HOW OUR PLATES MAKE THE WORLD GO ROUND

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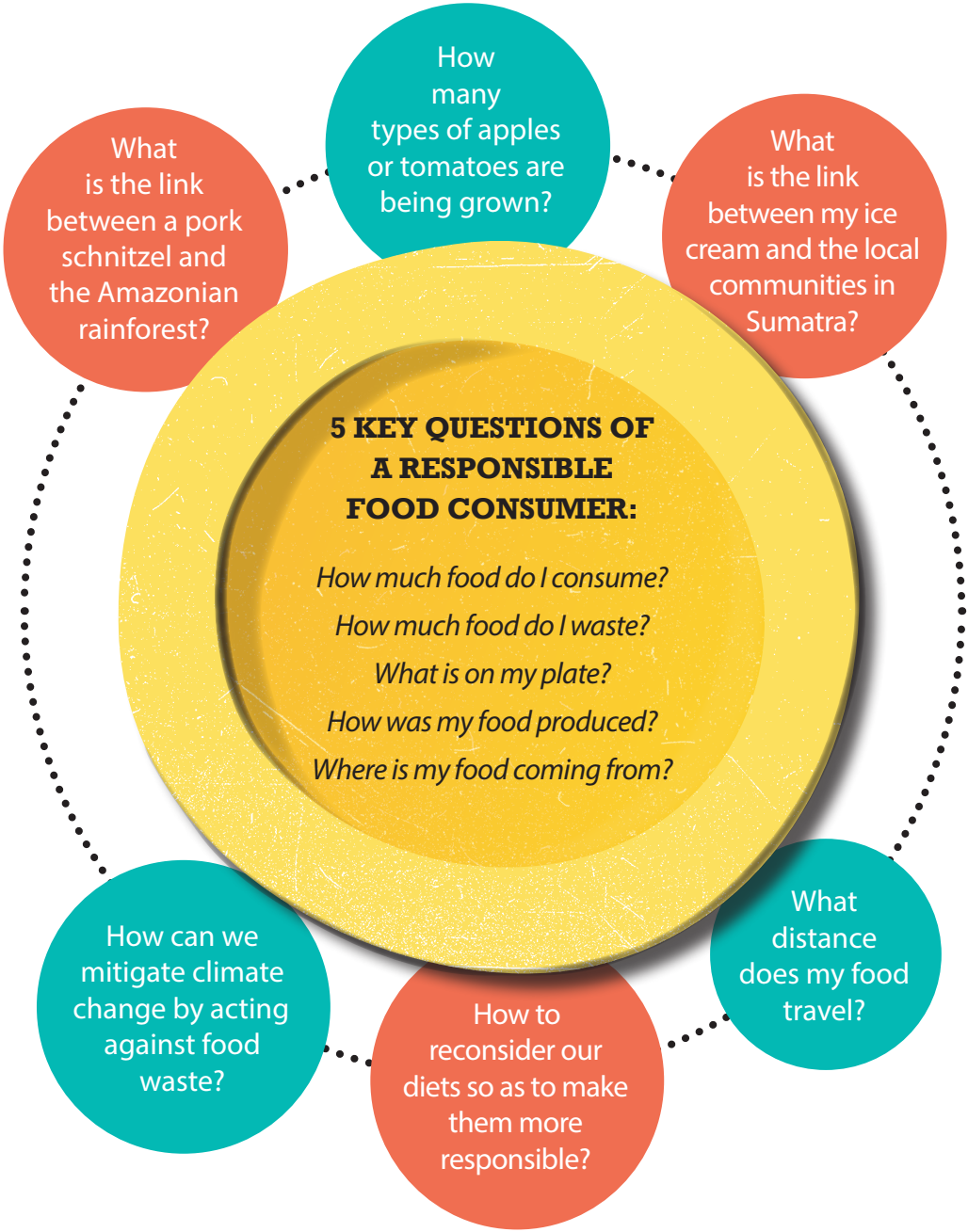


WE HAVE ONLY ONE PLANET!

However, in the Czech Republic we live as if we have 2,8 PLANETS at our disposal[1].

This means that we currently **USE MORE NATURAL RESOURCES** than what is a responsible and fair use of the planet should be.

Did you know that resources, such as water, soil, ecosystems and energy are necessary to produce food?

