

TEEB implementation: Supporting Biodiversity and Climate-friendly Land Management in Agricultural Landscapes

October 29, 2018



Dolores Barrientos
Mexico's Representative Officer
UN Environment

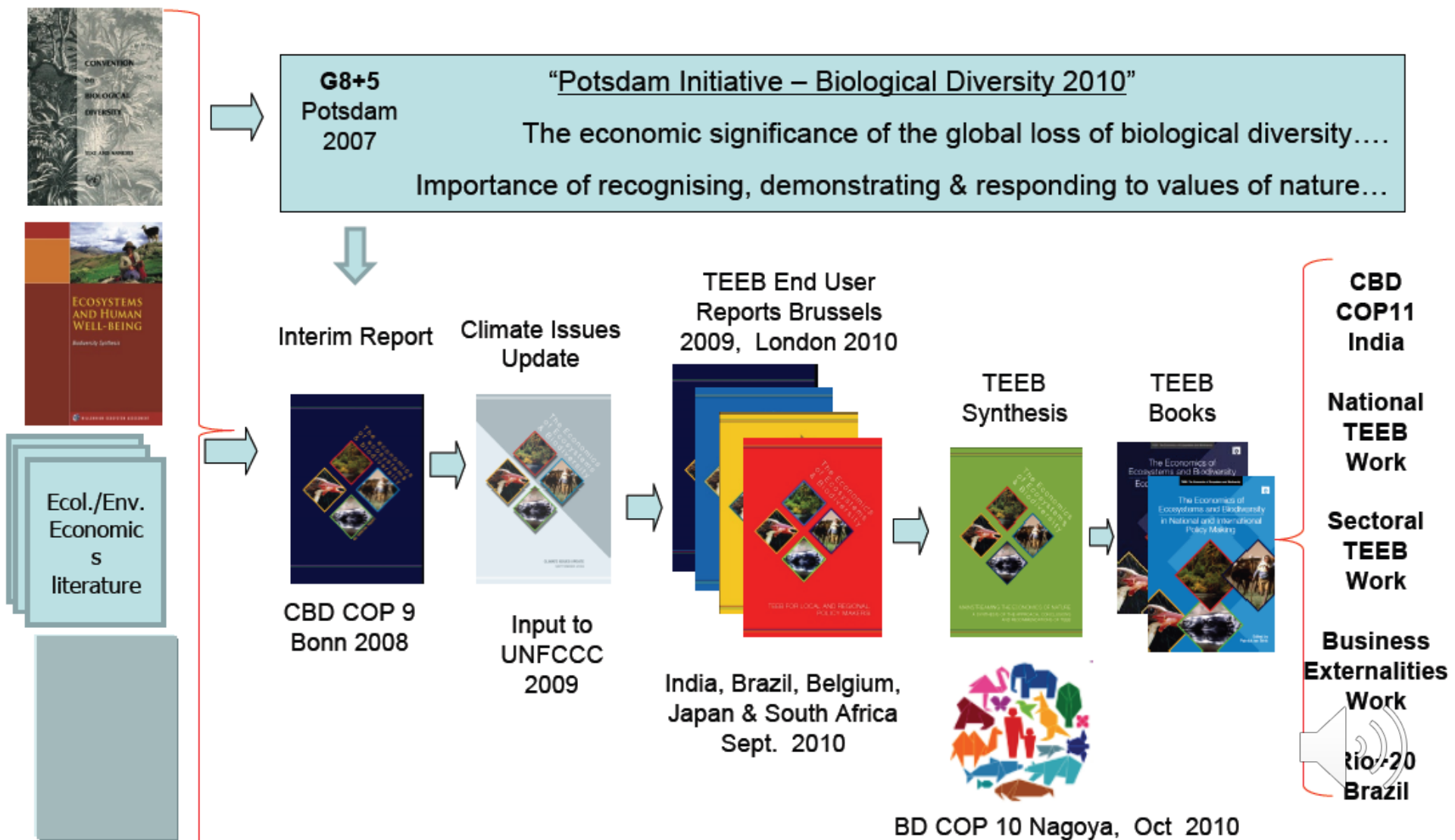
UNEP TEEB Office

October 29, 2018
Mexico City

teebweb.org
teeb.agfood@unep.org

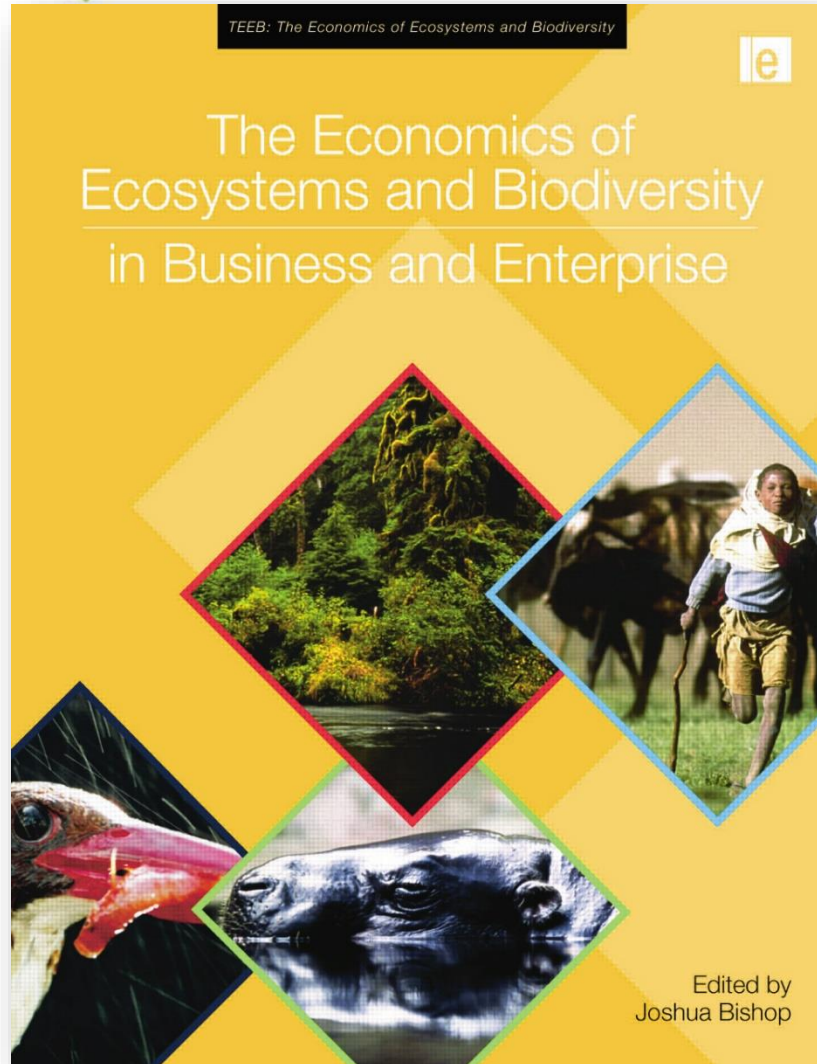


TEEB initiative (2008-2012)





TEEB for Business





Why select the Agriculture sector?

7.1.2 THE GLOBAL 20 REGION-SECTORS

Ranking of the 20 region-sectors with the greatest total impact across the 6 EKPIs when measured in monetary terms.

