# Chronicle

#### TN cops suggest DNA test to find out parentage of cow's calf!

First, police employed a simple natural test of mother-calf bondage hoping that the younger one would rush to its mother by instinct.



**Muthupettai:** Faced with a claim of ownership of a calf by two farmers here, police have come up with a unusual suggestion of a DNA test of the cows and the offspring to resolve the dispute.

Rajarathimam and Mathiazhagan, who are also relatives and residents of this town in Tiruvarur district, staked claim to the three-and-half year old calf, police said.

Rajarathinam in a complaint with police claimed that the calf was given birth by his cow and had been missing before he found it in the farmstead of Mathiazhagan.

However, the latter rejected the claim and said the he had been rearing both the mother cow and the calf.

First, police employed a simple natural test of mother-calf bondage hoping that the younger one would rush to its mother by instinct.

As the calf ran towards the cow brought by Mathiazhagan, police concluded it was the calf's mother. However, the other man did not budge and continued to assert his claim.

Caught at the wits end, Police then suggested a DNA test to conclude which cow gave birth to the calf. They asked both the parties to resolve the issue scientifically.

"For now, Mathiazhagan has taken both the cow and its calf.

We suggested DNA test to find an amicable solution. It is upto the parties to decide," Special Police Sub Inspector V Ramajunam told PTI.

Though DNA test has been the norm in deciding parentage disputes in humans, this is a perhaps one of the rare cases where it has been mooted for resoloving a dispute involving animals.

A top official of a Veterinary institute said though the technology is available for a DNA test of animals, it was a costly affair and involved technicalities.

"The technology to do such a test is available... it is a costly affair involving several technicalities. The test is not very easy," Vice-Chancellor of Tamil Nadu Veterinary and Animal Sciences University Dr S Thilagar told PTI when contacted.

#### Groundwater level declining in all the districts of Tamil Nadu

With the North East Monsoon mostly inactive, Tamil Nadu stares at a severe water crisis.



**Chennai**: Tamil Nadu, which is facing one of its worst ever North East monsoon rainfall seasons, will be facing severe water scarcity right across the state with the groundwater declining in almost all the districts except one.

All observatory wells of the State Ground and Surface Water Resources Data Centre across the State have recorded a fall in the groundwater table in December, compared with the level in December 2015.

The groundwater table in 17 districts has fallen by more than three metres. The groundwater level in Erode has fallen steeply by 6.46 meters below ground level (mbgl) followed by Villupuram and Tirunelveli at 5.89 mbgl and 5.74 mbgl.

The Nilgiris district is the only place to record a rise in the water level, that too marginally from 2.26 mbgl in December 2015 to 2.11 mbgl last month. The centre has stopped releasing the data on the groundwater level in Chennai as the city comes under the jurisdiction of the Chennai Metropolitan Water Supply and Sewerage Board.

With the state facing a deficit of 62 per cent rainfall in North East Monsoon, the ground water level has plummeted to record low since 2012. In the last five years, the state has received deficit rainfall in 2012, 2013, 2014 and 2016 and 2015 state witnessed 53 per cent excess rainfall.

The water levels recorded in the 17 districts, particularly in Western and Southern districts, have been lowest since 2012. Coimbatore district has the lowest level at 16.08 mbgl followed by Namakkal, Thiruppur, Salem and Erode has a water level below 12 mbgl.

An official of Water Resources Department said that the fall in water level was due to poor rainfall received during the South West Monsoon and the North East Monsoon.

The stress on the ground water table would go up further in the coming summer months as the storage level in the reservoirs were also very less, the official said, adding that none of the major reservoirs in the state has good storage.

With the monsoon coming to an end, there is very little hope for any major increase in the reservoir storage level. The WRD official said that the state stares at a summer of worst water scarcity both for drinking as well as for agriculture.



TNAU scientists cultivate 'veli masaal', register profit



The Tamil Nadu Agricultural University's Sugarcane Research Station at Sirugamani near Tiruchi has shown a successful experiment of cultivating fodder 'veli masal' and marketing it to needy livestock owners.

'Veli masal' accounts for a large amount of nutrient and livestock particularly goats and sheep prefer the fodder to any other variety. The Research Station took up the cultivation of 'veli masal' on a low key with a limited expense. "But, to our surprise, there has been a growing demand for the fodder to such an extent that the station has registered a huge profit --about four to five times of our investment," said N. Chandrasekaran, Professor and Head of the Station.

