

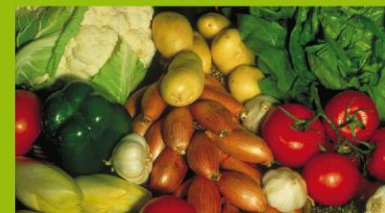
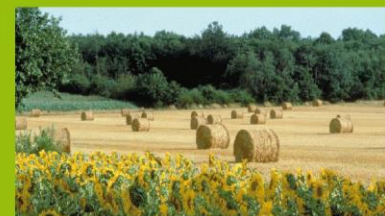
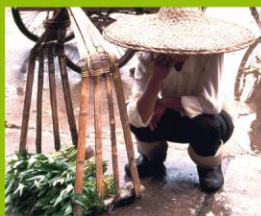
Soil research in the Joint Programming Initiative on Agriculture, Food Security and Climate Change FACCE-JPI

Prof. Rattan Lal, OSU,
FACCE-JPI Scientific Advisory Board



FACCEJPI

www.faccejpi.com



Agriculture Food Security and Climate Change

Context

5 core research themes

1. Sustainable food security under climate change.
2. Environmentally sustainable intensification of agricultural systems.
3. Developing synergies and reducing trade-offs between food supply, biodiversity and ecosystem services.
4. Adaptation to climate change.
5. Mitigation of climate change.

Running FACCE projects involving soil

ERA-NET Plus on Climate Smart Agriculture

- CAOS: Climate-Smart Agriculture on Organic Soils
- CINDERELLA: Comparative analysis, INtegration and EXemplary implEmentation of cLimate smart LAnd use practices on organic soils: Progressing paludicultures after centuries of peatland destruction and neglect

International Call on GHG Mitigation

- Many of the projects are relevant to soils, and details are available from the FACCE secretariat.

Running FACCE projects involving soil

Joint call with Belmont Forum: Food Security and Land Use Change

- AFGROLAND: African Food, Agriculture, Land and Natural Resource Dynamics, in the context of global agro-food-energy system changes

Joint call with BiodivERsa

- There are 6 projects related to soil under this theme.

Upcoming joint actions involving soil

1. ERA-GAS: ERA-NET for monitoring & mitigation of Greenhouse gases from agri- and silvi-culture

- Will launch a call for transnational research proposals under the ERA-NET Cofund scheme of Horizon 2020 of the European Commission on 1 March 2016.
- The scientific scope addresses collaborative projects in the following research areas:
 - 1) Improving national GHG inventories and monitoring, reporting and verification of emissions
 - 2) Refining and facilitating the implementation of GHG mitigation technologies
 - 3) State of the art production systems that are profitable and improve food and for biomass production while reducing GHG emissions
 - 4) Assessment of policy and economic measures to support emissions reductions across the farm-to-fork and forest-to consumer chain.
- The indicative total budget amounts to 14,5 M €
- Closing date for pre-proposals is planned to be 15 May 2016.

Upcoming joint actions involving soil



2. WaterWorks 2015 ERA-NET cofund

- Collaboration of Water JPI and FACCE JPI
- On sustainable water use in agriculture to increase water use efficiency and reduce soil and water pollution.
- The call is expected to open on February 16, 2016 with a closing date for pre-proposals on April 19, 2016.
- Funders from 23 countries have allocated initial national call contributions of in total approximately 18 M€ from National funds. The 7.9 M€ EU top up will generate a call budget of over 26 M€.

Upcoming joint actions involving soil

3. Thematic Annual Programming (TAP) Network on Agricultural Soil Functionality

- New FACCE instrument to define (part of) national research programmes together. Mutually agreed text will be included in national programmes
- participating on a voluntary basis.
- After national funding decisions, project meetings are organized among projects working on a given topic to discuss objectives, methods and expected outcomes (project clusters).
- Scope: Agricultural Soil Functionality with a focus on carbon sequestration
- Integrated approaches to sustainable soil management (soil carbon and soil quality), including aspects of ecosystem services made available by soils, biodiversity in relation to soils and food security
- Preparatory meeting yesterday

FACCE objectives on soil research

Examine the international landscape on soil research for food security and climate change adaptation and mitigation to explore opportunities for synergy and cooperation between FACCE-JPI activities and other relevant EU and international research initiatives

