

## VILLAPINZÓN TANNERIES' STRATEGIC PLAN: FROM AN ENVIRONMENTAL APPROACH, AN INTEGRAL SOLUTION BASED UPON LEARNING ALLIANCES

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This poster presents a strategy based upon setting learning alliances for each environmental component at tanneries from Villapinzón, and developing specific project results. The final goals of this strategy are to assure a sustainable development of factories and to improve water quality at the Bogotá River.

End-of-pipe solutions have been applied before and failed. Accordingly, an Integrated Water Management approach has been presented aiming to provide environmental sustainability to industries and better quality of life to tanners. It is based upon establishing learning partnerships as a way of giving long-term sustainability to projects under execution.

### REDUCTION

Parameter	Soaking	Unhairing	Deliming	Tanning
BOD	40%	80%	57%	
TSS	40%	73%	73%	
Chlorides	56%	99%		
Sulphites		84%	32%	
NTK			79%	
Cr				34%



**WATER SAVINGS**

25%



**ENERGY SAVINGS**

14%

### STRATEGIC PLAN

#### Biophysical

- Cleaner production (CP)
- Efficient water management.
- Adding value to solid waste



#### Economic

- Product Quality Improvement
- Improving managerial and bargaining skills.
- Productive chain improvement



#### Social

- Strengthening affiliation
- Empowerment
- Social Inclusion



#### Institutional

- Interinstitutional work
- Environmental Laws to CP



### LEARNING ALLIANCES & PRODUCTS

11

Number of organizations on learning alliances

6

Thesis

2

Agreements (competitiveness, CP, finances, penalties)

2

Pilot projects

3

Training material

3

Visits from experts

30

Workshops and meetings

1

Regional Leather Board.

1

UNAL Newspaper

11

#### CP SOLID WASTE

7

2

3

3

4

30

1

9

#### CONFLICT RESOLUTION

1

40

5

#### FINANCING & LEGALIZATION

1

2

10

1

7

#### EMPOWERMENT TANNERIES

2

2

- COMPETITIVENESS
- ASSOCIATIVE WORK

2

1

20

5

#### LAND PLANNING

3