RANK	SECTOR	REGION	NATURAL CAPITAL COST, US\$ BN	REVENUE, US\$ BN	IMPACT RATIO
1	COAL POWER GENERATION	EASTERN ASIA	452.8	443.1	1.0
2	CATTLE RANCHING AND FARMING	SOUTH AMERICA	353.8	16.6	18.8
3	COAL POWER GENERATION	NORTHERN AMERICA	316.8	246.7	1.3
4	WHEAT FARMING	SOUTHERN ASIA	266.6	31.8	8.4
5	RICE FARMING	SOUTHERN ASIA	235.6	65.8	3.6
6	IRON AND STEEL MILLS	EASTERN ASIA	225.6	604.7	0.4
7	CATTLE RANCHING AND FARMING	SOUTHERN ASIA	163.0	174.0	0.8
8	CEMENT MANUFACTURING	EASTERN ASIA	147.0	5.8	23.0
9	WATER SUPPLY	SOUTHERN ASIA	111.7	14.1	7.9
10	WHEAT FARMING	NORTHERN AFRICA	100.1	7.4	13.6
11	RICE FARMING	EASTERN ASIA	99.3	91.2	1.1
12	WATER SUPPLY	WESTERN ASIA	86.7	18.4	4.7
13	FISHING	GLOBAL	86.1	136.0	0.6
14	RICE FARMING	NORTHERN AFRICA	84.2	1.2	69.6
15	CORN FARMING	NORTHERN AFRICA	80.4	1.7	47.8
16	RICE FARMING	SOUTH-EASTERN ASIA	79.7	41.0	1.9
17	WATER SUPPLY	NORTHERN AFRICA	76.4	3.4	22.2
18	SUGARCANE	SOUTHERN ASIA	75.6	6.0	12.5
19	PETROLEUM AND NATURAL GAS EXTRACTION (excludes water and land use)	EASTERN EUROPE	72.6	371.6	0.2
20	NATURAL GAS POWER GENERATION	NORTHERN AMERICA	69.4	122.7	1.0





ZAKIR HOSSAIN CHOWDHURY/ANADOLU AGENCY/GETTY



Nature (December 2016)

Drying red chillis under the sun provides one of the few sources of employment for women in an area of Bangladesh.

Fix food metrics

For sustainable, equitable nutrition we must count the true global costs and benefits of food production, urge **Pavan Sukhdev**, **Peter May** and **Alexander Müller**.





Summary statement

The **TEEBAgriFood** study is designed to:

1. provide a comprehensive economic evaluation of the **'eco-agri-food systems' complex**
2. demonstrate that the economic environment in which farmers operate is distorted by **significant externalities**, both negative and positive, and a lack of **awareness of dependency on natural and social capital**



