



Introduction of New Work Item Proposal: Bamboo mats

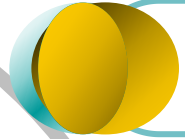
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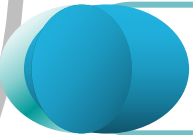
Outline



Background



Standardization Status



Proposed Contents



Work plan in future

Background

Brief introduction of Bamboo mat



- Abundant bamboo resources
- Good **thermal conductivity**, excellent **breathability**, good **elasticity** with comfortable using
- High **machinability**



Bed and pillows



Cushions



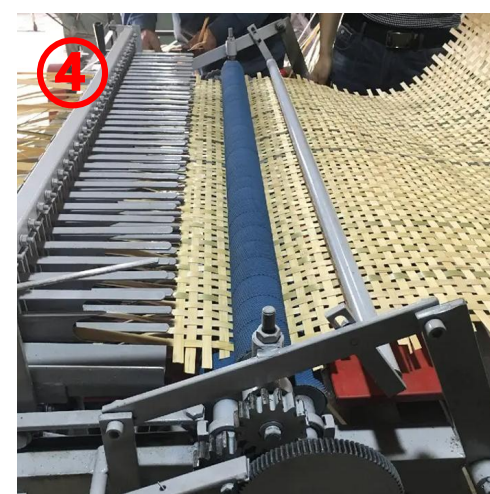
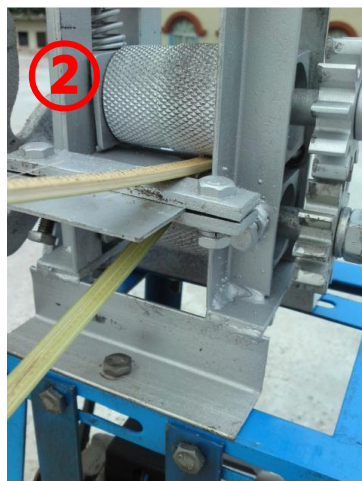
Carpets

- Beds
- Pillows
- Cushions
- Carpets

Background

Brief introduction of Bamboo mat

Bamboo woven mat



① Bamboo strips processing

② Bamboo splitting in tangential direction

③ **Bamboo silvers**

④ Bamboo silvers weaving

⑤ **Other treatments:**
finishing, dyeing, backing materials, etc.

⑥ Finished products: used for beds, carpets



Background

Brief introduction of Bamboo mat

Bamboo stick mat

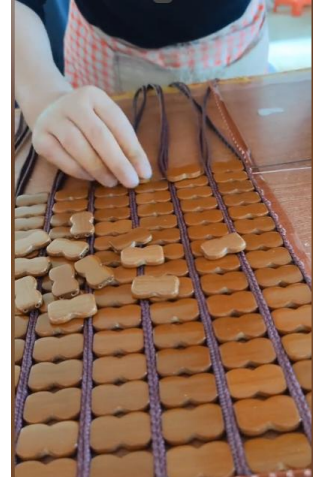


- ①~③ Bamboo silvers processing
④~⑤ **Bamboo sticks** processing
⑥ Bamboo sticks weaving
Other treatments: finshing, dyeing, backing material, etc.
⑦ Finished products: used for beds, pillows, cushions, carpets

Background

Brief introduction of Bamboo mat

Bamboo mahjong mat



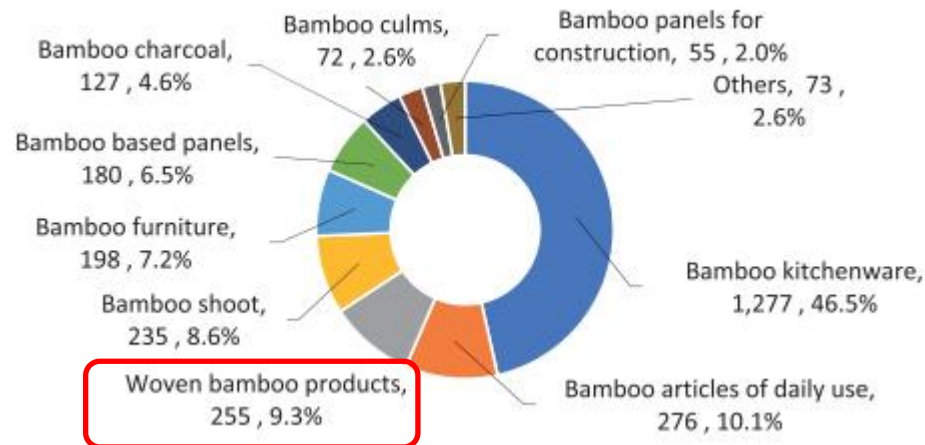
- ①~② Bamboo strips processing
- ③ **Bamboo blocks (carbonization, etc.)**
- ④ Bamboo blocks weaving
- Other treatments:** finishing, backing material, etc.
- ⑤ Finished products: used for bed, pillows, cushions, carpets



