

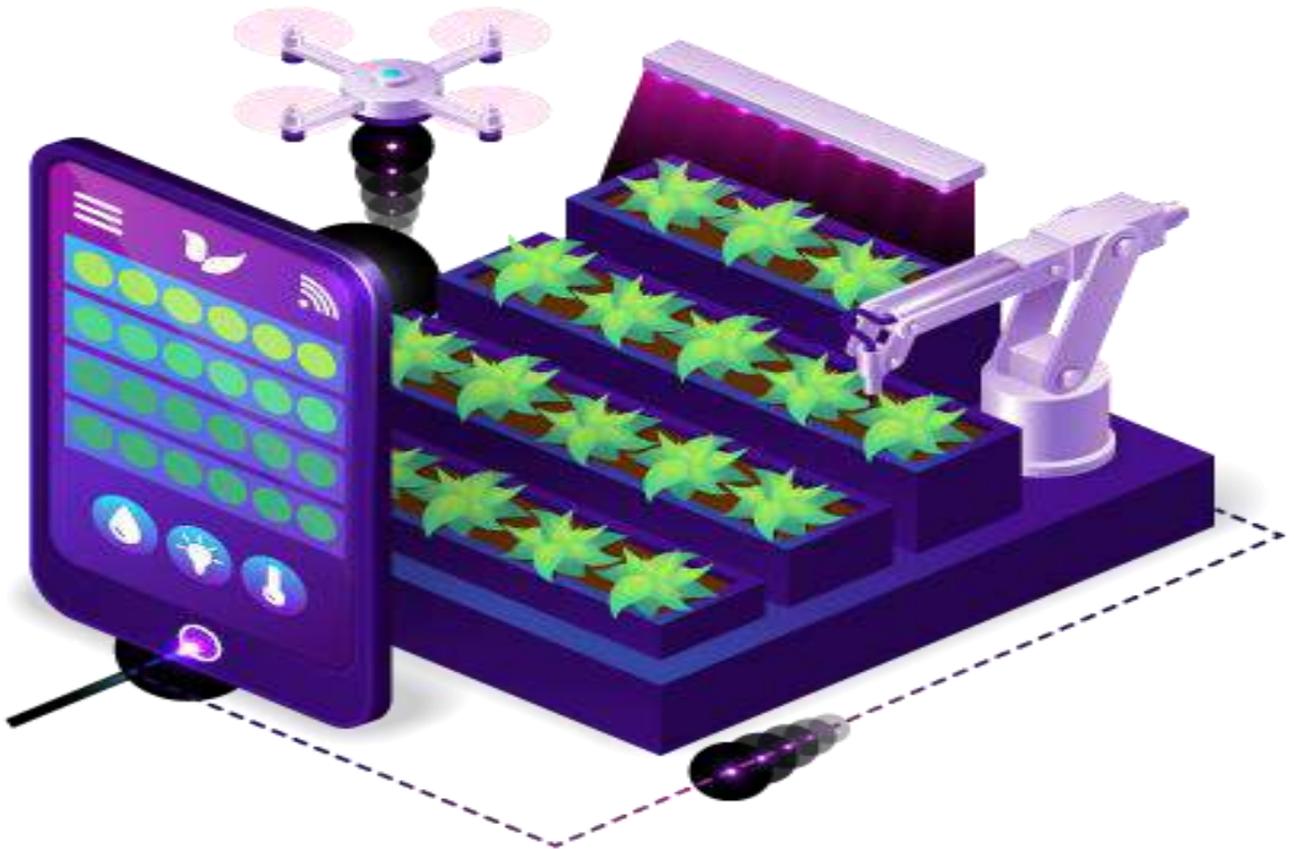
# AgTech Thursdays

## Session I: AgTech Landscape Context

20 August 2020  
5:00 – 6:15 PM

### Summary Report

Watch the full session here: [https://youtu.be/b0\\_AIPUxt60](https://youtu.be/b0_AIPUxt60)



## India Livelihoods Collective

India Livelihoods Collective is India's first non-financial and non-funding commitment based collaborative platform to leverage cross-sectoral expertise of organizations, enabling collective action towards creation of sustainable and local livelihoods in rural and urban India.

