

Enhancing Agricultural Mechanization through Access to Finance

Agricultural Mechanization in Bangladesh- The Future



















About CSISAMEA

Enhance agricultural resilience, productivity, and profitability by improving the competitiveness and effectiveness of the agricultural machinery market system

Phase 1

CSISA-Mechanization and Irrigation (MI)

The overall goal of MI was to introduce appropriate technology in partnership with private sector and support LSPs businesses to provide agri machinery services to farmers.

Phase 2

CSISA-Mechanization Extension Activity (MEA)

The overall goal of MEA is to improve production quality and efficiency of local private-sector manufacturers of machinery and spare parts.

2014 2019 2024

















Strategic Objectives of CSISMEA

Enhance farmers access to mechanization and other crop production and marketing services



Boost the competitiveness and efficiency of domestic and private sector-led agricultural machinery manufacturing, assembly, use and servicing

Enhance institutional capacity for agricultural mechanization through the development of skilled and youth workforce

















Access to Finance Objectives

Enable **light engineering SMEs and lead firms** engaged in manufacturing to invest in new manufacturing machinery, equipment, tools, factory layouts, and manufacture new types of agricultural machinery and equipment.

Allow companies selling agricultural machines and equipment (agricultural machinery retailers) to use their capital and bank finance to expand their businesses and invest in new machines, production facilities, and support services for customers.

Make machines more affordable and accessible for machinery/local service providers to start or expand agricultural mechanization service businesses.

















Key Stakeholders

ABLE SMEs: Agriculture based Light Engineering Small & Medium Enterprises who manufacture and/or have workshops to fix/modify machines

Dealer: Selling machinery and spare parts and often provide after-sales services such as machinery maintenance and repair services until the warranty period ends

MSP: They are micro-entrepreneurs who sell machinery services to farmers

Manufacturers and Importers: Importers and/or market agricultural machines and spare parts or both import and manufacture and assemble whole machines, components and spare parts. Such as Janata Engineering, Alim Industries

















Agriculture Mechanization Market

13.35%

GDP contribution of agriculture sector to the GDP in FY 2019-20 - Economic Review 2020

40.62%

The total labor force of the country is engaged in agriculture - Labor Force Survey 2018

\$15 B

Total investment in the LEI sector against the demand of \$7 trillion LEI products in the global market -BITAC (Rahman, 2018).















\$802.3million



Agri machine market size the next 5 years

Combine Harvester

4 Wheel Tractor

Rice Transplanter







10,000 units market
320 millions USD Sales
32 millions USD Profit

15,000 units market
175 millions USD Sales
17 millions USD Profit

5,500 units market
28 millions USD Sales
3 millions USD Profit

Other machines- Reaper, Maize CH, Jute extractor, specialized irrigation pumps, seedling equipment, Onion planter, Aerator, Foo

















Achievements

2020

13 LSPs received loans

Total loan received worth USD 9,647

Partners

MFIs

2021

13 ABLE SMEs, 2 dealers,

6 MSPs received loans worth USD 25,529

Total loans received worth USD 547,294

Partners

BRAC Bank, IDLC

Q1 2022

12 ABLE SMEs. 4 Dealers,

2 MSPs received loans worth BDT 43,592,420 / USD 512,352

Target to facilitate USD 600,000 loan disbursement by end of 2022

Partners pipeline

BRAC Bank, IDLC, GUK, VPKA

















Key Innovative Agri Solutions

- Innovative businesses combining agriculture and technology
- Tested business model, digital agri service delivery channel, banking & non-bank financing, service aggregation, digital ordering and tracking.

iFarmer

Training 49 MSPs and 1371 farmers in FtF zone to provide women and youth with agricultural machinery service provision businesses.

Outreach plans - 100 MSPs and 3000 farmers in FtF zone

Bhalo Social Enterprise

W orking with 4 MSPs as bhaijans who will be providing agricultural services including financial services to 4000 farmers in Jashor.

Outreach Plans - Provide agri services to 4000 farmers in 4 Upazilas of Jashore



















Lessons Learned & Key Pain Points



Agri companies

- → Retail financing provided by importers and leadfirms show poor recovery rates -
 - Offer FI-like financing options, but lack capacity

Unfit to manage financial products/services



- → Loan need varies across FtF zone and across ABLE SMEs, dealers and MSPs business.
- → Loans from banks are preferred by ABLE SMEs over MFIs due to low interest rate but heavy documentation, lack of seasonal loan products works as discouraging factors.
- → Lack of collateral leads to failure to secure loans. Cumbersome land valuation process, weak financial recording keeping act as barriers.
- → Renewal of environmental clearance certificates



- → Mobilizing big ticket size loans requires head office level involvement/validation rather than regional level approval.
- → Financial management training can be strengthened to improve loan refusal rate and aware about loan application procedures.
- → Continue innovating financial products to improve creditworthiness

















Current Financing channels

GoB subsidy	50-70% subsidy
Banks (including state owned Banks)	8% interest rates from specialized agri loans for farmers Dedicated schemes from commercial banks providing loans up to BDT 20-50 lacs at 7%-8% interest rates
NBFIs	14-15% interest rate in agri financing schemes with longer tenure and bigger loan size.
MFIs	Avg. 24-25% interest rate on loans

Engaging Social Enterprises as financial service providing delivery channels

- **iFarmer** & Hello tractor has planned to connect tractor owners to farmers by tracking machines and financing them.
- **Bhalo social enterprise** has plans to provide farming outputs using credit facilities that reflects business cycle of farmers and to provide machines & spare parts by partnering with importers & manufacturers

















Conclusion

- SMEs have business diversity which makes it easier to repay loans compared to that of MSPs and Dealers.
- MSPs/ABLE SMEs lack collateral. Land valuation rather machines are acknowledged as proper collateral by FI/N BFIs.
- Continue innovations and digitizing/organizing financial records and book keeping of MSPs, ABLE SMEs and dealers to make them bankable.
- Explore opportunity for a **special purpose vehicle to provide asset based financing** by using tracker system for machines.

















Strategic Pathways Forward

Co-designing blended finance facility with partners: Explore using financial and non-financial instruments for ABLEs(e.g. hub/incubators/accelerator etc.)

Facilitate access to loans and credit purchase facilities for ABLEs

Linking ABLEs with financial institutions/non-bank financial institutions

Loans should focus on allowing ABLEs to fulfill prioritized objectives

Continue facilitation of access to loan and inventory financing for selected dealers working with lead firms

Facilitate access to loans and credit purchase facilities to women headed SMEs.

Conduct a study to assess current & alternative financing products & delivery channels in the agri machinery market



















Scopeof Access to Finance Study

Deep analysis of the financial services available and required to allow agriculture based light engineering (ABLE) SMEs and machinery service providers (MSPs) to improve and expand their businesses.



