He said that the crop can withstand drought conditions and can be harvested once in 45 days. "This multi-harvest system has facilitated us to gain profit," he said.

The livestock prefer this leguminous feed because it is rich in protein. Livestock owners normally purchase it and mix it with grass before use.

Apart from harvesting veli masal, the station has allotted a separate field where seed plants are grown. "The seed plant is not harvested, as it requires more time upto 120 days to develop seeds," said R. Nageswari, Assistant Professor of Agronomy of the station.

The station has stocked 60 kg of seeds and farmers can get further details by dialling 9486201357 during working hours.

#### Workshop on assessment of food loss from fisheries in city tomorrow

A workshop on assessment of food loss from select gill-net and trammel net fisheries of India will be held at the Central Institute of Fisheries Technology (CIFT) on January 4.

The workshop is being jointly organised by the Institute and the Food and Agriculture Organisation (FAO). The Integrated Coastal Management, Kakkinada, Andhra Pradesh, is partnering with the programme. The study will cover select marine and inland fishing locations in Kerala, Tamil Nadu, Andhra Pradesh and Gujarat, says a communication issued by Suseela Mathew, director-in-charge of CIFT.

#### Farmers demand higher MSP for red-gram

### Say MSP of Rs. 5050 along with State government incentive of Rs. 450 a quintal is too less considering the cost of cultivation

Karnataka Pratha Raitha Sangha (KPRS), Karnataka Rajya Raitha Sangha (KRRS), All India Kisan Sabha (AIKS) and Red-gram Growers Association, Chittapur, have planned different forms of struggles for demanding better Minimum Support Price (MSP) for red-gram. Addressing a joint media conference here on Tuesday, the leaders of the organisations said that the MSP of Rs. 5050 plus State government incentive of Rs. 450 a quintal was too less considering the cost of cultivation.

"As per the report submitted by Agriculture Price Commission, the cost of cultivating red-gram in an acre is between Rs. 18,000 and Rs. 25,000. Considering the per-acre yield between three and four quintal, Rs. 6,500 is required to produce one quintal of red-gram. Based on these calculations, Karnataka government recommended an MSP of Rs. 6,500 a quintal of red-gram, but the Union government gave only Rs. 5,050," Maruthi Manpade, president, KPRS, said. Karnataka government, he added, should increase its incentive from Rs. 450 a quintal to Rs. 1,500 a quintal so that its own recommendation to Union government would get fulfilled, he added.



#### **Imports**

Mr. Manpade lashed out at the Union government for working against the interests of domestic red-gram growers by duty-free imports of the crop from various countries.

"We are not against imports. Our domestic pulses requirement is 222 lakh metric tonnes a year and our domestic production is 175 metric tonnes a year. If you consider World Health Organisation's recommendation of 80 grams of pulses per day per person, the domestic requirement would further grow. We may require to imports pulses when domestic production is not enough to meet. But, we should impose at least 30 percent import duty so that domestic growers could compete with big corporate classes in the import business," he said. He alleged that the Union government was imposing no taxes on the red-gram imports just to favour a major importer of food-grains, sacrificing the interests of domestic growers.

#### Struggle

Mr. Manpade said the farmers' organisations would launch coordinated struggles at various levels demanding increase in MSP for red-gram. As a first step, red-gram growers' representatives, along with Mallikarjun Kharge, leader of Congress in Lok Sabha and Sharan Prakash Patil, Medical Education Minister and Kalaburagi In-charge, would meet three concerned Union Ministers – Nirmala Sitharaman, Radha Mohan Singh and Ram Vilas Paswan – and discuss on import duties, MSP and other issues pertaining to red-gram procurement.

"If the meetings are not fruitful, we will launch street-struggles blocking roads across red-gram growing areas in the State," he warned.

Farmers' leaders Ambarish Gowda Balabatti, Ashok Myageri, Moula Mulla and others were present.

#### Woolly-necked storks spotted in city

The southern parts of the city and its suburbs have become a haven for birdwatchers, of late, with multiple sightings of rare species.

A group of zoologists have detected the unusual presence of woolly-necked storks, a 'vulnerable' species, near the wetlands of Attukal. While the presence of the migratory bird has been reported from various places, including Sasthamcotta, Vembanad, kole wetlands and along the banks of the Bharathapuzha in Palakkad, it has been spotted in Thiruvananthapuram, possibly for the first time. They were spotted in paddy fields of the College of Agriculture, Vellayani, functioning under Kerala Agricultural University.



