

(b) if so, the details thereof;

(c) whether Government has created warehousing and other storage facilities in rural areas in the context of the Food Security Bill; and

(d) if so, the total number of rural warehouses constructed till now in West Bengal?

THE MINISTER OF STATE IN THE MINISTRY OF AGRICULTURE (SHRI TARIQ ANWAR): (a) and (b) Yes, Sir. As per Report of the Working Group on Agricultural Marketing Infrastructure, Secondary Agriculture and Policy Required for Internal and External Trade of Planning Commission, the additional warehousing facility required for the Twelfth Five Year Plan 2012-17 is 35 million MT for storing agricultural produce.

(c) and (d) Government has created warehousing and storage facilities by launching several promotional activities and capital investment schemes for creation of storage infrastructure. These include schemes such as Grameen Bhandaran Yojana (GBY), Private Entrepreneur Guarantee (PEG) scheme and provision of Warehouse Infrastructure Fund of NABARD.

Since inception of the Grameen Bhandaran Yojana (GBY) in April, 2001 up to June, 2013, a total of 1201 godowns with a capacity of 7.38 lakh MT have been created in West Bengal.

#### **Effect of shortage of rain**

1559. SHRI VIJAY JAWAHARLAL DARDA: Will the Minister of AGRICULTURE be pleased to state:

(a) whether shortage of rains during 2012 had adversely affected crops in many parts of the country where rain-fed cropping pattern is the major source of farm productivity;

(b) if so, the extent of losses in Vidarbha region of Maharashtra, where farmers are committing suicides due to uneconomic cropping because of perennial power shortage resulting in non-operation of tube wells; and

(c) whether any relief measures have been taken so that small and marginal farmers of districts like Yavatmal, Akola, Washim, Buldhana etc. are not compelled to resort to desperate measure like suicides?

THE MINISTER OF STATE IN THE MINISTRY OF AGRICULTURE (SHRI TARIQ ANWAR): (a) As per 4th Advance Estimate, total area coverage under major crops during 2012-13 had witnessed a shortfall of about 45.9 lakh ha against 2011-12 primarily due to deficit rainfall during South West and North West Monsoon, 2012.

(b) During Kharif-2012, Government of Maharashtra had declared drought in 125 talukas in 16 districts of the State including 1 taluka of Buldhana District of Vidarbha region. As per information made available by State Government, 10519.44 ha area had suffered crop loss of 50% and above in Buldhana district during Kharif-2012.

(c) Government of India had approved an assistance of Rs. 778.09 crore from National Disaster Response Fund (NDRF) to Government of Maharashtra for managing drought situation during Kharif-2012 in the State including Buldhana district of Vidarbha region.

Besides, in view of rainfall deficit in several parts of the country during Monsoon-2012, Government of India introduced several schemes to mitigate sufferings of farmers especially that of small and marginal farmers such as (i) Diesel Subsidy Scheme (for providing protective irrigation in drought declared areas) (ii) enhancement of subsidy on seeds (to partially recompense farmers for re-sowing/purchasing drought tolerant varieties of seeds) (iii) up-scaling the Central Sector Scheme on Feed and Fodder (iv) waiver of import duty on oil cakes (v) additional allocation under Accelerated Fodder Development Programme (AFDP) (vi) providing assistance for feed and fodder supplements under National Mission for Protein Supplements (NMPS) (vii) introducing drought impact mitigating interventions in perennial horticulture crops (viii) reducing interest on rescheduled crop loans etc.

In addition, additional wage employment upto 50 days per household beyond

100 days under Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS), interim assistance under calamity component of National Rural Drinking Water Programme (NRDWP), fast tracking release of installments under NRDWP and Integrated Watershed Management Programme (IWMP) were extended to drought affected areas.

**Impact of climate change on agriculture**

1560. SHRI N. BALAGANGA: Will the Minister of AGRICULTURE be pleased to state:

- (a) whether Government has conducted any study to find out the impact of climate change on agriculture sector;
- (b) if so, the details thereof including the reaction of Government thereto;
- (c) whether Government's agricultural research institutes have conducted any study to assess the impact of global warming on agricultural production in different parts of the country;
- (d) if so, the details thereof; and
- (e) the steps taken by Government to deal with the impact of climate change on agricultural sector in the country?

THE MINISTER OF STATE IN THE MINISTRY OF AGRICULTURE (SHRI TARIQ ANWAR): (a) and (b) Yes, Sir. Realizing that the climate change is likely to have major impacts on agriculture, the Government through Indian Council of Agricultural Research (ICAR) has assessed the impact of climate change on Indian agriculture under different scenarios using crop simulation models.

(c) and (d) Yes, Sir. The Indian Council of Agricultural Research (ICAR) has conducted climate change impact analysis on crop yields through various centres in different parts of the country using crop simulation models (INFO-CROP and HAD CM3) for 2020, 2050 and 2080. The results indicate variability in temperature and rainfall pattern with significant impacts on crop yields. These studies projected