BIOTRAILS

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BIOTRAILS

In this issue

01 Introduction to the second issue

02 Cocoa produced in Peru

03 Aquaculture and Fisheries in Greece

04 Gold mining in Ghana

05 Handicrafts from the Amazon

06 The BIOTRAILS Learning Platform and the Learningd and Action Alliances (LAAs)

07 Contact

01 Introduction to the second issue

Dear Reader,

A few words for introducing the second issue of the BIOTRAILS's newsletter.

The first issue was meant to present BIOTRAILS to you. Within these pages, you will discover a concise, yet insightful, overview of biodiversity-relevant case studies forming the backbone of the project: 1) cocoa production in Peru; 2) fisheries and aquaculture products in Greece; 3) gold mined in Ghana; and 4) forest-based cultural products created by indigenous communities in the Brazilian Amazon.
As you can see, and will discover on the next pages, BIOTRAILS's case studies allows us to cover a wide range of biodiversity-related issues and to account for different socio-institutional and economic contexts.
Finally, this second issue presents the BIOTRAILS's platform for the Learning and Action Alliances (LLAs), a tool for supporting collaboration among different actors interested in transformative change for more sustainable value chains.

We hope you will enjoy reading our newsletter!

For additional information on the project, please visit www.biotrailsproject.eu.

Your sincerely,
Raffaele Giordano, Project Coordinator

02 Cocoa produced in Peru

Value chain & impact on biodiversity:

With chocolate consumption rapidly increasing worldwide and the rise in international cocoa prices, several domestic and international enterprises are emerging and expanding their cocoa-related activities in Peru, thereby transforming the overall sector from traditional production, rural assembly and sale, into a competitive arena for the procurement of cocoa beans. This is leading to an ever-increasing deforestation of the Amazon rainforest and to the disruption of the natural habitats.

The BIOTRAILS project aims to engage stakeholder/actors in the different phases of the value chain for co-designing intersectoral policies for accelerating transformative change, such as:

(i) Enforce the formalization of agroforestry land use concessions policies for controlling the territory;
(ii) catalyse the development of new and sustainable market for commercialising environmentally-friendly cocoa bean and derivatives;
(iii) Influence consumers' behaviour toward ethically sourced and eco-friendly chocolate;
(iv) Filling the knowledge gaps concerning the nexus Climate Change.Biodiversity-Society.

Key Facts:

- **Peru is the second largest producer of organic cocoa**
- **Ucayali is the third largest cocoa producer in the country**
- **Europe's demand for cocoa covers about 50% of the current production**
- **European countries export about 70% of the total chocolate in the market**

Find out more on BIOTRAILS website

03 Aquaculture and fisheries in Greece

Value chain & impact on biodiversity:

The high demand for fish products at the market and consumption side, in combination with illegal and unregulated fishing at the supply side, has led to depletion of a large amount of fish stocks and a severe degradation of the Mediterranean marine ecosystem. Despite the fact that policies have been put in place aiming to regulate human activities towards more resilient and viable fish stocks in the Mediterranean, they fail to capture the Nexus of the entire supply chain of marine biodiversity and do not take into account the large impact the trade and consumption of fish have on their stocks or on the pressures put to aquaculture.
The BIOTRAILS project will focus on the inclusion of companies, restaurant, restaurants, citizens and other key stakeholder for:
(i) Strengthening the link between demand for seafood-related ecosystem services and the condition of supplier and intermediate ecosystems;
(ii) co-define solutions for sustainable future pathways in retail and consumption patterns

Key Facts:

- **Globalization has allowed the consumption of fish products all over the world, even in places far from the sea**
- **The high demand for fish products has led a severe degradation of the Mediterranean marine ecosystem**
- **Trade and trans-shipment have led to a deterioration of the marine environmental conditions in terms of pollution and fish discard**
- **Italy, Spain and France are the main markets for Greek fish farming, absorbing 58% of the country's aquaculture production (report 2022 – HAPO)**

Find out more on BIOTRAILS website

04 Gold mining in Ghana

Value chain & impact on biodiversity:

The gold mining sector in Ghana can be roughly split into the Large-Scale Mining (LSM) and Artisanal and Small-scale Mining (ASM) sectors. Both pose threats to the ecosystem and country's biodiversity.

The Majority of ASM operations in Ghana involves surface mining which invariable leads to vegetation clearance and destruction. Impact of mining on vegetation cover is not only limited to direct deforestation but also triggers indirect deforestation through degradation and destruction of arable farmland.

Several studies have pointed out that mining operations results in soil and water pollution and land degradation that pose significant health risk. Mining impacts on water bodies have been particularly highlighted with studies indicating that high turbidity, oil and grease, arsenic and mercury pollution are the major threats. Moreover, deforestation and the impacts on the morphology of the territory, in combination with climate change, are affecting the flood risk, which represents a threat to local communities.

BIOTRAILS explores alternative pathways for transformative change, building on attempts from other projects and programmes, and combining production-sided and market-based incentives to limit the negative consequences of mining on biodiversity. BIOTRAILS will adopt a multi-scale approach, working both at national level, engaging large companies and institutional actors, and involving communities in the co-design of transformative solutions at the local level.

Key Facts:

- **Ghana is the number one gold producer in Africa**
- **The mining of gold accounts for 49% of the mining sector in Ghana**
- **30-35% of gold in Ghana is produced by artisanal and small- scale mining (ASM)**
- **ASM are poorly regulated and use low technology with an estimated 60-80% of them operating informally**

Find out more on BIOTRAILS website

05 Handcrafts in Amazon forest

Value chain & impact on biodiversity:

Sociobiodiversity value chains promote local economies through the commercialisation of products that empower local and indigenous communities as environmental stewards, and support global economic stability by mitigating deforestation, as weel as the increased risks posed by climate change, biodiversity loss, and other biogeochemical disasters.
When done sustainably, forest-based arts and crafts don't have detrimental impacts on biodiversity. However, new consumption trends and an increasing demand can pose a threat to biodiversity.
BIOTRAILS implementation explores alternative pathways for transformative change considering the impacts of indigenous artisanship as a key to improve sustainability practices, identify actions required through the formulation of policies but also ensuring their long-term environmental and economic viability, while also increasing community governance.

Key Facts:

- **Manufacturing of native craft works is a very important activity in the Amazonian rainforest**
- **Local people have started their own commercial activities to make handicrafts such as necklaces from forest products (i.e from seeds and plants)**
- **New consumption trends and increasing demand can pose a threat to biodiversity**
- **The loss and degradation of the Amazonian rainforest–also contributes directly to losses in social welfare due to its impact on human health and rural and indigenous livelihoods**

Find out more on BIOTRAILS website

06 The BIOTRAILS Learning Platform and the Learning and Action Alliances (LAAs)

And now the big news!

The BIOTRAILS Learning Platform has been launched!

By joining the platform, members can connect, discuss and share knowledge and experiences with other actors on the project's value chains and on transformative change, participate in various co-creation activities of the project as well as to be the first to test our tools and validate our methods. Beyond that they can learn more about different transitional pathways, tools and solutions for more sustainable value chains and join one or more of our Learning and Action Alliances (LAAs) to engage in social cross-sectoral and multi-stakeholder learning on the four value chains as well as on biodiversity-driven transformative change in general!

Follow the link and register to get involved: laas.biotrailsproject.eu

07 Contact

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