

*Global workshop on transfer of environmentally sound technologies
and capacity building for sustainable forest management
24-27 February 2004, Congo, Brazzaville*

Information Acquisition and Treatment : new tools for sustainable forest management?

**Acquisition et Traitement de l'Information :
de nouveaux outils au service
de la gestion durable des forêts ?**

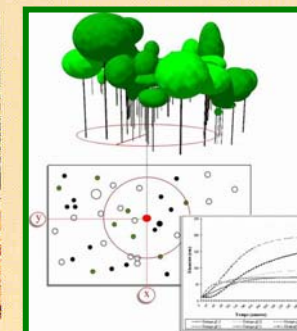


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France

Forests are complex anthropo-ecosystems

Forest management :

a complex equation
taking in account
both
biological data
and
socio-economic
informations



The need for diversified and accurate information

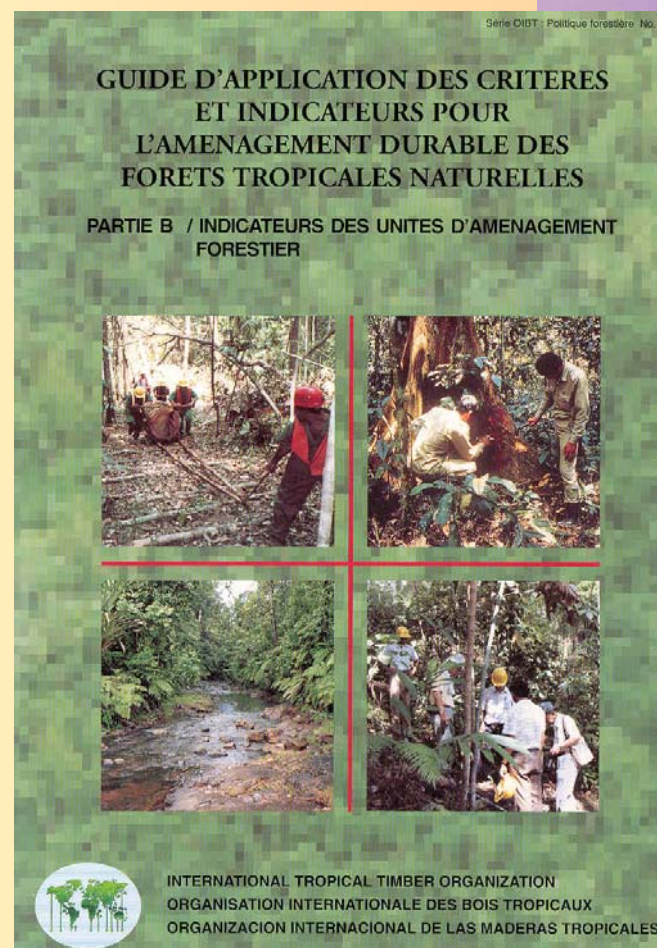
Criteria and Indicators for forest sustainable management:

Policies,

Society,

Ecology,

Forest products



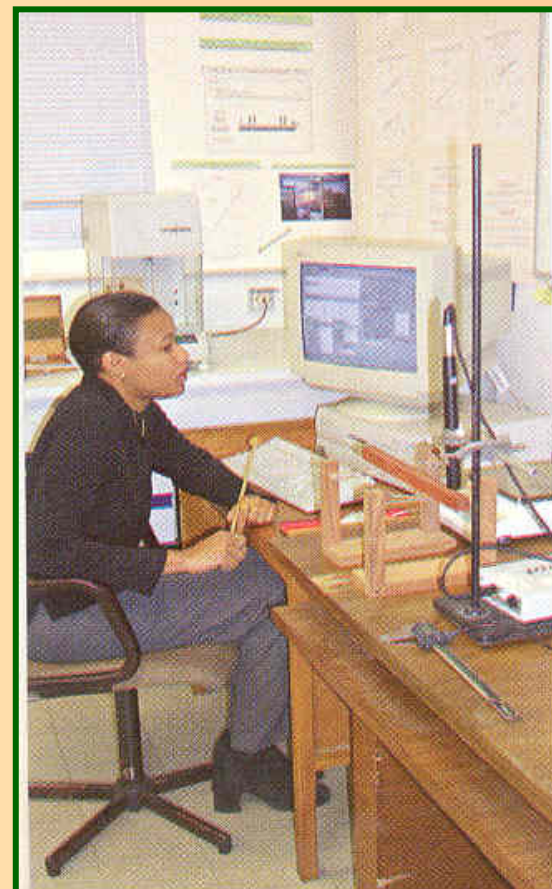
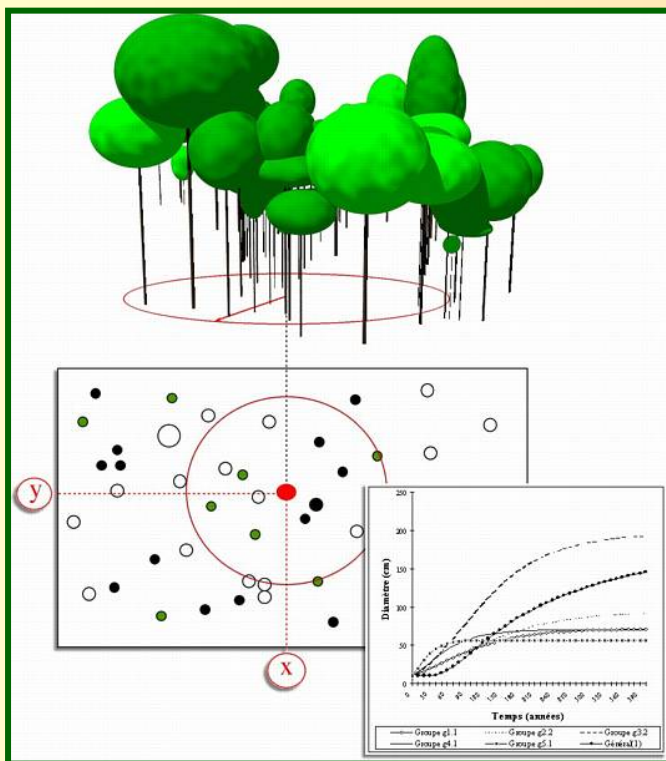
Directives
pour le développement,
le test et la sélection de critères
et indicateurs pour une gestion
durable des forêts



