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Water level in 91 reservoirs dips to 41% of total capacity

The water level in 91 major reservoirs in the country has dipped to 41 per cent of their total capacity, the government said on Tuesday.

According to the Union Water Resources Ministry, 64.55 billion cubic metres (BCM) of water was available in these reservoirs for the week ending March 2.

On February 23, the storage was 44 per cent or 68.741 BCM of the total capacity of 157.799 BCM. The March 2 stock though was 132 per cent of the storage reported during the corresponding period last year and 102 per cent of the decadal average, the ministry said in a statement.

The States that have recorded lower storage vis-a-vis the corresponding period last year are Himachal Pradesh, Tripura, Andhra Pradesh, Kerala, Karnataka and Tamil Nadu.

Punjab, Rajasthan, Jharkhand, Odisha, West Bengal, Gujarat, Maharashtra, Uttar Pradesh, Uttarakhand, Madhya Pradesh, Chhattisgarh and Telangana have reported a better stock compared to last year.

Sowing data for a rich harvest

Agri-tech firm CropIn provides farmers a variety of information — from weather conditions, likely yields to problems areas on the field



Krishna Kumar talks passionately about geo-tagging of farm plots, data analytics, machine learning and artificial intelligence in the context of farming and you wonder what these have to do with agriculture, especially when technology is the last thing on the mind of a vast majority of farmers.

But very soon he dispels this notion and says agriculture technology and datadriven farming are the way forward if farmers are to increase their productivity and reduce wastage.

That is exactly what his venture, CropIn Technology Solutions Pvt Ltd, based in Bengaluru, is attempting to do, as it provides information to the farmers ranging from weather and climatic conditions, the likely yield, problem areas in the field to when the farmer can expect a harvest.

Mobile app

CropIn has developed a mobile application that it gives to companies – banks and financial institutions, insurance companies, input companies, domestic and multinational food processing companies – which in turn give it to the farmers. The idea, says Krishna Kumar, is to build a technology platform to connect the farmer seamlessly with the ecosystem.

Upon graduating in electronics and instrumentation engineering, Krishna Kumar, Chief Executive Officer, CropIn, was employed in GE in Hyderabad, which he quit after a few years because he was itching to do something on his

own. For him, agriculture seemed to be the ideal option as there were so many uncertainties associated with it. He was keen to see how technology and data analytics can be used to improve farm yields.

CropIn itself came into being under interesting circumstances. Krishna Kumar had just his last month's pay and the provident fund money in his bank account. He wrote to his friends outlining his idea and asked them for money. 'We sink or sail together' was the message he conveyed to his friends. Before he knew it, he had raised about ₹7 lakh from his friends, with which he founded CropIn. The venture took off in early 2011 and the Beta version of the product was ready by the end of the year and it started selling the product in 2012, according to him.

CropIn sells the app to the input companies and food processors, who when they visit a farm geo-tag the piece of land, whose characteristics are then mapped using satellite images. CropIn, according to Krishna Kumar, uses European satellites as they are cheaper, but the company is talking to the Indian Space Research Organisation to see if it can hire any satellite. The satellite images of a plot are available every 10 days and the data sent out by the satellite are analysed by the CropIn's analytics team.

What it does

The satellite images are used to tell the farmer what the likely yield will be, whether the entire plot is well irrigated or not, whether it has sufficient amount of pesticides and fertilisers, and whether there is any problem with a particular patch in the field so that the farmer can be alerted to take immediate remedial steps. The alert message are sent in the local language to the farmers.

By this, he says, CropIn helps increase the per acre value of a farm, not just in terms of the output. It has around 80 customers now, including companies such as ITC, McCain, Mahindra & Mahindra, Mars, BigBasket, Sahyadri and State

governments and banks and insurance companies. It will also shortly start giving the app to farmers directly.

Krishna Kumar, who hails from Hazaribagh in Jharkhand, says the company is able to measure and analyse data about individual crops with 85-90 per cent accuracy. The app is crop agnostic and CropIn has so far covered nearly 1.5 million acres. It is working in 17 States in India and in eight countries, including Mozambique, the Philippines, Vietnam, Portugal, Nepal and Kenya.

Looking for funds

According to him, the company has raised "a few million dollars" from investors such as Ankur Capital, Seeders, Invested Development and UKaid and is looking to raise \$15-20 million in the next 12-18 months. This will be used to expand the area it has covered in India, cover more countries and develop the technological and analytical capabilities. The team strength from 80 now will increase to 130 in over a year. "We are investing in growth now. At the current rate of growth, we should break even in 2019," says Krishna Kumar.

He points out that there has been a lot of technological development in agriculture, but not much of digitisation. CropIn, with its technology, is helping change that. It has found that because of timely intervention it has been able to reduce losses in the field by nearly 20 per cent, while productivity has gone up by over 10 per cent.



Water level



Water level in the Papanasam dam on Tuesday stood at 53.10 feet (permissible level is 143 feet). The dam had an inflow of 59.14 cusecs and 204.75 cusecs was discharged. The level of Manimuthar dam stood at 48.20 feet (118 feet). The dam had an inflow of 91 cusecs and 100 cusecs was discharged.