## Learning Lab 1

## FEEDING MADEIRA

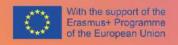
REGENERATIVE AND DISTRIBUTIVE FOOD SYSTEMS
FOR SUSTAINABLE ISLAND FUTURES

Funchal, 5-15 JULY 2022









A very quick intro to Madeira Island and why we picked 'food' as the main theme.









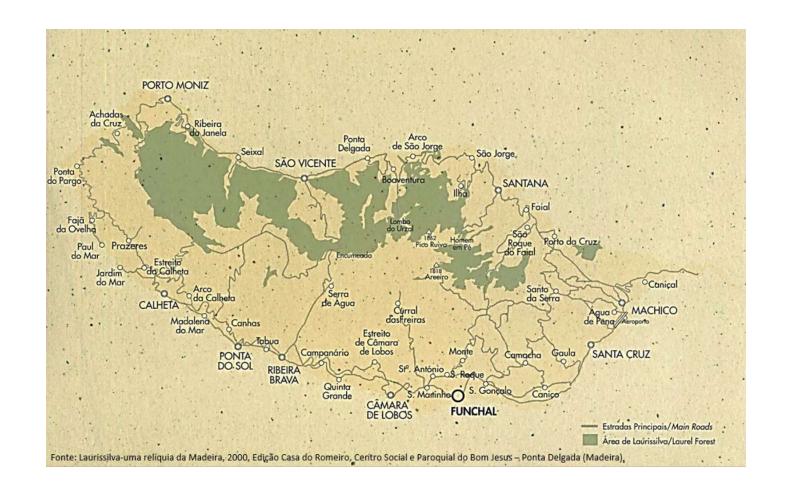








### the forest is shrinking...





# humans are expanding aggressively...









### Madeira é a região com maior risco de pobreza

Apesar da diminuição de 2,1% em 2020





Foto Arquivo/Aspress

"Em 2020, considerando o limiar de pobreza nacional, o risco de pobreza aumentou em todas as regiões do Continente, principalmente nas regiões Norte (mais 3,0 p.p.), Centro (mais 3,3 p.p.) e Algarve (mais 3,9 p.p.), e diminuiu nas regiões autónomas (menos 6,6 p.p. na Região Autónoma dos Açores e menos 2,1 p.p.na Região Autónoma da Madeira)", diz hoje o INE, nos indicadores sobre 'Rendimento e

#### Últimas

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### 'Os Verdes' reforçam o seu "não" ao teleférico no **Curral das Freiras**







O Partido Ecologista Os Verdes/Colectivo Regional da Madeira deu ontem entrada no 'Portal Participa' da sua pronúncia no quadro da Consulta Pública da Avaliação de Impacte Ambiental do Projeto do 'Sistema de Teleféricos e Parque Aventura do Curral das Freiras'.

Através de comunicado à imprensa, 'Os Verdes' dizem que, numa leitura





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### local food production... today like excellences





## Where do people buy mostly from?



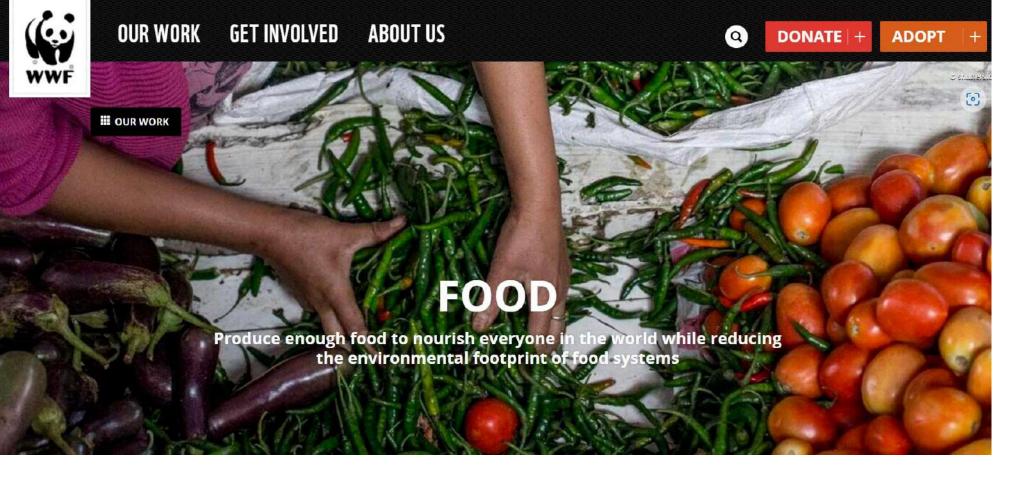


Can we actually change the way we produce, distribute, consume food on the island?

Can we use the island as a **test-bed** for sustainable food systems?