2 critères et indicateurs
gestion durable des forêts

1

The exponential development of computers : hardwares and softwares for forest managers

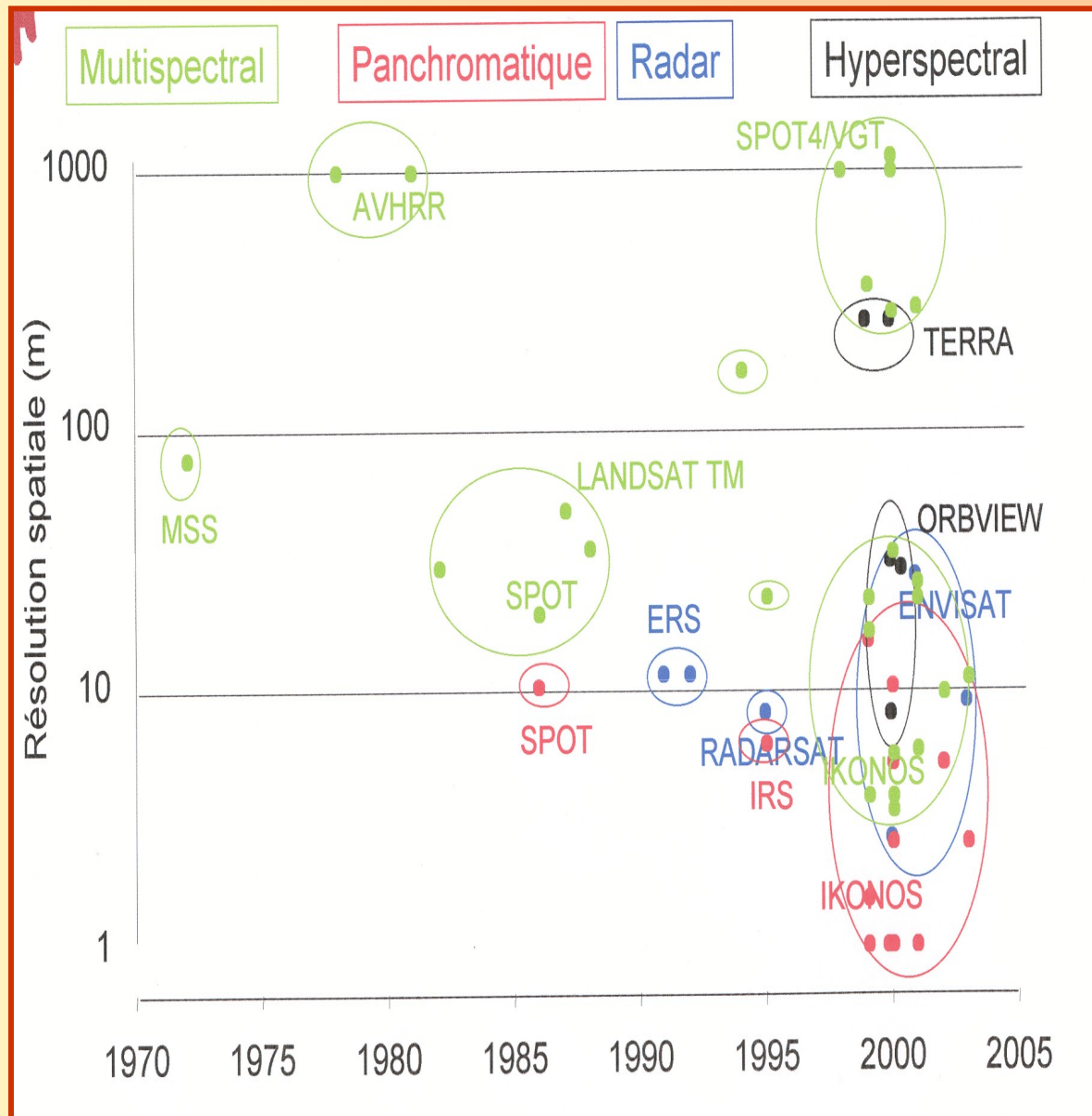


New tools for biophysical data

Remote sensing :

