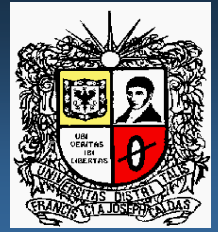




Ministerio de Ambiente, Vivienda y
Desarrollo Territorial
República de Colombia

Universidad Distrital
Francisco José de Caldas



Sustainable use and conservation of NTFPs in Colombia

International Conference on Sustainable Development of Non-Timber Forest
Products and Services
Beijing, P.R. China, 26-28 September 2007

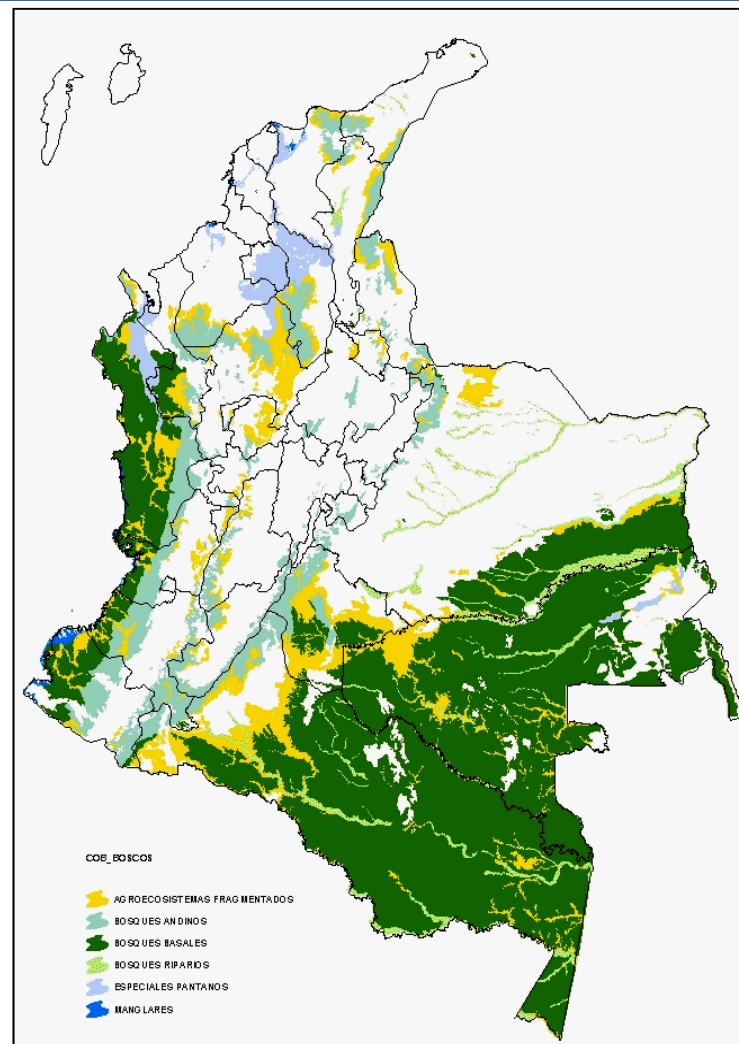
René López Camacho
Universidad Distrital Francisco José de Caldas



GEOGRAPHICAL LOCATION



Area: 1.142.000 km²



OBJECTIVES

- ✓ **An approach to the knowledge of the plant species used as NTFPs in two natural regions of Colombia: Andes and Amazonia.**
- ✓ **Identify current or potential uses.**
- ✓ **Collect information about the generation of management protocols and commercialization initiatives.**
- ✓ **Identify gaps in monitoring-related research.**



Information sources

- ✓ Data base of the use and assessment program of the Alexander von Humboldt Institute.
- ✓ Floristic studies related to NTFP (2000 and 2007).
- ✓ Analytical categories: food, handicraft, construction, firewood, medicinal, ornamental, honey-bearing, toxic and industrial.

