



The Project for Improving Livelihood of Small-Scale Farmers in Cajamarca, Republic of Peru



Improvement of purple corn supply chain for increase of small scale farmers' income

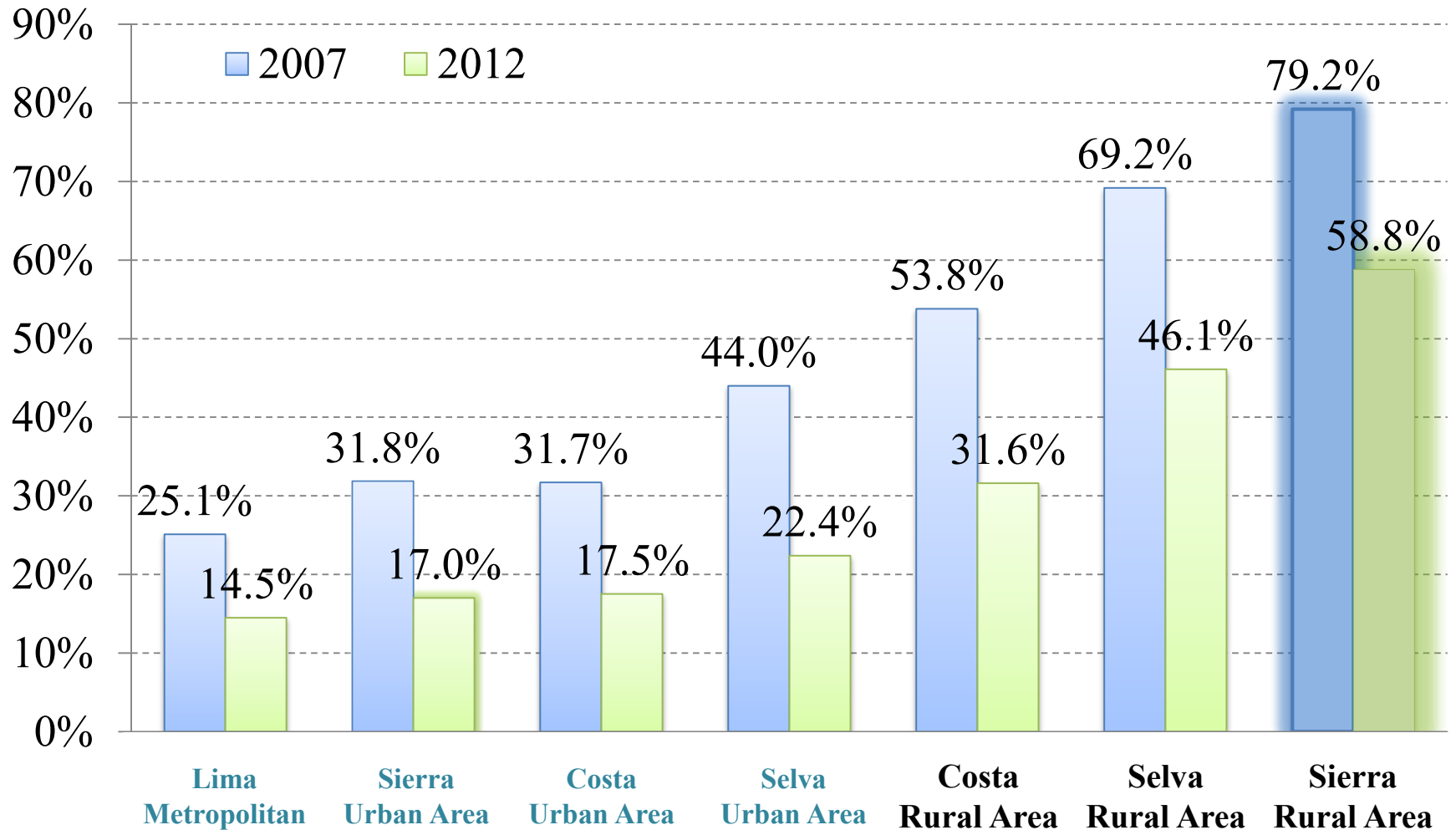
APEC Symposium on Inclusive Business in Agriculture, Forestry and
Fisheries for Rural Development and Poverty Alleviation