The visible and invisible flows of agricultural production



The visible and invisible flows of agricultural production

HUMAN SYSTEMS

AGRICULTURE & FOOD SYSTEMS



BIODIVERSITY & ECOSYSTEMS

Inputs Outputs Invisible positive flows Invisible negative flows



The visible and invisible flows of agricultural production

HUMAN SYSTEMS



AGRICULTURE & FOOD SYSTEMS

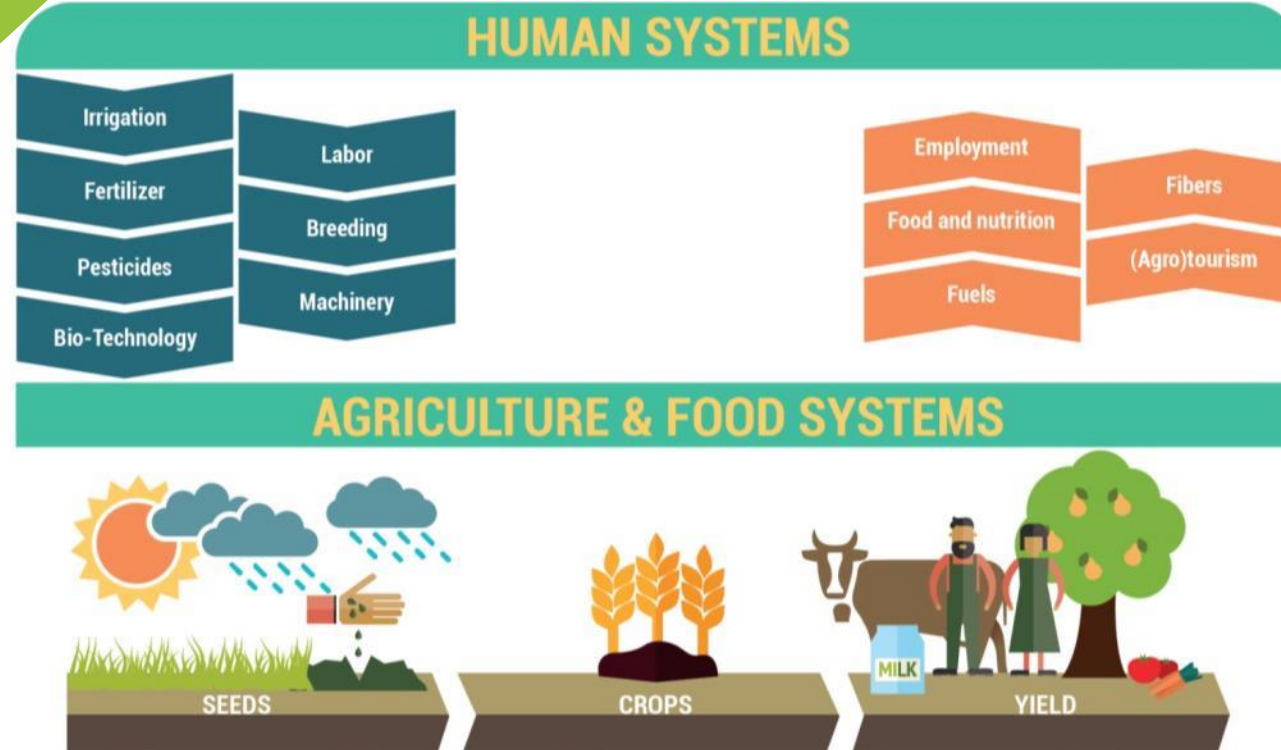


BIODIVERSITY & ECOSYSTEMS

Inputs Outputs Invisible positive flows Invisible negative flows