The large wading bird, which is approximately 95 cm long, has distinct features with black head and body with an iridescent sheen, and white neck and underbelly. The large bill is grey with a reddish tip and the bird has deep red eyes.

The legs and feet are also prominently red in colour. They are known to inhabit wetlands, marshes, rivers, ponds and lakes.

According to R. Sreejai, Assistant Professor at the Department of Zoology, St. Stephen's College, Pathanapuram, who led the research team, the woollynecked storks (known as 'Karuvarakkuru' in Malayalam) were found to be comfortable in the paddy fields and adjoining areas along with black-headed ibis and egrets, which are commonly found in such wetlands.

Both genders of the species are similar in appearance, while the juveniles are duller and lacked the iridescence that is notable in mature ones.

They are predominantly carnivorous with their diet consisting of fish, frogs, toads, snakes and lizards. Woolly-necked storks have been categorised as vulnerable by the International Union for Conservation of Nature (IUCN).

It was yet to be ascertained whether the presence of the migratory bird species in hitherto unexplored regions could be attributed to climate changes, even while such factors could affect migration patterns. The presence of large tracts of paddy fields in the region, which included Vellayani and Punchakkari, has led to a large number of migratory birds flocking to the area.

#### Declare Thanjavur district drought-hit

The DMK cadres staged a demonstration here and in Kumbakonam on Monday urging the State Government to immediately declare Thanjavur district as drought- hit among other demands.

In the demonstration held in front of the Panagal Buildings in Thanjavur, party South district secretary Durai Chandrasekaran led the agitation in which Orathanad MLA M. Ramachandran, town secretary T. K. G. Neelamegam, Youth Wing Organiser S. Ramanathan and others participated. At Kumbakonam, the demonstration was held near the Head Post Office.

The other demands included waiver of all agricultural loans, granting adequate solatium to the families of farmers who committed suicide or lost their lives to shock at the loss of paddy crop, compensation of Rs. 30,000 per acre to those who had raised paddy and Rs. 5,000 to families of agricultural labourers.

#### CSIR launches aquaculture tech courses in Goa

The Council of Scientific & Industrial Research's (CSIR) National Institute of Oceanography (NIO) has launched skill development courses in aquaculture technology to address the growing demand for a skilled workforce.

The skill development centre in aquaculture technology was inaugurated by Dr. S. Ayyappan, NABARD Chair Professor and former secretary, Department of Agricultural Research and Education (DARE) of the Union Ministry of Agriculture and Director General of the Indian Council of Agricultural Research (ICAR).

NIO director Dr. S. Prasanna Kumar told *The Hindu* on Monday that under this programme, all 38 laboratories under CSIR will train one lakh personnel in various skills.

The programme, being implemented by the Goa-based ocean research institute, proposes to conduct four courses initially, with job roles or qualification packs for Aquaculture Technician, Aquatic Microbiology Assistant, Aquaculture Worker and Brackishwater Aquaculture Farmer.



The CSIR-NIO is in the process of documentation for affiliation and accreditation with the Agriculture Skill Council of India. Those participating in the courses will have to solve theoretical and practical tasks, and will be given a certificate describing the content of the course and how each participant was able to solve the tasks set out upon completion .

Candidates who complete the courses will have employment opportunities as fish breeders, hatchery managers, farm, hatchery, feed, water system technicians and skilled farmers. The course will cater to various sectors including government bodies such as the National Fisheries Development Board, Marine Product Export Development Authority (MPEDA), Fisheries survey of India (FSI), Fish Farmers Development Agencies (FFDA), Coastal Aquaculture Authority (CAA), Central Marine Fisheries Research Institute (CMFRI), State Fisheries Departments, among others.

They will also be qualified for entrepreneurship in ornamental fish culture, aquaculture, hatchery and seed production, commercial pearl oyster production, fish disease diagnostic centre, consultancy services, and establishment of aquaclinics. Ancillary services include aqua feed preparation, fish oil antibiotic and aqua-drug supply, preservation and marketing of sea products.

Dr. Kumar said in the wake of globalisation, technology flow has increased and fisheries and aquaculture sectors are also transforming into industries at a fast pace. This, he said, has led to a demand for knowledgeable and skilled human resource for the development of standard products and services in the sector.

"CSIR in its Platinum Jubilee year proposes to mount a major programme on CSIR Integrated Skill Initiative. With 8,000 talented science and technology

personnel and interdisciplinary expertise, state-of-the-art facilities and pan-India presence, CSIR is in a unique position to contribute to this initiative," said Dr. Kumar.

