



Portuguese rivers are sinking fast The dangers of agroindustry and irrigation dams

Photo: Raquel Esperança

CATARINA MIRANDA
GEOTA

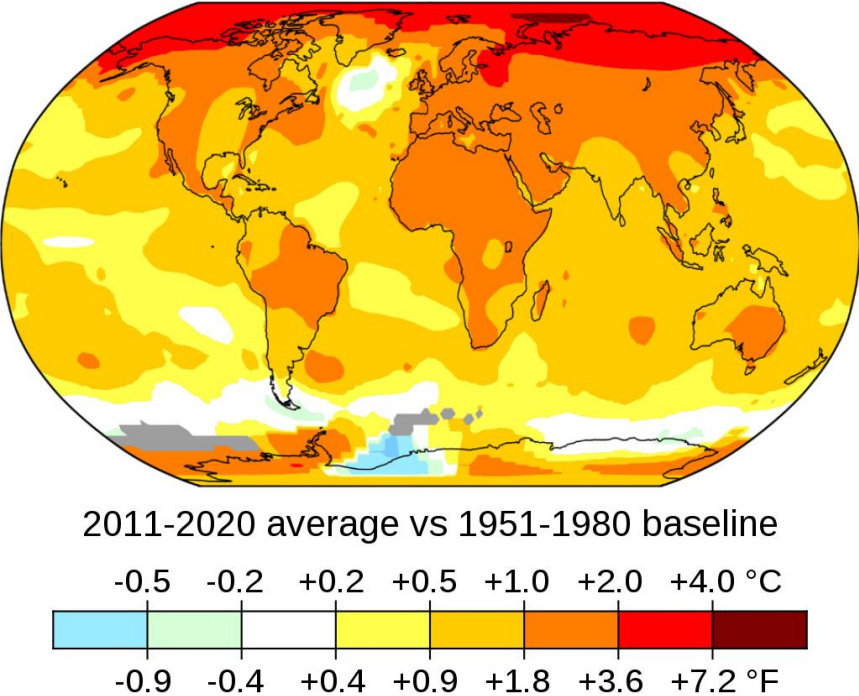


RIOS LIVRES

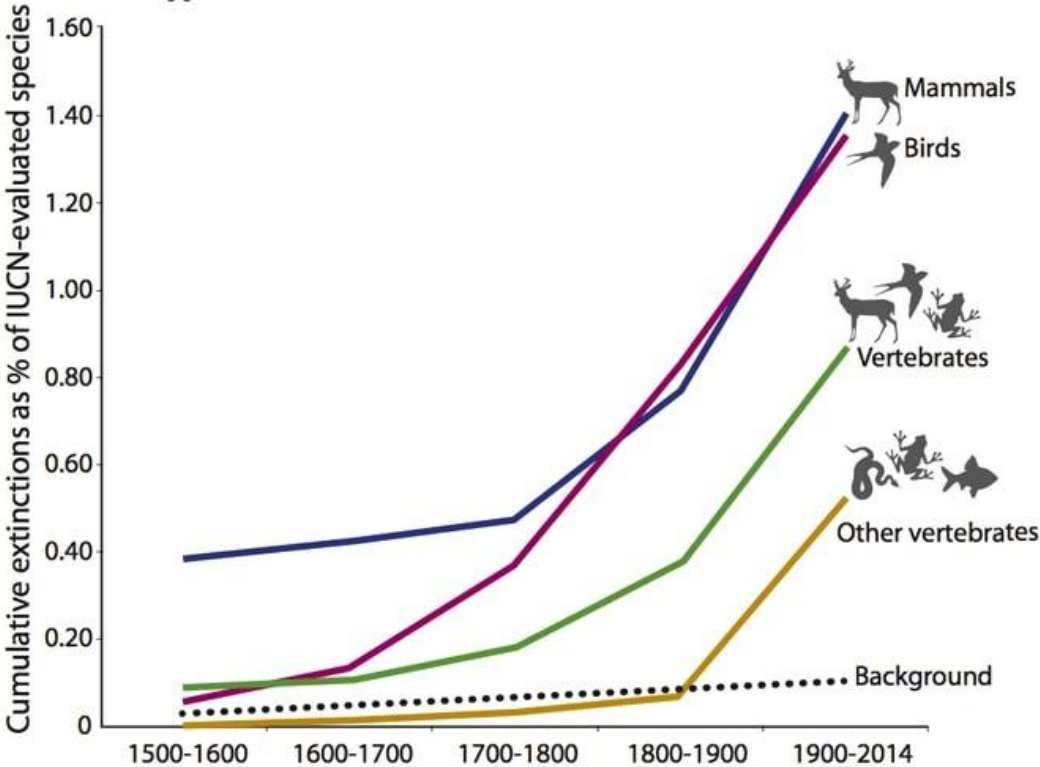
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CLIMATE CHANGE

