



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

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

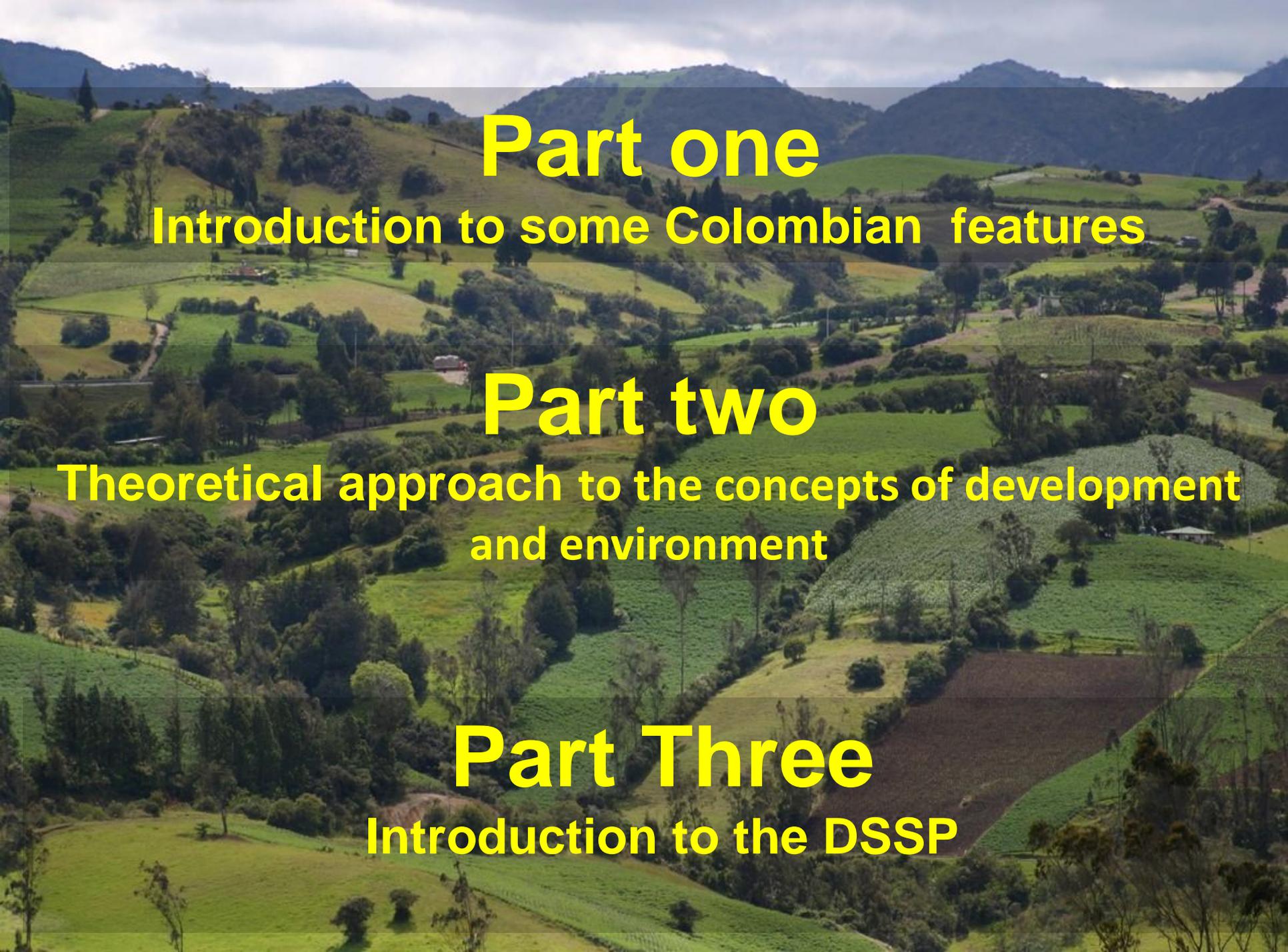
Center for Development Research (ZEF)

University of Bonn (UoB)

