Perception and management of avian pests by farmers

Représentations et gestion des pestes aviaires par les éleveurs

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Dynamiques de gestion des grippes aviaires à l'interface virus, oiseaux, Homme, Montpellier 22-24 Novembre 2011

Demand generally addressed to sociologists

Studying (farmers') perceptions

Main limits:

1. Identifying **biases**/ deficit in laymen perception
2. These biases affect **adoption** and acceptability by farmers of biosecurity measures,
3. But these biases can be corrected through **communication, education.**

Points of view versus biases in perception

Differences in perception are related to different "points of view" (rather than biases of perception)

Example: Poultry perception

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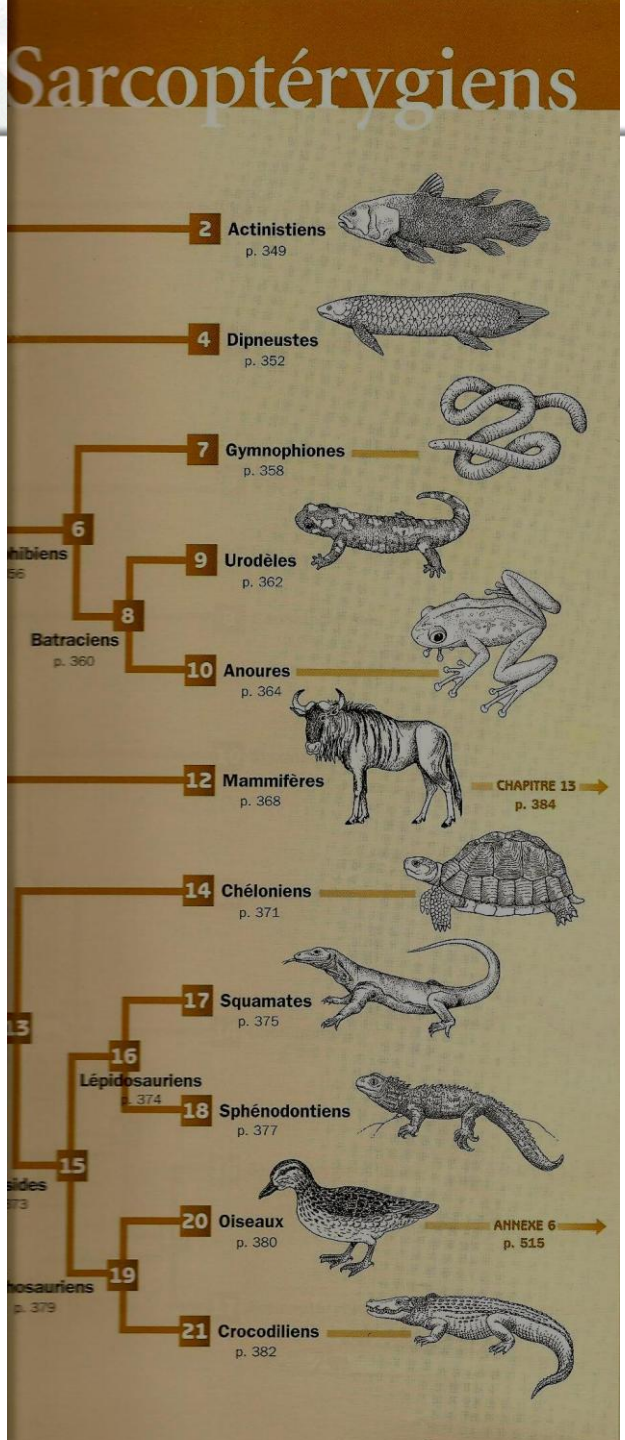
Poultry for zoologist ➔

