



4th Oceans Forum on trade-related aspects of Sustainable Development Goal 14

6–8 April 2022 Geneva and online (hybrid)
Salle XXVI

René Gómez-García, PhD
Senior Executive - CAF

ILAC – Seaweed Overall Perspective

- For many people in the LAC region, direct interaction with seaweed products has largely been limited to Asian cuisines, pottery, diet, and high-end beauty products. However, this market scenario is changing and it's doing it fast.



- Over the last decade, seaweed cultivation has emerged as an area of growth and innovation, with applications ranging widely from phytotherapy, to blue carbon.

- Already a multi-billion-dollar global industry, seaweed is an ingredient in everything from food to fertilizers and medicines to fuel



- In addition to its expanding product applications, seaweed is increasingly recognized as a sustainable solution for water quality improvement, carbon sequestration, and food security due to its highly relevant concentrations of plant-based proteins.

Market Highlights

- **85% of the seaweed harvest each year is used for human consumption.** In addition, seaweed can be found in food additives, food thickeners, medicines (Western and non-Western), animal and fish feed, cosmetics, biomass for fuel, plastics and disposable packaging, fertilizers, a variety of health products, and even soft drinks and alcoholic beverages.
- **Seaweed farming is still labor-intensive and primarily conducted on a relatively small scale** making it relevant for job creation and pro-poor economic development in coastal areas.



Market Highlights

- **LAC demand for seaweed is relatively small** if compared to other regions such as Asia, the LAC region could benefit from **multilateral organizations' collaboration, especially supporting market access and building linkages** with global value chains.
- In the LAC region the seaweed industry is still relatively underdeveloped, and fragmented.
- The **direct consumption of seaweed is not high enough to drive industrial level.**
- However, this is not the case for other more sophisticated applications of seaweed such as Nature Based Climate Solutions and Blue BioTrade.



Market Highlights

- There are over 10,000 species of seaweed globally divided into three main types: **red, brown, and green**.
- The current seaweed industry in the LAC region, farms close to a million metric tons of seaweed per year, primarily from small farms, making it a strong driver for job creation.
- The three major groups of seaweed, are:
 - **Brown kelp and other brown seaweeds (*Phaeophyta*)** can contain double the protein of their green counterparts, currently the most widely-used type of seaweed in food products. This is highly relevant, from a perspective of food security.
 - **Red seaweed (*Rhodophyta*)** has, among other things, notable potential as a salt/MSG replacement, and could be used to supplement the green seaweed market.
 - **Green seaweed (*Chlorophyta*)** has a long history of use in food products thanks to its high nutritional value. It also has a high tolerance for cultivation in the presence of pollutants.

A Shifting mindset - Ecosystem services perspective

Seafood and seaweed as a provisioning service (good) that can be assessed independent of other services?

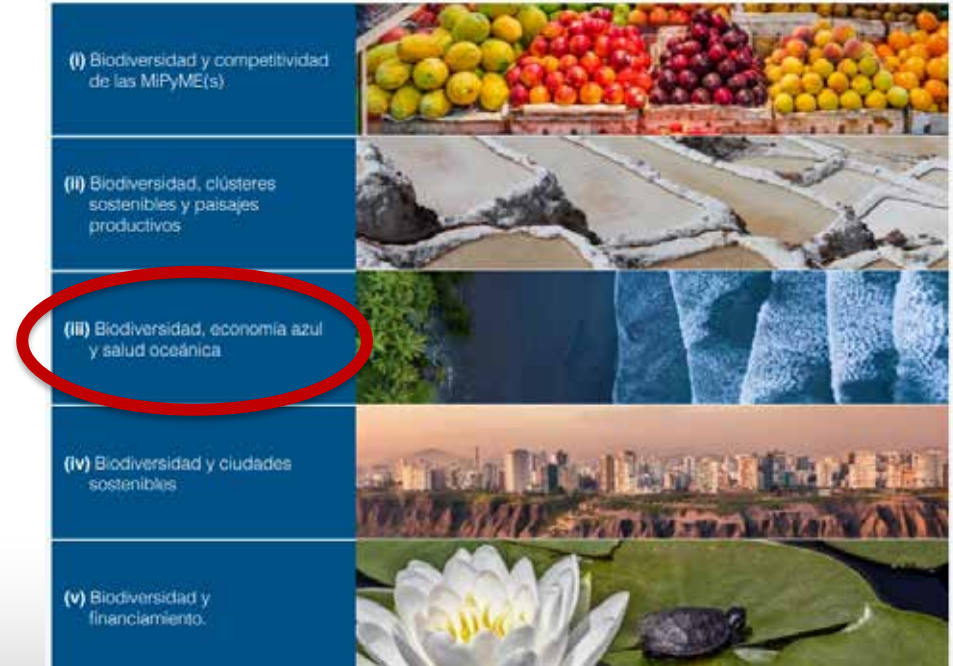
-or-

Seafood and seaweed are service that relies on ecosystems health impacting production, quality and profitability?



Mainstreaming BlueBioTrade and Blue Economy

- At CAF we are proud for supporting BlueBioTrade initiatives, which include applied research and patent development related to innovative applications of seaweed, such as BioPen, Seaweed Farming for bioremediation, and other blue carbon market development activities that are undergoing in Both Ecuador and Peru.
- CAF Biodiversity Strategy 2021-2026 has prioritized Biodiversity and Oceans Health as a priority area, it is within the scope of this strategy that we are currently working on the design of productive clusters that will enhance seaweed production and diversified its applications.