Tomás León Sicard, IDEA UN

Eva Youkhana ZEF UoB

June 8, 2019



Part one

Introduction to some Colombian features

Part two

Theoretical approach to the concepts of development and environment

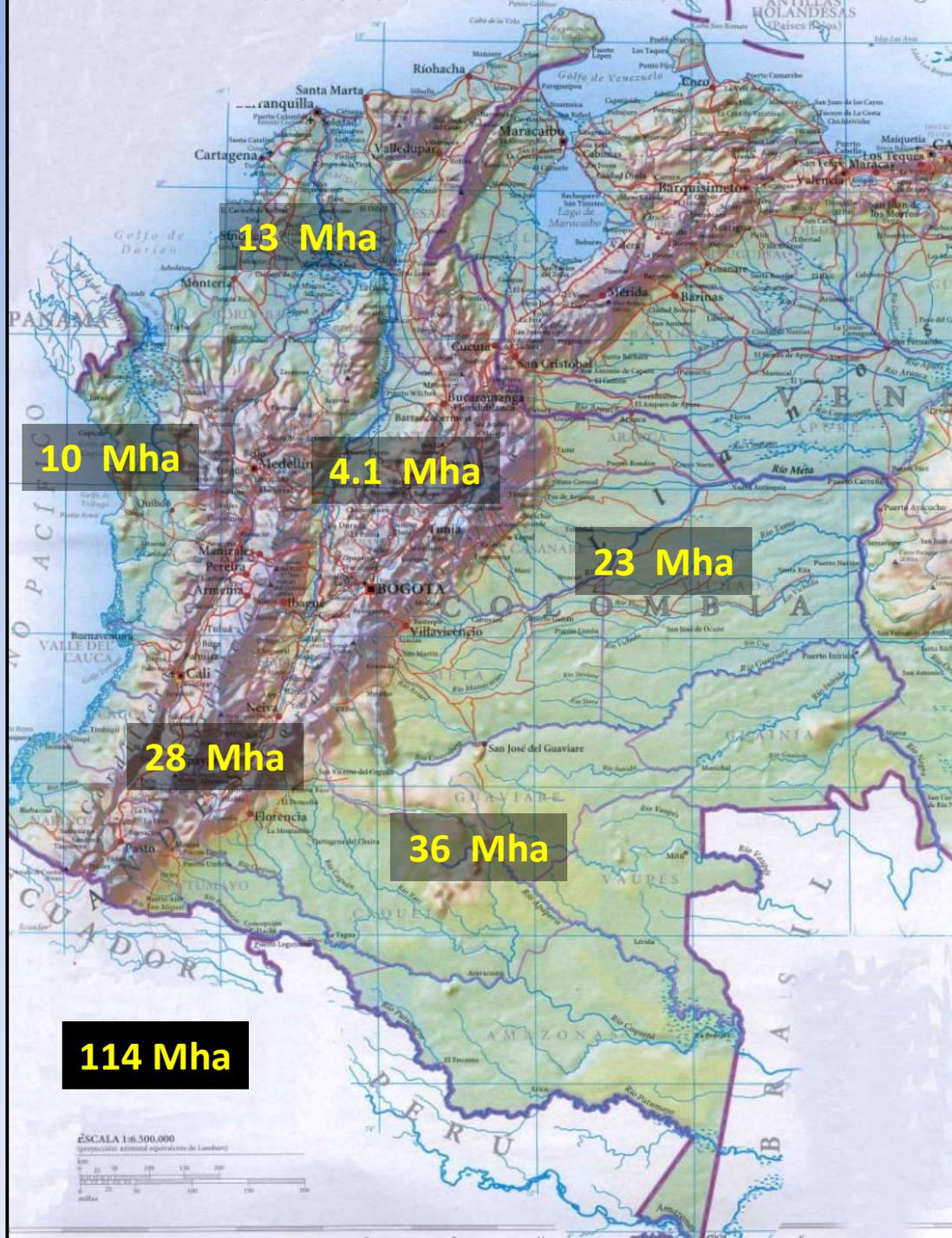
Part Three

Introduction to the DSSP

Part one

Introduction to some Colombian features



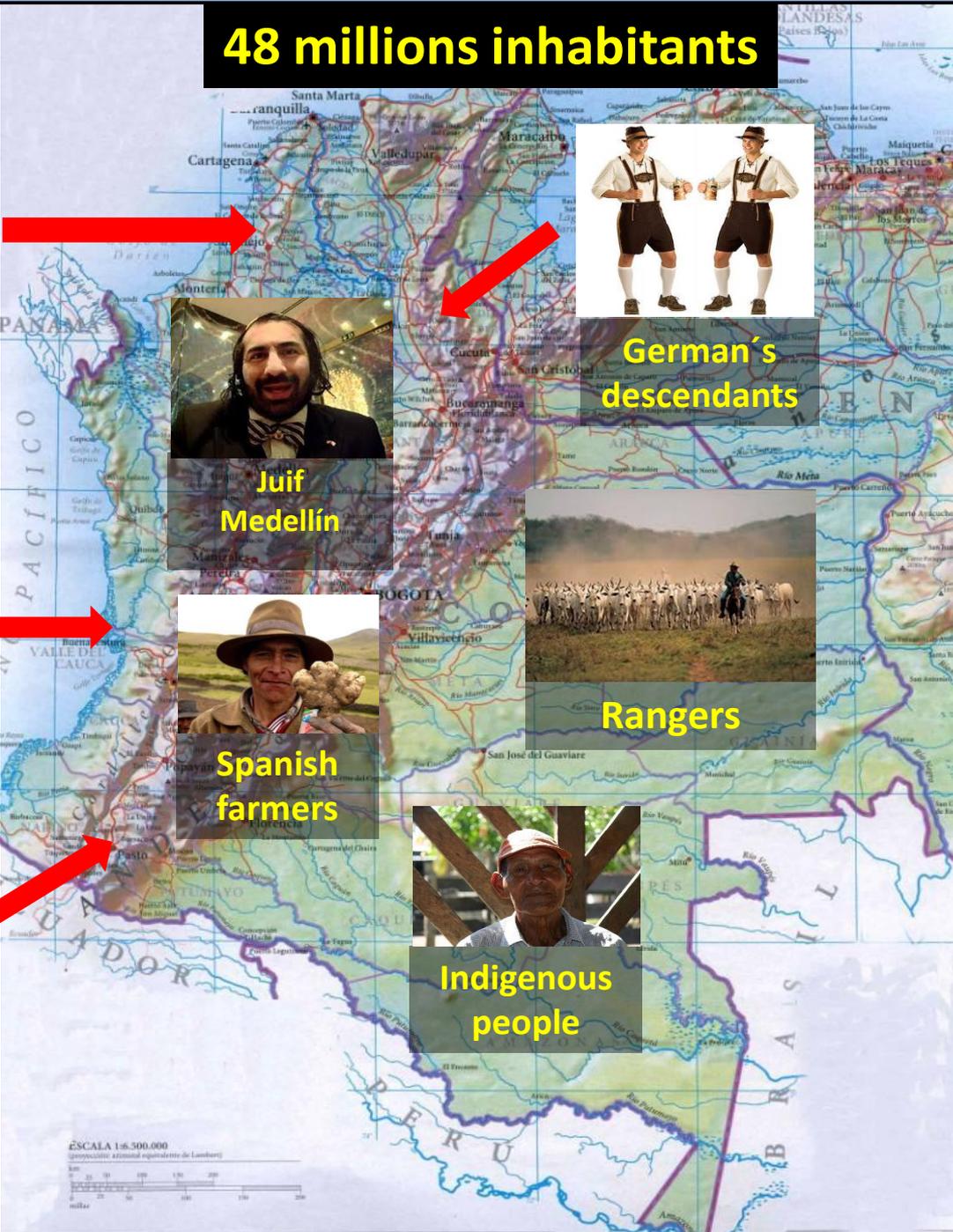


Secretos de belleza de las mujeres árabes



Arab migration

48 millions inhabitants



German's descendants



Juif Medellín



Rangers



Spanish farmers



Indigenous people



Afro-descendants



Inca's descendants

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, dark brown tree branch with several green leaves and some brown, dried leaves extends across the top of the frame. The background is a vast expanse of lush green trees and