AGRIALLIS
Science for Agriculture and Allied Sector: A Monthly Magazine
Volume 5, Issue 11
www.agriallis.com

Article Id
AL04274

VALUE CHAIN FINANCING IN AGRICULTURE

[1]C. Vaishnavi* and [2]Prashanth. B

Email
vaishnavi.choudam@gmail.com

[1]Division of Agricultural Extension, ICAR-IARI, New Delhi, India
[2]Department of Agricultural Extension Education, University of Agricultural Sciences, GKVK, Bangalore, India

Value Chain Finance (VCF) refers to financial services and products strategically distributed throughout the various stages of a value chain to enhance investments, returns, and the overall competitiveness of the chain. It involves both internal financing within the value chain and external financing from foreign and domestic sources. Agricultural Value Chain Finance (AVCF) utilizes value chain finance principles to support agriculture, aiming to improve funding, loan repayment efficiency, and relationships among value chain members. The institutional framework for AVCF in India involves various ministries, government agencies, banks, and financial institutions. AVCF employs diverse financial instruments to meet the specific needs of chain participants, ranging from product financing and receivables financing to risk mitigation products and financial enhancements. Different models and strategies are explored, emphasizing the importance of strategic partnerships and risk control measures. The document also delves into AVCF models in practice, emphasizing the role of Farmers Producer Organizations (FPOs) as anchors. The case study explores the implementation of VCF in the transition of farmers from rice to maize cultivation in Odisha, India. The study reveals that internal and external financial institutions play crucial roles in facilitating funding for VC actors. The conclusion emphasizes the pivotal role of technology and collaborative efforts in strengthening AVCF and fostering sustainable agricultural development.

Value Chain Finance

Value chain finance is the term used to describe financial services and products that flow to or through any point in a value chain and allow investments that boost the returns on their investments as well as the chain's expansion and competitiveness. These include enhancing financing at particular stages of the value chain to boost the chain's overall competitiveness and including several parties and utilizing connections to reduce or mitigate risk.It encompasses both foreign and internal financial sources.

•Financing that occurs within the value chain, such as when a lead company advances money to a market middleman or a supplier extends credit to a farmer, is known as **internal value chain finance.**

•Value chain interactions and processes enable funding from outside the chain, known as **external value chain finance**. An example of this would be when a bank lends money to a farmer on the basis of a contract with a reliable buyer or a warehouse receipt from an approved storage facility.

When using a value chain strategy, one must take into account both the risks and returns of the value chain actor requesting financing as well as the risks and returns of the finance provider. Financing for a value chain might come from value chain actors themselves, banks, microfinance organizations, other non-bank financial institutions, or a combination of these actors. These players may be involved in a value chain financing arrangement for a variety of reasons, and these factors influence the ways in which they are prepared to provide financial support for an investment in value chain upgrading.

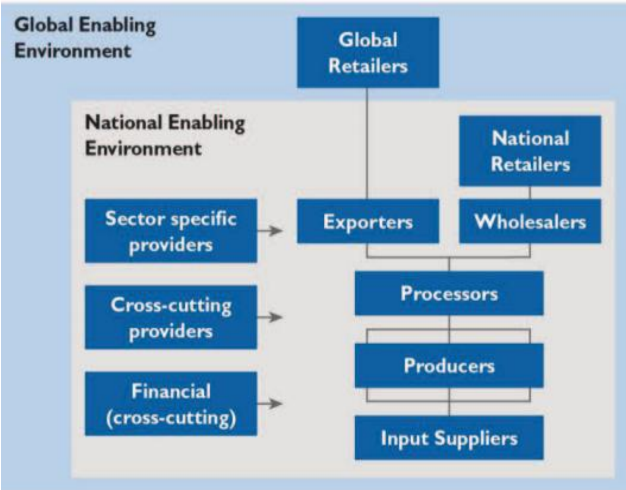


Fig.1 Normal value chain structure

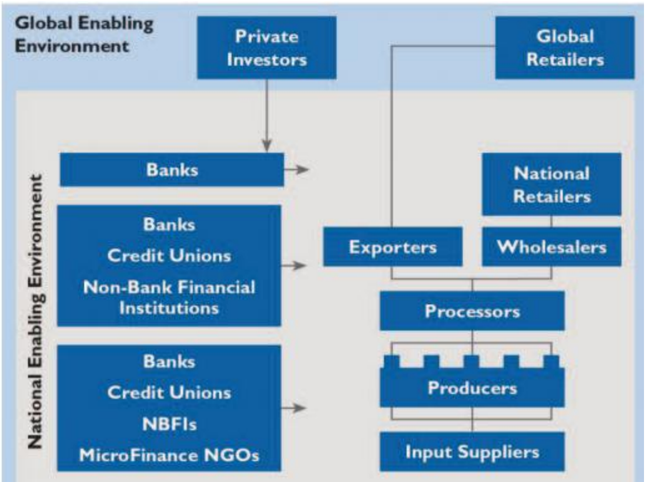


Fig. 2. Adding finance to the value chain

Agricultural value chain finance (AVCF)