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Population living in Poverty Line



Resource: Encuesta Nacional de Hogares 2007-2012 (National Households Census 2007-2012)
 Instituto Nacional de Estadística e Informática (National Institute of Statistics and Informatics)

Actual Situation of Agriculture (Cropping Technology)

- Insufficient use of agricultural inputs (high quality seed, fertilizer and other agricultural chemicals)
- Insufficient cropping management (fertilization, weed and pest control, maintenance of farming soil etc.)



- **Low quality of product**
- **Low cropping yield**
- **Low sustainability of cropping**

Low value products



Maize cropping farm covered with weeds

Actual Situation of Agriculture (Farming Management)

- Production without plan (cropping and sales)
- Individual production activities (cropping, purchase, sales)
- Unclear value and quality standard of the products
- Low confidence to other actors such as buyer



- **Unstable and/or small volume of shipment (order) of product**
- **Unclear shipment (order) date of product**
- **Unstable quality of the product**

High cost (risk) supply chain

Individual production without plan



Objective and Challenge

Objective

- Improvement of effectiveness / income of the supply chain through strengthening of farmer's capacity as an important actor of the chain and cooperation with other actors of the chain

Challenges

- Improvement of products market value
- Improvement of cropping technology
- Improvement of farming management (production plan)



Purple Corn

Crop	: Purple Corn
Variety	: INIA 601
Potential crop. yield	: 3.0-6.0 metric ton/ha
Elevation	: 2,500 - 2,900 m
Use	: Natural pigment (fresh and dry)



Evaluacion of Market Value

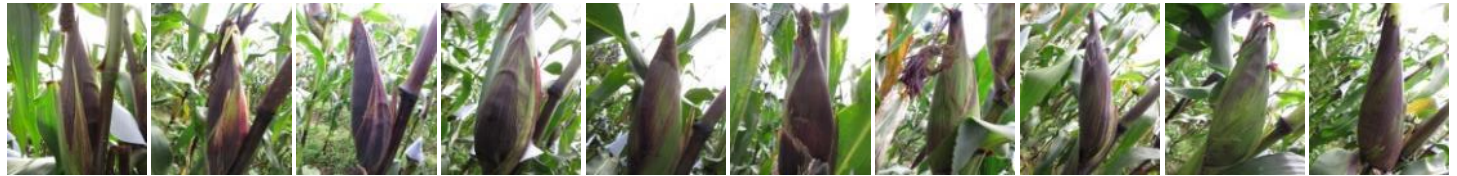
- Comparison of color content between different varieties



