

Sustainable Forest Management – A Real Option for Social Recovery in the Region of Northeastern Antioquia (Colombia)

“Global Perspectives on Indigenous Peoples’ Forestry: Linking Communities, Commerce and Conservation”

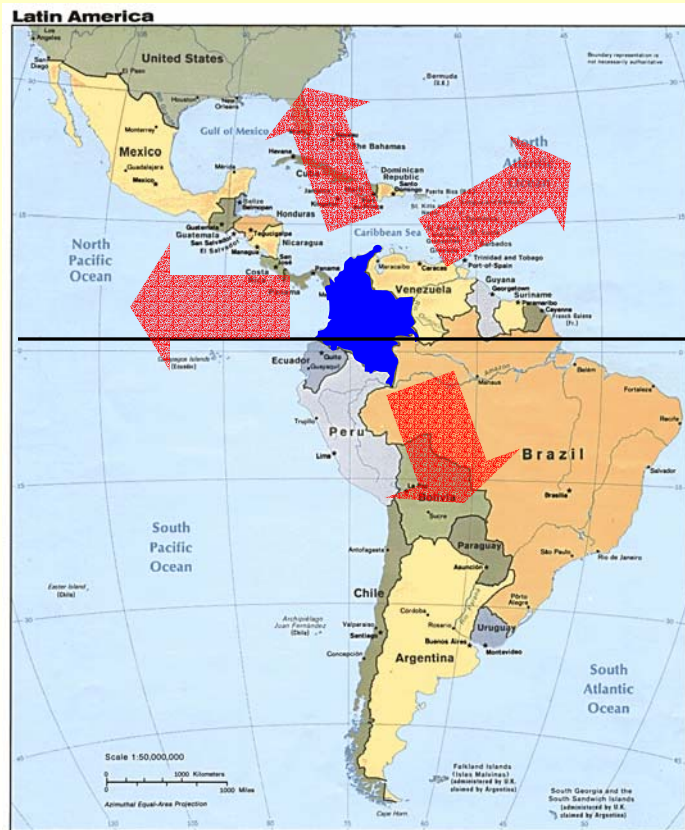
Vancouver, British Columbia, Canada

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**Alfonso José Uribe S.
Vice President of the Board
FEDEMADERA
Medellín, Colombia**



Colombia - The Best Corner of South America



Source: http://www.lib.utexas.edu/maps/americas/latin_america.gif



Source: http://www.lib.utexas.edu/maps/americas/colombia_rel_2001.jpg

Men at work at the Poppy Fields – The Harvest –



Photo: El Colombiano, Juan Antonio Sánchez

Due to our fine climatic conditions – sunshine and rainfall, ***this beautiful and fragile flower blooms 3 times/yr vs. 1 in its native lands.*** This wonderful growth rate, plus the enhanced productivity of the coca trees, has brought about the most devastating surge of destruction and violence to our country.

The Violent Groups - Rebels + Militias

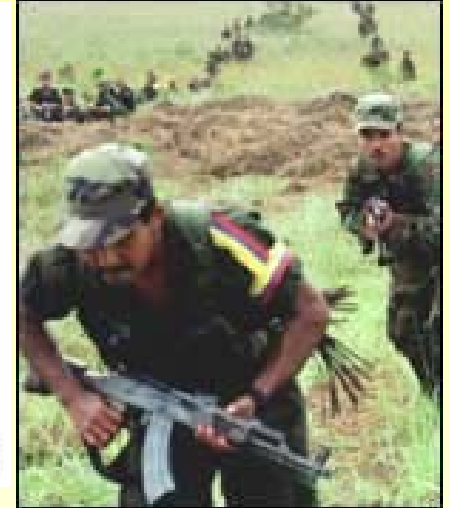


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Photo: El Colombiano, Manuel Saldarriaga

The Violence Problem

- **Illegal drug production** has generated a dramatic surge of violence in the rural areas
- The Marxist and Communist Guerrillas have left aside their political issues, **nurturing their cause with the produce of the drug fields**
- The appearance of right wing Paramilitary groups or Militias have also enhanced this violent process, and they also have relied upon the **financial support** of the **illegal crops** to sustain the **warfare**.
- In all, the **protection of the drug fields** and the processing labs have generated a permanent **struggle for power** and **control of territories and pathways** – all within the most distant and less communicated parts of the country.



