



AND THE COW
PRESENT

YOU'RE THE ONES EMITTING GREENHOUSE GASES!

AKA "HOW COWS AND LIVESTOCK FARMERS CAN HELP US FIGHT GLOBAL WARMING"



WITH THE FINANCIAL SUPPORT OF:

THE BELGIAN
DEVELOPMENT COOPERATION **.be**
RhôneAlpes Région





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.

FARRRT!

FARRT!

FARRRRRT!

FART!



WE ARE EMITTING 18% OF THE GREENHOUSE GASES
THAT CONTRIBUTE TO GLOBAL WARMING.

MUHAHAHAHA!

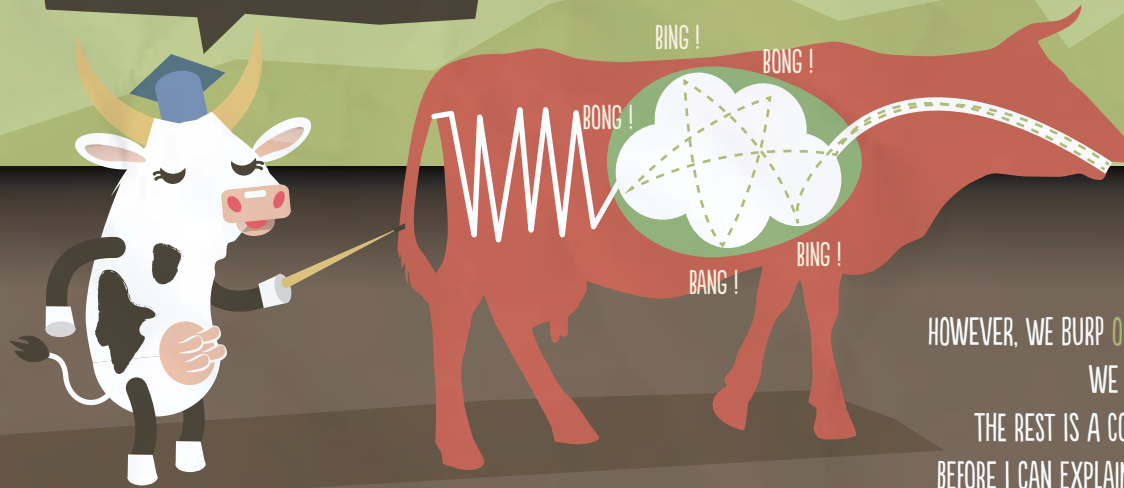
BUT, WHY GET SO FURIOUS?



TO BE HONEST, WE DON'T WANT THIS.
THE TRUTH IS: **YOU** ARE THE DEVIL!



UNLIKE WHAT MOST OF YOU BELIEVE,
THE GASES MY FRIENDS AND I EMIT
ARE NOT FARTS.



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 (CH_4).

BUH-URRRP!

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.

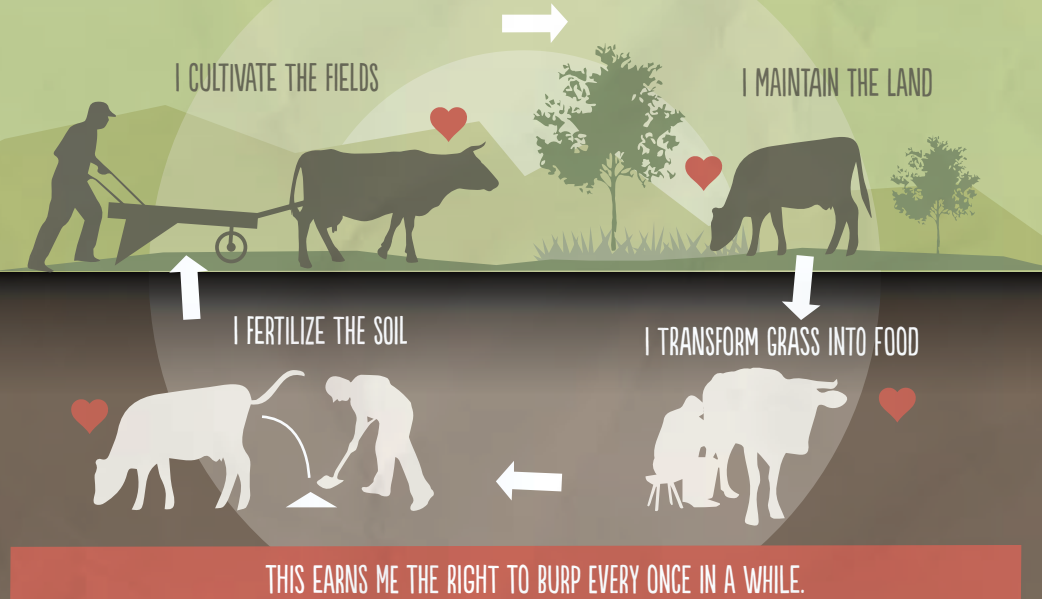
WHAT DOES A COW DO?

