

GLOBAL SOIL PARTNERSHIP



Ronald Vargas Rojas
Accra, 05 February 2013



GLOBAL SOIL
PARTNERSHIP

SOIL IS A LIMITED NATURAL RESOURCE

“Because it is everywhere, we tend to overlook the fact that soil is a limited natural resource”.



PROVISSION OF ECOSYSTEM SERVICES BY SOILS



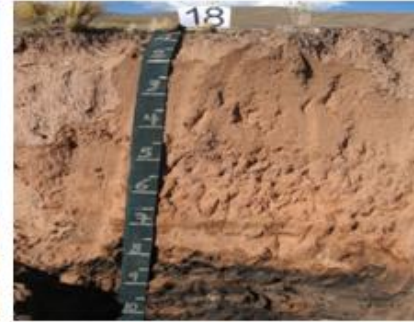
Life support services

- The soil renews, retains, delivers nutrients and provides physical support for plants;
- It sustains biological activity, diversity, and productivity;
- The soil ecosystem provides habitat for seeds dispersion and dissemination of the gene pool for continued evolution.



Provision services

- Soil is the basis for the provision of food, fibre, fuel and medicinal products to sustain life;
- It holds and releases water for plant growth and water supply.



Regulating services

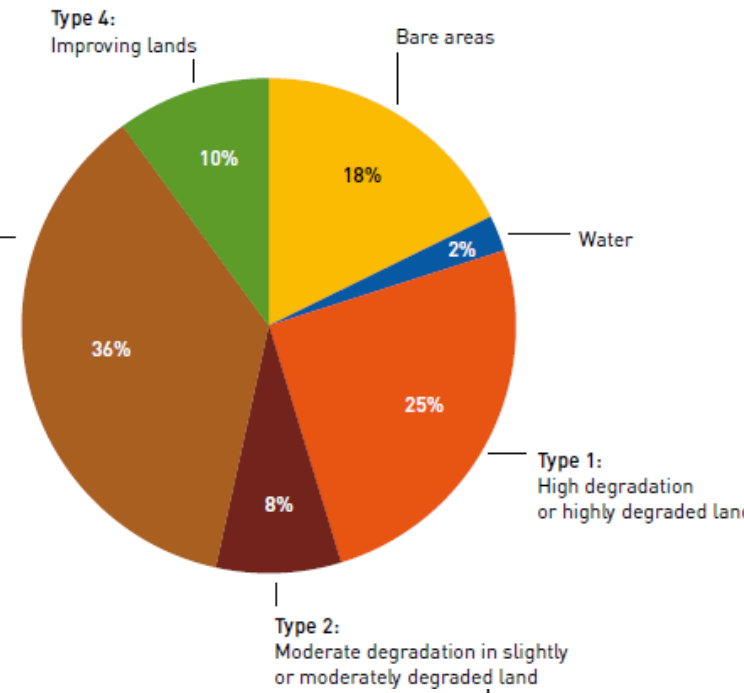
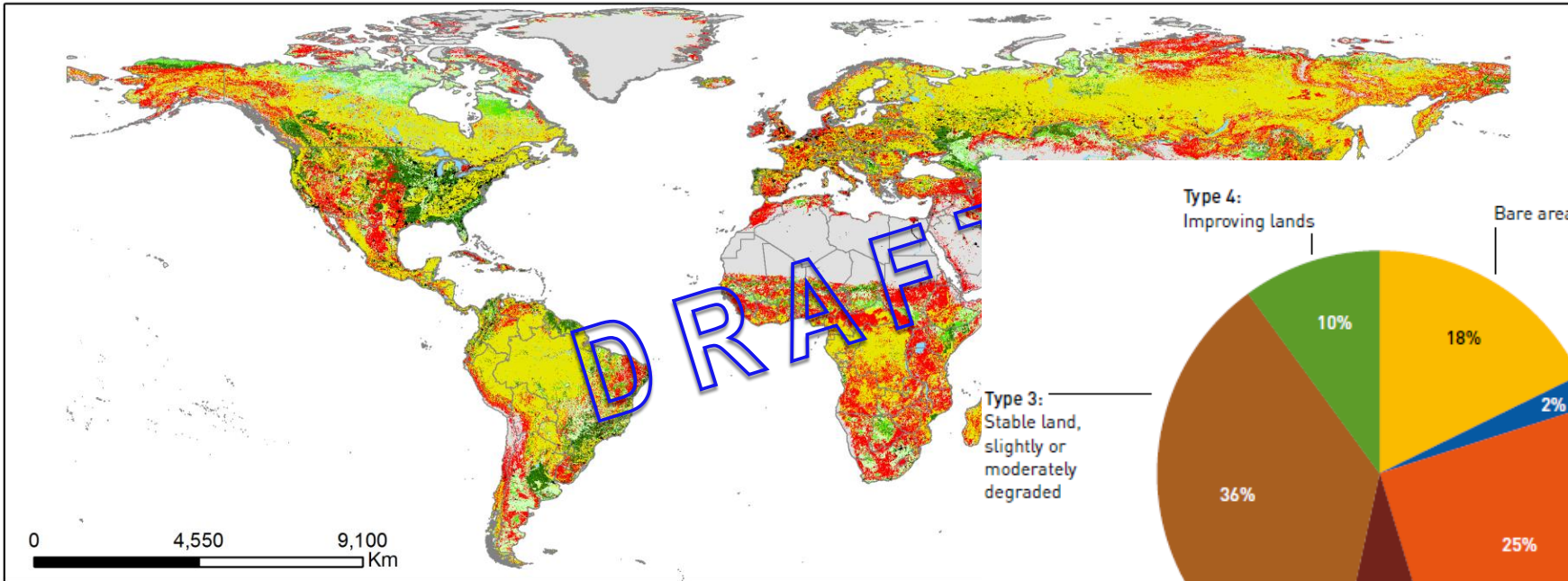
- The soil plays a central role in buffering, filtering and moderation of the hydrological cycle;
- It regulates the carbon, oxygen and plant nutrient cycles (such as N, P, K, Ca, Mg and S) affecting the climate and plant production;
- Soil biodiversity contributes to soil pest and disease regulation. Soil micro-organisms process and break-down wastes and dead organic matter (such as manure, remains of plants, fertilizers and pesticides), preventing them from building up to toxic levels, from entering water supply and becoming pollutants.



