











CII NABCONS Publication on

Innovative Business Models emerging through COVID19





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CII NABCONS Publication on: Emerging Business Models Through COVID19

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Foreword

The COVID19 Global Pandemic situation reiterated the fact that the 'Agriculture is the main pillar of Indian Economy.' While the demand for food and agricultural commodities remained constant, the lockdown situation initially impacted the supply side. The timely prioritization by Government of India helped the sector perform exceptionally well. Farmers and agripreneurs have adapted quickly to the situation through technologies and many innovative supply chain strategies and tapped the opportunities emanating from liberalization of the sector. NABARD, being the apex development financial institution for agriculture and rural development have also initiated many new credit programmes to complement GoI's initiatives in promotion of agriculture infrastructure, dry land farming, FPOs, etc. I congratulate CII – FACE and NABCONS for taking the initiative of coming out with publication on "Innovative Business Models emerging through COVID19". I am sure the document shall act as reference material for farmers, business houses, agri input suppliers and other stakeholders in identifying replicable business models.

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Chairman

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Head Office

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09th September 2020





Foreword

I congratulate the Confederation of Indian Industry (CII) and NABCONS on the launch of the CII NABCONS' Compendium on 'Innovative Business Models Emerging through COVID-19'. An exclusive repository of successful innovations in policy and by businesses during the pandemic, the Compendium provides invaluable insights and recommendations on shaping the agri sector and serves as a ready reference for emerging businesses.

The COVID-19 pandemic and the subsequent nation-wide lockdown led to significant economic and livelihood challenges, especially for the agriculture sector, which is inherently besieged by myriad challenges like low productivity, poor farming knowledge, weak last mile connectivity, climate change and rampant agri wastage. The restrictions during the early stages of the lockdown also impacted a large number of marginal farmers and landless labourers. Reverse migration from the cities to the villages aggravated the problem.

The Government of India acted with commendable speed, implementing path-breaking reforms and infusing liquidity through the Rs 20 lakh crore stimulus package for the economic revival of the sector. These reforms will undoubtedly drive the Government's vision of 'One Nation, One Market', and go a long way in addressing the need to provide support to the distressed, promote local industry, facilitate exports as well as create long-term drivers for competitive growth. Several State Governments have also put in place innovative supply chain models to ensure uninterrupted supply of perishables, leveraging private players or self-help groups.

With the Government driving a commendable policy thrust, businesses too rose to the occasion, innovating with agility to keep the wheels of the economy turning and reach essential items to the millions confined to their homes. The lockdown witnessed rapid adaptation to new circumstances, unparalleled collaboration and new partnerships by business. Indeed, innovations were witnessed at every node of business operation – from sourcing to manufacturing, logistics and distribution, customer interface as well as product formulation. Stories of such innovation, agility and adaptability speak volumes about the capability of businesses to rise to every challenge as well as their creative and innovative capacity to find the path to a better future.

This spirit of innovation will indeed remain a cornerstone in the new normal, as we learn from the experiences gained and adapt to a world with new priorities and redefined life-styles. The pandemic has provided companies with the opportunity for product innovation to address new trends like the growing demand for health, hygiene, nutrition, safety and convenience products. It was heartening to note how a host of new health and safety products entered the market in a very short span of time during the pandemic. The fast-changing trends also opened up newer avenues for the next generation entrepreneurs.

The agri sector also witnessed a fair share of innovation. Logistics challenges were resolved using alternative modes of transport like the railways for transferring not only perishables but even agri machinery. Innovative partnerships were forged to leverage advanced technology, including solutions to deliver block chain-led solutions for traceability as well as low-cost automatic GPS-enabled solutions for soil moisture estimation and so on. These are also areas that can provide opportunities for employment generation through engagement of trained youth. Going forward, scaling up such models will certainly lead to larger efficiencies in the agri-value-chain.

Safe distancing and the need to avoid physical engagements accelerated digitalisation. Innovative partnerships and collaborations and direct-to-consumer models were forged to reach customers on time. Such collaborations are expected to grow in the new normal, leveraging the learnings from the pandemic experiences. In agriculture too, new age technologies like Block Chain, Industry 4.0, Artificial Intelligence, Big Data, industrial Internet of Things can be leveraged to drive transformational change in value chains right from agriculture to storage, manufacturing and distribution. Digital media can also be harnessed to disseminate information and create awareness, particularly on issues like hygiene & safety.

The ongoing innovations in business models witnessed during the pandemic are leading to significant benefits across the agri value chain for farmers, businesses and consumers. This Compendium features a host of such interventions along with policy recommendations for scaling up such models. I am sure you will enjoy reading it and benefit from the information provided. My compliments, once again, to CII and NABCONS for this initiative and best wishes to their endeavours in the years ahead.

Stay Safe and Stay Healthy!

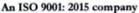
Sanjiv Puri

Chairman, CII National Council on Agriculture

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NABARD Consultancy Services Pvt. Ltd.

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Foreword

Amidst challenges, there lies opportunity for growth. The current situation due to COVID19 Global Pandemic and subsequent lockdowns has thrown great challenges, at the same time opened up window of opportunities. The kind of resilience shown by Indian Businesses during lockdown through adoption of innovative supply chain strategies is highly inspiring. It is more so with the supply chains in the agriculture sector. Many innovations have emerged in agriculture sector through development of unique distribution channels and digital extension services. The strategies thus developed are not a short-term mechanism but have potential to guide future business policies. We therefore take immense pride in partnering with CII-FACE and bringing out this valuable publication. I am sure that the publication would help farmers, agri-businesses, Farmer Producer Organizations (FPOs), policy makers and other stakeholders in taking forward the innovations.

Shri. K. Venkateswara Rao

Managing Director

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09th September 2020

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Overview

Globally, the COVID19 pandemic impacted agri-businesses severely with major supply chain disruptions logistical challenges. Initially, the impact was felt across Indian agri-businesses as well with challenges ranging from on-field to lockdowns impacting machinery delivery, sourcing challenges leading to price fluctuations, social restrictions leading impacting customer interfaces and agriculture extension, etc. While the demand for food and agri commodities remained constant, the challenges were more on the supply side.

However, the timely prioritization of the sector as 'essential' by the Government and the enablers thereafter averted a huge adverse impact of COVID19 on agriculture. Meanwhile, businesses adapted swiftly and came up with several innovative partnerships towards ensuring delivery of essential goods to their customers. While on one hand these ensured customers' needs during the global pandemic were met, they also showcased business resilience in the face of adversity. Most of these innovative models will become the norm going forward.

A key change was witnessed in terms of increased direct sourcing. While the Government allowed farmers the choice to sell directly to retailers and processors in a landmark reform, liberalizing the sector; state governments also stepped in to facilitate direct market linkage for farmers and farmer producer organizations either through self-help groups or private sector partnership models, thereby ensuring farmers incomes. Meanwhile private companies also ensured farm to fork connectivity through innovative business models, sourcing directly through farmers and FPOs.

Going forward, such direct sourcing models are going to be the norm, as it leads to price savings for businesses and better realization of income for farmers. This will further be backed by the Rs 1 lakh crore Agriculture Infrastructure Fund, which has been announced to strengthen farm gate infrastructure. Direct Sourcing will also be eased and encouraged through 10,000 new FPOs envisaged to be set up and the cluster-based model for 'one-district, one-crop' which will allow economies of scale.

Several innovations were also witnessed towards distribution and logistics agriculture and food companies, with models ranging from partnering with food delivery chains for last mile linkage, to leveraging technology by swiftly developing Apps and linking the supply to consumer households. Interestingly, new modes of delivery such as leveraging Railways for delivery of heavy mechanization tools such as tractor, were also seen.

Another key area where several innovations witnessed were was agriculture extension and customer interface. These innovations were mainly implemented by agriculture companies and are expected to become the norm going forward, as they not only led to significant cost savings for the businesses but also helped them reach a much larger customer base thus building scale.

Reacting swiftly to the health and nutrition awareness caused by the pandemic, several food companies swiftly innovated product formulations with greater focus on fortification and natural immunity boosters. These products saw a huge demand, and the trend is expected to be maintained going forward.

This Compendium of Innovative Business Models emerging through COVID19 is in two parts. **Part A** focuses on the various innovations in terms of Policy, State Government initiatives, innovations by farmer producer organizations and an overview of the key industry innovations witnessed.

Part B of the compendium focuses on 25 key Industry innovations in greater detail coving their impact and outreach. These innovations cover the segments of Delivery and Logistic, Sourcing, Agriculture Extension, Customer Interface and Product and Packaging Innovations

Innovations in Policy

The Indian agriculture sector has shown resilience amidst the COVID19 crisis & with a growth of 3.4 per cent in the first quarter of 2020-21, has emerged as the only sector with growth. Also, despite the pandemic, agricultural inflation rate of 2.3 per cent in Q1 2020-21, was among the lowest increases in inflation in agriculture items in more than a year. Timely prioritization of the sector as 'essential' and the enablers thereafter averted a huge adverse impact of COVID19 on agriculture.

An over Rs 20 lakh crore stimulus package towards building 'Atmanirbhar Bharat' was announced for the sector to infuse liquidity and boost agriculture resilience. The focused interventions like extension of interest subvention, loan moratorium, refinance to cooperative banks and regional rural banks were aimed at improving liquidity in the hands of the farmers and ensure that the small and marginal farmers are financially equipped to meet the post-harvest (Rabi) & current kharif financial requirements.

Also, the special drive to provide credit PM-KISAN concessional to beneficiaries through Kisan Credit cards was targeted to boost the much-needed to institutional access credit at concessional interest rates. Further, the inclusion of Fishermen & Animal Husbandry farmers into the ambit gave the allied sector the needed support.

Another highlight of Government intervention was the recent launch of financing facility of Rs 1 lakh crore under the **Agriculture Infrastructure Fund** for agrientrepreneurs, startups, agri-tech players and farmer groups for post-harvest

management and nurturing farm assets. The fund aims to provide medium-to-long term debt financing facility for investment in viable projects for post-harvest management infrastructure and community farming assets through interest subvention and financial support.

Agriculture sector also witnessed proactive action from the Government of India on pushing the agri marketing reforms agenda aimed towards 'Moving to One Nation, One Market'. The reforms were announced under the economic package for building 'Atmanirbhar Bharat' and the quick action in terms of approval by the Union Cabinet chaired by Hon'ble Prime Minister is commendable.

To begin with amendment to the **Essential** Commodity Act, a long-standing demand of the industry, was announced. The Ordinance provides that the central government may regulate the supply of certain food items including cereals, pulses, potato, onions, edible oilseeds, and under oils, only extraordinary circumstances. The freedom to produce, hold, move, distribute and supply is expected to harness economies of scale and attract private sector/foreign direct investment into agriculture sector. It will also help drive up investment in cold storages and modernization of food supply chain.

"The Farming Produce Trade and Commerce (Promotion and Facilitation) Ordinance, 2020" towards freeing up agricultural markets is another progressive policy reform. The provisions of the Ordinance fundamentally alter the agriculture marketing landscape in the

country in several ways. The Ordinance will provide dual benefits to the farmers by providing more avenues to sell their produce at better prices and also reducing their transportation costs significantly.

- Post the reform private companies are already evaluating procurement operations outside mandi and some pilots are seen in Karnataka and Maharashtra.
- Also, there is an increased interest in sourcing directly from farmers & FPOs. The companies already engaged in direct transactions in commodities like spices, rice, f&v are also looking at expanding their sourcing operations.

The third reform is the **Farmers** (Empowerment and **Protection**) Agreement on Price Assurance and Farm Services Ordinance, 2020 aimed to empower farmers for engaging with wholesalers, processors, aggregators, wholesalers, large retailers, exporters etc., on a level playing field. It is important here that the interests of both the parties are protected such that it does not act as a disincentive to either party. Also, the new Ordinance should ensure that concerns of the erstwhile act are addressed and there is complete clarity of rules so there is minimal interference of govt in enforcement of contracts. This will ensure uptake of the reform at the ground level.

Going forward the Governments vison towards 'Atmanirbhar Bharat' entails

 a. Transforming farmers into "entrepreneurs" with higher incomes
 & better quality of life (2x farmer income)

- b. Making India the "food basket" for the world (\$60 Bn+ exports by 2022)
- c. Making agriculture the "go to" investment opportunity
- d. Step change in India's "brand recall" for agricultural produce (Make-in-India)

Towards the vision to empower farmers and benefit them from economies of scale the Government is focusing on formation and promotion of 10,000 new FPOs under the new Central Sector Scheme titled "Formation and Promotion of Farmer Produce **Organizations** (FPOs)". scheme has a total budgetary provision of Rs 4,496 crore for five years (2019-20 to 2023-24) with a further committed liability of Rs 2,369 crore for the period from 2024-25 to 2027-28 towards handholding of each FPO for five years from aggregation and formation. The aspiration is to form one FPO in each block of every district.

The formation of FPO will also align with the agro cluster approach of 'one district, one crop' aimed at encouraging farmers to adopt the most suitable crop in their district that will help them realize better prices with increased scale. The cluster approach will also help enhance export competitiveness.

Also, identifying technology as a key pillar for 'Smart Agriculture' a **Digital Agri Stack** is being developed. The idea is to link the agri stack to state land records and land holdings GIS data. This will go a long way in enabling online marketplaces and "Smart Agriculture".

The overall proactive approach from the Government coupled with robust demand will result in overall enhanced competitiveness of Indian agriculture

Innovations by States

Along with the effective policy innovations at the Central level, several State Governments also enacted innovative supply chain models towards ensuring supply of perishables either by leveraging private players or Self-Help Groups. This section illustrates few initiatives by specific states.

Initiatives in Kerala

The Kerala state horticultural products development corporation (Horticorp) and Vegetable and Fruit Promotion Council Keralam (VFPCK), a registered company of Government of Kerala, launched the home delivery of fruits and vegetables (F&V) in Kerala to ensure steady supply of perishables to the citizens. Horticorp and VFPCK partnered with online marketing platforms like Swiggy, Big Cart, Keralaspecial.in and AM Needs to deliver F&V at people's doorsteps.

The procurement of F&V was done by VFPCK from block-level farmer's market, VFPCK farmers' market and other wholesale markets. These were then supplied to Horticorp, who in turn sorted and wrapped them in eco-friendly packaging material (such as grey paper) as per the demand/order of customers. The name of the customer was written on the grey paper.

Customers placed the order through the mobile application of AM Needs, Swiggy, Bigcart etc. The delivery men of these online agencies picked up the packed orders from Horticorp and delivered them to customers' doorsteps.