WE COULD ARGUE THAT I AM A
NOURISHMENT MACHINE, OR JUST SIMPLY
FOOD, BUT DO NOT BE FOOLED.

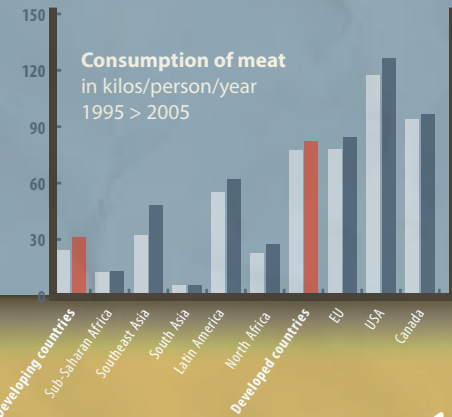
I AM ONE OF THE FIRST ANIMALS YOUR
CHILDREN RECOGNIZE.

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.

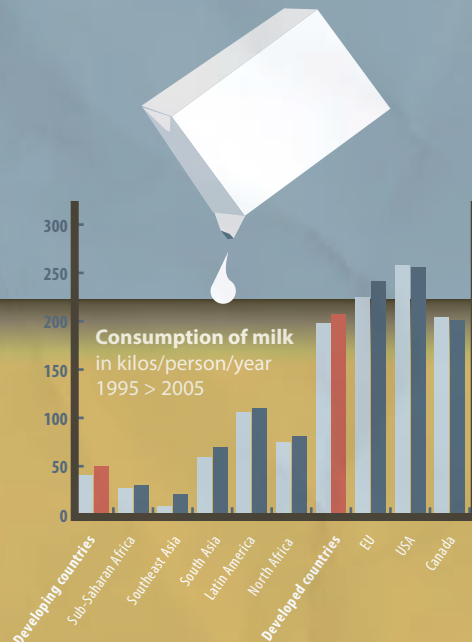
WHEN I FEEL AT EASE WITH MY ENVIRONMENT, I CREATE A VIRTUOUS CYCLE WITH IT.



BUT TAKE A LOOK AT THIS ...



AS IS MILK CONSUMPTION.



SO, TO MEET THE NEEDS OF AN EVER GROWING POPULATION, EUROPE — WITH THE WORLD IN ITS WAKE — IS DETERMINED TO:

INDUSTRIALIZE LIVESTOCK FARMING

An example in Europe:

