Monsoon Rains and Fertiliser Use

Agriculture and allied sectors in Indian economy account for 18 per cent of gross value added (GVA) but employ more than half of the Indian workforce. Indian agriculture is heavily dependent on the monsoon. According to India Meteorological Department (IMD), there are four monsoon seasons, viz., Pre-monsoon (March-May), South-West monsoon (June-September), Post-monsoon (October-December) and winter or North-East monsoon (January-February). Among these monsoon seasons, South-West monsoon is the main rainy season in India except for extreme south peninsula. On an average about 75 per cent of the annual rainfall is received from south west monsoon. Normal rainfall during south west monsoon is about 887 mm.

South-West monsoon establishes around 1st of June in extreme south (Kerala) and in extreme east (Assam) of mainland India. Then it gradually advances from south to north in the peninsula and from east to west in the northern India. The South-West monsoon season plays a crucial rule as about 55-60 per cent of the area sown is still rain-fed. India gets nearly 53 per cent of its agricultural produce from the Kharif season (April-September) compared to 47 per cent in the Rabi season (October-March). The impact of the monsoon is also crucial for Rabi crops as it has an impact on the ground water and also reservoirs which are critical for Rabi crops irrigation. Therefore, monsoon rainfall has a direct bearing on all crops across the country.

Though normal date of onset of South-West monsoon over Kerala is 1st June but there are variations in the onset dates. The actual rainfall in any year in meteorological sub divisions may differ widely from the normal, as the quantum of precipitation depends on the nature and the intensity of synoptic weather systems. The intensity and the distribution of rainfall are controlled by a series of tropical disturbances, in the form of low pressure, depression and cyclonic storms. With the application of modern technology, considerable developments have taken place in the field of weather forecasting, yet it is difficult to make an accurate prediction of weather. The impact of monsoon depends upon distribution of rainfall across space and time.

This year, the 2nd press release issued by India Meteorological Department (IMD), on 2nd June, 2015, predicted a deficit of 12 per cent from normal during South-West monsoon 2015. The prediction raised concern about the prospects of sowing in agriculture and consequent fertiliser demand and its use. However, in contrast to the prediction, the progress of rainfall during the first half of South-West monsoon 2015 has been quite encouraging. Rainfall has been well-spaced and quantitatively almost normal in major part of the country during first half of the current South-West monsoon season.

Even the pre monsoon season started with a positive note. Rainfall received during March to May 2015 of pre monsoon season was exceedingly good. It was 38 per cent higher than long period average. Consequently, availability of water level in the reservoirs was comfortable and there was good moisture availability in the soil. Brisk sale of fertilisers was reported during April and May 2015. Cumulative sale of urea and MOP was 22 and 30 per cent up over corresponding period of last year. Sale of DAP surged to more than double during the period.

Onset of South-West monsoon 2015 was delayed by 5 days. However, rainfall during June, 2015 was exceedingly good, 13 per cent higher than Long Period Average (LPA). Out of a total of 36 met sub-divisions, 31 meteorological sub-divisions constituting 92 per cent of the total area of the country received excess/normal rainfall. During April-June, 2015, cumulative sale was higher by 9 per cent in case of urea, 95 per cent for DAP, 31 per cent for NP/NPKs and 5 per cent for MOP over the corresponding period in the previous year.

There was some disappointment in the monsoon activities during 1st half of July, but it was more than

compensated in the second half of the month from good rains. Cumulative rainfall for the country as a whole during the period 1st June to 29th July, 2015 was normal in most parts of the country. Out of a total of 36 met sub-divisions, 26 meteorological sub-divisions received excess/normal rainfall and remaining 10 sub-divisions received deficient rainfall. Total actual rainfall upto 29th July, 2015 was 421.3 mm compared to 342.1 mm during the corresponding period last year. The threat of deficit rainfall is currently confined mainly to the contiguous stretch covering Marathwada, Karnataka, Rayalaseema and parts of Vidarbha and Telangana.

Central Water Commission monitors 91 major reservoirs in the country which have total live capacity of 157.80 billion cubic meter (BCM) at full reservoir level (FRL). Current live storage in these reservoirs as on 23rd July, 2015 was 58.60 BCM as against 50.77 BCM on 23rd July, 2014 (last year) and 54.20 BCM of normal (average storage of the last 10 years) storage. Current year's storage is 115 per cent of the last year's storage and 108 per cent of the normal storage.

As per latest information available on sowing of Kharif crops, around 65.5 per cent of the normal area under Kharif crops has been sown upto 24th July, 2015. Area sown under all Kharif crops taken together has been reported to be 693.83 lakh hectares (ha) at All India level as compared to 550.42 lakh hectares in the corresponding period of last year.

As compared to normal area, coverage upto 24th July, 2015 was higher by 2.8 lakh ha. under Bajra, 3.7 lakh ha. under Maize, 4.2 lakh ha. under Urad, 3.6 lakh ha. under Moong, 15.7 lakh ha. under Soyabean, 3.1 lakh ha. under Sesamum and 4.6 lakh ha. under Cotton. It was lower by 6.1 lakh ha. under Rice, 3.3 lakh ha. under Jowar and 2.7 lakh ha. under Sugarcane. However, area coverage was higher for most of the major crops upto 24th July, 2015 compared to corresponding period in the previous year. Going by current trends, this year's Kharif production is likely to be higher than last year. The June and July rains have ensured good progress of the sowing and vegetative growth stages in most parts of the country. Rains are still required, especially at the time of flowering from mid-August. Nothing can yet be said conclusively about rainfall in the second half of the season. But, the trend in rainfall experienced in the past few years has been even better in the second half of the season than in the first half.

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Keeping in background the rainfall received till July end and prospects of good rainfall during the remaining period of South-West monsoon, demand for fertilisers is expected to remain high during the main manuring seasons in coming months. Latest report of sales of fertilisers upto July indicate healthy growth in sales of major fertiliser products. There is need for arrangement of adequate supplies of fertilisers from domestic production and imports to fulfil the increased demand in the coming months of the year. Fertiliser industry supplies about 54 million tonnes of various fertiliser products in a year throughout the country, comprising around 640 districts, 641 thousand villages and 138 million farm holdings. This is a gigantic task. Fertiliser Industry has been performing this task without fail year after year despite all odds, including undue delay in payment of subsidy due to under provision in Union Budget. Mounting subsidy dues year after year has been crippling the financial health of the Fertiliser Industry.

To conclude, it may be construed that expected good monsoon rains during remaining period of the on-going Kharif season will lead to increase in sown area and result in positive growth in fertiliser consumption. Late monsoon rains will also ensure good soil moisture for Rabi sowing and step up demand for fertilisers. Fertiliser Industry is well equipped to produce to its capacity provided fertiliser companies are not starved of their working capital. Government should ensure timely payment of subsidy dues which exceed 70 per cent of cost of production of urea and 35 per cent of cost of production or import of P & K fertilisers. Timely payment of subsidy is of paramount importance for this basic and core industry. The Industry needs to be financially sound to perform the arduous task of ensuring timely supplies of quality fertiliser across the country. In case of urea, as the supply management is entirely with the government, it should be ensured that there is no lack in management of supply of urea in peak season in any part of the country. ■