

# **Doctoral Studies Support Program (DSSP) on environmental peace-building and development**

**Environmental Studies Institute (IDEA) - Universidad Nacional, Colombia (UNAL)**

**Center for Development Research (ZEF)**

**University of Bonn (UoB)**

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**June 8, 2019**





# **Part one**

**Introduction to some Colombian features**

# **Part two**

**Theoretical approach to the concepts of development  
and environment**

# **Part Three**

**Introduction to the DSSP**

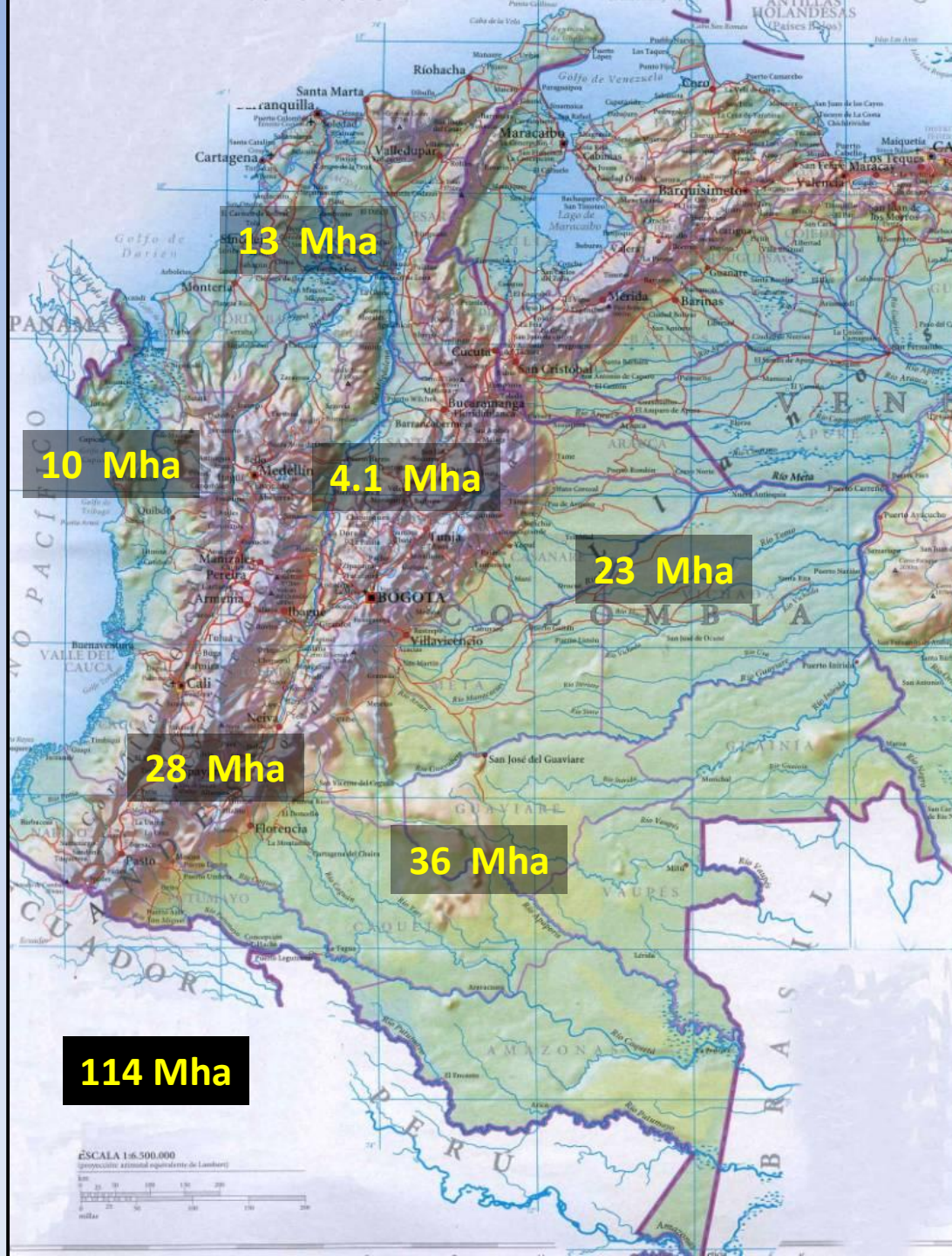


An aerial photograph of a lush, hilly landscape in Colombia. The terrain is covered in vibrant green fields, some of which appear to be agricultural, interspersed with dense clusters of trees and shrubs. In the background, a range of dark, forested mountains rises under a sky filled with soft, white clouds. The overall scene depicts a typical rural or semi-rural environment in the country.

