

Problems faced by small farmers

651. SHRI VIJAY JAWAHARLAL DARDA : Will the Minister of AGRICULTURE be pleased to state :

(a) whether Government is aware that small farmers are facing the problems of land degrading, water logging and problems related to quality of soil due to which productivity is falling day by day, making agriculture unprofitable;

(b) if so, whether Government has carried out any study to find out farming problems of small farmers; and

(c) if so, the details thereof and the action taken thereon?

THE MINISTER OF STATE IN THE MINISTRY OF AGRICULTURE (DR. SANJEEV KUMAR BALYAN): (a) to (c) As per available estimates (2010), about 120.4 million hectare is affected by various kind of land degradation which includes water and wind erosion (94.9 million hectare), water logging (0.9 million hectare), soil alkalinity/ Sodcity (3.7 million hectare), soil acidity (17.9 million hectare), soil salinity (2.7 million hectare) and mining and industrial waste (0.3 million hectare). As per studies conducted by Indian Council of Agriculture Research (ICAR), soil erosion leads to land degradation in upper reaches of river system, whereas when deposited at various locations of river systems, it may increase the soil fertility. However, overall foodgrain production has increased from 218.1 million tonnes (2009-10) to 264.8 million tonnes (2013-14- 4th advance estimates) in the country.

Studies of ICAR also reveals that smaller farms were with higher land productivity but it was predicted that over the long term smaller farms will loose this advantages as per capita income rises, economy diversify and workers leave agriculture and wage rate goes up. Further, small farm holders do not lag behind from other farm-size holding categories in adoption of improved technologies and use of fertilizers and irrigation. Productivity at small farms is much higher than large size holding, however, due to low per capita land, and output at small holding not enough to keep farm family out of poverty despite high productivity.

Government of India, Ministry of Rural Development is mainly implementing Integrated Watershed Management Programme for restoring ecological balance by harnessing, conserving and developing of degraded lands in the country.

Effect of over use of chemical fertilizers on soil health

652. SHRIMATI SASIKALA PUSHPA : Will the Minister of AGRICULTURE be pleased to state :

(a) whether it is a fact that use/overuse of various chemical fertilizers have spoiled the soil health over the years, if so, the details thereof;

(b) whether Government is encouraging farmers to use bio-fertilizers wherever possible, if so, the details thereof; and

(c) the steps taken by Government to improve the soil health of the country?

THE MINISTER OF STATE IN THE MINISTRY OF AGRICULTURE (SHRI MOHANBHAI KALYANJIBHAI KUNDARIA) : (a) There is no scientific evidence of declining soil health from judicious use of chemical fertilizers. However, indiscriminate and imbalanced use of fertilisers coupled with low addition of organic matter over years may result into multi-nutrient deficiencies and deterioration of soil health.

(b) Government is encouraging farmers to use bio-fertilizers through various ongoing programmes :

- (i) Under National Mission for Sustainable Agriculture (NMSA), Government provides financial assistance for promotion of organic inputs including bio-fertilizers.
- (ii) Indian Council of Agricultural Research (ICAR), organises frontline demonstrations, farmers training, publishing extension materials in local language.
- (iii) National Centre of Organic Farming conducts various extension and publicity activities like exhibitions, radio talks, TV programmes, distribution of literature on bio-fertilizers, etc. to educate farmers.

(c) Steps taken to improve soil health:

- (i) Government is advocating soil test based integrated nutrient management envisaging conjunctive use of both inorganic and organic sources of nutrients.
- (ii) Under NMSA, financial assistance is provided to States for setting up/ strengthening of mobile/static soil testing laboratories, training & demonstration on soil health management, promotion of micro-nutrients, setting up mechanized fruit/vegetable market waste/agro waste compost production units.
- (iii) Under Mission for Integrated Development of Horticulture, assistance is provided for establishing vermi-compost units and High Density Polyethylene (HDPE) vermi beds.
- (iv) National Food Security Mission provides financial assistance to improve soil fertility through application of soil ameliorants (gypsum / lime / micro-nutrients).
- (v) Under National Mission on Oil Seeds and Oil Palm assistance is provided on components like supply of gypsum, dolomite, liming, bio-fertilizers construction of vermi compost units at oil palm fields, intercropping etc. to improve soil health.