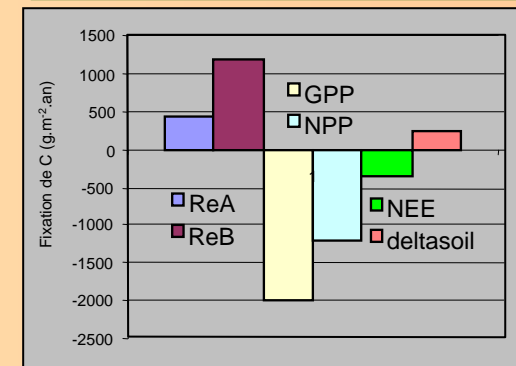
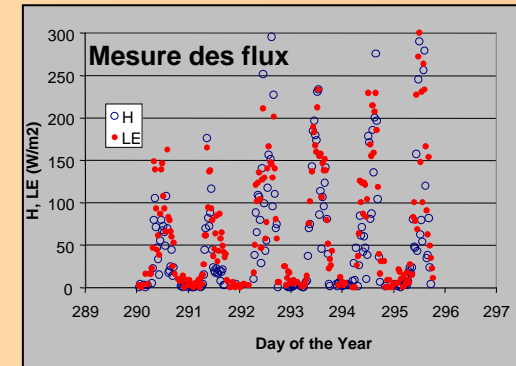
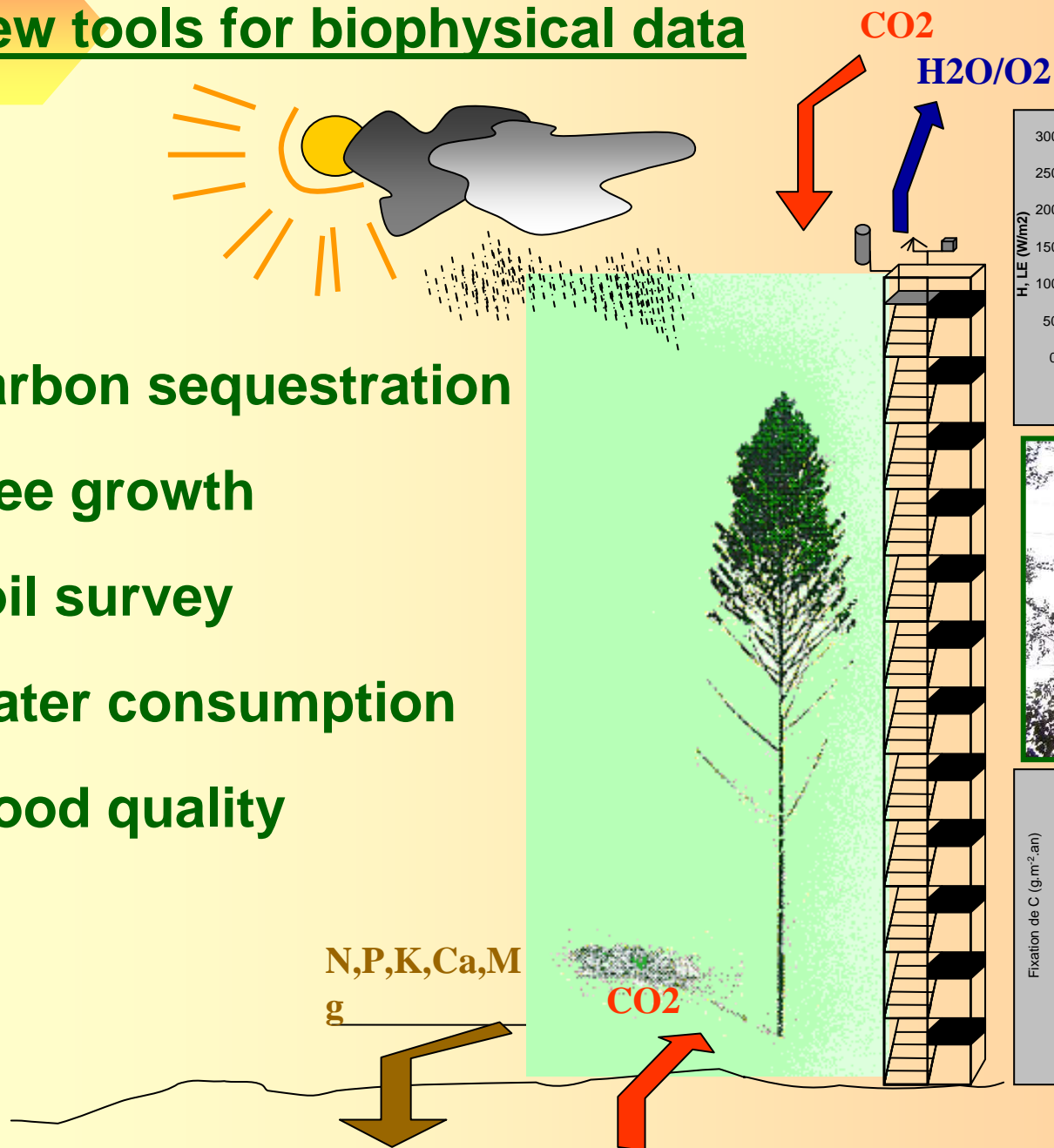
- a broad evolution during last 30 years