VCF provides a chance to increase funding for agriculture, enhance loan repayment efficiency, and fortify or combine relationships between value chain members. Identifying the funding required to strengthen the chain, customizing financial products to meet the needs of chain participants, lowering financial transaction costs by directly discounting loan payments at the time of product sale, and these are just a few of the ways it can enhance the quality and efficiency of financing agricultural chains.

A financial strategy and collection of tools known as AVCF can be used to finance agribusiness and agriculture. Reduced agricultural expenses and financing risks, as well as enhanced financial access, can all be facilitated by AVCF.

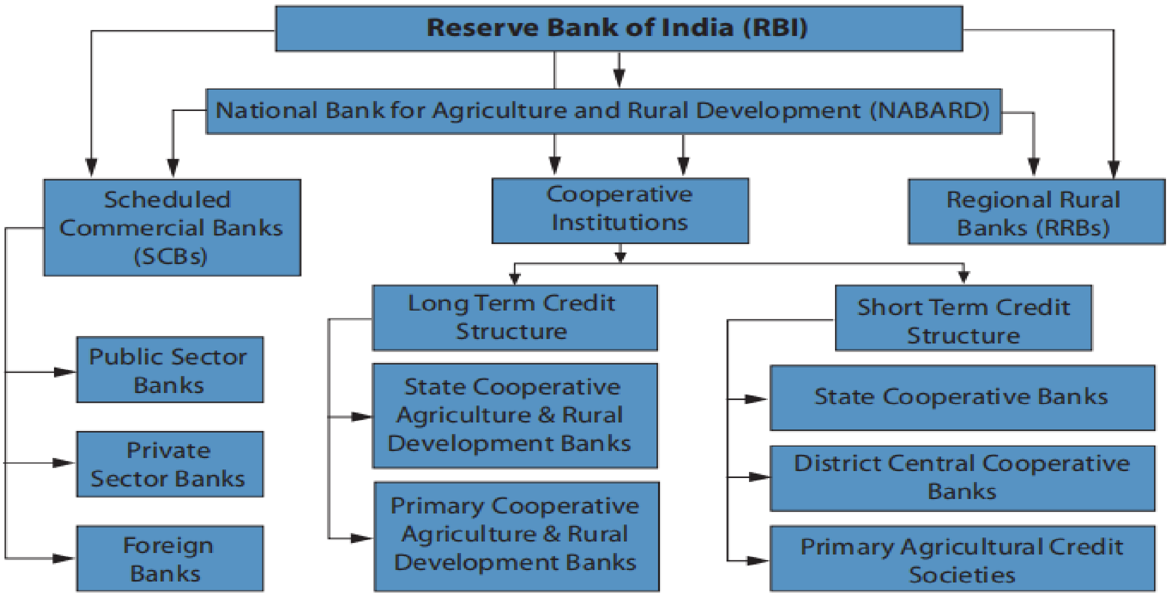


Fig.3: Institutional framework of Agricultural Value Chain

Institutional Framework of Agricultural Value Chain Finance in India

The institutional framework for agricultural value chain financing comprises of various ministries, government agencies, banks, financial institutions and apex bodies like Reserve Bank of India (RBI) and National Bank for Agriculture and Rural Development (NABARD). The framework indicates vast network of financing institutions across the country.