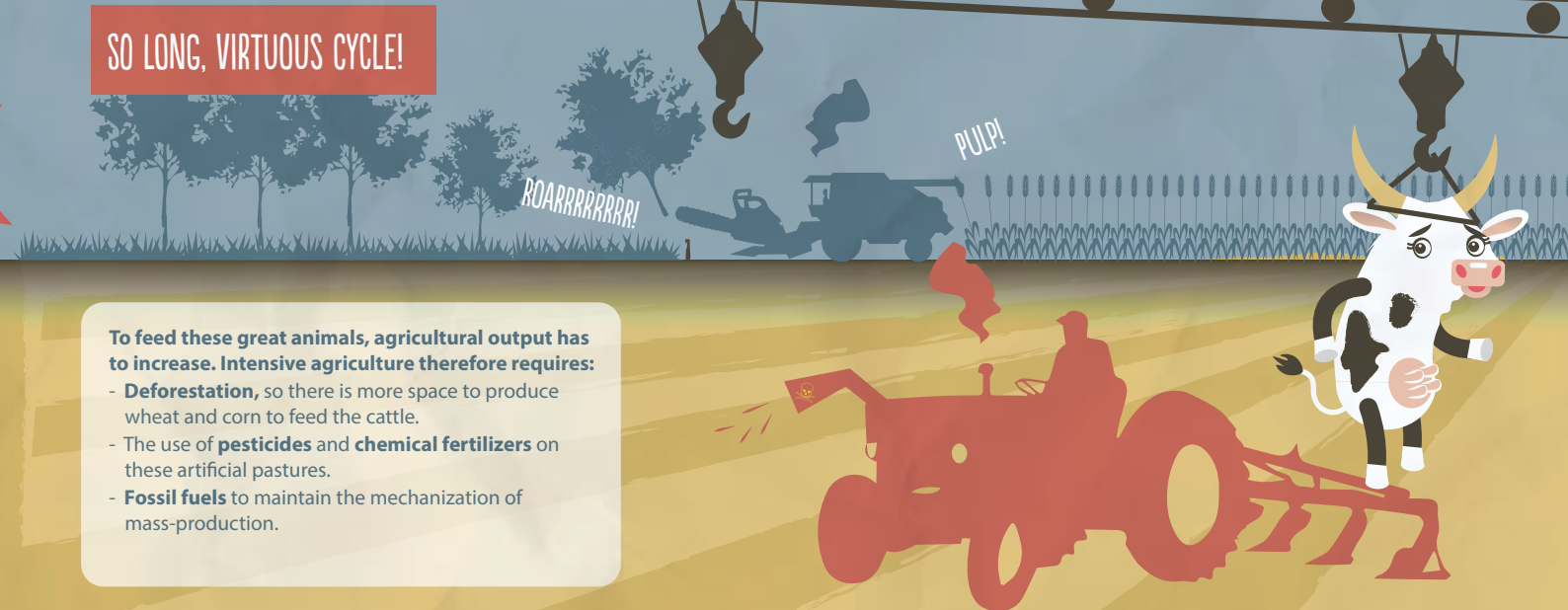
During the post-war period, a socio-political time marked by food shortages and fueled by the bright promises of technology, the EU countries deliberately engaged in a policy of agricultural modernization: they focused on the output of machines, soils, plants... **and animals!**

SO LONG, VIRTUOUS CYCLE!

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.

WE HAVE BEEN CHASED OFF OUR LANDS, LEAVING THEM IN THE CARE OF MACHINES ... ON A LARGE SCALE.



GLOBAL MEAT CONSUMPTION IS CONSTANTLY INCREASING

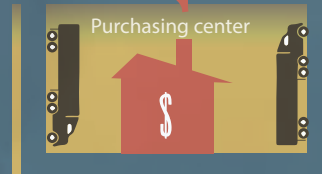
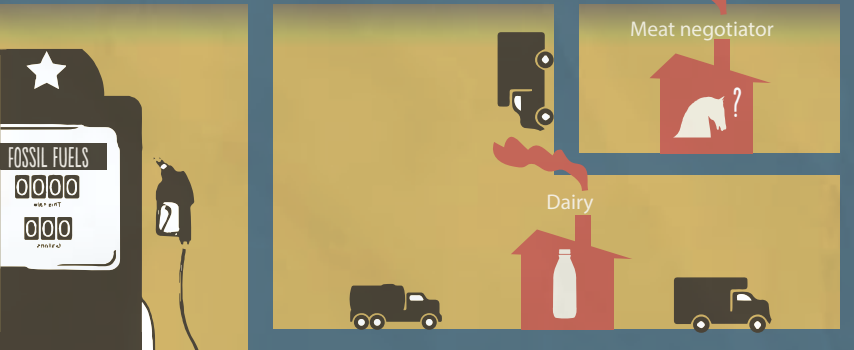
THE SUPPLY CHAIN HAS BECOME LONG ...

LONG ...

VERY LONG ...

