Tradition and innovation in Caribbean livestock farming systems: old rhum in new barrels.

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INTRODUCTION

- Lack of adoption of certain technologies at the farm level and particularly in tropical regions.

The transfer of technology (TOT) model classical mental map of how knowledge in the form of technology is developed and is transferred to farmers.

- Meanwhile, livestock keepers have steadily accumulated indigenous traditional experiences that have built sustainable LFS
Traditional!!!

Why?? What?? Who?? Where ??

Haiti

01

Context

And how??

Deep know -how

Guadeloupe
Different systems of tropical animal production

According to environment Resources, constraints, ...
Different systems of tropical animal production

According to equipment, markets, ...

But also, family, training, objectives, standards & references
_02 Facts
2. Use of by-products

exploiting the crop by-products at the farm level is very frequent

• Not practical
• Time consuming
• Unbalanced diet
• Poorly assessed

*The agro-industrial sector studied the interest of pellets production combining different non-conventional feed sources (on their nutritive and agronomic characteristics basis)

← further research are required
3. Creole remedies/ Trinidad&Tobago (Lans 2001, ethoveterinary) Guadeloupe (Marie-Magdeleine 2010 neutrocicals)

determining, through **an ethnoveterinary enquiry**, the natural or agro resources that are employed to cure the animals,

Lans 2001(from 28 ethnobotanicals)

<table>
<thead>
<tr>
<th>Scientific name</th>
<th>Common name</th>
<th>Plant part used</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Azadirachta indica</em></td>
<td>Neem</td>
<td>Leaves</td>
</tr>
<tr>
<td><em>Petiveria alliacea</em></td>
<td>Gullyroot</td>
<td>Roots</td>
</tr>
<tr>
<td><em>Ruellia tuberosa</em></td>
<td>Minny root</td>
<td>Roots</td>
</tr>
<tr>
<td><em>Stachytarpheta jamaicensis</em></td>
<td>Vervine</td>
<td>Leaves</td>
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has lead to acute **biochemical studies** …..

In vitro vs. in vivo / eggs, adults, L3 Compounds amino acid or terpenoid Alkaloids, terpenes, ...

... to enhance the use of **neutrociticals** (feed and health) against parasitism in SR
5. Di-moitié deeply embedded into the Caribbean society
Haiti (1985)/ St Lucia (1988)/ Guadeloupe (Salas 1989)

sharing the livestock capital by dividing the offspring between owners and breeders
* between the owner (frequently not a farmer) → (investments ..capital.. live-stock)
* and the breeder → ”land” and labour )

* that NGO use this system for half-half sharing between donors (NGO’s or is the key principle used for creating connective system international foundations) and poor and/or landless farmers where recipients agree to share the offspring of gift animals with others in order to implement animal activities within their farm-family unit
However some cases of subdued or rejected techniques although based upon traditional practices

→ Identify in terms of human values the causes leading to the rejection in an official context, while in an officious context they are relevant to the local farmers
How to allow synergistic interactions that promote diverse flows of traditional and modern knowledge for mutual learning.

Towards a changing vision: from the ‘top down’ approach to a participative approach of innovation.
Conclusions

contextualized research agenda
- reorganizing the innovation process while changing the mental map of TT for a territorial development plan embedded into the natural and socio-economic context
- based upon participatory action approaches to

* analyze the process of appropriation or rejection (identifying the cognitive and historical sources);

* improve organizational cultures and behaviors and fostering networks and linkages;

* aiming at introducing new products and processes that are socially or economically relevant to smallholder farmers and other actors in the LFS sector
Whatever the participatory action approaches can be
Thank you for your attention!!
Information and decisions of the farmer

Biotechnical processes of animal production

Between the 2 levels
Practices and data feed-back