Instruments to promote agricultural value chain finance

AVCF is first and foremost a funding strategy. It ascertains the financial requirements of chain participants and the most effective way to finance them by applying an understanding of production, value-added, and marketing activities. It is possible to apply or modify a wide range of cutting-edge financial tools to satisfy certain financial needs. Financial instrument categories that are frequently utilized in agricultural value chain financing includes:

Category	Instrument
Product financing	Trader credit • Input-supplier finance • Marketing and wholesale company finance • Lead-firm financing
Receivables financing	• Trade-receivables finance • Factoring &Forfaiting
Physical-asset collateralization	• Warehouse receipts finance • Repurchase agreements (repos) • Financial leasing (lease–purchase)
Risk mitigation products	• Insurance • Forward contracts &Futures
Financial enhancements	Securitization instruments • Loan guarantees • Joint-venture finance

Types of Value Chain Finance

1. Giving value chain participants credit, savings, guarantees, or insurance

- Seasonal loans or advances from buyers to farmers
- Agro-processors providing credit to farmers
- Input providers supplying in-kind of loans to producers
- Buyer out-grower schemes that involve credit (often alongside inputs)
- Short-term, medium term loans as working capital from microfinance institutions
- Long-term fixed asset loans from large financial institutions
- Financial firms providing partial guarantees to leverage lending to value chain actors

2. The formation of strategic partnerships via funding provided by a mix of value chain participants and financial establishments

- Market facilitators partner with banks fordeveloping credit franchise
- Commodity exchange links future buyers and sellers to reduce producers' price and marketing risks
- Bank lending to cooperatives and farmers' associations based on forward contracts with farmer groups
- Market facilitator links buy-back arrangements as a guarantee for fixed assets (such as drip irrigation)
- Financial institutions create a 'risk-sharing model' through a trust fund.

3. Providing instruments or services to control risks related to pricing, production, or marketing

- Screening and/or collection services for banks interested in lending to affiliated producers
- Warehouses that use 'receipts' for secured products, which producers can use as collateralfor loans
- Insurance companies that manage production risk for producers and lenders.

