TRAJECTORIES OF CHANGES OF PIG FARMS IN VIETNAM: COMPARISON BETWEEN A NORTHERN AND A SOUTHERN DISTRICT

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Pig breeding, the country’s 1\textsuperscript{st} meat production sector, is mainly produced in small farms ... 

- Mixed farming systems (crops – livestock)
- < 10 pigs: 87\% of pig breeding HH
- < 3 hectares

(Agri-Census 2011)

...but it is changing rapidly!
Evolution of total number of pigs in Thong Nhat district according to different pig herd size

Changes in pig production = intensification of production systems (Lemke et al. 2008)

- Replacement of local pig breeds by more productive breeds
- Development of artificial insemination
- Increasing dependence on industrial feed
- Market integration (inputs and outputs)

A specialization and increase of pig raising promoted by the Vietnamese government (subsidies, companies farms, …)
Questions

What is the diversity of “Farm trajectories” followed by farmers involved in pig production in Mai Son and Thong Nhat district?

What are the internal and external factors explaining those changes?
Material and methods: 2 contrasted regions in Vietnam

**Mountainous district**, one of the poorest due to poor access to profitable markets but also to various biophysical constraints to agriculture especially remote mountainous terrain.

**Lowland district**, involved in the planning program of reorganization of the livestock sector since 2009. Very quick development of pig production.
Material and methods: Interviews of farmers

Interview of 20 pigs farmers in each district

Selected to obtain a diversity of pig production size, farm location, combination of activities and ethnicity (in Mai Son)

Questionnaire to describe the detailed “trajectories” of the family-farm system starting at the installation: Family composition; workforce; Land and crops (types, use, practices); Pig raising (structure and management); Income and loans of the household
Mai Son

3 ethnic groups (1 H’Mong / 9 Thai / 9 Kinh)
0 to 3,5 ha
0 to 11 sows / 0 to 500 fatteners
Sale of pigs (14 farms), sale + consumption (5), consumption (1)
1/3 of local swine breeds

Thong Nhat

1 ethnic group (20 Kinh)
0,3 to 10 ha
0 to 450 sows / 0 to 4800 fatteners
Sale of pigs (20)
100% exotic breed
Material and methods: Data analysis

Analysis of each farm’s trajectory and comparison between farms to identify:
Results: 2 different models of development of pig production

An homogenous semi industrial technical system in Thong Nhat

- Dependency to companies (AI, feed, veterinary products)
- No self consumption of pig => commercialization
- Same system: improved building, exotic breed, industrial feed
- High investment (to buy animals, to construct buildings)
- Contracted farms
More diverse in Mai Son

- Local and exotic breeds
- Self consumption and commercialization
- Use of local resources and industrial feed
- Diversity on housing
Results: the diversity of trajectories for pig farms

- **Specialisation in pig production**
  - Specialise in pig production with intensification and increase of the herd size

- **Increase of the herd size**
  - Increase the herd size on limited surface that imply other activities
  - Increase the herd size but with maintenance of crops activities

- **Diversification**
  - Keep a small size with on and/or off farm activities
Results: Impact of external factors

High influence of the value chain

- Inputs available
- Loans to buy feed for animals
- Marketing organized by companies (products…)
- Training
Results: Impact of external factors

Low influence of policies

- Few trainings organized
- Few farms concerned
- For Dong Nai policies for relocalisation of livestock activities are not effective (farms in the urban areas have to move to the livestock areas in 2020)

Cesaro, 2014
Results: Impact of internal factors

Influence of different internal factors at farm level

- Capital: to increase herd size
- Land: to develop crops activities or not; to increase pig production
- Workforce: to develop pig raising or other activities
Discussion and conclusion : what future for pig farms?

**Specialisation** one of the trajectory followed by farmers but **diversification** remains important. **Intensification** with different levels (breed, feed…) identified in most trajectories. Specialisation and intensification permitted by the development of value chain and market, but some constraining factors (land, labor, capital)

**A stronger influence of policies (livestock concentrated zones)** : a separation between 2 pig farms
- a more urban production for poorer farmers combined with others activities for local production and commercialization?
- a more industrial production in LCZ based on contracted farms ?

**Young people**: pig production is not an opportunity for young people for whom other activities (industrial or commercial) seem more attractive. What kind of workers on pig farms?
Thank you for your attention