Background

Brief introduction of Bamboo mat

Proportion of China's export of main bamboo commodities in 2022 (unit: USD million, %)



unit: USD million

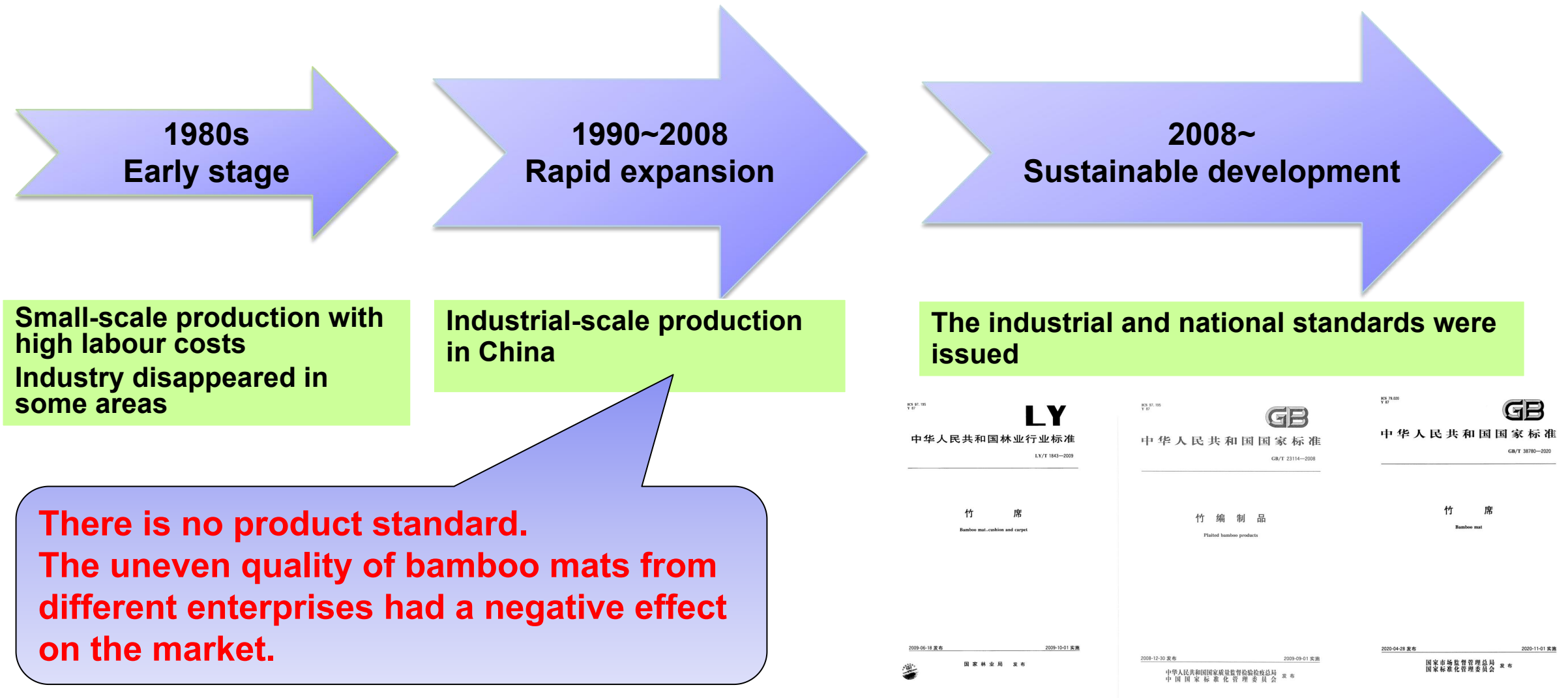
Category of Bamboo commodities	The USA	Japan	The Netherlands	Germany	India
Bamboo kitchenware	215.01	152.62	46.28	55.68	96.52
Bamboo shoot	15.76	141.29	5.64	5.93	0.24
Bamboo articles of daily use	67.60	11.90	16.54	22.06	1.56
Woven bamboo products	56.33	17.75	19.85	8.81	1.34
Bamboo furniture	57.63	9.70	10.18	22.54	0.52
Bamboo based panels	44.43	11.78	15.17	5.88	1.80
Bamboo charcoal	1.64	24.81	0.44	0.45	0.94
Bamboo culms	10.38	3.17	10.74	3.19	-
Bamboo panels for construction	8.72	0.02	11.90	0.32	1.17
Bamboo pulp and paper articles	14.01	1.24	0.04	2.28	0.10
Bamboo viscose fiber	0.18	0.20	0.15	0.25	12.12

Source: INBAR

- In 2022, the export value of bamboo products reached **2.75** billion US dollars, with woven bamboo products accounting for **12.9%** of the total.
- Bamboo mats and plaits accounted for **50%** of woven bamboo products.