- from research to development

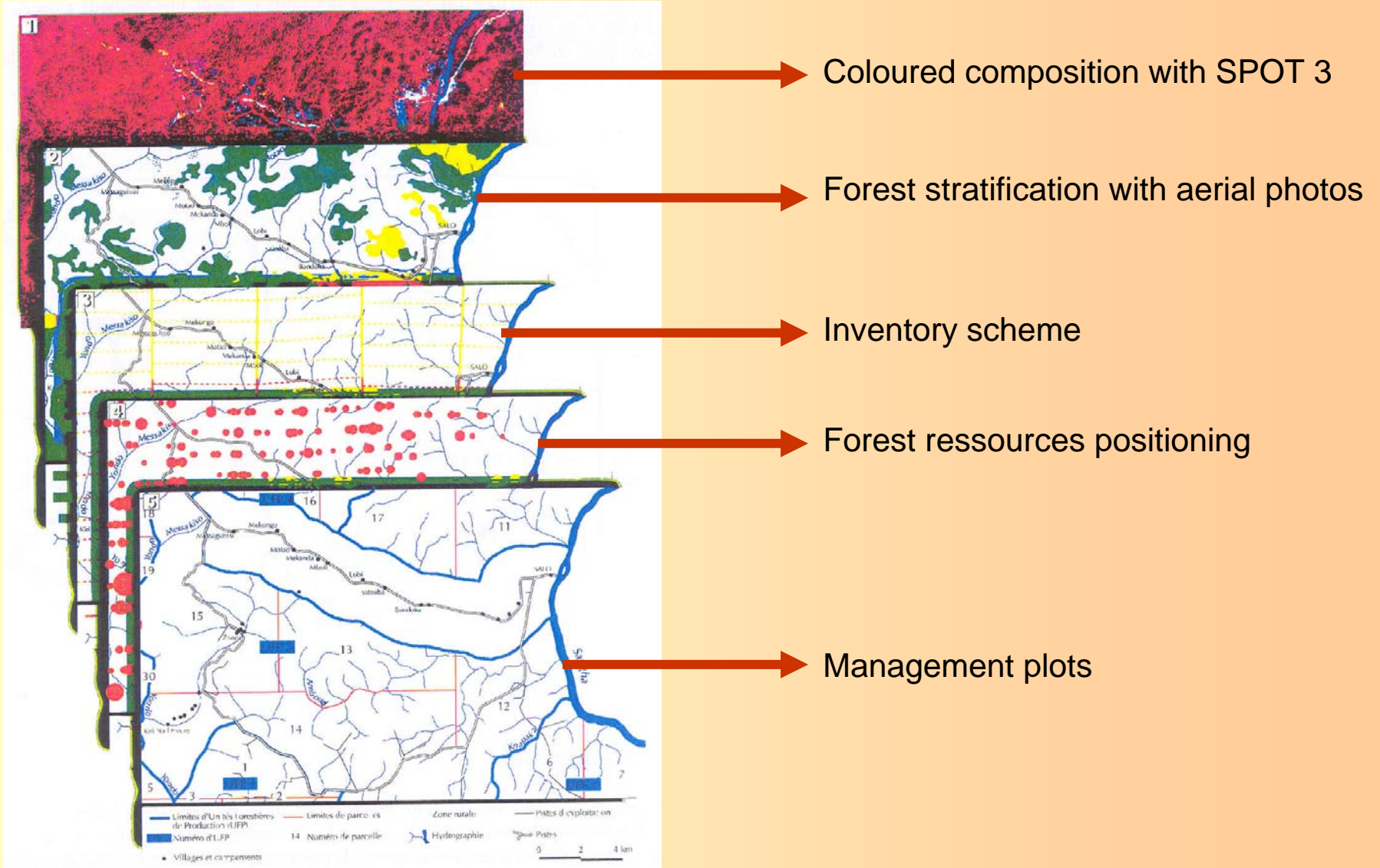


New tools for biophysical data

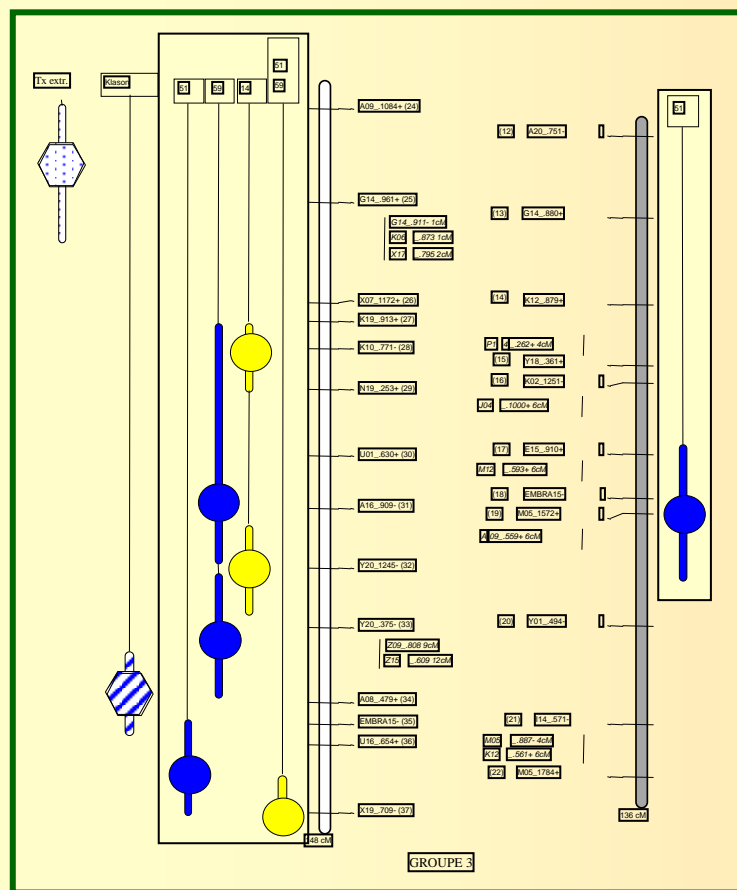
- Carbon sequestration
- Tree growth
- Soil survey
- Water consumption
- Wood quality



