



## 4th Oceans Forum

on trade-related aspects of Sustainable Development Goal 14:

A shift to a sustainable ocean economy:

Facilitating post-COVID-19 recovery and resilience











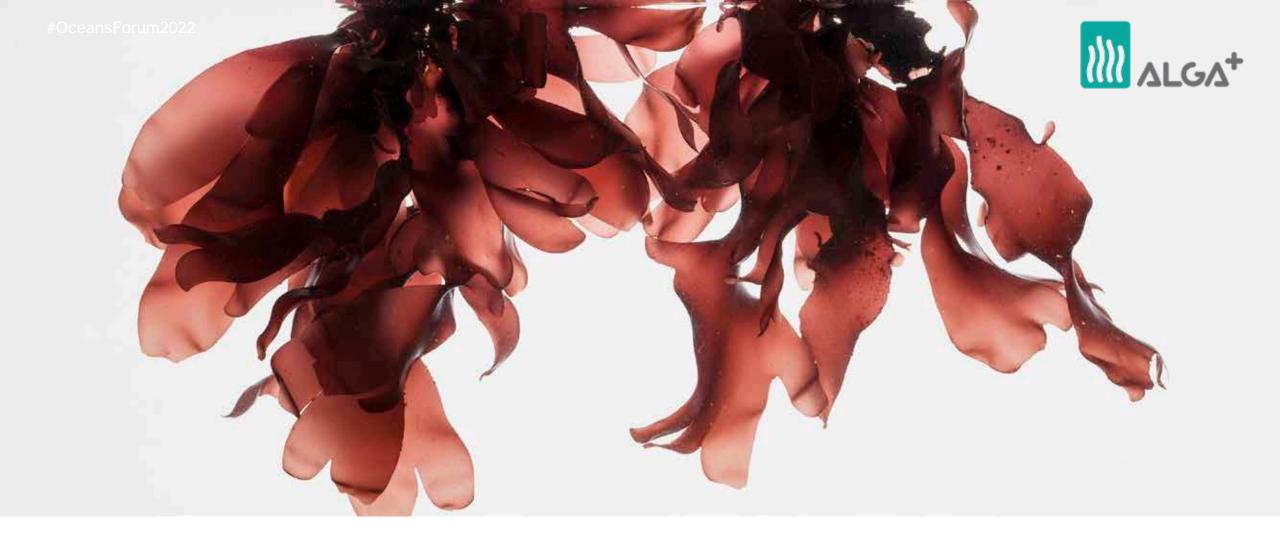














Seaweed farming – a way for sustainable growth

Helena Abreu

### Seaweed farming & SDG

- Provides the 4 ecosystem services
- Safe, traceable and high-quality Food, Feed, and Raw-material
- Preserves the wild seaweed populations & creates new habitats
- Bioremediation of N and P
- Reduce GHGs replacing edible & raw-materials with larger carbon footprints
- No freshwater, no fertilizers\*
- Does not compete with land for other food crops
- Source of protein, fiber and a contribute to fight nutrition deficiencies
- It can be integrated with other marine farming | leisure activities
- Provides Jobs and Education opportunities, independent from genera, across the globe but mostly in less developed areas





