

the experts are not able to say through what media it is being carried so that we can kill the media.

SHRI SONUSING DHANSING PATIL: This horse epidemic has greatly affected the living of the 'tongawallas'. What steps are we taking to compensate them?

SHRI M. V. KRISHNAPPA: That is up to the State Governments, and whatever the State Governments propose we will certainly consider and give vaccine and all medical facilities, whatever they want. The question of compensation is not our job.

MR. CHAIRMAN: The same question is repeated. The same answer is repeated.

SHRI BIREN ROY: When the disease first appeared in Pakistan, why at that time steps were not taken by spraying disinfectants and other things so that the flies from that area could not reach our country?

SHRI M. V. KRISHNAPPA: The disease appeared in Pakistan in April and our Government took immediate and necessary steps. We stopped the import of horses from Pakistan. We advised all the State Governments that this disease had occurred in Pakistan and asked them to be careful and to be prepared and to see that no donkeys or horses cross from Pakistan into our country.

#### LOCUST INVASION

f SHRI R. P. N. SINHA:  
| SHRIMATI SAVITRY DEVI  
| NIGAM;

\*63. <{ SHRI B. D. KHOBARAGADE: 1  
SHRI N. SRI RAMA REDDY: L  
SHRI P. N. RAJABHOJ:

Will the Minister of FOOD AND AGRICULTURE be pleased to state:

\$The question was actually asked on the floor of the House by Shri R. P. N. Sinha,  
703 R.S.—2.

(a) how many swarms of locusts have invaded the country so far during the current year;

(b) which are the States affected by locust invasion;

(c) from which direction or directions these swarms have entered the country and whether they have been breeding here also; if so, in which places and States;

(d) what has been the approximate damage caused, in terms of money, to the food crops of the country; and

(e) what measures were taken by Government for the extermination of the locusts and with what results?

THE DEPUTY MINISTER OF AGRICULTURE (SHRI M. V. KRISHNAPPA) : (a) to (e) A statement is laid on the Table of the Sabha.

#### STATEMENT

(a) and (b) Since 14th April, 1960, 109 exotic locust swarms entered into the country. The States affected are Punjab, Delhi, Rajasthan, Uttar Pradesh, Madhya Pradesh, Gujarat, Maharashtra, Bihar, Andhra Pradesh, Mysore and Orissa.

(c) The locust swarms, which have appeared in India, have their origin in the countries on the west of India. In India breeding has taken place mostly in the desert areas of Punjab and Rajasthan.

(d) The final estimates in regard to the damage caused by the locust to foodgrain crops are awaited from the respective State Governments.

(e) The following measures were taken:—

(i) The States which are most vulnerable to locust attacks in India were warned about the direction, intensity etc., of the locusts.

(ii) The locust warning organisation of the Government of

India which is directly responsible for locust control operations in the Scheduled Desert Area of India falling in the Punjab, Rajasthan and Guje-rat (over about 82 thousand square miles) was strengthened before the locust breeding season of 1960. Adequate supplies of pesticides and locust control equipment were placed at 41 outposts situated at strategic places in the desert area sufficiently in advance of the locust breeding season.

- (iii) The entire staff of the Central Plant Protection Stations located in the various States, actively participated with the officials of the State Governments in anti-locust operations.
- (iv) Locust breeding occurred in the Scheduled Desert Area expanding over about 35,000 sq. miles and practically everywhere the locust hoppers were killed by means of spraying and dusting of pesticides from the ground and from aeroplanes.
- (v) Locust invasions in India are the result of locust breeding and ineffective or inadequate locust control in the original breeding areas in Arabian Peninsula and elsewhere where they breed and form into swarms. Locusts cannot, therefore, be prevented from coming into India, though they may be destroyed on arrival here. With a view to minimising their intensity, the Government of India have been participating for the last six years in an International Anti-locust Campaign organised by Food and Agriculture Organisation of the United Nations by deputing Anti-locust Missions to Saudi Arabia and Kuwait.

It is on account of the above mentioned anti-locust measures that the intensity of locust invasion in India has been reduced considerably. If the eggs and locust hoppers were not destroyed in time, the swarms would have multiplied manifold and caused great havoc to crops.

SHRI R. P. N. SINHA: The locust that, have been roaming in the different States, are they migratory locusts or are they of native origin? If they are migratory, from which countries have they come?

