

Activities of the “Forest Products programme” in French Guyana

Background and stakes

Region of south America

84000 km² / 90 % of forest

700 000 ha with sustainable management by ONF

Population : 157 500 inhab. (1999)

among which more than de 50% are below 25 year old

From now to 2015

- population will double
- more than 50 000 young people will look for a job



huge needs in

- housing
- schools
- employments

The wood sector in French Guyana

- 65 000 m³ logs per year / 25 000 m³ sawing
- 75 % for local market (housing, public buildings...)
- about 700 employments (1st et 2nd woodworking)
- Deficit of foreign trade (furniture and wood based panels imports)

Resource specificity

- High species diversity (>1000) (Europe : about 80 species)
- many species in small quantities
- variability of wood characteristics (physical, mechanical properties ...)



Two major stakes :

- Economic development of the wood sector, in the framework of forest sustainable management.
- Development of wood in housing and building.

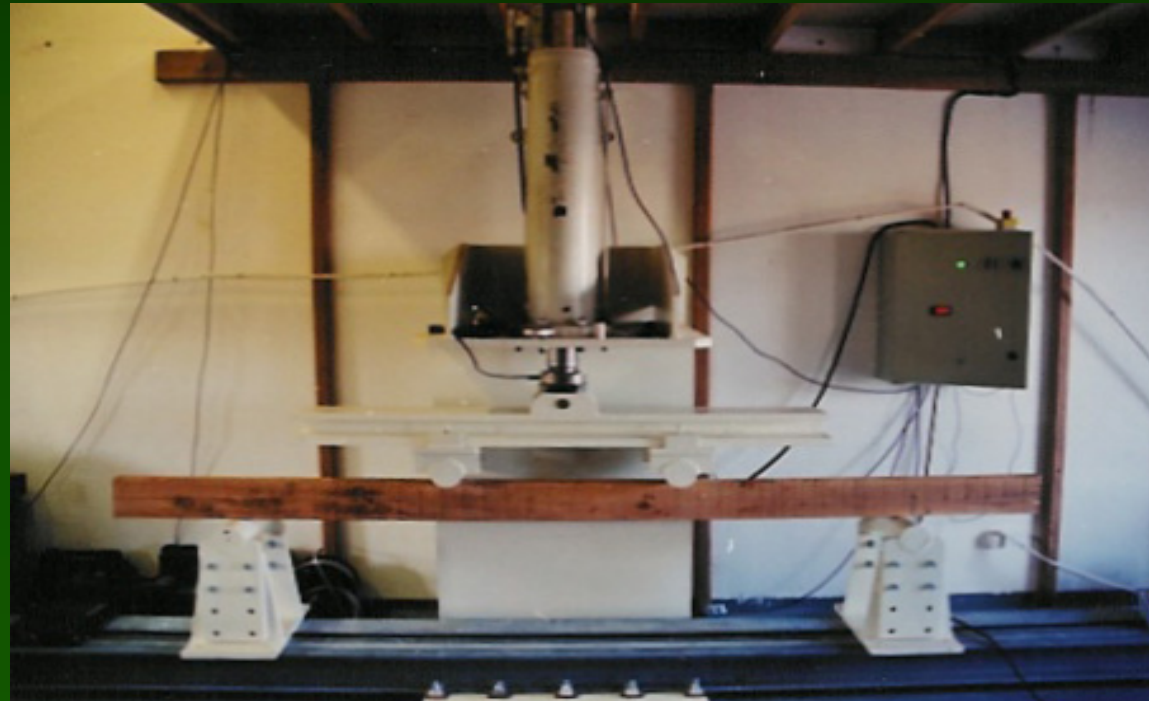


Two scientific et technological questions :

- Increase the number of used wood species.
- Improve wood processing for a good utilisation in construction.

Research actions and technical studies

- **Acquirements on Amazonian woods :**
 - ✓ wood collection and associated data base
 - ✓ physical and chemical characterisation of new species
 - ✓ characterisation of mechanical properties in full size



- **Conception and manufacture of wood based materials**

- blend of species according their characteristics
- laminated and bolted beams : (PhD) : study of mechanical behaviour, modelling and dimensioning.



- **Chemical determinism of natural durability (PhD)**

- understand natural durability of wood against fungi and its intra species variability

- => manufacture of wood preservatives with low impacts on environment.

- **Behaviour of wood finishing and preservatives applied on Amazonian woods exposed to tropical climate.**



- **expertises** : building sanitary states, wood control on building sites, energy from wood wastes and other biomass ...
- **review of conception** of wood building elements, from drawings, draft of requirements on wood ...
- **file review in** fund applications from wood sector companies to local authorities ...
- **edition** of a periodic booklet on various market information and research results dedicated to wood sector actors.
- Promotion of the **use of new species**
- ...

Training

- **Training sessions at the Antilles-Guyana University**
 - Professional Licence in "civil engineering and building in tropical areas"
 - DESS « tropical ecology »
- **Training courses for students from local schools**
 - CAP et BEP of joiners and carpenters (3 / an)
 - IUT Kourou (technicians) (1 à 2 / an)
- **Training sessions for professionals on specific items of wood processing**