vegetation, covering rolling hills and valleys. The sky is a pale, overcast blue. The overall scene is vibrant and natural.

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

**Private sector
Techno-science
Strong policies**

**Resource degradation
Erosion – Salinization
Water pollution
Ecosystem**

**SOME
COLOMBIAN
AGRARIAN
PROBLEMS**

**Dependence
Lack of local technologies
Weak scientific institutions**

**Non human and human health
Effects**

**Open market
Polarized society
Excluded peasant**

**Land Properties
Rights
50 years of fight
Peace process**

Little support from the current government for the peace process

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



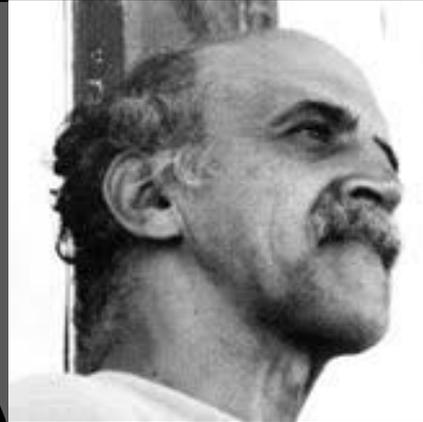
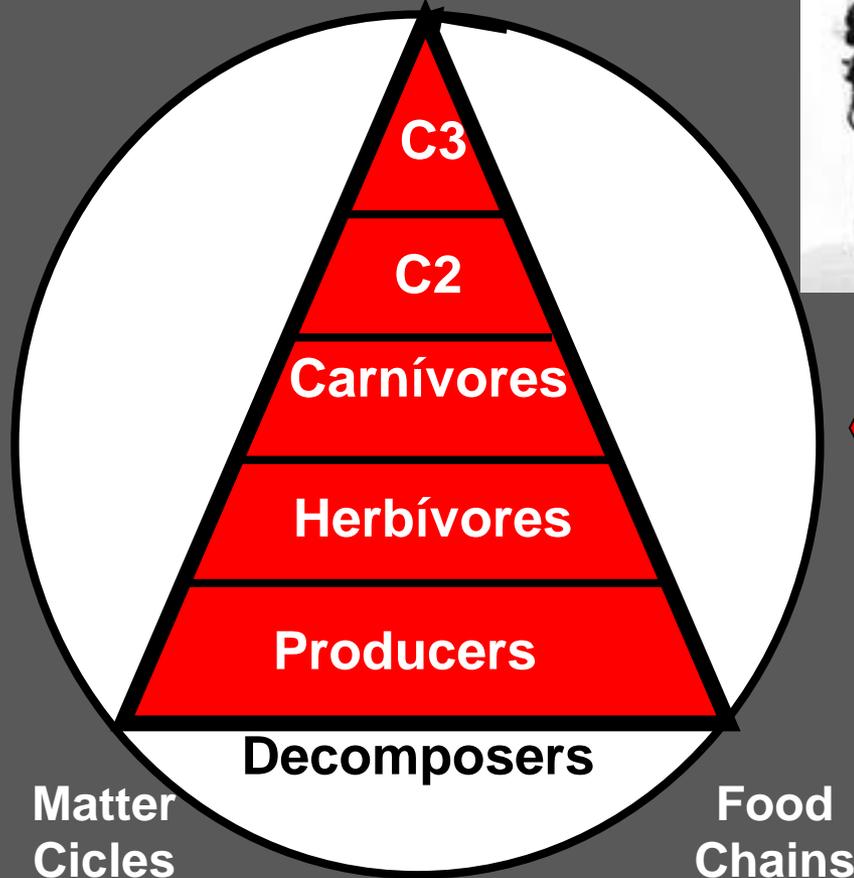
Part two

What is the environmental dimension?