In another initiative, the VFPCK procured fresh fruits & vegetables directly from farmers and sold these as 'F&V kits' in some major cities of Kerala through online



BigCart Fruit Combo



platforms of AM Needs, Big Cart and KooHoi. Customers booked their requirements through phone and Whatsapp.

The initiative was meant to help people who are confined to their homes during the lockdown and farmers who are unable to find a market for their produce.

The 'F&V kits' were of pre-decided quantities. For example, a 3-kg Banana Kit was priced at Rs. 125, the Vegetable kits priced at Rs. 120 contained 3 kgs of assorted vegetables, and the 6-kg mixed F&V kits were priced at Rs.200.

VFPCK also partnered with an NGO-Pelican Foundation, to supply fresh vegetables cultivated in Cherthala to apartments in Kochi. The vegetables were procured from farmers trained by VFPCK in Good agriculture practices, thus, these vegetables remained fresh for a couple of days even if they were not refrigerated, which in turn scaled the consumers'

Initiatives in Tamil Nadu

In Tamil Nadu, of the 179 Uzhavar Sandhais (Farmers' markets) around 150 remained open daily towards ensuring supply of fruits and vegetables. Further in 19 Uzhavar Sandhais where there was restriction, the functions were shifted to temporary premises to ensure social distancing. Since the nation-wide lockdown was implemented, 2.04 lakh MTs of vegetables and fruits to the value of Rs. 617.19 crore were sold to consumers directly by farmers.

On an average, 1,350 MTs of fruits and vegetables are sold per day in Uzhavar Sandhais by 4,690 farmers and benefitting 2.15 lakh consumers.

The Agriculture Marketing Board of Tamil Nadu has also extensively involved Farmer Producer Organizations (FPOs) towards directly connecting with consumers and thus maintaining farmer resilience. Around 113 FPOs have been connected to consumers through 70 Farmers Markets, 57 Wholesale Markets, 162 Retail markets/shops, 28 MSDA units and 99 mobile vans selling directly to consumers. During the lockdown period alone, these FPOs supplied 327 MT of fruits, 2517 MT of

demands. The increase in demand has resulted in the NGO transporting over 600 kg of vegetables twice a week to five apartments complexes in Kochi. To cater to the demand, the farmers have also begun supplying chopped and value-added vegetables. It is a win-win situation for both the farmer who gets a fair price for his produce and the customer who gets fresh and reasonably priced vegetables on his doorstep.



vegetables and 321 MT of groceries to consumers.

The Tamil Nadu Department of Horticulture and Plantation Crops expanded services under its E-Thottam (efarm) portal, which earlier (pre-COVID) supplied only saplings, areen seed crackers etc. Post the pandemic hit, the services have been expanded to cover supply of vegetables. Apart from vegetables, fruits like mangoes, guava, watermelon, muskmelon and jackfruit sourced from farmers in Krishnagiri, Salem, Kanvakumari, Tiruvallur, Kancheepuram and Villupuram districts are being offered through the E-Thottam portal.

Currently, the portal handles about 2,000 orders a day and the goal is to scale up gradually. Orders are usually delivered within two days. Packaging of the produce is being done at five centres in Chennai by

horticulture officials themselves. Delivery is carried out by hiring autorickshaws or through delivery partners like Zomato and Swiggy.

Initiatives in Bihar

The Government of Bihar, through the Bihar Rural Livelihoods Promotion Society (BRLPS), is spearheading the World Bank aided Bihar Rural Livelihoods Project (BRLP), locally known as JEEViKA with the objective of social & economic empowerment of the rural poor. The core strategy of JEEViKA was to build vibrant and bankable women's community institutions in the form of self-help groups (SHGs), who through member savings, internal loaning and regular repayment become self-sustaining organizations. Till date, over 10 lakh SHGs have been formed under JEEViKA.

During the challenging times of COVID19 pandemic, JEEViKA stepped in the rural retail market through its customized Rural Retail Shops. These shops enlisted as essential services remained open during the lockdown to ensure that people in rural areas were able to meet their needs of aroceries and other essentials. All precautionary measures were taken in these shops such as earmarked circles, sanitized shelves and other prescribed measures. The customers were also imparted with information on pandemic and what preventive steps can



be taken to break the chain. The customers were also advised not to touch anything in the premises to ensure maximum safety and minimize chances of contamination.

A total of 21 such Rural Retail Shops are run by JEEViKA across 10 districts of Bihar and have realized sales worth Rs1.28 crores, as of August 2020. The Rural Retail Shops have benefitted more than 900 grocery stores and over 2400 households directly. Supply of foodgrains through the Food Security Fund Procurement is also being taken care of through these Rural Retail Shops. The Rural Retail shops have helped JEEViKA in reaching out to 35000 households through their services.



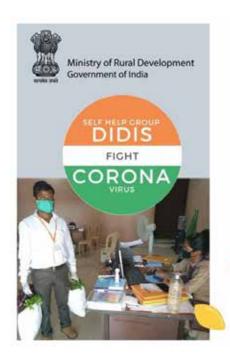
Initiatives in Jharkhand

In Jharkhand, SHG women used the Aajeevika Farm Fresh mobile app to sell vegetables, ensuring that social distancing guidelines were followed. The Aajeevika Farm Fresh service is run with the support of women Self Help Group members of the villages of Jharkhand and staffs of Jharkhand State Livelihood Promotion Society, an aegis of Rural Development Department, Government of Jharkhand.

The SHGs also used their networks to identify vulnerable households, flagging to

the administration the pockets in need of food.

They help run a 24-hour helpline by the State Rural Livelihood Mission (SRLM), which provides important information and counselling to the returning migrant. Every Panchayat in the state has a Muhkya Mantri Didi Kitchen, which provides free food to the needy. At present, the state has about 4,185 community kitchens in as many Panchayats, with SRLM providing Rs 20,000 each to SHGs running these centres.







Initiatives in Odisha and Chhattisgarh

In several states such as Odisha and Chhattisgarh SHGs have taken up the task of production, packaging and distribution of take-home ration (THR) as anganwadi centres across the country were shut due to the lockdown. These SHGs also distribute eggs along Ration to ensure nutrition to very child under five, pregnant women, lactating mothers, and vulnerable target groups.

Innovations by FPOs

Several innovations were also witnessed by FPOs of connecting farmers directly to

consumers, by leveraging online portals, digital platforms such as whatsapp, etc.

Chambal Agro Farmers Producer Company Limited-Madhya Pradesh

The Chambal Agro Farmers Producer Company Limited (CAFPCL) a newly formed FPO in Gwalior, Madhya Pradesh used a Whatsapp group to connect farmers who were struggling to sell fresh produce with residents who were facing shortage.

With the lockdown in place, several local vegetable markets and grocery shops were closed in Gwalior, leading to residents facing a shortage of essential supplies. Meanwhile, about 40 km from the city, farmers were struggling to sell their fresh produce of vegetables; some were forced to dump the vegetables due to lack of demand.

CAFPCL met this gap through a Whatsapp group of consumers in Gwalior and got them to list their requirements. Thereafter the FPO contacted farmers to note the availability of vegetables, and arranged curfew passes for its members. They then

started to transport the produce from the farmers to the consumers, reaching up to 300 consumers daily.

On an average, the sale volume per day was initially Rs 85,000 and on some days it peaked to Rs 1 lakh. The FPO initially had one vehicle to transport, then added two more as the volume of produce increased.

The initiative was recognized and supported by the district administration. The CEO of the zilla panchayat deputed the staff of the District Rural Livelihood Mission to help the FPO, created a mobile application for the residents of Gwalior to order vegetables, and provided a government building for packing, storing, and distribution of vegetables and other food items. The district administration has also replicated this initiative in other administrative blocks of Gwalior.



Bidar Horticulture Farmer Producer Company— Karnataka

The Bidar Horticulture Farmer Producer Company redefined its role from the supplier of farm inputs to the facilitator of fruit and vegetable sale to ensure support and revenue generation to both member and non-member farmers.

The FPC developed an online platform—www.raithanamitra.in – through which consumers can place orders for vegetables and fruits so that the required quantum could be sourced from farmers and delivered at their doorsteps.

Consumers can place their orders with a minimum purchase of Rs 100. The order s are in the four categories – vegetables, leafy vegetables, fruits, and ripen-yourself-mangoes under which consumers can buy green mangoes and ripen them at their homes through traditional methods.

The FPC serves around 2300 consumers in the city of Bidar.



Puthari Farmers Producer Company— Karnataka

The Puthari Farmers Producer Company went a step ahead and started purchasing perishable produce from other parts of the state. The FPC purchased grapes from Bengaluru rural-Chikkaballapur region and papaya from Mysuru-Mandya region. The

FPC offered farmers a price more than what they quote and kept only a 5% margin. The procured produce was sold at Gonikoppal town. The FPC plans to continue this model beyond the COVID19 crisis period.

Innovations by Industry

In light of the COVID19 pandemic, Indian businesses have adapted swiftly and come up with several innovative models for maintaining business continuity and ensuring product delivery and customer services. While on one hand these have ensured customers' needs during the global pandemic, these have also showcased business resilience in the face of adversity

Innovations in Delivery and Logistics.

A key area of innovation across agriculture and food companies have been in the delivery and logistics segment. This follows obvious trend of agriculture commodities being non replaceable and hence the demand for the same remaining steady. Several forms of innovations were witnessed ranging from partnering with food delivery chains for last mile linkage, to leveraging technology by swiftly developing Apps and linking the supply chain to consumer households. Interestingly, new modes of delivery such as leveraging Railways for delivery of heavy mechanization tools such as tractor, were also seen.

Innovative partnership models

Mumbai-based Marico has partnered with Swiggy and Zomato to ensure the delivery of its products, which include the popular Saffola brand of oats and oil. The items are listed on the food aggregators' apps. Once an order is placed, a delivery executive picks it up from the nearest Marico distributor and delivers to the consumer. Marico also partnered with aggregators like Delhivery, Shadowfax and Lalamove which had a technology led logistic solution to fulfil the demand.

Meanwhile, Keventer tied up with hyper-local delivery companies – Swiggy Grocery & Zomato market to take the entire product portfolio online and to ensure daily and fast deliver of nutrition at consumer doorstep. Jubilant Foods tied up with multiple partner brands to supply the key essentials like the Atta, Rice, Lentils, Milk, Spices, Pulses, oil, etc. Most of the companies have plans to continue these partnership models beyond the pandemic period, making them the 'new normal'.

Innovative direct Delivery models

In Uttar Pradesh, Gyan Dairy launched an App-based subscription of milk and milk products with contactless delivery. The App has seen 52000 + downloads by active consumers, thus showcasing its potential. West massive In Keventer Agro started its own home delivery service to various housing societies in and around Kolkata. This helped the company see an increase in monthly revenue by around Rs 50 lakhs despite disruption in the traditional marketina channel. Meanwhile, to cater to the growing demand for frozen food and ready to eat foods, ITC leveraged the Direct-to-Home (DTH) Model to sell directly to consumers under ITC on wheels initiative. With prior permissions from societies, WhatsApp message with Product Brochure and Pre-Order form were shared with residents. The consumers could place order via the pre order form (google form), pay online and delivery was ensured within 48 hours. This innovation contributed to 10% of total retail sales and frozen contributed to 8-15% of the total sales. Thus clearly, these innovative models helped companies in terms of increased customer base and in turn improved bottom lines.

Meanwhile, for consumers, this allowed for a new method of shopping for essentials from the comfort and safety of their own homes.

Innovative Logistics Model

Apart from food companies, logistics innovations have also been witnessed by mechanization companies, with TAFE leveraging trains to supply tractors to consumers. During April to June, the company deployed 37 trains from both Madurai and Dodaballapur plants to states of Rajasthan, Gujarat, Uttar Pradesh and Assam, supplying 5210 tractors and also reducing delivery/travel time by 50%. The success and time saving under this model has led to it being planned to become the 'new normal' for tractor delivery. A detailed plan is being worked out to use Railways as a major mode of transport of tractors in the future.

Innovations in Sourcing- Farm to Fork

Companies such as Big Basket and farm Promethean ensured to connectivity through innovative business models. Big Basket opened 14 collection centres during the COVID19 pandemic with special focus on fruits sourcing. Seasonal fruits like cherries, mangoes, plums and peaches were sourced directly from farmers at their farm to minimize human contact to the produce and prevent gathering of growers at collection centers. The company reached a large base of small and marginal farmers who were in dire need of market linkages. Meanwhile, Promethean launched the Reefer Vending Truck Market in Pune, which maintained the cold chain from the farm to the consumer and offer customers more choice with better quality in the convenience of their societies. The company tied up with a Farmer producer Organization (FPOs)-- Fresh Veg Agro Supplies in Ambegaon for the sourcing of fresh vegetables.

Innovations in Agriculture Extension

Another kev area where several innovations were witnessed was agriculture extension. These innovations were mainly implemented by agriculture input companies. Towards meeting the objectives of the Sustainable Rice Platform (SRP) Olam India formed a technology partnership with TraceX towards implementing a blockchain powered digital agricultural platform FOODSIGN™. The Platform is a next-gen digital which agriculture solution ensures connected. clean, traceable and transparent supply chain. Meanwhile, ITC under its Agri Extension Programme for Chilli Value Chain Development, leveraged the e-Choupal 4.0 app, one to one phone calls from call center, WhatsApp groups - to ensure uninterrupted crop advisory, pertaining to post harvest care which included drying, sorting, grading and packing. EID Parry developed a low-cost automatic GPS enabled soil moisture recorder in partnership with Sugarcane Breeding institute Coimbatore, to help farmers irrigate based on available soil moisture and not merely on his physical judgement leading to a 20% water saving.

Innovations in Customer Interface

Companies also focused on several customer interface innovations to maintain consumer base and ensure business continuity. Aries Agro launched the Aries 2020 booking application towards ensuring contactless booking and payment and a 100% digital order booking for the yearly requirements of all distributors and dealers were registered using the app. Also, the company created several digital platforms to continuously communicate with the

customers. Mahindra & Mahindra leveraged WhatsApp Video calls for providing quick repair and maintenance to customers for issues related to tractors & farm machinery. Meanwhile, TAFE launched Do-it- Yourself repairs for maintenance of tractors through Online webinars, Self-learning modules, Practical sessions.

Product and Packaging Innovations

Food companies such as HUL, Amul and Tata Consumers also focused on swift product innovations in the time of the pandemic towards maintaining consumer health and maintaining product demand. HUL strengthened fortification levels in Horlicks formulation to increase the zinc content, as Zinc was identified as an important nutrient that helps build the body's resistance against infections. Meanwhile, AMUL developed range of immunity booster beverages that were inspired from Ayurveda such as Haldi doodh shot (Turmeric latte), Tulsi doodh shot (Tulsi latte), Ginger doodh shot (Ginger latte), Ashwagandha doodh, etc. Nestle came up with MILO single serve packs priced at Rs 5 to maintain consumer sales.