Cultural services

- Soil provides support for urban settlement and infrastructure;
- In some cultures, soils may also be of specific spiritual or heritage value.
- Soils are the basis for landscapes that provide recreational value.

Land degradation affects soil health



Land degradation classes



■ Low status; Medium to Strong degradation

■ High s degrad

■ Low status; Weak degradation

■ High si

■ Low status; Improving



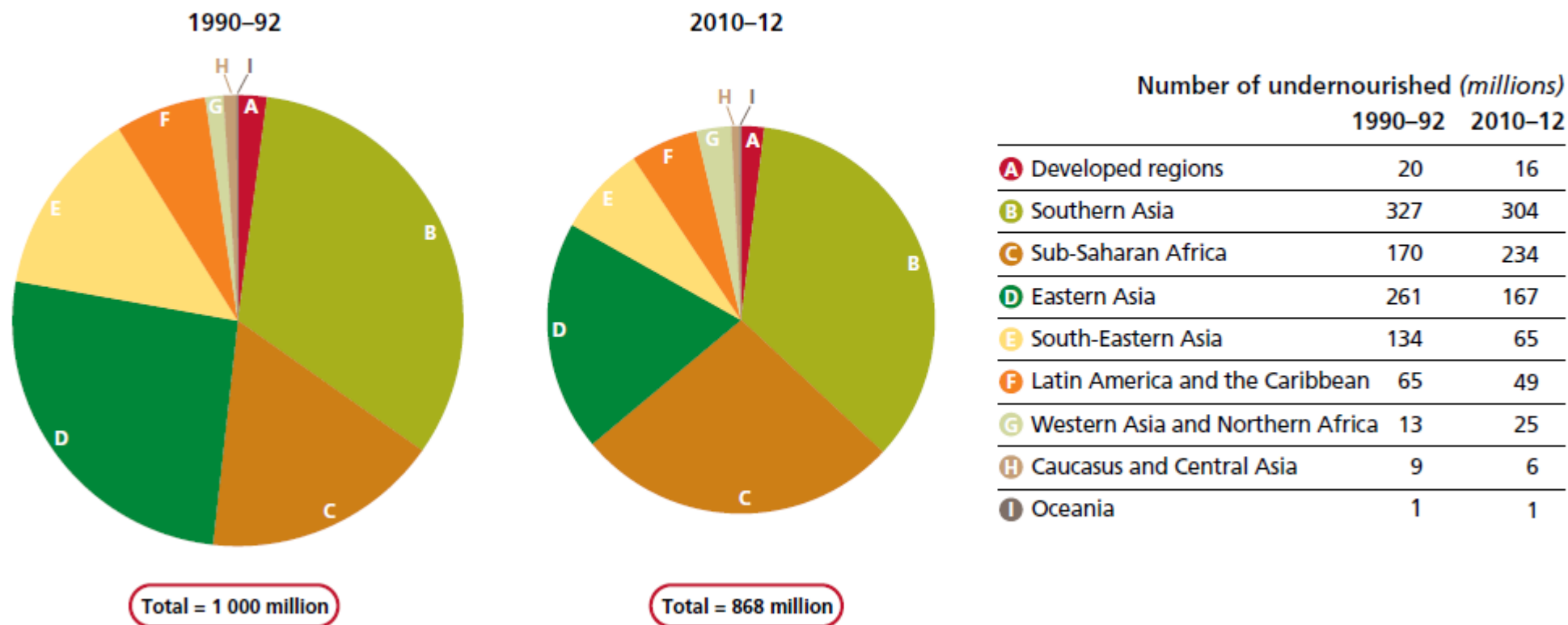
LADA

Source: F. O. Nachtergaele, M. Petri, R. Biancalani, G. van Lynden, H. van Velthuisen, M. Bloise, 2011. Global Land Degradation Information System (GLADIS) version 1.0. An Information database for Land Degradation Assessment at Global Level.

STATUS ON FOOD INSECURITY 2012

FIGURE 4

The distribution of hunger in the world is changing
Number of undernourished by region, 1990–92 and 2010–12



Note: The areas of the pie charts are proportional to the total number of undernourished in each period. All figures are rounded.
Source: FAO.

Towards 2050: food demand



food
production
needs

+60%

globally

+100%

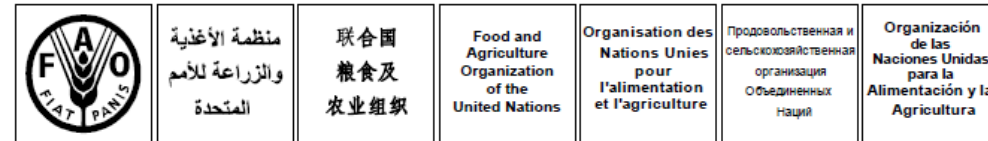
in developing
countries



Are we ready for that challenge?

GSP Officially Endorsed by 193 countries

May 2012



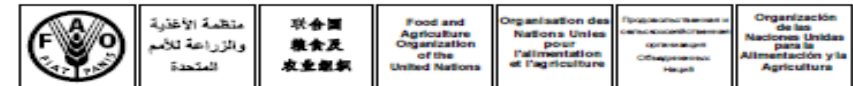
- During the last COAG 23 Session, the Committee, **193 member countries to FAO endorsed the establishment of the Global Soil Partnership**, and welcomed the update provided by the Secretariat.

COMMITTEE ON AGRICULTURE

29. The Committee endorsed the initiative of the establishment of the Global Soil Partnership, and welcomed the update provided by the Secretariat.
30. The Committee suggested the establishment of an Open-Ended Working Group to review the

CL 145/LIM/7 Rev.1

December 2012



E

- At the 145 FAO Council the GSP ToRs have approved and country members of FAO urged its implementation.

COUNCIL

Terms of Reference of the Global Soil Partnership (GSP)