Evaluation of management protocols and biocommerce initiatives

- ✓ Studies were revisioned by a group of green markets from Ministerio de Ambiente, Vivienda y Desarrollo Territorial (MAVDT).
- ✓ Leader initiatives by Alexander von Humboldt Institute-IAvH, Instituto Amazónico de Investigaciones Científicas (SINCHI) and other organizations.

NTFPs used by pre-Hispanic cultures



Shaman treatment with tobacco
smoke



Ornaments

NTFPs in the 18th century



José Celestino Mutis, botanist
and mathematician



“zarzaparrilla”
(*Smilax* spp.)



“quina”/ “kina”
(*Cinchona* spp)

LATEX



Couma macrocarpa
(Apocynaceae)
“Juan Soco”

FIBERS



Lepidocaryum tenue
(Arecaceae)
“caraná”

FRUITS



Myrciaria dubia
(Myrtaceae)
“camu-camu”

STUDY AREA



ANDES

- 287.720 km²
- 77,4 % of Colombia's population
- one of the highest threats to biodiversity (highly populated region)
- altitude: 0-4.500 msl



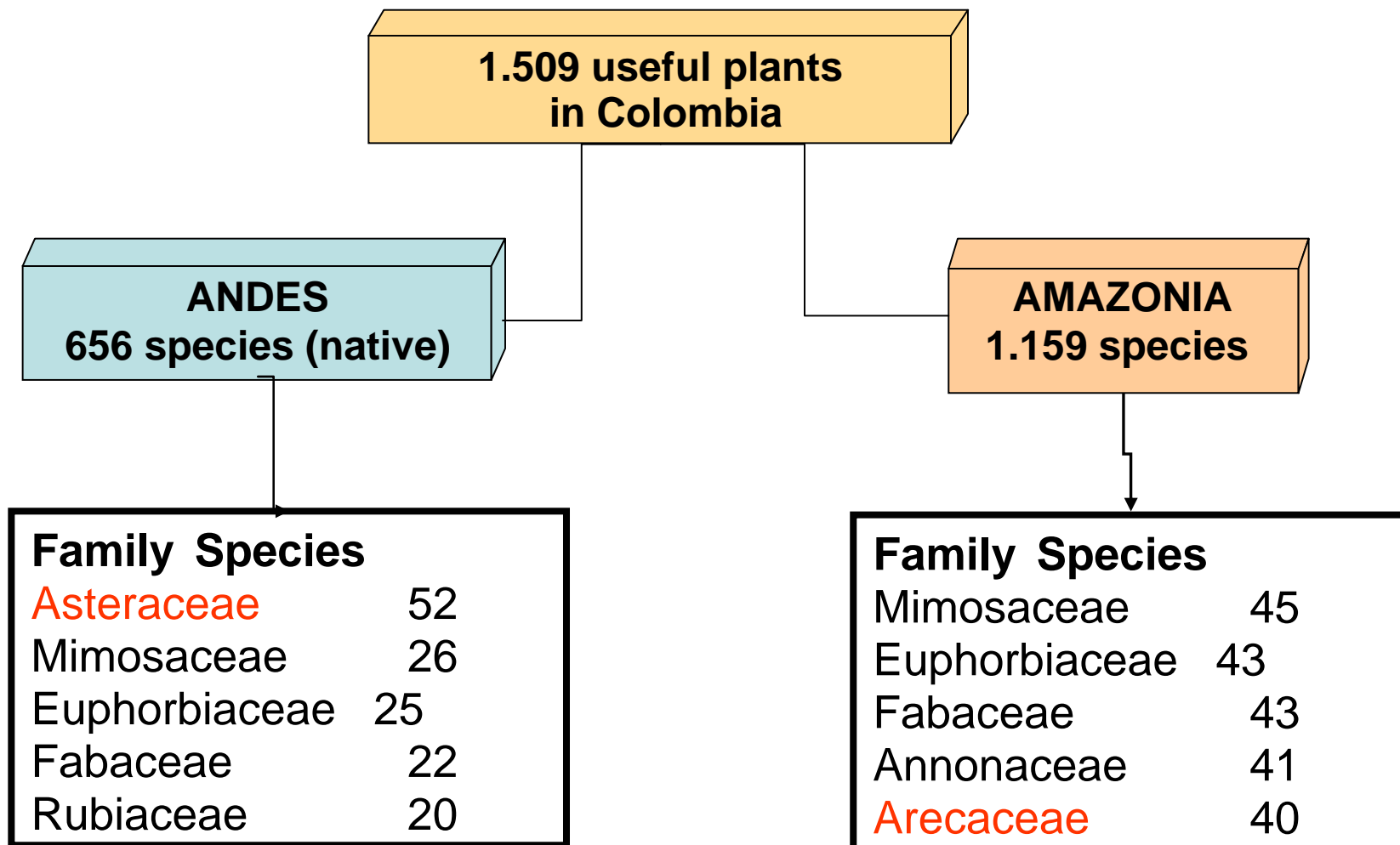
AMAZONIA

- 476.505 km²
- 2,37 % of the country's population
- lowest threat to biodiversity (sparsely populated region)
- altitude: 0–500 msl