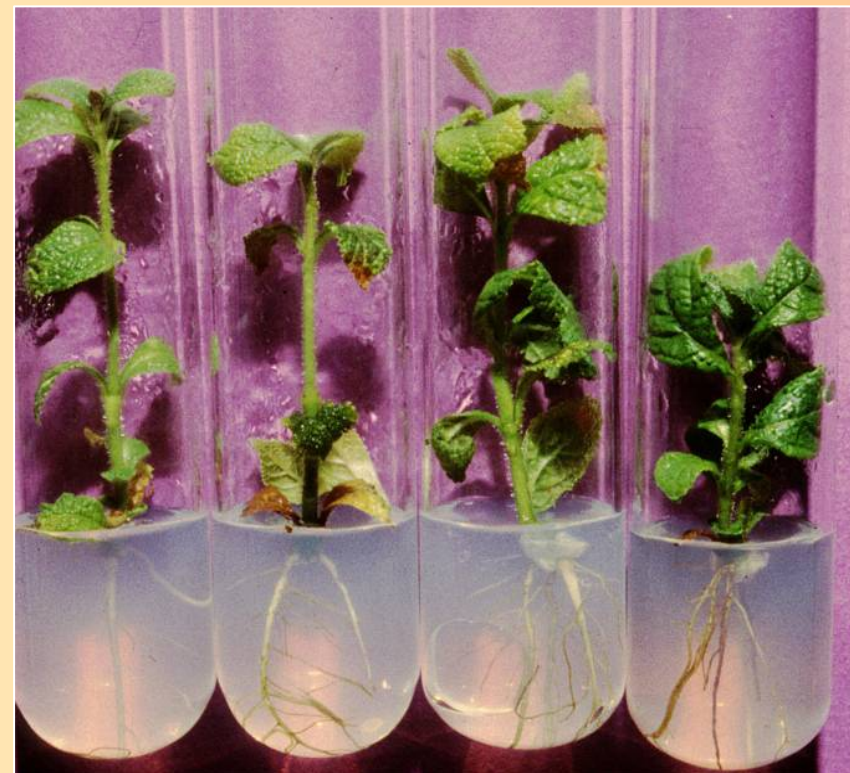
From global to local: the development of geographical information



Biotechnologies, tools for sustainable forest management?



**Eucalyptus genetic maps
for lignin synthesis**



**Vegetative propagation
of Teak**

New biological data to integrate

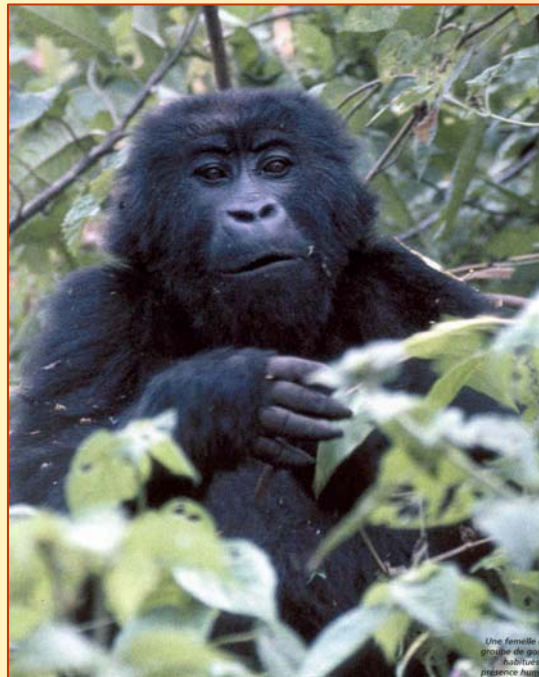


**Forest
inventories**

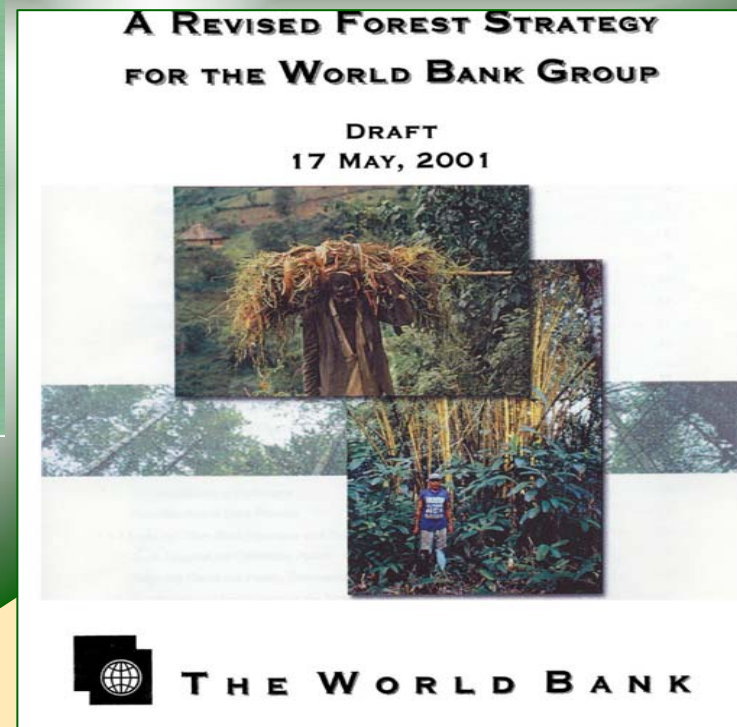
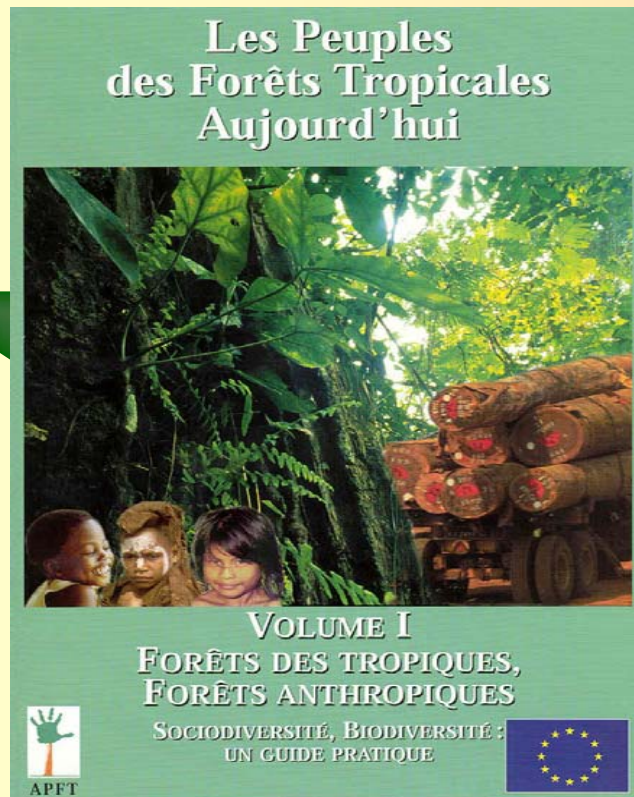