# Part one

## Introduction to some Colombian features







Secretos de belleza de las mujeres árabes



Arab migration

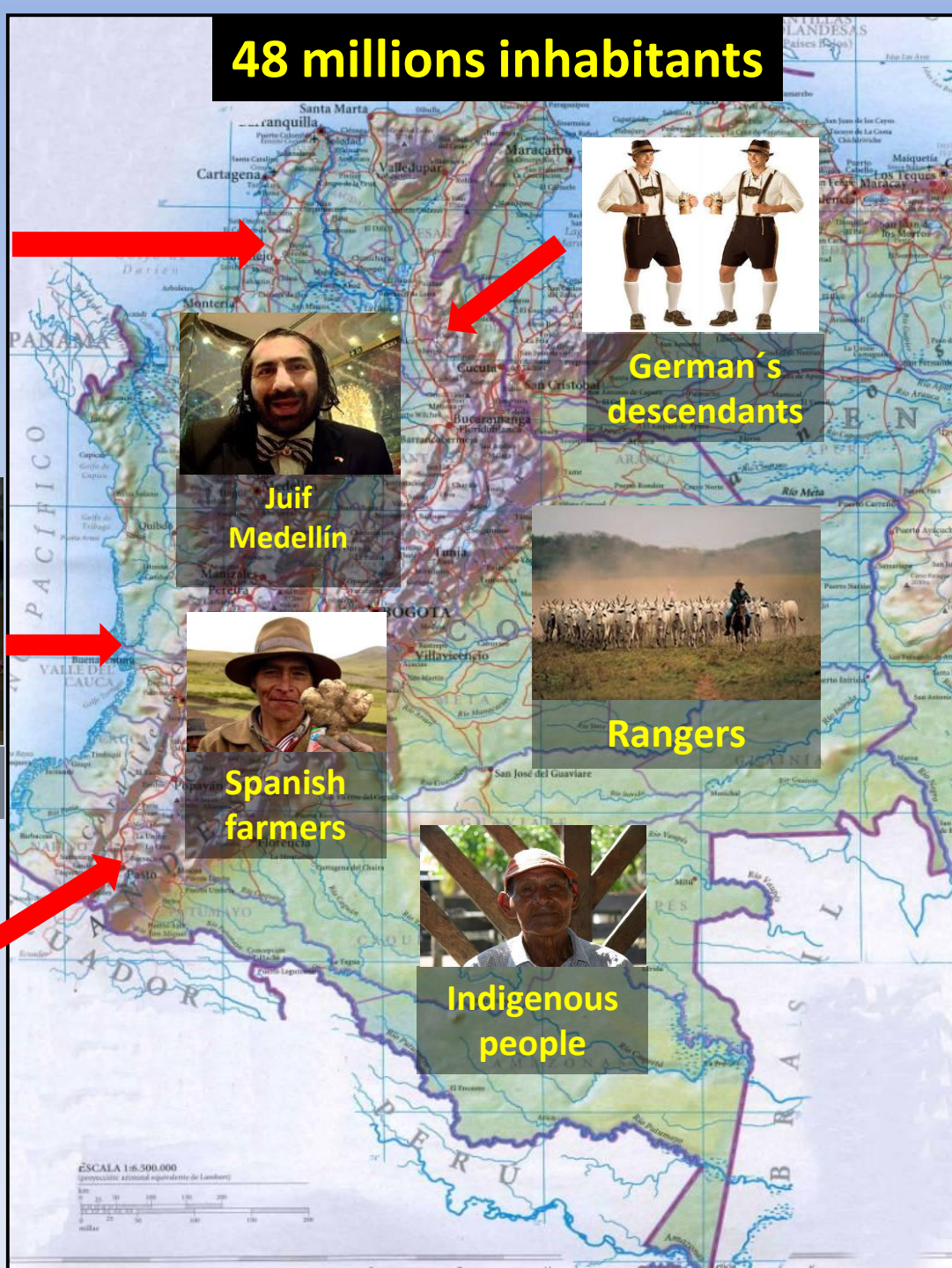


Afro-descendants



Inca's descendants

48 millions inhabitants



87 indigenous ethnic groups,  
3 different groups of Afro-Colombian population

At the same time, it has 64 Amerindian languages.



A photograph of a dense, green forest landscape. In the foreground, a thick, brown tree branch with green and brown leaves extends across the top of the frame. Below the branch, a vast expanse of lush green forest covers a hillside. The forest is composed of many different types of trees, creating a textured, multi-layered appearance. The background shows more forested hills under a clear sky.

**Colombia is a megabiodiversity country**

**56,343 species are registered in Colombia (2016),  
of which 9153 are endemic**



## First place in Orchids



## First place in Birds



## Second place in plants, amphibians, butterflies and freshwater fish





**third place in species of palm trees and reptiles and occupies the fourth place in the biodiversity of mammals**





# COLOMBIA FACES VARIOUS CONFLICTS IN THE RELATIONS DEVELOPMENT - ENVIRONMENT

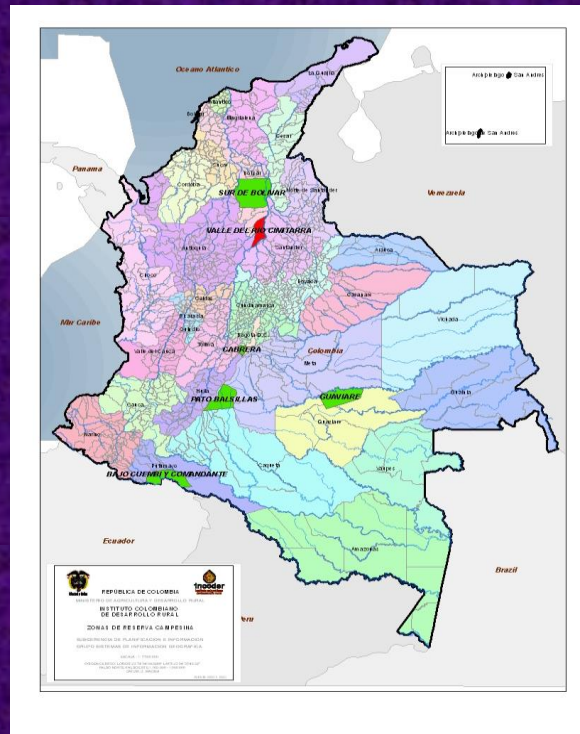
Unstable land  
property- Land  
Grabbing

