

## A European bamboo industry

not only for construction

**Dr Hans Friederich FRGS** 

Bamboologic



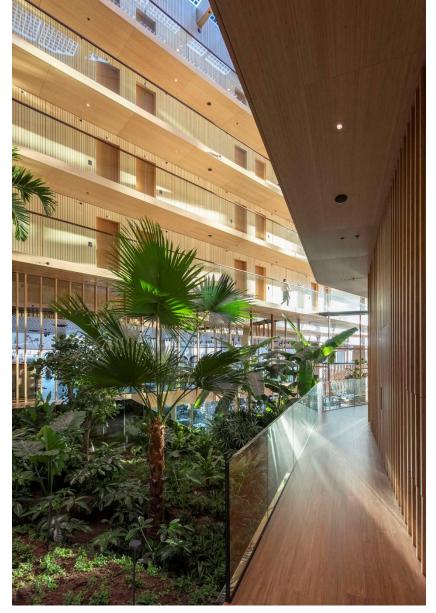
### Construction with Bamboo



Round pole?

Or

Engineered bamboo?



Vo Trong Nghia – Vietnam /Hoang-le-photography

Hotel Jakarta – Amsterdam (photo from Arch Daily

#### You need a reliable source of bamboo

Whichever way you build, you will need the raw material, and bamboo does not naturally grow in Europe





China has more than 6 million hectares of bamboo, and half of that was planted for production; The key species is so called Moso bamboo (Phyllostachys) and this is excellent for engineered bamboo.

Southeast Asia has giant clumping bamboo (Dendrocalamus)

This is great material for round pole construction of buildings like the ones shown by Marcus Roselieb



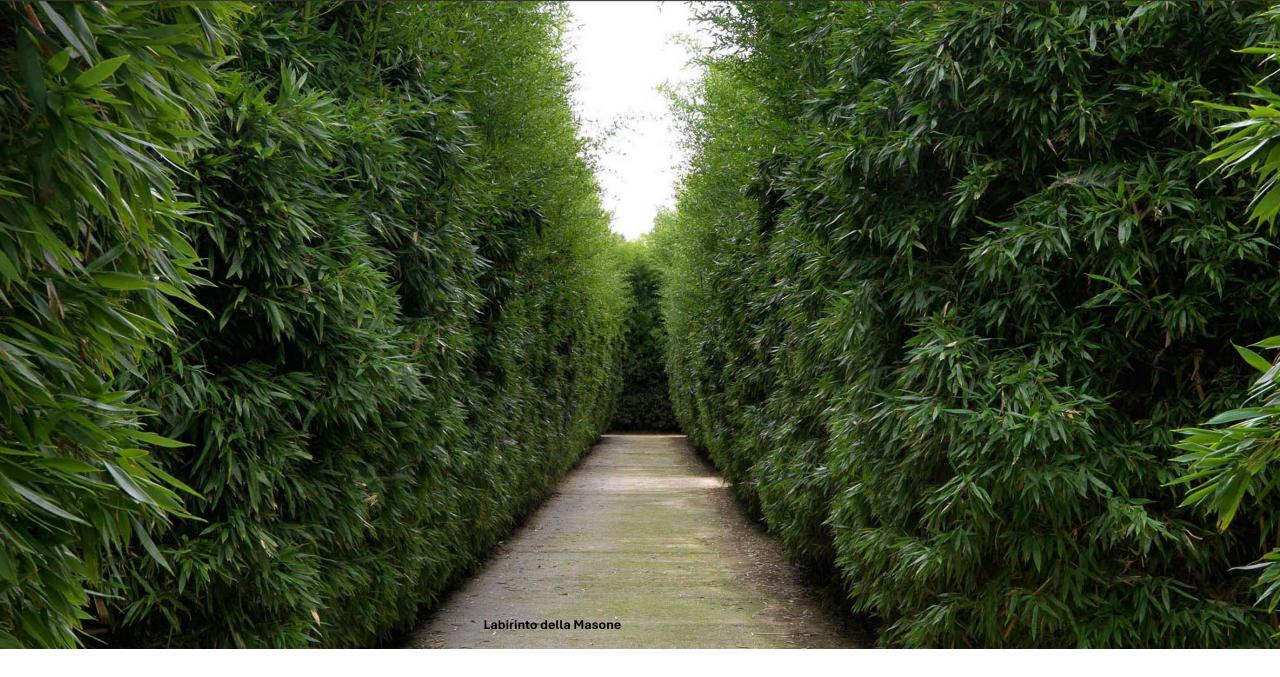


In South America, there is also Dendrocalamus, but we also find Guadua bamboo – excellent for the round pole construction of (large) buildings



Africa has a lot of bamboo, but it is not really used;

It is the nearest source of bamboo for Europe



But bamboo is already found in Europe, like here in Italy. Bamboologic is planning to plant much more

## Bamboologic farm Vidigueira, South-Portugal

12 ha bamboo forest project











## Bamboologic farm Alcoutim, South-Portugal

#### 110 ha bamboo forest project













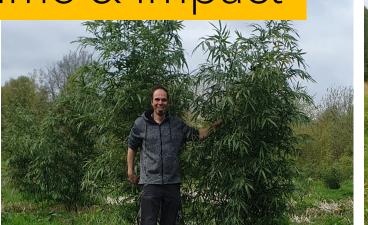






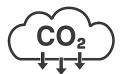
















#### Our bamboo farmers are superheroes...

. because our farmers have chosen to do things different. Cooperated through Bamboologic they grow bamboo, a fast renewable nature based material. 2 goals: supplying the E.U. bio-based industry and making a huge positive impact on climate, nature & agriculture.

