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# The future contribution of goats in redesigning livestock activities and value chains

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# The future contribution of goats in redesigning livestock activities and value chains

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**INRAE**

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# THE GLOBAL CONTEXT:

## The changes of the perception of animals by humans

“The philosophers have transformed the animals into machines, today they are seen as our neighbors” (Jacqueline Porcher)

- Providing animal welfare
- The economic stakes of the animal question (in vitro meat, milk from GMD yeasts, vegane products) : Defending the animal cause pays more than it costs

But if living and working intelligently and respectfully with animals is an emancipatory project, it is not compatible with the current economic system

# THE GLOBAL CONTEXT:

## The role of animal production in GHG emission, climate changing

FAO. 2006. Livestock's long shadow: Environmental issues and options, by H. Steinfeld, P. Gerber, T. Wassenaar, V. Castel, M. Rosales and C. de Haan. Rom

**The world meat consumption was quintupled between 1961 and 2018  
could grow 60% before 2080. Is it sustainable?**

- 73% of the use of agricultural lands are for animal production
- 7,1 gigatonnes CO<sub>2</sub> per year (14, 5% World GHG 60% due to cows)

# THE GLOBAL CONTEXT:

## The role of animal production in GHG emission, climate changing

But the abolition of livestock farming would pose serious economic, social and environmental problems.

- Livestock improves the food security of 1.3 billion people and for 600 million poor households is an essential source of income
  - Livestock (particularly ruminants) transforms biomass (coproducts, wastes) and lands (rangelands, schrubs) unusable for human nutrition
    - A dairy cow can produce until 4 kg animal protein from 1 kg vegetal protein
- During the XIX<sup>th</sup> century 1 billion arable lands have disappeared with the decrease of livestock farming
  - The key role of grasses in carbon sequestration
- Ruminants produce fertilizers (manure) for crops (integration agriculture-livestock farming)

The need for improving livestock farming systems and promoting healthier diets with less meat.

# THE GOATS TODAY:

## Intensification and artificialization; the impact of goats on environment

Since the 80's a renewed interest for goats but since 50 years with the same path than other animal sectors in favor of intensification and high performances:

More than 60% more heads between 1980 and 2000

Goat meat +60% from 2000 to 2020

Goat milk +53% from 2000 to 2020

But most of the goats heads are still in the hand of poor small holders in developing countries with low productivity

(+75% growth in Low individually family incomes)

Goats are a very small part of the GHG share (0,7 of the cattle heads )

# THE GOATS IN THE FUTURE

The winning cards of goats for future  
(multifunctionality, pluriactivity, valorisation of  
hinterlands, fight against poverty)

- The difficulties to change the processes of cognitive lock in unconsciously shifting all critical thinking
- The future of goat farming will depend on local dynamic in the rural territories and societies
- A regionalization scenario would be more favorable than a globalization one
- Enhancing diversity (of breeds, of systems, of resources)
- The need to build innovative technical models for pastoralism
- The challenge of education, training and research to make goat farming more attractive and more efficient with renewable resources
- The role of goats to make possible the agro ecological bifurcation