Climate  
changes

Dependence  
on  
multinationals

Financing  
Development  
Corruption

Territorial  
control  
security



Legal and Illegal  
Mining

Poverty

National Parks

Neighbor countries  
migration, drug trafficking  
violence

Inequalities







**but nevertheless, agriculture (and land ownership) are key in the current peace agreement of Colombia**





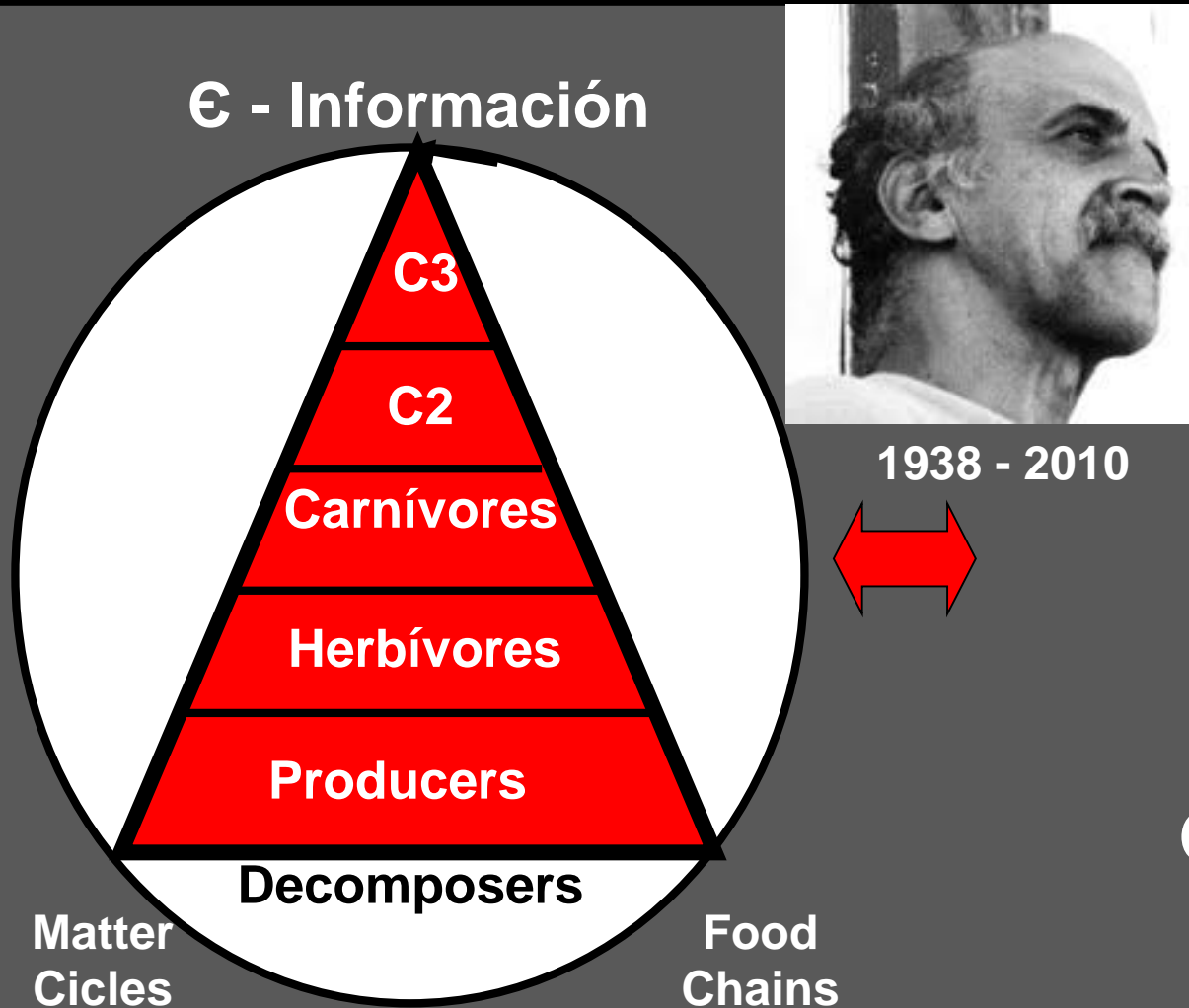
# Part two

What is the environmental dimension?