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http://news.bbc.co.uk/1/hi/english/world/americas/newsid_1724000/1724659.stm

The ILLEGAL CROPS

“Colombia produces more than 80% of the world's cocaine, and is the single largest supplier of heroin to the US”

Source: BBC News, “Colombia to resume drug crop spraying” Jeremy McDermott,
Tuesday, 7 August, 2001, 07:49 GMT 08:49 UK
http://news.bbc.co.uk/hi/english/world/americas/newsid_1477000/1477137.stm

The ILLEGAL CROPS



Photo: El Tiempo, Colombia



Photo: El Tiempo, Colombia



http://news.bbc.co.uk/1/hi/english/world/americas/newsid_1477000/1477137.stm



Photo: El Tiempo, Colombia

The Solution.....Spraying with devastating Herbicides??

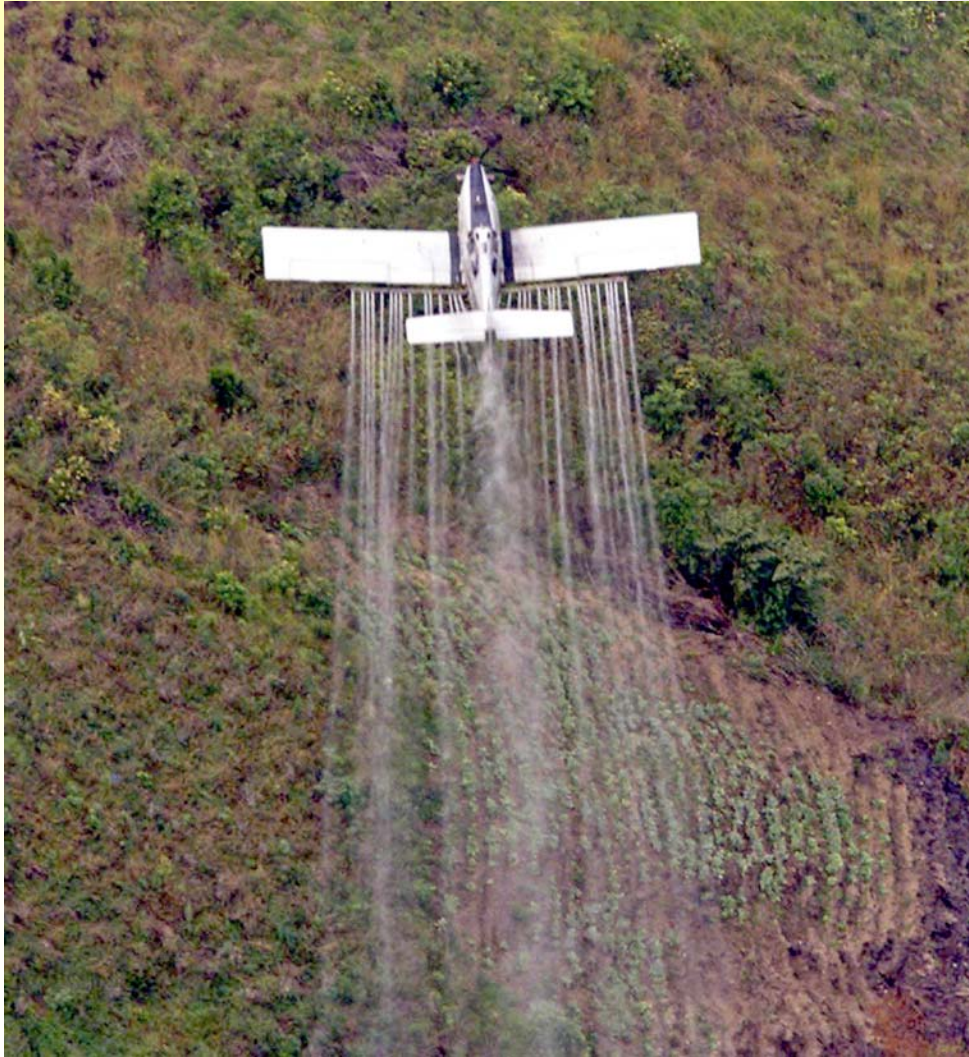


Photo: El Tiempo, Colombia



Photo: El Tiempo, Colombia



This option is currently being supported by the US government in the Plan Colombia – and tends to show the World that something is being “done” about our problem.

Is this really the solution?



Photo: Unión Temporal CECOIN/CORFAS

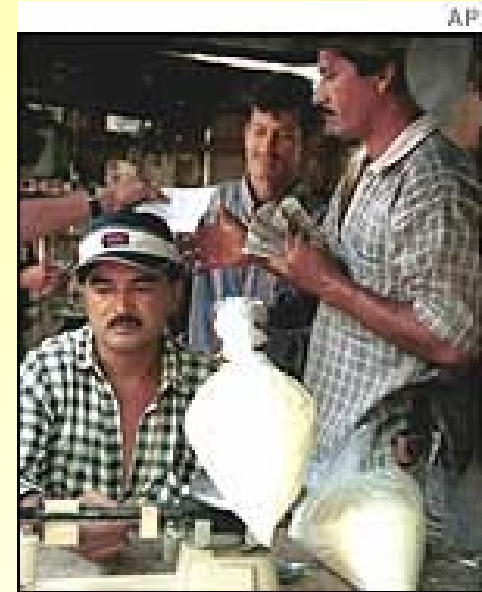
- *This dramatic picture shows the results of the defoliation of the coca or poppy plantations, but as you can see, they also affect the surrounding natural forests, causing an enormous environmental impact.*

Colonization or Illegal Crop Invasion?

