

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

Ophélie Robineau, geographer

UMR Innovation, CIRAD

Maria Laura Viteri

INTA, Department of Social and Economic Sciences



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

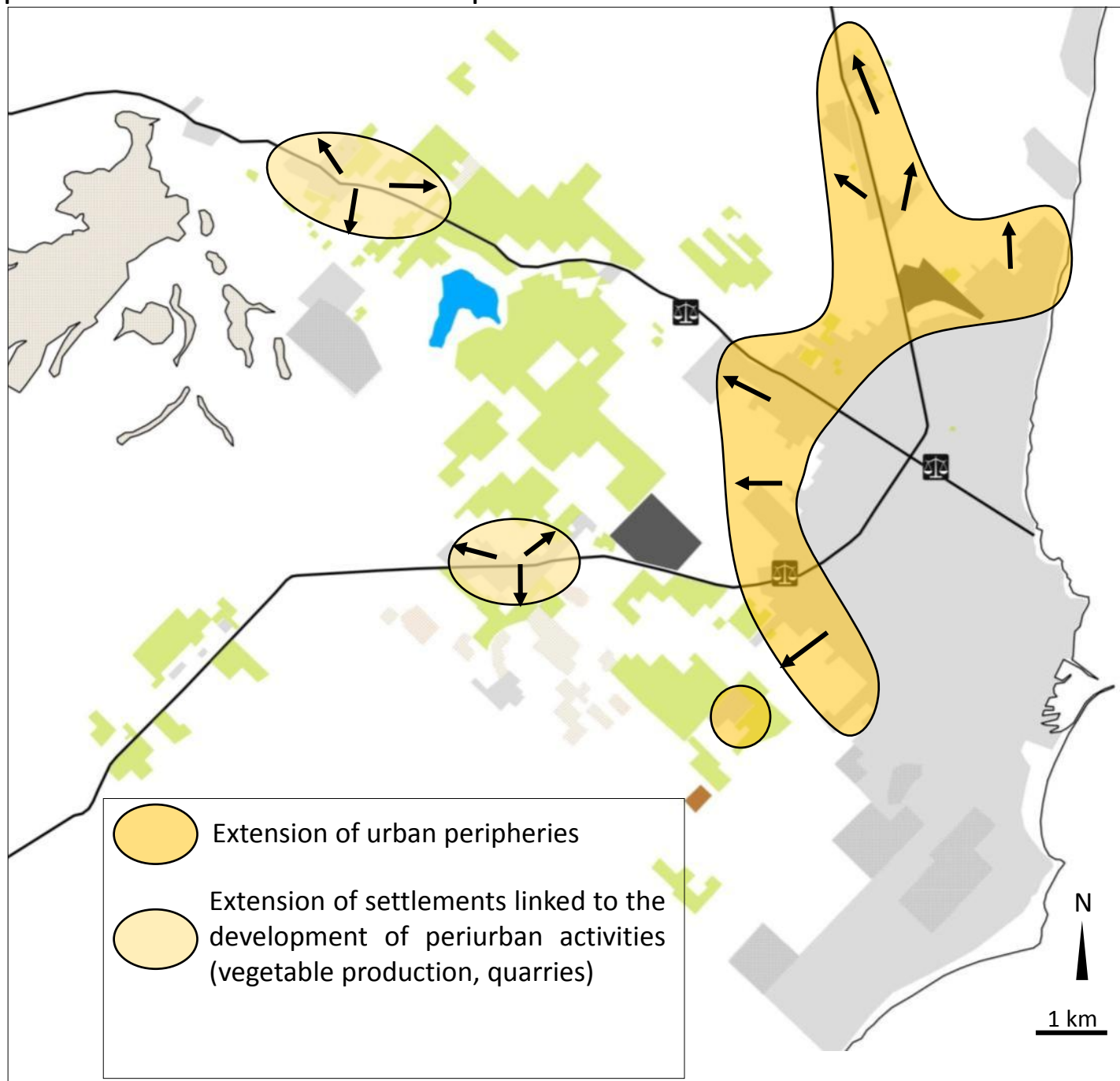


Changes in urban and periurban territory

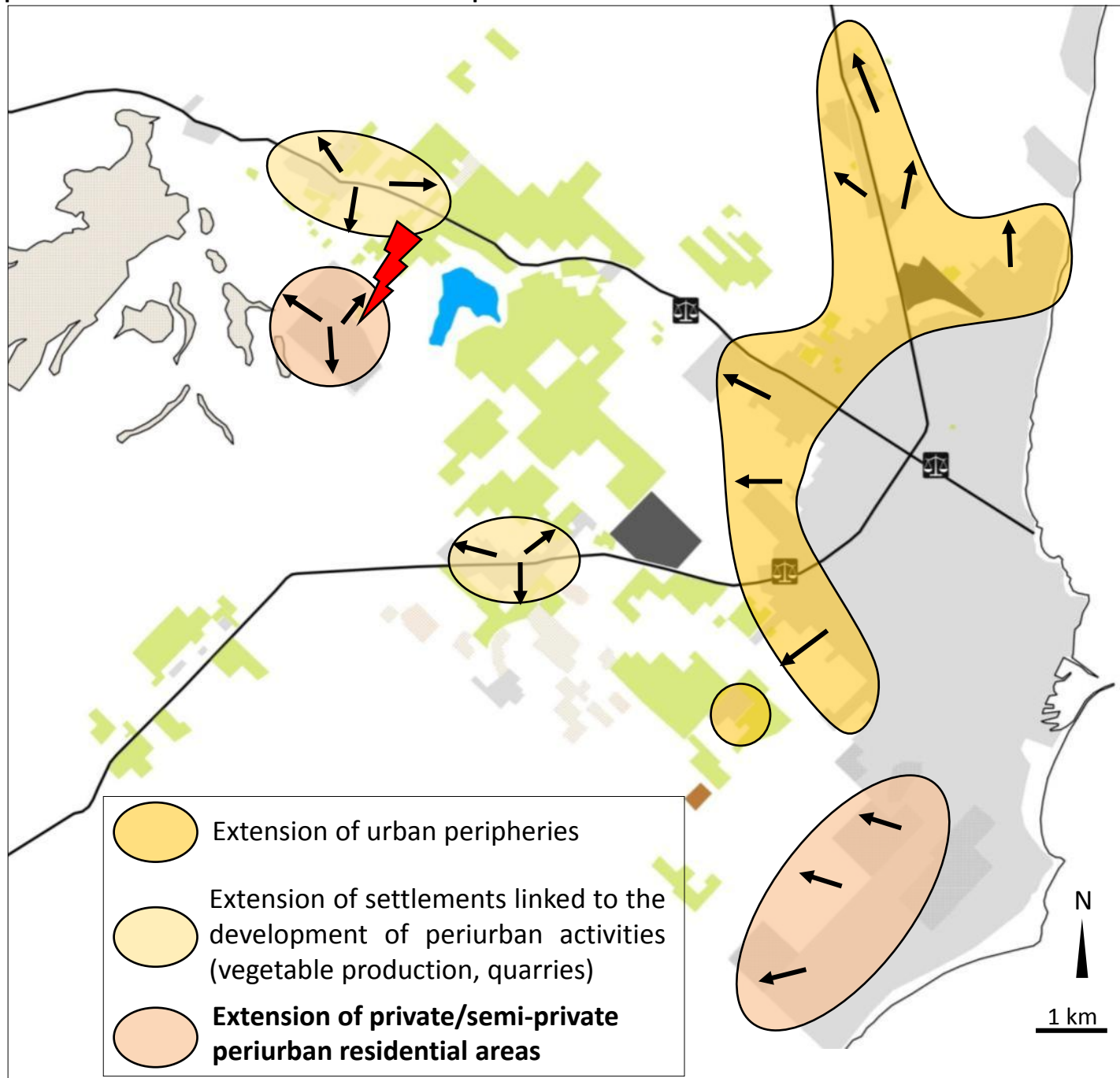
Change of socio-economic profile of periurban dwellers



Spatial expansion of Mar del Plata: new periurban dwellers



Spatial expansion of Mar del Plata: new periurban dwellers



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* »



« Conventional » model

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

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

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



« Conventional » model

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

Answers expectations in terms of volumes but engenders strong reactions from civil society associations

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



« Alternative » model

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)



« Alternative » model

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)



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



« Alternative » model

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)

