Ricebean: Demand Preferences and Marketing System

Doreen Bürgelt
Department of Agricultural Economics, University of Kiel
Introduction

- Doreen Bürgelt, MSc
  - Supply chains
  - Food economics

- Prof. Dr. R.A.E. Müller
  - Major research area: Innovation & Information of agriculture in developed and developing countries
  - Research experience in India

- Prof. Dr. M. von Oppen, Ph.D
  - Major research area: agricultural marketing and hedonic price analysis
  - Research experience in India
Content

- FOSRIN
- Network
- Demand Preferences
- Marketing System/ Supply Chain
FOSRIN

- Ricebean – *Vigna umbellata*

- Two central parts
  - Identify preferences = as part of breeding goals
  - Integrate ricebeans into legume market

- Hypothesis
  - Variability of ricebeans
  - Obstacles in supply chains or marketing systems

- Importance of improved ricebeans
Network and Information Flow

- Consumer
  - Market
    - Prices (Ricebean, other pulses)
  - Ricebeans
    - Analyzed characteristics
    - Selection -Index
    - Breeding goals
      - Breeders
        - Improved Ricebean
      - Farmers
      - Market
        - Market introduction
  - CAU Kiel
  - Analyzed Marketing system

Breeding goals

Consumer

Market

Prices (Ricebean, other pulses)

Ricebeans

Analyzed characteristics

Selection -Index

CAU Kiel
Demand preferences

- Develop a Market-based Legume Traits Value-Index (MLTVI)
- Link ricebean prices to willingness-to-pay for particular traits
- Identify relevant characteristics: visible (evident) and invisible (cryptic)
- Substitute: from the view of consumers
- Translate this information into a selection-index for breeders
- Hedonic Price Analysis

\[ P_i = b_i + a_{i1}q_{i1} + a_{i2}q_{i2} + \ldots + a_{in}q_{in} + e_i \]

- \( P_i \) = Price for one unit of a bean sample \( i \)
- \( b_i \) = Constant
- \( a_{ij} \) = Coefficient for the characteristic \( j \) in the sample \( i \)
- \( q_{ij} \) = Amount of characteristic \( j \) in sample \( i \)
- \( e_i \) = Random error
Demand preferences

\[ \frac{\delta P_i}{\delta q_{ij}} = P_{ij} \]

- \( P_{ij} \) = marginal price change of \( i \) when the amount of \( j \) changes in one unit
- \( = \) relative preference for a characteristic

Tasks:
- Consumer and middlemen surveys
- Collect \( i \) and \( P_i \)
- Laboratory analysis to quantify \( j \)
  \[ \downarrow \]
  - Hedonic Price Analysis
Marketing System/ Supply Chain

- Way of ricebeans from farmers to consumers
- Depict members (trader, wholesaler), their function, role and relationships

Tasks:
- Interviews and observations
- Identify:
  - Typical members and characterize key activities
  - Volume and value of ricebeans in the supply chain
  - Information linkages
  - Informal and formal transaction relationships (clientelization, bargaining)
  - Formal rules and regulations (grading systems etc.)
  - Costs, prices, margins
Marketing System/ Supply Chain

- links in supply chains:
  - Flow of ricebeans
  - Flow of information about ricebeans
  - Specific exchange relationships which connect the members of the supply chain

- Connection to every stage of the supply chain (breeding, grow, marketing, sales)
- Influence the value of ricebeans at an early stage
Marketing System/ Supply Chain

- Ricebean launch:
  - Markets research
  - Product development
  - Product pricing
  - Product promotion
  - Supply chain management
Thank you for your attention!