Agriculture

Emerging Scenario, context of COVID-19

The Agri and food supply chains are inherently highly volatile and given the vulnerability there was a fear of massive disruptions in the sector admist the COVID19 crisis. The impact was beginning to be felt in terms of delayed harvesting operations for the rabi crops, disruptions in manufacturing processes for agri inputs, limited mandi arrivals, logistics bottlenecks amongst others.

Sensing the possible crisis, the Government of India took proactive measures to ensure undisrupted operations at farm as well as mandi level and every effort was made to ensure resilience in the farm sector.

Harvesting of Rabi crop was prioritized, and mechanized operations were permitted.

To streamline logistics related issues a transport aggregator mobile app 'Kisan Rath' has been launched

Mandis are allowed to function and states are also advised to facilitate direct marketing to ease pressure on mandis.

Availability of inputs for the upcoming kharif season has been prioritized.

Key interventions on market side

- There are over 7500 regulated agricultural markets in India of which 2069 agriculture mandis are functional as on 24th April, double the number at the beginning of the lockdown period.

- National Agriculture Market (eNAM), the pan-India electronic trading portal, has been scaled with 415 new mandis added to platform, taking the total tally of eNAM enabled mandis to 1000 across 18 States & 3 UTs as was targeted.

- To decongest mandis and maintain supply chains of fruits and vegetables an electronic warehouse receipt-based trading module and an FPO trading module, which enables uploading of produce, bidding and payment from their Collection Centers directly, added to e-NAM. 82 FPOs from 15 states have reportedly traded on eNAM with commodities worth 2.22 crore.

Key interventions to streamline logistics

- To facilitate farmers and traders to identify suitable transport facilities for the movement of farm produce during the coronavirus lockdown the 'Kisan Rath' app has been launched. The objective is to ensure seamless supply linkages between farmers, FPOs, APMC mandis and intra-state and inter-state buyers. The app brings together more than 11.37 lakh trucks & 2.3 lakh transporters. As of 24th April, 80,474 farmers and 70,581 traders are registered on the App.

- Also, the railways network is being leveraged to supply perishable horticultural produce, seeds, milk and dairy products.

Key interventions for input availability in Kharif

- Manufacturing & packaging units for fertilizer, pesticides and seeds are included in the exempted list and their retail and distribution channel has allowed to operate.

Measures to boost liquidity

- **INR 2,30,000 crores stimulus** was announced for the sector on 14th May to boost agriculture resilience through enhanced liquidity infusion, by way of working capital funding through NABARD and credit flow through Kisan Credit Cards

- Further **allocations of over INR 1,50,000 crores** have been announced under various schemes for dairying, fisheries, bee keeping, medicinal & aromatic plants with focus on enhancing farmers incomes as well as promoting exports.

Timely prioritisation of the sector as 'essential' and the enablers thereafter averted a huge adverse impact of COVID19 on agriculture & backed by a normal monsoon the sector is positioned to grow at 3% in 2020-21.

However, some operational challenges need to be streamlined and logistics and labour availability concerns in the sector need to be addressed.

This document aims analyze the following aspects of the Indian agriculture with respect to the COVID-19 crisis-

a. **Rabi Harvesting**
b. **Mandi arrivals & prices**
c. **Kharif acreages and production outlook**
d. **Input supply chains** – Farm machinery, Fertilizers, Seeds and Agro chemicals

The document also suggests measures to mitigate the challenges being faced.

COVID19- Impact on Rabi harvesting

The Rabi crop was ready for harvest when the nationwide lock down was announced in March 2020. Disruptions followed suit due to crunch in availability of migrant labour and difficulty in inter and intra state movement of machinery.

The processes however were streamlined to facilitate inter & intra state machinery movement and farm operations were permitted.

After initial delays the harvesting operations are being completed

At the same time, to guide farmers on safety precautions during farm operations, Standard Operating Procedure (SOP) related to crop harvesting & threshing were announced by ICAR.

Harvesting operations are almost complete. As reported on 25th April, 98% of wheat crop is harvested in Madhya Pradesh, 92-95% in Rajasthan, 85-88% in Uttar Pradesh, 55-60% in Haryana, 60-65% in Punjab and 87-88% in other States.