Way Forward

Overall, these innovations have been resounding successes. The innovative business models have led to a reduction of cost for companies, ease of access for consumers and also built farmer resilience. The innovations have showcased that with planned partnerships, which are a win-win for all parties, Indian Agriculture holds the potential to not only tide over the challenge of the pandemic, but also grow in scale and resilience.

For example, the direct farm procurement and creation of value addition at farm gate is aligned to the policy focus on FPOs and agro clusters and the learnings can be leveraged to identify structural transformation. collaborative actions, integration and market technology innovations needed for linking clusters to organized supply chains. The existing partnerships can also be leveraged to identify farm gate infrastructure gaps in the clusters and handholding for bridging these gaps. The model also provides the benefit of value creation at farm level in terms of sorting, grading and packaging thus helping reduced human contact across supply chain.

Similarly, learnings from the extension partnerships have highlighted the targeted outreach as well as cost efficiency digital solutions offer. These partnerships also provide opportunities for employment generation by engagement of trained youth. However, focus needs to be on ITI's to train new generation of digital extension agents. The KVK network can also be roped into these partnerships to provide on delivery infrastructure. extension and advanced technology will also have a major role transformational role going forward as value chain partnerships with FPOs and agro clusters are forged.

Transition to B2C or D2C model is another emerging focus area. Going forward also the consumers will prefer these models given the concern for safety and benefit of convenience. All major retailers as well as FMCG companies are looking at leveraging these models by developing inhouse apps/ tying up with delivery service providers and the trend will continue

.

Disaggregation in networks and supply chains is emerging as another major trend with focus on cost optimization. Companies have set up smaller collection / distribution centers to cater to demand clusters and the model will continue to grow.

The pandemic has also opened up new avenues for logistics diversification and optimization. Multimodal logistics has gained much more focus and what is interesting to note is that the spread is not contained to perishables or milk but has

also seen diversification in terms of delivery of machinery and more.

Last but not the least product innovations have gained center stage and focus is increasingly shifting towards delivery of nutrition and immunity through fortification. This in the longer term will positively impact overall nutrition security towards 'Ending hunger, achieving food security and improving nutrition'. It will also open interesting avenues for new generation entrepreneurs with innovative ideas.

PART B:

FOCUS ON INDUSTRY INNOVATIONS









Innovations in Product Formulation & Packaging



INNOVATIONS IN AGRICULTURE EXTENSION

E.I.D. PARRY (INDIA) LIMITED

About the Company

E.I.D. – Parry (India) Limited is a part of Murugappa Group, one of India's leading business conglomerates and is engaged in the business of Sugar and Nutraceuticals. E.I.D. – Parry holds the distinction of setting up India's first sugar plant at Nellikuppam in 1842 and presently operates 6 sugar plants spread across South India.

The Company also retains a significant presence in the farm inputs business through its subsidiary Coromandel International Limited.



Challenge Faced

Given the COVID19 pandemic and movement restriction farmers and labours faced a critical challenge in decision making for adoption of Good Agronomic practices especially with irrigation management. Even if the farmer had precision irrigation systems like drip, his self-presence or labour presence to operate the systems was restricted or impaired due to the movement restriction.

At the same time, the movement of extension personnel and convening farmer meetings/ personal contact restricted dissemination of crop management advisories on time leading to poor crop and ensuant crop losses.

Innovations Implemented

To overcome the above challenges, EID Parry pioneered development and ground level implementation of three technologies in Cuddalore, Tamil Nadu and Srikakulam, Andhra Pradesh.

a. Automatic soil moisture recorder

EID parry had developed a low-cost automatic GPS enabled soil moisture recorder in partnership with Sugarcane Breeding institute (ICAR), Coimbatore by In-house IT /R&D departments. The device when installed in the field, automatically recorded the soil moisture and the data was transferred in real time to the servers of EID Parry to generate harvest order at optimum moisture to maximise sugar recovery. This was piloted pre-COVID and the extension personnel also used the technology to provide irrigation advisory to farmers during pre-COVID times.

During COVID19 as movement of extension personnel and farmers were restricted, the soil moisture meter was re-designed as a simple low-cost tool with LED indicators costing Rs. 1000 per unit which a farmer can buy and utilise to irrigate based on available soil moisture and not merely on his physical judgement (20% water savings). This technology is suited for small, marginal farmers as well as large farmers with labour manning the field to tackle the issue of in discriminant use of water. Farmers are deploying the same for determining when to irrigate.

b. Autonomous irrigation

Just with the onset of COVID19 for furthering technology advancement in irrigation with an objective to promote social distancing by eliminating farmer / labour movement to field, EID Parry introduced the novel concept of autonomous irrigation in both drip and furrow irrigation systems for the first time. A R&D trial was undertaken amongst 12 farmers to standardise the technology. The program was sponsored by Mondelez (I) Ltd with Tevatronic, Israel & Farmhand, UK as technology partners.

Under the program using advanced sensors and Artificial Intelligence (AI), crop will decide its water requirement based on multiple parameters in the field and an algorithm-based irrigation will happen automatically. The farmer / labour intervention is totally eliminated, and all data of irrigation is available at the comfort of his home on his mobile.

This is envisaged to reduce irrigation water use by 30-40% as it enables precision in both time and quantum of irrigation, improve productivity by 30-35% and sugar recovery by 0.5%.

It is planned to complete validation in March 2021 and launch to select farmers for refinement based on a larger farmer base feedback with a final low-cost commercial system launch in March 2022



c. **Cane doctor app** - EID Parry in collaboration with WWF, India, Rabo Bank and National Geophysical Research Institute (NGRI), Hyderabad is in process of developing a complete dynamic Decision Support Tool (DST) encompassing all cultivation aspects which was earlier developed and deployed pre -COVID for water use decision alone.

The DST will be a complete digital crop advisory tool and the scope of the program has been enlarged to cover real time ground water estimates, establish accuracy of soil moisture estimates for irrigation scheduling using satellite imagery, establish accuracy of weather forecasts, determine soil nutrient status and recommendation, establish a system for forecasting, detecting and providing solutions to pest and diseases instantaneously with an image capture and provide crop anomalies, crop condition and productivity forecast to farmer and company.

The pilot is planned to be launched in March 2021 with ground truthing and validation currently underway and integrated with the existing EID farmer connect app. from mid-2021.

Impact

- Leveraging the technologies, EID Parry was able to deliver a **15% improvement in cane farmer incomes**. This was a result of 6 tonnes of additional cane production i.e Rs. 16000 per acre additional revenue.
- ➤ In terms of cost of operations, the **sugar recoveries improved by 0.5%** i.e 1.75 Cr additional revenue for every lakh tonne of cane crushed @ Rs. 35000 / tonne estimated sale price of sugar.
- These technologies ensure **30-40% savings in water consumption**.
- > Hassle free, precision with cost savings and safe environment of cultivation for farmer.

Plan to scale

The initiative will further be scaled, and the target is to ensure 20 - 30% YOY growth in adoption and implementation of the technologies.

Policy support sought

- 1. Promote IIT's/ Engineering tech institutes / MSME electronic hubs & industries incubators to develop and produce low cost components of autonomous system being imported from abroad so as to enliven "Make in India".
- 2. Subsidising such innovative water saving mechanism / systems for 2-3 years till we are able to develop low cost indigenous components to promote wider reach and adoption.
- 3. Industry Institution partnership with Co-funding by Government for location specific solution refinement, validation and promotion of DST technology.

ITC LTD

About the Company

ITC is one of India's largest integrated agri business enterprises with significant presence across every node of the agri value chain. The company works closely with farmers to improve the productivity and quality of various crops and sources the finest of agri products across multiple geographies in India. The business deploys customised infrastructure and technology to supply these products to discerning customers in India and over 60 markets worldwide.



Challenge Faced

Chilli crop in Andhra Pradesh was at the edge of harvest when COVID19 spread started intensifying in India. Generally, harvest and post-harvest in chilli are the critical phases, which needs utmost care. Right harvesting, drying, grading and packing plays an important role in determining the end market price for farmers.

When the lockdown started, farmers were pushed to uncertainty and were facing issues of guidance on crop harvesting and drying. From an ITC perspective, the challenge was to handhold farmers on right harvest and to ensure quality drying practices are implemented during the initial phases of lockdown.

Innovation Implemented

ITC through its deep linkages with farming community, local presence across the supply chain took measures to support farmers in crop production and ensure continuity of business.

As a part of ITC's Integrated Agri Extension Programme for Chilli Value Chain Development with Govt. of Andhra Pradesh, interventions were implemented to help farmers in **Guntur**, **Krishna**, **Prakasam**, **Kurnool** districts during COVID19.

This included proactively educating farmers, workers and their family members to create awareness on COVID19 safety precautions and social distancing, thus preventing the spread of virus into their communities.

Given limited movement allowed, **digital technology was leveraged: e-Choupal 4.0 app**, **one to one phone calls from call center, WhatsApp groups -** to ensure uninterrupted crop advisory, pertaining to post harvest care which included drying, sorting, grading and packing. Field staff who were present in project villages started visiting farms of their respective villages only, on a regular basis, to guide farmers on best practices, adhering to the Government norms of lockdown and directives of COVID19 safety precautions.

The following digital interventions were implemented:

Digital crop monitoring through app: Information regarding farm, crop, practices and inputs were collected in the crop monitoring feature of the app. This data helped to provide site specific / farm specific recommendations to the farmers. In addition, the data with respect to package of practices aided in ensuring а demand-driven production system in line with requirements of food safety, traceability and sustainability.



Digital crop advisory though call center:

Personalized information was disseminated to the farmers based on their crop stage. The solution included a dedicated content management team that governs the flow of information to the farmers and provides access to a range of information related to weather, good agricultural practices, recommendations on pest & disease management, post-harvest management and market information.

For efficiency in post-harvest management, farmer friendly **foldable chilli dryer** was deployed which ensured faster drying of chilli when compared to traditional way. In addition, the technology played a critical role in quality enhancement and protected chilli from foreign material contamination, untimely rainfall and finally reducing aflatoxin.

Handholding was also provided to farmers in arranging new packaging material (gunny bag) to avoid quality loss during storage and routed financial assistance from Govt. Further given the movement restriction, to ensure timely procurement, ITC also on-boarded multiple exporters on the platform, to procure chilli from the project area.





Impact

Transaction of Rs.265 Cr. by 17 exporters and other traders for a **total Chilli sale volume of 29,000 MT.**

The Agri-extension support coupled with adoption of good production practices enabled farmers to achieve a 13 % increase in productivity - 24 Qtl/Acre against the 21 Qtl/Acre of general farmers. 8% improvement in grade out turns and resulted in an additional realisation of Rs. 23,000/Acre to the project farmers.

The intervention also ensured business continuity for ITC with the company procuring 1,100 MT of Chilli at farm gate from the project villages.

Plan to scale

The project is planned to be implemented in 62 villages of Guntur, Krishna, Prakasam and Kurnool districts of Andhra Pradesh covering 25,000 acres in 2020/21. It is planned to cover 100,000 acres by 2023/24. as well.

Policy support required

In addition to the current financial assistance provided by Govt. of Andhra Pradesh, assistance should also be extended to farmers for procuring "Packaging material" and "Foldable Chilli dryer" as these small interventions have significant potential to improve the crop quality, integrity and reduce wastage.

OLAM AGRO INDIA PRIVATE LIMITED

About the Company

Olam India is one of the largest and most diversified agri-commodity companies in the country. *Its* business includes the processing of nuts – primarily cashews and almonds; and spices – including turmeric, chilli, coriander, cumin, black pepper, and ginger. The company is also a leader in rice, cotton, coffee, cocoa products, sugar, oil and oil seeds.



Olam International is a founding member of the Sustainable Rice Platform (SRP), which was conceived by the United Nations and the International Rice Research Institute, towards addressing the "rice paradox" through a framework for increasing production in a sustainable way.

Challenge Faced

Olam India meets the objectives of SRP, towards producing sustainable, traceable and residue free Basmati rice, by partnering with the country's small holder paddy farmers and supporting them on sustainable best practices.

This project demands a high degree of engagement with Farmers, farmer producer organisations (FPOs) and the entire eco system to ensure compliance with standards set forth.

However, the unprecedented crisis of the COVID19 pandemic, imposed severe restrictions on the movement of people in the field and brought direct face to face interactions to a halt.

India's Nation-wide lockdown and travel restrictions began in end-March, which was also the ripe season for Kharif paddy sowing. Farmers had already begun field activities.

Thus, there was an urgent need to innovate on newer modes of engagement with the farmer eco system especially leveraging digital technologies, such that disruptions could be minimized. Unless digitised measures were taken up, several farmer support programs such as farmer registrations, tracking of farms recommendation of package of practices, farmer engagement etc. would have become increasingly difficult.

Innovation Implemented

Faced with the challenge of restricted movements and halted face to face interactions, Olam India formed a technology partnership with TraceX towards implementing a **blockchain powered digital agricultural platform** FOODSIGNTM.

The Platform is a next-gen digital agriculture solution which ensures connected, clean, traceable and transparent supply chain.

FOODSIGN™ provides a connected eco-system enabling farmers, agri businesses, food corporations, credit providers, logistics providers etc. to exchange information with mutual

trust via a permissioned blockchain, enabling each one to prove transparency, traceability of the claims across the supply chain.

The Platform captures information such as FPO and farmer profiles, land holdings, farm geo-maps, crop plans/activities/package-of-practices, harvest, post-

quality,



processing, crop sales, Post-harvest processing steps, production compliances and so on.

Accessing the Platform

harvest

The various stakeholders of the SRP project such as Farmers, FPOs, project officers, Field facilitators, Krishi Sakhis are digitally mapped in FOODSIGN™. Depending on the user roles and responsibilities, the users leverage either the web-based application or multi-lingual, off-line enabled android application.

Farmers, field facilitators, Krishi Sakhis use the **multi-lingual mobile application** to track the produce from sowing until harvesting and Project managers, Project officers and other office bearers use the **web-based application** to track and trace the pre-harvest and post-harvest information.

Considering that the filed movements are restricted, all the key stake holders are trained online on the application usage.

Capturing data/information

Farmers are registered in the system remotely/on-site by field facilitators using the multi-lingual android application. Using the mobile app remotely or otherwise, each and every farmer's land under SRP is geo mapped and also other details such as crops, varieties, are under sowing, sowing dates, planting dates, expected harvest so on are all recorded on the system.

Dissemination of Information

Farmers are grouped into Krishi Sakhi clusters and are assigned to respective Krishi Sakhi and field facilitators for any advisory.

