

# Post-COVID-19 ICT Roadmap: The Supply Chain Sector

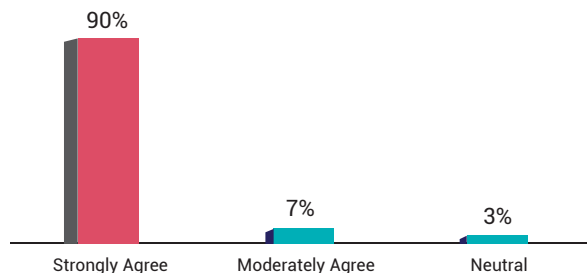
## How the Roadmap came to be

With the growing certainty that COVID-19 is here to stay, the ICT Division of the Government of Bangladesh is developing a roadmap to fight the pandemic and ensuing crisis and to find innovative ways to flourish in the 'new normal'. Supply Chain is one of the 18 priority sectors selected based on the impact of COVID-19 on the sector and its potential for transformation of the economy and society.

## Why Supply Chain

Food security has been threatened with smallholder farmers failing to buy agri-inputs from intermediaries either due to unavailability or price hikes stemming from scarcities. FMCG distribution channels have been disrupted during this lockdown owing to absence of digitized inventory management platforms. With sales forces being cut down to half, collection of real time inventory data is being compromised resulting in inaccurate forecasts. This has in turn led to supply chain crises like stockouts, stockpiling, and price inflation of essential goods.

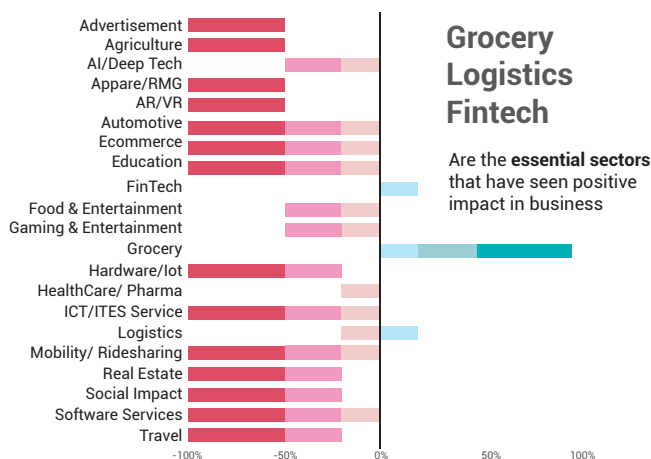
90% SMEs strongly agreed they have been experiencing delays/disruptions in the supply chain



Source: LightCastle Analytics & Sheba.xyz, 2020

## Impact of COVID-19

Movement restrictions during the shutdown led to a plunge in demand for transportation services. Unavailability of transportation coupled with unequal distribution of farm laborers across the country led to acute scarcities of labour in the agricultural sector. Even though there was uptick in demand on e-commerce sites for agri produce, the service providers failed to procure at scale from the rural markets to meet the urban demand. In the industrial sector, Bangladesh is forecasted to be affected by the Chinese slowdown through global value chains. It is predicted that Bangladesh will directly incur a loss of USD 16 million in total because of China's slowdown. An astounding 94% of this loss, approximating US \$ 15 million, will be borne by the leather industry.



Source: Bangladesh Startup COVID-19 Response Group & LightCastle Analysis, 2020

## Constraints

Presently most agri-input manufacturers only have capacity to supply to Upazilla level and thus cannot cater to the needs of marginal farmers. Smallholder farmers failing to buy expensive agri-input products from intermediaries face a grim reality which might eventually result in a shortage of food supply. Moreover, absence of digitised inventory management platforms has created disruption in the FMCG distribution channel during this lockdown. The increasing mobile data cost is making it more difficult for the people belonging to the lower income group to reap the benefits of using mobile applications to avail digital services such as - agri-based app, logistics app, and e-commerce platforms.