The harvesting of Pulses & Oilseeds is also completed in Karnataka, Andhra Pradesh, Telangana, Rajasthan, Maharashtra, Uttar Pradesh, Haryana and MSP procurement is underway.

100% harvesting of sugarcane has been completed in Maharashtra, Karnataka, Gujarat, Andhra Pradesh, Telangana and Punjab. About 92-98% of harvesting is completed in Tamil Nadu, Bihar, Haryana and Uttarakhand whereas 80-85% harvesting has been completed in Uttar Pradesh.

Harvesting of potato is also complete and storage operations are ongoing. For onion harvesting is underway and may extend up to mid-May.

MSP for Rabi 2019-20 crops was raised to assure a return of 50% to 109% over cost of production of various crops. The centers for Rabi pulses and oilseeds procurement have almost doubled from 1485 last year to 2790 this year and MSP procurement is currently underway in 20 States. Delay in harvesting delayed MSP procurement for wheat initially but the same has gained momentum now.

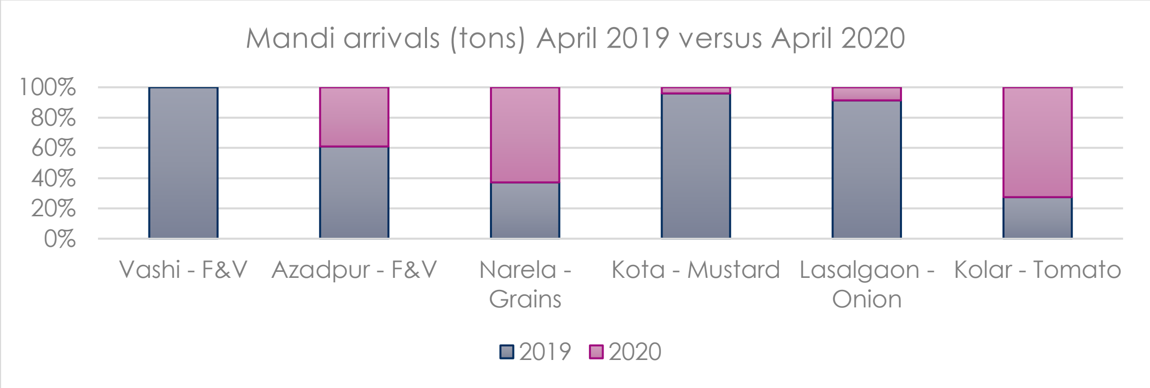
The purchase rate of wheat is still close to the MSP but for other crops like mustard and gram which are not usually procured by Food Corporation of India, there are instance of these being sold below MSP and states need to proactively intervene to ensure farmers do not suffer.

Overall, during the lockdown period Minimum Support Price (MSP) purchases of amount more than Rs 74,300 crore were undertaken.

Timely harvesting and MSP procurement of the Rabi crop will help ensure working capital in the hands of the farmers and build resilience in the sector

COVID19- Mandi Arrivals and Prices

There has been a visible decline in the arrivals in the mandis. While arrivals of vegetables such as Onion, Potato and Tomato in mandis have increased between March when the lockdown started to April, it is lower when compared to the mandi arrivals in the corresponding period last year.



Source: agmarketnet.gov.in

Azadpur mandi has witnessed a 36% drop in F&V arrivals in the month of April 2020 as compared to corresponding period last year.

- As per industry sources, the reason for the situation was regulated trade and volume with trade per trader permitted to 1 truck per day. Under normal circumstances one could witness 60 active wholesalers handling roughly 100-150 trucks of various fruits in a day, however under current circumstances, average volumes handled was around 30-50 trucks of various perishables so the drop-in arrivals.

Similarly, onion in Lasalgaon and Mustard in Kota reported almost a 90% drop in arrivals.

- In case of onion, the reason for the situation was closure of all APMCs in Nashik district, including Lasalgaon due to corona virus scare. This also led to steep pressure on prices with prices in April trading below the cultivator's cost of production, onion prices fell to as low as Rs 6 a kg. On the other hand, farmers were desperate to sell off their produce, especially of the late kharif variety, due to its low shelf life and fear of spoilage.

Riding on a bumper crop tomato arrival in Kolar were more than doubled.