**Non wood
forest products**

Wildlife



Social and economic components



Technology transfer: the real challenge

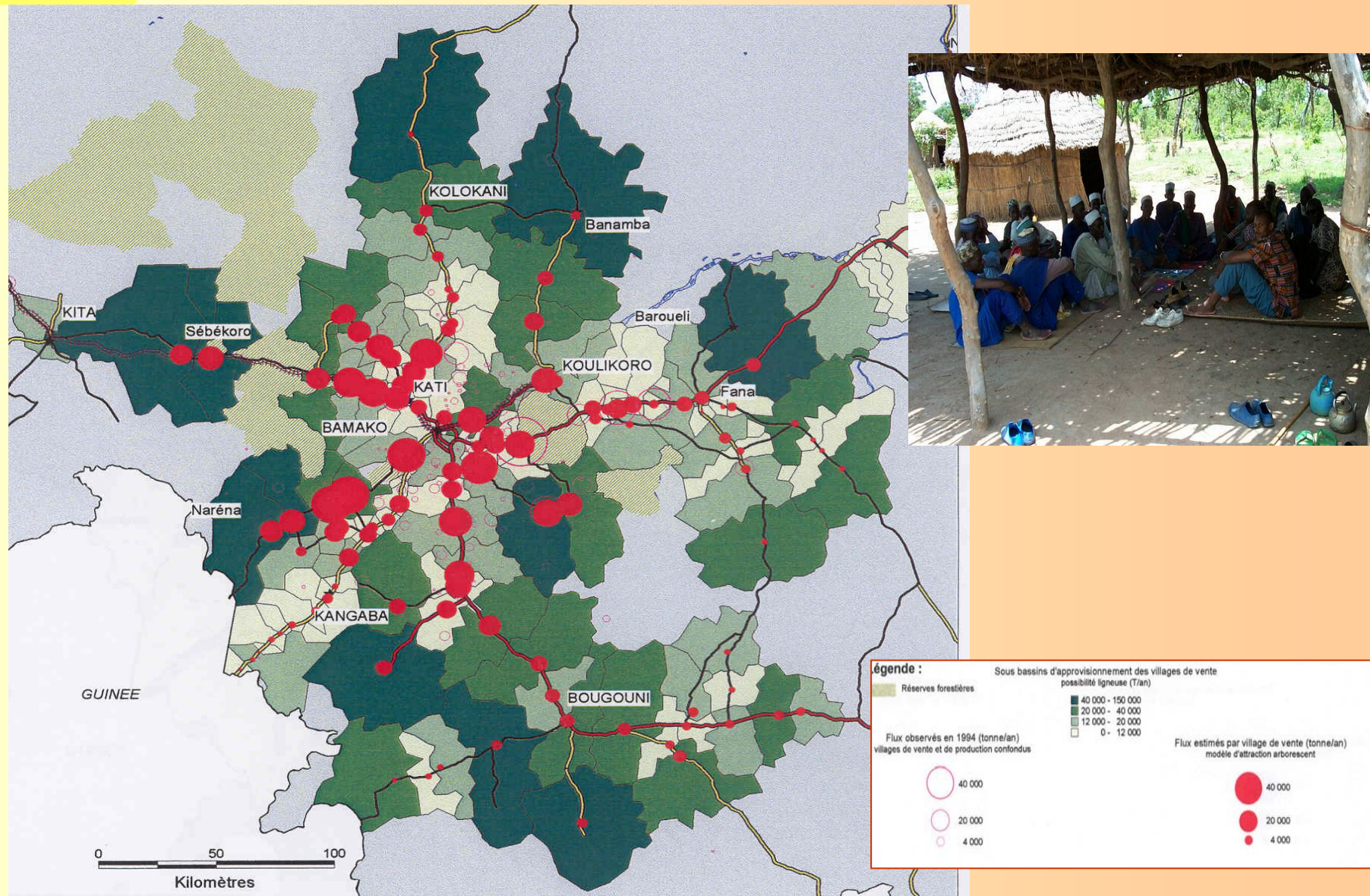


transfer tools and data analysis ,
transfer methods and know how,
transfer strategies and concepts,

Transfer from scientists → forest managers,
countries → another countries,
international agencies → national bodies,
decision makers → operational workers