Scaling-up - on the Ground Experiences - Seaweed and Innovation

- Impact Area: Peru – Paracas Bay.
- Number of targeted species: 3.
- Champion: ACUISUR.
- Allies: Smithsonian.
- Impact: Marine seagrass and landscape restoration.
- Objective: Technology transfer for planting, cultivation and harvesting of algae in a technified system of suspended ropes, and recovery of natural meadows.



Chondrus crispus



Ulva lactuca



Chondracanthus
chamissoi



Scaling-up - on the Ground Experiences - Seaweed and Innovation

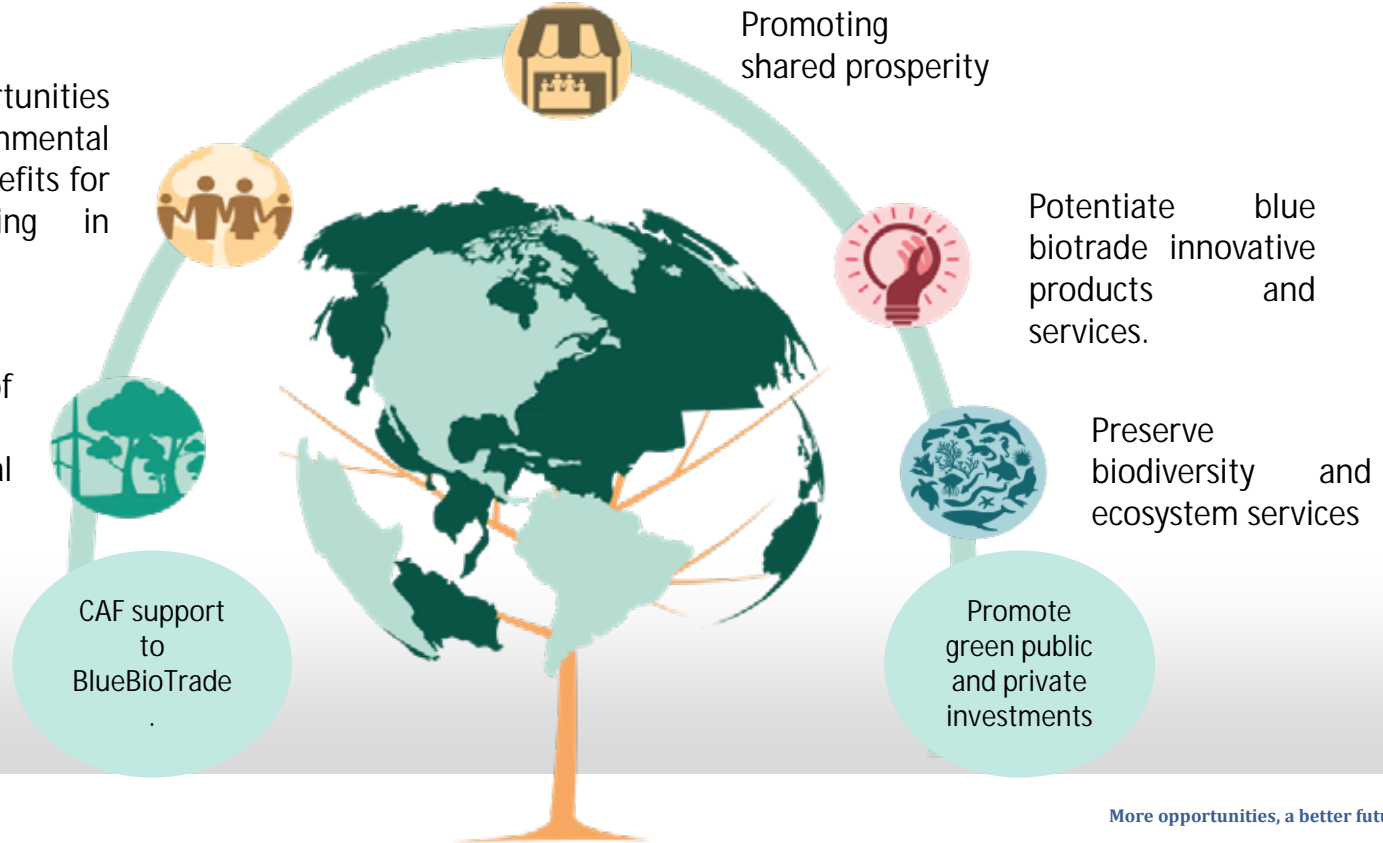
- Impact Area: Blue Biotrade –Peru.
- Number of targeted species: 5
- Champion: BIOPENCIL.
- Allies: Smithsonian.
- Ongoing work: Marine and Coastal.
- Spin-off: Regional GEF 8 project.
- Expected impact: Landspace and biodiversity restoration; ethical biotrade, woman empowerment.



BlueBioTrade – An Opportunity

Generating opportunities for social, environmental and economic benefits for communities living in coastal areas.

Providing proof of concept for sustainable development in coastal and marine sites.





Thank you for your kind
attention.



Más oportunidades, un mejor futuro.

René Gómez-García
Senior Executive
rgomez@caf.com