Transformation of the vegetable supply chain in Mar del Plata (Argentina) in the face of raising health concerns

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Building sustainable urban food systems

Urban food issues is taking more and more importance in the political agenda

City scale: relevant to build a food governance oriented toward sustainable food systems

Agriculture and food systems have long been polarized in the scientific and the public debate by "conventional versus alternative" models: dual perceptions about the best suited model to go toward the construction of sustainable food systems.

Recent research examines the porosity of both models: intermediary forms and the coexistence of models in local territories is thought as a possible condition to build resilient and sustainable food systems.
Argentinean context

Agricultural landscape dominated by agricultural industrial model

Duality between “conventional” model and model oriented toward agroecology

From mid-2000s, rising health concerns

→ municipal laws voted to prohibit the use of pesticides

Mar del Plata:
- 2nd horticultural belt of the country
- Municipal law on the use of pesticides voted in 2008

→ How do current models answer to local food issues?
→ Is the municipal order a lever/a break to sustainable development of the vegetable food chain and of the urban and periurban territory?
Agricultural belt: Patchwork of vegetable production and intensive cereals and oilseed crops
Changes in urban and periurban territory

Change of socio-economic profile of periurban dwellers
Spatial expansion of Mar del Plata: new periurban dwellers

- Extension of urban peripheries
- Extension of settlements linked to the development of periurban activities (vegetable production, quarries)
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- Extension of urban peripheries
- Extension of private/semi-private periurban residential areas
- Extension of settlements linked to the development of periurban activities (vegetable production, quarries)

1 km

Legend:
- **Yellow** - Extension of urban peripheries
- **Light brown** - Extension of settlements linked to the development of periurban activities (vegetable production, quarries)
- **Pink** - Extension of private/semi-private periurban residential areas

N

1 km
Changes in urban and periurban territory

Change of socio-economic profile of periurban dwellers

Little systematized knowledge on production free from agrochemicals

⇒ Belief that producing without chemicals is not feasible
⇒ Some larger farmers moving farther from city
⇒ Small-scale farmers try to adapt
⇒ Estate agencies taking advantage of the situation
Changes in the vegetable supply chain

Two « strong » models

Conventional

« Producción agrícola »

Alternative

« Agroecología »
Dominant model
Farms from <5 ha farms (mostly Bolivians) up to 70ha farms (European descendants)
Characterized by:
- Use of agrochemical inputs
- Share cropping system
- Marketing activities organized for large volumes
- Produces sold outside the local area
« Conventional » model

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Share-cropping system ("Bolivian scale") ➔ impact on input management
Lower use => because of fear of controls
“Quality” of produces based on visual aspects
Important role of private agronomists
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Answers expectations in terms of volumes but engenders strong reactions from civil society associations

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“Quality” of produces based on visual aspects
Important role of private agronomists
Isolated farmers in the “conventional landscape”
Small-scale farming (<2ha)
Characterized by:
- Production free from agrochemical
- Short circuits
- Important links with programs (technical advisors)
Lack of outlets (bottleneck)
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Little systematized knowledge
Little/no adapted input in agronomy shops
Few agronomist involved
Individual and informal on-farm tests
⇒ Difficulty to extend this model of production
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« Alternative » model

Closer from the society’s new expectations but is not accessible to the large majority of producers and consumers

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Intermediate/hybrid forms

Many actors do not find their place in conventional or alternative models

Intermediary forms emerge or get a greater legitimacy in the current context of rising health issues
Many small-scale vegetable producers find difficult to get an interesting income through conventional channels

→ Compromise between conventional and alternative channels
→ Compromise for farming practices
→ Compromise for prices

Example 1
Intermediate/hybrid forms

Example 2

A wholesale market with complicated location...

1. Stalls
2. Administration offices
3. Agronomy shop
4. Area owned by the railway company
5. Gravel road used for market’s access
Intermediate/hybrid forms

Example 2

Most of producers/retailers operating through this wholesale market are in average of smaller-scale than the ones operating through the two other markets

→ adaptation of the functioning to this type of actors

Reputation on good quality of vegetables: smaller-scale producers, face to face transaction, anchoring in local supply

Allows small retailers to exist: impact on vegetable offer within the city
Conclusion

The changes engendered by the municipal order go beyond productive aspects ➔ Small-scale farmers in delicate situation

Municipal order adopted abruptly: break between producers and consumers But can be a lever to build a concerted policy for urban and periurban planning

Public actors support strong and well identified models. Intermediary forms do not find visibility in that political landscape ➔ they bear more local community’s expectations than a political vision

Intermediary forms = compromises between social, economic and environmental aspects ➔ the way to sustainable development?