

**ADVISORY FOR FARMERS IN VIEW OF DEFICIENT RAINFALL
SITUATION IN MAHARASHTRA**

The rainfall in Solapur region of Maharashtra (as on date July 17, 2014) is not deficient compared to cumulative rainfall for the same period during previous years of normal rainfall (Table 1).

Table 1: CUMULATIVE RAINFALL FROM January 1, 2008 TO July 17, 2014 (mm) DURING LAST SEVEN YEARS AT SOLAPUR (Maharashtra)		
Data from Weather Observatory NRC on Pomegranate, Kegaon Solapur		
Year	Rainfall (mm)	REMARKS
2008	169.20	Slightly deficient (15.5%)
2009	191.10	Normal rainfall
2010	211.40	Normal rainfall
2011	190.20	Normal rainfall year
2012	125.90	Drought year
2013	370.71	Excess rainfall year
2014	218.10	Normal

However, according to Regional Meteorological Centre, Mumbai pomegranate growing areas in Maharashtra show 20- 85% (Solapur 21%) deficient rainfall during the period June 1 to July 16, 2014 compared to long term averages for the same period. In view of the current rainfall situation in Maharashtra the regions showing up to 25 % deficient rain during June-July, may not face scarcity of irrigation water, as pomegranate is a drought tolerant crop, though responds well to irrigation w.r.t. fruit yield. However, in districts with the prediction of rainfall deficient above 25%, the farmers are advised to take following measures:

I. *In situ* water conservation:

- Raising soil around the plants (earthing up) to make raised beds of 10-12 inch height and 35-40 inch (1m) width
- Organic mulching with sugarcane trash/cereal crop residues
- Inorganic mulching with pervious black polythene (100 micron) or transparent mulches
- Intercropping with low height and/or less water consuming intercrops like Moat/Matki bean (*Vigna aconitifolia*), green gram (*Vigna radiata*), Dhaincha (*Sesbania aculeate*), Sunhemp (*Crotalaria juncea*) etc. may be taken

depending on disease and pest situation in individual orchards, for best utilization of waste water and to compensate for yield losses in pomegranate if any.

- Avoid weeding (with proper pest control sprays) except in the basin of plant, weeds will act as green mulch

II. On farm water conservation:

- Energise tube wells for pumping out water when required.

III. Plant canopy/crop regulation/Irrigation

- **Orchards in rest:** Prune the plants to maintain minimum required foliage and irrigate with only water required for survival
- **Orchards where fruits to be harvested in 20-30 days:** Remove water sprouts or branches without fruits to reduce foliage. Irrigate the plants regularly with minimum water requirement depending on fruit load, soil type and weather conditions.
- **Orchards where *mrig bahar* has been taken:** Remove water sprouts and suckers as and when observed/every 15 days, do not keep heavy fruit load. Depending on plant growth and canopy keep minimum load as in table below. Irrigate only when there is no rain.

Optimum fruit load/plant	
Age of plant	Number of Fruits per plant
2	20-25
3	35-45
4	50-80
5 and above	85-100

- Farmers in areas where heavy water shortage is there and were to take *August bahar*, may postpone and take late hasta bahar, when water requirement will be less.

IV. Fertilizer application: Fertilizer application should also be reduced/minimised as without sufficient water fertilizers will not be utilized and will be wasted. Fertigation may be preferred.

V. Disease and pest management: Though deficient rains have been predicted but due to favourable temperatures (25-30°C), high humidity (RH>50%) and intermittent drizzle the weather is highly congenial for diseases like bacterial blight, wilt, anthracnose and *Colletotrichum* rot, *Phytophthora* blight and other fungal spots and rots. Thrips on new foliage/growth, leaf eating caterpillars, fruit borers and fruit sucking moth incidence may increase hence, suitable measures be adopted for keeping their infestation low. To manage disease and insect pests farmers are advised to follow spray schedules as recommended by NRCP for *mrig bahar* crop (available in English and Marathi languages on www.nrcpomegranate.org scrolling bar and in downloads) or contact for advise on 0217-2350074.