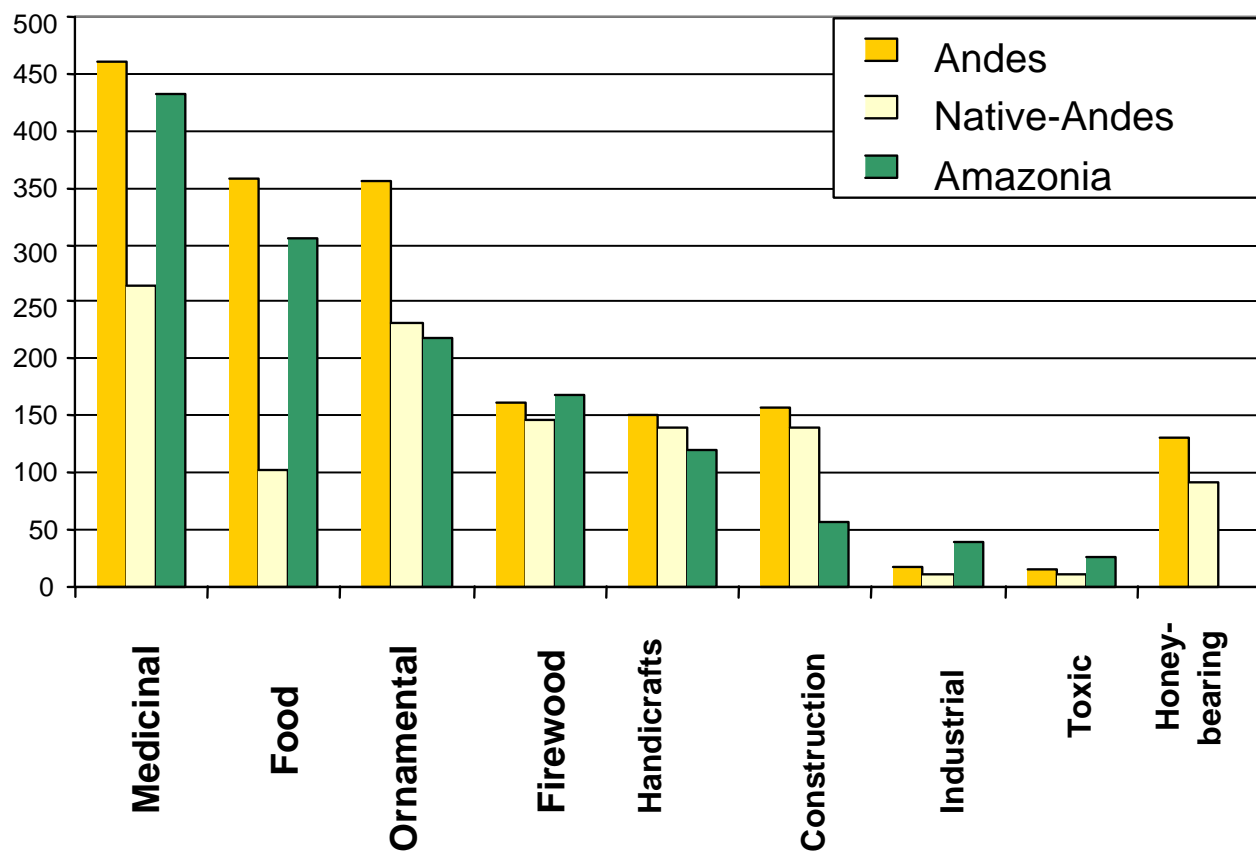


RESULTS

Current knowledge

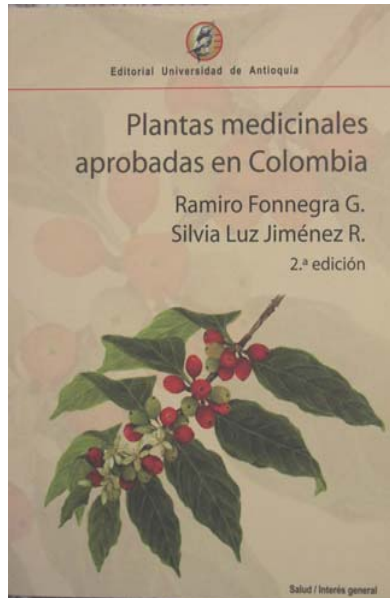


Species by category



Medicinal

156 commercialized species
461 species in Andes (265 natives)
433 species in Amazonia



Crescentia cujete
Jacaranda mimosifolia
Solanum nigrum

Food

359 species in Andes (265 natives)
306 species in Amazonia



Euterpe precatoria
Mauritia flexuosa
Spondias mombin
Vaccinium meridionale

Ornamental

231 species in Andes
219 species in Amazonia



Heliconiaceae, Araceae,
Marantaceae, Arecaceae

Firewood

162 species in Andes

168 species in Amazonia



Caesalpinia spinosa

Dodonea viscosa

Clethra fimbriata

Aspidosperma spp.

Protium spp.

Handicrafts

140 species in Andes

119 species in Amazonia



Bixa orellana

Indigofera suffruticosa

Genipa americana

Carludovica palmata

Honey-bearing

131 species in Andes (91
native)