By buying their carbon removal certificates you enable bamboo farmers to make more positive impact. Together we are supercharging sustainability!

#### Support the farmers

- 4 Become a bamboo farmer
- 4 Road our FAQ

www.bamboocarbonremoval.eu

#### Impact in numbers









#### Bamboo carbon removal projects

Independently certified certificates for the removal of CO2 through bamboo forests.

Make a positive impact on climate, biodiversity & agriculture in Europe.

→ Questions? Read our FAQ





















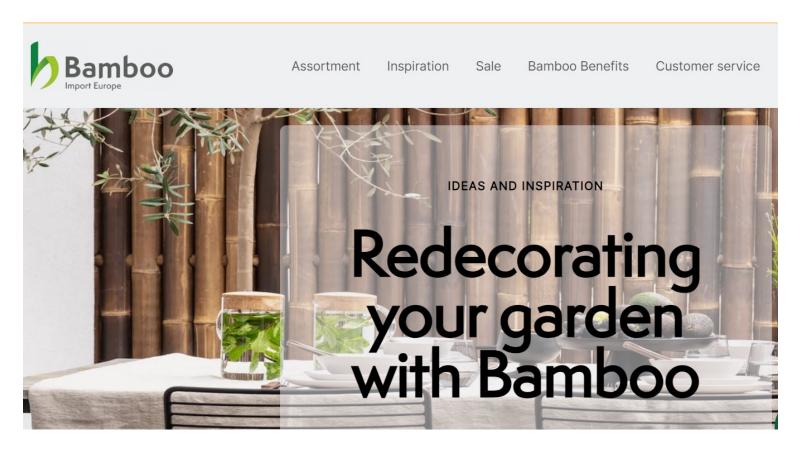




## B-to-C



Largest importer/distributor of bamboo poles and products in Europe 14 sales points in 10 countries



#### 14 sales points



Processing

















# B-to-B











## Market demand

- Wooden boards | Chips min. 90.000 mt/yr
- Vegetable processing | Shoots 50 100 mt / yr
- Composite materials | Slats 650 mt/yr
- Animal feed | Saw dust min. 1.000 mt / yr
- MDF / insulation | Chips min. 6.000 mt / yr
- Poles ski slopes | Culms 50.000 pcs. / yr
- Toilet paper | Biomass 30.000 mt / yr

- Shipping pallets | 3.000 mt/yr
- City rafts | Culms 1.200 pcs. / yr
- Train sleepers | Poles 50.000 mt / yr
- Beauty product | Leafs 10 mt/yr
- Tea producer | Leafs 1 mt/yr
- Bamboo flower pots | 10.000 / yr
- Amusement park | Poles 1.000

## We need to plant more to satisfy demand



Joao Ludovico at Bamboologic nursery in Alcoutim

And there are environmental benefits







How can we deal with pollution of agricultural land and water ways?

# Farmers protest across Europe, press ministers to act

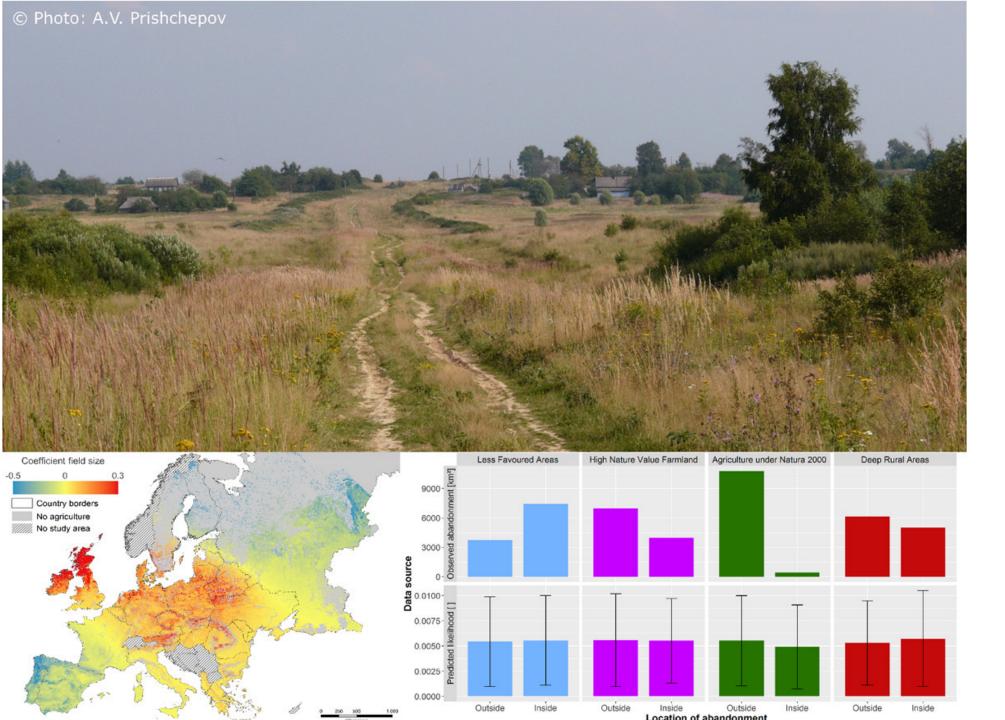
By Philip Blenkinsop, David Latona and Anna Wlodarczak-semczuk