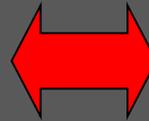


The Augusto Angel Maya question

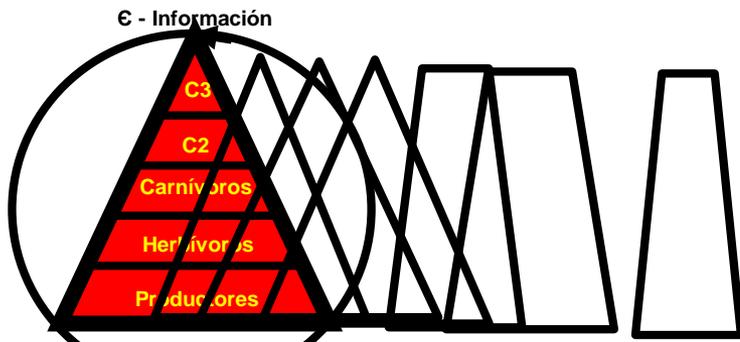
€ - Información



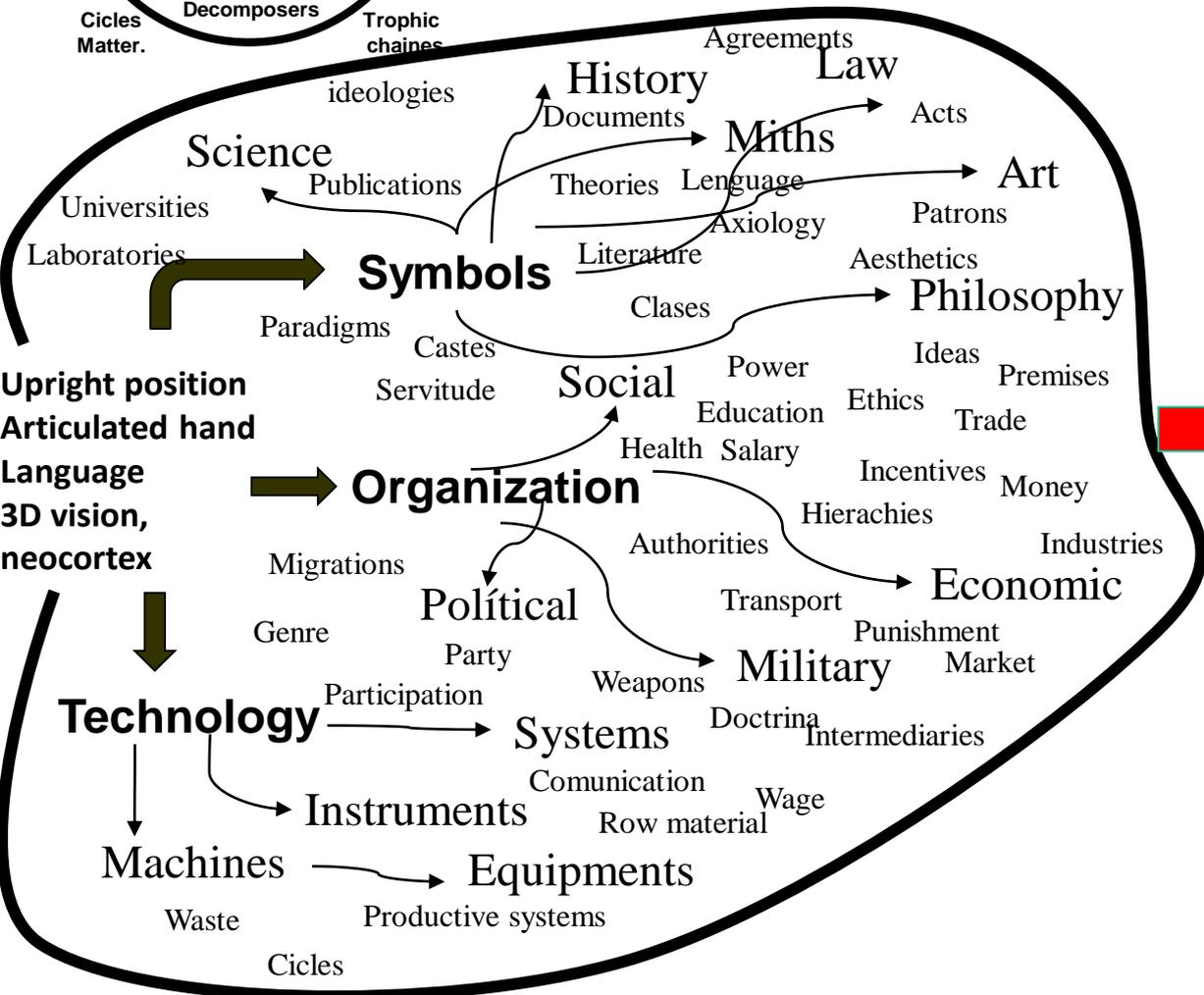
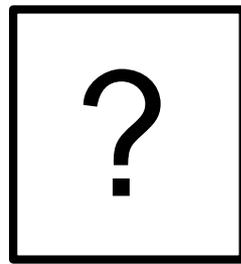
1938 - 2010



Do human beings occupy or exercise a niche within ecosystems?



