Activities of the “Forest Products programme” in French Guyana
Region of south America

- 84000 km² / 90 % of forest
- 700 000 ha with sustainable management by ONF
  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 and 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 to 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**