Crop and Variety specific input plans and package of practices are defined in the system and the same is communicated automatically to farmers via a simple daily SMS in the local language

Ensuring Adherence to Norms

- Field facilitators are able to track their farmer's compliance to POP recommendations and farmer's field activities via FOODSIGN™ android app. The system automatically provides alert and notifications.
- Weekly on-line reviews are held with the field staff for review the data capture, identifying any field challenges and any additional training required.
- A dashboard and frequent alerts for field assistants to easily track farmer's progress has also been put in place
- Weekly reviews are held with the client management team for passing on the field insights and seeking their input for improvements.

Impact

Olam has implemented the FOODSIGN™ platform in the district of Fatehabad in Haryana, impacting 300 farmers. However, there are plans to scale this up to 5000 farmers by 2024.

Apart from the one-time cost of implementing the technology solution, the cost per farmer for this digitization was only Rs 100 which is also borne by Olam. However, the innovation has helped earn a revenue of USD 3-4 million, thus showcasing the immense impact.



INNOVATIONS IN SOURCING

PROMETHEAN POWER SYSTEMS

About the Company

Promethean designs and manufactures refrigeration systems for commercial cold-storage applications. The company's technology enables food suppliers to reliably store and preserve perishable food items—such as milk, fruits and vegetables—without the need for expensive diesel-powered generators. Promethean's patented Thermal Storage System can store and release large amounts of cold energy and can be applied to various cooling applications in areas with unreliable grid supply.

Challenge Faced

The COVID19 pandemic severely impacted the purchase of essential food by consumers. While supply chains from the farm to the markets were disrupted initially, social distancing norms also made purchase from markets a time-consuming hassle. Further, the fear of infection led to aversion among people for stepping out to buy daily essentials like vegetables, fruits and dairy products from multiple vendors and giving and taking cash.

While home delivery options were availed by some, this method lacked the flexibility of consumers to pick and choose the produce they wanted. Further, due to the lack of cold chain integration, the quality of produce delivered through online/home delivery were often sub-standard, although high priced.

Promethean realised the challenge of consumers in terms of lack of choice, poor quality and high prices for fresh produce, and saw an opportunity for innovation.

Innovation Implemented

Analysing the challenge, Promethean worked out a solution to address the three main concerns of fresh produce consumers—Convenience, Choice and Quality.

Promethean has launched the Reefer Vending Truck Market in Pune, which maintains the cold chain from the farm to the consumer and offers them more choice, better quality and the convenience of their societies.

The company tied up with a Farmer producer Organisation (FPOs), Fresh Veg Agro Supplies in Ambegaon, for the sourcing of fresh vegetables.

The Reefer Trucks picked up fresh produce directly from the FPO farms and Promethean then sorted and stored the produce in cold rooms at their factory.

The Reefer Vending Trucks ensured that the produce is delivered at a temperature between 12 to 15 deg C to the consumers.

On the supply side, Promethean tied up with 10 residential societies in Pune, each with



between 250-500 flats, for sale at specific time slots on specific days of the week. At each society, the truck is parked for 2-3 hours on prior specified days, and produce is sold maintaining all social distancing protocols.



The rates offered to the consumers are same as the local market and they are free to pick and choose what they want. The customers place the produce on the weighing scale which is connected to a Promethean application. The is invoice generated automatically and mailed to the customer. All payments are through Paytm or Google Pay so all forms of contact are eliminated.



Impact

The innovative model has been deployed in Pune, Maharashtra. Promethean partnered with Sakhi Rural Unique Enterprises (SURE), an NGO based in Pune; and Fresh Veg Agro Supplies, an FPO based in Ambegaon for the initiative.

The innovation led to a revenue of around Rs 25,000/day for the company, with fresh produce being delivered regularly to over 500 consumers. It also had the added advantage of connecting farmers to markets during the challenging times of the pandemic, and thus supporting livelihoods. The model can easily be sustained and expanded by adding more reefer delivery trucks. Going forward, Promethean looks forward to connecting with more FPOs and expanding the innovative model.





ROQUETTE INDIA PVT LTD

About the Company

Roquette is a global leader in plant-based ingredients, a pioneer of plant proteins and a leading provider of pharmaceutical excipients. In collaboration with its customers and partners, the group offers the best ingredients for food, nutrition and health markets.



Challenge Faced

As a result of the pandemic and subsequent lockdown that followed disruptions were faced in the transporting raw material (corn) from Bihar & MP to Pantnagar (Uttarakhand).

Innovation Implemented

Given the challenge in transportation to ensure business continuity, Roquette procurement team worked together with the farmers of Udham Singh Nagar district to grow maize instead of paddy for spring crop in the area.

It was a joint effort by **Roquette**, **Bayer**, **GramUnnati** and **local FPO's**.

Together it resulted in successful growing of corn on 4000 acres of land. Roquette assured the farmers with market access for the corn produced in the local area.



The project was also supported by Pantnagar Agricultural University and Udham Singh Nagar district administration.

Impact

Roquette is encouraging local supply and optimizing means of transportation to combine economic profitability and low environmental footprint. The project not only helped the company secure sustainable source of raw material but helped farmers community by replacing high water guzzling paddy crop with maize crop (which requires less water). Maize crop helped the farmers to earn a good income as maize requires less maintenance as a crop. The farmers do not have face the hassle of looking for buyer, transportation and price negotiation, which was a boon for them in lockdown period.

Plan to scale

Going forward it is proposed to scale up area under cultivation of maize from 4000 acres to 10000 acres in 2020.

Policy support required

Support in terms of agriculture extension and post-harvest handling infrastructure will help scale the initiative further.

SUPER MARKET GROCERY SUPPLIES (BIG BASKET)

About the Company

Big Basket is an Indian online grocery delivery service, which primarily delivers grocery goods found in convenience stores, fruits and vegetables, home essentials and food supplies to its customers.

Customers use the BigBasket Mobile App or the online portal to place orders. Big Basket employees then secure the items from their warehouse and deliver the items to the consumer.



Challenge Faced

The COVID 19 pandemic resulted in a sudden increased demand for online grocery. For Big Basket, the demand increase across key cities was to the tune of 2x to 3x of pre-COVID levels. This led to all collection centres of the company operating at full capacity, yet still unable to meet the demand. The company realised the need to extend their farmer network immediately as even the mandis remained shut. This led to scouting for procurement locations, arranging for vehicles, packaging material etc. at a time when the country was under lockdown.

Innovation Implemented

Towards meeting the risen demand, Big Basket opened 14 collection centres were opened between April to July, with a special focus on fruits sourcing.

In a usual situation, farmers bring their produce to the collection centers themselves. However, during the pandemic, to minimise human contact to the produce and prevent gathering of growers at collection centres, seasonal fruits like cherries, mangoes, plums and peaches were sourced directly from farmers at their farms.

The pandemic also led to a number of 'unconventional' locations for sourcing produce. For example, Tomato was sourced from smaller pockets in Telangana and Grape from farmers in Karnataka. This led to the company reaching a much larger base of small and marginal farmers who were in dire need of market linkages.

Meanwhile, this also led to price stability for consumers. At a time when tomato prices were surging, Big Basket's increased farmer base not only helped cater to the demand of tomatoes in the South but also helped bring a very smooth supply chain to the North by reducing intermediation and exorbitant price build up. The company also came up with special harvesting, packing, loading techniques to transport a perishable product like tomato for over 2000km.

Big Basket provided the farmers with packaging material to be able to dispatch their produce safely to consumers.





All payments to farmers during this period were made only digitally and within 24 hours of the transaction.

Another challenge was shortage of on-farm labour in the case of fruits. To overcome this, Big Basket took a team of 100 labourers to Himachal for procurement of Apples. This team travelled as per government regulations, was quarantined for 14 days and started work only after all medical tests and local permits were provided for them.

To streamline the supply chain, Big Basket also started direct supplies from source to the last mile hub for staple products like Onions, Melons, potatoes. For this the company started packaging in consumer packs at the source, which also helped reduced human contact across supply chain.

Geography and Outreach

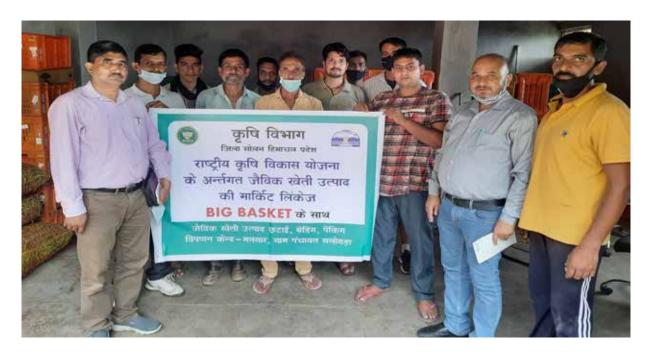
The collection centers were set up pan India. The direct sourcing was focused mainly in the states of Himachal Pradesh, Telangana, Maharashtra.

The company managed to reach out and impact 3000 new farmers during the pandemic period. Around 250 cherry farmers were directly benefitted since the traditional supply chain to Azadpur mandi was broken.

Meanwhile, the ramped-up sourcing helped serve around 20 lakh customers pan India.

The innovations to reduce supply chain wastages and the farm-gate market linkages will be continued beyond the pandemic period.





WAYCOOL FOODS AND PRODUCTS PVT. LTD

About the Company

WayCool Foods & Products Pvt. Ltd. is one of India's fastest growing Agri-Tech companies, driving social impact while transforming India's food economy. Founded in July 2015, WayCool aims to build the world's largest food development and distribution services company and positively impact the lives of 500,000 farmers.

WayCool currently handles 250+ tonnes of food products per day, across 10,000 clients, and from a network of 40,000 farmers in more than 50 regions in India. WayCool's products include staples like rice, pulses, wheat flour, dairy, and value-added products.



Challenge Faced

WayCool operates direct supply chains for fresh produce, staples and dairy, connecting producers to liquidators such as retail stores and hotels. Given the essential nature of the service, it was important for WayCool to remain operational throughout the lockdown

However, the pandemic posed significant operational challenges. There was a sudden shift in demand, due to complete closure of hotels and restaurants, and significant uptick in demand from retail outlets. Additionally, the supply chains were disrupted due to sudden introduction of containment zones, both in sourcing regions and in the distribution regions.

The disruptions were further aggravated given the shortage of labour in urban areas due to migration back to the villages. In addition, there was increased need to completely reorganize work to maintain effective social distancing and provide adequate employee protection and care.

Innovation Implemented

Analysing the challenge, WayCool attempted a two-pronged strategy to ensure business continuity.

Towards ensuring business continuity, operations were atomized. For any of the sourcing point or warehouse that came under a containment zone, redundant sources were identified, and large warehouses were substituted with multiple, distributed small warehouses, in order to provide backups in case of closure of any one source or warehouse zone.

Employee protection and care was another important aspect of business continuity. This included protective actions such as reengineering our entire operations to ensure social distancing, end-to-end sanitization of vehicles and warehouses, application of UV-C based sanitization technology for air purification in workstations, robotised sanitization of warehouses using UV-C and other measures. Further to take utmost care for any affected employees, measures such as 24-hour hotline, doctor-on-call via videoconference, issue of pulse oximeters to staff, tie ups with hospitals and other measures were facilitated.

Over and above these measures, the company is making 3 strategic shifts to align with the long-term effects of COVID19.

- a. Digitization of operations such as sales calls, and cash collection
- Automation of handling, sorting, grading and packing in our wet warehouses using in-house warehouse automation solution RAPID designed specifically for wet-warehouses. RAPID, which stands for Receiving, Allocation,



Packing, Invoicing, and Dispatch, encompasses the end-to-end of warehouse operations. RAPID ensures that the products face minimal handling through the entire process, and seamlessly integrate the digital platform with world-class warehouse automation.

c. Migration of work to distributed, rural centres run by micro-entrepreneurs. WayCool has partnered with a woman entrepreneur in the outskirts of Coimbatore and facilitated the set-up of a mechanised garlic peeling factory. WayCool supplies the raw produce and lifts the finished good.

A similar facility has been set up in partnership with an FPO in a village near Chennai city. This



enables the company to create additional rural income, reduces risk through the creation of distributed factories and moves value addition closer to rural areas.

Impact

The innovative model has been deployed near Chennai and Coimbatore. Impact is visible in terms of increased revenue. Today, the garlic peeling facilities manufacture over 250 kg per day of peeled garlic, creating a revenue of over Rs 4000 per day for the woman entrepreneur/FPO, and Rs 30000 per day for the company.

Also, with the sourcing facilities distributed, the company is protected from any localised containment zone creation and business continuity is maintained.

The intervention is also helping address sustainability as the waste material created by the process of garlic peeling is consumed locally for the production of agricultural inputs.

Plan to scale

This innovation around migration of work to distributed, rural centres run by micro-entrepreneurs will be continued as a strategic initiative. Similar solutions are being developed for mechanised onion grading and packing in the source regions in Maharashtra, packing of spices, dry fruit and other products in the rural areas from where these are sourced, and so on. The company has been working in partnership with National Agro Foundation and TNSCM for enabling the above.

Policy support sought

Low cost capital support, as offered under the recent package of agricultural reforms, will greatly enhance the scale at which this innovation can be built

INNOVATIONS IN DISTRIBUTION & LOGISTICS

GYAN DAIRY

About the Company

Gyan Dairy is a privately held subsidiary of C.P. Milk and Food Products. The company manufactures, markets and sells a full line of dairy products.

It offers a diverse portfolio of 17 dairy products, prepared using the milk supplied directly to the company by 100,000+ dairy farmers.



always fresh, always pure

Challenge Faced

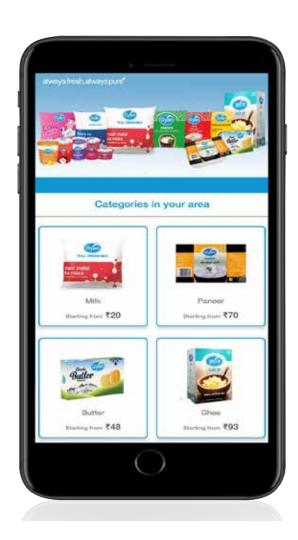
The COVID19 pandemic severely impacted the dairy industry. The Pan-India lockdown impacted liquid milk consumption by around 30-35% with the closure of the HoReCa sector, QSR, unorganized sector, as well as sweetmeat shops. While other food sectors were also impacted, Dairy saw a much harder hit because the products were highly perishable.

All this led to institutional sales of Gyan Dairy dropping by 25 to 30%.

Innovation Implemented

Towards overcoming the drop in sales, Gyan Dairy launched an App-based subscription of milk with contactless delivery.