Can digital technologies be **enablers** to rethink the local food systems?





By improving efficiency and productivity while reducing waste and shifting consumption patterns, we can produce enough food for everyone by 2050 on roughly the same amount of land we use now. Feeding all sustainably and protecting our natural resources.



Today the goal is to learn to design and implement systems that can be **distributive** and **regenerative**, to benefit individuals and communities, local economies and the environment.

As food system, we mean **the whole chain**, from production, to distribution, consumption and regulation. To design new sustainable food systems, we must embrace the challenge **from different perspectives** such as understanding the role and needs of producers, consumers, and policy makers.



We will start from 4 macro-themes that we identified as relevant for Madeira Island and its sustainability.

Later you will meet **7 local start-ups** that aim to evolve toward digital maturity and use their experience to shape future sustainable scenarios for the island about food (and beyond).



We will start from **4 macro-themes** that we identified as relevant for Madeira Island and its sustainability.



## Agrobiodiversity is our safety net

### macro-theme 1

Over the years the island of Madeira has become more and more dependent on other foreign lands and countries in terms of materials, non-renewable energy sources, semi-finished and finished products, including food. The local agricultural practice has been witnessing various challenges, among which the loss of interest from the locals in working the land, consequently influencing the process of rural desertification; the reduction of agrobiodiversity, that means both loss of local varieties and know-hows related with crop production, rural traditions and local diet. Agrobiodiversity is not just good for the natural ecosystems and its species, but also for the economic and socio-cultural autonomy of the human communities too.

- --- How can we boost the interest toward local varieties both from farmers and consumers perspective, promoting the consumption of local varieties production?
- --- How can we keep alive those local agriculture techniques and know-hows that are at risk of disappearing? Could they be improved and/or 'updated' for new sustainable practices in food production?
- --- Would it be possible to identify in the local rural/cultural heritage those know-hows and practices (easily accepted and used by the community) that could contribute to a contemporary concept of circularity and new circular economic models?



## Forest & Water island life-blood

### macro-theme 2

The Laurisilva of Madeira, within the Madeira Natural Park, conserves the largest surviving area of primary laurel forest, a vegetation type that is now confined to the Azores, Madeira and the Canary Islands. These forests display a wealth of ecological niches, intact ecosystem processes, and play a predominant role in maintaining the hydrological balance on the island. The forest, which is a place of importance for its biological diversity, used to cover the whole island surface, today it is present only at 20%. Despite being a UNESCO world heritage site, the *Laurisilva* is under constant threats and pressure by human activities. Without this type of forest, there wouldn't be water; without fresh water running through the island, it wouldn't be possible neither farming nor living.

- --- How can we make the local human communities acknowledge the importance of protecting the forest and its ecosystems to make them thrive?
- --- How can water be recognised as a precious product of the forest and its cycles? How should it be managed?
- --- Would it be possible for the local nonhuman communities to have a say on what is to be decided on the future of the forest?



## **Pollinators** our saviours

### macro-theme 3

There has been growing interest in wild and managed pollinators, motivated partly by concerns about the global decline of pollinator abundance and diversity, as well as the impact of human activities on plantpollinator networks and ecosystem function. Threats to pollination networks include land use modification, pesticides and pollution, climate change, invasive species, and declines of insect, mammal, and bird pollinator species. In Europe, of the 264 cultivated species, 80% depend on the activity of pollinating insects (EFSA, 2009). But most of today's agricultural practices continue to contribute to the disappearance of pollinator populations and in their varieties of species, underestimating the consequences.

Compared to other European territories, Madeira looks a bit behind when taking action against the decline of the local pollinator population. The practice of monocultures, rural desertification and in particular, the excessive and incorrect use of pesticides by the farming communities all over the island, are probably the major threats to local pollinators, and so is to the island biodiversity.

- --- How can we look after the local ecosystems?
- --- How could we provide a safe environment and conditions for local pollinators to thrive?
- --- Would it be possible to provide farmers with alternatives to pesticides?



## Waste as opportunity

### macro-theme 4

In our current economy, we take materials from the Earth, make products from them, and eventually throw them away as waste; the process is linear. In a circular economy, by contrast, we stop waste being produced in the first place. The circular economy is based on the principles of: Eliminating waste and pollution; Circulating products and materials and Regenerating nature.

On an island the subject of waste management is fundamental, but even more relevant would be to rethink waste as a resource for economic autonomy and sustainable systems. In Madeira the culture of reuse and recycle is still small, both on an individual consumer and company levels.

- --- What could make both consumers and companies value waste more?
- --- How waste could be an opportunity to generate systems that are regenerative for nature and distributive to local communities?
- --- How can local waste become a resource for economic autonomy and sustainable systems?

