

Towards Viksit Bharat@2047 Technological Innovations and Policy Options for Eastern Region



ICAR Research Complex for Eastern Region

ICAR Parisar, P.O. Bihar Veterinary College
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Towards Viksit Bharat@2047: Technological Innovations and Policy Options for Eastern Region

Editors: Abhay Kumar, Anup Das, PC Chandran, SS Mali, DK Singh, P Bhavana, Kumari Shubha, Arti kumari and Sarfaraj Ahmad

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The Director,
ICAR-Research Complex for Eastern Region
ICAR Parisar, Patna- 800014, Bihar, India
Ph: +91-0612-2223962, FAX: +91-0612-2223956
E-mail: director.icar-rcer@icar.gov.in
Website: www.icarrcer.icar.gov.in

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Model for Structural and Functional Analysis of Makhana Value Chain

Period of development: 2017 - 2021

Developers:

DK Singh, Abhay Kumar, IS Singh, Naresh Chandra, Ujjwal Kumar

Background:

Makhana producers faces many issues like inefficient marketing channels, lack of mechanization leading to higher harvesting cost and shortage of organized popped makhana processing industries. Despite higher demand and remunerative price in consumer market, makhana farmers and primary processors are not getting good share in its value chain. In order to enhance the effectiveness and efficiency of makhana marketing system, proper understanding of its value chain is required which can help in devising market policies for enhancing farmers' profitability and their socio-economic status. Present study was conducted to analyse the makhana value chain in the country.

Description of the technology:

A model was developed to analyse the makhana value chain which included different aspects of its production as seed, processing as popped makhana, value addition as different products, marketing and consumption by ultimate consumers. Production aspects included estimation of cost of cultivation of makhana seed as well as cost of processing. Both structural and functional analysis was done for national market of popped makhana. Structural model of makhana value chain was developed to find out the different stakeholders involved at different levels from its production to consumption and their interdependence on one another in the value chain. Marketing margins of these stakeholders was also estimated. Functional model for all value chain actors was also developed to study the role of each stakeholder in the chain. Functional analysis studied the role played by the important value chain actors.

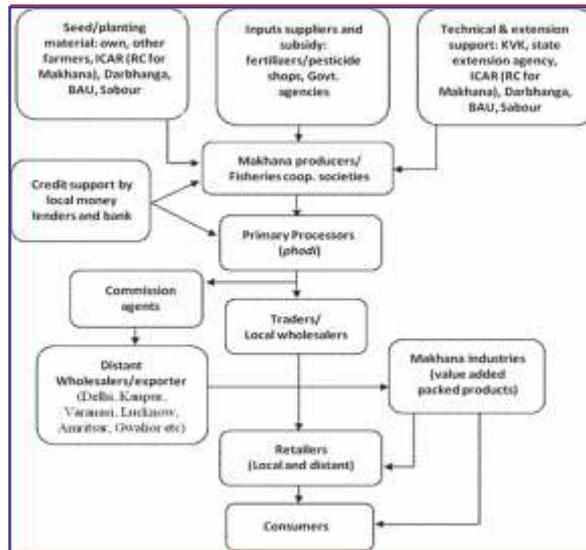
Farmers – Processors - Local wholesalers - Distant wholesalers- Distant retailers - Consumers has been identified as the most important marketing channel of popped makhana contributing almost 70% of total trade. Marketing cost, market margins and price spread were studied at national market and share of each stakeholder in consumer rupees was estimated. It was found that share of farmers, processors, local wholesalers, distant wholesalers and distant retailers in final consumer price was 27.62, 8.63, 5.03, 13.9 and 19.56 per cent respectively. This makhana value chain is prevalent in whole country.

Commercial potential:

The technology can be offered through consultancy services, licensed, or outsourced to the State Agricultural Department, development agencies, RKVY, NGOs, and Makhana growers.

Impact:

Makhana Industry and Policy Makers



Structural model of makhana value chain

Agro-eco region suitability:

North Bihar and Adjoining Makhana producing states

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Singh DK, Singh IS, Kumar U, Kumar A. and Bhatt BP. 2018. Traditional Wisdom of Mallah Community regarding Makhana Production and Processing in North Bihar, *Indian Journal of Extension Education*, 54 (2): 76-82.