Vallea stipularis

Lafoensia acuminata

Trichanthera gigantea

Saurauia scabra

Construction

159 species in Andes 57 in
Amazonia



Guadua angustifolia
Lepidocaryum tenue

Industrial

18 species in Andes 40
in Amazonia



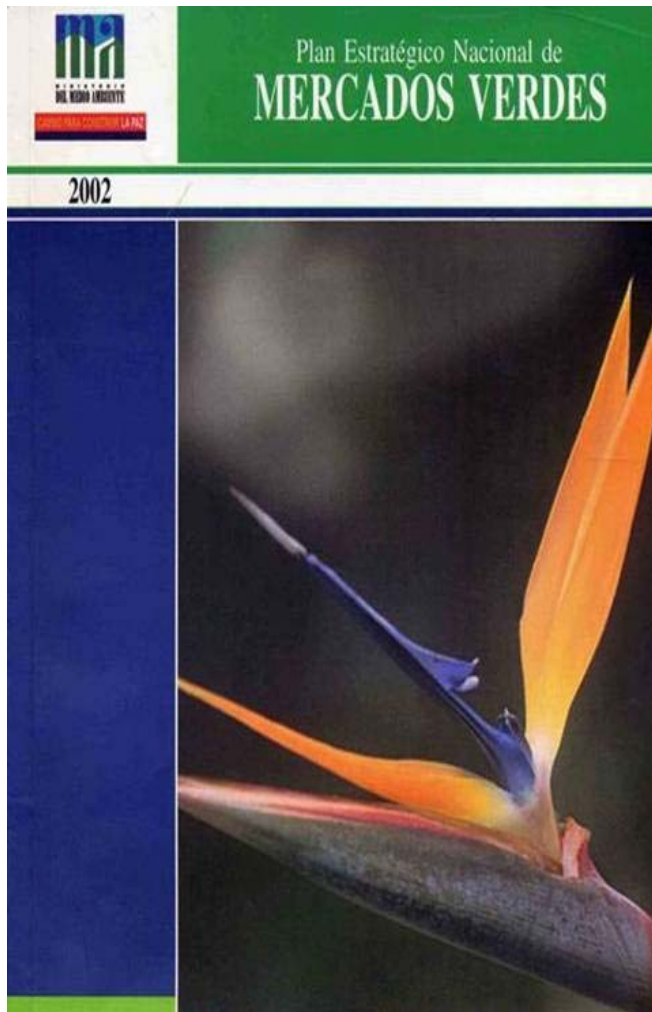
Hevea spp.
Ricinus communis

Toxic

16 species in Andes
26 in Amazonia



Curarea tecunarium
Toxicodendron striatum



NATIONAL STRATEGIC PLAN FOR GREEN MARKETING

GOALS