The visible and invisible flows of agricultural production

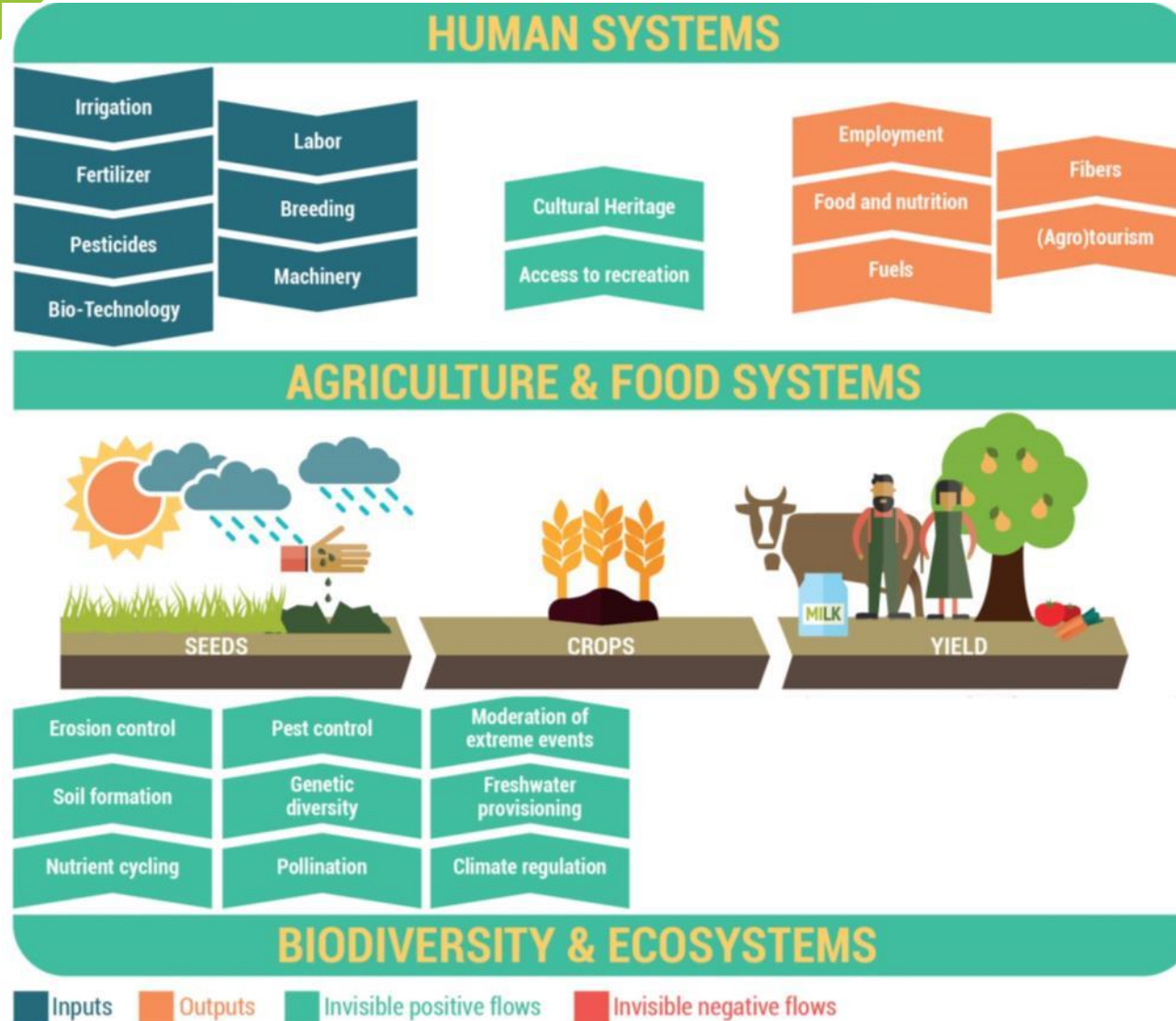


BIODIVERSITY & ECOSYSTEMS

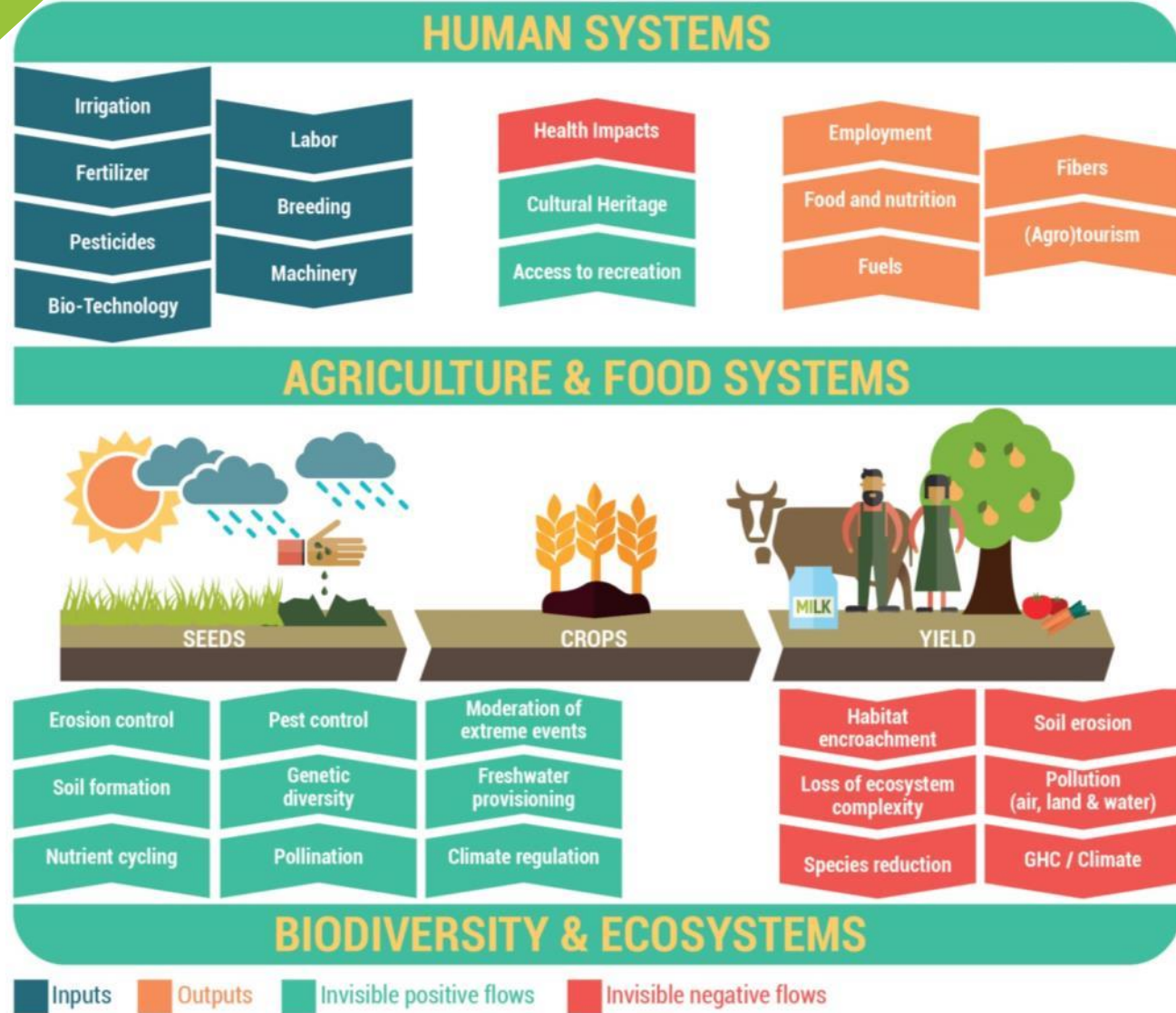
Inputs Outputs Invisible positive flows Invisible negative flows



