

The export policy of the country recently approved by the cabinet envisages doubling agricultural exports from present ~US\$ 30+ Billion to ~US\$ 60+ Billion by 2022, to diversify our export basket, to include novel, indigenous, organic, ethnic, traditional and non-traditional Agri products, tackling barriers to deal with sanitary and phyto-sanitary issues and to enable farmers to get benefit of export opportunities in overseas market, which is in-line with vision of the Government to double farmers' income. Production of the large volumes of a wide range of exportable quality agricultural products require higher investments in research and development in agriculture and the current level of investment in agricultural research needs further enhancement.

(b) and (c) In addition to the normal budgetary allocation, the Government has taken efforts to attract external investments in agricultural research through schemes like National Agriculture Technology Project (NATP)/National Agricultural Innovation Project (NAIP) through world bank funding support. In addition, ICAR/DARE encourages the scientists to earn competitive grants from various national and international agencies including DBT, ICMR, DST, BBSRC, ESRC, CDC etc. for supporting agricultural research. Besides, the Government is encouraging to research institutes under ICAR to generate funding for meeting the research expenditure by providing services and selling the agricultural produce. Research institutes are given targets to generate money. There are special incentives for development of technology by private sector and encourage companies to invest in research. The protection of plant varieties and patents has been strengthened to attract private investment.

Under International Collaborations, funding for agricultural research is received from many International agencies like IRRI, CIMMYT, ICARDA, Bill Melinda Gates Foundation, IAEA etc. under approved work plans. Besides, the Government of India has enabled the conducive environment for investment by the Indian and multinational seed companies in agricultural research and annual investment of more than ₹ 700 crores are being made by private seed companies. Foreign Direct Investment (FDI) has attracted many multinational companies for investing in agricultural research.

#### **Cloud seeding experiments**

2573. SHRI KUMAR KETKAR: Will the Minister of AGRICULTURE AND FARMERS WELFARE be pleased to state:

(a) whether in 2006, Dr. A.P.J. Abdul Kalam, then President of India had suggested to carry out cloud seeding experiments for 5 years to tackle drought; and

(b) if so, the reasons for not starting the experiments so far?

THE MINISTER OF STATE IN THE MINISTRY OF AGRICULTURE AND FARMERS WELFARE (SHRI GAJENDRA SINGH SHEKHAWAT): (a) Dr. A.P.J. Abdul Kalam, Former President of India in the year 2004 had suggested to explore Regional cloud seeding with the cooperation of participating states with the effective seeding techniques.

(b) Indian Institute of Tropical Meteorology (IITM), Pune is doing a scientific study on cloud seeding to propose suitable option for rain enhancement.

**Promotion of vocational education in agriculture**

2574. SHRI SYED NASIR HUSSAIN: Will the Minister of AGRICULTURE AND FARMERS WELFARE be pleased to state:

(a) whether Government has taken any steps to promote vocational education in agriculture;

(b) if so, the details thereof; and

(c) if not, the reasons therefor?

THE MINISTER OF STATE IN THE MINISTRY OF AGRICULTURE AND FARMERS WELFARE (SHRI GAJENDRA SINGH SHEKHAWAT): (a) No, Sir.

(b) Question does not arise.

(c) The Indian Council of Agricultural Research (ICAR) undertakes, aids and promotes higher agricultural education in the country.

**Dependency on imported fertilizers**

2575. SHRI AMAR SINGH: Will the Minister of AGRICULTURE AND FARMERS WELFARE be pleased to state:

(a) whether it is a fact that there has been a steep rise in the prices of fertilizer during the last two years which had adversely affected the farmers;

(b) if so, the details thereof;

(c) whether it is also a fact that India is overwhelmingly dependent on import of fertilizer to meet the requirement of farmers, if so, the details thereof; and

(d) the steps Government proposes to take to explore innovative ways to increase self-reliance?

THE MINISTER OF STATE IN THE MINISTRY OF AGRICULTURE AND FARMERS WELFARE (SHRI PARSHOTAM RUPALA): (a) and (b) Urea is under