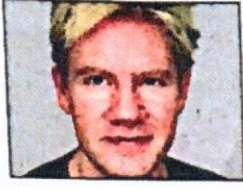


e-Mandis can help ensure that the future for Indian farmers is far brighter than ever before

Switch on the Sabzi Market



Bjørn Lomborg

With general elections looming, national parties are setting out their competing visions for boosting India's economy. Much of this agenda includes increasing farmers' incomes. The agricultural sector is vital, and it is clear that reforming agricultural markets and setting up electronic mandis (e-mandis) would make a significant difference.

In a world-first effort to help India undertake the important work of prioritising programmes that achieve the most good, NITI (National Institution for Transforming India) Aayog asked India Consensus to undertake a fast-track analysis looking at 100 current programmes. All of these programmes NITI Aayog highlighted for study, support India's efforts to achieve the Global Goals — previously, United Nations' Sustainable Development Goals — 169 development targets that every nation has signed up to.

The study by India Consensus, which is a collaboration between Tata Trusts and Copenhagen Consensus, will be released in due course. It will show that following cost-benefit analysis could make a huge difference. For example, if India were to spend ₹50,000 crore more, achieving the Global Goals, focusing on the most phenomenal programmes identified to date by India Consensus, would create extra benefits for India worth ₹20 lakh crore — more than the entire

Indian public consumption.

In the area of agriculture, this study highlights the benefits to be gained from investing more in the National Agriculture Market (NAM). This is a pan-India electronic trading portal that networks the existing Agricultural Produce Marketing Committee (APMC) mandis to create a unified national market for agricultural commodities.

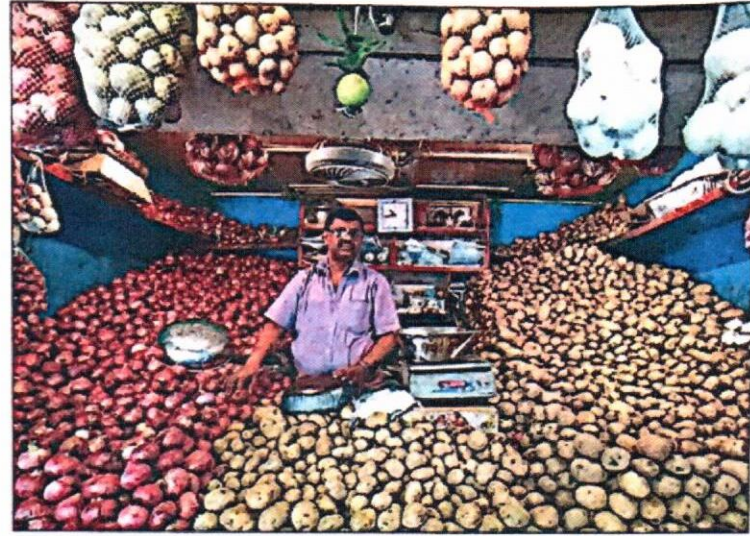
The NAM portal provides a single-window service for all APMC-related information and services. This includes commodity arrivals and prices, buy and sell trade offers, and allows farmers to respond to trade offers.

Money Plant

e-Mandis increase the pool of buyers for farmers' produce. Instead of dealing only with local traders in the farmers' mandi, a farmer can theoretically buy and sell with the entire country. This improves prices because farmers have more people to sell to, and avoids farmers getting taken advantage of by unscrupulous local traders, because they can see all the prices across the electronic market. Electronic markets also benefit buyers because they reduce the cost of searching for sellers.

A study undertaken by researchers for India Consensus in Rajasthan found that the cost of setting up e-mandis is relatively modest at ₹34 lakh per mandi, or ₹39 crore for the remaining 114 mandis yet to implement electronic markets.

One key factor is that e-mandis leverage the set-up of existing agricultural markets, so new costs are relatively small. Costs include providing hardware, software and other peripherals and orientation programmes for farmers and traders. Including set-up and running costs, the annualised cost of the intervention is ₹11 crore per year.



Low-hanging fruit

Findings from Karnataka, which is considered to be the pioneer for this intervention, showed that farmers earned around 13% more for two years, for a set of crops sold through the e-platform.

In the study from Rajasthan, it was assumed farmers would make only half of this amount. While electronic markets were highly successful in Karnataka, subsequent uptake across the rest of the country under e-NAM has been muted. In Rajasthan for example, after two years of implementation, only 2.5% of all produce by value was traded through e-mandis after 25 out of 139 were brought online.

The Rajasthan study assumes a slow take-up rate. Even with such pessimistic assumptions, the benefits of the programme are large, with an annualised benefit to farmers, buyers and society worth some ₹685 crore per year. That means that every rupee spent achieves benefits worth some ₹65, making it a phenomenal investment.

It is important to note that e-mandis are still at a nascent stage. There have been reports that the necessary infrastructure to support e-mandis have been lacking in places. However, even with these, Karnataka achieved

excellent benefits. And the study reduces by half the benefits achieved in Karnataka, and still has a phenomenal return on investment.

More importantly, there has been a limited take-up of e-markets by farmers and traders to date. However, e-mandis have a useful life of, perhaps, several decades, and over this time, the value of agricultural produce will increase dramatically — along with the potential for benefits.

Green Shoots

Even modest take-up rates — as low as 10% — would still lead to benefit-cost ratios (BCRs) in the phenomenal range. This is because the fundamental economic case for e-mandis is strong: limited spending can integrate disparate markets through which a lot of value is traded — and which will grow over time. The Karnataka experience demonstrates that strong implementation is possible, and it is up to those implementing the e-NAM system to fully capture the potential benefits.

e-Mandis can help ensure that the future for Indian farmers is far brighter than the past.

The writer is president, Copenhagen Consensus

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