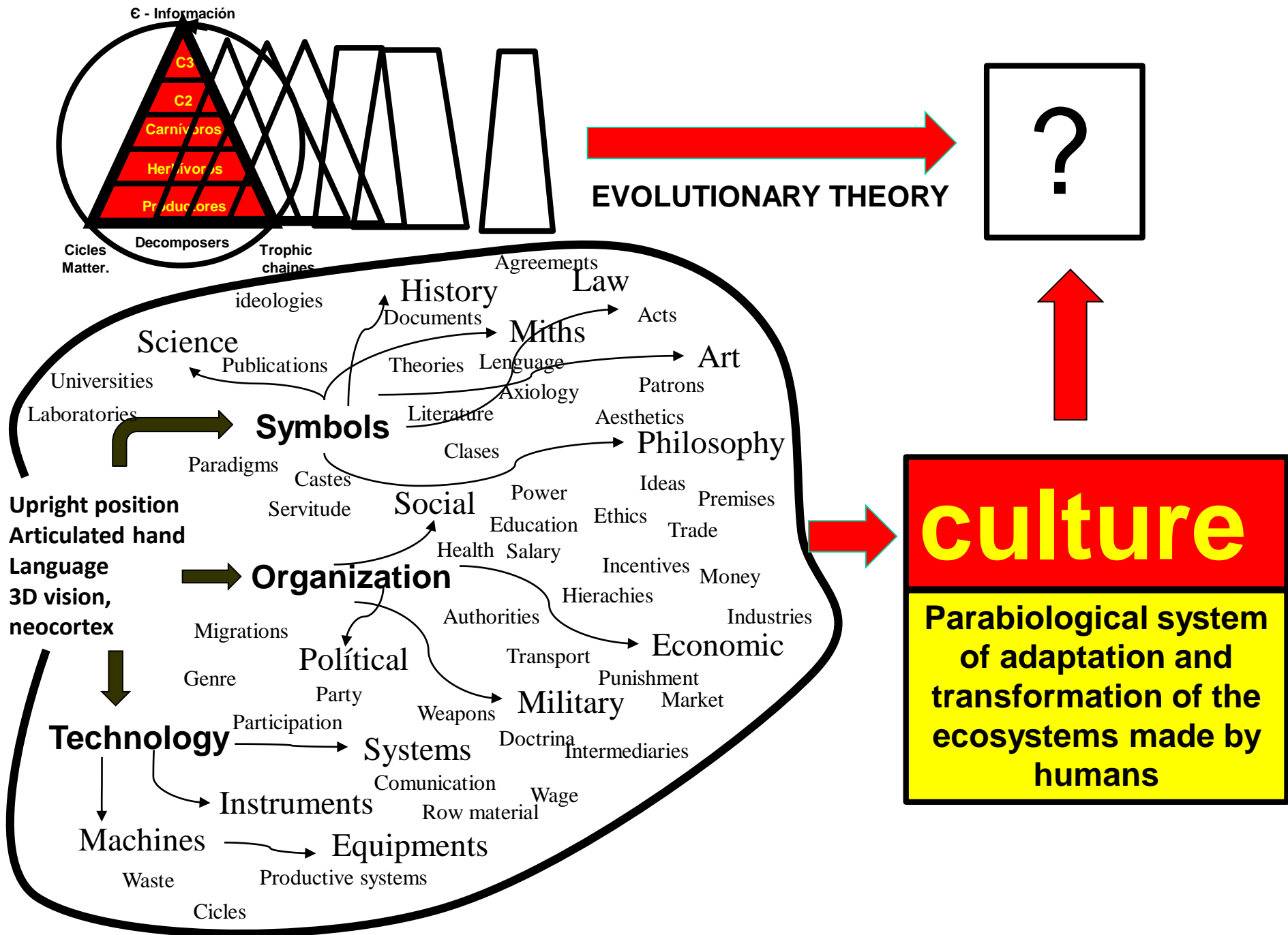


# The Augusto Angel Maya question



Do human beings occupy or exercise a niche within ecosystems?







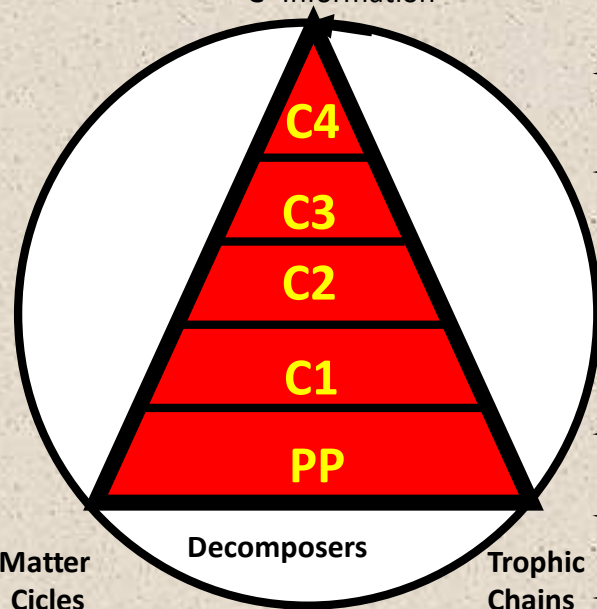
**The answer to  
the Augusto Angel's question:**

**“...The niche of humanity  
is the cultural and adaptive  
transformation  
of ecosystems...”**



# ECOSYSTEM

€ -Information



NNRR Extraction

Agriculture

Livestock

Industry

Urbanization

Aesthetics

Tourism

# CULTURE

**ESTRUCTURA SIMBOLICA**

Myths  
Science

Art  
Law

History  
Filosofía

**ORGANIZACIÓN**

Military

Social  
Política

Economics

**TECNOLOGIA**

Systems  
Equipment

Machines  
Acts

Processes  
Institution

Social – Economics – Politics – Technologicals – Ecosystemic processes – Energy flows- Material Cycles