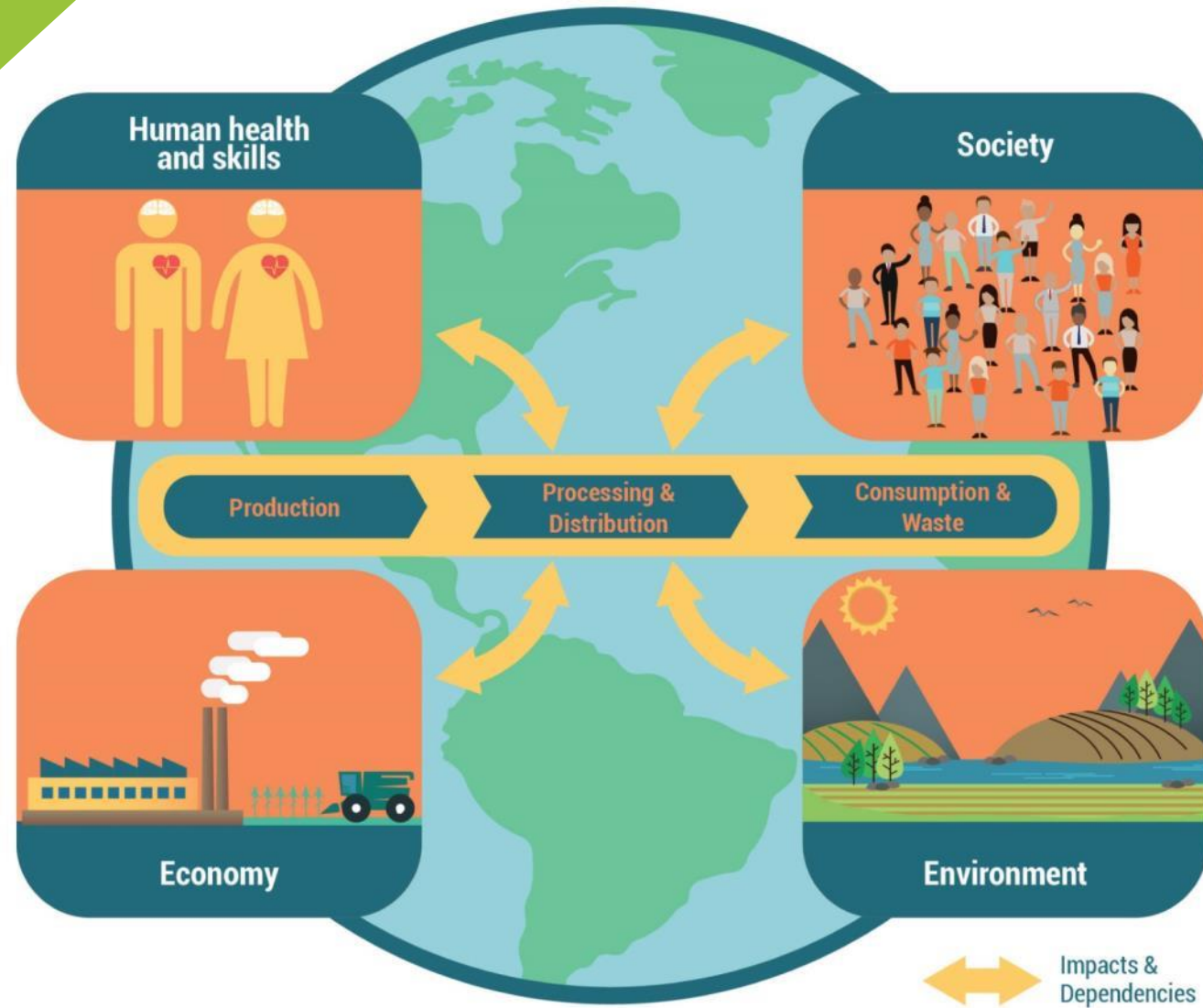
The visible and invisible flows of agricultural production



