOSPITALS RUN UNDER COAL MINES WELFARE FUND

*888. **Dr. Rama Rao:** Will the Minister of **Labour** be pleased to state:

(a) how many hospitals are run under the Coal Mines Welfare Organisation, in which centres, how many beds