

**Promoting Responsible Value Chains in  
India for an Effective Contribution of  
the Private Sector to the SDGs**  
*(PROGRESS Project)*

*Report on COVID19 and Its Impacts on  
Food Loss & Waste: A Multi-stakeholder  
Dialogue*  
*(June 19, 2020)*



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## 1. Project Introduction

Centre for Responsible Business (CRB) and Aston India Centre for Applied Research (AICAR), Aston University, UK have teamed up to explore and investigate how private sector companies - as part of GVCs, production networks and FDIs in India have/could better contribute towards achievement of specific SDGs, particularly inclusive education and life-long learning (SDG4), employment and decent work for the youth (SDG 8), women's social and economic empowerment (SDG 5), sustainable consumption and production (SDG 12), and Climate Action (SDG 13). This project referred to as the PROGRESS project is being supported by International Development Research Centre (IDRC), Canada. The project was officially launched in October 2018 and will run till September 2021.

The generated evidence would be used to engage and support policy and practice (industry) level discussions and actions through multi-stakeholder processes involving **four key sectors viz. i) Apparels & Textiles, ii) Agro-Processing, iii) Pharmaceuticals, and iv) Gems & Jewellery**. Further, the experience of the project would also be used to engage with the international actors to highlight the contributions through this GVC approach and areas that need attention. It would thereby highlight and demonstrate methodologies for achieving sustainable and inclusive GVCs aimed at benefiting the youth, women and local environment in India.

Based on discussions with stakeholders in the agro-processing sector, the issue of managing food loss and waste was identified as a relevant and critical area for the research focus as it has implications for the country's food and nutrition security. Further, curbing food loss and waste will directly contribute to the achievement of SDG 12 (Sustainable Consumption and Production – specifically SDG Target 12.3). CRB's internal research has highlighted some best practices and regulations that have made a start on addressing this issue. However, the research has also highlighted certain gaps to be managed if food loss and waste have to be managed. The discussion on food loss and waste has assumed even more importance in the current context of COVID19 pandemic, which has impacted each segment of the agricultural value chain in some way or the other - from inputs, production through to harvesting, logistics and markets. In addition, there have been disruptions at all levels due to labour shortages, reduction in consumer demand given the procrastinated lockdown in India.

Hence, it was decided to hold an on-line stakeholder discussion with the following objectives:

- To understand how stakeholders in the agro-processing sector can address/have addressed the problem of food loss & waste (using the framework and indicators of SDG12)
- To examine challenges presented by COVID19 and the lockdown in managing food loss & waste in India
- To discuss how interventions by the government (Centre and States) and private sector actors can help reduce food loss & waste in the supply chain

## 2. COVID19 and Its Impacts on Food Loss and Waste: A Multi-stakeholder Dialogue

An on-line stakeholder discussion was held on 19<sup>th</sup> June 2020, which saw many sectoral stakeholders and experts from government, industry, civil society, academia, logistics, and international organisations. The roundtable discussions were largely divided into two sessions: an *inaugural session* wherein the context was laid by **1) Ms. Nandita Gupta (IAS), Joint Secretary, Ministry of Consumer Affairs, Food and Public Distribution** and **Mr. Vijay Sardana, a Techno-Legal expert in Agri-business**, and a *moderated discussion* amongst all expert stakeholders to deliberate on challenges and potential solutions to address food loss and waste in agricultural value chains in India.

Key highlights from the inaugural session and stakeholder discussions are provided below:

## Inaugural Session

### Why Address Food Loss?

Statistics were shared to emphasize on the need to address Food Loss & Waste (and more so in a Pre-Covid world), which has impact on **Natural Resource Management**, as well as implications on **Nutrition and Food Security**.

**Food wastage** is the third biggest polluter in the world. Out of 6 giga tonnes of food production, 1.6 giga tonnes are wasted (of which edible foods amount to 1.3 giga tonnes). The **water consumption** used in production is **250 million cubic meters of water** and greenhouse gases emissions amount to nearly **3.3 giga tonnes**. Land utilised is **1.5 billion hectares** (10 times the size of India's agricultural capacity). **33%** of all inputs such as water, energy go to waste. **54 percent of inputs** that are directed towards production, post-production and handling of the value chain go to waste. **46 per cent of inputs** that are directed toward processing and distribution and other downstream segments of the value chain go to waste.