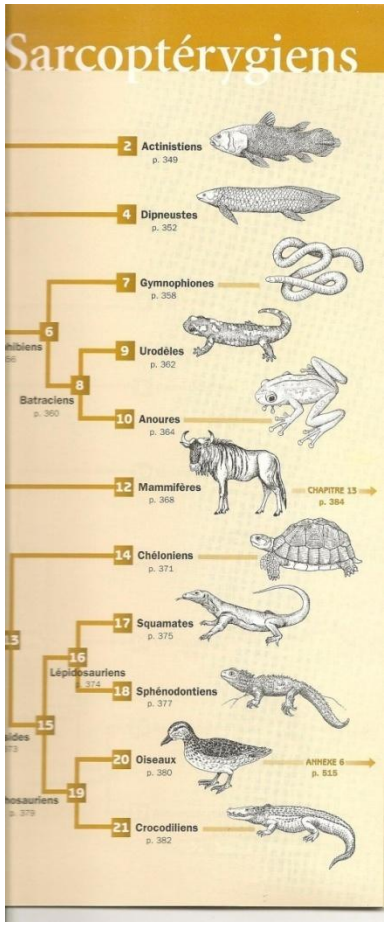


Poultry for a cook

Poultry for a farmer

Different knowledge (no mistake), legitimate, collective,...

No hierarchy between knowledge reflecting social hierarchy



Case studies

- Farmers
  - Vietnam, Thailand: H5N1
  - Ethiopia, Madagascar : Newcastle Disease and other avian pests

- Considering farmers as risk managers
- Identifying the logic of their practices rather than cognitive biases.

Result 1. Familiarisation with H5N1 risk

- From crisis to routine situations

➔Experiences vary according levels of intervention (international, national, local), leading to differing views of the problem

From crisis to routine situation: Vietnam

	Step 1 « crisis » (2003-2004) Farmers (+ institutions	Step 2: routine Farmers
Reference	*SARS*	*Avian Pests (Newcastle)*
Risk characteristic	Unknown, Dreaded	Experience based knowledge Limited impact ➔acceptable
Risk's dimension	epizootic, zoonotic, pandemic	Epizootic
Farmers' feeling of control	*low*	*high*
Farmers' management	Passive: reporting/ external support	**H5N1 managed like others avian diseases**

Local management and experts' recommendations

Experts' recommendations (IO):

- Prevention/ anticipation, pro-active
  - biosecurity: prevention and control of the spread of animal disease and zoonosis (OIE).

Local/laymen management (backyard farmers)

- Diversity of objectives in management of avian pests
  - Direct losses,
  - Economic impact at farm scale.
  - Limiting spread in a **limited** area = epidemiologic space (social and geographic space)

- These objectives can be reached through many poultry diseases management practices, not limited to prevention ones.

Diversity of farmers' risk management practices (routine)

Systematic prevention. Ex: regular vaccination, hygiene,...

Contingent prevention
(linked to trigger events: outbreaks, climatic conditions,…)

Mitigation (economic loss reduction): selling or consuming sick/dead animals *(only possible with small flock)*

Adaptation (loss acceptance): limiting the scale of the activity

Exposure avoidance: reducing livestock activity during the risky (rainy) season

Transference: buying pullet, (insurance)

Risk exploitation: speculating on risk

Rationality of farmers practices BUT production of negative externalities

- The spread of the disease
  - Mitigation (Consuming/ selling sick animals)

- The potential of development of poultry farming
  - Acceptance/ Avoidance: limits the possibility of development of the production

.➔need to think health in term of common good/ public good (collective interest ≠ ∑ individual interests)

Conclusions: local/ international, negociation/ participation

1. Farmers are risk managers (cf. Enterprise Risk Management Framework)

The objective is not maintain the integrity of the functions of farming system (not only animal health)

2. The representation by experts of EID and biosecurity hardly finds an echo at local level (no "glocalization")

International level: strategies of prevention and precaution

Local level: strategies of reaction (+++) and prevention (+/-)

3. Perception studies do not necessary aim at building communication campaigns **but to inform on the different communities of interests**

4. Health Management? Animal health is a public good. It requires collective action, **negociation (rather than participation)** between groups of interest in order to select problems and tools (taxes, incentives, compulsory regulation for global goods governance).

Comparison

	Madagascar	Ethiopia	Vietnam
A shared pattern	The more production factors are invested in poultry raising (intensification) ➔the higher the economic losses are when avian pests ➔prevalence of preventive strategies (ex ante) compared to reactive (ex post) strategies		
Critical distance	Increase with the level of intensification of the poultry system		
Specific strategies **(cultural and economic context)**	mitigation (selling and consuming sick or dead animals)	Cultural factors limit mitigation strategies	<u>Exploitation:</u> wait vs sell
Recovering practices	Poultry guarding contract		Credit