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



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



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

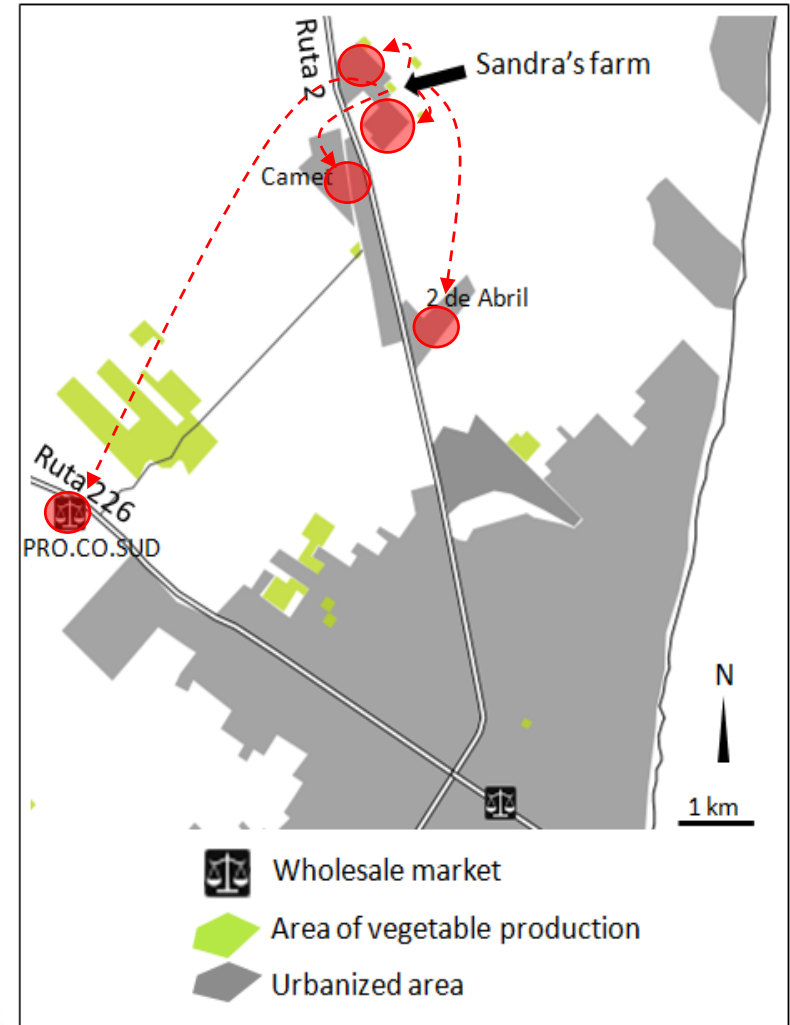


Intermediate/hybrid forms

Example 1

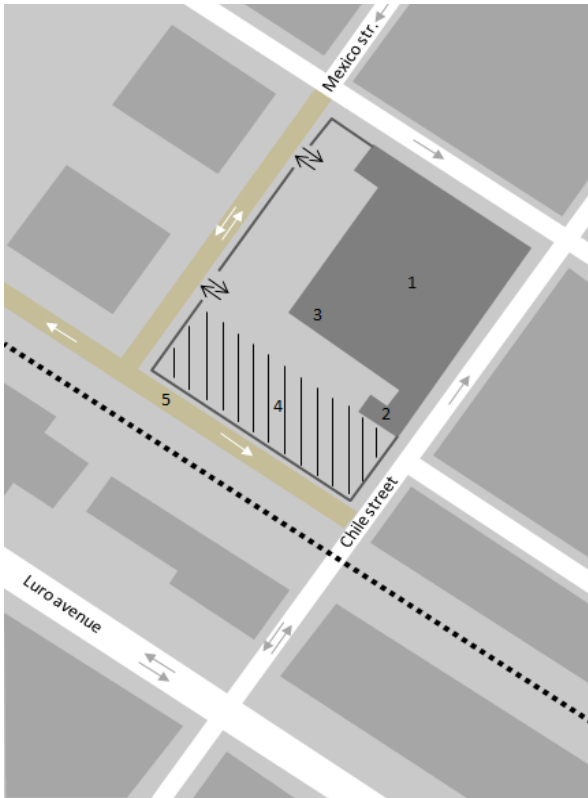
Many small-scale vegetable producers find difficult to get an interesting income through conventional channels

- ➔ Compromise between conventional and alternative channels
- ➔ Compromise for farming practices
- ➔ Compromise for prices



Intermediate/hybrid forms

Example 2



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

A wholesale market
with
complicated location...



Intermediate/hybrid forms

Example 2

... transformed in advantage

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 food 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?**

