



ASSESSING THE AGRITECH LANDSCAPE IN BANGLADESH — EXECUTIVE SUMMARY —





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EXECUTIVE SUMMARY

- This report is presented by Biniyog Briddhi (B-Briddhi), a multi-year Private Sector Engagement (PSE) programme supported by the Embassy of Switzerland in Bangladesh and implemented in collaboration with Roots of Impact and LightCastle Partners. By analysing the agritech landscape in Bangladesh, B-Briddhi seeks to support the advancement of the development of impact enterprises that empower smallholder farmers, who represent some of Bangladesh's most vulnerable populations, by enhancing their productivity and resilience within an evolving agricultural landscape.
- The agritech sector has become a central pillar of agricultural strategies across South Asia, driven by the need for sustainable productivity and modernisation. Countries such as India and Vietnam have showcased successful agritech models, attracting both domestic and international investments. With 45% of its workforce engaged in agriculture, Bangladesh is uniquely positioned to drive agritech solutions to address broader sectoral challenges. Smallholder farmers in Bangladesh face ongoing challenges, including limited access to affordable credit, market volatility, and fragmented supply chains. These issues create substantial investment opportunities, particularly for solutions that enhance productivity, optimise resource usage, and improve market access. Investors are increasingly recognising the sector's potential for both financial returns and social impact, particularly in uplifting rural communities.
- Agritech entrepreneurs struggle to secure patient capital, especially in the early stages, due to local banks' risk aversion strategies and lack of collateral. While international funding is a vital alternative, challenges such as capital repatriation and regulatory hurdles persist. Entrepreneurs have also highlighted gaps between technological innovations and farmer needs, slow adoption due to entrenched traditional practices, and infrastructure constraints like insufficient cold storage and unreliable market data.
- However, investors see promise in Bangladesh's growing middle class and consumption trends, but remain cautious due to market volatility and regulatory complexities. Some investors focus on long-term growth strategies, while others seek quicker returns through financial partnerships. Exit strategies remain a concern, although opportunities such as private equity roll-ups and acquisitions offer potential. Investors emphasise the need for accelerators and venture capital firms to bridge the skills gap among entrepreneurs, enabling them to scale successfully.
- As the country seeks to modernise its farming practices, leveraging blended finance can play a pivotal role in expediting the development of agritech solutions across priority areas. By combining various types of capital, including grants, concessional loans, equity investments, and guarantees, blended finance structures mitigate investor risk while ensuring agritech enterprises have access to the necessary funding to develop and scale. On the other hand, policy reforms, including regulatory sandboxes, centralised trade licensing platforms, and private credit bureaus, are essential for fostering a supportive agritech ecosystem. These interventions will unlock scalable, high-impact innovations, benefiting farmers, communities, and the broader agricultural sector.

FRAGMENTED STATE OF BANGLADESH'S AGRICULTURE LANDSCAPE: THE AGRICULTURE SECTOR IN BANGLADESH REMAINS HEAVILY FRAGMENTED

Bangladesh Agriculture Sector Problem Tree



RISING ADOPTION OF AGRITECH SOLUTIONS IN SOUTHEAST ASIA

Southeast Asia's agritech sector is actively leveraging digital platforms to improve market access, financial services, and advisory support.

Countries such as India, Bangladesh, and Vietnam are addressing supply chain inefficiencies by adopting technology-driven logistics and distribution solutions. Government initiatives in countries like Thailand and the Philippines play a pivotal role in advancing agritech through supportive policies and state-backed programmes. Furthermore, labour shortages caused by ageing farming populations in Thailand have accelerated the adoption of automation and IoT-based technologies. As evidenced in the table below, the region presents ample opportunities for investors, driving a notable surge in agritech investments in recent years.

	Grants	Pre-Seed	Seed	Pre-Series A	Series-A	Series B	Series C	Series D+
Bangladesh	USD 0.9 Mn	USD 3.2 Mn	USD 3.9 Mn					
India			USI	D 1.2 Bn		USD 2	2.5 Bn	USD 9.1 Bn
Pakistan		USD 6.5 Mn	USD 3.2 Mn	USD 2.0 Mn				
Thailand		USD 5.7 Mn	USD 6.3 Mn	USD 11.9 Mn				
Vietnam		USD 7.4 Mn		USD 5.3 Mn	USD 4.6 Mn	USD 30 Mn		

Source: LightCastle Analytics, Invest2Innovate,NIA, Deal Street Asia, AgFunder

AGRITECH ENTERPRISES IN BANGLADESH HAVE RAISED USD 20 MN TILL DATE

Although Bangladesh's agritech sector remains relatively nascent compared to its regional counterparts, enterprises in the space have collectively raised USD 20 Mn to date.

Enterprises like <u>iFarmer</u> and <u>WeGro</u> are driving growth at the intersection of agriculture and fintech, while market linkage players like <u>Agroshift</u> and <u>Fashol</u> account for 50% of total agritech investments. Companies focused on financial access for farmers have secured 41% of funding, with iFarmer expanding into a full-stack agritech provider. Growing global investor interest and advancements in precision technology and IoT highlight the sector's potential for significant expansion.

Fundraising Landscape By Segment

Access to Market	Access to Finance		
(50%)	(41%)		
	Access to Inputs (4.8%)	Access to Technology (4.2%)	

The agritech industry can be segmented into key areas, each addressing specific challenges in agriculture.

- Digital marketplaces enhance access to quality seeds, fertilisers, and machinery, while market access solutions streamline supply chains by removing intermediaries.
- Financial services bridge credit gaps via crowdfunding and institutional partnerships.
- Additionally, digital advisory platforms and precision agriculture tools, such a\$IoT and AI, empower farmers with insights and productivity enhancements.