### **Business Standard**

### Budget 2017 might increase funds to fight climate change impact on farming

Studies show per-hectare productivity of rice in the country might go down 4-10% in irrigated areas

With agriculture in the country facing numerous challenges because of uncertain weather, the Centre is expected to increase allocation to fight climate change in the Budget for 2017-18. The allotted funds could increase to about ~900 crore — nearly 45% more than current allocation. Senior officials said the allocation could be under various heads, spread across all three wings of the Ministry of Agriculture: Department of Agriculture, Indian Council of Agriculture Research and the Department of Animal Husbandry, Dairying and Fisheries.

### Demand crunch compels Chhattisgarh farmers to distribute vegetables free

They did it as a mark of protest against demonetization



Finding no buyers for the produce, Chhattisgarh farmers on Monday distributed vegetables free of cost in the state capital as a mark of protest.

The farmers have been taking vegetables in 2,00,000 hectares of land in the state, which contributes supply of over 25 per cent of country's total potato demand. Other vegetables grown in the state are also distributed across the country.

Following favourable climatic condition, Chhattisgarh had a bumper production of vegetables in the kharif season. But the farmers failed to have respite. For, the price of vegetables had come down resulting in severely affecting the demand of the produce.

The farmers had destroyed loads of tomatoes in the streets earlier. On Monday, they distributed vegetables to the people free of cost at the venue where they staged dharna.

"We had set a target to distribute 100,000 kilograms of vegetables free to the people and it was achieved," Hitesh Varu of Chhattisgarh Yuva Pragatisheel Kisan Sangh said. The cost of vegetables distributed free had been estimated at Rs 25 lakh, he added.

Varu, who is spearheading the agitation, said they had demanded free electricity to the farmers till July when the new crop would arrive. Besides, the interest on the farm loan granted to the farmers should also be waived off, he added

The association had also urged the state government to build more sugar factories so that vegetable growing farmers could switch over to sugarcane farming as option. The government had announced constructing 100 cold storages. "With the cold storage, we had demanded that a processing unit also by the side," Varu said.

Interestingly, cash crunch following demonetisation was not the issue for the short demand as had been in other parts of the country. Every year, the state faces the problem of lack of demand but this season, the period had been lengthy, Varu said.



Unseasonal rain and hailstorm causes crop loss in western Odisha



Hailstorm in Odisha ruins crops.

BHUBANESWAR/ JHARSUGUDA: Unseasonal rain and hailstorm lashed in different parts of western Odisha on Monday evening bringing the temperature down in the region. The rain has badly damaged harvested paddy crops and onions.

There was a sudden burst of rain in Jharsuguda at 5 in the evening and it continued for three hours, forcing people to desert roads and markets. The rains dampened ongoing Jharsuguda Zilla Mahotsav as water gushed into stalls causing loss in business.

"We had predicted rain in some parts of the state due to a trough formation over the state. Besides, western disturbance and interaction between hot and cold air coming from opposite sides has caused rain and hailstorm in some areas," said <u>IMD</u>'s Bhubaneswar centre director, Sarat Chandra Sahoo. "The rain and hailstorm will drop the maximum and minimum temperature by a couple of degrees," Sahu added. Jharsuguda recorded maximum temperature of 26.6 degree celsius and minimum of 13.1 degree celsius on Monday.

The unseasonal rain had caught many unaware in the chilly winter evening. "We were about to go home after my tuition but when we it started raining so we had to stop but we were thrilled to see the hailstorm" said Rachit Agarwal, a student

Farmers are in fear of harvested paddy and vegetable crop loss due to this unseasonal rain and hailstorm in the district. "We have sowed onion crops but due to this hailstorm I fear that I may incur a huge loss." said Surendra Kumar Sahoo, a farmer of Hirma Village Jharsuguda.

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Similarly another farmer Baikunta Sahoo said, "I have planted mustard crop in my half acre land along with tomato and I am afraid everything will get damaged in the rain."

Many farmers who kept their harvested paddy in open will incur heavy loss as the crops got wet. "I have kept five hundred bags of paddy in the open, which got damaged," said Dilip Badhei, general secretary of Paschim Odisha Krushak Sangathan Samavya Samiti (Jharsuguda).

"Agriculture department will do the assessment as per the norms and calculate the crop loss. The farmers will be compensated as per the relief code set by the government, said Jharsuguda sub-collector Ajay Jena.