- Food loss (as defined by the Ministry of Consumer Affairs) occurs during the stages of procurement, storage and transportation and is the unintended result of the agricultural process and of technical limitations.
- States need to address food losses
  - At the time of procurement which are carried out by mandis that are notified as well as state agencies
  - Losses and inefficiencies in the PDS system
- Policy interventions to ensure better distribution under the PDS include 'One nation, One ration card,' by aligning with the Aadhaar card, which will check inefficiencies associated with the PDS
- **Storage considerations:**
  - All grains procured by the Ministry are to be stored in jute bags as per a Cabinet directive but there are some limitations in terms of adequate supply of jute bags

and alternatives have to be explored. Temporary measures include use of HDPE bags for the shortfall. However, a detailed analysis needs to be undertaken on viable alternatives for storage that take into account both the livelihood aspect (for the jute industry) and environmental aspects (HDPE is plastic and not the most environment friendly). The private sector is encouraged to offer an alternative which is eco-friendly and to consider the livelihoods element

- The new storage areas focus on construction of silos and not warehouses
  - Silos provide higher storage capacities
  - Treated grains to be stored without jute bags.
  - Silos also have a reduced requirement of land.
- COVID19 has further reinforced the need for adequate infrastructure. However, it has to be deliberated as to where this capacity needs to be added.
- Need for consideration of crop specific interventions as a single policy will not adequately address crop specific needs on storage (perishable vs non-perishable, grains vs oilseeds etc.).
- **Logistics**
  - There needs to be a consideration of mechanized transport to curb food loss, which will facilitate a streamlined approach for grains from procurement, transit and finally storage in silos
- **Private sector** must be taken into account the following in times of challenges by ensuring competitiveness and cost-effectiveness, investment, Business contingency planning for managers and innovation

## Stakeholder Discussions

### Challenges during COVID19

Many stakeholders weaved the impact of COVID19 into their conversations and some elaborated upon the challenges posed by COVID19, which need to be kept in mind going forward in similar scenarios. They can be found below:

- Centralised production and distribution food systems have resulted in risk to food and nutrition security in rural areas. The trend of reverse migration has further burdened these systems
- Excess supply of fruits and vegetables produce in rural areas due to disruptions in logistics which could not reach areas of demand. This added to the farmers distress as they could realize sufficient income from their produce.
- Certain methods of market linkages suffered such as those that were people-centric; technology-centric means have been leveraged; for example, certain suppliers resorted to using apps in order to receive bulk orders for fruits and vegetables from consumers, who benefited from fresh farmer-grown produce
- The issue of zoonotic diseases has come to the forefront

## INFRASTRUCTURE RELATED

- **Storage systems and infrastructure**
  - The most critical discussion needs to centre around how and where infrastructure capacity needs to be added to deal with future disasters most effectively
  - Infrastructure requires human training and capacity building (for e.g. holes to be plugged in storage space to prevent moisture seeping in)
  - Regulations are required to promote activities where technology and infrastructure upgradation is possible
  - Further private sector investments in developing 'silos' (PPP models)
  - Exploration of Public-Private Partnerships especially in relation to investment in Farmgate infrastructure in rural areas to benefit FPOs
  - Lessons from one sector can be applied to another sector, for example, lessons from dairy can be applied to horticulture value chains
    - Storage capacity was moved closer to point of production
    - Point of processing was moved midway between point of production and Point of consumption
- **Infrastructure and Logistics**
  - The importance of logistics has been established as now there is a department of logistics at the government level , which is a recognition of the role that logistics has to play role, e.g. agro-logistics (already existing)
- **Data Analytics and IT**
  - Real time data (via smart phone apps) can help prioritise interventions and resource allocation. It would be critical to identify the *Food Loss Hot Spots*
  - Need for better data analytics & information to farmers to match demand and supply and enable growers to respond better to market demand thus resulting in lower losses
  - There are questions about reliability of data; as data on food loss and waste is originating from different sources and is often in ranges, there is a need for a streamlined approach for measuring data
  - Data will also help policy-makers as currently food loss is not adequately measured, appropriate corrective action is hard to implement.
  - Integration of technology
    - Ecosystem players to encourage incubation of fin-tech and agri-tech, including at the FPO level
    - Farmers reluctant to adopt new technologies due to the price of certain commodities such as of rice being low and low awareness on the impacts on food security and on environment

## POLICY RELATED

- **Need for commodity specific interventions/ policies**

- Different commodities have different nodes for food loss and thus it is important to identify different hot spots and design interventions accordingly for example, rice value chains have most wastage at the threshing and winnowing stages whereas horticultural value chains have the most wastage during transit due to their perishability
- **Appropriate incentives for sustainable practices** and relook at the subsidies for fertilisers/crops.
  - Sustainable public procurement can increase focus on the issue of food loss and waste.
  - Role of pricing: consumers of branded basmati rice, for example, would be willing to pay more for sustainably produced goods.
  - The price for agricultural produce in India is quite low and if right prices aren't there, farmers have no incentive to use latest equipment or techniques to produce sustainably
- **Role of FPOs and Agri-entrepreneurs**
  - The recent reforms in the sector will provide considerable boost to FPOs.
    - Public sector support can be leveraged with the Atmanirbhar Bharat Abhiyan scheme
- **Food safety/quality and Food loss**
  - Focus on Food safety from farm gate level onwards which will ensure a reduction in Food Loss and Waste levels across the entire supply chain with the government strengthening FSSAI and the Private sector to be compliant with regulations
  - There is not only loss of food quantity but there is also incidence of value loss (loss in nutrition)