NOWADAYS, FOOD PRODUCTION:

contributes more to **GLOBAL WARMING** than all cars, trucks, airplanes and trains combined

IS THE BIGGEST USER OF FRESH WATER; but degrades massively water quality due to pesticide and fertilizer runoff

accelerates **THE LOSS OF BIODIVERSITY**

is a major driver of **DEFORESTATION** (and desertification)

1 Global Footprint Network, 2010

Climate change and the depletion of resources pose a threat to livelihoods; and the poorest people are being disproportionately impacted. These challenges add up to a food system that is already malfunctioning. Although **small-scale farmers** are the base of our food system as they today feed the majority of the world's population, they are also amongst **the poorest people on the planet**.

What is wrong with the global food system? Is it possible to feed 9 billion people by 2050 or is a change of paradigm necessary?

Agriculture can take a **new direction** and ensure everyone access to a healthy, nutritious diet today and tomorrow. It can end hunger and lift people out of poverty if it develops through family-based, small-scale, diverse, local systems in the Global South. It can also help cool the planet and preserve ecosystems.

Food should be grown, traded and consumed in **respect of the human right to food and within our planetary boundaries**.

The journey might be long… How about we start caring more about what we eat, how our food is produced and where it comes from?

Every day we have the possibility to demonstrate that we care about people and the planet, just by consciously deciding what will be on our plate. There are six global trends in food consumption that deserve particular attention.

1.

WHAT IS HIDDEN BEHIND MY FOOD?

Globally, diets tend to include more and more meat, dairy products, fat and sugar and larger portions. In the last ten years, **obesity has become the world's number one health problem**. More than a third of all adults – 1.46 billion – is considered obese or overweight.[2]

Unhealthy diets tend to be disproportionately greedy in regards to the total food available. Did you know that people from industrialized countries who represent **only 18 % of the world's population** consume **39 % of cereals and 41 % of animal protein** (meat, fish, and dairy products) of world production? Food in the globalized system goes primarily where people can afford it.[3]

Moreover unhealthy diets are very resource intensive, putting the planet also at risk. Different food requires different amounts of natural resources (soil, water and energy). Meat and dairy require significantly more water and soil, while sweet or processed food is highly energy demanding.

Our food choices therefore don't only influence our health but also the world around us.

Can we rethink the content of our plate and decrease the consumption of unhealthy and resource intensive food in favour of healthy food, that is light on planet and fair towards others?

2 WHO (World Health Organization). 2008. 10 facts about obesity.

3 UNEP (United Nations Environment Programme). 2012. The critical role of global food consumption patterns in achieving sustainable food systems and food for all.

PYRAMID REPRESENTING THE IMPACT OF FOOD ON HEALTH AND THE ENVIRONMENT

FOOD PYRAMID

source: Barilla center for food and nutrition

2.

TOO VALUABLE FOR THE GARBAGE CAN?

One third of the world food production ends up lost or wasted. Food losses occur most frequently in developing countries, at farm level due to limitations in harvesting techniques, storage infrastructure or cooling facilities. Food wastage occurs especially at retailers', catering or at the consumer level. People in developing countries waste only between 6 to 11kg per person per year, compared to 95 to 115 kg in industrialized countries.[4]

Every year, consumers in industrialized countries waste almost as much food (222 million tons) as is produced in Sub-Saharan Africa (230 million tons).[5] Did you know that about 89 million tons of food is being wasted in the European Union every year?[6]

Globally, about 30 % of cereals, 40–50 % of fruits and vegetables, 20 % of all oilseeds, meat and cereals and 30 % of fish are being wasted.[7]

When food wastage takes place, **precious resources** such as **soil, water, energy are being wasted in vain**. Food wastage also generates unnecessary environmental pollution and greenhouse gas emissions when food ends up in incinerators. It is particularly alarming to note that 30 % of sea fish never gets to our plates due to decreasing or collapsing fish stocks.

Do we still consciously realize that we waste food? Or has wastage become a daily routine?

Could we pay special attention to never waste food that is resource-intensive such as meat?

Can we avoid that food ends up in the garbage can by composting it or feeding it to farm animals?

