

[Banks](#) are now increasingly looking at leveraging agricultural technology to facilitate rural lending.

They have even partnered agri-tech companies, which are creating a credible database on farmer behaviour, helping agriculturists get the best prices for selling their produce, and enabling satellite mapping.

Rural lending has, for long, been a neglected area because of it being a high-cost and low-margin business. Traditionally, loans were disbursed after due assessment of farm land.

This often required physical visits - an expensive affair for [banks](#) and financial institutions. Agri-tech solutions, however, are meant to reduce this and make it efficient and cost-effective.

[YES Bank](#) has piloted a fintech solution that uses geotagging of farmlands for remote monitoring and evaluation. It enables instant credit disbursement in rural areas, while reducing operational costs and improves farmers' portfolio by reducing risks.

Experts say rural lending is shifting towards cash flow-based lending, which would lower costs and attract big [banks](#) and financial institutions.

Banks aim to provide financial support to start-ups, but, eventually, their partnerships go beyond financing. "Right now, agri-tech players are working in their own space. We help them network with incubators, and provide them with the right kind of mentorship.

A challenge for these institutions is to market themselves to farmers. So we give them the entire profile of farmer producer organisations we are associated with," said Arindom Datta, Asia Head, Sustainability Banking, Rabobank.

The world's largest agri-financing company said data collection from rural areas had become more credible with the advent of technology.

"Now that the data has been created in a credible form, it is possible to predict farmers' behaviour to some extent. Financial companies can look closely at the data points and determine whether the farmer is good or how he does his business or manages his risks," said Datta.

Numerous fintech firms are coming up with solutions to assess the profitability of farmers. These solutions assess their cost of input and output, and the positive cash flow arising from it. Agri-tech solutions can also increase the efficiency of processes. For example, fintech companies are providing devices to check quality.

Initially, this had to be done physically and only enabled sample testing.

"We have partnered a fintech company that determines how much money is to be paid to a farmer depending on not just the quantity but also the quality of milk he offers," said Anshul Swami, head, retail, inclusion and rural products at RBL Bank.

RBL Bank looks after the finances of a transaction and provides technological assistance to

its customers.

Agri-tech solutions also offer pre-production quality predictions. "Satellite mapping can help predict a farmer's productivity, depending on the region, with regard to how much produce a farmer will have, and at what price he/she will be able to sell it at a particular time.

This is critical information for financial institutions and fintech players," said Rabobank's Datta.

In addition, fintech solutions are helping farmers improve their productivity.

"ICICI Bank's 'Mera iMobile' is an app that offers rural lending products and information like where farmers can procure the best prices for their produce.

This, as well as information on weather and soil conditions to help farmers plan their sowing and harvesting activities conveniently and in an informed manner," said B Madhivanan, chief technology officer, [ICICI Bank](#).

Since its launch, the application has witnessed over half-a-million downloads, and monthly transactions worth over Rs 2.5 billion, according to the bank.

While RBL Bank is using psychometrics to study the behaviour of rural customers, [YES Bank](#) is experimenting with an advanced data analytics tool to integrate local customs and culture within its digital platform.

The biggest challenge for agri-tech-based lending is the fact that it needs to be both frugal and robust in order to be scalable. "Someone in the supply chain needs to pay for the technology. Agricultural lending is a game of volume and not of margin. So technology must be designed keeping that in mind," said Datta.

[YES Bank](#) said it was partnering several fintechs to offer differentiated banking services in rural pockets of the country.

"Such partnerships have helped us not only accelerate the go-to market of several asset and liability products through instant credit decision-making, but also target smoothening of workflows to lessen the paperwork to almost zero through Aadhar-enabled authentication, while ensuring soundness of the asset quality," said Pralay Mondal, senior group president, retail and business banking, YES Bank.

### **Banks and agri-tech partnerships**

- YES Bank has piloted a fintech solution for geo-tagging of farmlands
- ICICI Bank's mobile app provides agricultural information like weather and soil conditions,
- RBL Bank has partnered with fintech company that tests quality of milk
- Rabobank provides special guarantee to provide working capital for agri-tech companies