

## **SETU – A Single Window Logistics Solution for Pandemic Lockdowns**

On 22nd March, India announced its first phase of lockdown of 21 days which was followed up by another 20 days and 14 days. During the 1st phase all inter-state movements of road transport were suspended barring a few exceptions. This posed a massive supply chain disruption given that about 60% of transport in India is through roads<sup>1</sup>. A group of officers of IRTS – a civil service of India managing the operations and business development of Indian Railways – saw the need to bridge this gap by providing a single window logistics system which was not existent even in normal times. This was named unequivocally “SETU”, meaning, a bridge, in several Indian languages.

### **The Lockdown Challenge and Indian Railways**

The Freight trains in India cater to about 35% modal share and predominantly move bulk goods like coal for power plants, iron ore, cement, petroleum products, food grains and fertilisers most of which continued to run, albeit at a lesser scale, to support the survival needs during the lockdown. But, citizens and businesses require movement of all kinds of essential goods, not necessarily bulk. And, many citizens require critical medicines which are not available in a Tier 2 or Tier 3 city.

Indian Railways quickly put together and started running 100+ Special Parcel Trains on major routes for moving smaller sized consignments (1kg to typically 100 tonnes). But people need end-to-end connectivity especially when there is disruption of usual modes of transportation. Likewise, businesses which usually relied on roads, need to be made aware, guided and handholded to move their goods via Indian Railways, almost overnight.

### **Need for a Single Window Solution**

The approach was to provide *transportation as a solution* by working backwards and not continue work in a “supplier centric approach”, which is usual with Indian Railways given its legacy constraints. It is pertinent to note that even e-commerce platforms use the supplier centric approach. For example, we enter delivery pincodes often finding them to be unserviceable. SETU, on the other hand, is set to be “end user centric” where the user requests transportation between two locations and the team will then work out the modal options to connect the two.

The team being a set of under-training civil servants and few young officers within Indian Railways gave it an advantage which a usual single window solution couldn't. The team could request for help from the entire government machinery on ground, especially when it came to delivery of medicines. It also worked to propose changes at policy level as situation unfolded. It tied up with few start-ups, service minded voluntary organizations as well. All this was on the backbone of Railways as the middle mile connectivity during lockdown.

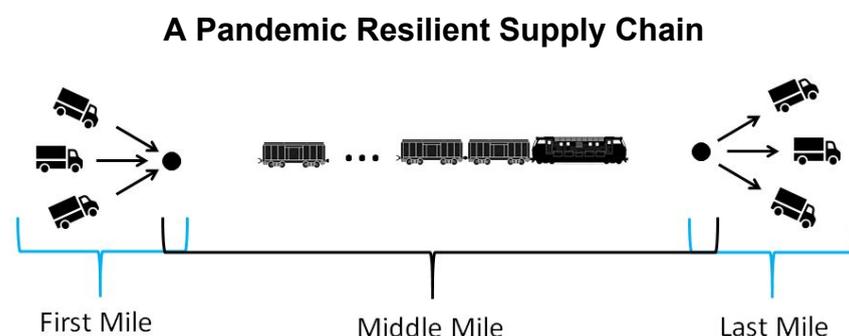
### **The Modal Model**

The issue with the current transportation scenario is that modes are competing rather than complementing each other resulting in locations which are over-served and areas which are under-served. Numerous studies have brought out the need for higher rail modal share in the

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<sup>1</sup> NITI Aayog and Rocky Mountain Institute. Goods on the Move: Efficiency & Sustainability in Indian Logistics. 2018.

economy for a geography the size of India in terms of social, environmental and energy costs<sup>2</sup>. We go a step ahead and explain below why Railways should be the core of a pandemic supply chain. SETU worked on this modal model where major legs will be through railways with the first and last mile served by road.



### Primacy of Railways in a Pandemic Resilient Supply Chain

There are 2 distinct advantages of railroads over road transport. First, railroads being infrastructure centric, most staff are stationed at particular locations (operating, control rooms, signalling, track) and less number of people are moving (drivers, guards) vis-a-vis roadways. This is important as this prevents transmission of pandemic virus to long distances by primary contact. 1 trainload can carry about 100 trucks equivalent goods, making it at least an order less in pandemic transmissivity.<sup>3</sup>

Secondly, given the very nature of railroads in India, their jurisdiction is not coterminous with State boundaries making them a truly “lockdown resilient” supply chain system. Beyond these two direct advantages, there are positive externalities of less emissions and that less people are required to man gas stations, road side eateries “*dhabas*” and the like.