Source: LightCastle Analytics

Agritech firms face challenges building trust with farmers and financial institutions, often viewed skeptically in a market dominated by intermediaries. Confidence & Trust Oligopolistic market control and inefficient handling of perishables hinder agritech startups' ability to scale and Supply Chain Complexity disrupt existing supply chains. Limited logistics and storage infrastructure constrain agritech growth, with slow technology adoption and lack of Infrastructure & modern equipment further impeding scalability. Technological Gaps Agritech startups struggle with local funding due to high perceived risks, misaligned investor expectations, and Financial Barriers & limited exit options in Bangladesh. Policy reforms, especially in taxation and IPO regulations, are needed to support agritech growth, along with Policy & Regulatory digitisation and antitrust measures to level the playing field. Political instability dampens investor confidence, though agritech firms generally navigate these challenges, with Impact of Political Climate calls for regulatory reforms to ensure investment security. on Investor Sentiment

GROUND-LEVEL INSIGHTS FROM AGRITECH FOUNDERS

Bangladesh's growing economy attracts long-term investments in agritech, but investors stress sustainable, Investment Opportunities profitable models over grant-reliant ones. & Sector Potential Bangladeshi startups trail regional peers in tech adoption and investment readiness, often struggling with **Comparative Performance** governance and scalability. of Startups in the Region Founders in Bangladesh often lack operational skills, requiring deeper support from VCs and accelerators to Addressing the Skills Gap transition into effective CEOs. among Entrepreneurs Collaboration with financial institutions offers agritech firms both financing solutions and potential bank-driven Integration of Agritech & exit strategies, leveraging data as a key asset. **Financial Institutions** Limited local exit options push investors toward bank acquisitions or foreign listings, though regulatory reforms are Exit Strategies & needed for smoother foreign investment. Despite political and logistical challenges, investors are cautiously optimistic, viewing agritech as resilient and Political & Economic Risks essential to Bangladesh's economic future.

PERSPECTIVES FROM INVESTORS & DEVELOPMENT PARTNERS

Areas Of Support	Action Plan	Leading Examples
Agritech Accelerators	Establishing targeted incubators can nurture the agritech ecosystem, offering support to entrepreneurs focusing on local challenges such as supply chain inefficiencies.	India, Vietnam
Mechanisation Support	Subsidy schemes for farm equipment in India have boosted mechanization and productivity. Bangladesh could achieve similar benefits through subsidy or leasing programs via public-private partnerships (PPPs) to promote modern machinery use.	India
Digital Agricultural Platform	Pakistan's Kissan Card Scheme provides direct subsidies by centralizing farmer data, cutting costs, and boosting yields. Similarly, India's AgriStack enhances access to credit, quality inputs, and markets while streamlining agricultural initiatives and benefit programs.	India, Pakistan
Regional Hubs	Thailand's Agritech & Innovation Centres (AICs) offer region-specific training in productivity and innovation, while the Philippines' DOST supports agritech enterprises with funding and technical aid through programs like SETUP.	Thailand, Philippines
Capacity Building and Technical Training	India's KVKs and Pakistan's Agricultural Training Centres enhance productivity and livelihoods through farmer training and advisory services. Similar centres in Bangladesh could promote sustainable practices, higher yields, and cost reduction.	India, Pakistan
Public-Private Partnerships (PPP) in R&D	India's National Agricultural Innovation Project and Pakistan's PPP Model have successfully boosted agri-innovation and productivity through government-private sector collaboration.	India, Pakistan

RECOMMENDATIONS & WAY FORWARD (I/II)

Priority Area	Recommendation	Timeline
Impact-Linked Finance solutions	R1: Funding mechanisms such as the Impact-Linked Finance instruments that incentivise additional impact through non-repayable funding in combination with equity or debt investments to de-risk projects, appealing to both development and private sector investors.	Short-to-Medium Term
Investor Relationship Management	R2: Foster long-term relationships with investors by providing quarterly updates/semi-annual updates to share milestones and achievements, showcasing commitment and growth.	Short-to-Medium Term
Data Licensing	R3: Monetise collected data by licensing it to governments, research institutions, and agribusinesses needing insights into crop cycles and productivity patterns. This strategy can help generate an additional revenue stream and enhance investor appeal.	Long-Term
Exit Strategy Planning	R4: Map out potential exit opportunities, such as acquisitions by larger agribusinesses or mergers with complementary enterprises. Clearly articulate this exit strategy to investors, helping them understand potential returns and timelines.	Long-Term
Data Transparency	R5: Prepare detailed financial projections that include revenue forecasts, cash flow needs, and ROI for potential investors. Prioritise transparency and ensure that projections account for local challenges like seasonal revenue variations.	Medium-to-Long Term
Capacity Building	R6: Partner with accelerators or training programmes to enhance technical and business skills, aligning with sector goals and attracting investors.	Short-to-Medium Term

RECOMMENDATIONS & WAY FORWARD (II/II)

Priority Area	Recommendation	Timeline
Mechanisation and Service Delivery Models	R7: Develop leasing/rental models for machinery to support seasonal agricultural needs without high ownership costs for smallholder farmers.	Short-to-Medium Term
Impact Investment	R8: Position the business as an impact-driven enterprise by highlighting rural development metrics to appeal to impact funds.	Medium-to-Long Term
Funding Runway Management	R9: Implement robust financial management practices to monitor cash flow, expenses, and runway regularly, adjusting strategies as needed.	Medium-to-Long Term
Market Research and Validation	R10: Collaborate with industry mentors to validate product-market fit and identify customer needs, helping to refine offerings and demonstrate demand to investors.	Short-to-Medium Term
Local Community Engagement	R11: Foster relationships with local farming communities to enhance trust and gather insights that can inform product development and marketing strategies.	Medium-to-Long Term







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