WE ARE STILL BURPING, BUT ALL UNDER THE SAME ROOF.

THIS MAKES IT EASY TO CONCLUDE THAT COWS DON'T DO MUCH OTHER THAN CONTAMINATE THE ENVIRONMENT



As you can see, production and transportation are heavily **dependent on large amounts of fossil fuels** (ventilation, heating, equipment, fuel, processing, packaging, distribution, etc.)

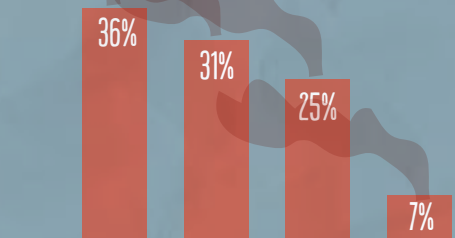
CRACK !

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.



AND WE ARE POOPING THERE TOO.

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



BREAKDOWN OF GREENHOUSE GAS EMISSIONS DUE TO LIVESTOCK.

*Source : Livestock's long shadow, FAO, 2006.

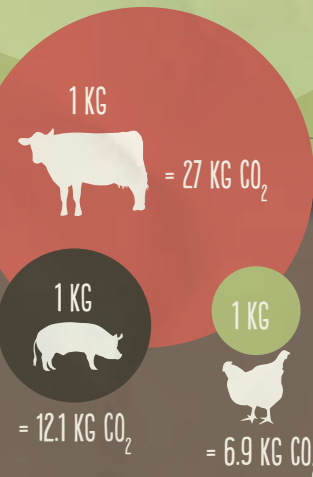
THE MOST URGENT RESPONSE IS:
REDUCE THESE GAS EMISSIONS.

WELL, HUMANS SHOULD EAT
OTHER STUFF THAN BEEF.

SOME POULTRY PERHAPS?

ER, NO,
I WAS THINKING MORE ALONG THE LINES OF PORK.

BUT LOOK AT THE DIFFERENCE
BETWEEN GHG EMISSIONS:



Source : Environmental Working Group
(in the equivalent of CO₂ per kilo of produced meat)

BUT BEWARE!

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

OKAY, WE GET! WE GET IT!

BUT MOST IMPORTANT OF ALL, we are neglecting the economic, environmental and social functions of cows for a different kind of livestock farmer, one which constitutes a large group in developing countries...

SMALL-SCALE LIVESTOCK FARMERS!

600 MILLION OF THE POOREST MEN,
WOMEN AND CHILDREN ARE DEPENDENT ON
LIVESTOCK FARMING FOR SURVIVAL.



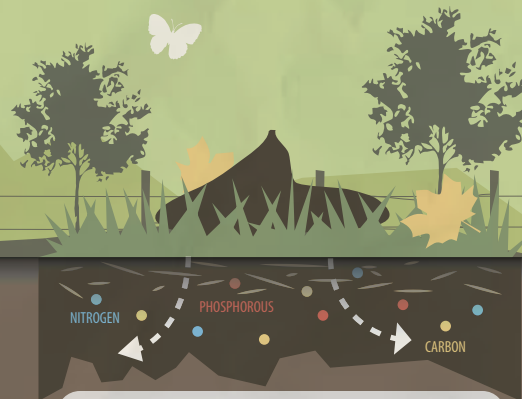
In regions that are too dry or too cold for the soil to be cultivated, I am the people's **money**, their **savings**, and of course their **food**, providing a nutritional balance for their rations.

AND WE SHOULD BE INSPIRED
BY THEIR PRACTICES TO TRY AND
REDUCE GAS EMISSIONS.

WHAT DO YOU MEAN?

THEY HAVEN'T BROKEN
THE VIRTUOUS CYCLE!

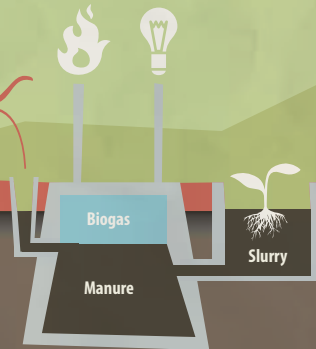
I AM THEIR FERTILIZER.