EVOLUTIONARY THEORY



culture

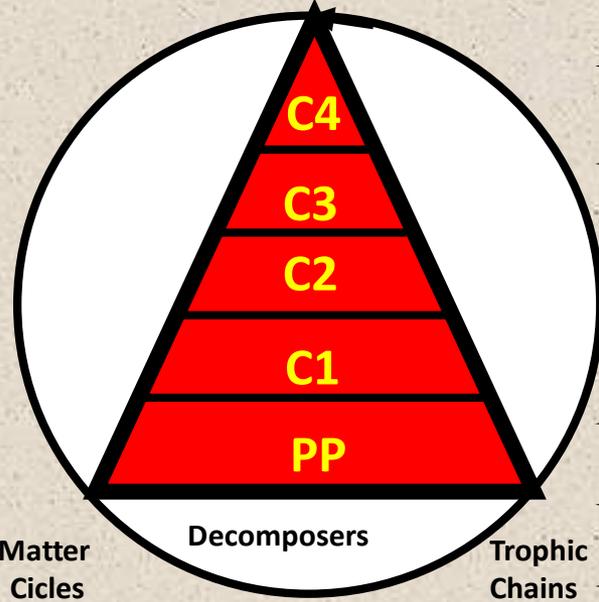
Parabiological system of adaptation and transformation of the ecosystems made by humans

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

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

ECOSYTEM

€ -Information



NNRR Extraction

Agriculture

Livestock

Industry

Urbanization

Aesthetics

Tourism

CULTURE



Social – Economics – Politics – Technologicis – Ecosistémics processes – Energy flows- Material Cicles