Rain and hailstorm were witnessed in Sambalpur district also.



#### Marine exports body bets big on South American markets



The prospects for seafood exports are looking bright this fiscal after a dip last year, and the Marine Products Export Development Authority (Mpeda) is looking to focus on South American markets such as Argentina, Brazil and Chile to secure more orders. At the request of seafood exporters, the trade body is planning to lead a delegation to these emerging areas. Mpeda Chairman A Jayathilak maintains that the sector will recover well enough from the business dip in 2015-16, which was triggered by currency fluctuations and a decline in sea catch. Seafood exports dwindled to \$4.7 billion in 2015-16 from the record level of \$5.5 billion in 2014-15. In an interaction, Jayathilak said Mpeda has taken all efforts to increase the utilisation of fishery resources by asking State

governments to crack down on indiscriminate fishing and prevention of juvenile catch. Excerpts:

#### What accounts for the revival in exports in FY16?

Things are looking bright now, with the 9 per cent increase in unit value realisation in 2016-17 to \$5.42 this year, against \$4.99 last year. Export of high-valued shrimp and the value-added products contributed to the increase in unit value. There has been increased demand for shrimps, squid and cuttlefish from major markets.

We have seen an increase of almost 13 per cent in the export value up to November 2016 compared to the same period last year. In dollar terms, the increase is nearly 9 per cent. However, the volume growth is not very significant, indicating a higher unit value realisation. The US is the largest market for Indian seafood, followed by the South-East Asian countries and the EU.

#### Why did exports fall last year?

The improvement in world shrimp supply, especially in Thailand and Vietnam, brought down the average unit value of frozen shrimp to \$8.28 per kg from \$10.38 in 2014-15. The depreciation of the euro, weaker economic conditions in China, devaluation of the Japanese yen were some of the other contributing factors.

Moreover, the decline in capture fishery in India has brought 10.5 per cent less wild caught shrimps in 2015.

#### What is the share of value-added products in seafood exports?

The capacity of value addition in the sector is just 14 per cent of the total installed processing capacity, which is 23,375 tonnes. Value-added product exports account for only \$850 million of total seafood exports: that's just 17 per cent of the export value.

The way forward is to increase the unit value realisation through high-end value-addition — for instance, sashimi-grade shrimp/tuna/freeze dried shrimp, breaded and battered shrimp, canned and retort pouch products.

In 2015-16, India supplied about 35 per cent of the total exported quantity to South-East Asia alone, which was mostly utilised for value-addition.

#### What are the hurdles in value-addition?

The labour-intensive sector faces several impediments in value addition: it requires a huge amount of capital to improve the skill of the workforce. It requires high-quality standards across the supply chain. The sector lacks adequate incentives to move forward with value-addition. High-end value-addition is seen to offer good returns, but is a risky venture. Besides, the lack of self-belief and role models inhibits exporters from going for value addition.

There is an urgent need to appropriately incentivise capital-intensive projects for high-end value-addition.

Mpeda is preparing a project for availing of funds from the Ministry of Skill Development Entrepreneurship for skill development of labourers in peeling, filleting, cutting, grading, personal hygiene, ingredient mixing, and so on. There should be higher export incentives for high-end value-added products.

Mpeda's schemes should be made at par with the proposal of other government departments like the Ministry of Food Processing and Industry.

## How do you propose to overcome the tougher testing norms for seafood exports set by European Union?

The entire industry is flummoxed by the EU's stance on the sampling of marine food products, particularly its increasing the sampling norms to 50 per cent of the consignments at a time when the rejection of consignments to the EU are in decline. Earlier, the sampling norm was about 10 per cent of the consignments.

Over the last five years, rejections have been consistently lower. Since the cost of testing will have to be borne by the exporters, seafood exports from the country will be affected. The matter is being taken up by the government.

The EU is the third-largest market for Indian shrimp exporters, with a share of 20.71 per cent in dollar terms, after the US (28.46 per cent) and South-East Asia (24.59 per cent). Quantity-wise, the EU is the second-largest destination, with a share of 19.70 per cent of the 945,892 tonnes of seafood exported from India in 2015-16.

#### Have you chalked out an export strategy for coastal States?

Shrimps contribute to nearly 70 per cent of the total export value and it will remain so in the future. Of the total shrimp exports, 75 per cent (worth \$2.1

billion) came from aquaculture in 2015-16. However, currently only 11 per cent of the potential area of 1.2 million hectares in coastal States is utilised for aquaculture.