- On the other hand, tomato prices in Kolar have dropped by almost 75%[1], last year during the same period 1 Kg of Tomato was selling at INR 14 per Kg while this year the price fell to INR 3 per Kg in Kolar. As per industry sources, the reason of the same was absence of private traders, who normally facilitate upcountry sales, owing to uncertainty on trade and disposal in destination markets.

What is evident is that while MSP procurement is helping farmers, price volatility is high in case of perishables and farmers are distressed here.

[1] agmarketnet.gov.in

What is encouraging is the announcement made on 15th May around framing a central law to provide farmers the freedom to sell their produce as per their choice, and to promote barrier free inter-state trade and e-trading of agri produce. These measures will facilitate direct linkages between farmers and industry and will help enhance incomes in the hands of the farmers. In the long run they will also give impetus to bulk buyers to invest in extension services to improve productivity and returns.

Another problem facing perishables is a **20-25% reduction in demand as bulk demand from hotels and restaurants decline** and this surplus needs to be consumed to ensure returns to farmers.

Demand from consumers for staples like tomato, onion, potato is increasing however, it will not be able to offset the surplus much.

While the government announced additional working capital funding through NABARD of 30,000 crores, for crop loans, the processing sector also offers the capacity to consume the surplus production. They are **presently challenged in terms of capacity utilization (working at 30-40%), inventory from last year due to poor offtake** and **working capital**. If the scenario continues demand from processors will fall which will have an adverse impact on uptake of the surplus produce available with farmers. Enhancing working capital with the processing industry will be key to help them procure and process the surplus output available in the market,

Working Capital enhancement

- Additional working capital loans to purchase raw material should be provided to the food processors. The liquidity to the processors, amidst the economic crisis, will ensure that they are able to support the farmers in this time of need and contribute to avoid rural distress.

What is equally important is to ensure that the quality of the perishables is maintained, and post-harvest losses are minimized. This will require creation of farm gate infrastructure and aggregation points.

The INR Rs 1 lakh crore agri infra fund announced by the Government will help bridge the gap in post-harvest infrastructure requirement at farm gate.

The major announcement made on 15th May around deregulating the EC Act will provide the much-needed boost to the processing industry and encourage investment by private sector for creating agri market infrastructure that supports scale.

In addition, controls like Essential Commodity Act have been proving to be counterproductive mainly because Stock holding limits did not distinguish between food processing industries, food retail chains etc. who by the very nature of business are required to hold large stocks for their inventory.

For retailers' **pressure is being faced in maintaining supplies in high value commodities with localized production** such as cherries from Himanchal Pradesh, Peach & Plum from Himanchal & Uttarakhand and going forward the same challenge may arise in procuring Litchi from Bihar.

The reason for the same being localized production and with logistics constraint pan Indian movement is becoming costly. The logistics constraint is has resulted in escalating transportation charges.

Illustration of the freight price escalation

In case of cherries, the current rate being quoted for by logistics companies for transportation from Delhi to Bangalore are as high Rs 150/- per Kg, while pre-covid these rates were almost half at Rs 80/- per kg for direct shipment from Chandigarh to Bangalore door to door.

On the other hand, the farmers are suffering in the absence of offtake of their crop. This is particularly the case for the hill states of Himanchal & Uttarakhand where in the local demand is negligible given the complete failure of the tourist season.

To ease the pressure, Government can consider resuming air freight from the production locations to major metros to help retailers in off take of these high value commodities

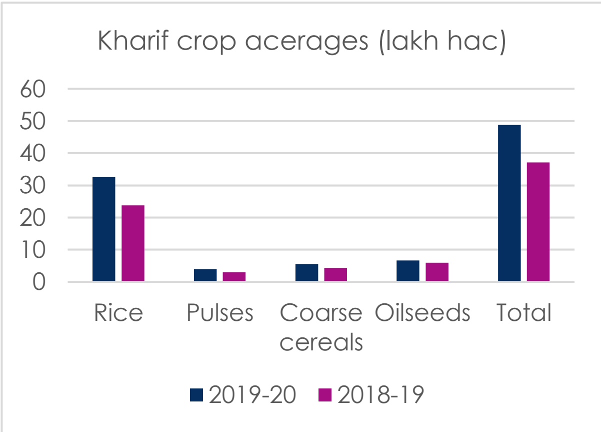
Impact is also being felt in the export oriented high value crops like Grapes where the farmer is struggling to find a market with exports largely hit. **The export of fresh grapes (HS CODE 08061000) has witnessed a 40% decline in 2020 as compared to the same period in 2019, in terms of value a 27% decline.** The same scenario may arise in mango if concrete steps are not taken.