SHRI. M. V. KRISHNAPPA: These special locusts are called desert locusts and they are migratory in character. They are not bred all over, but there are certain places like the Rajasthan Desert and it is only there that they breed. Unfortunately this year we had more than 108 locust swarms crossing from Pakistan into India and we have killed all of them except three which are roaming about in the eastern States of India. They move with the wind. The wind is not favourable for them to go back to Pakistan. *(Interruption)*. Although it looks humorous, I am telling the truth. These locusts come from Pakistan and the Middle East. Even in Pakistan they say that they get these from the Middle East countries. As far as we are concerned they come from Pakistan. They come with certain winds and go back with certain winds. Before the end of October generally they clear out of India and go back to Pakistan. This year unfortunately due to the heavy monsoon in the south—north-east monsoon, that is the type of wind that is blowing—this wind is not favourable for these locusts to go back to the north. So, they are roaming about in Orissa and West Bengal and as soon as favourable winds come, they go back to the West.

SHRI D. A. MIRZA: Are we to presume that even animals and flies used to come from Pakistan?

*(No reply)*

SHRI BIREN ROY: The locusts do not take so much time as the flies or other things. Why should it not be possible for the Government to charter some small aircraft and spray so that these locusts could all be eliminated? It is very easy and it is done in most other countries, and the Government is sitting quiet until the locusts fly even up to Orissa where at any time in the history of India they have never entered.

SHRI S. K. PATIL: Of all the agents that are really necessary to kill these locusts, a small aeroplane for spraying is no doubt the best. Unfortunately, we have got only two, rather one and a half. One is active and very good and the other aeroplane is a small one. It is necessary for a wide country like this that we should have ten to fifteen such aeroplanes. It is a question of foreign exchange. We did try some time back, not expecting that the locusts were coming, but we could not succeed. But it is actively engaging our attention, and before another visit comes from these unwanted guests, I think we shall be ready with at least two more aeroplanes.

SHRI BIREN ROY: My point is, in our Flying Clubs we have the Tiger Moths—we have twenty Flying Clubs in India—and only a sum of Rs. 6,000 is needed to convert each of these Tiger Moth aeroplanes into a sprayer. My question is; Why are not these Flying Clubs helped with only Rs. 6,000 for each plane for spraying purposes so that at the time of emergency they could be used?

SHRI M. V. KRISHNAPPA: We have been considering this point of making use of these Flying Clubs at times of necessity. But these locusts require a different type of plane. We had Beaver aeroplane tried in Bengal, it collapsed and its pilot was almost dead last year. Another pilot who tried Piper aeroplanes in Maharashtra actually died this year. The poor man went and crashed in Maharashtra near Sholapur this year and the only successful man is this pilot. It is not so easy to make use of the Tiger Moth

plane for these operations. This operation of killing the locusts when they are at flight is rarely done in the world because the locusts can be killed only when they are laying eggs and when they become swarms and hoppers. When they are on the march, it is not possible to kill them especially in the Indian terrain because suppose a locust swarm is going in a particular direction and the Tiger Moth goes with them, after an hour or two, we do not know the direction of the locusts and they go as they like. And we have to have the aerodrome or the fuel should be ready there. It has to work under very many limitations. We have considered this point very seriously and we have taken the necessary steps.

SHRI BIREN ROY: The Tiger Moths must be modified before using as spraying units.

\*64 and \*65. [The questioner (Shri P. Ramamurti) was absent. For answer, vide cols. 225-27 infra.]

#### केन्द्रीय बीज निगम की स्थापना

६६. श्री नवाब सिंह चौहान :  
श्रीमती सावित्री निगम :

क्या खाद्य तथा कृषि मंत्री यह बताने को कृपा करेंगे कि :

(क) क्या सरकार केन्द्रीय बीज निगम स्थापित करने का इरादा कर रही है ; और

(ख) यदि हां, तो इस योजना की मुख्य बातें क्या क्या हैं और यह कब तक कार्यान्वित हो जायेंगी ?

t [SETTING UP OF CENTRAL SEED CORPORATION

f SHRI NAWAB SINGH

J CHAUHAN:\*

bb- ") SHRIMATI SAVITRY DEVI  
I NIGAM:

Will the Minister of FOOD AND AGRICULTURE be pleased to state:

fEnglish translation.

JThe question was actually asked on the floor of the House by Shri Nawab Singh Chauhan.