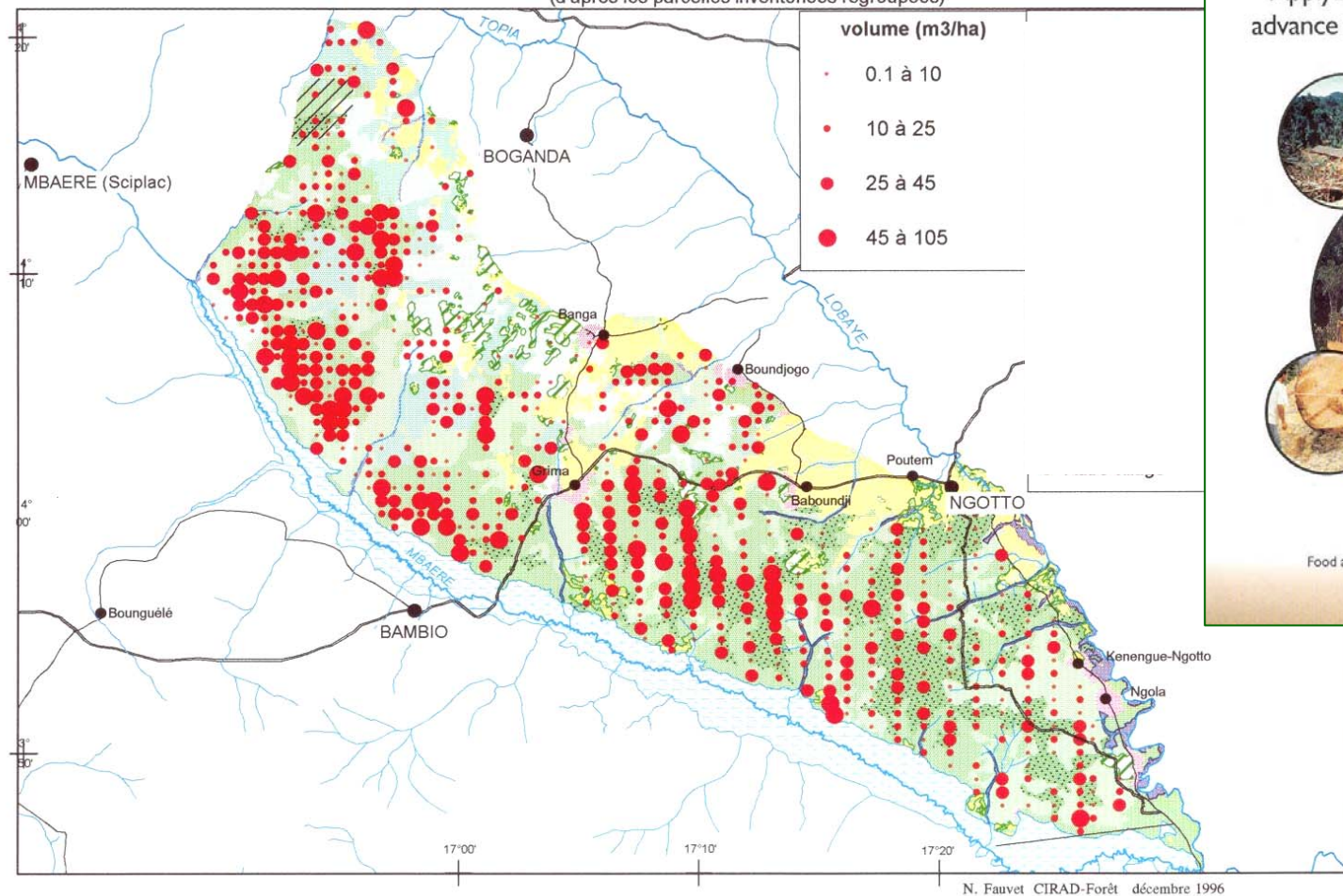
Providing fuel wood to urban populations from sustainably managed rural forests



Forest management plans for tropical moist forests

REPUBLIQUE CENTRAFRICAINE
PROJET ECOFAC
FORET DE NGOTTO

MELIACEES (SAPELLI+TIAMA+DIBETOU+SIPO+KOSIPO)
Volume à l'hectare des tiges de diamètre exploitable ($\geq 80\text{cm}$)
(d'après les parcelles inventoriées regroupées)



ASIA-PACIFIC FORESTRY COMMISSION

Applying reduced impact logging to
advance sustainable forest management



Food and Agriculture Organization of the United Nations
Regional Office for Asia and the Pacific
Bangkok, Thailand
2002

Forest plantations, an opportunity for effective technology transfert

Tree breeding

Sylviculture tools

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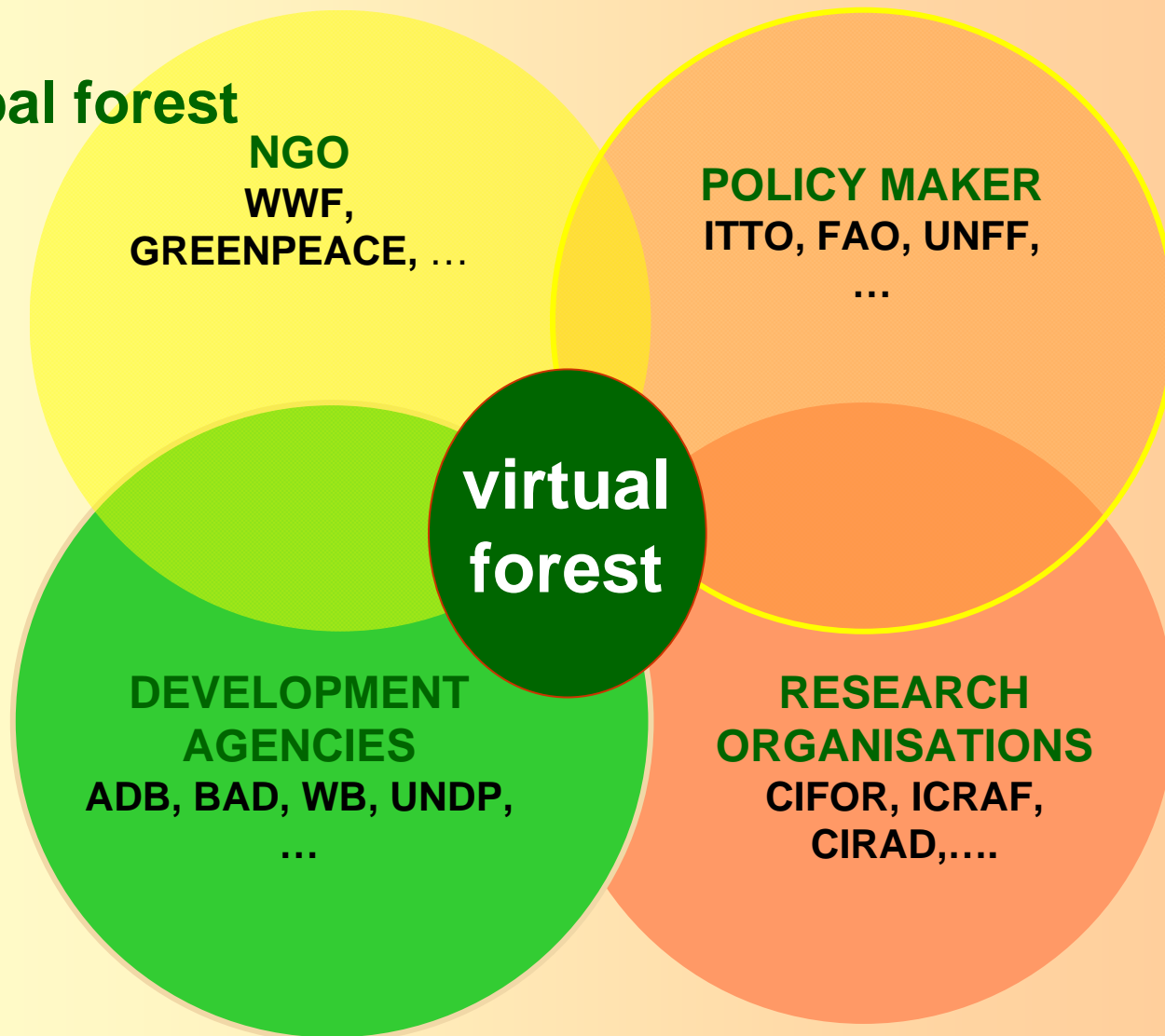
Land use management