Temperature change in the last 50 years



6TH MASS EXTINCTION



Sources: NASA 2021; Ceballos et al. 2015

Mitigating Climate Change and Biodiversity Loss



A European Green Deal

Striving to be the first climate-neutral continent

Biodiversity Strategy for 2030

Aims to protect nature and reverse the degradation of ecosystems

A specific action/commitment is that “at least 25,000 km of free-flowing rivers are restored”

Farm to Fork Strategy

Promotes agricultural practices that:

- are sustainable
- Have neutral or positive environmental impact
- that help to mitigate the impacts of climate change and to reverse the loss of biodiversity

02/08

Sinking? Portuguese Recovery and Resilience Plan

Pisão Dam

- 70 year old project
- 120 million Euro
- Silver medal - most negative environmental practices in Europe – cash awards
- Although EC does not allow investment in dams
- Announced as strategic to mitigate climate change
- Irrigation area over 10 thousand ha (7 km² flooded area)

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PLANO DE RECUPERAÇÃO E RESILIÊNCIA

Barragem do Pisão. Costa fala em "vontade política" para avançar com obra pendurada há 70 anos

O primeiro-ministro respondeu aos críticos do PRR, explicando que a barragem vai evitar a seca na região.

Por Francisco Nascimento
30 Julho, 2021 • 13:40

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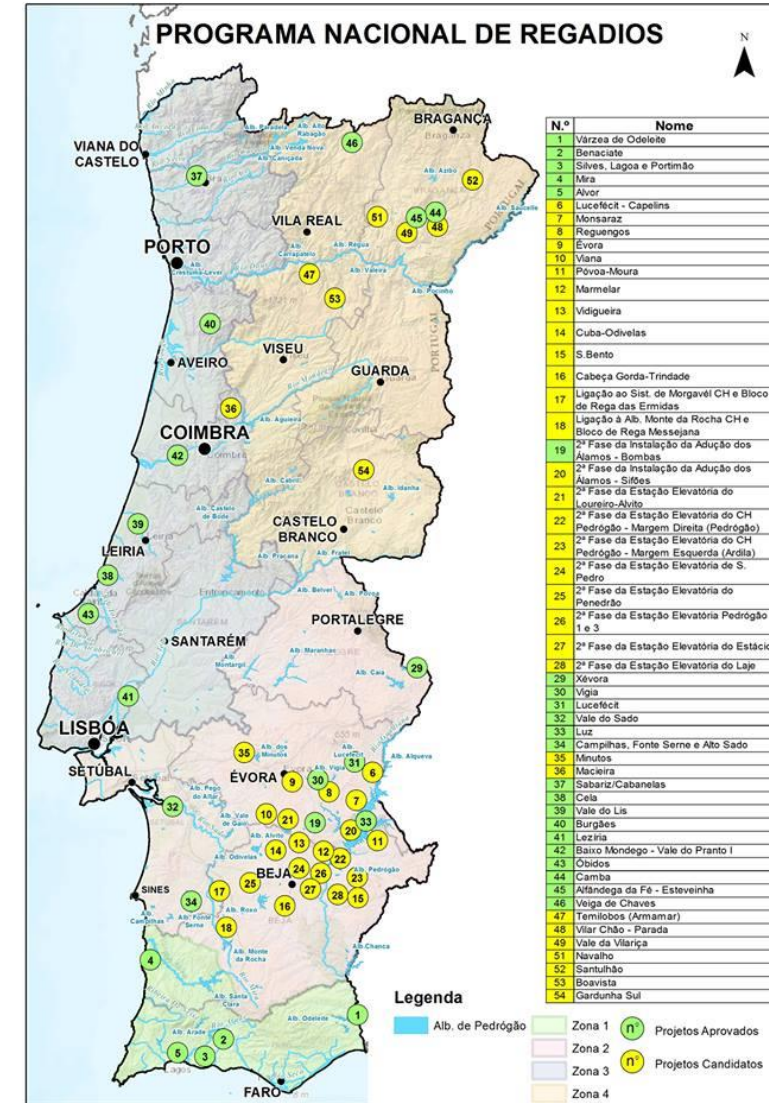
Comentar