- *If we analyze the methodology involved in the **preparation of a coca or poppy plantation**, we would find that it is no different than the **“slash and burn” practice** inherited from our “Spanish Conquistadors” and validated all over South and Central America.*
- *By law, a farmer can claim the land when he has cut down all the trees, burnt them down and prepared the soil for agriculture – it is stated in our Constitution, and has been there for centuries.*
- *Normally these newly opened fields are not very fertile, and soon will loose productivity, they are abandoned or sold to cattle farmers, and the cycle starts all over again – cutting open new spans of virgin forest lands.*
- *If we analyze the social background of our rural areas, we will find that the **Indigenous people are loosing their possibilities for survival, the possibility to be rightfully employed, educate their children and live decently, so they find the illegal crops as an attractive solution to their problems.***

Colonization or Illegal Crop Invasion?

- *These illegal plantations can be established in exactly the same way as the colonization process the community has traditionally been used to – and **the satellite picture will also show no difference.***
- *The unusual revenues they receive, will foster the clearing of more forest lands into instant drug fields – in turn, **the more we get sprayed the stronger will be the pressure on our natural forests.***
- *In these regions there is a **total absence of the Government**, which is not capable of providing the **basic human needs**:*
 - Health Care
 - Education
 - Public Security
 - Road Infrastructure, etc.



http://news.bbc.co.uk/hi/english/world/from_our_own_correspondent/newsid_1765000/1765609.stm



Photo: El Tiempo, Colombia

The PROBLEM

The Colombian Rebel groups
capitalized on government's
abandonment of rural areas

THREAT, FEAR and
ISOLATION

are their best business case

Threat, Fear and ISOLATION



<http://semana.terra.com.co/1045/actualidad/ZZZB2B4Y21D.asp>

“Nos metimos en la iglesia porque pensamos que ahí Dios nos protegería”

