Import of Cows

6639. DR. B.L. SHAILESH: Will the Minister of AGRICULTURE be pleased to state:

- (a) whether Government are aware that the Farm Ministers of the European Economic Community have imposed a 10 per cent cut on output of milk recently resulting in a large number of well bred cows rendered surplus:
- (b) if so, whether Government propose to import some of these cows; and
 - (c) if not, the reasons thereof?

THE MINISTER OF STATE IN THE DEPARTMENT OF AGRICULTURE AND COOPERATION IN THE MINISTRY OF AGRICULTURE SHRI YOGENDRA MAKWANA): (a) Yes, Sir. There are reports that restrictions have been imposed and incentives withdrawn on higher milk production in European Economic Community countries. As a result, the farmers try to decrease milk production and reduce the number of animals.

(b) and (c) Large-scale import of temperate dairy cattle in India is not desirable because they are highly susceptible to tropical deseases and have low heat tolerance. The conditions of feeding and management with most of the farmers in the country are also not conducive to their maintenance and economic production. Recently limited number of animals (843 heifers and 96 bulls) have been imported by Indian Dairy Corporation under Indi-FRG Bilateral Programme between January and March, 1987 to be supplied to selected progressive farmers and located some of them at organised Bull Mother Farms.

Spray of Insecticides

6640. SHRI R.M. BHOYE: Will the Minister of AGRICULTURE be pleased to state:

(a) whether biggest impediment in the control of 'Kolshi' is the lack of education

to the farmers who are ignorant about the spraying process including the proper time for spraying; and

(b) if so, the steps taken in this direction?

THE MINISTER OF STATE IN THE DEPARTMENT OF AGRICULTURE AND COOPERATION MINISTRY OF AGRICULTURE (SHRI YOGE DRA MAKWANA): (a) and (b) No, Sir.

The Government of Maharashtra have taken timely and appropriate steps to educate the farmers about the spraying process and the proper time for spraying.

Investigation Charges Against Officials of the Hindustan Copper Limited

664). SHRI ATISH CHANDRA SINHA:

DR. V. VENKATESH:

Will the Minister of STEEL AND MINES be pleased to state:

- (a) whether investigation of charges made against some senior officials of the Hindustan Copper Limited has now been completed;
 - (b) if so, the facts thereof; and
- (c) the action proposed to be taken in this regard?

THE MINISTER OF STATE IN THE DEPARTMENT OF MINES IN THE MINISTRY OF STEEL AND MINES (SHRIMATI RAMDULARI SINHA): (a) to (c) Out of the 12 cases against senior officers of Hindustan Copper Limited pending in November, 1986-87 have since been finalised. The remaining 5 cases are under investigation.

Use of Chemical Fertilizers

6642. SHRI C. MADHAV REDDY: Will the Minister of AGRICULTURE be pleased to state:

- (a) whether Scientific studies conducted in Philippines, Thailand and Japan have shown that use of biofertilisers for paddy and other crops is replacing/substituting chemical fertilisers:
- (b) if so, the steps taken in this direction in the country to reduce depence on chemical fertilisers; and
- (c) whether a national project on biofertilisers was started in March, 1983 and if so, the target set and achievements made thereunder?

THE MINISTER OF STATE IN THE DEPARTMENT OF **AGRICULTURE** AND COOPERATION IN THE MINISTRY OF AGRICULTURE (SHRI YOGENDRA MAKWANA): (a) and (b) It is not a fact that biofertilisers used for paddy and other crops in Philippines, Thailand and Japan are entirely relpacing/substituting chemical fertilisers. However, Azolla a non-symbiotic biofertiliser, is used as a green manure for rice on a large scale only in a few countries like China and vietnam. Realising the importance of biofertilisers in supplementing the nitrogen requirement of specific crops the Government has sanctioned a National Project on Development and use of Biofertilisers.

(c) Yes, Sir. A National Project on Development and use of Bio-fertilisers was sanctioned in March, 1983. The production target of the project has been fixed at 600 tonnes each of Rhizobium culture and Blue green Algae per snnum. The estimated production of Blue green algae (BGA) during 1984-85 and 1985-86 through BGA subcentres have been of the order of 75 tonnes and 125 tonnes respectively.

Development of Bio-fertilizers

- 6643. SHRI C. MADHAV REDDI: Will the Minister of AGRICULTURE be pleased to state:
- (a) whether a great stress has been laid on development of biofertilisers—both symbiotic and non-symbiotic during the Seventh Plan period;

- (b) if so, details thereof and the work undertaken in this direction:
 - (c) the results achieved so for:
- (d) whether it is a fact that experiments have shown that biofertilisers can reduce the use of chemical fertilisers by 40 per cent;
- (e) the details of field trials conducted; and
- (f) the time by which the results are likely to be implemented?

THE MINISTER OF STATE IN THE DEPARTMENT OF **AGRICULTURE** AND COOPERATION IN THE MINISTRY OF AGRICULTURE (SHRI YOGENDRA MAKWANA): (a) to (c) Yes, Sir. With the continuation of the National Project on development and use of biofertilisers, stress has been laid on development of both symbiotic and non-symbiotic biofertilisers during the Seventh Five Year Plan. Under the National Project sanctioned by the Government, it is proposed to produce 600 tonnes of rhizobium culture and 600 tonnes of Blue Green Algae per annam through the establishment of one National, 8 Regional and 60 Blue Green Algae sub-The estimated production of Blue Green Algae during 1984-85 and 1985-86 through these sub-centres has been of the order of 75 tonnes and 125 tonnes respectively. The production of rhizobium culture could not be taken up due to the delay in the establishment of National and Regional centres.

(d) to (f) The experiments conducted have shown that application of effective strains of 500 grams of rhizobium culture add about 60-65 kilograms of nitrogen per hectare in pulses and legume-oilseeds. Application of 10 kilograms of Blue Green Algae to wetland paddy adds about 25-30 kilograms of nitrogen per hectare. These biofertilisers are soil and crops specific and will augment the nitrogen supply depending on the effectiveness of the strains and specific crop. However, their large scales