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Sinking? National Irrigation Program

- over 50 000 ha of new irrigation areas until 2022
- 534 million euro
- Funded by European Investment Bank, Council of Europe Development Bank and Rural Development Programme
- Finance Minister and Agriculture minister, between other defenders, state this program as strategic to mitigate climate change effects



04/08



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Sinking? The Tagus Project

- 4 weirs + 2 dams in the last 120 km of the Tagus
- Water to 300 000 ha irrigation areas
- 4,5 million EUR
- defenders say the project is strategic to mitigate climate



05/08 change effects

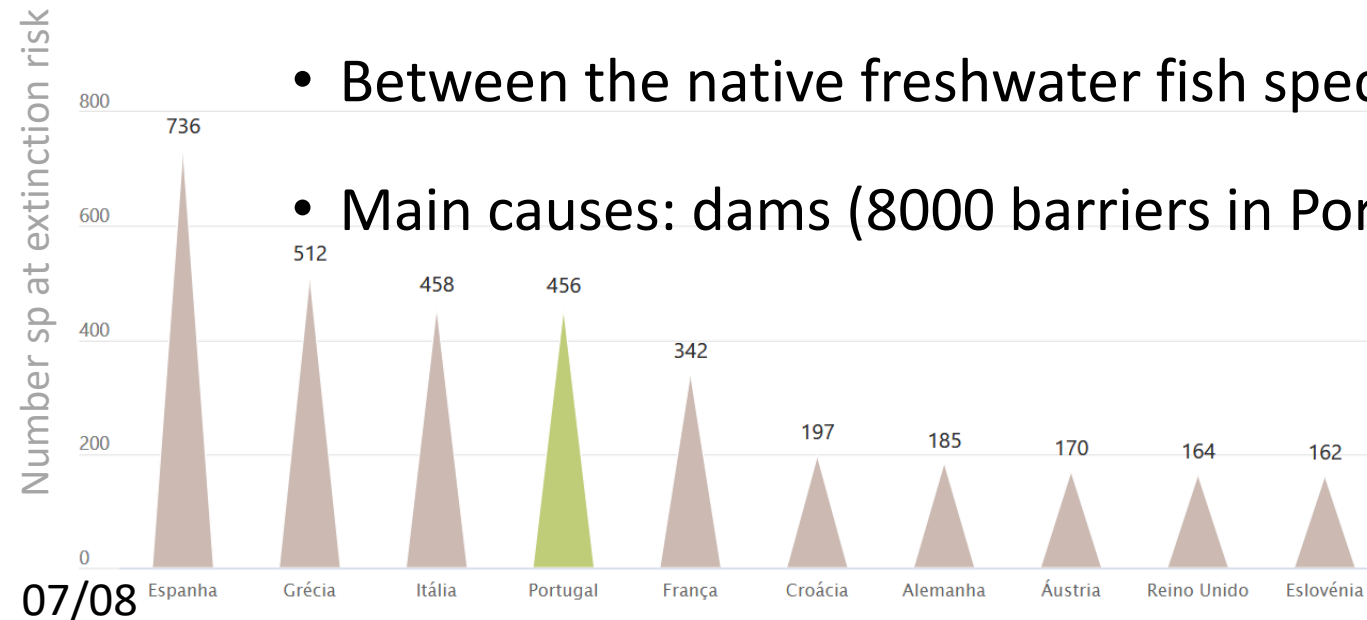
Sinking? Southern Portugal

- Dominated by intensive agriculture
- Cultures not adapted to region/climate
- Social Issues
- Environmental issues
(biodiversity loss, depletion of hydric and soil resources)



Sinking? Biodiversity Loss

- Portugal – top 4 in Europe regarding extinction risk
- In 3 years, number of threatened species doubled
- 30% of our freshwater fish species are exotic
- Between the native freshwater fish species, over 60% are threatened
- Main causes: dams (8000 barriers in Portugal) and irrigation agriculture



Promoting Alternatives

- Protection/Maintenance of river ecosystems in natural conditions
- Restoration of damaged impacted river ecosystems
 - Dam Removal
 - Restoration
- Sustainable agricultural practices
 - Species adapted to Region and Climate
 - Restoring the Water Cycle (e.g. water retention landscapes)

08/08

Thank You!

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