YOU'RE THE ONES EMITTING GREENHOUSE GASES!

AKA "HOW COWS AND LIVESTOCK FARMERS CAN HELP US FIGHT GLOBAL WARMING"
Hello dear friends, do you recognize me?

I'm the Devil.

I bet you've already heard the news: my friends and I have decided to destroy this planet. We are very well organized.

We are emitting 18% of the greenhouse gases that contribute to global warming. Muhahahaha!

But, why get so furious?

To be honest, we don't want this. The truth is, you are the Devil!
Unlike what most of you believe, the gas my friends and I emit are not facts.

You have a monogastric system, which means the colon is the main digestive organ, with us cows. It is the RUMEN, which is situated at the front of our digestive system. So we burp! Unfortunately for the planet, we burp methane (CH₄).

BUH-URRRRR!

However, we burp only 25% of the greenhouse gas emissions we are held responsible for. The rest is a consequence of the way you breed us. Before I can explain this, I need to remind you of something.

What does a cow do?

We could argue that I am a nourishment machine or just simply food. It do not be fooled. I am one of the first animals your children recognize. They call me 'moo-moo'. Draw me, sing about me, tell stories about me. My milk saves lives. You are proud to make great cheeses with it. I provide clothing, too. I don't blame you.

When I feel at ease with my environment, I create a virtuous cycle with it:

- I cultivate the fields.
- I maintain the land.
- I fertilize the soil.
- I transform grass into food.
- This earns me the right to burp every once in a while.
To feed these great animals, agricultural output has to increase. Intensive agriculture therefore requires:

- Deforestation, so there is more space to produce wheat and corn to feed the cattle.
- The use of pesticides and chemical fertilizers on these artificial pastures.
- Fossil fuels to maintain the mechanization of mass-production.

An example in Europe: During the post-war period, a socio-political time marked by food shortages and fueled by the bright promises of technology, the EU countries deliberately engaged in a policy of agricultural modernization: they focused on the output of machines, soils, plants... and animals!

**Consumption of meat in kilos/person/year**

- **1995 > 2005**

**Consumption of milk in kilos/person/year**

- **1995 > 2005**

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**Developing countries**

- Sub-Saharan Africa
- Southeast Asia
- South Asia
- North Africa

**Developed countries**

- Latin America
- EU
- USA
- Canada

Source: The State of Food and Agriculture, FAO, 2009
As you can see, production and transportation are heavily dependent on large amounts of fossil fuels (ventilation, heating, equipment, fuel, processing, packaging, distribution, etc.)

The amount of greenhouse gas emissions from ruminants and manure are significant probably due to the large number of animals. The high concentration of animals in feedlots often leads to soil and water pollution to the point where the amount of rubbish and urine produced completely exceeds the absorption capacity of the surrounding land.

Large quantities of cattle dung are spread around the same land, and its slow decomposition emits 31% of the methane coming from livestock.*

The different organic materials mineralize and enrich the soil naturally while allowing continuous coverage of the earth. The richer the soil gets, the more storage of carbon. It is estimated that 30% of CO₂ in soils worldwide is stored by grasslands.

When we talk about the climate, the intensification of monogastric livestock farming also poses some problems: water pollution, biodiversity loss, fossil fuel dependence, epidemics, poor animal welfare, etc.

In regions that are too dry or too cold for the soil to be cultivated, I am the people’s money, their savings, and of course their food, providing a nutritional balance for their rations.

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Source: Environmental Working Group (in the equivalent of CO₂ per kilo of produced meat)
My dried dung is often used to fuel the fire of their furnaces. Some farmers recover gases emitted during the decay of my droppings and turn them into useful energy: that’s biogas!

More than 1 billion farmers do not use any motorized machines. I help to tow, plow, and transport. I also replace fossil fuels that emit greenhouse gases. That way, they save on fossil fuels used in transportation and the heating of selling points. Short supply chain = fewer GHG emissions.

Studies are trying to find out what type of diet is the most effective to make me emit less gas. However, the results depend on my breed and my growth stage.

Their knowledge, institutions and traditional practices, well-adapted to local conditions and developed over centuries in response to environmental changes, could be of great value in helping the entire livestock sector adapt to the variability of the current climate.
To reduce the risk of total loss in case of abrupt change, they avoid monocultures and keep different livestock breeds at the same time. They select different endogenous breeds that are naturally adapted to the climatic conditions. Globally, livestock farmers keep about 40 types of animals and more than 8,000 races (source: ETC-group, 2009). They do not hesitate to move their herds to areas providing access to critical resources during tough times, the rhythm of their movements depending on rainfall and fodder availability. They do not hesitate to move their herds to areas providing access to critical resources during tough times, the rhythm of their movements depending on rainfall and fodder availability. They share food, manage resources together throughout the year; lend their herds to one another... They thus promote mutual support and exchange of knowledge. Coping skills developed by small-scale farmers are not infinite. They are limited by the difficulties they face.

We must support these small-scale farmers, providing them with services, training, education, veterinary care, pastoral field schools, etc.

Okay, but who do you mean by “we”? 

You!
ARE YOU A POLICY MAKER?

- Encourage local, regional and national dialogues on climate change and food sovereignty with farmers.
- Support policies in favor of small-scale farmers in Europe and in developing countries.
- Provide funds to help small-scale farmers contribute to food security and fight climate change.

ARE YOU A FARMER?

- Continue to develop sustainable farming practices.
- Exchange practices with small-scale livestock farmers in Europe and in developing countries.
- Participate in local, regional and national dialogues on climate change and food sovereignty with governments and local authorities.

ARE YOU A CONSUMER?

- Increase the awareness of your surroundings on small-scale livestock farming, climate change and food sovereignty.
- Improve your consumption habits by supporting local and sustainable livestock production.

No matter your role, you can learn more by visiting: www.smallscalefarming.org

Well, now you can’t blame it on the cows anymore!

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