**Cultural effects**

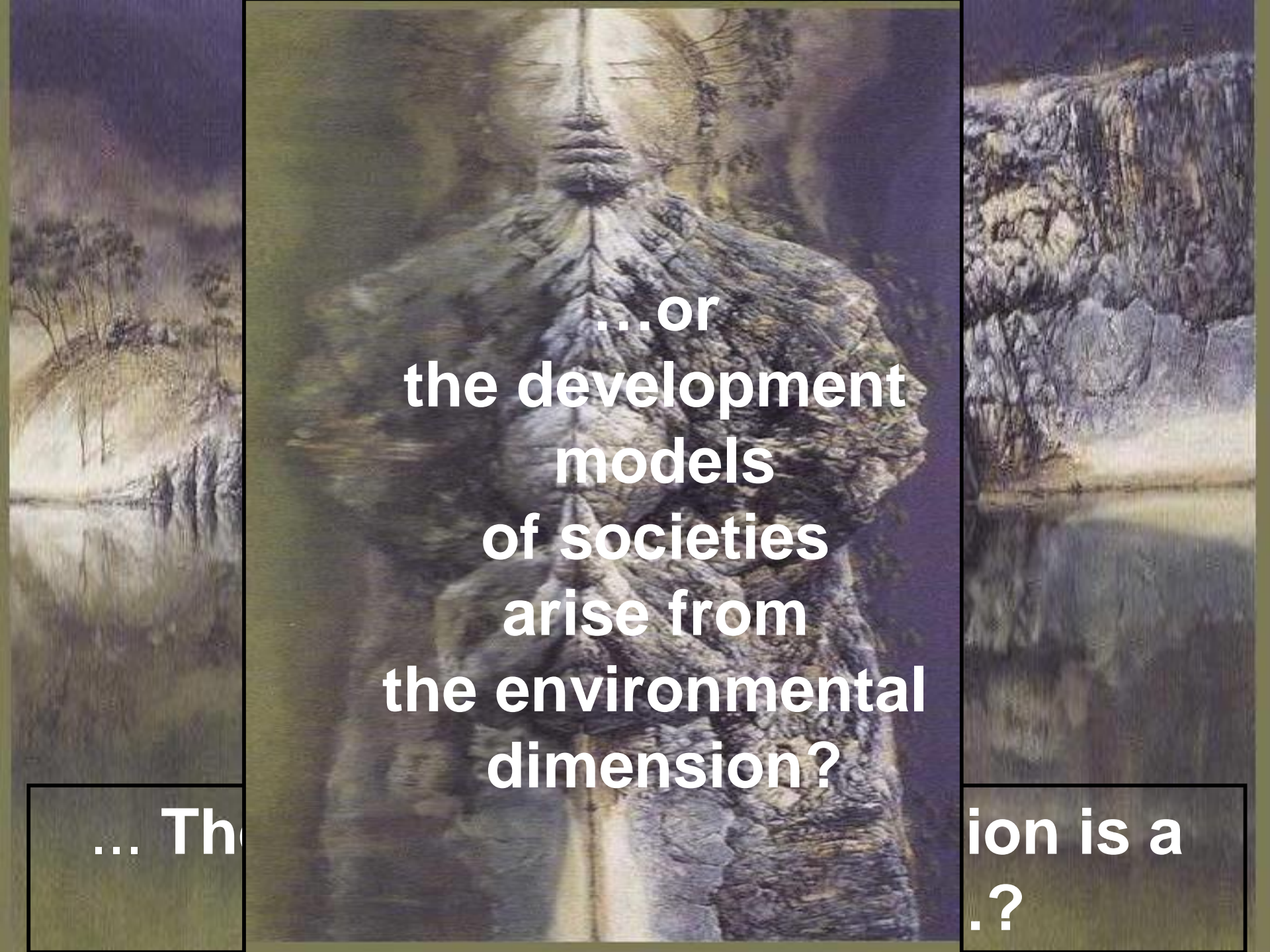
War – Poverty  
Wealth – Health  
Violence – Corruption  
**Development**

**INTER  
ACTION**

**Ecosystemic effects**

Contamination – Erosion  
Restoration – Bd  
Water quality - Air  
**Climate Change**





...or  
the development  
models  
of societies  
arise from  
the environmental  
dimension?

... The

ion is a  
.?





**Instead of the concept "sustainable development"**

**we prefer to use the concept  
"Environmental sustainability of  
society"**



# Part three

## Bilateral Graduate School

### Doctoral Studies Support Program on environmental peace-building and development (DSSP)

Instituto de Estudios Ambientales (IDEA) - Universidad Nacional, Colombia (UNAL)  
Center for Development Research (ZEF)  
University of Bonn (UoB)









## German Federal Ministry for Economic Cooperation and Development (BMZ) and German Academic Exchange Service DAAD: Program “Bilateral Graduate Schools” working on SDGs

- ☐ new alliances
  - ☐ joint knowledge production
  - ☐ Transformative action!
- 
- ☐ 7 graduate schools worldwide
  - ☐ Sept. 2016 – Dec. 2020
  - ☐ € 450.000 p.a. (5 years)
  - ☐ 4 in Africa, 2 in Latin America, 1 in Asia





# Bilateral graduate Program of DAAD / Network

Vietnam	<a href="#"> <u>RoHan – Rostock-Hanoi SDG Graduate School</u></a> Hanoi University of Science and Technology (HUST), University of Rostock
Colombia	Doctoral Studies Support Program (DSSP) on "Environmental peace-building and development in Colombia" Universidad Nacional de Colombia, University of Bonn/ZEF
Peru	<a href="#"> <u>trAndeS – Postgraduate Programme on Sustainable Development and Social Inequalities in the Andean Region</u></a> Pontificia Universidad Católica de Perú, Freie Universität Berlin
Ethiopia	<a href="#"> <u>German-Ethiopian SDG Graduate School: Climate Change Effects on Food Security (CLIFOOD)</u></a> Hawassa University, FSC University of Hohenheim
Ghana/Nigeria	<a href="#"> <u>Performing Sustainability – Cultures and Development in West-Africa</u></a> University of Maiduguri, University of Cape Coast, University of Hildesheim
Cameroon	Yaoundé – Bielefeld Bilateral Graduate School Natural Products with Antiparasite and Antibacterial Activity (YaBiNaPA) Université de Yaoundé I, University of Bielefeld
South Africa	Wits – TUB Urban Lab Interdisciplinary Bilateral Postgraduate Studies Programme for Sub-Saharan Africa University of the Witwatersrand, Technische Universität Berlin



