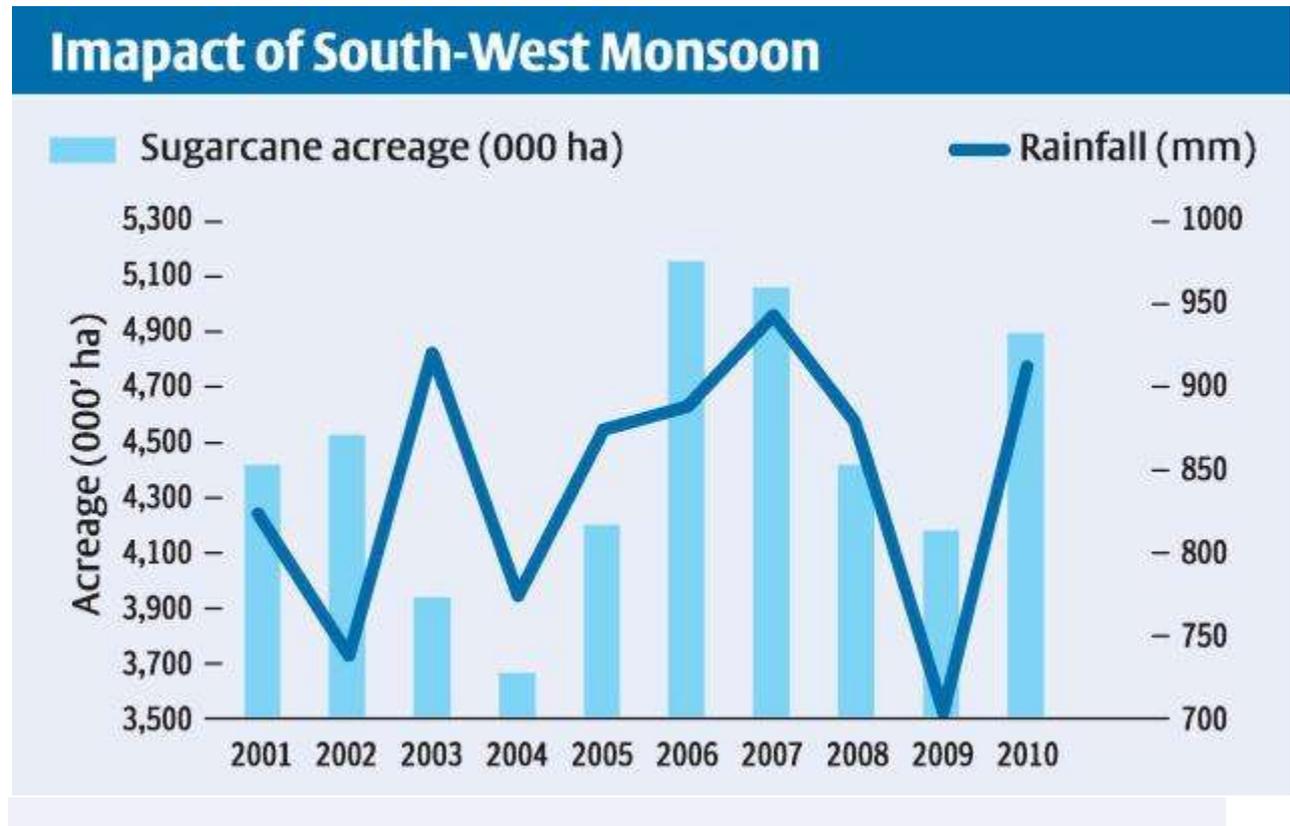


Will El Nino impact sugarcane harvest?

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With plantings over, it could impact yield and sugar recovery

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Sugarcane planting for the 2014-15 sugar season starting October is almost complete in Maharashtra, Karnataka and Tamil Nadu; while in UP and other parts of North India the planting will continue till late May.

The total water requirement for sugarcane is 80-100 BCM (billion cubic meters) during the season, which is about 8-10 per cent of the total water requirement for all the irrigated crops, grown during same duration.

In sub-tropical region, sugarcane requires 1,500 mm water for a hectare, out of which about 600 mm is met through rain water, while the rest through irrigation.