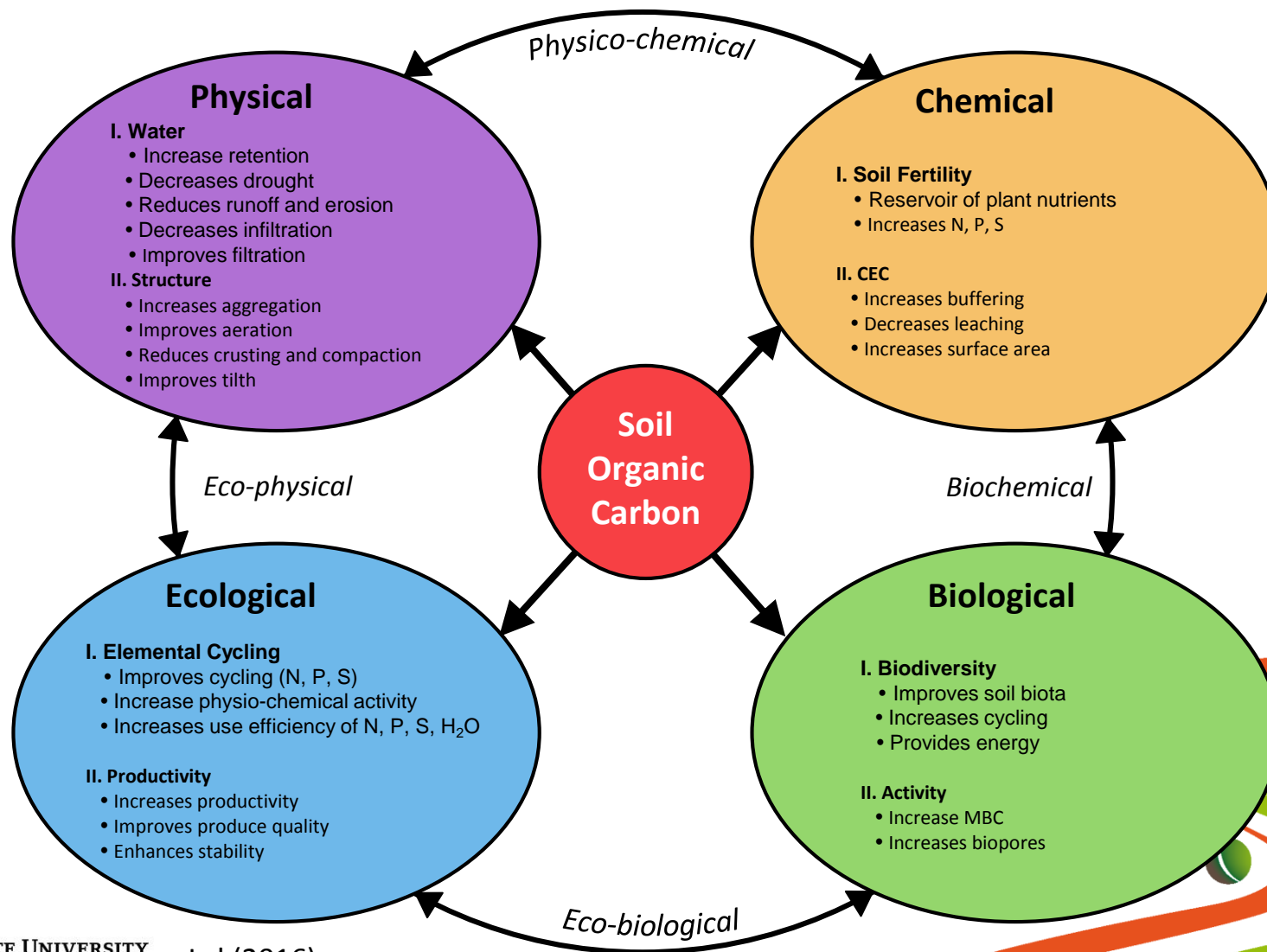
SOIL FUNCTIONALITY

“It is the capacity of a specific soil to function under designed circumstances to meet its planned intentions or requirement without any loss of original functional capability”.

This concept addresses the performance aspect of a specific soil according to the design or specific goals.

-----Yong et al.(2012)