Stakeholders involvment



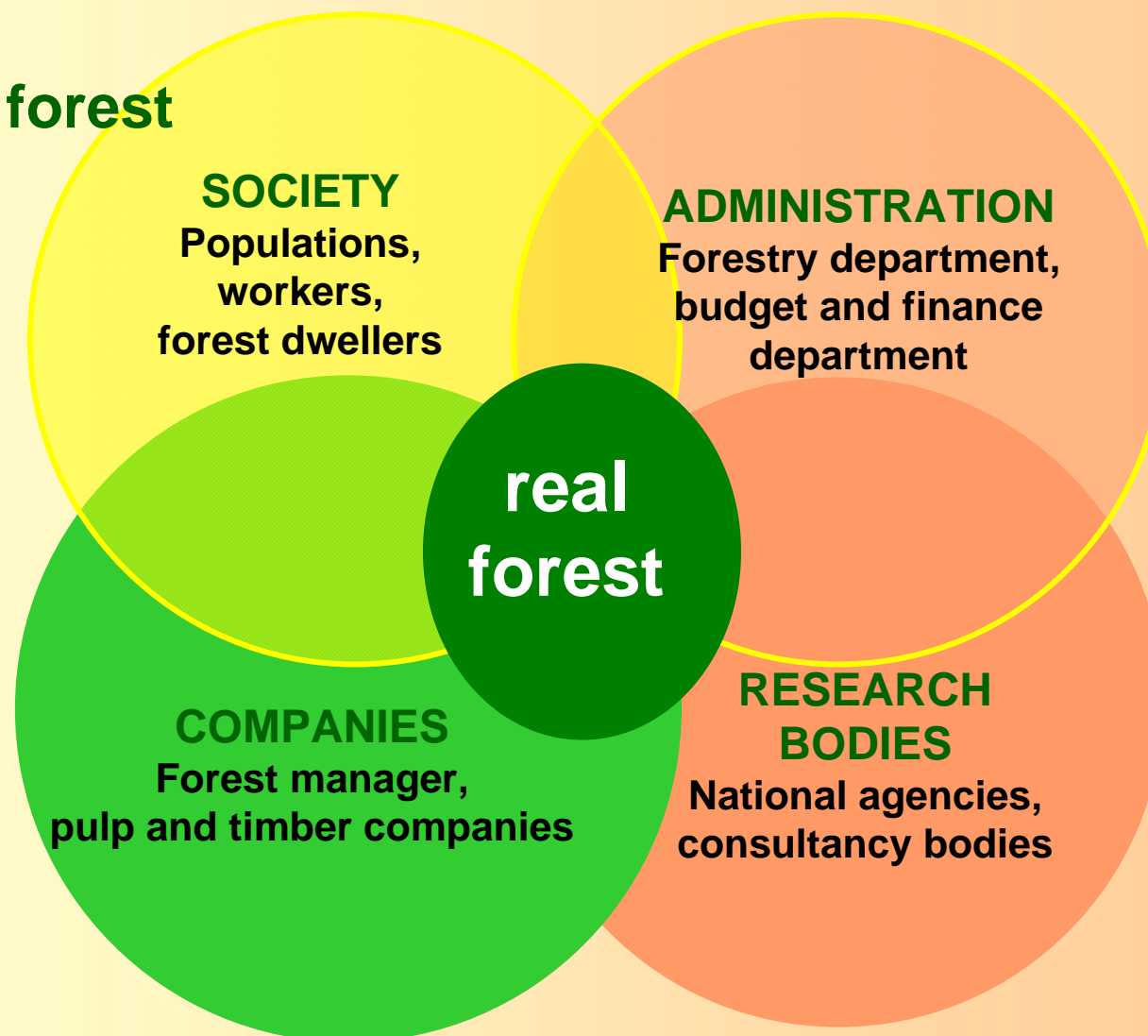
Technology transfert for forest sustainable management

From global forest



Technology transfert for forest sustainable mangement

To local forest





Cirad

**Thank you
for your attention**