Threat, Fear and ISOLATION

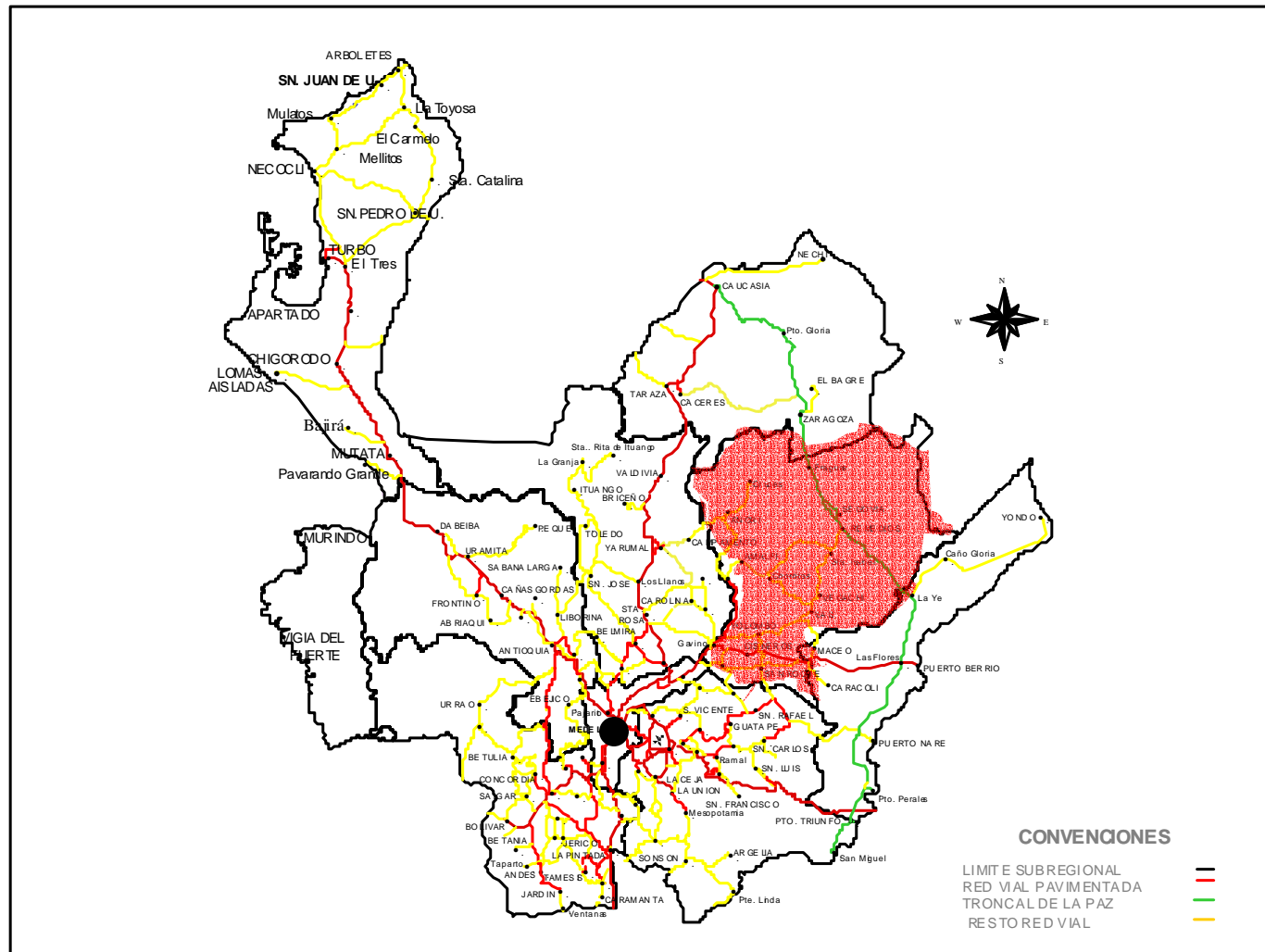


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Tenancy of the Land - Characteristics of Land Owner:

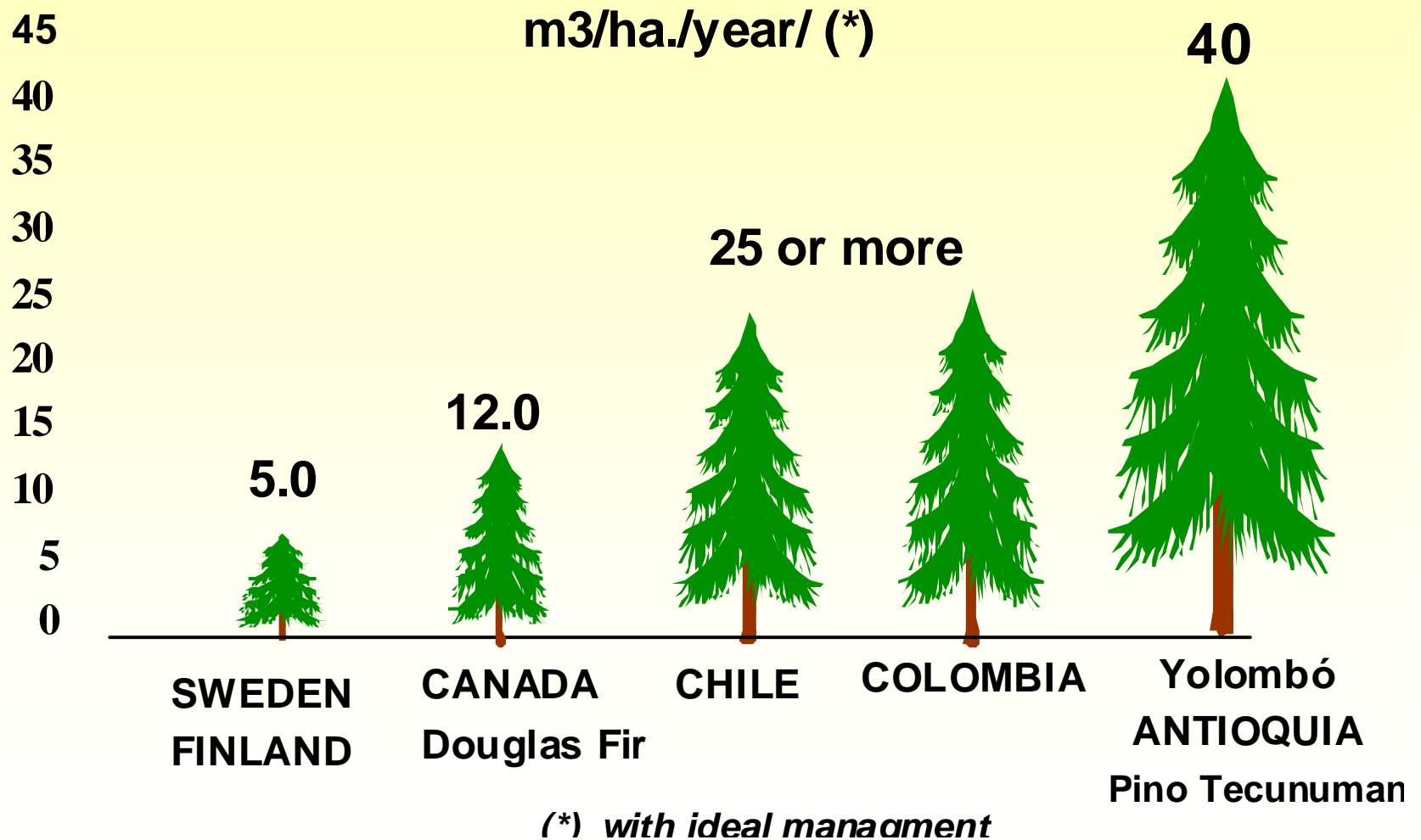
- **Age: generally 45 or older**
- **Low to basic elementary education**
- **Low technical skills training – mainly due to absence of national educational programs in the region**
- **Traditionally relied on Subsistence Farming**
- **Normally look for alternative income by employing themselves with neighbors on temporary activities.**
- **Rural salaries seldom include legal fringe benefits.**
- **Adult children have abandoned the family group:**
 - **Migrated to main cities looking for jobs**
 - **Incorporated to the Guerrilla or Paramilitary Groups**