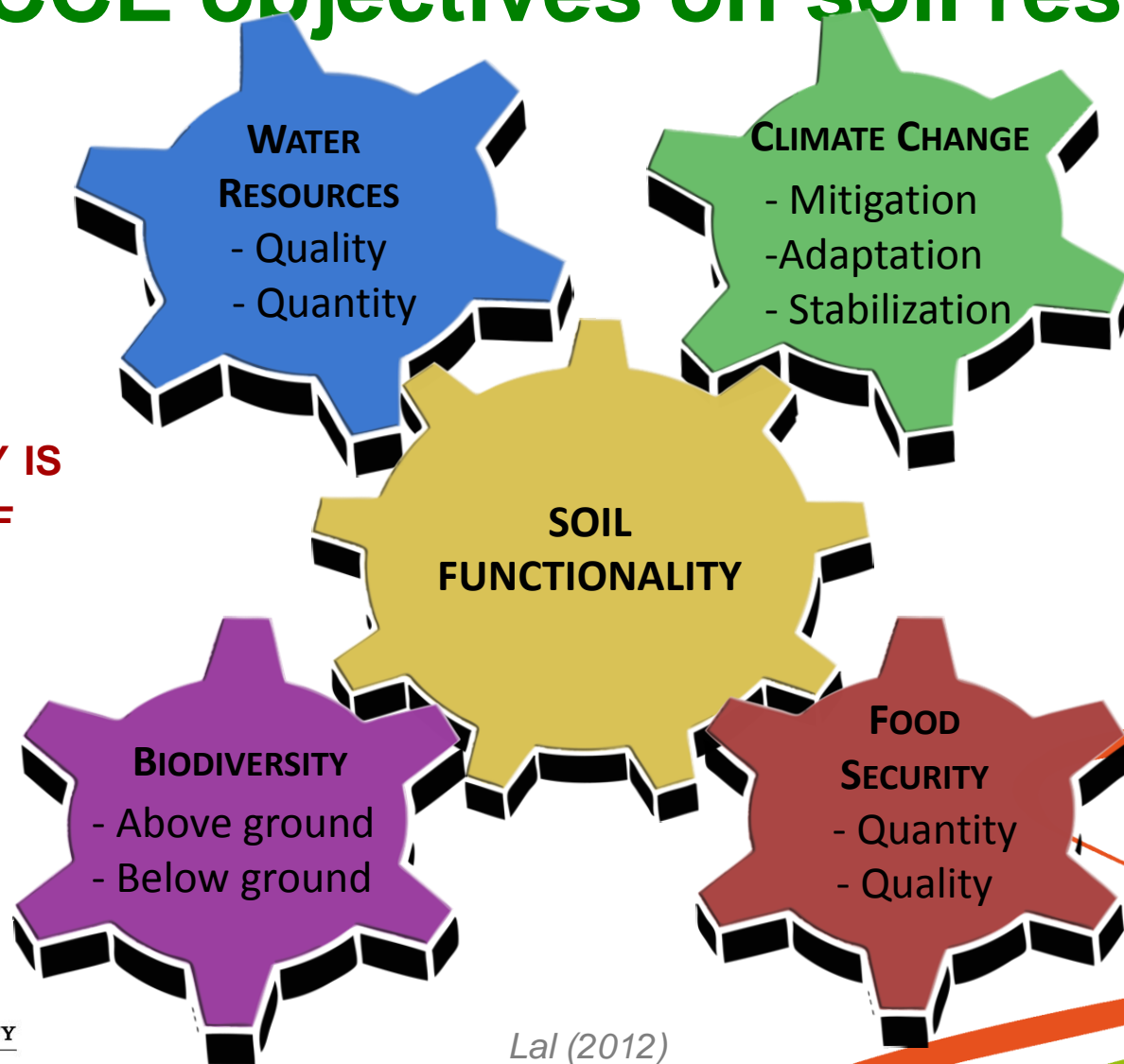
SOC AND SOIL FUNCTIONALITY



Lal (2016)

FACCE objectives on soil research

**SOIL
FUNCTIONALITY IS
THE ENGINE OF
ECONOMIC
DEVELOPMENT**



Lal (2012)

FACCE objectives on soil research

THE LAW OF RETURN

"It states that the nutrients harvested from soil must be returned. Harvesting without returning is a robbery of the soil and a banditry; a particularly mean form of banditry, because it involves robbing of future generations which are not here to defend themselves"

Sir Albert Howard

Thank you for your attention!

Email: lal.1@osu.edu  THE OHIO STATE UNIVERSITY

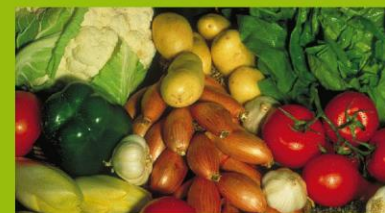
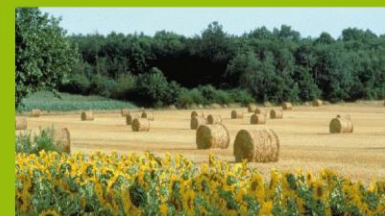
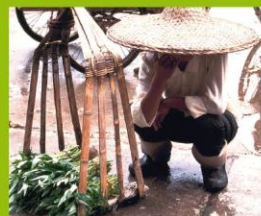
Facce-Secretariat@paris.inra.fr

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