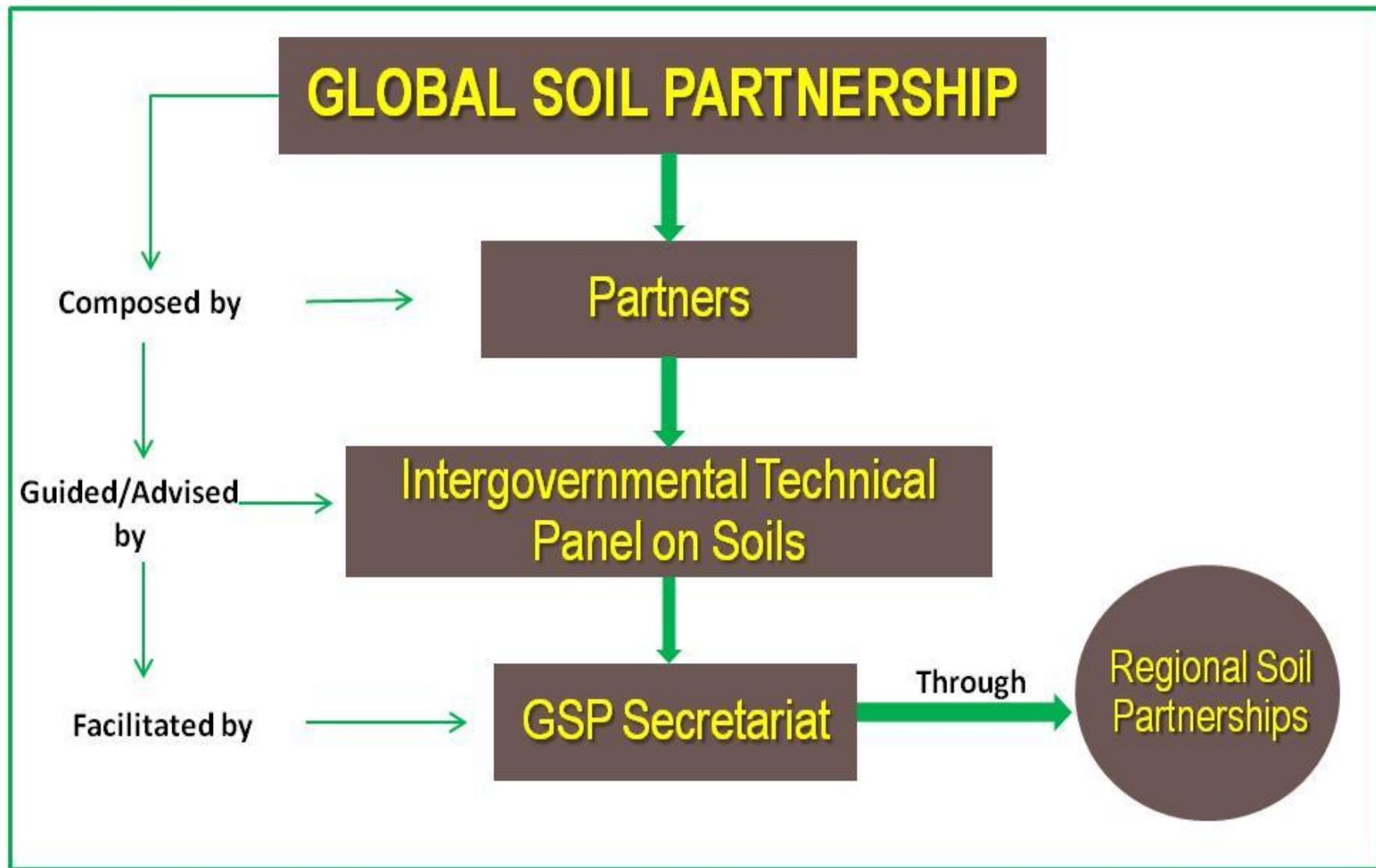
1. Background

1. Soil is the thin layer of material (organic and inorganic) on the Earth's surface that has been subjected to and influenced by environmental factors (parent material, climate, organisms, topography and time) providing the basis for plant establishment and growth and the provisioning of ecosystem services. Soil is a finite natural resource. On a human time-scale it is non-renewable. Soil is the foundation of agricultural development and sustainable development and provides the basis for food, feed, fuel, fibre, water availability, nutrient cycling, organic carbon stocks, biodiversity, and a platform for construction. The area of fertile soil is limited and is increasingly under pressure due to climate change and competing, unsuitable land uses, resulting in increasing degradation. Currently, 46% of the world's land is considered to be degraded. Urgent action is needed to reverse this trend. Healthy soils are required to feed the growing world population and meet their further needs. It is considered that this can only be ensured through a strong partnership which takes into account the existing initiatives and institutions.

2. During its Twenty-third Session which took place from 21 to 25 May 2012, the FAO Committee on Agriculture (COAG) endorsed the initiative for the establishment of the Global Soil Partnership.

3. The present Terms of Reference are based on the GSP Background paper prepared by a Technical Working Group composed of soil scientists established by FAO after the GSP meeting held from 7 to 9 September 2011. The Terms of Reference have been reviewed by an Open-Ended Working Group composed of Permanent Representatives which was set up upon COAG recommendation at its Twenty-third Session.

Structure of the GSP



GSP Pillars of Action

1. Promote **sustainable management** of soil resources and **improved global governance** for soil protection and sustainable productivity;
2. Encourage **investment, technical cooperation, policy, education awareness and extension in soils**;
3. Promote **targeted soil research and development** focusing on identified gaps, priorities and synergies among economic/productive, environmental and social dimensions;
4. **Enhance the quality and availability of soil data and information:** *collection, analysis, validation, reporting, monitoring, integration with other disciplines*;
5. **Harmonize and establish voluntary guidelines of methods, measurements and indicators** for soil protection and sustainable management.



GSP LAUNCH IN WEST AND CENTRAL AFRICA



- Soils are a crucial component on sustainable intensification of agriculture (food security) and climate change adaptation;
- Priorities: implement sustainable soil management with especial attention to integrated soil fertility management and soil conservation practices to address soil degradation;
- Updating soil information systems at regional and national levels in order to guide actions towards climate change adaptation and food security;
- Capacity development in an interdisciplinary setting.
- Increase investment in soil activities.

More priorities to come.....