[www.ilc.org.in](http://www.ilc.org.in)

## CSRBOX

CSRBOX is India's leading CSR knowledge and impact intelligence driven collaboration platform for the development community. It serves as an enabler, encouraging partnerships between CSR stakeholders. At CSRBOX, we are committed to the idea of advancing social impact and change. Whether you are a Donor agency looking to invest in transformative and sustainable projects or an implementation leader dedicated to accomplish your organization's goals, CSRBOX can help you achieve your objectives. With years of experience in working on social development projects with non-profits, corporate and social enterprises, we excel in catalysing the vibrant social transformation movement in India by driving collaborations and partnerships for good. With research, strategy and designing tailored programs in the CSR ecosystem, we help our clients solve their most challenging issues.

<https://csrbox.org/>

## MicroSave Consulting

MicroSave Consulting (MSC) is a boutique consulting firm that has, for 20 years, pushed the world towards meaningful financial, social, and economic inclusion. With 11 offices around the globe, about 180 staff of different nationalities and varied expertise, we are proud to be working in over 65 developing countries. We partner with participants in financial services ecosystems to achieve sustainable performance improvements and unlock enduring value. Our clients include governments, donors, private sector corporations, and local businesses. We can help you seize the digital opportunity, address the mass market, and future-proof your operations.

<https://www.microsave.net/>

Curated and Published

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## About AgTech Thursdays

AgTech Thursdays is an innovative webinar series, organised in collaboration with CSRBOX & MicroSave Consulting. The use of digital technology is set to play a transformational role in modernizing and organising agricultural activities in a bid to double the farmers' income by 2022. In coherence, the series aims to bridge the knowledge to action gap in this direction by identifying latest trends, progress in agriculture technology and boost for agri-businesses. It will highlight the various avenues for interventions to take place, success stories of diverse AgTech players & AgTech enablers in strengthening the value chain at various levels. The series would provide a holistic view, encapsulating the challenges & learning towards improving technology adoption rates and time-efficient product development & delivery to provide scalable, low-cost and customized solutions to the farmers to increase and sustain the livelihoods outcomes in agriculture. Session I - AgTech Landscape Context was held virtually on 20th August 2020.

### Key highlights of Session I:

- Agriculture and Farmers Landscape
- AgTech Landscape
- Classification of Start-ups/Segments
- AgTech Funding in India
- Challenges and Way Forward
- AgTech Case Study: Reflections by PayAgri

### Session I Speakers:

#### **Mr. Anil K. Gupta, Partner-Payments & Distribution, MSC**

Anil Gupta is a Partner at MSC and heads the Digital Financial Services-Payments and Distribution Domain. He is a hands-on development banker and technology manager with over two decades of experience.

#### **Mr. Anurag Saxena, Global Head-Strategic Initiatives, MSC**

Anurag Saxena heads Strategic Initiatives for MSC global offices. He is a strategy consultant with over 13 years of experience gained through projects with governments, international funding agencies, non-profits, and corporates in Bangladesh, Hong Kong, India, Kurdistan, Oman, and the USA. He also focuses on applications of emerging FinTech solutions including blockchain and Artificial Intelligence.

To know more about MSC, visit: <https://www.microsave.net/>

#### **Mr. Rajkumar K.V.M., Co-Founder, MD (Agri Transaction), payAgri**

Rajkumar is an investment banker turned agriculturist with over 16 years of experience in Deal Origination and Deal Execution in agriculture, renewable energy, food processing, information technology and infrastructure. He then started focusing on agriculture, building expertise in contract farming, polyhouse farming and agri trading. He has extensively worked in maize and turmeric value chains.

