



1917 ITEAMS – HOW DEPARTMENT OF AGRICULTURE & FARMERS' WELFARE, MEGHALAYA, IS SUPPORTING FARMERS DURING THE COVID-19 LOCKDOWN



In this Note, Canning S Shabong illustrates how the Department of Agriculture & Farmers' Welfare, Government of Meghalaya (India) is using ICT solutions to support farmers who are facing marketing issues resulting from the lockdown imposed due to COVID-19 Pandemic.

CONTEXT

On the evening of 26 March 2020, in the midst of the national lockdown because of COVID-19, the Government of Meghalaya took a Cabinet decision that the 1917 iTEAMS (Box 1) of the Department of Agriculture and Farmers' Welfare will procure vegetables for distribution to retail outlets at Shillong and other urban areas. To start with, there were no wholesale and retail outlets selling vegetables in the city as the main market – 'lewduh' which is the largest wholesale and retail market in the city – was totally closed and shut down as soon as the lockdown was announced. In this scenario, the conventional marketing channel was totally closed and unavailable for public service.

Box 1: 1917 iTEAMS?

The 1917 iTEAMS programme can be considered as India's first-ever disruptive farmer centric, market-oriented, cloud-based facilitation service that connects farmers to markets through real time agro advisories, affordable logistics, and market information. The programme was established by the Department of Agriculture in collaboration with the Department of Animal Husbandry, Meghalaya Small Farmers Agri Business Consortium (MgSFAC), Department of IT, Meghalaya Institute of Entrepreneurship (MIE), Central Agriculture University (CAU), and Digital India Corporation (DIC). To utilise the 1917 iTEAMS' (www.1917iteams.in) service, any citizen, farmer, or a buyer of agriculture, horticulture, livestock products, etc., can call the Agriculture Response Centre's (ARC) Toll Free Number 1917, from 7am to 7pm, Monday to Saturday, which is manned by Incoming Call Officers (ICO Level 1) and Vehicle Despatch Officers (VDO).

MANDATE

- 1. Agro Advisory:** Providing farmers with timely and accurate information for proper decision making. Farmers can call the toll free number of **1917** for any queries on Agriculture, Horticulture, Fisheries, Animal Husbandry, Apiculture, and Sericulture. Farmers can call and request for a package of practices, pest/disease management in crops, health management in livestock, or any other information pertaining to departmental schemes and training.
- 2. Logistics Solutions:** Providing evacuation and transportation logistics solutions to farmers and buyers who wish to transport their goods to any farms or markets of their choice through a network of pickup trucks, which are known as Agri-Response Vehicles (ARVs) at a highly competitive rate of INR 0.02 per kg/km.
- 3. Market Connect:** Providing information about potential markets and sellers, and making farmers and buyers aware of the different selling/buying options available to them. 1917 iTEAMS connects the Registered Farmers having commodities to sell to the Registered Buyers looking to buy the same commodities – but does not by itself participate in the buying or selling negotiations.

FIELD CHALLENGES

The challenge before the 1917 iTEAMS was how to organise this huge task in the midst of the Corona virus scare and the risk of exposure to the dreaded virus and link both the distressed farmers and the consumers who were unable to get their daily dietary requirements, and thus keep them going in this sudden closure. The iTEAMS' management team activated its connections and links to all the value chain players, who are, though not directly involved in vegetable logistics, yet are involved in other processed produce generated by the farmers. Even though all these players were willing to help in this hour of need, they were averse to dealing with highly perishable items like vegetables, which have a very short shelf life. They do not have huge State wide distribution logistics which this operation requires, nor the matching demands from their customer base. The whole scenario now became one of economy of scale and speed and efficiency of the value chain, which had not been tested before in such a situation.



The iTEAMS' task was cut out and although the entire fleet of 17 Agri Response Vehicles and the backend team were ready to respond, connecting all the dots became a big challenge under these circumstance, as it meant that iTEAMS had to play a bigger role than what was originally mandated, which is to just provide logistic support, market linkage and advisory to farmers. *ITEAMS was not designed to be a relief and rehabilitation agency nor a disaster or emergency response agency.* Therefore, it had to work purely on a business model, which is partly subsidised by the government. iTEAMS cannot take on the role of a buyer from the markets as it does not have the mandate to do so, nor the distribution network to successfully run a trading business. Farmers need to be paid in cash for their goods, which was the need of the hour, but this was not the role of iTEAMS. Many government agencies¹ had tried their hand in this role but had run into severe losses and had to eventually close down.



¹Mizoram is a case in point where the State Government through a State Agency tried to help farmers by purchasing ginger directly from the farmers and selling it in the open market. Due to inherent market risk, and fluctuating market demands, market volatility, and the highly non-asymmetric forces, the agency had run into huge losses and could not provide this service on a sustainable model. Similar agencies in other States had also tried to help farmers market their perishables but they too do not have the resources to sustain such operations due to high overheads and low margins.

A Catch-22 Situation

It was very clear that there was a Catch-22 situation at play in the beginning and it was decided by the iTEAMS' management to concentrate only on semi-perishables under those circumstances, as these have a longer shelf life and can also be sent to processing agencies for processing. Thus the plight of the farmers whose vegetables were ripe for harvest/already harvested, seemed to present a bleak picture, as they were staring at huge losses this season. Some brave farmers even posted on Facebook that they are ready to sacrifice and support the government at this time of calamity, as they have reached a point of acceptance of the situation. But on the other hand, there was a huge demand in the entire State to the tune of 475 metric tons for fresh fruits and vegetables per day by quick estimates. The East Khasi Hills alone required about 132 metric tons of fresh fruits and vegetables every day, based on conservative estimates and the 2011 Population Census. If the decadal population growth rate of about 28% is added to this figure, the demand for fresh fruits and vegetables is huge, which cannot be met from local production alone.