The App, 'Gyan Fresh' can be downloaded onto consumers' mobile devices- both android and ios. The App allows consumers several options of delivery including daily delivery, one-time delivery or regular deliveries. It is also assured that the delivery is done on time and with complete adherence to safety.



The consumer may select the product and preferred delivery option for delivery the very next day between 6AM to 8AM.

The transactions on the mobile app are processed through a secure payment gateway, allowing contactless payments.

The App is promoted aggressively through promotional offers on purchases.

Impact

The innovation has been implemented for Lucknow District in Uttar Pradesh.

The App has seen 52000 + downloads by

active consumers. The company envisages the consumer base to be increased to 1,00,000 customers by FY-2021.

Further, based on the success of the App-based delivery, the company is planning to expand the portfolio of delivery to complimentary categories like fruits, vegetables, bakery etc.





ITC LTD

About the Company

ITC's Branded Packaged Foods business is one of the fastest growing foods businesses in India. The business continues to invest in every aspect of manufacturing, distribution and marketing to ensure that it can leverage emerging opportunities and fulfill its aspiration of being the most trusted provider of Branded Packaged Foods in the country. ITC's Foods business also exports its products to the key geographies of North America, Africa, Middle East and Australia.



Challenge Faced

Frozen food category saw an increase in demand during the COVID19 given an increase in consumers seeking snacking options. The craving was fuelled by limitations in eating out / ordering in. Also, the category offered the benefit of variety, taste and convenience.

The challenge in the category is distribution and availability. The category availability of frozen products is limited to about 10% of the outlet universe. Also, within the 10% outlets, the available freezer capacity is limited, making range availability a challenge.

In addition, stocking options at the consumer level is also limited and therefore requires frequent replenishment by the consumer.

Innovation Implemented

To address the distribution challenges and increasing demand for snacking options ITC under its 'Master Chef' brand of Easy to cook Snacks, Meals, RTC, Frozen Veggies leveraged the **Direct-to-Home (DTH) Model** to sell directly to consumers.

Within 3 weeks of lockdown, ITC put in place a distribution model that could service consumers directly.

The first model launched was **freezer on wheels**, under this model consumers could
place order via the pre order form (Google form) and the orders were serviced directly



through the delivery van. With prior permissions from societies, WhatsApp message with Product Brochure and Pre-Order form were shared with residents. The consumers placed order via the pre-order form. For, consumers convenience and safety no minimum order was required, they could pay online post-delivery and free delivery was ensured within 24-48 hours.

"This was a low-cost model and delivery was routed in partnership with a Wholesale Distributor in Delhi /NCR and with a third-party agency in Mumbai. Stall Model was also leveraged in potential apartments with higher demand. To create a cost-efficient model the societies were mapped, and route plan was deployed.

The second model was **ITC on wheels**, a Ready Stock Model for Societies where the entire ITC portfolio was made available to the consumers at their doorstep. Prior permissions were taken from societies and residents were informed about a van in their premises with ITC products. Like the first model this also had advantage of low-cost which was covered within the channel margin.

Frozen Snacks had to be maintained and delivered to consumer in -18 degree. The lockdown had created a constraint on availability of reefer vehicle which ensures that product is reaching at consumer at right temperature. The team overcame the challenge by starting delivery in dry ice and ice boxes however this had an issue of capacity limitation, so Glycol freezers were setup in the vehicle that had enough capacity to carry 150+ units.

The company partnered with housing societies in metros like Apna Complex, My gate, No broker and Azgo to supply essential products to housing societies across key cities.

These models currently available across six cities **Delhi**, **Gurgaon**, **Mumbai**, **Bangalore**, **Kolkata**, **Hyderabad**, **Chennai**.

In addition to the above ITC is also leveraging its direct-to-consumer portal itcstore.in, which has availability of more than 400 products that are accessible across the top six cities at present. ITC has also tied up with e-commerce players like Zomato, Dunzo, Swiggy and Domino's for last mile deliveries.



Impact

ITC was able to cater to **5 lakh** households in 1,000+ societies across **6** cities primarily in the containment zones. This model contributed to around 10% of the total retail sales.

The innovations not only ensured business continuity but also ensured customer delight by reaching food products at a time when they had limited or no access



Plan to scale

Yes, these emerging channels are likely to become mainstream in the new normal even after the pandemic passes.

Policy support required

Facilitating creation of cold chain infrastructure at retail end will help seamlessly connect the frozen supply chain and help the segment grow.

KEVENTER AGRO

About the Company

Keventer Agro Limited, the food processing business of Keventer Group, is one of the fastest growing Food Company in Eastern India. Keventer Agro is present across categories like dairy, bananas, frozen foods, export of food commodities, franchisee for beverages and franchisee for hospitality brands.



Challenge Faced

With the nationwide lockdown in end March, there was a near panic in the minds of consumers for easy availability of essential items. There was a significant disruption in the distribution system and most general trade outlets as well as wet markets remain closed or were in operations for limited periods of time.

While consumers could stock some grocery items for perishables like milk, banana it became critical to look at innovative solutions to ensure that Keventer's product portfolio was easily available to consumers everywhere.

Innovation Implemented

The innovation was implemented at 2 level:

- Leveraging e-commerce: Keventer tied up with hyper-local delivery companies –
 Swiggy Grocery & Zomato market to take the entire product portfolio online and to ensure daily and faster deliver of nutrition at consumer doorstep.
 - **5 depots** were setup overnight at strategic locations across the city **New Alipore, Manoharpukur, Alipore, Swabhumi and Rajarhat** to ensure these delivery companies had access to stocks on a real-time basis and were able to deliver to consumers in 30-60 mins.

Complete range of Keventer food products - Keventer Milk, Keventer Banana, Keventer Frozen Foods along with the newly launched Keventer Lassi and Flavoured Milkshakes - is available to be ordered through the two e-



commerce platforms from the safety of home

In addition, Keventer Agro, being the largest franchisee of Parle Agro in India, also made fruit range of beverages like Frooti, Appy and Appy Fizz available on the platform.

 Home delivery service: Keventer Agro also started its own home delivery service to various housing societies in and around Kolkata. Orders were aggregated using WhatsApp and the company ensured that supplies of its entire product portfolio – bananas, curd, milk, frozen foods, beverages – were delivered by company delivery representatives.

These company delivery representatives were extensively trained on maintaining safety protocols and social distancing at all times.

Sales through the digital channel is being supported by an extensive push in terms of advertising on social media, and the company is investing in a significant manner in its brand push as well.



Impact

The innovation was implemented in the city of Kolkata and impact was witnessed in terms of increased revenue of approx. 50 lakhs/month despite disruption in the traditional marketing channel.

Plan to scale

Swiggy Grocery & Zomato Market have become an integral part of Keventer's digital channel, and the company will continue to embrace the Direct-to-consumer route as one of the key methods of reaching consumers going forward.

MARICO LIMITED

About the Company

Marico Ltd is one of India's leading consumer products companies. Currently present in 25 countries across emerging markets of Asia and Africa, Marico has nurtured multiple brands in different categories.



Challenge Faced

During COVID19, supply chains were severely impacted due to lockdowns and the three major challenges faced were:

- **Distribution:** The traditional methods of distribution through channel partners was impacted both in Rural and Urban markets. The channel partners were unable to supply goods to outlets. Smaller towns had the biggest impact due to limited availability of vehicles.
- **Manpower:** As most of the manpower had returned back to their hometowns, there was a huge shortage of manpower especially for the loading/unloading activities
- Dynamic External Environment: As the situation was continuously evolving with frequent lockdowns and changes in rules, managing supplies was a significant challenge

Innovation Implemented

Given the dynamic situation, it was critical to adapt quickly and ensure that supplies especially of essential goods were not hampered in the critical times. The innovation implemented was:

- On boarding 3rd Party aggregators: As the demand of vehicles and manpower was dynamic due to the evolving situation, a solution was needed where in demand can be fulfilled in a real time basis. Pan India 3rd party aggregators like **Delhivery**, Shadowfax and Lalamove which had a technology led logistic solution were quickly on boarded to fulfil the demand
- Order fulfilment: Different models like "bill to ship to" were implemented wherein supplies were done directly from the company depots to the outlets bypassing the channel partners. Rural towns especially in UP and Rajasthan were served directly from the depots. This also brought in efficiencies in the system and ensured that all orders were fulfilled on time
- **Technology led approach**: Using tele-calling and retailer apps, orders were collected every day. Basis these orders, vehicles and manpower were deployed from 3P aggregators and supplies were done.

Impact

The innovation was implemented in 14 states namely Delhi, Uttar Pradesh, Rajasthan, Haryana, Madhya Pradesh, Maharashtra, Gujarat, Telangana, Karnataka, Tamil Nadu, West Bengal, Bihar, Jharkhand and Assam and the impact was witnessed in terms of-

- **Revenue/Sales** Significant amount of Sales generated till today.
- Cost of Operations a very small percentage of the overall revenues till today
- **Customers reach** Close to 250 cities and small towns have been supplied through the 3P model

Plan to scale

Basis the cost efficiencies and the ability to reach deeper in rural India, the plan to scale up the model in the future is under consideration

SPENCER'S RETAIL LTD

About the Company

Spencer's Retail Limited, part of RP Sanjiv Goenka Group, is a multi-format retailer. Spencer's, being one of the earliest entrants into the retail space in India, introduced the Indian consumer to the concept of organized retailing. The first ever hypermarket in India was launched by Spencer's in Hyderabad in 2000. Today, Spencer's runs 120 stores, including 37 Hyper stores in over 35 cities in India.



Challenge Faced

The COVID19 pandemic severely affected the brick and mortar retailers. There was **panic buying with almost 4x demands for essentials articles** across grocery, staples, households and processed foods articles.

On the other hand, there was a **decline in demand and sales of non-food SKUs** as a result of which retailers faced challenges in article assortment at distribution center (DC) given that traditionally non-food put-away articles used to occupy major space at DC.

There was also a serious **manpower crunch** with ~60% absenteeism cases across various distribution centres. With interstate and inter-district movement restriction **supplies to stock at depot** were also impacted

Innovation Implemented

Given the challenges, following changes in strategy was implemented.

- a. Earlier Non-food used to occupy major space at DC. However, due to huge demand of grocery, staples, households and processed foods articles, these were prioritized as essential SKUs.
- b. Spencer's started taking bulk order from societies from a list of essential items via WhatsApp/tele-call and the order would be delivered in one go. Residential Welfare Association (RWA) list for essential SKUs of FMCG, Staples & General Merchandise was prepared by identifying high velocity essential SKUs. This list of prepared SKUs was also shared with manufacturers and distributors to help them

plan their production and distribution to ensure supply connect for the essentials demand.

A novel concept of Case Level Traceability (CRT) was implemented for essential SKUs, which helped in reducing the lead time and ensure faster collection of essential SKUs at DCs. To tackle issues faced by vendors, a "War Room" was created between distributors & manufacturers, wherein they were provided with stock movement visibility & availability. This helped in ensuring and managing supplies.

For faster delivery of essential SKUs, strategic partnerships with **Swiggy** and **Uber** were forged.

c. To ensure the business continuity in containment areas a unique store was chosen as the Back-up or Alternate Hub Location, which acted as a DC and catered the essentials SKUs delivery with strategic tie-up with omni-channel delivery partners. Replenishment was facilitated from these identified alternate hubs aided with manpower support from the regional DC to which these alternate hubs belonged.

Impact

The innovations were implemented pan India and helped ensure business continuity for the company.







TRACTORS AND FARM EQUIPMENT LIMITED

About the Company

Tractors And Farm Equipment Limited (TAFE) s an Indian tractor major incorporated in 1960 at Chennai. The company currently holds about 25% market share of the Indian tractor industry with a sale of over 150,000 tractors (domestic and international) annually.

A strong distribution network of over 1000 dealers effectively backs TAFE's four iconic tractor brands – Massey Ferguson, TAFE, Eicher and the



recently acquired Serbian tractor and agricultural equipment brand IMT – Industrija Mašina i Traktora.

Challenge Faced

The COVID19 pandemic led to several challenges for the mechanisation sector includinglogistics challenges of delivering new products, physical challenges of ensuring customer services and challenges to launching new products.

- Challenges to product delivery: The pandemic and the subsequent travel restrictions led
 to severe shortage of drivers and truck availability, which was a major challenge as trucks
 are the mode of delivering tractors to consumers from factories. Further, due to lockdown
 in various state borders, movement of trucks were uncertain leading to severe delays in
 transit times.
- Challenges to customer servicing: The physical restrictions led to customer service challenges, such as dearth of spare parts with dealers/servicemen, challenge of providing on-site repairs, etc.
- Challenges to new product launch: An effective launch programme is essential for success and quick ramp up of any new tractor model. In a non-COVID situation, TAFE launches its products with to a huge audience comprising Dealers, Dealer Sales & Service team members, prospective customers, influencers, bankers, etc. However, the COVID19 pandemic stalled the possibility of any such physical launch, thus impacting the company's business potential.

Innovation Implemented

Each of these challenges were swiftly dealt with to ensure business continuity and customer satisfaction.

• Innovation in Logistics and product delivery: Towards the challenge of product delivery, TAFE used trains to supply tractors to customers. During April to June, the company deployed 37 trains from both Madurai and Dodaballapur plants to states of Rajasthan, Gujarat, Uttar Pradesh and Assam. A bulk of 175 tractors were transported per train. Flexible scheduling/placement of trains helped TAFE plan in advance and run all trains with full capacity.

The support of the Ministry of Railways, Government of India and the Southern Railways helped in successful delivery of the innovation.

• Innovation in Customer Service: Several innovative models were tried out. Customers were involved in solutioning by engaging with them in Do-it- Yourself repairs for maintenance of tractors to repairing tractor. This was a success and was the saviour for customers business.

Online webinars, Self-learning modules, Practical sessions from the place of existence were some of the techniques that were utilized and worked well for **Do-it- Yourself** repairs. Also, video calls to technicians enabled customers' learnings.

Further, alternate locations identified for service such as Petrol stations/makeshift workshops. Additionally, stocks provided at mechanics' homes for covering nearby rural areas and stand- by tractors were provided especially where the tractors were off-road.

 Innovation in Product Launch and Marketing: Towards overcoming the challenge of not being able to hold physical product launches, TAFE switched to a combination of Physical and Digital Launch.

The products were launched physically in a studio set and invitees attended the program digitally from their locations. Thus, beginning the trend of 'Phygital' launches.

Glimpses of Digital Launch - MF 5118



Two new products were launched using this innovative marketing method—the tractor MF 5118 and MF 9500 SMART.

Each launch was attended by an audience of over 17000, which was much more than what a physical launch would have witnessed.