4 FAO (Food and Agriculture Organization of the United Nations). 2011. Global food losses and food waste – Extent, causes and prevention. Rome.
5 FAO, ibid.
6 EUROSTAT. 2006.
7 FAO, op.cit.

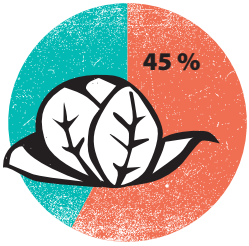
APPROXIMATELY ⅓ OF FOOD PRODUCED IS EVENTUALLY LOST OR THROWN AWAY.

fish and sea food

milk

meat

cereals



fruits and vegetables

Source: FAO 2014

3.

ARE CZECH PIGS FED BY THE AMAZONIAN RAINFOREST?

The world consumes more meat than ever before. The highest consumption takes place in industrialized countries. Did you know that **we consume on average 77.4 kg of meat per person in the Czech Republic**[8] while the world average consumption stands around 40 kg? And that the world production of poultry increased tenfold in the last 50 years?[9]

The growth of intensive meat and dairy production is a driving cause of **climate change**. Deforestation for growing feedstuff, for extension of pastoral lands or for feedlots release enormous amounts of carbon dioxide. Livestock also emits large amount of methane, a gas that warms the climate twenty-two times more than carbon dioxide does.

Livestock-raising also relies on plenty of resources. **Between 5000 to 15000 liter of water are necessary in order to produce only 1kg of beef.**[10] Large **areas of land** are also needed. The Latin American soybeans imported to Europe as feedstuff for poultry, pork and cattle are grown on twenty million hectares[11], more than **twice the size of Czech Republic**.

Between 2000 and 2005, soy fields in **Argentina** replaced 4,6 million hectares of land previously used for a variety of food production.[12] With the local supply of potatoes, beans, peas, lentils, and eggs continuously decreasing, the number of people lacking access to basic food increased: they are now becoming **recipients of the redistributive policies of the government**.

How do we feel about intensive farming, meat and dairy production?

Could we once or more times a week substitute meat with meals made of cereals, beans or vegetables? And choose meat from non-intensive production?

8 Czech statistical office (ČSÚ). 2012.
9 FAOSTAT. 2010.
10 IFAD (International Fund for Agricultural Development). 2013. Water facts and figures.
11 The European Parliament. 2011. The EU protein deficit: what solution for a long-standing problem?.
12 Fritz, T. 2011. Globalising Hunger: Food Security and the EU´s CAP, FDCL.

4. WHAT HAPPENS WHEN GREEN BEANS TRAVEL 9000 KM TO OUR PLATES?

It is nowadays possible to find a large offer of fresh food products throughout the year. But supplying our supermarkets' shelves with strawberries or green beans at nearly all times of the year requires importing these products sometimes from as far away as Kenya.

Long trips to our markets result in CO^2 emissions from air and ground transport, contributing to **climate change**. Moreover, the majority of products are prematurely harvested and sprayed with chemicals so they can endure the journey.

Although buying veggies or fruits produced in developing countries supports employment and long term development when certain social, economic and environmental conditions are met, it may in other cases contribute to long term problems that will offset the short term benefits.

An issue of growing concern is the **virtual water** traded away when food is sold on foreign markets. Virtual water is the volume of fresh water used to produce food. As water represents a precious, scarce natural resource in many regions, its overuse directly jeopardizes livelihoods and even the long term economic viability of the agro-export industry itself.

In **Peru**, since the 1990s the **cultivation of asparagus in the Ica region for the fresh export market** has exploded. The Ica region knows nearly zero unemployment and Peru has become the number one exporter of asparagus in the world. But in the Ica Valley, asparagus is **grown intensively** on **large strips of land reclaimed from the desert** and irrigated by groundwater. Ten years ago, this greening of the desert became unsustainable when the irrigation needs started to push the exploitation of the valley's aquifer into the red. Extraction significantly exceeds the amount of recharge of the groundwater. Unless this situation is addressed, the overexploitation of the aquifer will eventually exhaust the water resources which a population of over 300 thousand people, depend on for their survival.[13]

Do we know the actual seasons of local fruit & vegetables? Do we know how farmers are being treated by supermarkets or manufacturers of our food?

A good general rule when choosing fruits and vegetables is a combination of criteria: seasonal, local, and also grown without the use of pesticides (organic farming).

