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

2013



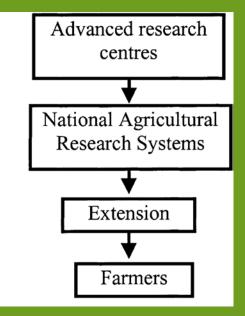
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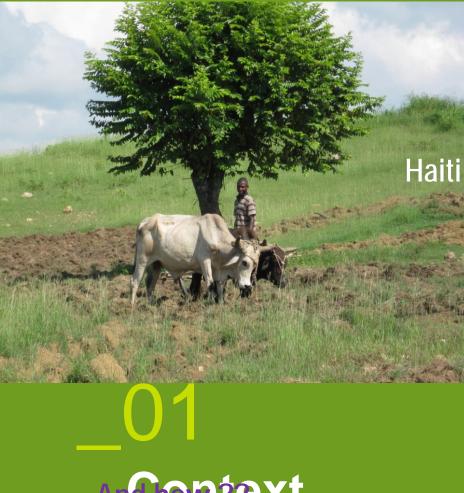


•lack of adoption of certain technologies at the farm level and particularly in tropical regions.

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 ??

### AnContext

#### Deep know -how

#### Guadeloupe

#### Different systems of tropical animal production

According to environment Resources, constraints, ...





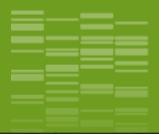
#### Different systems of tropical animal production



# Acording to equipment, markets, ...

#### But also, family, training, objectives, standards & references











#### 2. Use of by-products

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

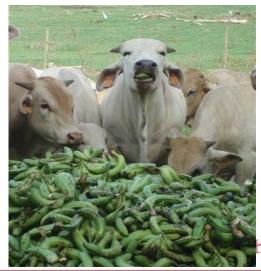
- Not practical
- Time consuming
- Unbalanced diet
- Poorly assessed

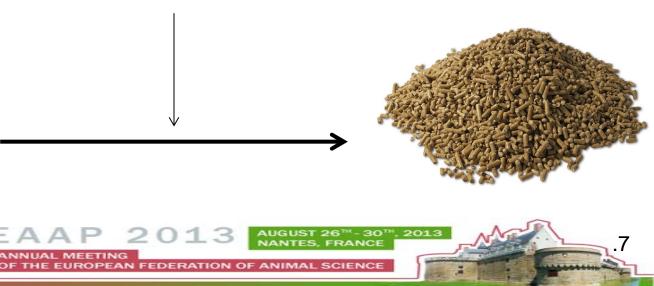




\*The agro-industrial sector studied the interest of pellets production combining different non-conventional feed sources (on their nutritive and agronomic characteristics basis)

#### $\leftarrow$ 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)

Scientific	Common	Plant part used
name	name	
Azadirachta indica	Neem	Leaves
Petiveria alliacea	Gullyroot	Roots
Ruellia tuberosa	Minny root	Roots
Stachytarpheta jamaicensis	Vervine	Leaves

has lead to acute biochemical studies .....

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



#### 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)  $\rightarrow$  (investments ...capital.. live-stock) \* and the breeder  $\rightarrow$  "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





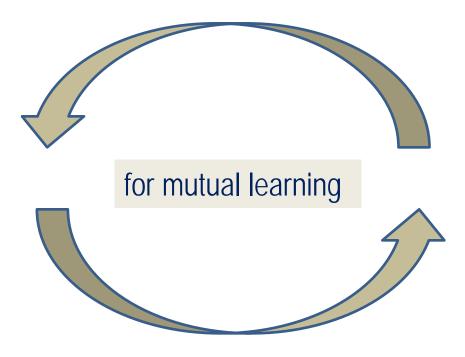
However some cases of subdued or rejected techniques although based upon traditional practices

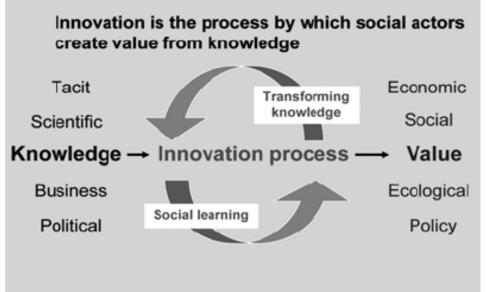
 $\rightarrow$  Identify in terms of human values the causes leading to the rejection in an official context, while in an officious context they are relevant to the local farmers





How to allow synergistic interactions that promote diverse flows of traditional and modern knowledge





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 socioeconomic 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





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### Thank you for your attention !



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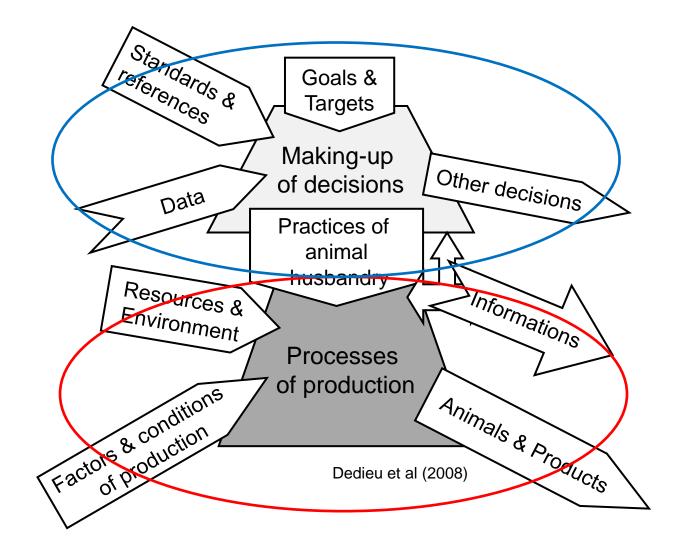
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AIVERSILE



Information and decisions of the farmerBetBiotechnical processes of animal productionBatdat

Between the 2 levels Practices and data feed-back