Consolidate the production of environmentally sustainable goods and increase the supply of competitive ecological services in national and international markets in order to contribute to environmental quality and social comfort improvement.

Green Markets: Categories

↓

**Clean
production
mechanisms
MDL**

↓

**Environmental
services**

↓

**Industrial
ecoproducts**

↓

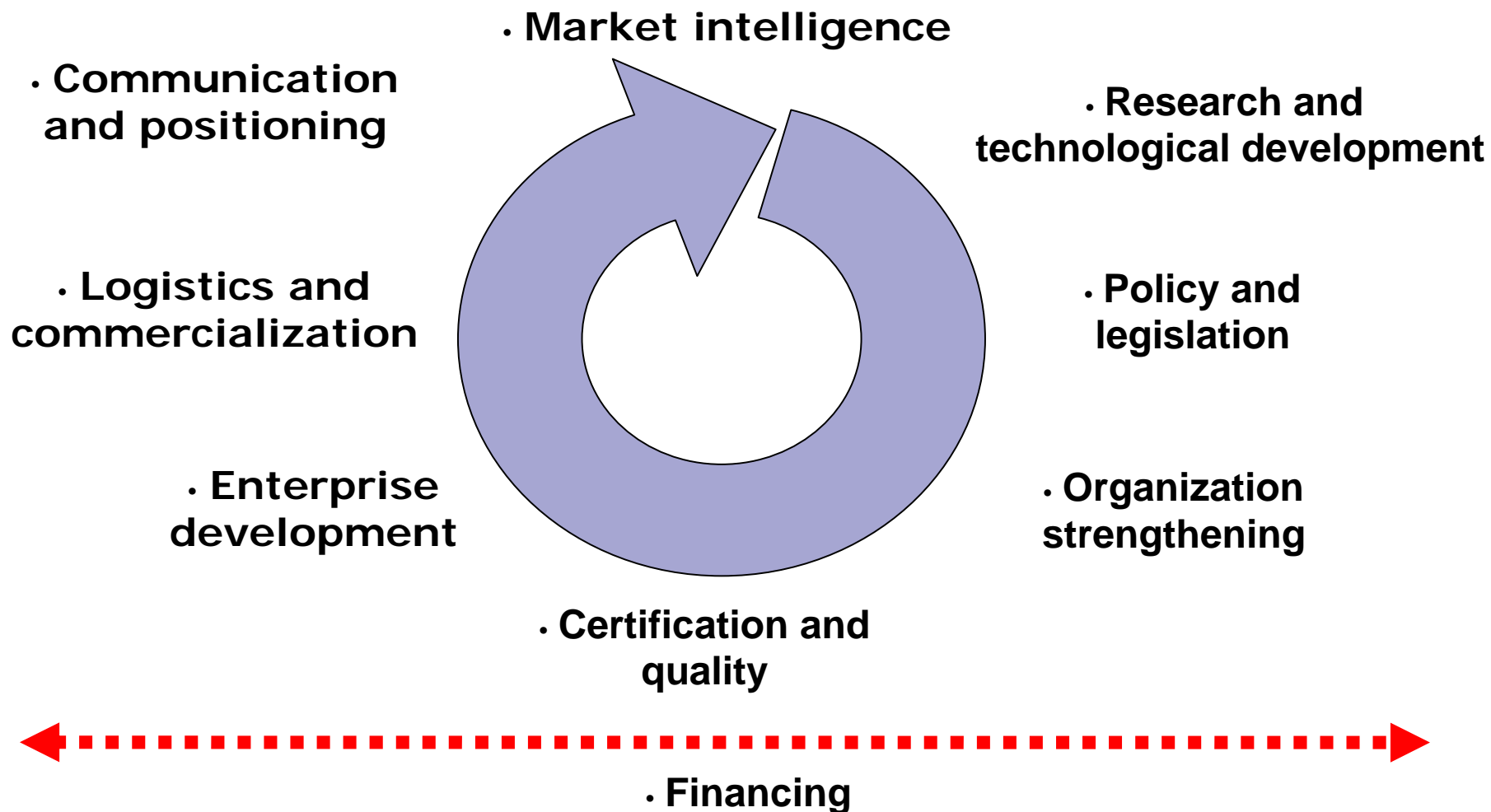
**Sustainable advantages
of natural resources**