What would we possibly learn if we asked what kinds of pesticides were used to grow our food? And what answers to this question would we like to get?

13 Progressio, CEPES and Water Witness International. 2010. Drop by drop. Understanding the impact of UK´s water footprint through a case study of Peruvian asparagus.

5.

WHEN MORE FOOD MEANS FEWER VARIETIES

The wide number of different fruits and vegetables offered today hides that there are considerably **less varieties** of apples, tomatoes or potatoes **grown today.**

A worldwide problem is the reduction of species diversity or their loss and extinction. **30 000 types of edible plants do exist**, but usually **we consume only 30 types of those**.[14] Do you know that 75 % of the genetic diversity has disappeared during the last century as farmers worldwide switched to genetically uniform, high yielding varieties and abandoned multiple local varieties?

The phenomenon of **standardization also applies to livestock**. In Czech Republic, about a quarter of the animal breeds are estimated to be endangered or at critically low levels.[15]

The standardization of crops, the increased use of GM seeds and the related loss of locally adapted varieties is a cause of concern for food security. **Diversity provides genetic variability** that can be crucial for overcoming outbreaks of pests and pathogens and environmental stresses (droughts, floods). Many agricultural communities consider **increased local diversity** a critical factor for the **long-term productivity and viability of their agricultural systems**. For example, interweaving multiple varieties of rice in the same field has been shown to increase productivity by lowering the loss from pests and pathogens.

Can we sustain the richness of our food system by discovering forgotten types of fruits and vegetables?

Do we value local varieties and encourage farmers to continue growing them?

14 IPBES (Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services). 2013. "Even farm animal diversity is declining as accelerating species loss threatens humanity." ScienceDaily. 27 May 2013

15 EUROSTAT. 2011. From Farm to Fork.

6.

WATCH OUT FOR PALM OIL!

Palm oil is the most used vegetable oil in Europe and in 2000 it became **the most traded vegetable oil in the world**.[16] It is found in 50 % of all industrial processed goods, like food (biscuits, chocolate, ice cream, chips) but also cosmetics, cleaning agents, animal food and even in motor fuels.[17]

Most of the production comes from **Indonesia** and **Malaysia**. In order to satisfy the growing demand for palm oil on the global market, huge areas of rain forests were cleared to create vast palm plantations for large-scale cultivation. **The land of local people is being increasingly occupied** and indigenous **tribes are losing their traditional way of life** and means of livelihood. Moreover, deforestation of such precious natural ecosystems causes the destruction of natural habitats of many rare plants and animals, precious for medicinal purposes.

Suku Anak Dalam (Children of the Forest) is one of the last Sumatran tribes whose traditional way of life is fully dependent on the tropical forest. Of the approximately 200,000 members of the tribe, only 1,500 individuals retain the traditional way of life. As a result of the shrinking forest, a large number of these nomads have been forced to settle directly on palm plantations. They are forced out of their home in the forest, but integration into regular society is unimaginable.