The scheme for formalization of Micro Food Enterprises aimed at helping 2 lakh MFEs under a cluster-based approach will help sustain exports in the long run.

Going forward, to ensure remunerative prices to the farmers it is also imperative that efforts being made to streamline logistics are more focussed on perishables. **The announcement**

of extension of 'Operation Greens' to all fruits and vegetables is the first step in this direction. Similarly focus on PPP solutions enabling use of irradiation technologies for food preservation, will play a key role in reducing wastage.

COVID19- Kharif acreages & production outlook



[2]Pre-monsoon sowing of kharif crops has begun across the country with **paddy acreage 27 per cent higher** so far as compared to the corresponding season last season. Similar positive trends are seen in acreages of **pulses (increase of 24%); coarse cereals (increase of 21%) and oilseeds (increase of 10.3%).**

Given the estimate of increasing acreages and normal monsoon the Kharif food grain output is pegged at 149.92 million tons against a production of 147.9 million tons in the previous year.

The output for pulses, oilseeds, cotton and sugarcane is also estimated to increase.

The Government aims to produce a record 298.3 million tons of food grains in 20-21.

These estimates, however, also depend on normalcy in the supply chains of agri inputs.

Any adverse impact of COVID19 on Kharif 2020 sowing so far is not visible which is important as adequate kharif output will ensure food availability in the long run.

[2] As per data of Ministry of Agriculture and Farmers' Welfare

COVID19- Impact on Agri input supply chain

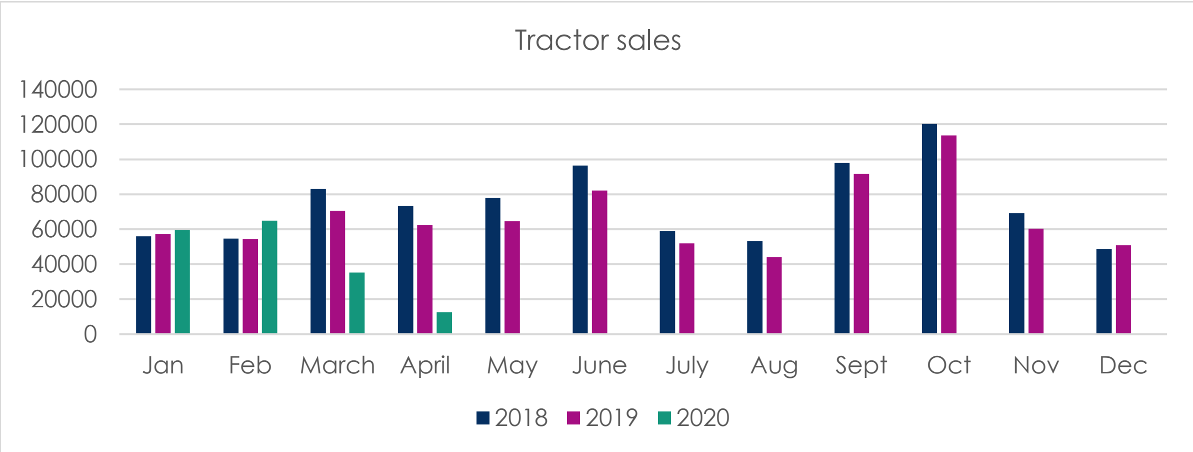
FARM MECHANIZATION

In the agri input category the initial 10-15 days lag in commencing harvesting operations has hugely impacted the farm mechanization sub-segment.

This is primarily because March/April being the key season for Rabi crop harvest is also the key season for tractors and farm machinery sale and the delay has resulted in drop of sales.

Farm machinery sector was hard hit due to COVID-19 with almost 50% drop in sales in March 2020.

Tractors alone have seen a drop of almost 80% sale in the Month of April 2020.



Source: Tractors Manufacturers Association

While one may see a decline in sales in 2019 as well, this was primarily because sales in 2018 were exceptionally good given better irrigation availability, better retail finance and new model introduction in the industry.