In tropical zone, the average requirement is 2,000-3,000 mm, out of which 600 mm is met through rain water. It is one of the reasons why we require about 10 irrigations in sub-tropical and 25 irrigations in tropical zones.

Over 60 per cent of ground water irrigation is through deep wells. Therefore, for both rains and irrigation, monsoon is crucial. In India, South-West Monsoon brings about 70 per cent of the total rainfall.

Therefore, for an idea of 2014-15 sugarcane acreage, we need to examine the S-W monsoon during 2013, which was some 6 per cent higher than the normal average rainfall.

Tropical areas

Maharashtra and Karnataka contribute 30-35 per cent of total sugarcane production. In Maharashtra, about 75 per cent sugarcane is planted in central and southern regions, which have catchment areas in and around Konkan and Madhya Maharashtra. So examining the rainfall in these regions would help assess the progress in planting.

Planting for the 2014-15 season in Maharashtra started in mid-July to mid-August (*Adsali* i.e. the 18-month crop). During June-August 2013, Konkan and Madhya Maharashtra together received 21 per cent excess rainfall than normal. In 2012, rainfall was 13 per cent deficient. Usually, *adsali* accounts for 1-1.25 lakh hectares which could have increased with a good monsoon.

The second set of planting happened during mid-October to mid-December, when Konkan and Madhya Maharashtra together received normal rainfall in 2013 as well as in 2012.

The third set of planting happened during January-March (*Suru*) 2014 for which plantings are going on in some places. Usually, the plant: ratoon ratio is 60:40, but in 2013-14 it was estimated to be 45:55, and looking at the monsoon trends, it is assumed that during 2014-15 it will be in the ratio of 65:35.

Normal ratio of *Adsali*, pre-seasonal and *Suru* is 20:45:35, which is estimated to be 27: 55:18 in 2014-15 season. With good S-W monsoon, reservoirs in the 12 States are having more water compared with 2012.

Karnataka and UP

In north Karnataka, it is stated a majority of the plantation is done in October-December (Pre-seasonal) and the rest in January-March. In south Karnataka, it is done as *Eksali* in January-March (12-month crop).

In Karnataka, water level in reservoirs/dams such as Almatti Dam/Bagalkot, Ghataprabha and Malaprabha/Belgaum, Narayanpur/Bijapur and Kabini/Mysore, till mid-July 2013, was 60 per cent at FRL. In comparison, the level was 25 per cent of FRL in the same period a year ago.

In Uttar Pradesh, which alone contributes for about 35-40 per cent of total sugarcane production, autumn planting happens in mid-October to mid-December, which is just about 5-7 per cent. Spring planting, which happens in February to March, is the most common.

Farmers prefer this time for planting, as they get a longer duration for crops to mature. In January-February, rainfall was in excess, which, however, delayed the planting, which is still on. Late planting also happens due to wheat harvesting from April onwards.

El Nino and cane

A good monsoon in 2013 has given a boost to planting but any set back on the S-W monsoon this year may impact cane yield, particularly in Karnataka, Maharashtra, Tamil Nadu and Andhra Pradesh.

The good rainfall experiences in the last two years can be impacted with onset of climatic patterns such as El Niño.

Currently, the El Niño-Southern Oscillation (ENSO) is neutral for India.

However, the sub-surface of the tropical Pacific Ocean has warmed up substantially recently. It is predicted that the tropical Pacific is likely to continue to warm up in the coming months, with

most metrological models showing surface temperatures either approaching or exceeding El Niño thresholds by August.

Although, Indian Metrological Department hasn't yet officially announced any impact of El Nino on S-W Monsoon, a few symptoms support the El Nino impacting countries such as Australia.

Apart from impacting monsoon and climatic patterns, sugarcane planting in the country depends on lot other socio-economic-political factors, including cane price arrears. ISMA, like every year, starts conducting satellite mapping from June-July to assess the actual position on ground and estimates the sugarcane crop acreage.

Moreover, by that time major planting would have been completed, so any impact of El Niño can be only be seen on the yield and recovery in 2014-15 season.