**Biocommerce
initiatives**

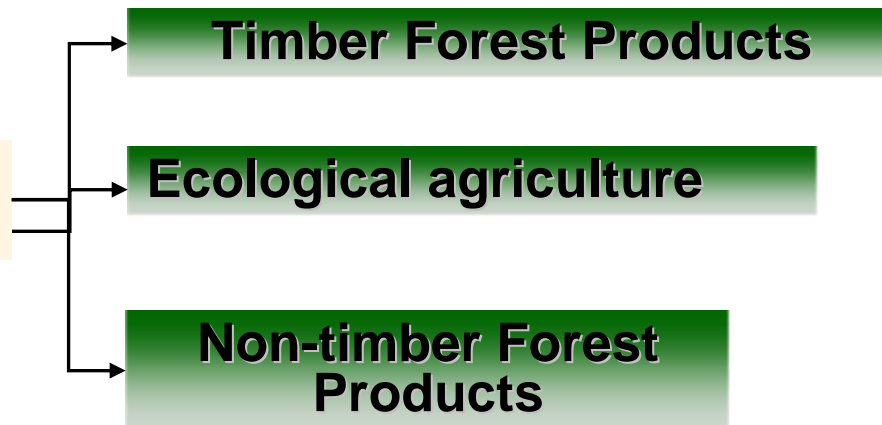
Technical focus

STRATEGIC AREAS



Sustainable advantage of the natural resources

- essential oils
- rubbers and resins
- colourants
- flowers and foliages
- exotic fruits
- fauna
- medicinal plants



In 2006 Colombia produced 0,05% (US\$307 million) of the worldwide exports in biocommerce market

