

Here comes your field!

Hi, my name is Carla Giardini and this is my colleague Ben Wissler. We are working at Campo Mio 2000, an agri-food innovation project of the European Union and would like to have you as a partner for a little experiment. Here's the story:

With seven billion people now sharing this planet, a number that continues to grow, the size of the Earth remains the same. This raises many questions for our future, including whether or not there will be enough food. Dividing the total global area of arable land, which is around 1.4 billion hectares, by the number of earthlings gives us this number: 2000 square metres per person. On this piece of land everything Mother Earth supplies you with must grow: bread, rice, potatoes, fruits, vegetables, oil, sugar...as well as all the feed for the animals whose meat, milk and eggs we eat, which does not stem from meadows and pastures. On top of that the cotton for our jeans, tobacco for smokers, plus "bio" gas or diesel and other so-called renewables.

We have actually already laid out your own personal 2000 m² in the City Park downstairs. To start off with we planted it with the global average. Next season we can adapt it to your wishes and your consumption. Let's take a look at the field.





1) Wheat 2) maixe 3) rice 4) other cereals and grains 5) other oilseed 6) soybean 7) Totton 8) nuts 9) fruits 10) pulses 11) fibres 12) vegetables 13) tubers





1 The global field

So, this is how your 2000m² would look if they were to represent the global situation.

More than half of it would be cultivated for four crops: wheat, corn, rice and soybeans.

The other cereals, tubers and oil crops would be dominated by very few types and varieties of plants. Of course, the smaller gardens are full of hundreds of varieties, but the area they cover is only a small fraction of the arable land.

With the exception of rice, the bigger part of the large monocultures is dedicated to non-food uses, such as animal feed, fuel and energy.

2 The big bustle

If well maintained, your 2000 m² will be bursting with life: trillions of microorganisms will live together with billions of fungi, algae and protozoa, and millions of thread and bristle worms, springtails and mites. It could be home to nearly a million centipedes and beetles as well as tens of thousands of ants, woodlice, spiders and of course - the kings of soil - earthworms. Moles, mice and birds will feed on them. Bees, bumblebees, butterflies and other insects will also be rather interested in flowering plants. In total, your 2000m² could host no less than 20 quadrillion organisms, weighing about 2 tonnes. We don't want to lose any of them. Only where it bustles and hums is the earth healthy and fertile. We rely on you! And wouldn't it be nice to have a rabbit and a fox as well?

3 Pig meal?

We don't know the names of these two pigs unfortunately. They are just two of 260 million pigs in Europe and 1.3 billion worldwide. The often referred to average European consumes about 40 kilograms of pork a year. The two guys here just meet the needs of five Europeans when they are slaughtered at a weight of around 115 kilograms.

To grow the wheat, soy, corn and other plants consumed by a pig until then, about 9 square metres per kilogram of meat is required. This means these two will have practically eaten an entire field. In addition, during their short lifetime they will be fed with antibiotics five times.

By the way: European animal welfare provisions would allow no less than 2000 pigs to be kept on our field: one square metre per grown up animal.

4 Kitchen inventory

Kitchens, canteens, restaurants and supermarkets - these are places where we manage our 2000m² field: Every meal we eat, every food purchase we make, can be seen as an order to our agricultural producers. What each of us really consumes varies enormously. Our eating habits differ according to age, income, culture, energy requirement and many additional factors; however the average European consumes nearly a tonne of food a year.

Expressed in energy, this works out at around 3,500 kilocalories a day. The kitchen could be slightly cramped and you certainly don't want to eat that much every day!

So isn't it a consolation that we throw away nearly half of our food on its journey from farm to plate?