In this backdrop, how can iTEAMS play a role which is over and beyond its original mandate – was the question before the team. Further, with the uncertainties of the situation which was evolving by the day, how can an operation of this magnitude be run, which was a first for iTEAMS. The whole team got to work and activated all its resources, connections and channels to try to come to some sort of strategy and coherent response.

ADDRESSING THE CHALLENGE

Initial steps

The team requested all the ATMA extension functionaries posted in the various Community Development (CD) Blocks of the State, and the district agriculture and horticulture officers to assess the availability of produce from the main production clusters so as to understand the supplies. As this exercise was going on, the other team contacted some of the local Headmen and Dorbar Shong to help facilitate and join hands in this endeavour, so that the entire operation could be organised in an orderly and effective manner. Many local headmen called the 1917 iTEAMS hotline and were connected to this logistic chain. Another team got to work with the State Government and the local administration to request issuance of curfew passes for the 1917 iTEAMS' personnel and ARVs. The third team went to work with connecting all the local online players so that they can take orders from the citizens and provide home delivery. All these online players' delivery vehicles were also provided with curfew passes from the district administration. The Deputy Commissioners and their team also provide all the necessary support and facilitation during this planning exercise.

Implementation

Logistics

On the morning of March 27th, the team despatched its Agri Reponse Vehicles to all the major vegetable production clusters, especially pea producing clusters. Ten tons of peas were lifted from Khweng, Ri-Bhoi, and delivered to NARI FRESH in Mawiong for onward distribution to Fair Price Shops (FPS) in the city. Another vehicle was sent to Laitjem in East Khasi Hills to lift five tons of peas and distributed to Nongthymmai and Lapalang.



Another vehicle was sent to Syntung to lift strawberries, and one to Myllem to pick up vegetables. In West Garo Hills, four vehicles of 1917 iTEAMS were sent out to Rimrangpara, Rombagre and Amindarangsa and also to Hajongpara in South West Garo Hills District, to purchase vegetables such as yams, papayas, peas, tapioca, brinjal, rosella, etc., and later on these were distributed in the localities of Babupara, DC Park, Akongre, Tetengaja and Police Reserve.

One vehicle also ferried essential services to Rombagre village. In Jaintia Hills, vehicles were despatched to Niriang village and assorted vegetables were lifted for distribution in Jowai market.

ICT Deployment

The backend team got to work right from 7am till 11pm and the Agri Response Hotline received no less than 700 incoming calls on its hotline as well as to the team project management numbers which were opened via various social media channels, WhatsApp group and mobile sms. The interesting part is that this entire operation was managed by a cross functional team comprised of government officials, domain experts, and market experts who worked remotely and from their homes, due to the lockdown.

The entire 1917 iTEAMS systems is Cloud-based, where its core technology system is hosted remotely in servers located in Delhi. All the calls made to iTEAMS is via an Interactive Voice Response (IVR) system via a 32 PRI line system, which is multi-lingual and linked to a farmer database of 24,000 farmers connected and registered from across the State. Callers are routed to different Incoming Call Officials (ICO) based on their specific requirements. Those who require an ARV are diverted to the Vehicle Despatch Team; those requiring advisories are routed to an ICO Level 1 Expert. If the query is not closed by the L1 Expert, it is escalated to a Level 2 Domain Expert for resolution.

The ARV operations are also tracked via a GPS system and Vehicle Tracking Software developed locally, which keeps a tab on the trips, distance, time and location of the vehicles.

IMPACT

During the pre-Covid-19 period, 17 Agri Response Vehicles were making one trip per day lifting loads (2.5-3 MT per vehicle per trip) from mostly progressive farmers who have medium or large holdings. The number of farmers they benefitted was 20-25 farmers/day.

But during the Covid period, 10 vehicles were added and these vehicles make 27-30 trips



each day. These vehicles are also lifting produce not only from medium and large farmers, but also from farmer collectives (20-25 farmers who aggregate their produce in one place where the ARVs come to collect the produce).

Now produce is collected from about 500 farmers each day and each vehicle is collecting up to 4-5 MT per vehicle per trip. While only five districts were covered (East Khasi Hills, West Khasi Hills, West Jaintia Hills, Ri-Bhoi and West Garo Hills), currently the area of operation has extended to 11 districts.

Feedback and Public Response:

“1917 has done a commendable job lifting produce of distressed farmers from different parts of West Jaintia hills. We are indeed grateful to the team for helping the farmers in this difficult time and of course for the vegs on our plates,” said one FB post.

Another reads *“Thank you 1917 iTEAMS, for the quick response - it has benefited the farmers as a whole”*.

A comment by Kupar Lyngdoh also keeps team morale high. It reads *“Since its inception the project mission and vision is unique and the farmers count on 1917, unprecedented, today turnout. The people of the State can count on your service - Bravo 1917 iTEAMS you excite us with your service. When this is all over, rewards from everywhere will hunt you.”*

LESSONS

The 1917 iTEAMS project is a first of its kind in the country, which is designed with a very lean and agile model of functional, operational and staffing system, where the government does not own the assets, such as vehicles. These ARVs and drivers are totally outsourced from transport operators who are then assimilated onto the iTEAMS platform. The entire staff is also hired from a local recruitment agency on a contractual basis. This provides the business environment of a corporate sector agency with the flexibility of a private agency along the lines of a PPP model.



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