To know more about PayAgri, visit: <https://www.payagri.com/>

## Session-I | AgTech Landscape Context

**Mr. Bhomik Shah, curator ILC, CEO, CSRBOX** formally opened the AgTech Thursdays series by introducing its aim and objective. Farmers are the backbone of all agricultural interventions and the AgTech Thursdays series aims at leveraging technology to increase farmers income through sharing of best practices and new models, partnerships, collaborations in the agtech domain. **Ms. Bhagyashree Patil, Coordinator ILC** then introduced the panelists for Session I.

### MicroSave Consulting

**Mr. Anil K. Gupta, Partner-Payments & Distribution, MSC** began by stressing the inevitable importance of agriculture in our daily lives. Agriculture and allied sector adds 368 billion USD to the economy and provides livelihood to more than half of the population. The sector has shown immense resilience even in times of the COVID-19 crisis.

Although agriculture is the largest employer in the country, it contributes only 16% of the GDP and out of the 146 million farmers in India, 86% are small and marginal farmers with less than 2 hectares of land. These farmers face multiple challenges in terms of finance, weather conditions and market fluctuations.

Mr. Anil explained the production challenges including - access to good quality seeds, fertilizers, irrigation facilities, machinery, high cost of labour, unsustainable soil due to limited diversification and limited means to hedge high risks and the post production challenges including limited storage facilities, middle men and poor market linkages. Only 30% farmers are able to borrow from formal sources and maximum bank loans are laid out to medium and large farmers.

Mr. Anil stressed that poverty is not simply the lack of income and farmers face several complexities and vulnerabilities in attaining a secure livelihood. Hence, livelihood initiatives need to focus on building assets along with income generation for farmers. These assets include - **social capital** including relationships of exchange, reciprocity and trust, **physical capital** in the form of infrastructure, **natural and financial capital** and **human capital** referring to the health and education of the farmers. All these essential assets are interrelated and impact one-another. Interventions focussing on building these assets will lead to an increased income, reduced cost of production and vulnerabilities, sustainable agriculture and food security.

In the entire agri value chain, we see a variety of of AgTech solutions that can increase farm income with sustainable agriculture

<b>Farm management and data analytics</b> <ul style="list-style-type: none"> <li>Remote sensing, smartphones, drones, sensors &amp; IoT</li> <li>Predictive modelling, crop monitoring and traceability</li> </ul>		<b>Agri Financing / FinTech</b> <ul style="list-style-type: none"> <li>Value chain financing</li> <li>Fintech</li> <li>Farmer onboarding</li> <li>Credit scoring</li> </ul>	
<b>Agri - input marketplaces</b> <ul style="list-style-type: none"> <li>Direct to farm</li> <li>Data and advisory driven</li> <li>Channel agnostic</li> <li>Last mile delivery</li> </ul>		<b>Livestock management</b> <ul style="list-style-type: none"> <li>Livestock—cattle, poultry, and fisheries</li> <li>Data driven supply chain and financing</li> </ul>	
<b>Agri - output marketplaces</b> <ul style="list-style-type: none"> <li>Demand aggregation</li> <li>Kirana stores, modern trade, horeca</li> <li>Procurement via Farmers/FPOs</li> <li>Staples &amp; fresh produce</li> </ul>		<b>Mechanization / Novel farming</b> <ul style="list-style-type: none"> <li>Hardware</li> <li>Farming as a service</li> <li>Vertical farming/hydroponics</li> </ul>	

Mr. Anil introduced existing AgTech solutions by categorizing them into six categories:

- Farm management and data analytics - to make informed decisions and reduce losses - CropIn
- Agri-input marketplaces - supply side - DeHaat
- Agri-output marketplaces - demand aggregation - PayAgri
- Agri financing and fintech - Jai Kisan
- Livestock management - Stellaps
- Mechanization/novel farming

Mr. Anil also highlighted the existing enabling ecosystem for agtech startups. With a huge demand and investments (500 million USD invested since 2014), there are more than 3,000 agtech startups currently operating in diverse stages of the value chain. The Global Pandemic has created new avenues for AgTech solutions as technology adoption is no longer a choice but a necessity.