Northeastern Antioquia – The Region



But Nature's miracle also affects our trees!

Forest Growth Rates for Softwood Species in Various Countries



Plantation Pinus Oocarpa (17 years old) in Yolombó (Antioquia)



- Growth Statistics on 17 year old Plantations
- Average Basal Diameter: 30 cm
- Average Height: 30 m

Facts - Northeastern Antioquia

- **Mining** – gold mining started in the 1500's, and today still is one of the main activities in the region, accounting for 30% of the gold production in the State of Antioquia.
 - **Sawn Lumber** – This is the product of the opening of the natural spans of forest lands into agricultural and grazing fields, however, as the forest frontier moves up north, Yolombó is still the obliged route for the mobilization of the sawn cants in direction to the main cities.
 - **Agriculture:** Sugar Cane (10,000 hectares) and Coffee (3,068 hectares) are the main crops. Most agricultural lands are dedicated to small-scale subsistence agriculture.
 - **Cattle raising:** Mostly in the lower flat lands, occupies over 30% of the total territory. It is not very productive today due to the influence of the violence. Besides, it only generates 1 permanent employment per 100 hectares.
- Source: PLANEA -Subregión del Nordeste(1999)

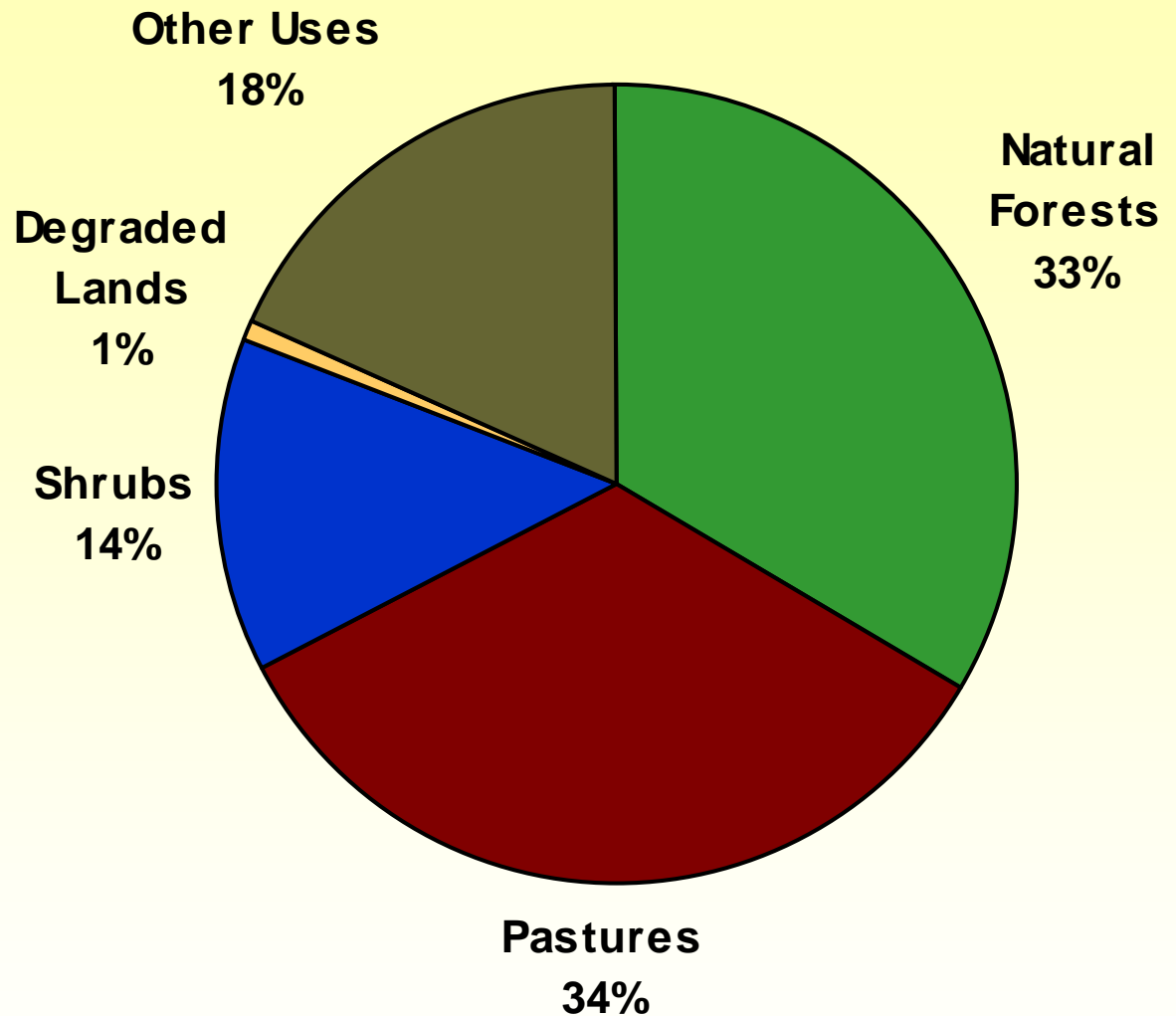
Today's Picture

- ***Today we have mostly depleted and non productive lands, compact soils as result of intensive grazing practices, no longer apt for any productive agricultural use.***
 - Mature Plantation Forest located within this area
- ***Traditional rich mining towns did not foster agricultural practices, and goods were imported from Medellin or neighboring regions***
- ***Violence problem, enhanced by 2 Guerrilla and 1 Paramilitary fronts have forced the population to migrate to safer cities***
 - Why do people migrate? Usually when their lives are at risk.
- ***Normally the higher educated and younger population are those who leave first, imposing a tendency to the “povertization” of the region.***
- ***Few opportunities for Women landowners, head of families in struggle for survival***
 - **Their Options?? Illegal crops??**
- ***Only 47% of Basic Needs of the population are covered in the region***

Source: PLANEA -Subregión del Nordeste(1999)

Uses of the Soil

- **Total Area: 8,544 km²**
- **Natural Forests:** Mainly to the northern part of the region. This is normal considering that the forest frontier has been gradually moving north with the pressure of 'colonization' process
- **Degraded lands** - mostly due to uncontrolled alluvial mining in rivers, causing erosion



Source: PLANEA -Subregión del Nordeste(1999)

Population Characteristics

- **Total Population: 181,236 in 1999**
 - 49.8% in urban areas
 - 50.2% in rural areas
- **Education:** (Percentage of the population in schooling age/age level)
 - PK - 44%
 - Elementary - 96%
 - Secondary - 52%
 - Trade school - 39%
- **Illiteracy - 13% (Population over 12 yrs. Old)**
 - Source: PLANEA -Subregión del Nordeste(1999)

The Widows of the Violence -



Photo: El Tiempo, Colombia

- ***Violence has been gradually creating another mayor social problem, where for different reasons women are left alone to raise their families. This is how we find women landowners, head of families, trying to make their way in a difficult and aggressive environment.***

