Integrating neglected crops in global value chains: the case of quinoa in Southern Bolivia

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1. Background
   1.1 Rationale and motivation
   1.2 Introduction to the case study

2. Quinoa value chain in Southern Altopiano in Bolivia
   2.1 Farmers wellbeing
   2.2 Upgrading
   2.3 Governance

3. Conclusions
   3.1 Different development models for quinoa’s future
Recent food crisis contributed to deepening the debate about food security and the right of people to define their own food systems.

Increasing interest has been shown regarding how so-called neglected and underutilized species (NUS) can contribute to the fight against malnutrition and poverty.

But what happens when one of these NUS becomes rapidly and increasingly integrated in global markets?

Case Study:

Quinoa, an Andean grain cultivated essentially in Bolivia, Peru and Ecuador

Quinoa has been “rediscovered” as a “superfood” because of its high nutritional values

BACKGROUND
Quinoa figures in Bolivia

First evidences of quinoa cultivation
New food regimes – quinoa becomes "neglected"
New quinoa production systems
First producer organizations are established
First private firms
Quinoa boom

Questions:
Q1: How quinoa boom affected farmers wellbeing?
Q2: How quinoa VC changed? And what the consequences?

FIELDWORK INFORMATIONS

- 2012 November – 2013 April
- Interviews with privileged speakers (market map)
- Farmers survey
- Semi-structured interviews with agroindustrial players (private firms and producer organizations)
- Workshop with exporters and international buyers
BACKGRUND
Southern Altopiano characteristics
Self-consumption

Input providers

Quinoa farmers

- Associated
- Independents

- Residentes
- Permanentes

Selling

Private firms

Producers Associations

Informal Intermediates

Informal markets

FARMERS

Consultant/Technical assistance

AGRO-INDUSTRY

Government (local and central level, formal and informal institutions)

BUYERS

Aid programs

Public Procurement

Retailers

Restaurants

Organic

Fair trade

Mainstream markets

Smuggling - Peru

Domestic Market

Export Market (US, EU, Asia...)

Trade Chambers of quinoa exporting organizations

Certifiers
## 2. VALUE CHAIN ANALYSIS
### Farmers well-being

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Indicators</th>
<th>Comments</th>
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<tbody>
<tr>
<td>Economic</td>
<td>• Incomes&lt;br&gt;• Credit (access and utilization)</td>
<td>• Increasing specialization&lt;br&gt;• Price volatility&lt;br&gt;• Cost of production rising&lt;br&gt;• Inequalities increasing</td>
</tr>
<tr>
<td>Social</td>
<td>• Education&lt;br&gt;• Basic assets&lt;br&gt;• Auto-evaluation wellbeing</td>
<td>• Presence of large governmental infrastructural programs</td>
</tr>
<tr>
<td>Nutrition</td>
<td>• Food consumption score&lt;br&gt;• Food expenditure&lt;br&gt;• Quinoa consumption</td>
<td>• Role of intermediates&lt;br&gt;• Need of better understanding about urban consumption drivers</td>
</tr>
<tr>
<td>Environment</td>
<td>• Soil erosion&lt;br&gt;• Lama/Ha ratio&lt;br&gt;• Biodiversity loss</td>
<td>• Need of better understanding of “underutilization” of biodiversity</td>
</tr>
<tr>
<td>Cultural identity</td>
<td>• No food uses&lt;br&gt;• Variety preferences&lt;br&gt;• Traditional institutions (Ayní)</td>
<td>• Reverse migration flows</td>
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2. VALUE CHAIN ANALYSIS
Upgrading

KEY QUESTIONS:
- Technology improvement
- Reorganizing activities within the V.C.
- Identify areas to increase added value

EVIDENCE:
- Social and economic improvements
- Organic certification
- Increasing distances between farmers and buyers
- Decrease in farmers associations market share
- Low development of agro-industry
- Emerging differences between farmers associations and private firms value chains
(Lack of) Agroindustry development:

Linkages:
- Better biodiversity utilization
- Diminishing pressure over production increase
- Development of new products more appropriated to domestic market

The “private firms” chain seems to be more active in this field:
- Larger financial capacity
- Better networking activity
- More active in differentiating market opportunities
2. VALUE CHAIN ANALYSIS
Governance

**KEY QUESTIONS:**
- Identify formal and informal rules
- Identify who establishes the rules and monitor their enforcement
- Effectiveness of existing rules

**EVIDENCE:**
- Change in rules is associated to the shift from “producer-driven” toward “buyer-driven”
- Increasing use of codified standards
- Traditional rules (institutions) are more effective for some use (e.g. land conflicts)
2. VALUE CHAIN ANALYSIS

Governance

<table>
<thead>
<tr>
<th>Governance as driving</th>
<th>From producer-driven to buyer driven</th>
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</thead>
<tbody>
<tr>
<td>Governance as linking</td>
<td>From relational to market structure</td>
</tr>
<tr>
<td>Governance as normalizing</td>
<td>From domestic-market to civic-market convention</td>
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Changes (and conflicts) about governance reflect in low effectiveness to face questions emerging after the quinoa boom

Examples:

<table>
<thead>
<tr>
<th>Organic vs. sustainable</th>
<th>Buyers are interested in organic production, but this by itself in not able to ensure sustainable production over time</th>
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<tbody>
<tr>
<td>Equilibrium between agricultural activity and other economic activity (e.g. lama breeding)</td>
<td>Some standards (e.g. fair trade) have prescriptions about it, but they are few effective</td>
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<td>Price management</td>
<td>It is now “fair” for farmers; too high for private firms and buyers; presence of different expectations for public policy in this area</td>
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3. **CONCLUSION**  
**Different development models for future of quinoa**

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<thead>
<tr>
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<th><strong>Product focused model</strong></th>
<th><strong>Farmer focused model</strong></th>
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<tbody>
<tr>
<td>Governance driving</td>
<td>Buyer</td>
<td>Producer</td>
</tr>
<tr>
<td>Price level</td>
<td>Low</td>
<td>High (but associated with public policy to promote domestic consumption)</td>
</tr>
<tr>
<td>Product policy</td>
<td>Standardization</td>
<td>Specification and diversification</td>
</tr>
<tr>
<td>Producer specialization</td>
<td>Yes</td>
<td>No (do not detach quinoa VC from other economic activity, e.g. lama VC)</td>
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<td>Policy demanded</td>
<td>Support to increase productivity</td>
<td>Support to domestic market</td>
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<td>Market priority</td>
<td>Exports</td>
<td>Domestic</td>
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<tr>
<td>Risks</td>
<td>Environmental sustainability, low productivity, new country entries (suppliers)</td>
<td>No rise in domestic consumption (and resulting price and income decrease)</td>
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Commodity model vs. Food sovereignty model

- The establishment and development of a quinoa GVC was fundamental to enhance social and economic conditions for Bolivian farmers.

- Now players (not only farmers) have to face new risks deriving from this success itself (social and environmental sustainability)

- Changes and conflicts along the VC reveal different strategies to manage this new situation

- Public policy is the missing player in quinoa story

THANKS!

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