# IDEA and ZEF

- Internationally operating research institutes with a focus on “development - environment”
- Interdisciplinarity - integrating disciplines with new concepts and methods
- transdisciplinarity (reduce differences between science and practice, science and politics)
- Institutes of higher education
  - Master in environmental studies (IDEA)  
Doctoral Program on Environmental Studies (2020)
  - Bonn International Graduate School – Development Research (BIGS-DR) (ZEF)



# Main objectives of DSSP (overview):

1. Introducing interdisciplinary, integrative and innovative scientific approaches, concepts and methods on ecosystem – culture relations, peace and conflict (SDG 4)
2. Developing a research agenda addressing the SDGs, (1,2, 4, 11, 15, 16).
3. Internationalizing science and research with transatlantic and regional partnerships (SDG 16)
4. Exploring and critically reflecting the role of higher education for addressing the SDGs (embeddedness of knowledge production) (SDG 4)





## Goal 1: Introducing interdisciplinary, integrative and innovative scientific approaches, concepts and methods (SDG 4)

### Course Work

- English course (Jan.– Feb.)
  - Attending running programs of IDEA\*
  - 1st Interdisciplinary module (April – May)
  - Summer School in Germany (June – July)
  - Inauguration (kick-off workshop) in **October 2018**
- 
- ☐ 6 scholarships per year to UNAL doctoral students
  - ☐ 2 Writing Fellowships
  - ☐ 2 Research Fellowships



### Integration of other heartquarters of IDEA

- Bogotá
- Medellín
- Manizales
- Palmira

### AND: Countries in the region

### Network of stakeholders from policy and practice

- Other scientific programs and projects (CAPAZ)
- Social movements (CesPAZ, IALA)
- NGOs on land conflict, peace, just development, food security, food sovereignty etc. (Grupo SEMILLAS, FIAN)

# Chosen students 2018- 2019

RHEINISCHE FRIEDRICH-WILHELMS-UNIVERSITÄT BONN

ZEI ZEN  
IN  
ZEE ZEN  
EN

**Carolina Tobón Ramírez**  
**David Zamora Ávila**  
**Ingrid Quintero**  
**Juliana Sabogal Aguilar**  
**Mauricio Ángel Macías**  
**Julián Vivas García**





# Students 2018

Name	Doctoral Program	Title of the thesis project	Director(a)
Mauricio Alberto Ángel Macías	Public Health	Contamination of <b>air and health</b> in Bogotá in the second half of the 20th Century, an environmental history.	Stefania Gallini
Ingrid Quintero Silva	Agroecology	<b>Main Agroecological Structure</b> , activities of dung beetles and soil fertility in agroecological systems of the high mountains.	Tomás León
Carolina Tobón	Geography	<b>Social metabolism, sustainability and territory in the basin of Bogotá river.</b>	Nohra León
David Andrés Zamora Ávila	Civil Engineering	Distribution of <b>ecosystem services</b> in a hidrological basin by coupling ecohydrographical and ecohydrological models.	Erasmus Alfredo Rodríguez
Julián Augusto Vivas García	Agroecology	Criteria for framing <b>public policies</b> towards an agroecological transition in Colombia.	Carmenza Castiblanco
Juliana Giselle Sabogal Aguilar	Agroecology	<b>Impact of the agrarian politics (1960-2010) and contributions of the land reform (2016) for the territorial peace.</b>	Marina Sánchez de Prager

# Students 2019

Name	Doctoral Program	Title of the thesis project	Director(a)
Roger Fabián García Díaz	Agroecology	Environmental analysis of the <b>indigenous agroecosystems</b> TUL of Nasa people (Toribío, Tacueyó and San Francisco, Cauca North.	Tomás León
Mariana Trujillo Gallego	Engineering-Industry and Organizations	<b>Influence of environmental practices of the Green Supplies Chaines approach on sustainable performance: an empirical study in Colombian manufacturing companies</b>	William Ariel Sarache Castro
Patricia Gómez Nore	Geography	<b>Environmental analysis of land grabbing in three natural regions of Colombia</b>	Alice Beuf
Carlos Arturo Aristizábal Rodríguez	Agroecology	Organizational strengthening of the Agroecological <b>Farmers Market Network</b> of Cauca Valley	Diego Iván Ángel Sánchez
Deissy Giovanna Quintero Arias	Civil Engineering	<b>Land modeling</b> using systems dynamics and emergetic synthesis as a management tool for ordering	John Fabio Acuña
Diego David Aldana	Law	<b>Towards an integral conception of the right of access to land in the framework of the post-agreement</b>	Nelson Camilo Sánchez León



## Term papers (interdisciplinarity)

- **Protected areas and peace agreement in Colombia.**

*Carolina Tobón (Chemist), Mauricio Ángel (Doctor), David Zamora (Engineer).*

- **Public policies and agroecological practices.**

*Julián Vivas García (Economist), Juliana Sabogal (Sociologist), Ingrid Quintero (Biologist).*