February 26, 2024 5:33 PM GMT+1 · Updated 3 months ago





"We produce the food and we don't make a living. Why is that? Because of free trade agreements. Because of deregulation. Because the prices are below the cost of production. So we demand the EU to move on this."



And how to address the fact that farmers abandon their land?



# CHINA BAMBOO INDUSTRY PLANS AT NATIONAL AND PROVINCIAL LEVELS

Translated by the International Bamboo and Rattan Organisation



- China has a National Bamboo Plan 2011-2020
- Government-supported and market-driven
- Government will help to accelerate industry clusters and upgrade product quality to increase its market competitiveness to ensure a healthy development.



#### Bamboo grown by neighbour causes £100k of damage as it spread under property

FEBRUARY 1, 2022 | MARC DA SILVA



Homeowners have long been warned that bamboo can be more damaging to a property if left unchecked, and one family discove how damaging it could be when shoots started bursting from the of their house.

The plant, which had been growing in a neighbour's garden, had underground and came up from under the concrete floor of the bedroom house in Hampshire.

The bamboo invaded the ground beneath the home to emerge in

leighbors' legal battle over backyard ba upreme Court

TACEY BARCHENGER | NorthJersey.com

### **Bamboo Battle: B.C** wins \$2,000 from n planted bamboo tha lawn



# **B SQUARE**

#### 3,000 bill after he y to find invasive rol of his home and าe oven'

ontact: Dan.Grennan@MailOnline.co.uk

**)ATED:** 15:34 BST, 20 December 2023



nboo is the new Japanese knotweed:





tle against 'out of control' bamboo which 26,000 to remove.

Bloomington says bamboo ban means longtime resident must purge invasive species from yard

à Dave Askins 
☐ Bloomington, Local Government 
☐ July 6, 2022 
☐ 3 Minutes

"Because bamboo is nasty, and yo

Charles Parker of Saanich installed a barrier to prevent spread of the bamboo from the neighbours' yard

The vigorous, fast-growing plant can cause a lot of damage

gardens

HOME & INTERIORS > GARDENS

Brits are being urged to stop planting bamboo in their

BY LISA JOYNER PUBLISHED: 21 DECEMBER 2019

Sugan Lazaruk

#### s bamboo drought-tolerai choose the best types to si conditions

The drought tolerance of bamboo can take several year gets itself fully established







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D+C POVERTY REDUCTION GENDER

Water

#### Bamboo means water

Indonesia is the sixth largest bam known that bamboo, a kind of grae inside.

handicraft industries. Its ecological value of conserving water re is less well known. Villages that take care of bamboo forests enjo abundant and clean water.

#### Residents Urged To Embrace Bamboo Trees To **Cushion Against Climate Change**



May 14, 2023 Counties, Environment, Nyamira

Nyamira residents have been urged to embrace planting bamboo trees to save drying-up water catchment areas, causing a Climate Change crisis due to prolonged drought

Mr. Benjamin Mutinda, an officer at Kenya Forestry Research Institute (KEFRI), while training farmers at Ekerenyo, said that that the Bamboo trees need to be grown by all farmers and serious timber entrepreneurs, because they conserve the environment, since these trees need very little water to grow to maturity because they are hollow



as been promoting bamboo cultivation for water conservation

yana, a farmer from Sullia, has been promoting conservation, especially when the water crisis in ith every passing year.

tion of bamboo in 2019. He said that with areca the valley last disease for the past several very

**WS** 

Pulitzer Prize-winning, nonpa reporting on the biggest crisis planet.

#### The Radical Case for Growing Huge Swaths of Bamboo in North America

The grass has a bad rap in the U.S. as an invasive nuisance, but the nlant can quickly sequester at least double—and maybe even six

#### Challenges that can be overcome

- > Lack of Political support;
- > Limited awareness of benefits of bamboo;
- > Objections from nature conservation organizations;
- ➤ **Need** for more research and studies;
- ➤ Little experience of growing bamboo under European conditions;
- > Unknown costs of cultivation, harvesting and production;
- ➤ Unsuitable regulations, norms & standards.

## And amazing opportunities

- **▶** Part of the EU Green Deal;
- ➤ Land restoration and erosion control;
- Greening degraded landscapes;
- Restoring the water balance;
- Creating jobs;
- > Providing a new cash-crop that can be part of integrated landscape planning;
- > Developing an innovative European industry;
- > Avoiding international trading complications.