Models for AVCF

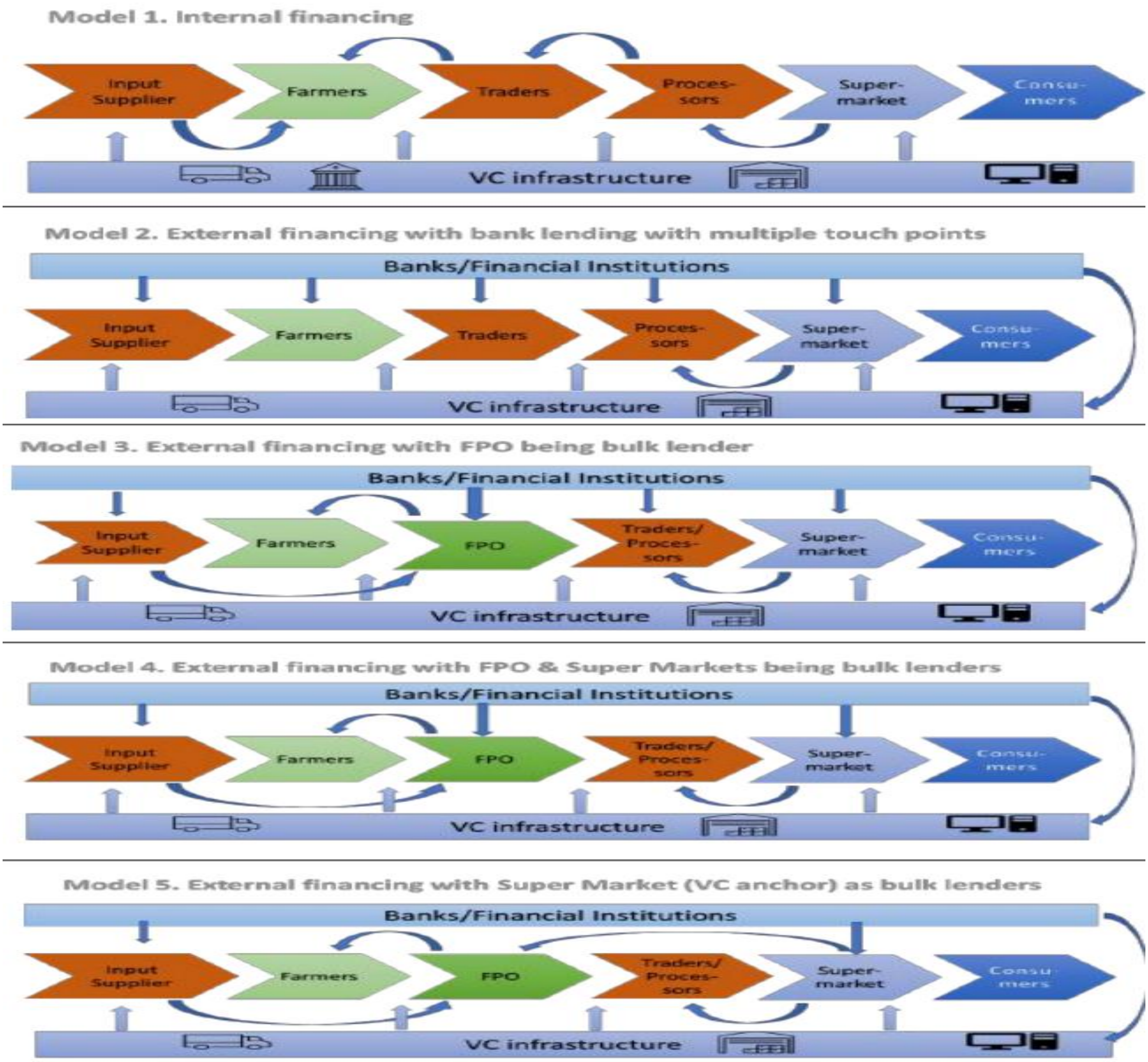


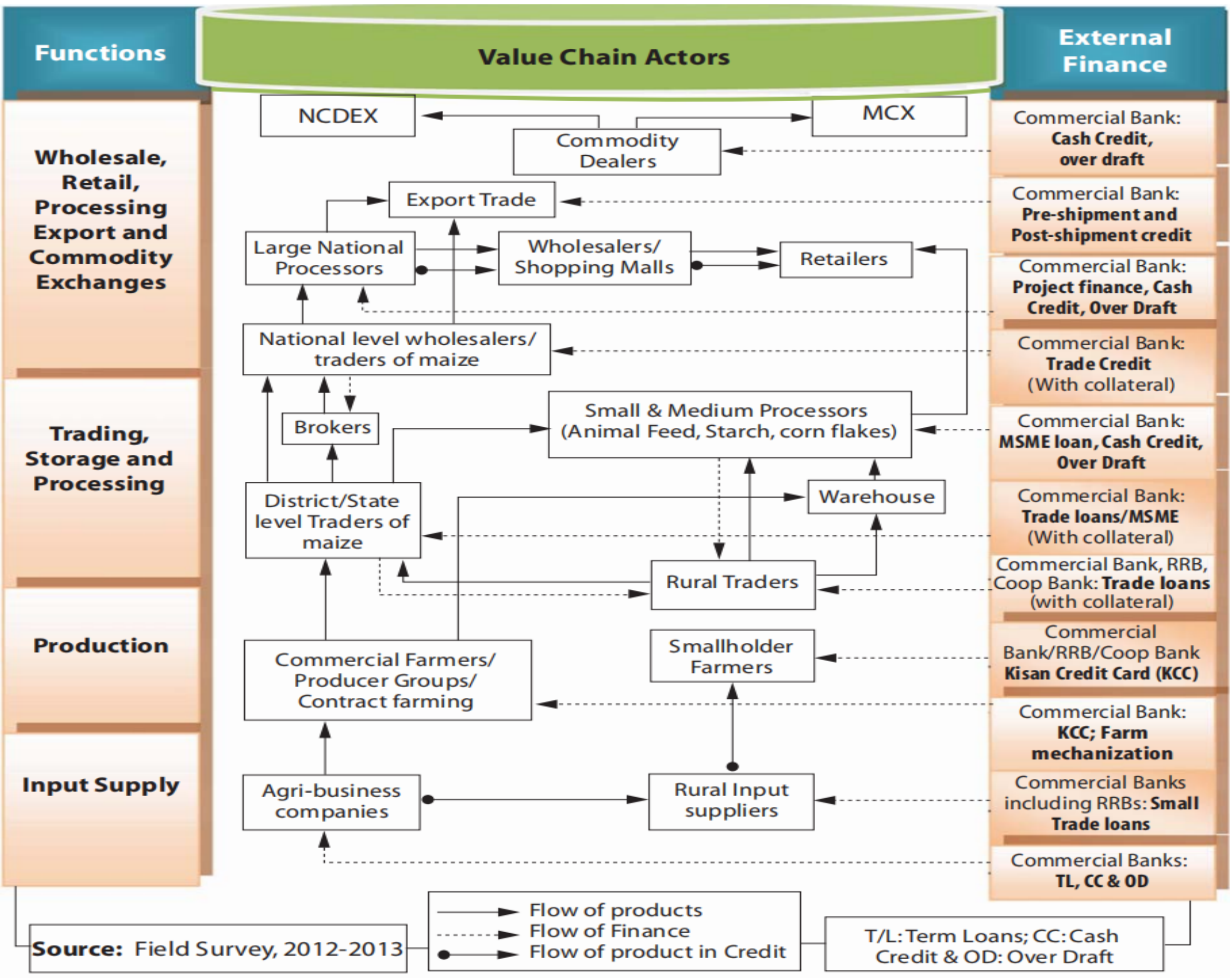
Fig.4 Different models present in AVCF

Parameter	Existing practice	FPOs as the anchor for farmers	With VC anchor (VCA)
Models	**Models 1 and 2**	**Models 3 & 4**	**Model 5**
Modus operandi	Business as usual approach. Banks give loans to whoever they can & informal lending happens. There is no anchor for the VC	Model 3. FPOs take bulk loan from banks & lend to members Model 4.FPO and Food retail company as two anchors	Financing through VCA which will aggregate the credit needs of the entire VC including producers and negotiate with bank
Pluses:			
Producers/VC partners	No specific benefits	Lower transaction costs, lesser hassles & cost of documentation, loans possible without individual security	TC of VC partners decline. Small players too can access credit easily. Certainty of supply, direct from farmers at lower cost
Banks	No specific benefits	Lower transaction costs, higher recovery probability	Lower transaction costs due to wholesale credit, Higher recovery probability
FPO Management/ VC anchor	Not applicable	FPO can earn commission on credit transaction	FPO/Anchor can earn commission
Minuses:			
VC nodes/partners	High transaction costs. Sub optimal, high cost borrowing. No coordination among players. Hence, duplication of efforts leading to inefficiency. Exploitative tie-ups among VC players	VC operators other than farmers will have to continue with existing credit arrangements; FPO management bears the accountability	VC Anchor/FPO management will bear additional accountability and load of financial transactions
Banks	High transaction costs. Sub optimal lending. Have to deal with multiple players. More effort per unit business	Concentration risk	Concentration risk
Other issues		Regulatory concerns to be addressed	Regulatory concerns to be addressed

Case Study

Value Chain Finance to Maize in Odisha State of India

The Odisha agricultural department initiated a project in 2010 to transition farmers from rice farming to maize growing. This is the variation of the special maize plan. This programme, which will cost INR 155 million, is another collaboration with private seed enterprises for 2011. This represents a 26.6% increase over the INR 120 million spent the previous year on providing farmers with a comprehensive kit of insecticides, fertilizers, seeds, and bio fertilizers. The scheme's coverage area was 30,000 hectares in 2010, rising to 40,000 hectares in 2011, and staying the same in 2012.