THE only WAY OUT –

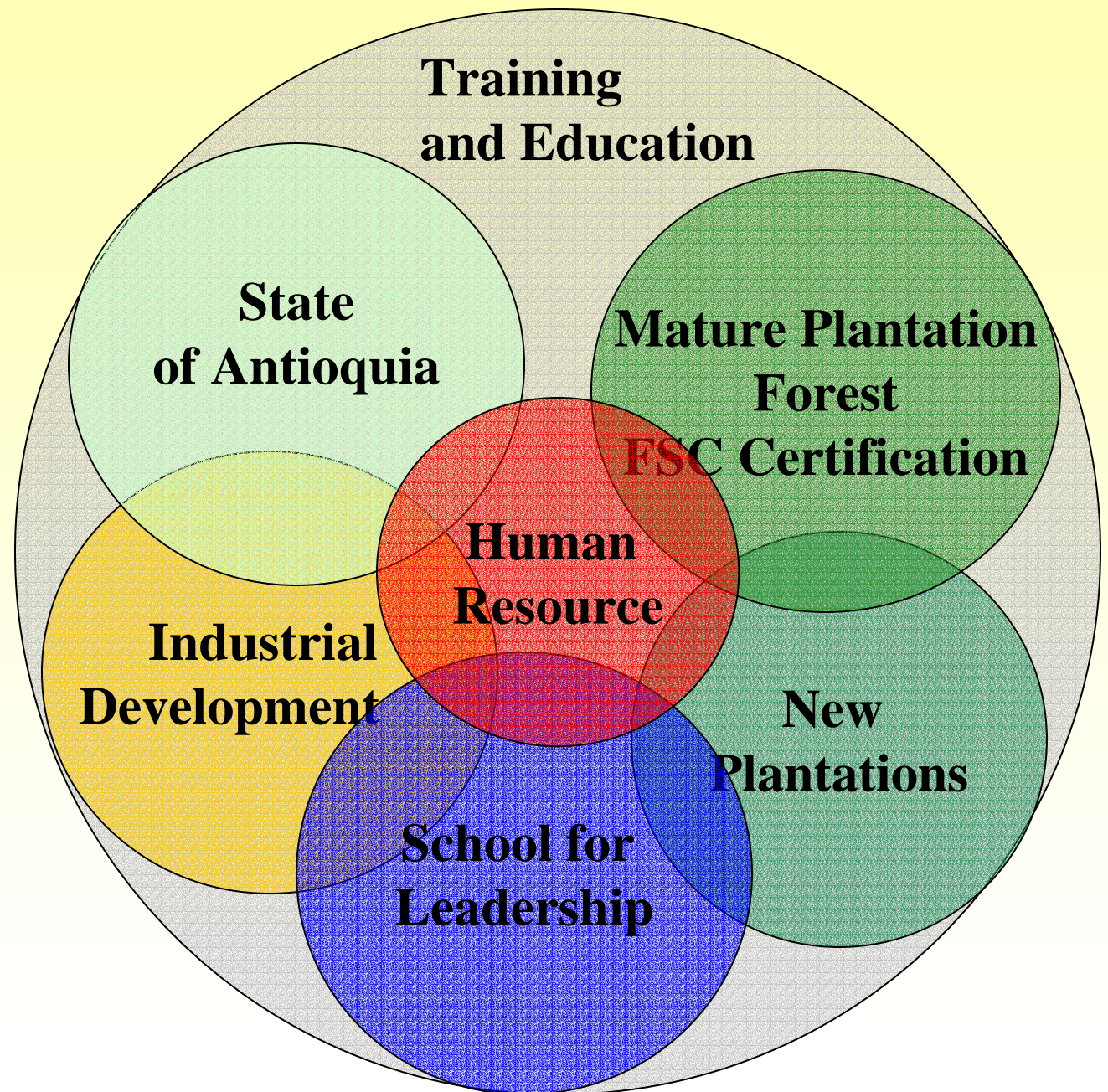
- ***THROUGH EDUCATION***
- ***WITH THE CREATION OF SUSTAINABLE ECONOMIES***
- ***BASED ON SUSTAINABLE FOREST RESOURCES***

A PROJECT FOR SOCIAL RECOVERY

**BASED ON
EDUCATION
AND THE
CONSTRUCTION
OF A
SUSTAINABLE
ECONOMY**

IN WHICH

**THE HUMAN
RESOURCE
IS THE CENTRAL
AND MOST
IMPORTANT
ELEMENT**



THE PROJECT –

- **Sustainable Resources:** *FSC-certified plantations as baseline (partners already in place)*
- **Sustainable Economies:** *Certified value-added product manufacturing (much of infrastructure and partners already in place)*
- **Sustainable Learning:** *Long-term "hands-on" education from ground up (partners already in place)*

PART 1 – Industrias Forestales Doña María S.A. – A Privately owned Forest

- *A total of 1600 hectares of plantation forests with ages ranging from 8 - 22 years, mature and ready for harvesting.*
- *Over 20 years of investigation in the area with softwood species*
- *Plantation becomes the baseline for Certified Plantation Learning:*
 - *Plantation to be FSC Certified;*
 - *Certified Resource Manager Training to be conducted on this plantation*
 - **Living case study of Sustainable Forestry and Forest Management established for teaching/training ground at all levels of education**
 - **A working atmosphere that will help create the human resources required to develop the Certified Natural forests in other socially disrupted areas of our country**

- ***Logging and transportation will be undertaken with the creation of local cooperative groups***
- ***Full support from local municipal and state governments. State government created the Reforestation Manager adhered to the Secretary of Agriculture***
- ***Educational programs required to provide the proper training and skills needed for all professional activities.***
- ***Work ethics, Basic administration and legal skills must be provided to all members of cooperative group***



PART 2 – New Plantations – Long Term Program will Guarantee Sustainability of the Project