#### **PRIVATE SECTOR RELATED**

- **Focus on value chain interventions including linkages**
  - Adopt a holistic view of the value chain and focus on movement between the value chains as well (again role of transport).
  - Linkages in the supply chain must work efficiently to address food loss and waste
  - Private sector needs to play a key role, as most of the food moving through our country moves through private hands<sup>1</sup>.
  - 'Food Loss & Waste' audits should be introduced for private sector to include in their annual disclosure reports
- **Good practices (Buyers/FMCGs)**
  - Model of direct linkages on a local/regional based that was facilitated by certain stakeholders such as Tier 1 suppliers that assured consumers supply of fresh produce on the basis of bulk orders in certain residential societies

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<sup>1</sup> <https://www.epw.in/journal/2020/18/commentary/covid-19s-disruption-indias-transformed-food.html>

- Leveraging the usage of the Direct procurement model between supplier and consumer with quick graduation to apps
  - Leveraging the usage of Direct procurement model between farmer and consumer with farmers benefiting from the guarantee of a sale and being assured of their incomes
- **Capacity-building**
  - Creating awareness of addressing food losses and waste amongst all value chain actor
  - At the organizational level, there needs to be a management audit with regards to resource consumption and it needs to be carried out on a yearly basis
  - Capacity building for farmers in commodity-specific protocols of handling be it via a cluster model or at the FPO level
  - Requirement to better connect farmers to markets effectively

#### **Multi-stakeholder collaborations**

- Need for more engagement between different stakeholders to arrive at solutions
- Need to create awareness amongst stakeholders to address Food Loss and Waste
- Understanding of the inherent inter-dependencies inherent in the agricultural value chain.
  - For example, agricultural produce is meant for human consumption, as well as feed for livestock and as well as raw materials for industry

### **3. Concluding Remarks and Way Forward**

- CRB will continue engaging this select group of key sectoral stakeholders and experts from the agri-business sector going forward on this topic of food loss and waste (SDG12) and SDG 8 (Decent Work and Economic Growth), which are being covered as part of this project.
- On-boarding of this sectoral group into an on-line platform that is being developed by CRB under the PROGRESS project to continue discussion on policy and practice considerations for food loss and waste
- To have further consultations with this sectoral group to further deep dive into 3-4 areas identified above and develop an action plan covering the development of policy and practice inputs, particularly in relation to
- To co-ordinate with stakeholders from this sectoral group regarding data collection towards academic outputs as a part of the PROGRESS project



## Appendix 1: Sectoral Experts in attendance at the On-line Stakeholder Discussion

Name	Name of Organization
Saikat De	BASF
Dr. Milli Srivasatava	Bournemouth University
Prof. Suresh Misra	Indian Institute of Public Administration
Ishani Pandulkar	Chintan Environmental Research and Action Group
Pragya Nehru	CII-FACE
Mamta Prajapati	National Consumer Helpline
Vijay Sardana	Independent Expert
Aruna Rangachar Pohl	Indian Foundation for Humanistic Development
Ashok Kumar	M-CRIL
Raman Ahuja	Food and Agriculture Organization
Nandita Gupta	Ministry of Consumer Affairs, Food and Public Distribution
Pramel Kumar Gupta	Natural Capital
Dr. Sunil Pareek	NIFTEM
Dr. Sankhyan	PEPSICO
Sanjay Sethi	LT Foods
Rosy Chowdhury	Rainforest Alliance
Azhar Tambuwala	Sahyadri Farms
Minakshi Dey	SODEXO
Namit Agarwal	World Benchmarking Alliance
Pradeep Mishra	United Phosphorus Ltd
Sumit Roy	WWF
Dr. Bhaskar Mittra	Tata-Cornell Institute for Agriculture and Nutrition (TCI)
Vidisha	Transport Corporation of India Limited

Project Team Members (In attendance)	
Rijit Sengupta	CRB
Devyani Hari	CRB
Priyanka Chhaparia	CRB
Ramanuj Mitra	CRB
Nitya Chhiber	CRB
Gillian Dowie	IDRC