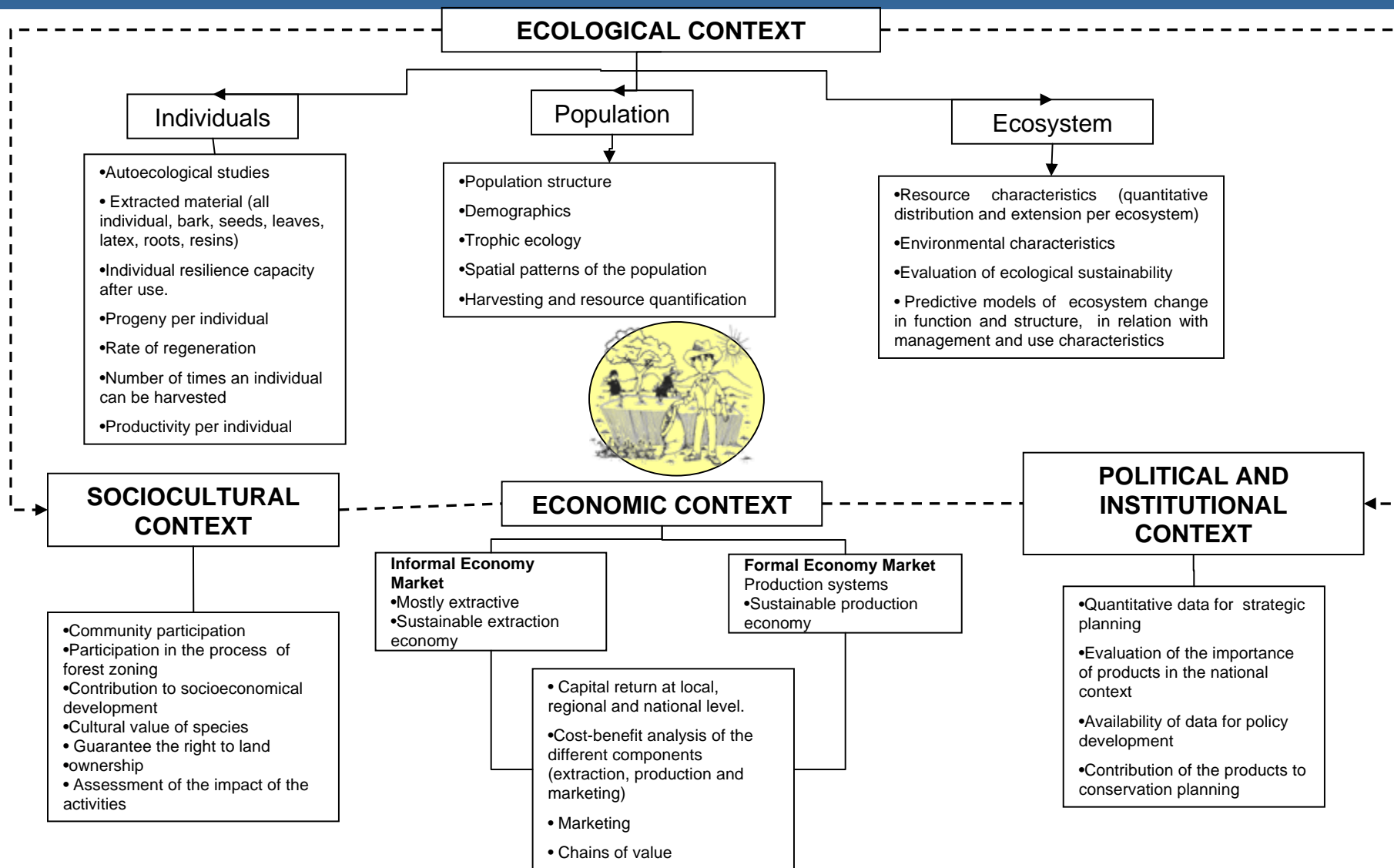
2003..... 530 biocommerce companies
2007..... 1.300 registered companies

RESULTS

Research guidelines

- Scientifically based specifications to guarantee careful resource management without overexploitation and to give economical advantages to the local population
- Development of protocols and data bases on harvest management
- Incorporation of **NTFP** in agroforestry and restoration programs.
- Structuring of markets and value chains
- Definition of harvesting stocks by environmental authorities





CONCLUSIONS

- Lack of information about the ecology of non-timber species is one of the biggest drawbacks when managing these resources.
- It is necessary to support research in the ecological, social, cultural, political and institutional contexts.
- Consolidation of participation processes between state and rural communities: forestry planning programs, agroforestry systems and restoration practices



CONCLUSIONS

- Programs to raise consumer awareness about origin protection, domination and product differentiation.
- Market niches for nutraceuticals, cosmeceuticals, energizing products (*Paullinia cupana*, *Maytenus laevis*) or oil (*Plukenetia volubilis*) provide good opportunities.
- New market strategies and technological innovations: processes of international cooperation with other Amazon countries

THANK YOU



Libertad y Orden