Impact

Innovation in Logistics and product delivery: The logistics innovation of deploying freight trains to deliver tractors was implemented in the states of Tamil Nadu and Karnataka with connectivity to Rajasthan, Gujarat, Uttar Pradesh and Assam. A total of 37 trains were deployed to deliver 5210 tractors. This led to the delivery/travel time being reduced by 50%.

The success of this logistics model as such that it is being planned to become the 'new normal' for tractor delivery. A detailed plan is being worked out to use Railways as a major mode of transport of tractors in the future.

Innovation in Customer Service: The innovation was launched pan-India and was a huge success. More than 3,00,000 customers were contacted, over 1,00,000 service requests were booked and over 3000 customer complaints were resolved. Dealer teams attended over 40,000 man hours of training towards ensuring business continuity.

Innovation in Product Launch and Marketing: The launch was physically based in Chennai, Tamil Nadu, where TAFE partnered with Chennai Sree Gokulam Studio, while the event was attended digitally pan-India.

The products took off with big numbers in the launched states in the first month of June itself. The demand for the product was so high that it could not be met initially due to COVID19 related supply chain and logistical constraints.

Additionally, the new marketing innovation also led to huge cost savings for TAFE and Dealer network in terms of travel costs.

INNOVATIONS IN PRODUCT FORMULATION & PACKAGING

AMUL

About the Company

AMUL is an Indian dairy cooperative society based in Gujarat. It is managed by a cooperative body, the Gujarat Co-operative Milk Marketing Federation Ltd. (GCMMF), which is jointly owned by 3.6 million milk producers in Gujarat.

The AMUL Model of dairy development is a three-tiered structure with the dairy cooperative societies at the village level federated under a milk union at the district level and a federation of member unions at the state level.



Challenge Faced

The Dairy Industry was heavily impacted by the crisis of the COVID19 pandemic. India's Nation-wide lockdown, which began in end-March led to consumers not going out to buy milk and milk products. Meanwhile, distribution was hampered as well due to limited movement of vehicles.

Although milk and milk products were allowed to be sold and distributed under essential category, AMUL still faced issues on ground with respect to reaching the last mile. Individual Consumers (Impulse) was the worst hit category during lockdown. Since college canteens, café, restaurants, etc. were mostly closed the offtake of single serve packs declined. Additionally, overall beverage consumption went down with the restrictions on travel. Consumers were also particular in prioritizing their needs.



Innovation Implemented

Towards offsetting the challenges, AMUL innovated their product offerings as well as marketing channels to reach out to consumers.

While on one hand, the Government of India was vocal about the benefits of Ayurveda to maintain immunity towards fighting the pandemic; consumers did not have many convenient options to include Ayurveda in their daily meals.

cognizance this Taking of market gap, AMUL quickly developed range of immunity booster beverages that were inspired from Ayurveda. The immunity range comprises of Haldi doodh shot (Turmeric latte), Tulsi doodh shot (Tulsi latte), Ginger doodh shot (Ginger latte), Ashwagandha doodh (Ayurvedic latte, containing brahmi, shankhpushpi, tulsi, etc.)









Another innovative product launched was the 10ml pack pf Panchamri (Milk, curd, honey, sugar, ghee) available at Rs 2.5/pack. The product plugged the gap of safe and hygienic prasada- offering to deities and served to devotees, during the times of COVID19. The product has a shelf life of 120 days.

Impact

AMUL launched the new innovative products pan-India and has seen tremendous success in terms of customer demand. Based on the high demand, the company plans to continue the products beyond the COVID19 times and

integrate them into regular company offerings.

HINDUSTAN UNILEVER LTD (HUL)

About the Company

Hindustan Unilever Limited (HUL), a subsidiary of Unilever, is India's largest Fast-Moving Consumer Goods company with heritage of over 80 years in India. The company has over 35 Hindustan Uniterer Limited brands spanning in 20 distinct categories.



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Challenge Faced

With COVID19 pandemic, there was a heightened consumer need for strengthening immunity across the strata. The role of nutrition becomes even more crucial to maintain the daily nutritional needs that support the body's natural defence mechanism. The general population was also bombarded with misinformation, home remedies and tips on how to build immunity over different sources.

Zinc, Vitamin C and Vitamin D are key nutrients known to build immunity against disease. Unfortunately, zinc deficiency in the Indian population varies from 40-60% in different age groups, with inadequate dietary Zinc being the primary cause.

Innovation Implemented

As a key player in the health drink segment HUL took the responsibility to help consumers access credible and scientific nutrition with focus on Horlicks - one of the biggest food brands in India.

HUL strengthened fortification levels in Horlicks formulation to increase the zinc content, as Zinc was identified as an important nutrient that helps build the body's resistance against infections.

The R&D, Medical affairs, Innovation & Supply chain teams were mobilized to bring the strengthened formulation to market at the earliest possible opportunity. The integrated effort ensured that production was resumed at the earliest and seamless availability of raw materials as well as packing materials was assured. The logistics was also optimized by reducing touchpoints to ensure SKU availability with trade.



A massive mass media campaign was carried out to sensitize consumers on importance of balanced nutrition for stronger immunity. Also, the fact that Horlicks contains Zinc, Vitamin C and Vitamin D – key nutrients known to support immunity, was communicated to consumers on mass media.

HUL also committed to donating 1.5 lakh packs of Horlicks to help provide immunity to health care workers and providers as they continue their tireless fight against Coronavirus.

Impact

The product innovation was done at the right time and presently captures 58% (INR 2200 Cr) of HUL's portfolio.

The mass media campaign also had significant impact with the message reaching out to 60% of the Health Food & Drink (HFD) category Households in the country, which is 29 million households through various mediums.

Plan to scale

The Zinc enhanced formulations will continue to grow beyond COVID19

NESTLÉ INDIA

About the Company

Nestlé India Limited, is the Indian subsidiary of Nestlé which is a Swiss multinational company. The company's products include food, beverages, chocolate, and confectioneries. Nestlé has presence across India with 8 manufacturing facilities and a large number of co-packers.



Challenge Faced

The CoVID 19 pandemic resulted in a change in consumer behaviour. Affordability took precedence as people want to conserve the cash for the future. Consumer baskets altered in favour of 'essentials' in comparison to affordable luxuries.

Innovation Implemented

Towards maintaining consumer demand, the company innovated packaging into smaller packs.

The MILO single serve pack was launched, priced at Rs 5 to help consumers access the product. Also, the NESCAFÉ RTD 1 liter pack was launched for in-home consumption.

Innovations in supply chains was also implemented, with Nestlé India providing its own transportation and manpower service for supplier. Over 100 suppliers benefitted from this support.

Nestlé India stood by its nearly 100,000 Dairy farmers in these difficult times and ensured that every drop of milk

they gave Nestlé has been taken into its factory for processing. Similarly, Nestlé continues to work closely with its Coffee farmers and Spice growers. It extended its support to numerous farmers in Karnataka by sourcing substantial quantity of Tomatoes from them through its suppliers to ensure there is no distress.



INNOVATION IN CUSTOMER INTERFACE

ARIES AGRO LIMITED

About the Company

Aries Agro is a company manufacturing micronutrients and other customized nutritional products for plants and animals. The company has a vision to create value for "farmers" and all "stakeholders" using cost effective, environmentally safe crop nutrition



solutions customized for the specific needs of crops and soils of India and other markets

Challenge Faced

Since Agriculture Inputs were classified as 'essential' commodities during the COVID19 pandemic, Aries took immediate steps to restart manufacturing at their various locations and units.

The primary challenges were faced in the areas of customer connect, staff training, preseason order booking and payment collection. With Rabi harvest having been completed and Kharif booking in progress, it was most essential to keep the communication going with the Sales team and enabling digitisation on a widespread level throughout the organization.

Innovation Implemented

The company ensured business continuity leveraging innovations in technology, communication, robust remote monitoring software, company apps, video conferencing facilities, digital payments and automation on the shop floor.

• Innovations in Booking and Payment

Towards ensuring contactless booking and payment, the Aries 2020 booking application was developed, and 100% digital order booking for the yearly requirements of all distributors and dealers were registered using the app.

Similarly, all payments were made digitally and advances towards orders booked were collected using online payments and various payment gateways including Online Banking, BharatPay, Paytm and GooglePay.

• Innovations in Manufacturing and Logistics

Automation of operations in the factories for manufacturing and packaging ensured that operations could restart with limited workforce as prescribed by the Government guidelines from time to time.

Daily review was conducted with a core team made in charge of the rapid transformation and emergency response. This team ensured follow up in all regions and locations on a war footing to ensure that liquidity and business continuity was not affected even for a single day.

In terms of safe logistics, the movements of materials were ensured using a pool of registered transporters having proper authorization to function during the lockdown and facilities were implemented to sanitize and to protect all goods and people entering and exiting the premises.

Customer Interface

The company created several digital platforms to continuously communicate with the customers.

For the Company's Golden Jubilee Celebration. Aries connected 850 dealers across 26 States on to a digital platform for the Annual Dealers Convention. This was a recordbreaking first of its kind diaital customer convention, followed by a 100% digital booking bazaar and flash sale.



In addition, all farmers

meetings were moved online with small group of farmers being trained by the Aries team for a series of online trainings, branded Aries Fasal Sabha.

Technical aspects of the Company's products were communicated digitally through 43 sessions with 1900 people attending during the three months lockdown period.

• Safety and Hygiene Protocols

All factories and offices were had facilities for temperature scanning, full body sanitization tunnels, periodic fumigation and all required health and hygiene measures.

The Company also implemented 100% testing of factory workers using rapid test kits for COVID19 and medication was provided on site. Option was also provided to all admin staff to avail of such rapid testing kits on demand.

In addition, the company has implemented proximity sensors on the shop floor at its largest factory in Ahmedabad. These sensors are embedded in the Identity cards of the workers and the factory is virtually fenced into zones and when more than the permitted number of workers are within a zone (as per social distancing requirements), it triggers a buzzing sound to the worker concerned and also to the factory incharge. In the event that a worker tests positive, this system also provides information on who has been in contact with the worker over the previous



30 days, so that contact tracing, quarantine/isolation and testing can be immediately conducted. This system is now being expanded to all other factories.

Impact

All innovations were implemented pan-India, impacting 9 million farmers who are Aries customers, served by 8500 distributors and dealers of the company in 26 states of India.

The financials of the company improved as cost of operations reduced due to digitization, minimal/lack of travel of over 800 sales staff, low fuel consumption for transport, phased utilization of factories, etc. Further, demand remained healthy as the agri sector was exempted from lockdown conditions and rural areas were also relatively less affected. The Q1 results of the company (Apr-Jun 2020) showed an increase in sales of approx. 34% over the previous year.

AXIS BANK LTD

About the Company

Axis Bank Limited is an Indian private sector bank which offers a range of financial products. Headquartered in Mumbai, Maharashtra, the Bank has over 4,500 branches pan India. Further, the Bank has over 1,400 touch points, in form of branches and business correspondent (BC) network, in the rural areas.



Challenge Faced

The Bank has a base of over 20 Lakh rural customers. For the rural customers, BC network of the Bank, through agents on-ground, play a very important role in making financial services especially cash deposit/withdrawal accessible to them.

With the nation-wide lockdown imposed due to the COVID19 pandemic, the challenge of accessing banking functions sharpened even more for the rural customers, and the role of the BC network became further necessary to provide ease of cash access for such customers' daily requirements.

Further, with Government of India's (Gol's) announcement of various direct benefit transfer

(DBT) schemes, it was imperative that the BC network, again, continued to function to allow the eligible customers to cash out such fund transfers.

However, the challenge was to ensure that the BC network continued to function in light of both administrative hurdles due to lockdown imposition and personal fear of COVID19.

An additional challenge was the



Bank ensuring sufficient cash holdings with the BC agents' on-ground in light of an expected increase in demand for cash.

Innovation Implemented¹

Towards mitigating these challenges, the Bank undertook several administrative as well as sanitation and hygiene measures.

Administrative Measures

On the administrative front, the Bank through its branches provided the requisite authority letter to the BC agents allowing them to keep operating as essential services

Further, to ensure sufficient cash holdings with the BC agents' on-ground, the Bank provided fund advances to BCs to manage the increase in expected cash demand onground.

Further, the authority letter issued to BC agents enabled their seamless movement to allow them to go to a branch for withdrawing cash for their daily use.

Sanitation and Hygiene Measures

Towards the personal protection of the BC agents, the Bank provided a 'Sanitation Allowance' of Rs. 100 per day for each of the active BC agents. Additionally, an 'Illness Group Insurance' scheme coverage was issued for all BC agents with an insurance cover of up to Rs. 1 lakh per agent.



Towards ensuring that on-ground sanitation and hygiene practices were followed at agent locations, the Bank issued guidelines, in line with the advisory from Department of Financial Services (DFS), Ministry of Finance, for ensuring awareness of

- Proper sanitization measures to be followed
- Social distancing norms to be followed including encouraging facilitating IRIS authenticated transactions

¹ Please note that, in context of the challenge highlighted above, all measures listed below and data provided are as applicable for the cash transacting BC agents.

Impact

The innovation measures were implemented pan-India across the BC network (580 touch points or outlets as of May 2020) in 207 districts across 29 states.

BCs for the Bank are Manipal Technologies, CSC e-Governance Services and Digicard Services who have deployed agents on-ground.

The measures ensured business continuity with more than 80% of BC outlets active daily on an average.

Around 3.07 Lakh transactions were recorded through these outlets between April and May 2020, of which 5.37% were IRIS authenticated transactions. The total throughput of these transactions was worth Rs 54.8 Crores. And more than 13,000 Bank customers transacted at these outlets in each month.



CORTEVA AGRISCIENCE

About the Company

Corteva is a major agricultural chemical and seed company that was the agricultural unit of DowDuPont prior to being announced an independent public company. It is the biggest standalone agricultural organization in the world.



Challenge Faced

At Corteva Agriscience, farmer, is central to everything the organization does. A personal interface with the farmer through a widely spread sales & demand generation teams is core to the business.

However, during COVID19 lock down, travel was banned, and the customer contact got impacted hugely. Sales & Demand generation team were not able to meet the farmers and discuss about products & solutions for the upcoming kharif season.

Innovation Implemented

To overcome limitations imposed by COVID19 Situation, two digital tools – **Audio Conferencing & Video Conferencing** were implemented to facilitate personal conversations with customers.

Given the limitation that many farmers did not have internet access, the Audio-conferencing tool was implemented which helped widespread farmer access at a time. Using the tool, many training programs were conducted for farmers on best crop management practices and many of their queries regarding cultivation practices were resolved. Also, the group meetings helped farmers interchange ideas & experiences about crop management practices.