Standardization Status

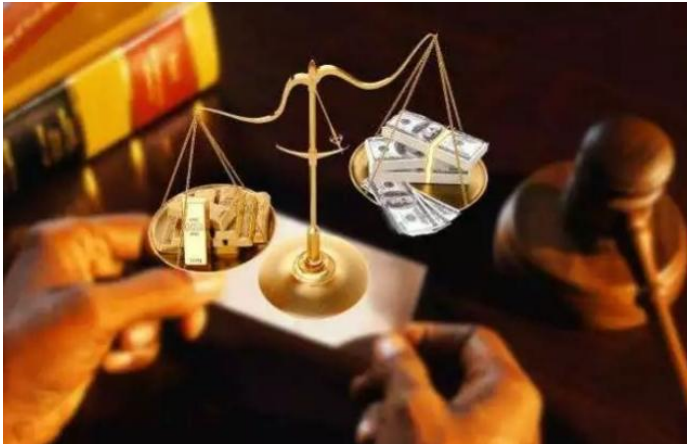
Standard Development in China



Standardization Status

Challenges

- There is no international standard for bamboo mats.
- Different markets had different technical requirements and test methods .
- Great inconvenience for bamboo mats manufacturing, quality management, and international trade.



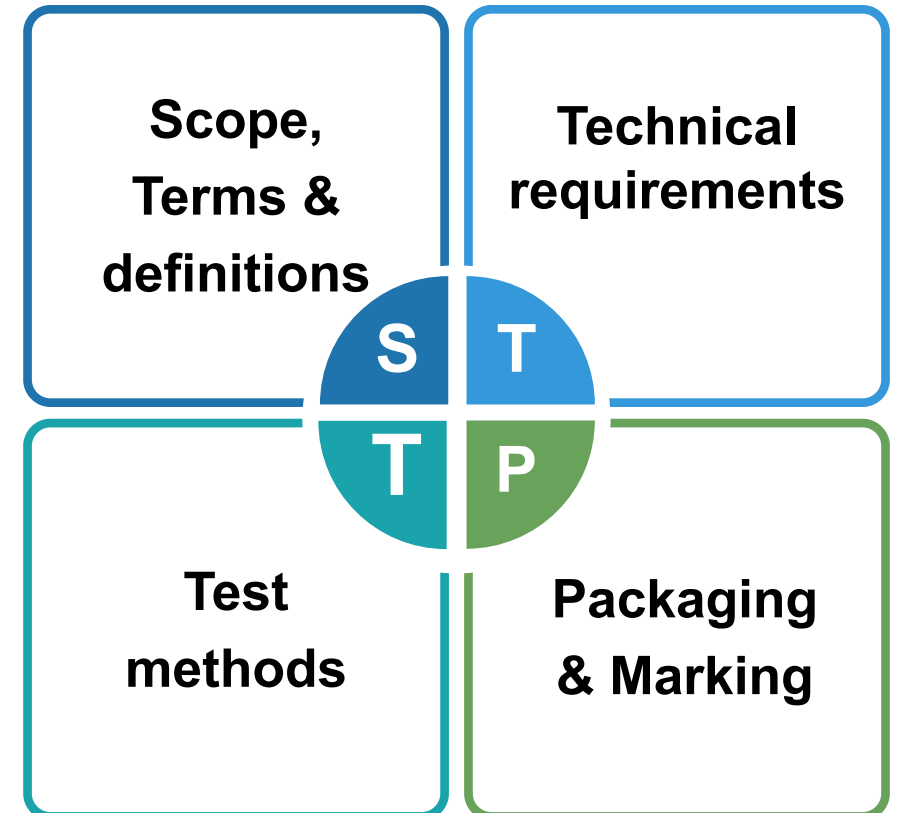
Proposed Contents

Principles & Main Contents

Principles



Main Contents



Bamboo mats

- bamboo stick mat
- bamboo woven mat
- bamboo mahjong mat

Bamboo elements

- bamoo stick
- bamboo block
- bamboo silver
- etc.

Requirement

- bamboo thorn
- etc.

Size and Tolerance

- Common sizes
- Tolerances on the length and width

Appearance

- Bamboo thorn
- Crack
- Bamboo stick breakage
- Mildew
- Glue delamination
- etc.

Physical, mechanical, and chemical property

- Moisture content
- Bonding quality
- Bamboo stick toughness
- Color fastness
- etc.