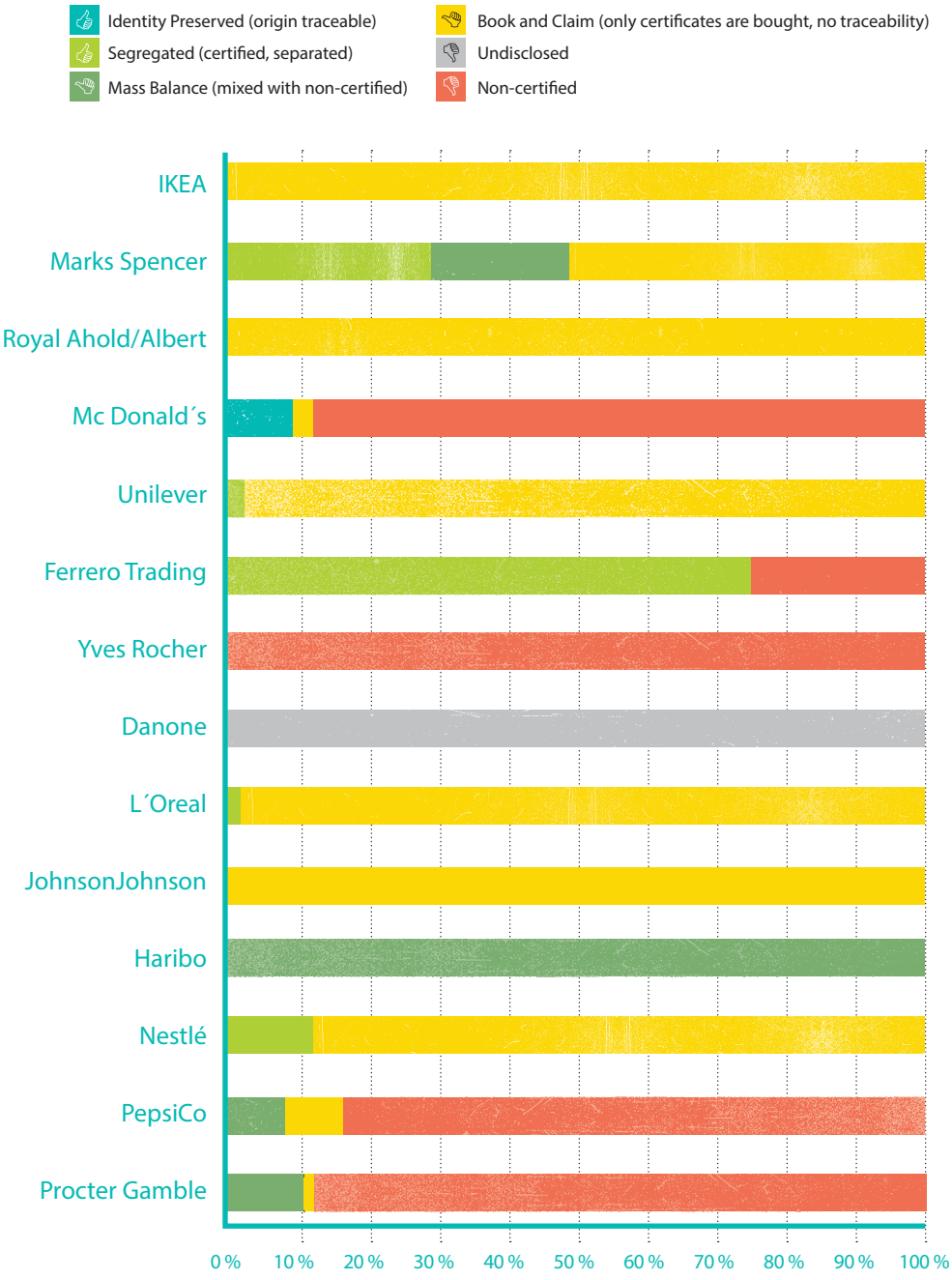
To ensure sustainable palm oil production without negative impact on local inhabitants and environment, a certification system was created. However, only 15 % of all palm oil in the world is certified.[18] One of the fastest ways how to increase this share would be asking the manufacturers to get their palm oil certified or prefer the producers who use certified palm oil.

Pokusíme se vědomě hledat výrobky, které palmový olej neobsahují?

Pokud mezi ně naše oblíbené produkty nepatří, proč alespoň nenapsat jejich výrobcům, aby používali palmový olej s nejvyšším standardem certifikace?

16 Perty, A. 2012. Palmöl: Fluch oder Segen? Wie ein Rohstoff Klima und Regenwald bedroht und dennoch auf eine grünere Zukunft hoffen lässt. WWF Deutschland. Berlin.
17 WWF (World Wild Fund for Nature).2013. Palm Oil Buyers Scorecard. Measuring the Progress of Palm Oil Buyers.
18 WWF.ibid.

WHAT TYPE OF PALM OIL IS USED BY THE BRANDS?



Source: WWF, 2013.

6 RECOMMENDATIONS FOR RESPONSIBLE FOOD CONSUMPTION:

LET'S

eat less but better
stop food wastage
replace meat by veggies more often
choose food produced in respect of people and the planet (water, soil, ecosystems and climate)
look for more diversity in our food
watch out for palm oil.

Every year, to celebrate the World Food Day (16th October), Glopolis organizes the International Food Film Festival ALIMENTERRE/ THE EARTH ON MY PLATE.

To participate to the festival and discover the hidden stories of our food, go to

www.festivalalimenterre.cz

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