To augment exports, the area under shrimp farming has to be increased, with land allotment in a time-bound manner by the State governments.

#### Bird flu effect: Saudi slaps temporary ban on Indian poultry products

Bengaluru, January 2:

Saudi Arabia has placed a temporary ban on the import of Indian poultry products, following the recent outbreak of avian influenza or bird flu in several parts of the country.

Saudi joins other West Asian countries such as Kuwait in banning the imports of poultry from India, which reported about seven instances of bird flu outbreak during 2016 with the latest being in Khordha district of Odisha. Saudi was the second largest buyer of Indian poultry products in 2015-16. As per DGCIS, India's poultry exports to Saudi Arabia stood at ₹95.64 crore, accounting for over 12 per cent of the country's total poultry shipments of ₹766.71 crore in 2015-16.

Saudi's decision to ban Indian poultry imports was disclosed by the Agricultural and Processed Food Products Export Development Authority (Apeda) through its website on Monday.

"The Royal Embassy of Saudi Arabia vide its Note Verbale no. 209/404 dated 25.11.2016 has informed that the Ministry of Environment, Water and Agriculture of Saudi Arabia have decided to impose a temporary ban on the import of live birds, hatching eggs and chicks from India due to the outbreak of highly pathogenic avian influenza," Apeda said in a notice on its website on Monday.

The outbreak of avian flu was reported from Punjab, Haryana, Tripura, Karnataka, Kerala and Odisha during 2016.

Ashok Kumar, President of the Karnataka Poultry Farmers and Breeders Association, said the poultry sector is getting used to such frequent bans by overseas buyers.

The government should come out with pro-active policies for the sector to help realise its potenial, he added.

#### **Double whammy**

Saudi's ban on Indian imports has added to the woes of the poultry farmers, who are already reeling under the impact of frequent outbreaks of bird flu in the country and the ongoing cash crunch.

Kumar said typical seasonal surge witnessed during Christmas and New Year was not there this time due to the curtailment in consumer spend on account of prevailing cash shortages.

#### **Shipments suffer**

As a result of tempered demand for poultry products, the prices were near normal during the season.

India's poultry exports, which have been on an upswing in the recent years, are seen facing a slowdown in the current financial year.

According to Apeda, India's total poultry exports during April-October 2016 were down 36 per cent at ₹297.53 crore as against ₹465.32 crore in the corresponding period of the previous year.

Poultry exports grew from ₹566.80 crore in 2013-14 to ₹766.71 crore in 2015-16 on increase in purchases by countries such as Oman and Saudi Arabia.

#### Global black tea production up in 2016

Coonoor, January 2:

The global black tea production in calendar year 2016 was more than that in 2015 despite a massive decline in Sri Lanka because of a huge increase in Kenyan production.

"According to our compilation, black tea production so far this year is 1,905.13 million kg (mkg) against 1,853.52 mkg in 2015. This increase of 51.61 mkg marked a growth of 2.78 per cent," Rajesh Gupta, Compiler of 'Global Tea Digest 2016,' told *BusinessLine*.

This was despite Sri Lanka posting a massive shortfall of 40.04 mkg to dip to 262.53 mkg. Uganda and Tanzania also posted a decline.

However, these shortfalls were offset by the huge increase of 73.30 mkg in Kenya where production soared to 426.12 mkg from 352.82 mkg.

Bangladesh posted an increase of 15.01 mkg to reach 68.78 mkg.

Indian production up to October, the latest period for which official data is available, rose by 8.72 mkg to reach 1049.31 mkg.

India continues to top the world in black tea production.

#### A winter of discontent for cash-strapped small farmers in Punjab



The collapse in perishable vegetable prices has intensified their debt burden

Sangrur and Samrala, January 2:

The fertile land of Punjab is lush with the promise of greener harvests to come, but the mood of the State's cash-strapped farmers is decidedly downbeat.

With most small farmers having taken loans against their land, the sharp fall in the prices of perishable vegetables in the wake of demonetisation has put them on slippery ground, unable to recoup even their production cost.

The trade in perishable vegetables, such as potatoes, cauliflower, peas and others — all sown in Punjab — was mostly conducted in cash. With demonetisation, all the links in the production chain, including traders and commission agents, have come under stress, bringing down prices sharply.

