Present Status of Bamboo in Japan

Masatoshi WATANABE, Dr.Agri.

Specialist, Japan Bamboo Society (JBS)
Secretary General, Japan Bamboo Association (JBA)
Technical advisor, Rakusai Bamboo Park of Kyoto City
On Japan

Bamboo cultivation area in 2009

- Shoot: 23,916.4
- Culm: 33,440.3
- Total: 57,357ha

42% Shoot
58% Culm
1. Bamboo in Japan

*Phyllostachys pubescens*

*P. bambusoides*

*P. Nigra var. henonis*
2. Present status of culm cultivation and production

Culm cultivation area

Yearly changes of culm cultivation area

- Others
- P. pubescens
- P. bambusoides

38%
Present status of culm production in Japan

Culm production (ton)

Yearly changes of culm production

15%
The reason why such a downward trend occurred is due to the following "five reasons".
① Market decrease
② Availability of substitute articles
③ Import of bamboo products
④ Bamboo cultivation is labor intensive and very hard work
⑤ Aging skilled labor
Present status of bamboo shoot production

Relationship between domestic production and imported amount
4. Present problems in Japan

Here, I would like to point out the present problems in Japan.

① The increase of non-managed bamboo forests
Area of bamboo forests in Japan (ha)

Statistics:
79,921 ha

Landsat:
247,309 ha

Bamboo areas by statistics and Landsat in 2003

24%!
Increase of non-managed bamboo forests

Non-managed *P. Bambusoides* forest

Non-managed *P. pubescens* forest
4. Present problems in Japan

② Expansion of bamboo forests

This problem is the expansion of bamboo growth into afforestation areas, woodlands near populated areas and various farms.
5. Utilization of bamboo and related problems in Japan

Here, I would like to show you the figure to explain the ways of bamboo utilization in Japan.
Utilization of bamboo

**Industrial utilization**
- New construction materials
  - Bamboo board, flooring, wall
- Bamboo fiber
  - Pulp, paper, rayon
- Bamboo powder
  - Fertilizer, fodder
- Carbonization
  - Bamboo charcoal, active carbon, vinegar
- Medical supplies
  - Preservatives, drinks
- Bio-energy
  - Electric power, alcohol, ethanol

**Cultural utilization**
- Traditional industries
  - Traditional bamboo culture
  - Japanese housing materials
- Typical gardening materials
- Land prevention
  - Embankment protection
  - Protection for landslide
- Creation of green environment
- Effect for recreation

**Bamboo shoot**
- Foods
- Fodder

**Culm**
- Leaves: CO₂ absorption
  - Restoration to soil
- Branches: Living materials like broom
  - Restoration to soil
- Culm sheath:
  - Rapping materials, fodder, restoration to soil

**Rhizome:**
- Handle materials, prevention for disaster
6. Counter measurement for solving present problems

① On the problem of increasing non-managed bamboo forests
Counter measurement

- Increase in non-managed bamboo forests
- Decrease in demand
- Industrial utilization

Increase the demand

Key reason
Problems
① "high production costs"
② to need the large volume

Industrial utilization

small scale plan

village group
neighborhood associations
small scale communities.

Counter measurement
At present, decreasing trend of import

Japanese consumers are awakening to the security and safety concerns of imported foods.

The domestic production of bamboo shoots seems to be increasing gradually.
Counter measurement

On the problem of expansion of bamboo forests

No relation with bamboo industry

Lacking necessary management, such as weeding, improvement cutting and selective thinning.
Conclusion

I believe that Japan has achieved a level of high technology in the cultivation and utilization of bamboo in a global perspective.

However, such a high technology cannot be manifested today, and presently the valuable bamboo resources of Japan are not utilized sufficiently.
Despite this truth, I would like to emphasize that we Japanese never give up and we must find the best way to solve the various problems inhibiting our bamboo industry in the near future.
Thank you very much!

Masatoshi WATANABE