For the month of march the manufacturing of tractors was down by 32% as compared to last year. For April this declined to almost negligible manufacturing

Also, at present manufacturing of tractors and farm machinery is under tremendous pressure. A survey across TMA has indicated that around 50% of the manufacturing facilities are lying in the containment zones and thus manufacturing is impacted, and the key challenges being faced were in procuring raw materials for manufacturing and transportation of finished goods due to unavailability of drivers. As per TMA, **manufacturing is running at bare 3-5%, that too on available inventory, and if the scenario continues the sales opportunity in the monsoon window (June) will also be missed hugely impacting the revenue of the segment.**

The **other key concern facing the farm mechanization sector is the liquidity crunch**. This is primarily owing to challenges in retail finance with banks not very forth coming in lending at present.

Some of the suggestions to reduce the pressure include

Categorizing of agri-machinery and its supply chain as an essential service

- Will help ease the manufacturing related challenges

Prioritizing loan for purchase of agriculture equipment's through banks and NBFC's

- The Government may consider subsidizing the lenders for any concessional rates offered for such purchases

Claim for refund on account of inverted tax under GST

- Refund of ninety per cent of the amount claimed on a provisional basis may be allowed, to improve liquidity.

FERTILIZER & MICRONUTRIENTS

The demand as well as consumption of fertilizer so far has been higher as compared to the corresponding period last year. Between 1st to 22nd April, fertilizer offtake at dealer level was reported to be 15.77 lakh MT (46% higher than last year during the same period), while sale at farmer level was 32% higher than last year.

As per industry sources, the reason for the same are -

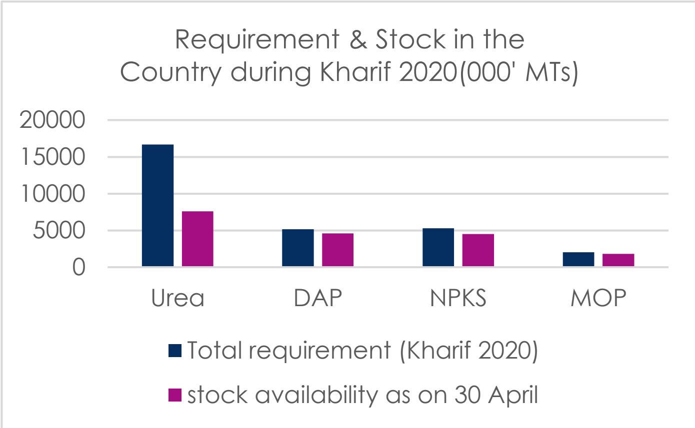
- Increase in acreages of upcoming Kharif crop
- As much as 90% of rural retail is operational
- Backlog of disruption in March made up in April.
- Dealers have bought upfront for Kharif season anticipating normal monsoon and due to low pipelines last year

Fertilizer manufacturing is already granted exemption and logistics is being focused upon to ensure timely availability in the sowing season.

As per the Index of 8 Core Industries, under Index of Industrial Production (IIP), Fertilizers production increased by 2.9 per cent in February 2020 over February 2019. Its cumulative index increased by 4.1 per cent during April to February, 2019-20 over the corresponding period of previous year.

The graph represents the requirement & the stock for the Kharif season. As per industry sources,

- The gap in urea availability will be met through production which is already higher than last year.
- Also, most of the Phosphatic plants have come onstream and in the last 2 weeks, production has picked up so the requirement for phosphatic fertilizers will also be met.