Variety 1



Variety 2



Variety 3



Variety 4

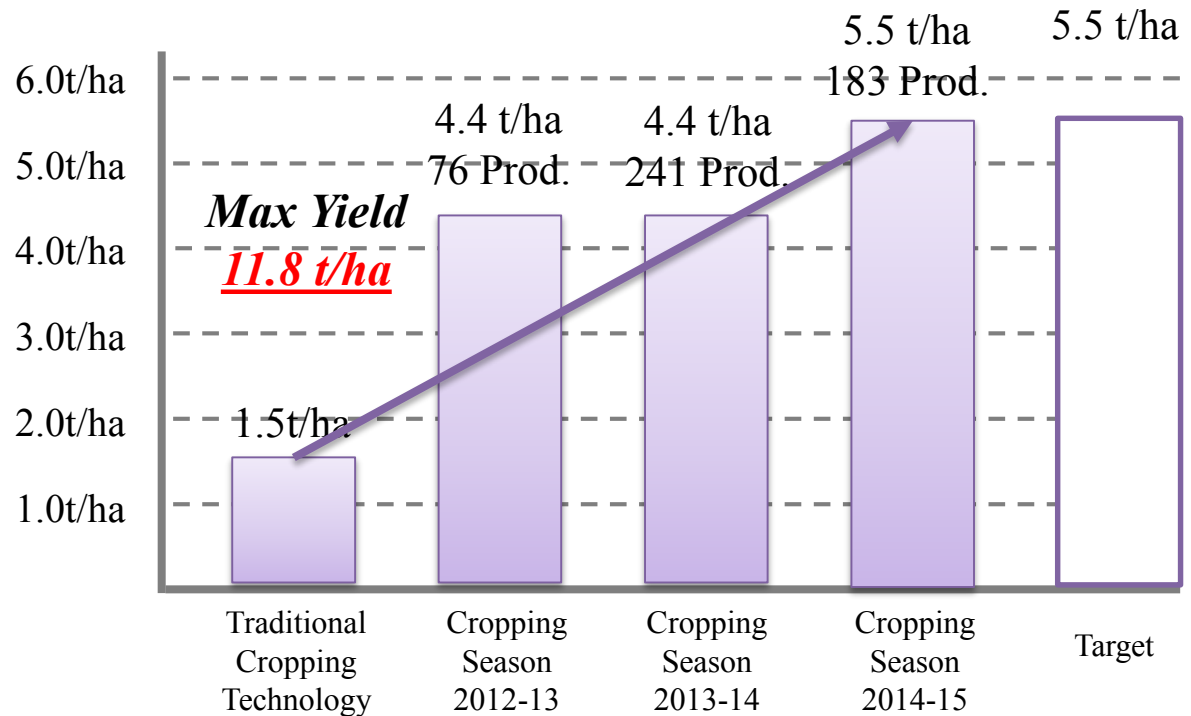


Improvement of Cropping Technology

High quality seed



Adequate
Cropping Technology

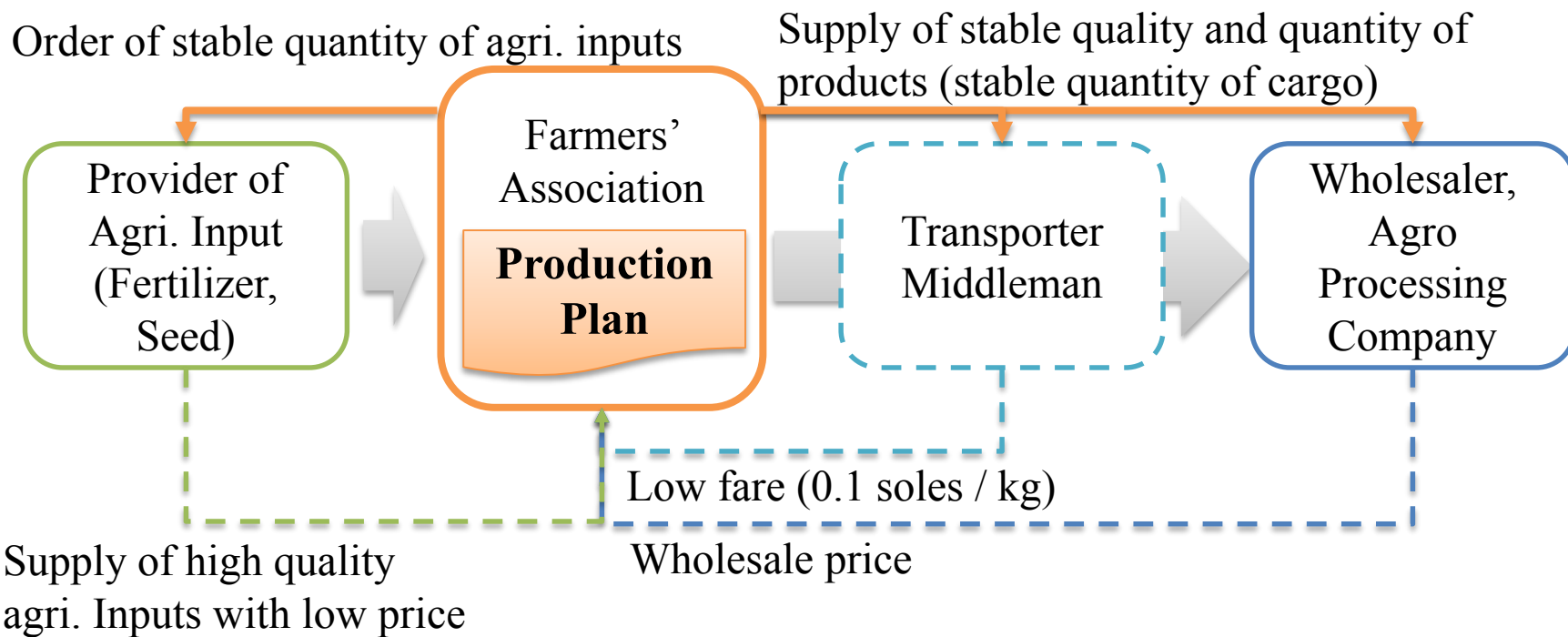
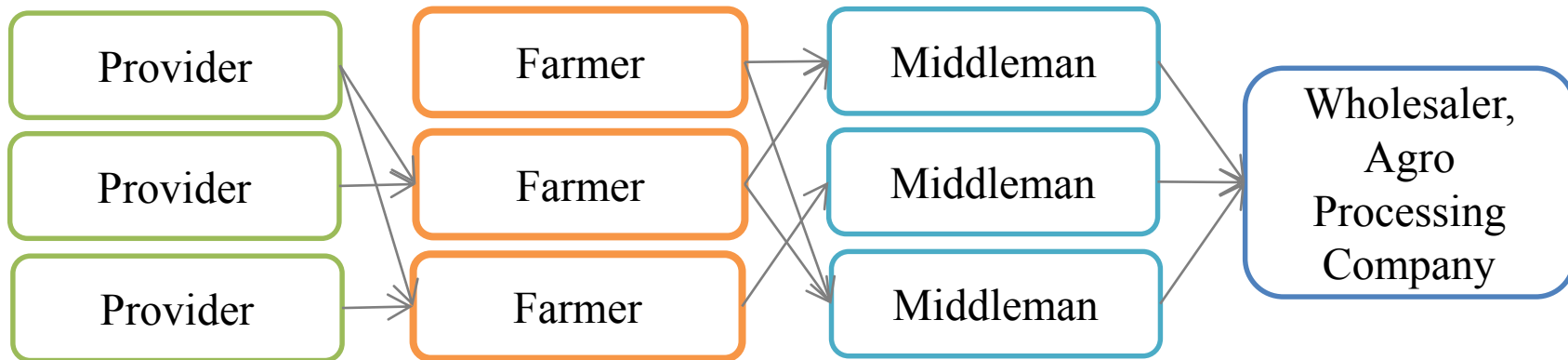


Diversification of Products

- Trial of production of crashed purple corn core (raw material for extracting natural pigment) with an agro processing company



Improvement of Farming Management



Conclusion and Suggestion for Promoting Inclusive Business

1. Enhancement of farmer's understanding of **roles, advantages of different actors** of supply chain / Improvement of farmer's awareness as an important actor of supply chain.
2. Strengthening of **basic skills** (crop cross cutting) of cropping and farming management.
3. Enhancement of farmer's understanding on importance of not only **“increase”** and also **“stability”**.
4. Assistance for **improving relationship between actors** of supply chain.
5. Establishment of farmers' **association with selected farmers** which can provide **“services”** to non member farmers.