

inter-crop price parity, terms of trade between agricultural and non-agricultural sectors and the likely impact of MSP on consumers and overall economy along with rational utilisation of scarce natural resources like land and water. Cost of production is one of the important factors in the determination of MSPs. Cost of production includes all paid out costs such as those incurred on account of hired human labour, bullock labour/machine labour, rent paid for leased in land, expenses incurred in cash and kind on use of material inputs like seeds, fertilizers, manures, irrigation charges, depreciation on implements and farm buildings, interest on working capital, diesel/electricity for operation of pump sets etc, miscellaneous expenses and imputed value of family labour. Hence the costs considered are very comprehensive and based on the methodology recommended by Expert Committees from time to time.

(c) and (d) Government had substantially increased the Minimum Support Prices (MSPs) for all mandated kharif, rabi and commercial crops for 2018-19 Season. This decision of the Government is a historic one as it redeems the promise of the pre-determined principle of fixing the MSPs at a level of at least 150 per cent of the cost of production announced by the Union Budget for 2018-19. For the year 2018-19 all mandated agricultural crops getting at least 50 percent return over cost of production.

#### **Production of manure from organic waste**

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

- (a) whether Government has been able to develop manure for crops from organic waste;
- (b) if so, the details thereof;
- (c) the research bodies involved in such research;
- (d) the comparative cost of producing such manure against the chemical fertilizers; and
- (e) the effective steps taken/proposed to be taken by Government to produce manure from organic waste?

THE MINISTER OF STATE IN THE MINISTRY OF AGRICULTURE AND FARMERS WELFARE (SHRI PARSHOTTAM RUPALA): (a) and (b) Government has developed improved technology to prepare various types of organic manures such as phosphocompost, vermicompost, city compost, Farm Yard Manure (FYM), municipal

solid waste compost, etc., from organic wastes. Waste decomposer developed by National Centre of Organic Farming (NCOF), Ghaziabad, has been distributed to farmers across the country for on farm production of organic manure from organic waste.

(c) Various ICAR institutions particularly Indian Institute of Soil Science, Bhopal; Indian Agricultural Research Institute, New Delhi; Indian Institute of Farming System Research, Modipuram; Central Research Institute for Dry Land Agriculture, Hyderabad; Central Arid Zone Research Institute, Jodhpur; Indian Institute of Horticultural Research, Bengaluru; Central Plantation Crops Research Institute, Kasargod; ICAR Research Complexes and State Agricultural Universities are involved in developing technologies for production of manures/ compost from various waste materials.

(d) The cost of production depends on type of fertilizers or manure to be produced. However, fertilizer production requires large industrial setup and costly raw material vis-a-vis manure which could be prepared even at farm level using locally available bio-degradable material. Thus manure production is cheaper. Although such a comparative study has not been done.

(e) The Government has taken the following effective steps to produce/promote the use of manures from organic waste:-

- (i) Under National Mission of Sustainable Agriculture (NMSA) assistance is also provided for setting up of mechanized Fruit/ Vegetable market waste/ Agro waste compost production unit 100% financial assistance to State Government/ Government Agencies upto a maximum limit of ₹ 190.00 lakh per unit and 33% of project cost maximum limited to ₹63 lakh per unit for individuals/private agencies through NABARD as capital investment for establishment of agro/vegetable waste compost production units of 3000 Total Per Annum (TPA) production.
- (ii) Under Parampragat Krishi Vikas Yojana (PKVY) financial assistance is provided at the rate of ₹50,000 per ha per farmer for three years, out of which 62% i.e., ₹ 31,000 is provided for organic conversion, organic inputs, on-farm input infrastructure.
- (iii) Under MOVCDNER assistance is provided for on-farm and off-farm inputs production infrastructure @ Rs 3750/ha 3 years, for each.
- (iv) Government of India is providing Market Development Assistance @ ₹1500/-per metric ton (MT) to Fertilizer Companies for sale of City Compost.