Source: Fertilizer Monitoring System, Department of Fertilizer

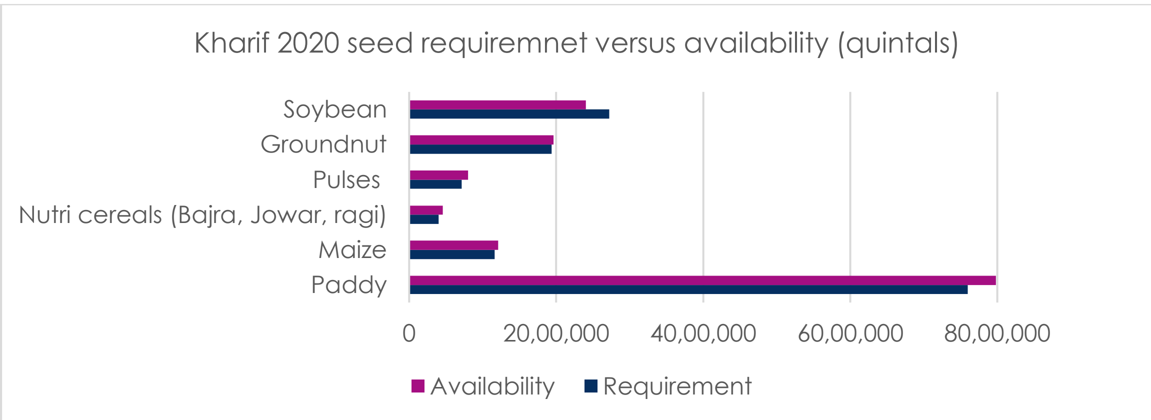
Owing to increased production, the Department of Fertilizers have assured sufficient stock to meet the country's demand in the upcoming season.

Overall at this point, the fertilizer availability looks fine. However, going forward maintaining cash flow of the industry will be critical to maintain supplies.

Seed

Given the increase in acreages, the demand for seeds has been higher as compared to the corresponding period last year. Krishi Vigyan Kendra's have reportedly sold 20% more seeds in the four months this year as compared to the same period last year.

For seeds the production/packaging is mostly over and inventory for Kharif is ready. The Kharif seed production is also comfortable positioned to meet the requirement.



Source: Ministry of Agriculture & Farmers' Welfare

Overall at this point, the seed availability looks fine.

For seed, agro chemicals and fertilizers, the manufacturing units, except those in the containment zones are producing at 60-70% capacity. The retail channel is also resuming as per the local guidelines. However, there have been challenges of farmers' being charged excess at retail end and these need to be streamlined. Also given contained movement of farmers it will be critical to ensure stock availability at the retail shops at village level.

Recommendations – Short Term

Measure to improve liquidity

The stimulus package announced for the sector is expected to enhance liquidity in the hands of the farmers. In addition, the following measures can be further considered towards implementation to the stimulus package

The agri input and mechanization service providers may be linked to KCCs to allow purchase of inputs / renting of equipment by farmers on credit without impacting the input /service providers.

While measures have been announced to infuse liquidity, it will be important to ease access to credit. It is suggested that to facilitate securitization and documentation digitally so that loans can be disbursed faster and with ease.

Ensuring timely availability of inputs

In the containment zones, to facilitate availability of agri inputs, pre-positioning of inputs such as seeds, fertilizers, pesticides, etc. at centralized locations in time for the kharif sowing season will help mitigate the challenge of supplying farmers with these critical inputs at the right time

Ensuring labour availability

As companies ramp up operations, there is an urgent need to enhance the labour footprint in Green and Orange Zones up to 75% of original levels, in order to support manufacturing.

Facilitating direct market linkages

For direct sourcing states are evolving new model's MP has come up with 'Anugya Patra', Gujarat, Rajasthan are issuing direct licenses to operate. This should be made the normal phenomenon for doing business and should be facilitated in the long run as well.

A barrier is the price discovery issue as mandi's are not operating and so model rate cannot be bench marked. A framework should be put in place to decide prices in direct procurement arrangements.

While the Finance Minister has announced a facilitative legal framework to enable farmers for engaging with private sector what is equally important to ensure that this framework is transparent and fair to both the buyers and the sellers.

Streamlining logistics

For commodities with localized production in particular, Government can consider resuming air freight from the production locations to major metros.

Efforts being made to streamline logistics need to have special focus on perishables.

Promoting the policy reform agenda

While the announcements made on 15th May take care of a lot of reform agenda, the Government should also consider incentivizing adoption of the **Model Agriculture Land Leasing Act (MALL)** at the state level. Incentives to the states adopting the Act and formulating rules to operationalize the same may help in fast-tracking adoption of the Act.

From a longer-term perspective, strategic thinking on the export agenda is required to attain the $100 billion Agri exports target. For scaling existing exports, we need to assess the scope for enhancing both volume and value of exports in existing markets. At the same time, we need to focus on Argo products that have potential for value addition, and policies & processes that will get us to the target of $100 billion.