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**.

*Source : White et al., Grassland ecosystems, 2000.

I AM ONE OF THEIR **ENERGY SOURCES**



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!**

I AM THEIR **MOTOR**



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**.

THEY SELL MY FOOD MOST OFTEN **LOCALLY**



That way, they save on fossil fuels used in transportation and the heating of selling points.
Short supply chain = fewer GHG emissions

I COULD ALSO EMIT LESS GHG IF THEY WOULD GIVE ME A **MORE EASILY-DIGESTIBLE DIET**



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.

PLUS, THERE IS AN INJUSTICE HERE. IN YOUR OPINION, WHO ARE THE FIRST PEOPLE TO EXPERIENCE THE IMPACTS OF CLIMATE CHANGE?



NO, SMALL-SCALE LIVESTOCK FARMERS.

I DON'T KNOW. BALD PEOPLE?



WELL, THEY WILL NEED TO ADAPT.

THEY DID NOT WAIT FOR YOU. IT WOULD BE GOOD FOR US TO COPY THEM **HERE**.

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.



THEY DIVERSIFY
THEIR PRODUCTION AND BREEDS

THEY MAINTAIN
PLANT AND ANIMAL BIODIVERSITY

THEY ARE MOBILE

THEY WORK TOGETHER

SO THEY DO NOT NEED HELP.

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"?

OH BUT YES THEY DO!

YOU!

To reduce the risk of total loss in case of abrupt change, they avoid monocultures and keep different livestock breeds at the same time.

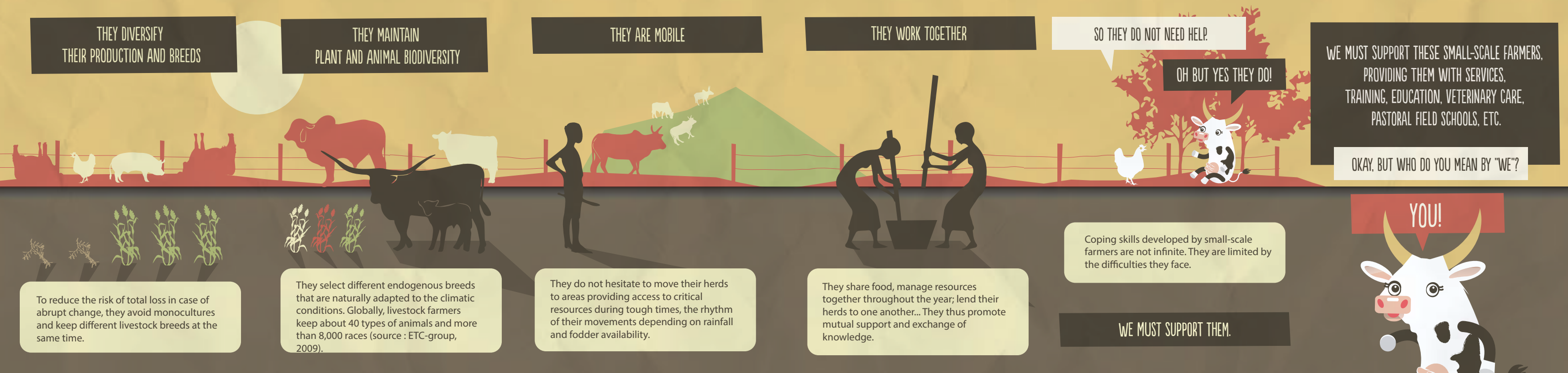
They select different endogenous breeds that are naturally adapted to the climatic conditions. Globally, livestock farmers keep about 40 types of animals and more than 8,000 races (source : ETC-group, 2009).

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 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 THEM.



ARE YOU A POLICY MAKER?

YOU CAN:

- 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?

YOU CAN:

- 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?

YOU CAN:

- 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!

This document is a result of the EU project DCI-NSAED/2011/239-602 carried out with the support of the European Commission in the framework of its program on awareness of development issues and promoting development education in the European Union.

Coordination: AVSF ● Revision: VSF Belgium, SIVtro, VSF Czech Republic, VSF Europa ● Design / Graphics: www.petitfayot.com