### SETU Working Mechanism

SETU is a shining example of inter-agency and inter-modal coordination achieved by the IRTS officers by operating at 3 levels.

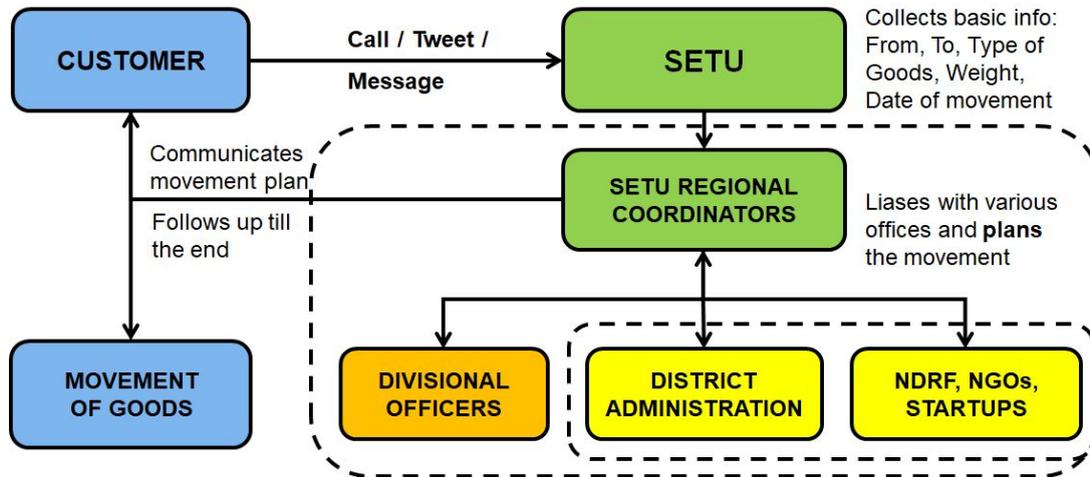
1. The Core Team which manned the dedicated single window helpline, crawled tweets and messages across Twitter for identifying people with critical need to transport lifesaving drugs, children with special needs and by reaching out to people who have tagged eminent personalities for help. Alongside this, contacting businesses which are in need of transportation through national level manufacturing associations.
2. The Divisional officers who advised the core team about the best possible mode and route assessing local conditions and facilitated faster transactions on the ground. They went out of the way to facilitate pick-up and drop of medicines from railway stations through their vehicles and staff.
3. The Partners such as District Collectors, Superintendents of Police, the National Disaster Response Force (NDRF) who came forward to help in not just issuing passes but also in transporting the medicines and essentials themselves by road. They were

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<sup>2</sup> India Transport Report : Moving India to 2032, National Transport Development Policy Committee (NTDPC), Planning Commission (2014)

<sup>3</sup> Assuming a train load to be 4000 tonnes, and each truck to carry 40 tonnes. And it takes 3 member crew to run a train vs 2 for a truck. The assumption is also that train crew work within their limits, while truck crew go beyond state jurisdictions. This makes it about 67 times lesser in transmissivity.

also supported by service minded NGOs and Volunteers authorised by authorities. This was augmented by intra-city transportation startups which facilitated first and last mile connectivity by trucks in case of business customers.



Within days of setting up, SETU got thousands of requests for transportation movement which indicate the gap which truly needed to be bridged. A key highlight is that one of the largest e-commerce companies in India – Walmart backed Flipkart – started using SETU for movement of their goods across the country.

### Way Forward

The success of SETU rests on the simplicity and thus the outreach of the model – from farmers to industrialists, from a doctor to an ailing patient – across the country. As it was manned by civil servants themselves who were quick to understand the need and sensitivity of the request and acted as a one stop solution. In order to continue to serve the people in a sustained manner during disasters and disruptions in supply chain networks it is imperative to institutionalize the 24x7 SETU portal by an Integrated Logistics Cell in the Ministry of Home Affairs or a dedicated Logistics Ministry in the respective countries.

SETU has great potential for expansion and increasing the modal share of railways in normal times as well. Notably, Southern Railway has tied up with India Post for first and last mile connectivity for small size parcels which can be booked via an app. But the game changer will be coordination with freight forwarders to tap the 10-100 tonne consignment size which hitherto has been through road transport. The freight forwarder market needs to be developed and institutionally brought on a single platform. Till then, or alternatively, Indian Railways can directly enter into a contract with truckers to provide an end mile connectivity option. From international experience, domestic containerized transport is key as handling time and losses are reduced through cross docking. For this, trucking companies, freight forwarders, custom house agents and port administrations, besides the rail users, need to come together with SETU as the bridge.

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