# **Six months research fellowship**

**Juliana Cepeda Valencia (UN / Faculty of  
Agricultural Sciences)**

Identifying and evaluating worthy forms of coexistence: citizens and communities that bet on territorial development

**Milson Betancourt (IDEA / UN)**

Territorial and environmental challenges for peace in Colombia



## Goal 3: Internationalize science and research and foster comparative analysis (SDG 4, 16)

- **Bonn International Center for Conversion (BICC)**, Markus Rudolph\*
- **University of Development Studies** (Northern /Upper East Region, Ghana) → Michael Ayamga (Faculty of Agribusiness and Communication Sciences), Emmanuel Derbile (Dean of Faculty of Planning and Land Management) → **transatlantic partnership**
- **Universidad Nacional Autónoma de Nicaragua – Managua (UNAM)** → Freddy Ariel Sánchez Ruiz, Darya Blandon, Rommel Zambrana → **regional partnership**

### International conference (2019)

Environmental thinking and alternatives to development from a South – South / South - North perspective“ (Thyssen Foundation)

## Goal 4: To Explore and critically reflect the role of higher education for the SDGs (SDG 4: Quality education for all)

- The co-production of knowledge is important to establish cooperation at many levels
- There are no superior / inferior knowledges → but a hierarchization of knowledges
- Consider the relations and asymmetries of power → knowledge production and epistemologies are contextualized and embedded in its trajectories
- Including actors of civil society, social movements, private sector → multi-stakeholder approach
- Decolonize methodologies / reflexivity / positionality → empowerment in planning / learning for transformative action





# Exchange of knowledge between German colleagues and members of Instituto Latinoamericano de Agroecología (IALA María Cano) en Viotá / Cundinamarca



**Decolonizing Higher Education in Colombia: How does the Instituto Agroecológico Latinoamericano María Cano attempt to produce knowledge in a decolonial way?**

***Claudia Lefkes and Eva Youkhana***



# Other advances ZEF

**Local power relations and social contestations in agrarian production and land use: Challenges behind the peace-building in Colombia**  
**Dennis Avilés**

**Perspective of gender as constructive element in the process of peace in Colombia**

**Eva Dietz**

**Sustainable tourism in indigenous and Afro-Colombian Communities**

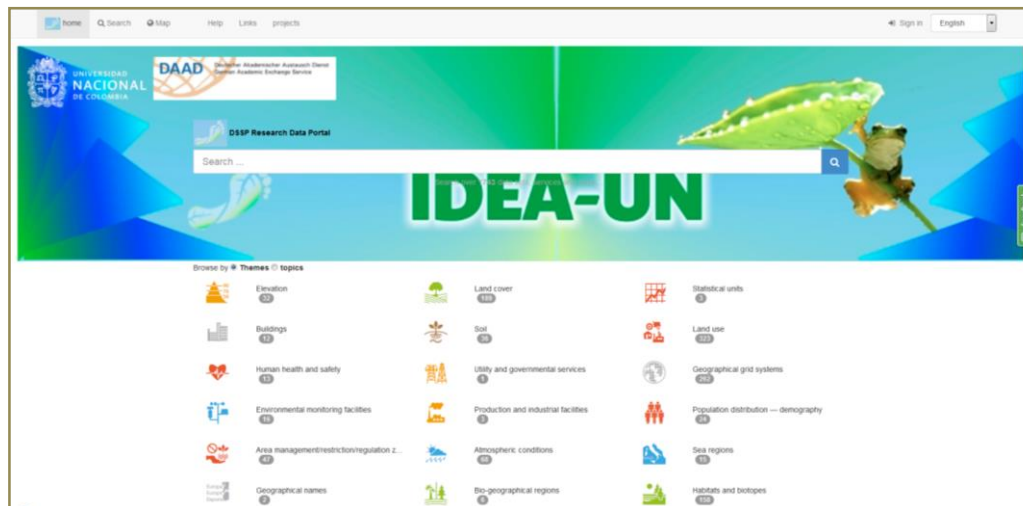
**Emilia Schmitz**

**...plus the multiple works of the National University in these matters ...**



# DSSP Research Data Portal (Geoportal) for

- Sharing of research data with the scientific and local communities
- Internal sharing of restricted (confidential) data
- Sharing and visualizing geospatial data
- Creating maps by portal users



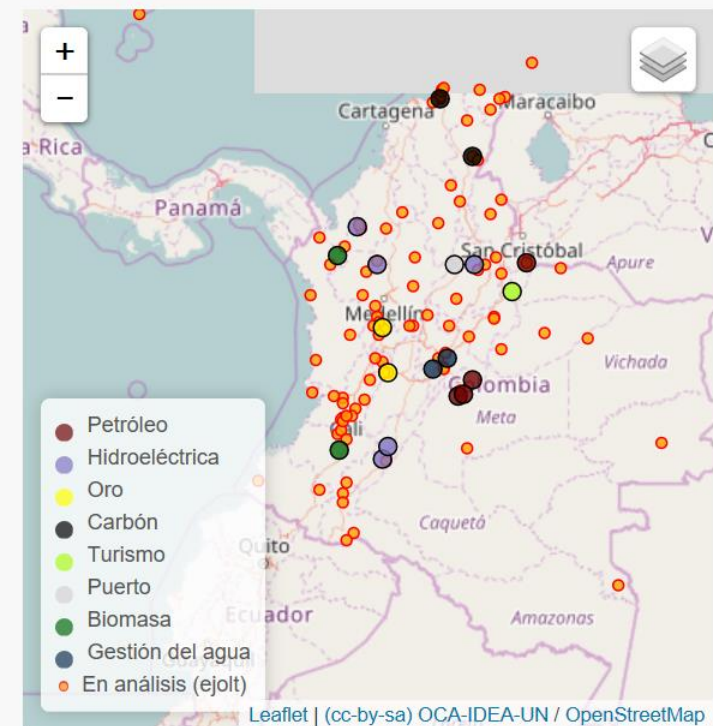
## Observatory of environmental conflicts