The wrinkles on Parminder Singh's wizened face appear to deepen as he shares his tragic tale. "Every piece of land you see in front of you is under mortgage. The big farmers, and those who have other businesses (besides farming), are better off, but for us, every single season matters," he said.

Parminder bears an ₹18 lakh debt burden, a part of which he took on for his son's education.

Tanveer Singh, a young man in his 30s, has decided to take out his potato harvester to prepare the land for the next crop.

"It is late in the season. We were hoping that potato prices would increase once again, but they haven't. What can we do? If I don't sow the maize now, I will lose money twice over," said Tanveer, looking over his land, enveloped in haze on a cold, winter morning.

The demonetisation has hit Punjab's vegetable farmers' incomes, much like in neighbouring Haryana. Many small farmers claim the prices at the mandi will not even cover their cost of production, let alone reap them a profit.

Hardeep Singh from Parthala village, another young farmer who has about 2.5 acres of land, on which he sowed potatoes last season, says he will be forced to run his crop over.

"I have invested over ₹1 lakh in sowing potatoes — for the seeds, fertilisers, pesticides, labour, diesel and other expenses. Now, the price of a sack of 50 kg has come down from over ₹400 to under ₹100. It will not even cover the production cost. Plus, I will have to pay labourers to clean and bag the potatoes, then transport them to the mandi. I cannot afford the additional cost," Hardeep said.

In India, the average potato yield stands at about 26 tonnes per hectare (2.47 acre). At ₹100 for 50 kg, Hardeep stands to earn only about ₹52,000 from his yield, or about half his investment.

In addition, the labour cost of reaping the potato crop is about ₹30-35 for every 100 kg, the farmers said.

"With demonetisation and all the loss that I have suffered, my loan burden will become heavier. The government should forgive our loans, at least those incurred in the past two months," said Parminder.

#### Innovative technology needed to reduce agri produce wastage, says expert



#### New Delhi, January 2:

There is a need to adopt business as "unusual" to sustain and improve farm sector because farmers' condition is deplorable even though farming has improved, new NAAS President Panjab Singh said on Monday.

"While farming has improved, the condition of our farmers who feed us all continues to be deplorable and needs our utmost attention," said Singh after taking charge as President of think-tank National Academy of Agricultural Sciences (NAAS) for a period of three year.

Singh, who was earlier Chancellor of Rani Lakshmi Bai Central Agricultural University, said that he has identified some of the priority areas to boost farm sector growth.

#### Natural resources

NAAS would look at ways to achieve simultaneous improvement in basic natural resources and also farm production. "As of now, one is growing at the cost of other. Policy and technological dimensions are to be set in place to achieve this," he said in a statement.

On wastage of agri-produce, he said, "As of now, we are producing more to lose more. At present, about 90 per cent of the farm produce is sold (in distress sale) soon after harvest, letting farmers lose much of their share of income."

There is a need to have innovative technologies and define investment priorities to balance the two, he said.

#### **Higher production**

The other focus areas, Singh said, would include increasing production of pulses and oilseeds, better implementation and monitoring of some government programmes like crop insurance and procurement at MSP among others.

Human resource development at every level, both by number and by training, is a major concern and this needs to be addressed, he added.

#### NAAS founded in 1990

NAAS, a think-tank of intellectuals to address emerging challenges and provide inputs to stakeholders in promoting sustainable agriculture and excellence in agriculture science, was founded way back in 1990.

It is headquartered at PUSA campus in the national capital and has 15 regional chapters across the country.

Singh is an agronomist by training and possesses more than four decades of experience in agriculture research, education and planning and management across institutions and organisations.

#### Soyabean, oil in bull run



Indore, January 2:

Both soyabean and soya oil ruled higher today with demand outstripping arrivals. Amid improved demand and buying support, soya refined in Indore mandis rose to ₹732-35 a quintal (up ₹20 from last week), while soya solvent rose to ₹700-Rs 705 (₹680-85).

Soyabean also traded higher on weak arrival with farmers holding up their stock anticipating a rise in prices. Soyabean rose to ₹3,050 a quintal (up ₹100). Slack availability of soya seeds with crushers also lifted plant deliveries to ₹3,100 a quintal. Soyameal ruled flat at ₹26,500 a quintal.

#### Cotton edges up on rising demand



#### Rajkot, January 2:

Cotton prices moved up on the back of rising demand from domestic mills. Moreover, good export enquiries and tight supplies at the producing States have supported the cotton price to increase on Monday.