However, the agtech initiatives are also faced with challenges like limited funding due to high risk involved, fewer collaborations with industry players due to difference of opinion on scope of agtech, limited availability of agri data and reaching out to the dispersed small and marginal farmers. Mr. Anil concluded his address by stressing that there is a need to build more collaborations among agtech initiatives and with other industry players.

## PayAgri

**Mr. Rajkumar K.V.M., Co-Founder, MD (Agri Transaction), payAgri** shared the story of PayAgri which was born after the 2015 food crisis coupled with the farmers giving up farming. The first step taken by Mr. Rajkumar was to become a farmer himself in order to understand the complexities and nuances of agriculture. They then interacted with several farmers across India where every 10 kms the climate and soil texture changes to study the entire agriculture value chain.

**“ Farmers are the only people in the economy who buys everything at retail price but sells it in wholesale price. - John F Kennedy**

PayAgri aims to solve three main problems. It aims to reduce the **middle men system** by 60-70%. The value created by the farmers is shared by 8-9 middle men and the farmer is unable to recover even the principal amount. Another issue addressed by PayAgri includes the cash based transactions performed by the farmers. There is no financial track record which disables the farmers to take formal financial loans and decisions and forces them to seek help from the middle men. Lastly, PayAgri aims to work on the small landholding sizes of the farmers due to which they are unable to achieve scale.



PayAgri envisions creating 360 degree linkages for the farmers by developing an enabling agri ecosystem for the farmers. PayAgri analyses the requirements of both the farmers and buyers/ retailers and provides practical solutions. Mr. Rajkumar explained this with the example of their interventions in the coconut and garlic value chains. This process of need analysis and studying the value chain has helped PayAgri to reach the foreign markets as well.



**Mr. Anurag Saxena, Global Head-Strategic Initiatives, MSC** then addressed the questions from the audience:

Q. 1: Who all are active in the agtech space in terms of investments

A. Depends on the stage of the agtech initiative. Some examples are - Mumbai Angels, Bloom Venture, Omnivore, Sequera, Avishkar Group and Global Innovation. Business houses are also open to investing in agtech startups since the Pandemic has led them to explore diversification.

Q. What is the typical tenure within which the VCs expect returns?

A. Typically it is 3 to 5 years but in the AgTech space it can be anywhere between 3-8 years depending on the nature of the fund.

Q. How is the response towards PayAgri from the farmers ?

A. Initially it was difficult to build trust. The farmers are suspicious due to the years of exploitation they have experienced. Once we were able to show them the value that can be created with immediate payments, they started to trust us and actively accepted the initiative.

Mr. Anurag concluded the session of the AgTech Thursdays series by highlighting the convergence of agtech and traditional agricultural practices and how agtech has the potential to create skilling opportunities for the rural population and support to manage the seasonality of agriculture.

## Key Take-Aways

- Although agriculture is the largest employer in the country, it contributes only 16% of the GDP.
- Agtech can support in overcoming the production challenges including - access to good quality seeds, fertilizers, irrigation facilities, machinery, high cost of labour, unsustainable soil due to limited diversification and limited means to hedge high risks and the post production challenges including limited storage facilities, middle men and poor market linkages.
- Livelihood initiatives for farmers need to work on building assets like **social capital** including relationships of exchange, reciprocity and trust, **physical capital** in the form of infrastructure, **natural and financial capital** and **human capital**
- The Global Pandemic has created new avenues for AgTech solutions as technology adoption is no longer a choice but a necessity.
- Agtech startups can be classified into the following categories - farm management and data , agri-input marketplaces, agri-output marketplaces, agri financing and fintech, livestock management and mechanization/novel farming.
- There is a need for collaboration and coordination among agtech startups intervening across the value chain to create a larger impact.
- Lack of financial track record disables the farmers to take formal financial loans.
- AgTech initiatives must conduct a need analysis to understand the area before designing any solutions.