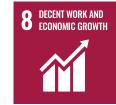












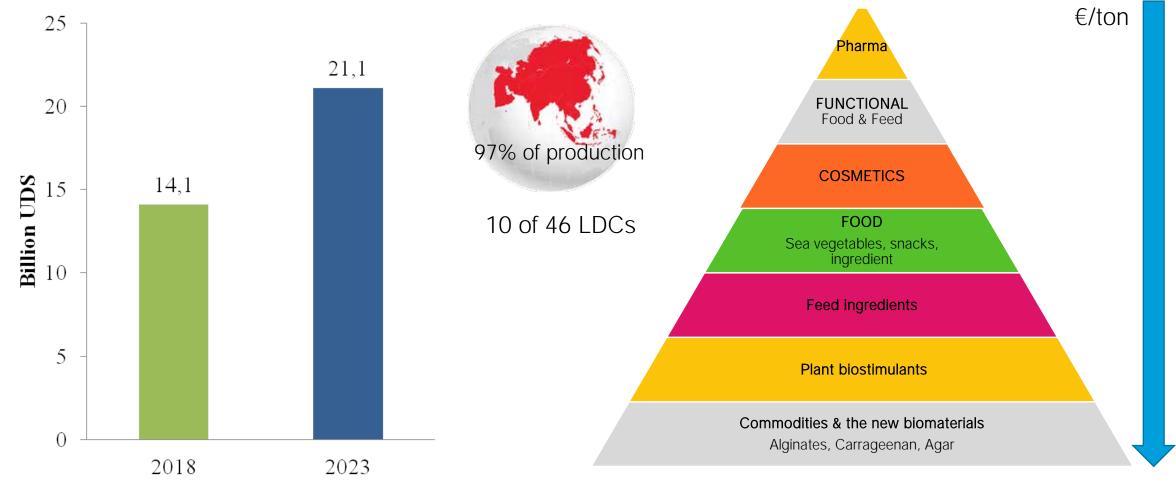






#### 34.7 million tons seaweed

Markets and Markets, 2020





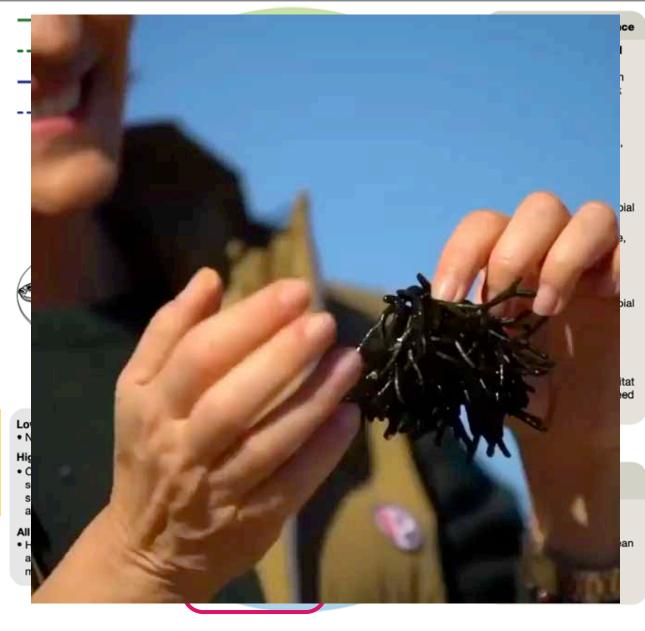
#### Seaweed farming

- + Top source of "blue food" (38%)
- + Job creation:
  - 1 per 2dry ton (ALGA+)
  - 1 per 10dry ton (WorldBank estimates)
- + At sea and near/on-shore

Also with IMTA at comercial scale







# Over 450 edible seaweed!

- Size
- Chemical composition
- Production systems
- Value



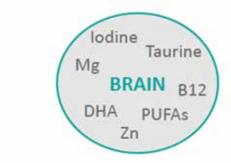




#### 1g of Seaweed a day....









Macro and micronutrients, antioxidant & anti-inflammatory compounds, etc...

Adapted from Cornish et al. 2017



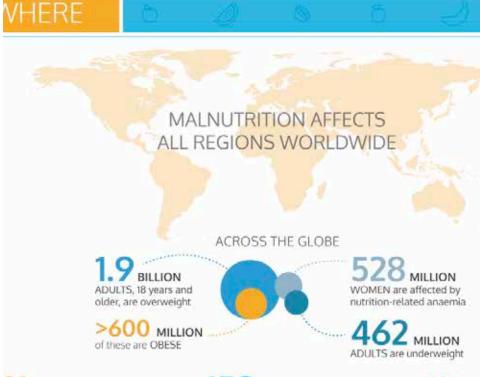
Fe

Zn

Mg

K

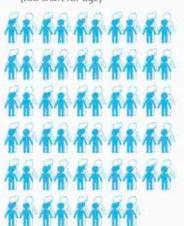
Vit. E. A and **B12** 







children are stunted (too short for age)











U.S. won't let Russia pay its debt at American banks, forcing Moscow to default or drain money from its war





Europe vows new Russia sanctions over Bucha carnage. But Putin's closest EU ally could doom that plan



No 'union,' 'living
'restrooms': A pla
Amazon internal
ban words in emp

SIGN IN

INTERNATIONAL - UKRAINE INVASION

Europeans are so scared of a nuclear attack they're panic buying iodine tablets

BY CHRISTIAAN HETZNER

March 8, 2022 6:04 PM GMT

What about Seaweed?!











#### **Products**













#### Women take the lead









#### **Education** | Literacy

- At school & businesses

All generations

- Between countries |cultures







# R&D and Knowledge transfer

- Agriculture & Marine Agronomy
- Asia & "Newcomers"
- All with LDCs
- Biology, Technology, Product Development









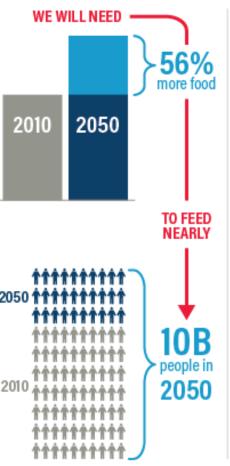


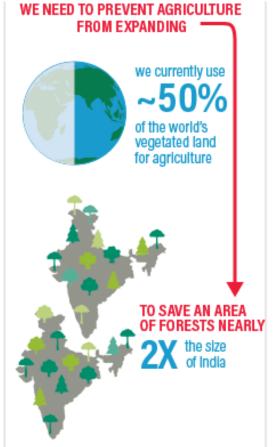
#### CREATING A SUSTAINABLE FOOD FUTURE BY 2050

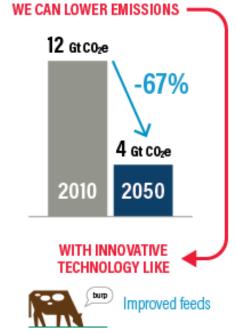


How do we feed 10 billion people... ...without using more land...

...while lowering emissions?







Resilient crop breeds





Plant-based burgers

# 35,000,000 tons of seaweed & more to come...

A unique global "blue food" and raw-material

**Education & Transfer of knowledge** 

Solid R&D and accurate info to attract long term investment & results































### Thank you!

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