Traders said at present, cotton supply is tight and domestic mills' demand increased which lifted cotton prices. On the other hand, enquiries from exporters are higher. Gujarat Sankar-6 cotton was up ₹100 to ₹39,900-40,200 per candy of 356 kg.

About 22,000 bales of 170 kg arrived in Gujarat and 1.35 lakh bales arrived in India. *Kapas* or raw cotton traded up on strong demand for cottonseed from oil millers. *Kapas* gained ₹10 to ₹1,040-80 per 20 kg and gin delivery *kapas* stood at ₹1,080-1,120. Cottonseed traded up by ₹10 to ₹480-520 per 20 kg.

#### **Speculation lifts pepper futures**



#### Kochi, January 2:

Pepper futures market on Monday moved up on speculation citing absence of sellers. Spot prices, however, remained unchanged on sluggish activities. Cheaper availability of high bulk density pepper from Karnataka has reportedly driven the buyers to there, even though moisture content is higher than that of Kerala, market sources told *BusinessLine*.

On the terminal market, three tonnes of High Range pepper were traded at ₹670 a kg. New pepper from Pathanamthitta district is available at ₹640-650. Spot prices remained unchanged at ₹65,700 (ungarbled) and ₹68,700 (garbled) a quintal. January, February and March contracts on the IPSTA increased by ₹1,000 a quintal to ₹68,000, ₹66,000 and ₹61,000. Export prices were \$10,450 a tonne c&f for Europe and \$10,700 for the US.

#### Domestic demand to keep sugar prices at high levels, says ICRA report

New Delhi, January 2:

Sugar prices are expected to remain firm in the near term due to tight stock position following 9 per cent decline in production and steady growth in consumption, rating agency ICRA said today.

"Consumption is likely to outpace domestic production due to lower sugar production in Maharashtra and Karnataka.

While this decline will be offset to some extent by increased sugar output from Uttar Pradesh, the overall production may decline by 9 per cent and fall short

by 2.5-2.8 million tonnes from domestic consumption, which continues to grow at a steady pace of 2-3 per cent annually," ICRA said in a report here.

The expected decline in the sugar production during SY17 (sugar year 2016-17) along with the drop in stocks in SY16 and the impact of global sugar deficit scenario also led to firming up of domestic prices in October 2016, ICRA Head, Corporate Ratings, Sabyasachi Majumdar said.

"Therefore, sugar prices are expected to remain firm in the near term, given the tight stock position," he added.

The sugar marketing year begins from October.

An opening stock of 7.6 million tonnes for SY17 is likely to result in the overall sugar availability between 30.5-31 million tonnes, which is expected to meet the domestic consumption of around 26 million tonnes, the report said.

However, the closing stocks of around 4.8 million tonnes in SY17 is lower than the normal sugar stock level of about 6.4 million tonnes (based on requirements of three months domestic consumption) and this would be sufficient to meet demand of about two months of consumption, it said. "Sustained healthy realisations and good recovery rates are likely to result in healthy contribution margins for Uttar Pradesh-based mills despite a ₹25 per quintal rise in the cane price for SY17.

"With the Fair and Remunerative Price (FRP) of cane for SY17 fixed at the same level as of the previous year and sugar prices on the higher side, the profitability of mills based in Maharashtra and Karnataka is likely to improve," Majumdar said.

However, the extent of increase in absolute levels of profits could be moderated with the decline in cane availability in these regions, he maintained.

ICRA expects efficient and forward-integrated sugar mills to report healthy profitability trends across most key producing states over the next 2—3 quarters.

However, past losses, which were largely funded by debt, will continue to weigh on net margins, capitalisation and coverage indicators of mills, especially the weaker ones, the report said.

Reuters adds: Meanwhile, the Central government has permitted export of 8,424 tonnes of raw sugar under its tariff-rate quota (TRQ) to the US, which enables shipments to enjoy relatively low tariff.

TRQ is a quota for a volume of exports that enter the US at relatively low tariffs. After the quota is reached, a higher tariff applies on additional imports.

"The quantity of raw sugar (8,424 tonnes) to be exported to USA under TRQ up to September 30, 2017 has been notified," Directorate General of Foreign Trade (DGFT) said in a public notice.

India enjoys duty-free sugar exports to the US for up to 10,000 tonnes annually under preferential quota arrangement.

India, the world's second biggest producer and the largest consumer of sugar, has a preferential quota arrangement for sugar export with the European Union as well.

The country had exported 1.1 million tonnes of sugar in the 2014-15 marketing year (October-September).