



## Bamboo propagation and utilisation training

Supported by FACT and FAD projects of SPC.

"Once established the clumps may be harvested annually over hundreds of years. Different bamboo species produce many products including two main crops: edible shoots and timber poles. Other uses include handicraft, paper and biofuel generation." Mr. Durnford Dart

8/7/2009

**Bamboo propagation and utilisation workshop report**

**Date:** 4<sup>th</sup> August, 2009-08-07

**Purpose:** To create awareness on the care /maintenance of bamboo and its utilisation.

**Introduction**

The bamboo propagation and utilisation workshop was held at Fiji's Forestry Department in Colo-I-Suva and the nearby nursery, previously owned by Forestry Department. A total of 25 participants (annex one) attended the day long training which was conducted by Mr Durnford Dart of Bamboo Australia Pty Ltd. European Union funded Facilitating Agricultural Commodity Trade [FACT] project as well as Forestry and Agricultural Diversification program of Secretariat of the Pacific Community's Land Resource Division provided the financial support for the workshop.

Bamboos are described as world's largest grasses, growing up to 36 meters high with diameters that can exceed 30 cm. Bamboo plants produce an annual crop of new shoots that telescope into poles at up to a meter per day. Once established the clumps may be harvested annually over hundreds of years. Different bamboo species produce many products including two main crops: edible shoots and timber poles. Other uses include handicraft, paper and biofuel generation.

The prime focus of the workshop was to identify and establish bamboo as a substitute timber material suitable for the production of bamboo flooring, plywood, charcoal and biofuel with export potential.

Members of Fiji Bamboo Association that were present at the workshop were very impressed with the techniques and knowledge imparted by the resource person, and were very thankful to the SPC for organising such training.



### **Activities of the Day**

The training begun at 9:00a.m with the resource person who went through two power point presentation. Some highlights of the presentations were:

#### 1. Uses of Bamboo:

- Bamboo is a grass –the world’s largest grass that grows up to 36 metre high with diameters exceeding 30 cm and produces an annual crop of new shoots that telescope into poles @ a metre a day. Once established, clumps are harvested for hundreds of years.
  - Bamboo benefits by producing two crops.
  - Edible shoots
  - Timber poles.
- Bamboo thrives when irrigated with effluent –sewerage –pig –cow as it strips nutrients from the effluent!
- Bamboo absorbs carbon dioxide = carbon sequestration credits.
- The utilization of bamboo is only limited to the imagination, in construction: Poles –Flooring – Cladding, in furniture: Home –Resort –Commercial, in handicrafts: Utensils –Toys –Blinds, even in Marine: Raft –Fishing –Wharfs –Markers, structures: Housing –Sheds –Pens and in transport: Truck decks –Crates –Barrows.

#### 2. Propagation of Bamboo:

- MASS PROPAGATE SPECIES FOR CONSUMPTION AS:
  - Edible Shoots
  - Construction Timber
  - Biofuel Feedstock
- Methods of propagation
  - Division
  - Seed
  - Culm Cutting
  - Branch cutting
  - Marcotting
  - Micro Propagation
  - Trench Layering
- For best results
  - Select healthy and strong parent plants..
  - Keep cuttings moist at all times.
  - Remember to water established plants.
  - Apply fertilizer when the root system of the new plant is established.
  - Teach recipient of new plants how to manage and maintain.

Following morning tea, the whole team went to the bamboo nursery established by Forestry Department .The participants were exposed to different varieties/species of bamboo in Fiji present (so far there are only 7). The resource person also demonstrated to the participants on how to maintain the clumps and also explained the reason for marking the individual bamboo so that only 4 years old matured is harvested and others allowed build up.

After much discussion and lunch, the resource person demonstrated the technique of propagating bamboo using young branches.

### **Conclusion**

The training concluded with remarks from European Commission delegate Ms Cristina Casella who showed her appreciation for such training. Mr Dart also encouraged the participants to seriously consider bamboo as a potential crop that can generate revenue for them. A follow-up of this training was also recommended.

## Annex one

### Participants and observers for Bamboo Training Workshop

1. Mr Durnford Dart - Trainer, Bamboo Australia; durn@bamboo-oz.com.au
2. Dr Lex Thomson – SPC LRD FACT Team Leader (resource person); lext@spc.int
3. Mr Jalesi Mateboto – SPC LRD – community forestry; jalesim@spc.int
4. Mr Vinesh Prasad – SPC LRD FACT Media liaison and information ; vineshp@spc.int
5. Mr Saimoni Nabiturumaru – Ministry of Information (video recording)
6. Mr Iowane Konoitukana – Silvicultural Research Division – Fiji Department of Forestry (Colo-I-Suva)  
ph: 3322311
7. Mr Keleto Kadi – Forest Extension Service, Fiji Department of Forestry (Colo-I-Suva)
8. Mr Masi Latiniara – local architect (2NDSITE) – interest in bamboo for construction; ph: 3314219;
9. Ms Kim Kumsook – interior architect (Architects Pacific)
10. Mr Samuela Taucilagi – nursery worker (Narere and Lau Is) ph: 8607771
11. Mr Soko Sukulu – Maravu Bamboo Club ph 3606850 ph: 9536579
12. Mr Malakai – Maravu Bamboo Club (Colo-I-Suva landowner)
13. Mr Ilikana – Maravu Bamboo Club (Colo-I-Suva landowner)
14. Mr Saimoni Gataurua - Community Extension Officer – Ministry of National Planning;  
saimoni.gataurua@labour.gov.fj
15. Mr Bob Horton - Business Development Specialist (IHRDP) – US Peace Corps;  
bob.horton@mindspring.com
16. Ms Gilly Huggett – local architect (Architects Pacific and Bamboo Association of Fiji) ph: 9955871
17. Mr Chris Cole – local architect (Architects Pacific) - chris@architectspacific.com
18. Ms Lynda Miller – Fiji Bamboo Association (Wakaya Is) ph: 9908471
19. Mr Usaia Korodrau – Bitukau Enterprises (Vusuya); ph: 7316215
20. Mr John Lewis – Fiji Bamboo Association (Suva)
21. Mr Wilson Chow – private grower (Wainibokasi Landing) - wchow@colonialfiji.com.fj
22. Mr Vilisoni Nataniela – private grower (Wailoku & Rotuma) ph: 3322213
23. Mr Leone Moce Naililiwalu – Vutikalulu Centre, Naitisiri (through juliedewa@yahoo.co.uk)
24. Mr Eremasi Qaraiwalu – Vutikalulu Centre, Naitisiri
25. Mr Kamenieli Manito – Vutikalulu Centre, Naitisiri
26. Mr Niumaia Livou – Vutikalulu Centre, Naitisiri
27. Mr Keleto Kadi – Forest Extension Service, Fiji Department of Forestry (Colo-I-Suva)
28. Mr Humphrey Chang – Winglee Farm (grower/user) – [wlm@connect.com.fj](mailto:wlm@connect.com.fj)
29. Mr Ivan Krishna – SOPAC, Suva – ivan@sopac.org
30. Ms Cristina Casella - Delegation of the European Commission for the Pacific Regional Integration,  
Environment and Natural Resources - Cristina.CASELLA@ec.europa.eu