With farmers who had internet & smartphone, connect using Video Conferencing tool was established. The advantage here was freedom to share crop management videos, testimonials as well as farming practices along with addressing the queries of farmers.

Services of iKonTel Solutions Pvt. Ltd, Bengaluru and Zoom video conference was leveraged under the initiative.

Impact

The digital tools were implemented pan India and in a short span of one month, the team was able to talk to 0.5 million farmers and clear all their questions on product, it's usage, availability, etc., Given the relevance and wider outreach, it is planned to further refine the digital tools and make them a regular feature of the company's customer connect programs.

JUBILANT FOOD WORKS

About the Company

Jubilant FoodWorks Limited (JFL/Company) is part of Jubilant Bhartia group and is one of India's largest food service Company, with a network of 1,354 Domino's Pizza restaurants across 288 cities (as of June 30, 2020). The Company has the exclusive rights to develop and operate Domino's Pizza brand in India, Sri Lanka, Bangladesh and Nepal. At present, it operates in India, and through its subsidiary companies' in Sri Lanka and



Bangladesh. The Company has exclusive rights for developing and operating Dunkin' Donuts restaurants for India and has 30 Dunkin' Donuts restaurants across 10 cities in India (as of June 30, 2020). The Company has entered into the Chinese cuisine segment with its first owned restaurant brand, 'Hong's Kitchen' and has 4 Hong's kitchen restaurants across 2 cities in India (as of June 30, 2020). The Company has forayed into the ready-to-cook segment with a range of sauces, gravies and pastes under the newly launched brand, 'ChefBoss'.

Challenge Faced

The COVID19 pandemic brought about significant changes to the HoReCA industry, with ambiguity on hygiene & safety about food consumption. With social distancing becoming a norm for everyone, customers increasingly started to prefer website /mobile app ordering home delivery of food while staying safe at home.

At the same time, delivery speed were also challenged with restricted employee and resource availability as well as movement to the store (Chefs, cooks, kitchen staff, etc.) Furthermore, the supply chain suddenly faced massive issues with inter-state restrictions in the movement of goods, including essential items.

In addition, the traditional process of delivery involved a lot of human contact at the preparation and the payment stages something which was no longer an option once the country was exposed to the global pandemic. This also accelerated the innovative steps; whether it was introducing "Zero Contact Delivery (ZCD)" service by any QSR for the 1st time in the country or partnering with leading FMCGs for delivering essential food items via "Domino's Essentials" service.

Innovation Implemented

JFL was the first food service company to launch online and mobile ordering nationally in India. The Company foresaw the oncoming restrictions prior to the lockdown and had already strengthened its digital platforms to cater to the needs of the changing purchasing behaviour of the consumers. As of January 2020, nearly 30 million people have downloaded its mobile ordering app. In light of the pandemic, core processes were revisited and hygiene & safety protocols were further heightened and strengthened to meet the requirements.

Two key innovations implemented during this time period, included— **Zero Contact Delivery/Ordering & Take Away and "Domino's Essentials" Launch**

Zero Contact Delivery/Take Away

Health & Safety of its customers and employees is of utmost importance to JFL. Keeping this in mind, the Company introduced the Zero Contact" Delivery service, which was implemented from kitchen to customer homes.

- **a. Kitchen Innovation:** For more than two decades, Domino's Pizza has specialised in Pizzas which are hand-tossed. However, when faced with the pandemic, over 20,000 team members across the country had to be trained within 48 hours to start making the pizza using the Nitrile gloves. The purpose was to ensure that during the entire process, from the restaurant until it's delivered to customers at their doorstep, the pizza remained untouched by bare hands. **Supply Chain Innovation:** Contactless transfer of the pizza base & food ingredients from the commissary to the restaurants to logistics and finally at production in store was ensured.
- **b. Packaging Innovation:** In order to meet the hygiene & safety standards as well as to make them suitable for carrying heavy delivery packages to meet the increased demand for Zero Contact Delivery of both pizzas and essential items, further design changes in the carry bags were made.
- c. Customer Interface Innovation: Domino's existing digital infrastructure enabled us to focus on strengthening our offerings on mobile app. The digital team activated the App changes within hours to have the Zero Contact Delivery feature available in the App for customers to order. The Company switched to 100% Zero Contact Delivery service, thereby avoiding any physical contact between our Safe Delivery Experts and the customers. The App also gave transparent information regarding team member's health status to all our customers. Simultaneously, our Safe Delivery Experts were up skilled and trained to ensure quick adoption to the ZCD process for the last mile delivery, including calling the customers and delivering at the nearest possible place in case of any restrictions.

d. Innovations for Zero Contact Ordering and Take Away:

To welcome customers once the Unlock was getting implemented, all Domino's restaurants that were operational were equipped with a host table at the entrance

for a 3-step safety measure before a customer steps inside. The Company also enabled QR code-based "Zero Contact Ordering", i.e. a QR code system wherein using the Domino's app, a customer can browse, select their options from our menu and place an order. In addition, designated "Zero Contact Pick-up/Takeaway" counters were placed inside stores as per the floor markers to maintain a safe distance when customers pick their orders.

Domino's Essentials Launch

During the implementation the Zero Contact Delivery service, the Company noticed that a lot of its customers were struggling to procure daily essentials. Realising the demand of daily food essentials, the company introduced a new business module of delivering essentials to its customer base. This new module was implemented in 2 days.

The delivery infrastructure of Domino's will be leveraged to help customers order everyday grocery essentials, enabled through partnerships with ITC Foods, General Mills, Gujarat Cooperative Milk Marketing Federation Ltd. (GCMMF), Tata Consumer Products Ltd, Kohinoor Speciality Food India Pvt. Ltd., Adani Wilmar Ltd., Mawana Sugars Ltd. ensure uninterrupted supply of essential items like the Atta, Rice, Lentils, Milk, Spices, Pulses, oil, etc. Supplies were procured across major commissaries and within a week the service was expanded to over 600 stores.

Geography and Outreach

- 1. Both the innovations were successfully implemented pan-India.
- 2. The innovations enabled JFL to maintain 90% of their delivery network spread across 272 cities, during the peak lockdown months.
- 3. Delivery of essentials across 600+ stores were enabled impacting over 10,000 customers.
- 4. The success of these innovations has prompted the company to consider continuing the same beyond the COVID19 crisis.

MAHINDRA & MAHINDRA

About the Company

Mahindra & Mahindra is one of the largest vehicle manufacturers by production in India and the largest manufacturer of tractors in the world.



Challenge Faced

Just before the harvesting season for the Rabi crop was about to commence the country was put under lockdown to avoid potential spread of corona virus.

The sudden lockdown impacted dealer workshops, M&M service teams, M&M Spares warehouses and also call centers. Also, farmers were apprehensive about how the company will provide the critical support the during the crucial harvesting period.

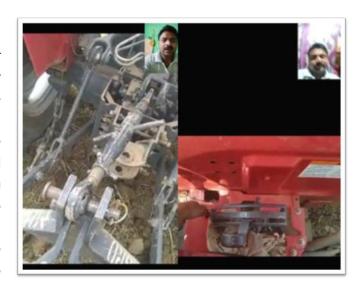
The challenge therefore was to ensure that the machinery was available with the farmers on time and also the service was available to farmers without any delay to ensure minimum downtime.

Innovation Implemented

To overcome the challenges two innovations were implemented by Mahindra & Mahindra

 For quick resolution of repair and maintenance related issues for tractors & farm machinery WhatsApp Video calls were leveraged.

Company's Customer Care Managers (CCMs) would take all stake holders including customers on a WhatsApp Video call, understand the issue in detail and, suggest probable solutions & guidance on what to



repair & how to repair through various videos.

The model was able to cater to a large number of complaints in a timely manner and the customers were extremely happy and satisfied after getting resolution of their issues in their distress needs.

 Given restriction on movement Mahindra & Mahindra also started providing "Home-Care-Service" as an alternative of repair at workshop.

Under the model the Dealer network was leveraged, and their mechanics were provided with necessary set of parts, lubricants & tools to ensure emergency service needs of our Customers from their village itself.



Every mechanic adopted 20+ villages for Home Service. At almost 400+ dealerships this initiative started with service given to more than 7000+ customers in first 18 days.

Impact

The two models were implemented pan India and 1200+ critical repair and maintenance related issues for tractors & Tractor Mounted Combine Harvesters were resolved in a window of 3 weeks

Plan to scale

Given the relevance and wider outreach, it is planned to make the digital tools a regular feature of the company's customer connect programs.

NCDEX EMARKETS LTD (NEML)

About the Company

NCDEX e-Markets Limited (NeML), is the leading Indian electronic web based, online, commodities spot market and services company.



Incorporated in October 18 2006, NeML is a wholly owned subsidiary of NCDEX. With a national presence,

the company has pioneered breakthrough initiatives like Mandi Modernization Program (MMP), e-Pledge, and e-marketing.

Challenge Faced

NeML is present in more than 20+ locations across 19 States in India and has more than 12000+ members in their platform. NeML employees visit members/ clients on a daily basis for appraising new business opportunities, onboarding of members, membership engagement events, training of members, etc.

Due to the COVID19 pandemic and the resulting lockdown the members/ clients interface was hugely impacted and impact was seen innterms of a

- a. Customer acquisition by competitors
- b. Customer Disengagement
- c. Challenge in onboarding new members/clients virtually
- d. Digitalization of processes and challenge in terms of training members/ clients to adapt to the changing scenarios

Innovation Implemented

In order to provide seamless services to members/clients, personalized SMS and Email alerts were incorporated for members in times of COVID19 to provide critical information and for adherence of membership renewals. Instead of conducting physical conferences NeML moved to webinars wherein the members/clients were trained to adapt to the changing scenario.

All the trading modules for the new technological changes was through online webinars for the members.

Social media campaigns have been used to a large extend to reach out to the prospective participants.

For onboarding new members, a new portal was developed, and online membership drives were conducted. Also, the processes of onboarding were simplified, and physical collection of documents was replaced by digital document verification by NeML employees.



Going forward, NeML is in the

process of developing a new mobile application which will enable the customers to be updated with customized information for all auctions conducted through NeML platform and will be able to select and receive notifications.

Impact

The innovation was implemented pan India, and with the new online membership portal NeML was able to get in touch with more members than they were doing through physical interactions. NeML was able to onboard 100+ FPOs through this process.

Further, NeML was able to garner more interests though webinars rather than physical conferences as the members could attend the webinar from anywhere.

Additionally, NeML travel expenses were greatly reduced as most of the processes were moved to cloud.

Plan to scale

NeML believes that all processes will move towards digitalization in the future and the current business innovation will be scaled in future.

NATIONAL E-REPOSITORY LTD (NERL)

About the Company

NERL is an institution and a market intermediary incorporated by NCDEX to provide a digital platform for issuing and recording negotiable warehouse receipts (eNWR) for agricultural commodities in registered



warehouses of WDRA (Warehousing Development and Regulatory Authority).

Challenge Faced

To overcome the drawbacks of Over the Counter (OTC) trading, in terms of lack of transparency and possibility of manipulation, WDRA promotes warehouse based scientific storage and trade.

NERL is engaged in on boarding the WDRA registered warehouses on its repository digital platform for issuing eNWR for goods stored in these warehouses. Transfer of ownership of ENWRs is done through simple repository account transfers. This method does away with all the risks and hassles normally associated with paperwork. Consequently, the cost of transacting in a repository environment is considerably lower as compared to transacting in physical warehouse receipts.

The warehouses and depositors (farmers and non-farmers) are mostly based near production centres which could be in rural or semi -urban areas of the country. Given the COVID19 pandemic, and Nation-wide lockdown several operational challenges were faced in terms of

- Difficulties in reaching, handholding and training depositors, bankers and warehousemen
- Limited bandwidth and connectivity issues in rural and semi urban centres
- Minimal physical interface with clients, depositors, banks and repository participants
- On-boarding of electronic trading platforms to the NERL Repository ecosystem
- Need for doing away with paperwork and physical documentation

Innovation Implemented

Despite the challenges, NERL has been seamlessly servicing its clients since 18th March 2020 using **NERL distributed infrastructure setup and support**.

Under the new system, the on-boarding of registered warehouses is, managed online by a **central team in Mumbai** to give uninterrupted support to new and existing warehousemen. A dedicated helpdesk is setup for troubleshooting and on-boarding new registered warehouses.

To facilitate **Remote on-boarding of Depositors** (farmers and non-farmers) by the Repository Participants, the KYC process for account opening was enabled via mobile, e-mail or scanners. This has ensured operational ease while meeting the thorough documentation requirement.

NERL in collaboration with NeML and WDRA also enabled **India's first Warehouse-based sale through eNWR** in June 2020. Towards this, NERL collaborated with NeML electronic trading platform for trading agri-commodities using eNWR helping farmers and traders to digitally sell/buy produce at the right price. The proposal of auctioning / trading of eNWR in spot trade was submitted to WDRA and promptly approved following which, both teams collaborated in training and handholding buyers and sellers on the platform.

To overcome the challenges in physical documentation, NERL has developed **validations in account opening**, **warehouse on-boarding** and **withdrawal of commodities modules**. These validations are verified through OTP transactions helping NERL to authenticate each transaction remotely without any physical documentation.

The innovative processes and business approach is **implemented across 12 states and one union territory**,

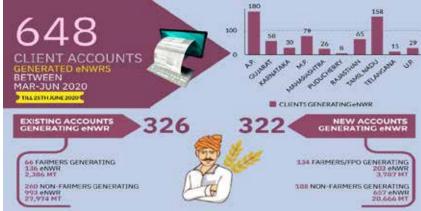
- West- Maharashtra, Gujarat
- Central Madhya Pradesh, Rajasthan
- 🖶 North Utter Pradesh, Haryana, Punjab, Delhi
- 🔸 South Andhra Pradesh, Telangana, Tamil Nadu, Karnataka, and Puducherry

Impact

Given the digital approach, NERL has managed to penetrate remote rural regions during the lockdown. Impact was seen in terms of larger number of farmers as well as FPOs adopting the instrument, increased commodity deposits at the warehouses as well as loan being extended against the eNWRs. Some significant outcomes in emerging business line have been

a. Revenue reported 72.5% growth between March to May 2020. April 20 revenue in comparison to the same period last year was up by 211% while May revenue for 2020 when compared to last year was up by 541%

- b. **1989 eNWR were generated** between March to June 2020 for 54,813 MT of commodities deposited at the warehouses for 47 commodities. The top 5 commodities
 - being Chana (9241MT), Wheat (7415MT), Paddy (6519MT), Maize (5960MT) and Guar (2909MT).
- c. The number of Farmers/FPOs generating eNWR almost doubled with 182 new farmer accounts opened between March June 2020.