OCA

Observatorio de Conflictos Ambientales  
Investigación para la defensa de los territorios

### Conflictos Ambientales de Colombia



**...beyond academy results...! strong  
friendship bonds have been created!**



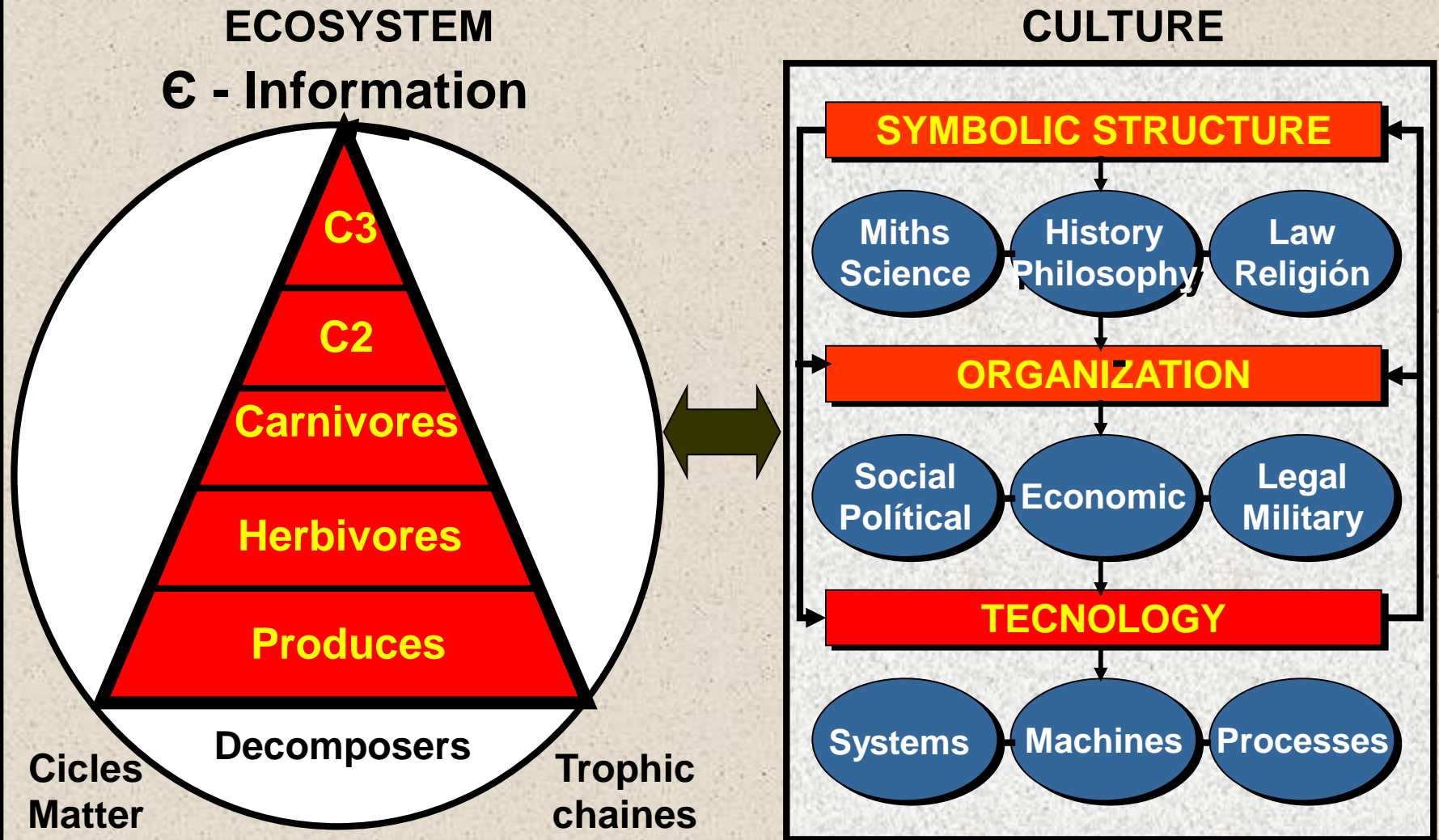
**Education, if it is not  
environmental, it is not education**

***Augusto Angel Maya***

**Thanks**



# THE ENVIRONMENTAL APPROACH: ECOSYSTEM / CULTURE INTERRELATIONS



TUC D'AUDOUBERT CAVE in France was entered sometime between perhaps 11,000 and 13,000 years ago by *H. sapiens*, also called Cro Magnons, who sculpted small clay bison in a recess almost a mile underground.

# Culture as an evolutionary emergence of nature

A detailed illustration of a prehistoric cave scene. In the center, a large bison is being prepared by several Cro-Magnon people. One person is standing on the left, another is crouching in the foreground with their back to the viewer, and others are positioned around the animal. The cave walls are dark and textured, and the floor is covered with rocks and some small fires or lamps.