The visible and invisible flows of agricultural production



Eco-agri-food systems complex – impacts and dependencies





TEEB for Agriculture & Food

teebweb.org/agrifood/home/scientific-and-economic-foundations-report/



TEEB for Agriculture & Food

An initiative of 'The Economics of Ecosystems and Biodiversity' (TEEB)

TEEBAgriFood

Information Materials

Events

Media

Team

TEEB

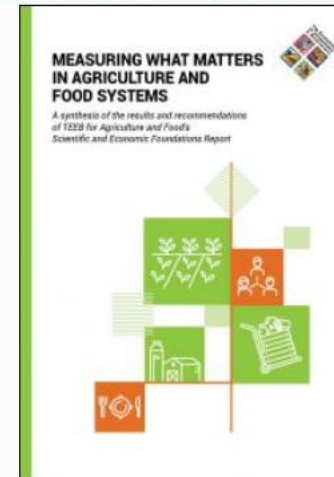
Contact

Scientific and Economic Foundations

[Scientific and Economic Foundations Report](#)



[Measuring what matters in agriculture and food systems](#)





TEEB AgriFood Implementation

1. **Global Alliance** funding (December 2018)
Haripriya Gundimeda (Wheat value chain **North India**)
Peter May (Cattle and Soy in **Amazon**)
2. TEEBAgriFood DEVCO Africa (April 2019)
Livestock (**Tanzania**), cocoa (**Ghana**), coffee (**Ethiopia**), rice (**Senegal**)
3. IKI studies (December 2019)
Colombia: Putumayo Department - includes Amazon lowlands, highland forests, Colombian plateau and several important water basins
Kenya, options are two upper Basin areas (Tana Basin and Ewaso Njiru Basin), the Mau catchment area/ Mara River Basin and the drainage basin from Mt Suswa to Lake Magadi
Thailand – organics production
Tanzania - Southern Highlands - upstream of the proposed Stiegler hydropower dam
4. Mainstreaming Biodiversity in the Agricultural Sector of **Mexico**. IKI project, collaboration with GIZ and FAO.(2021)
5. EU Partnership Instrument (December 2022)
Brazil, China, India, Indonesia, Malaysia, Mexico, Thailand

Thank You!

Dolores Barrientos
Mexico's Representative Officer
UN Environment

UNEP TEEB Office

October 29, 2018
Mexico City