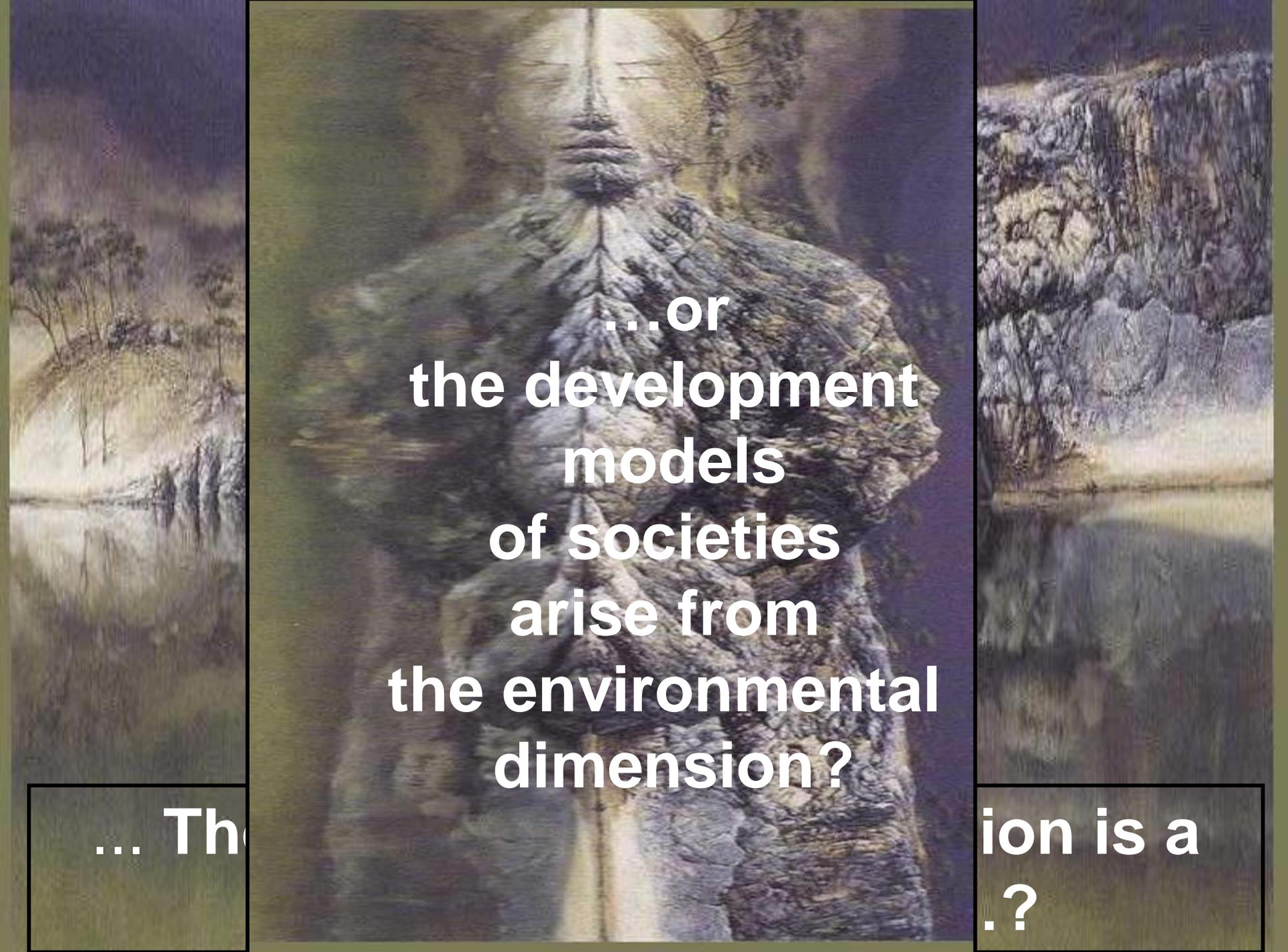
Cultural effects

War – Poverty
Wealth – Health
Violence – Corruption
Development

**INTER
ACTION**

Ecosistemics effects

Contamination – Erosion
Restauration – 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	RoHan – Rostock-Hanoi SDG Graduate School 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	trAndeS – Postgraduate Programme on Sustainable Development and Social Inequalities in the Andean Region Pontificia Universidad Católica de Perú, Freie Universität Berlin
Ethiopia	German-Ethiopian SDG Graduate School: Climate Change Effects on Food Security (CLIFOOD) Hawassa University, FSC University of Hohenheim
Ghana/Nigeria	Performing Sustainability – Cultures and Development in West-Africa 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 air and health in Bogotá in the second half of the 20th Century, an environmental history.	Stefania Gallini
Ingrid Quintero Silva	Agroecology	Main Agroecological Structure , activities of dung beetles and soil fertility in agroecological systems of the high mountains.	Tomás León
Carolina Tobón	Geography	Social metabolism, sustainability and territory in the basin of Bogotá river.	Nohra León
David Andrés Zamora Ávila	Civil Engineering	Distribution of ecosystem services in a hidrological basin by coupling ecohydrographical and ecohydrological models.	Erasmus Alfredo Rodríguez
Julián Augusto Vivas García	Agroecology	Criteria for framing public policies towards an agroecological transition in Colombia.	Carmenza Castiblanco
Juliana Giselle Sabogal Aguilar	Agroecology	Impact of the agrarian politics (1960-2010) and contributions of the land reform (2016) for the territorial peace.	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 indigenous agroecosystems TUL of Nasa people (Toribío, Tacueyó and San Francisco, Cauca North.	Tomás León
Mariana Trujillo Gallego	Engineering-Industry and Organizations	Influence of environmental practices of the Green Supplies Chaines approach on sustainable performance: an empirical study in Colombian manufacturing companies	William Ariel Sarache Castro
Patricia Gómez Nore	Geography	Environmental analysis of land grabbing in three natural regions of Colombia	Alice Beuf
Carlos Arturo Aristizábal Rodríguez	Agroecology	Organizational strengthening of the Agroecological Farmers Market Network of Cauca Valley	Diego Iván Ángel Sánchez
Deissy Giovanna Quintero Arias	Civil Engineering	Land modeling using systems dynamics and emergetic synthesis as a management tool for ordering	John Fabio Acuña
Diego David Aldana	Law	Towards an integral conception of the right of access to land in the framework of the post-agreement	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)

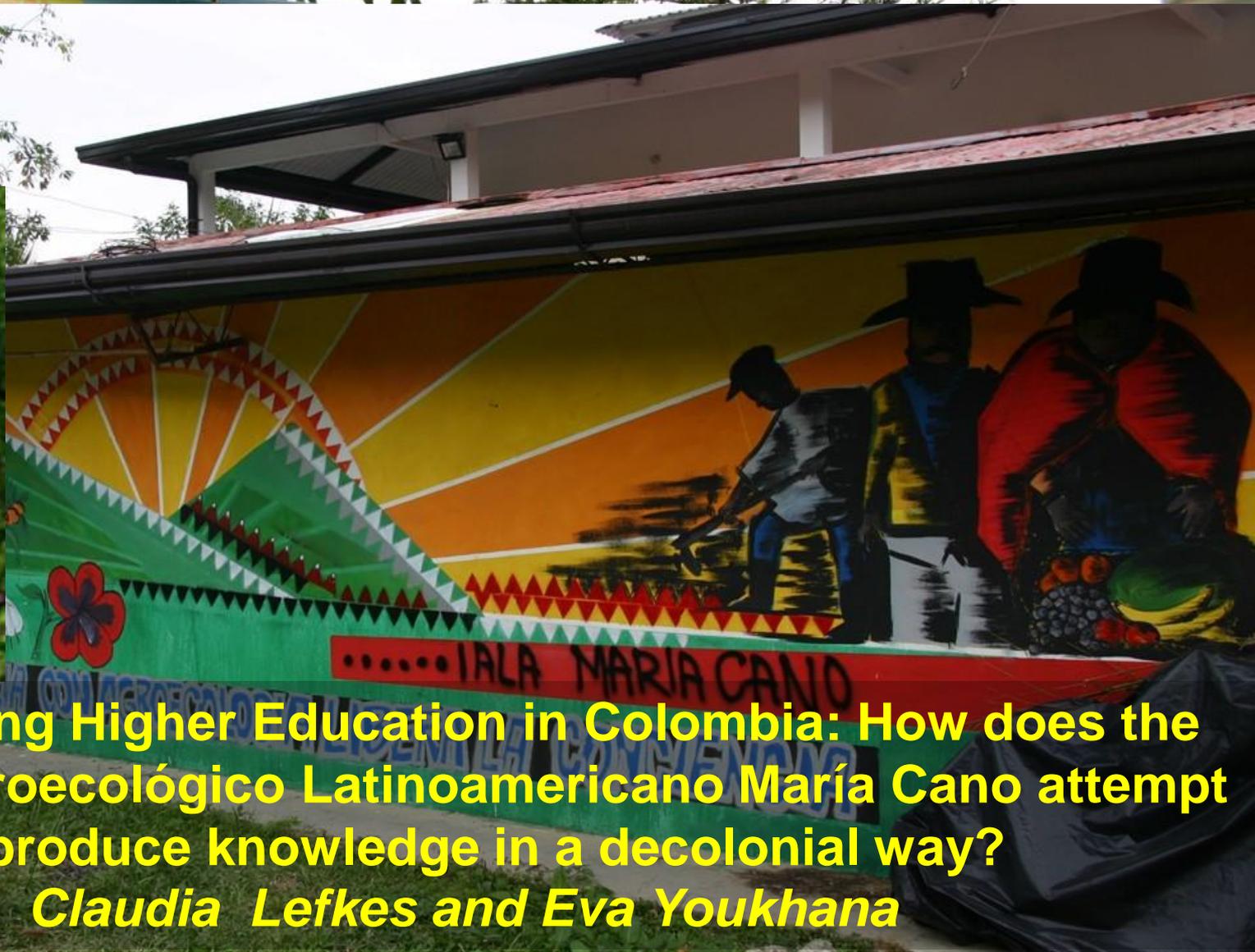
Environmental thinking and alternatives to development from a South – South / South - North perspective“ (Thyssen Foundation)