Lessons Learned

The major lessons learned after detailed study of the maize value chain and access to finance by the actors of the chain:

- When it comes to the value chain actors' ability to obtain funding, both internal and external financial institutions play significant roles.
- The combination of trader's credit and commercial bank financing is the most effective source of funding for the Odisha maize value chain.

● Banks are more ready to lend money to value chain participants whose products are vertically linked with other players than to farmers since farmers do not assume as much risk.

● Banks prefer to deal with the group of farmers/producers/cooperatives that are bigger legal entities than directly with the farmers.

● Farmers with low levels of financial literacy pose a greater risk to financial service providers because they may misuse loans or occasionally worry that having credit could result in the seizure of their property.

Conclusion

An environment that supports infrastructure and shared facilities at competitive prices is necessary for the success of AVCF. All venture capitalists, for instance, require transportation or logistics, AI, ICT, IT-enabled services, and regular and cold storage, among other cutting-edge digital infrastructure services. The AVCF can be facilitated by the development of postharvest infrastructure through GoI programs like the Agri Infrastructure Fund (AIF) scheme, which can strengthen capacity at the PACS, FPO, agriculture entrepreneurs, and agri start-up levels.

Fin techs and agri startups have the potential to transform the AVCF. They can assist in giving the VC players experiences that are flexible, effective, affordable, and unique. They have the ability to democratize currently available services such as block chains, invoice-based trade, Trade Receivables Discounting System (TReDs), and digital connection within agri-value chains.

References

APRACA Report, 2013, Value chain financing in Agriculture: Case studies from India.

IFAD report, 2012, Agricultural value chain finance strategy and design.

NABARD report, 2022, Financing Agricultural Value Chains: With FPOs as Pivots.

https://www.nabard.org/auth/writereaddata/tender/0808222219rural-pulse-issue-XXXVIII.pdf

USAID FS Series, 2009, Value Chain Finance.

Value Chain Finance, http://www.marketlinks.org/good-practice-center/value-chain-wiki/value-chainfinance#:~:text=What%20is%20Value%20Chain%20Finance,and%20competitiveness%20of%20the%20chain.