- *Species selection based on serious and documented technological investigation of more than 20 years.*
- *Will provide long term employment possibilities for the local and neighboring rural communities*
- *Over 300,000 hectares (741,300 acres) of land available for forest development*
- *Reforestation generates 1 permanent job per every 10 hectares (24.7 acres) of planted trees.*
- *Delicate product handling operations in the Nurseries – ideal for Women labor opportunities.*



- ***Cooperative groups, based on small landowners helping restore productivity on their lands***
- ***This will recover their own self esteem and willingness to stay in their lands, and work for their future.***
- ***Must be accompanied with education and training programs in all technical areas***
- ***Social education must be included***



Job Opportunities for Women

Women Filling Bags at Nursery



Women Packing Seedlings



Job Opportunities for Women:

Seed Preparation

- Cleaning
- Selection
- Packing
- Storage

Nurseries

- Seed Bed Preparation
- Bag Filling
- Broadcast seeding
- Seedling Transplant

- Fertilization
- Irrigation
- Weed Control
- Seedling Selection
- Packing
- Delivery
- Accounting
- Office work

Jobs give Women Heads of Family an opportunity to raise their families



**Angela works at the Nursery,
as head of family is raising her 3 daughters**

Women, Childhood and Adult Education

- **Gender equity** – *experience has indicated that women are ideal for all the delicate activities at the nurseries. This will give them the opportunity to be productive and provide support to their families*
- **A Nursery within a Nursery** – *a School will be established close to the nurseries, so that the women can walk their kids to School on their way to work*
- **Health Care** – *Health centers to be constructed to provide proper health care to rural population*
- **Adult education** – *school and educational programs can be offered after daily work*

**PART 3 – THE SCHOOL FOR THE
LEADERS – Sustainable Management
Program will be incorporated in
Curriculum K4 – 12.**

- *Enhance leadership in environmental care*
- *Create the cultural concern for sustainability amongst the leading sectors of our local society*
- *Foster “Wood Culture”*
- *WoodLINKS Program*

The Columbus School (Medellin) – a US International School Educating the Leaders of the Future



PART 4 – INDUSTRIAL DEVELOPMENT

- ***PHASE 1 – THE SAWMILL – THE PLATFORM FOR INDUSTRIAL DEVELOPMENT OF THE REGION***
- ***PHASE 2 – DEVELOPMENT OF A SUSTAINABLE, INDUSTRIALLY INTEGRATED MODEL***
 - ***SUSTAINABLE USE OF WASTE PRODUCTS***
 - ***INTEGRATION WITH PULP AND PAPER INDUSTRY***
 - ***VALUE ADDED SECONDARY PRODUCTS***

INDUSTRIAL DEVELOPMENT - Current Uses of Softwoods

Lack of Standard Grading System =
Low Value Added Products

- *Pallets*
- *Tongue & Groove Roofing*
- *Crates*
- *Particle Board (chipping logs)*



Current Uses of Softwoods



Tongue & Groove Roofing



Pallets

Proposed Uses:

- ***Certified Value Added Forest Products –***
 - *Furniture (Knotty Pine)*
 - *Home Interior Products*
- ***Production oriented for Quality, not for Quantity - Niche Market***
- ***Structural Uses - Timber Frame Construction System***
 - *Enhance noble uses of wood*
 - *Provide economic housing solutions*





Tray Table w/ ceramic tile inlay



Gender Equity – Job Opportunities



Woman hand painting a Ceramic Tile

Benefits of the Project:

- **Social Benefits:**

- *Long term employment opportunities – will facilitate the Recovery of Social Structure*
- *Gender Equity – supporting the Widows of the Violence*
- *Restore capacity to regenerate wealth amongst rural population*
- *Recover self esteem and willingness to stay in their lands, and work for their future.*
- *Bring about a different baseline for the Country that can be replicated easily in other areas*

Benefits of the Project:

- **Partnership with Nature** – *Sunshine and rainfall at their best*
- **Certified Forest Culture** - *Working example of Sustainable Forestry Practices*
- ***High Quality Value Added Products can access International Markets increasing revenues of the project***
- **Ecological and Environmental**
 - *Reduced Pressure on Natural Forests*
 - *Carbon Sequestration*
 - *Watershed Protection*

Where are we now?

Confirmed Partners of the Project:

- *State of Antioquia*
- *Industrias Forestales Doña María S.A.*
- *FEDEMADERA*
 - *GTCFV (FSC - Colombia)*
- *The Columbus School*
- *Currently volunteer technical assistance team:*
 - *Mater Engineering*
 - *Collins Company*
 - *WoodLINKS*
 - *Sitka Solutions*
 - *USM*

Where to?

- *Project design being completed*
- *Partnerships secured*
- *Funding search to be initiated*

Let's have a Reason to Believe!