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

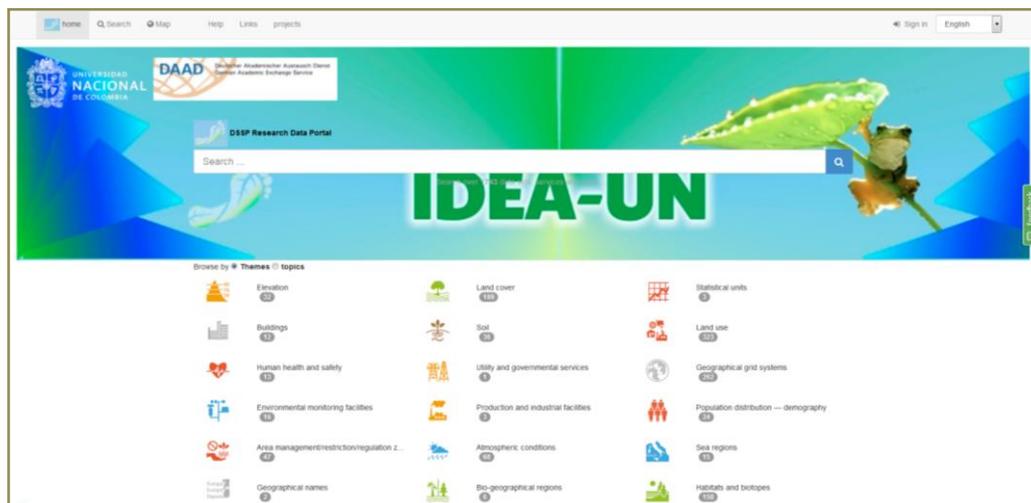
Sustainable tourism in indigenous and Afro-Colombian Communities

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



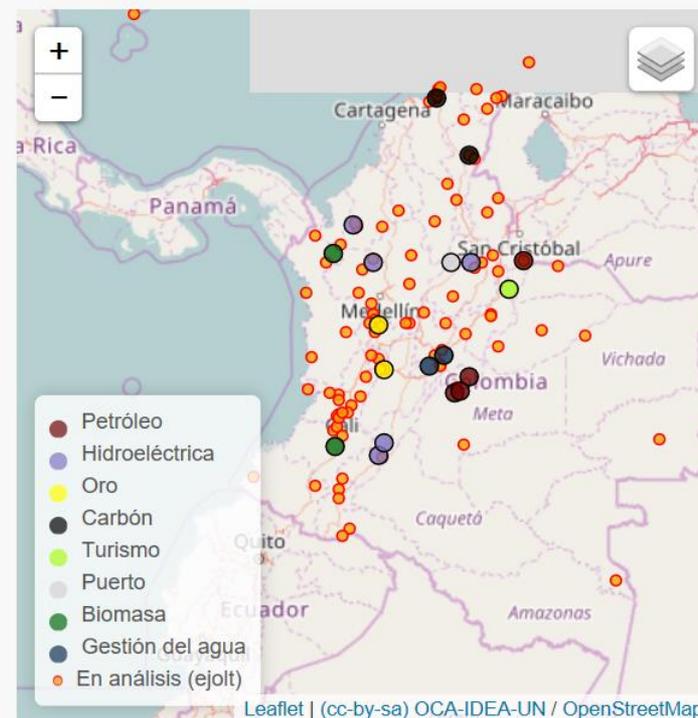
Observatory of environmental conflicts



OCA

Observatorio de Conflictos Ambientales
Investigación para la defensa de los territorios

