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The Innovative Development of the "Bamboo as a Substitute for Plastic" Industry and the Global Plastic Actions

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Li Lan International Bamboo and Rattan Organization

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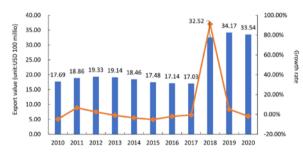
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1. About Bamboo 1.1 Status



Data Source: Statistics and Collation from the UN ComTrade database.

- Resources: There are more than 1600 species of bamboo in the world, widely distributed in the tropical, subtropical and temperate regions of Asia, Africa and Latin America.
- Industry: Nowadays, bamboo industries have realized almost full-biomass utilization and the related value-chain. Bamboo is widely applied in textile, green food, renewable energy, construction, medicine & health, furnishing and housewares, handicrafts, etc. Bamboo is recognized as an excellent alternative substitute for wood and plastic.
- Trade: In 2021, the global export value of bamboo products is around 3.599 billion USD (around 3.381 billion EUR).





About Bamboo Features and Advantages



As a green, low-carbon, fast-growing, renewable and degradable biomass material, bamboo can provide nature-based solution for UN 2030 Sustainable Development Goals:

- SDG1 No Poverty
- SDG7 Affordable and Clean Energy
- SDG11 Sustainable Cities and Construction
- SDG12 Responsible Consumption and Production
- SDG13 Climate Action
- SDG15 Life on Land





2. The "Bamboo as a Substitute for Plastic" Initiative

- Formulate supportive policies
- Promote technological innovation
- Encourage scientific research
- Promote market expansion
- Enhance publicity





2. The "Bamboo as a Substitute for Plastic" Initiative

2.1 Progress

- Participating INC-1 and INC-2;
- Formulating a Global Action Plan for Bamboo as a Substitute for Plastic□
- Encouraging scientific research and innovation;
- Promoting the significant potential and value of bamboo in key international fora.











2. The "Bamboo as a Substitute for Plastic" Initiative2.2 Impacts on Bamboo Industries

- Promote global policies harmonization for coordinated and universal actions against plastic pollution, facilitate the regularization and standardization of plastic substitute products;
- Assist the transformation and upgrading of the bamboo sectors in developing countries, help achieving the duel carbon goals and green development;
- Coordinate advantageous scientific innovation forces in the world, develop new products and technologies;
- Enhance the formation of new bamboo production, processing and applications models,
 promote new market, consumption and green trade;
- Focus on bamboo plastic substitute products, carry out entire lifecycle environment evaluation, which help push forward controlling of plastic pollution and combating climate change.



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3. Products, Challenges and Opportunities

3.2 Challenges

- Limited scale, production capacity and product types, lack of advanced technologies;
- Fragmented policies among countries and regions which restrict the promotion and application of plastic substitutes
- Inconsistent and complex rules, norms and standards for sustainable products in international trade
- Insufficient consumer awareness



3. Products, Challenges and Opportunities

3.3 Opportunities



- Finding alternative plastic substitutes is of great practical significance for the global response to the plastic pollution crisis;
- According to UNCTAD statistics on trade value of plastic substitutes, natural fibers (plant/tree based) make a significant part of the main substitutes.





3. Products, Challenges and Opportunities 3.4 A Case of Best Practices

Anji, China

- Location: northwest of Zhejiang Province
- Total area: 1800 square kilometers
- Bamboo forest area: 670 square kilometers
- Total production value of the bamboo sector: nearly 20 billion RMB (about 2.5 billion EUR)
- With 1.8% of the national bamboo forest resources, Anji generated 10% of the national total production value.







3. Products, Challenges and Opportunities

3.4 A Case of Best Practices

- Focus on top-level design, systematic policy supports
- Develop entire industry chain
- Accelerate development of key scenario applications
- Comprehensively promote public participation









THANK YOU