- d. Loans worth over 167 crore
 were financed by 18 banks against over 41,000MT financed against eNWR between
 March to June 2020.
- e. **98 warehouses issued eNWR/eNNWR during the lock down** of which 63 were existing and 35 were newly added warehouses.

Plan to scale

The innovations have helped ease procedural aspects for the Value Chain Participants, especially, farmers and other depositors during the pandemic. The online digital platforms for remotely managing business / operational activities has been accepted as the new normal and NERL will continue the digital transformation going forward as well.

Policy support required

Centralized Digital Record-keeping ecosystem of agricultural commodities stored in warehouses will help State and Central Governments to take informed decisions on market interventions. With the help of these services, the Government can track the private stock of agricultural commodities available in the country on a real time basis. This will also formalise the storage and trade in agriculture marketing. Being further reinforced by a regulatory authority like WDRA, it becomes a dependable and robust source of information for the Government and enables decision-making based on reliable data sets.

While, the Government is already working towards strengthening this ecosystem, **Mandatory** registration of warehouses under the WDRA will help as an effective catalyst.

Also, RBI and SEBI should be endorsing eNWR as a trustworthy financial instrument for extending loans and trading in agri-markets of India

TATA CONSUMER PRODUCTS

About the Company

Tata Consumer Products Limited, a subsidiary of the Tata Group is the world's second-largest manufacturer and distributor of tea and a major producer of coffee. It is home to key brands such as Tata Tea, Tetley, Tata Salt and Tata Sampann ans has a combined reach of over 200 million households in India. The companies portfolio of products



ranges from tea, coffee, water and ready-to-drink to salt, pulses, spices, ready-to-eat and more.

Challenge Faced

With onset of COVID19, the anxiety around health and immunity reached unprecedented levels. An emerging behaviour was going back to age old Indian wisdom of home remedies. 'Haldi' (Turmeric) is one such home remedy with Antioxidant, anti-inflammatory and immunity building properties. Recently, in the AAYUSH guidelines for building immunity, the government has recommended the usage of Haldi. While the benefits and opportunity were well recognized, the challenge was to make this 'boring' spice into something interesting to appeal to the youth and encourage them to try it.

Another challenge faced was in a key product category for Tata Tea - 'Chakra Gold'. This is one of the leading brand in the state of Tamil Nadu which has a vibrant 'Tea culture' in the form of hot tea shops 'tea kadais'. This Hot Tea Shop segment faced severe challenges due to the movement restrictions imposed by the COVID19 pandemic which resulted in low sales contribution of this segment for the company as well as impacted the tea shop owners adversely who were faced with a sudden future uncertainty.

Innovation Implemented

HALDI

While haldi is full of goodness, its usage is largely restricted to daily cooking and sometime as an additive to hot milk. There was an opportunity to

- a. Spread the word around goodness of Haldi and
- b. Broad base the use of Haldi in our cuisine; creating new ways to use it daily.

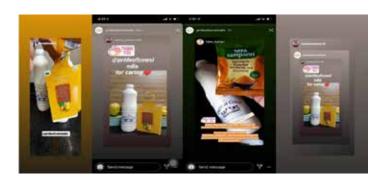
Tata Sampann partnered with nutritionists like Kavita Devgn, MasterChef Sanjeev Kapoor and many social media content creators and food bloggers to promote the campaign #BeatTheLockdown and #HarDinHaldi. The aim was to popularize the usage of haldi in many easy and tasty formats which will help build immunity and at an overall level helps consumers live a wholesome life.

For **social media recipes and quick tips** were developed that spoke about innovatively consuming Haldi. Articles and blogs were published on Nurtikorner (the company's content to commerce platform).

A massive social media contest the **#hardinhaldi challenge** was promoted. 7 Videos were created by the brand. Another 60 videos were created by influencers, to propagate daily use of Haldi, in exciting new avatars.









Further reaching out the consumers contextually for Spices, Haldi was sampled with milk brands such as Pride of Cows and others to tap onto the Haldi doodh context.

Innovative crowd Funding Initiative by Chakra Gold- To support Hot Tea Shops

While there was a business challenge, understanding the social responsibility and taking the pandemic as an opportunity for relationship building with the channel partners 'Chakra Gold' launch an innovative initiative #OruTeaSollunga to help some of the Hot Tea shops combat stressful times and raise interim funds for them to tide over this challenging phase. While there were restrictions that prevented customers from stepping out for their daily cup of tea, they could still help the Hot Tea shop owners, by contributing the cost of one cup of tea (Rs. 10/ cup) through a digital payment, from the comfort of their home. Chakra Gold tied up with a leading digital wallet provider, Bharat Pe, and set up a system from scratch to enable patrons to express their solidarity with these Hot Tea shop outlets by contributing through a digital wallet.

The message was brought out in a memorable creative', that captured the memory of a Kadai shop owner, pouring out a hot cup of chai. The headline evoked simple commitment. 'Order a cup of tea...this time for our Hot Tea Shop Anna (brother in Tamil)'. This was then bought out in leading newspaper and was shared through social media to people of Tamil Nadu.

Apart from this, the brand also 'Walked the Talk', by committing to donating payments for more than 2 lakhs cups of tea to add to the contribution received from the patrons in Tamil Nadu.

Impact

Leveraging social media, the marketing campaign had pan India outreach. The #BeatTheLockdown and #HarDinHaldi campaign received many positive reviews and comments both from users as well as industry experts for the initiative. Overall, there were > 65 Mn views and around 40 Mn engagement

Donations worth over 11,000 cups of tea were raised through the crowd



funding campaign. Along with Chakra Gold's contribution, the total money that will be disbursed to over 2500 hot tea shops in Tamil Nadu will be about Rs. 34 lakhs. The brand is targeting to complete this disbursement by end September 2020.

EMERGING PARTNERSHIPS

PEPSICO INDIA

About the Company

PepsiCo is one of the largest MNC food and beverage businesses in the country. PepsiCo India has been consistently investing, in the areas of product innovation, increasing



manufacturing capacity, ramping up market infrastructure, strengthening supply chain and expanding company's agriculture programme. The company has built an expansive beverage and snack food business supported by 62 plants across the country. In two decades, the company has been able to organically grow eight brands, each of which generate Rs. 1000 crores or more in estimated annual retail sales and are household names, trusted across the country.

Challenge Faced

With disturbance in supply chain and logistics it became important to find new ways to cater to the customers especially in the rural hinterlands.

Innovation Implemented

To enable last mile doorstep delivery in rural India and encourage eentrepreneurship, PepsiCo India has announced partnership with Common Service Centres(CSC), under the Ministry of Electronics and Information Technology (MeitY), Government of India, to list its products on Grameen e-store platform.

As a part of the partnership, PepsiCo India's snacking brands like Lay's, Kurkure and Uncle Chipps will be listed on the CSC Grameen eStore and made available in the hinterlands through aspirational Village Level Entrepreneurs (VLEs). Starting with a pilot in Sultanpur District, Uttar Pradesh, PepsiCo India's products will initially be listed on Grameen eStore with 264 VLEs stores.



Integral to the Digital India programme, Common Service centres (CSCs) are making digital inclusion of rural India a reality. To facilitate smooth rural ecommerce, the VLEs will add products from the built-in master catalogue. The customers can then look upon the eStore for the required product in their locality using a GPS and place an order on their Grameen eStore app.

The orders can be placed by customers through the eStore that can either be picked up directly from VLE or delivered by the VLE at the doorstep ensuring zero contact.

Going forward the initiative will be scaled pan India.

NATIONAL COLLATERAL MANAGEMENT SERVICES LTD

About the Company

The National Collateral Management Services Limited (NCML) is the country's leading organisation providing solutions for various stake holders in the post-harvest space. Major solutions offered by NCML include Commodity Management Solutions including Storage & Preservation of Commodities, Collateral



Management and providing Supply Chain Management Service(s) also include providing Market Intelligence, Weather Intelligence and Commodity Research services to varied value chain participants and facilitating Testing and Inspection and Procurement and sale of commodities through state-of-the-art e-market place.

Challenge Faced

With the pandemic and subsequent lockdown, access to market became a key challenge for farmers. The Government took immediate action and tried to streamline the mandi operations. NCML launched 'Surakshit Mandi' to benefit farmers by providing access to markets with complete safety.

Innovation Implemented

NCML launched the "Surakshit Mandi" initiative for helping farmers sell crops leveraging NCML's network of warehouses across the country. The concept of Surakshit Mandi is derived from Suraksha for everyone's health in the post-harvest value chain, Suraksha for the physical health of the commodity and Suraksha of the price for farmer, lender and customers and the health of all stakeholders. The initiative focused on facilitating aggregation of farm produce without breaking the protocol of social distancing and helping farmers sell their crops through NCML's e-market place viz., mktyard.com

The initiative included digital token-based queue system; facility for testing; digital transaction for price discovery; digital flow of credit between buyer and lender. NCML's warehouses/silos/cold storages, were the nodal points for executing the whole process.

The advantages of warehouse to function as market yard, include protection of the unsold produce for the farmers and more participation of traders due to suitably assayed, and graded produce. For Farmers it offers the benefit of easy and safe access to market, and secure and timely payment.

Way Forward

The government has brought in major reforms and this shall provide the necessary impetus for further promoting and enhancing the footprints of 'Surakshit Mandi'. Going forward, Surakshit Mandi is being implemented in five states at twenty different locations providing user-friendly IT system that is seamlessly integrated with Farmers, Buyers, Logistic service providers and Payment system. System has seamless integration starting from farmer giving their intention to bring the produce for sale to payment and settlement till the commodity is shipped to buyer. NCML aims to create an alternate and innovative supply chain where most agriproduct warehouses will engage with farmers, FPOs and Farm level aggregators for all their needs.



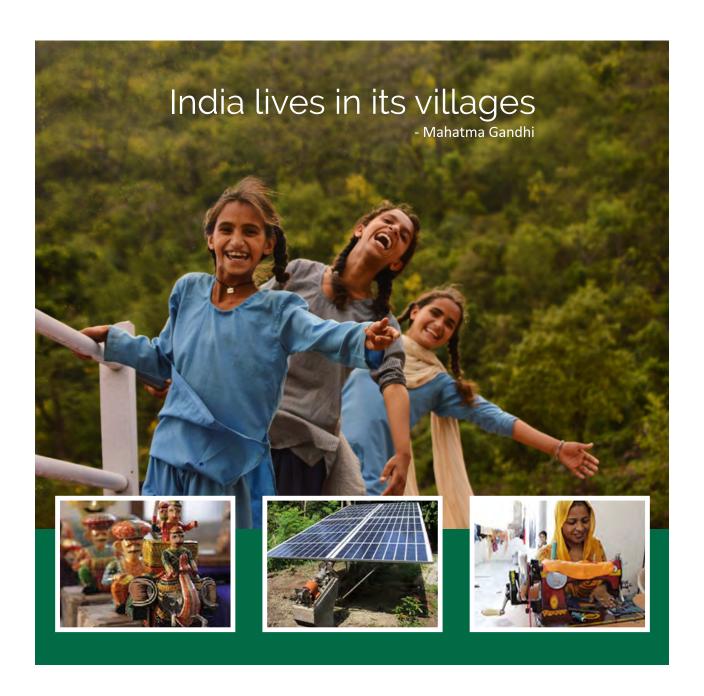
About NABARD

We are India's apex development bank that came into existence in 1982. Our mandate is to promote sustainable and equitable agriculture and rural development through participative financial and non-financial interventions, innovations, technology and institutional development for securing prosperity.

Our journey of nearly four decades has seen us define a clear and purposeful role for ourselves in rural India and serve various facets of nation building.

Headquartered in Mumbai, we have 30 Regional Offices located in the States and Union Territories of India, three training establishments situated in Bolpur, Lucknow & District Development Managers (DDMs) functioning at the district level.

Our major functions include providing refinance support, building rural infrastructure, preparing district level credit plans, guiding the banking industry in achieving credit targets, supervising Cooperative Banks and Regional Rural Banks (RRBs). We also implement Gol's development schemes, train handicraft artisans and provide them a marketing platform for selling their articles, undertake climate adaptation and mitigation measures among others.



Powering rural India,
Empowering the masses



Development Bank of the Nation for Fostering Rural Prosperity









NABARD Consultancy Services

A wholly owned subsidiary of NABARD

NABCONS, a wholly-owned subsidiary of NABARD (a Government of India promoted Direct Finance Institution) is India's premier consultancy and advisory service provider with focus on the strategic spheres of agriculture and allied sectors such as Food Processing and Storage, Animal Husbandry, Socio Economic Studies, Climate Change, International Business, Third Party Monitoring and Infrastructure and others.

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Rural Infrastructure Skill Development

International Business & Climate Change

Social Sectors Natural Resource Management Banking & Finance



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With competent and multi-disciplinary team of experts and subject matter specialists NABCONS has executed 2200 assignments. NABCONS has a pan India presence with its corporate offices at New Delhi, Zonal offices in Mumbai, Hyderabad and Guwahati and 29 Principal Consultant's Offices, one in each State Capital and outreach in districts and villages.



The Confederation of Indian Industry (CII) works to create and sustain an environment conducive to the development of India, partnering Industry, Government, and civil society through working closely with Government on policy issues, interfacing with thought leaders, and enhancing efficiency, competitiveness and business opportunities for industry.

For 125 years, CII has been working on shaping India's development journey and, this year, more than ever before, it will continue to proactively transform Indian industry's engagement in national development. The premier business association has more than 9100 members, from the private as well as public sectors, and an indirect membership of over 300,000 enterprises from around 288 national and regional sectoral industry bodies.

With 68 offices, including 10 Centres of Excellence in India, and 9 overseas offices in Australia, China, Egypt, Germany, Indonesia, Singapore, UAE, UK, and USA, as well as institutional partnerships with 394 counterpart organizations in 133 countries, CII serves as a reference point for Indian industry and the international business community.

Confederation of Indian Industry

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FACE is CII's Centre of Excellence dedicated to building efficiencies across the agricultural value chain from farm to fork. FACE is charged with the mission of improving competitiveness of India' agriculture and food sector by catalysing innovation, building capacity and enhancing productivity across the value chain. FACE works with farmers, companies, development institutions and the government to

- Improve on and off-farm productivity through the dissemination of best practices & technological innovation
- Invest in capacity building initiatives & skill development for supply chain participants across the value chain
- Strengthen linkages across the value chain through market access initiatives, thereby reducing losses and increasing farmer incomes

FACE's service portfolio comprises commodity specific value chain assessments and supply chain advisory services for food and agri businesses, training and consulting services in the area of food safety, and sectoral research across different market segments.