Conflictos Ambientales de Colombia



Leaflet | (cc-by-sa) OCA-IDEA-UN / OpenStreetMap

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

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

Augusto Angel Maya

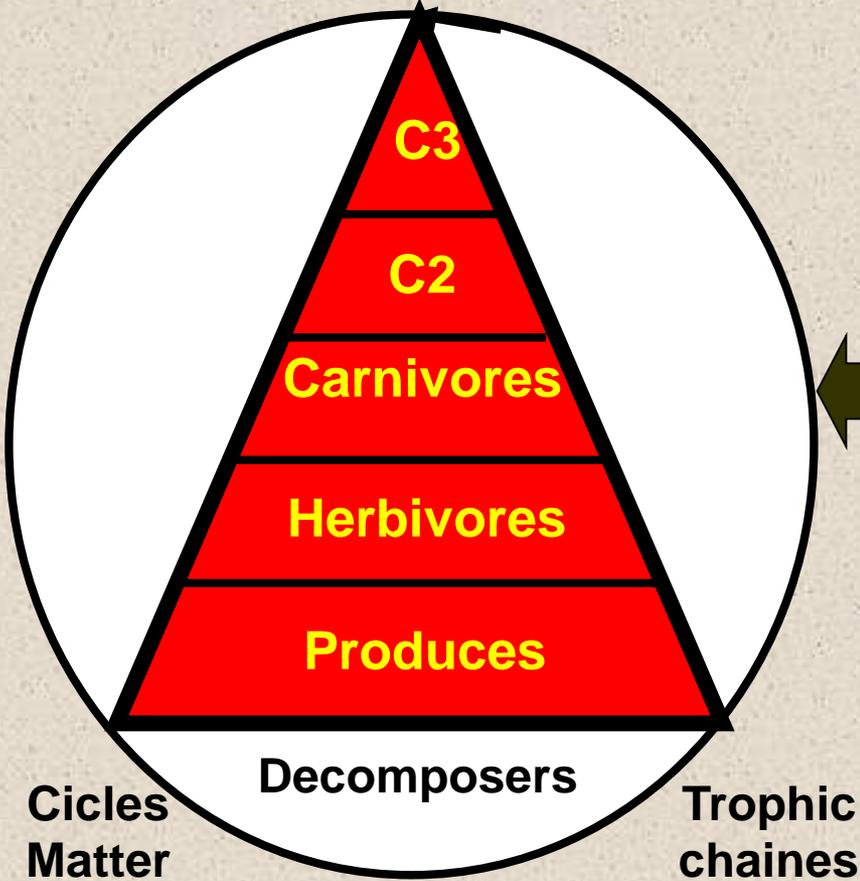
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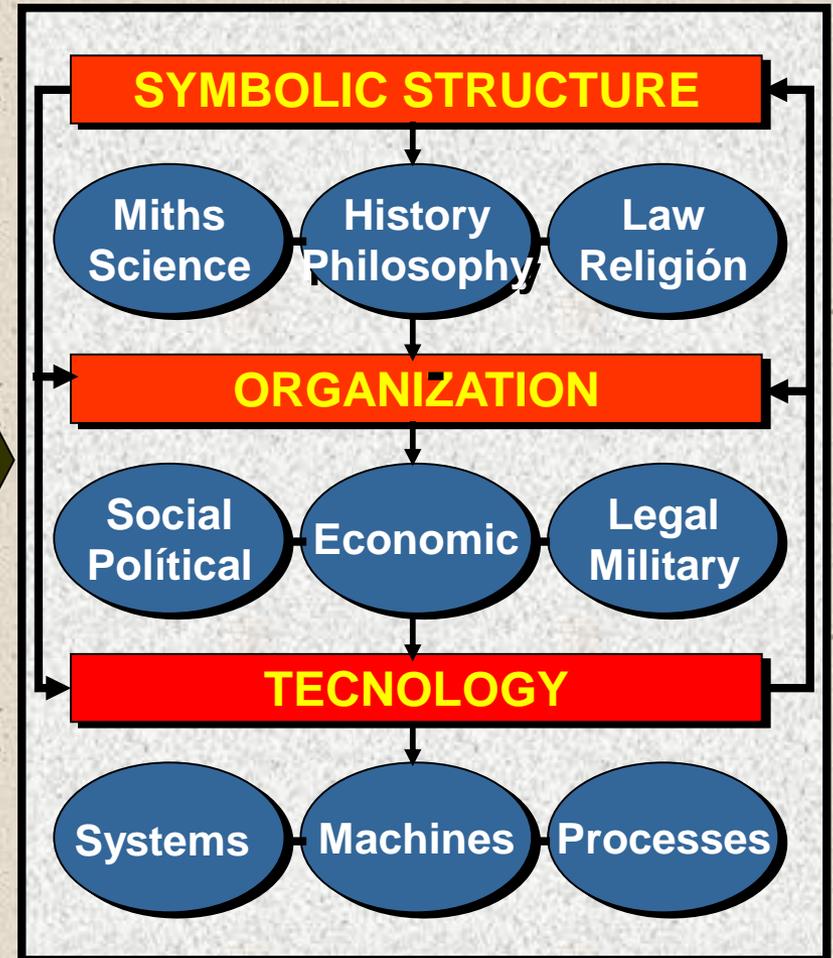
THE ENVIRONMENTAL APPROACH: ECOSYSTEM / CULTURE INTERRELATIONS

ECOSYSTEM

€ - Information



CULTURE



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