LightCastle Analytics Wing, Impact of Coronavirus on Livelihoods: Rural and Low-Income Population of Bangladesh, LightCastle Partners, 12 May, Retrieved 13 July 2020 from

<https://www.lightcastlebd.com/insights/2020/05/12/impact-of-coronavirus-on-livelihoods-rural-and-low-income-population-of-bangladesh-2>

LightCastle Analytics Wing, Withstanding the Outbreak of COVID-19 in the Footwear Industry, LightCastle Partners, 15 April, Retrieved 13 July 2020 from

<https://www.lightcastlebd.com/insights/2020/04/15/footwear-industry-another-casualty-of-the-catastrophic-outbreak-in-the-economy>

## Action Agenda

Taking learnings from local and global best practices and to tackle: (i) the effects of the pandemic, and (ii) the existing systemic and regulatory shortcomings regarding financial inclusion, the ICT Ministry is proposing the following five interventions in the immediate and short term:

Title	Empowering marginal farmers will strengthen agri supply-chain, which could be implemented as a part of 8FYP	Fully digitizing inventory management by the end of 2021, will make the FMCG supply chain more efficient and resilient	Onboarding policymakers to lower the cost of the mobile internet packages by 2020	Popularize use of smartphones in rural areas by 8FYP	Policy reform to modify the law of lending fleets by corporations within 2020
Why (To address:)	Manufacturers only have capacity to reach Upazilla level and thus cannot cater to the needs of marginal farmers. Smallholder farmers failing to buy expensive agri-input products from intermediaries have to face a grim reality which ultimately results in a shortage of food supply.	As salesforce has been curtailed in half to prevent the transmission of COVID-19, companies are failing to collect proper inventory data thus cannot forecast demand, which ultimately resulted in supply chain disruptions giving rise to problems like stockouts, stockpiling and price hike of essential goods.	High cost of data is making internet connectivity unaffordable for rural people to avail digital services such as - agri-based app, logistics app, and e-commerce platforms.	Smartphones are still not preferred by rural mass people over feature phones. Therefore, causing hindrances on the implementation of digital supply chain system	Large corporations are legally bound to only carry their own goods using their fleet. The biggest ramification of this law is that the vehicles have to complete the return trips with an empty load which results in huge transportation costs for companies.
What	Formation of effective partnerships among agri-product manufacturers, logistics startups, Bangladesh Railway and Bangladesh Post Office to ensure last mile reach in the agri-supply chain	Logistics startups which have expertise in managing end-to-end digitized supply chains should step up and collaborate with FMCG industries to ensure smooth digital management of inventory.	Government should enforce restrictions on telecom companies by putting a price ceiling to limit data package costs.	Government could partner with telecom companies to incentivize use of smartphones in the rural regions.	Firstly, the law should be changed by collaborating with specific policy making bodies so that corporations can lend to or share their fleets with other companies and government entities
Lead Agency	Ministry of Post and Ministry of Railways	Ministry of Industry	Ministry of post and tele-communication	Ministry of Finance	Ministry of Road Transport and Bridges
Actor	Agri-product, manufacturers Traditional Logistic, Companies Logistics startup	CMSMEs, Startups	Telecom Companies	Smartphone producer/importer/w holesaler/retailers/c ustomers	Conglomerates,MS MEs Logistics Startups
Coordinator	ICT Division	ICT Division	ICT Division	ICT Division	ICT Division
Facilitator	a2i	a2i	a2i	a2i	a2i
Partners	Bangladesh Post-Office Ministry of Agriculture	ICT Division	ICT Division	ICT Division	ICT Division
Partners	UNCDF, Syngenta Foundation (SFSA-B)	ADB, WB, IFC	Telecom Companies	Distributors and wholesalers	Truck/cover-va n owners
Financing and modality	PPP; cost of implementing last mile delivery for famers	PPP for app development; cost of goods and services for inventory management	PPP; to make most of the change in policy	PPP; to make most of the change in policy	PPP; change in policy; lower overall logistics cost and time.

It is high time for supply chains of industries, especially those focused on international trade, were digitized. At present, many of the processes involved in trade, including customs clearance, are conducted in person. For instance, a bill of lading document has to go from carrier to shipper to consignee and back to the carrier at the destination and, on the way, go through several other stakeholders. By digitizing such documents, it is possible to transfer them in the right sequence from one stakeholder to the next with a click of a button. Such documents can also go through blockchain technology in the future to ensure proper audit trail and transparency.