

Towards sustainable agriculture: elements for a comprehensive EU strategy

European Commission
DEVCO – C1

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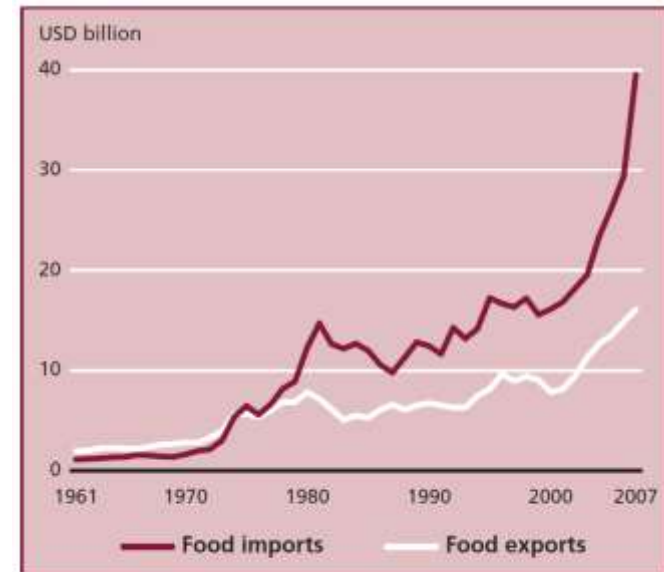
I. The need for increasing food production



Growing and evolving food demand

- ❖ *Current malnutrition: 910 million malnourished (31% of are in Sub-Saharan Africa)*
- ❖ *Demographic growth (9.3 billion by 2050)*
- ❖ *Changes in the structure of demand (urbanisation, emergent economies)*
- ❖ *SSA imports roughly 20% of its staple calories*

AFRICAN IMPORTS AND EXPORTS OF AGRICULTURAL PRODUCTS



Source: FAOSTAT, 2011

I. The need for increasing food production

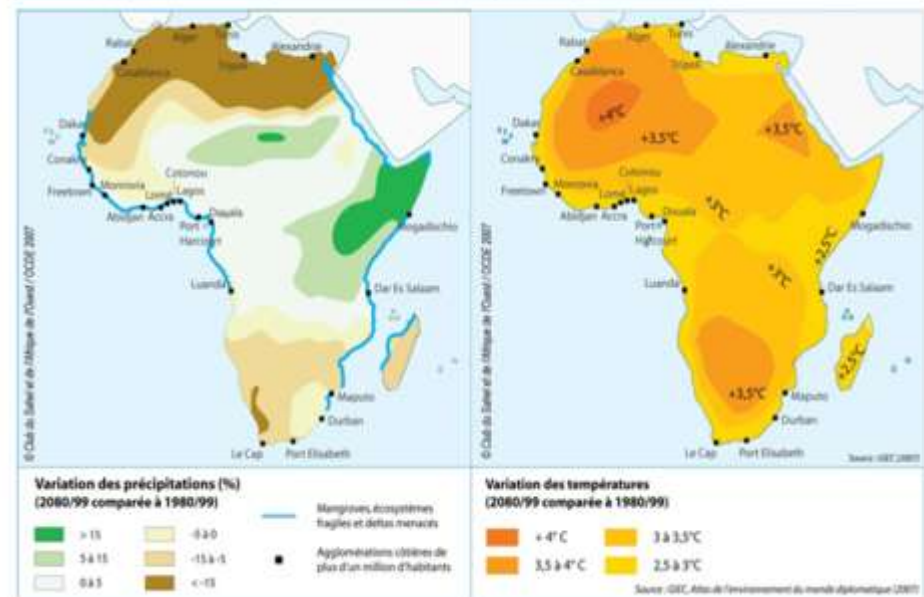


Strong constraints on supply

- ❖ *Dwindling resources base: limited availability of vacant cultivable land*
- ❖ *Environmental degradation*
- ❖ *Increasing scarcity of non-renewable resources and energy*

❖ *Climate change*

Une image possible des changements climatiques en Afrique



I. The need for increasing food production



**According to FAO, world food production should increase by 60% by 2050
(in Sub-Saharan Africa it should at least double)**

BUT

Given the increasing scarcity and deterioration of productive resources



**Growing food production
will imply above all growing
yields (intensification)**



II.1. SOME FACTS AND FIGURES ON EU COOPERATION POLICY IN AGRICULTURE

- ❖ *EU aid: >1 billion Euro per year for food and nutrition security worldwide*
- ❖ *Priority given to 50 countries*
- ❖ *Political dialogue to be held in each beneficiary country to set up concrete locally-adapted actions in support to agricultural intensification*
- ❖ *Research / management of agriculture related knowledge considered as a Global Public Good*



II.2. FRAMEWORK FOR EU COOPERATION POLICY IN AGRICULTURE AND FOOD SECURITY

- ❖ *'Increasing the impact of EU development policy: 'an **Agenda for change**' (2011)*
- ❖ *'An EU policy framework to assist developing countries in addressing **food security** challenges' (2010)*
- ❖ *'The EU approach to **resilience**: learning from food security crises' (2012)*
- ❖ *'**Boosting food security** through EU action: implementing our commitments' (2013)*
- ❖ *'A decent life for all: **ending poverty** and giving the world a **sustainable future**' (2013)*
- ❖ *'Enhancing maternal and child **nutrition** in external assistance: an EU policy framework' (2013)*



II.3. EU COOPERATION INSTRUMENTS

- ❖ *European Development Fund (EDF):*
 - ACP countries
- ❖ *Development Cooperation Instrument (DCI)*
 - Geographic: Latin America, Asia
 - Thematic:
 - Global Public Goods and Challenges (food security, environment, energy, migration and asylum, health, education , culture...)
 - Non State Actors (EUR 2 billion)
- ❖ *European Neighbourhood Programming Instrument (ENPI)*



II.4. MAIN PRIORITIES FOR EU COOPERATION POLICY IN AGRICULTURE AND FOOD SECURITY

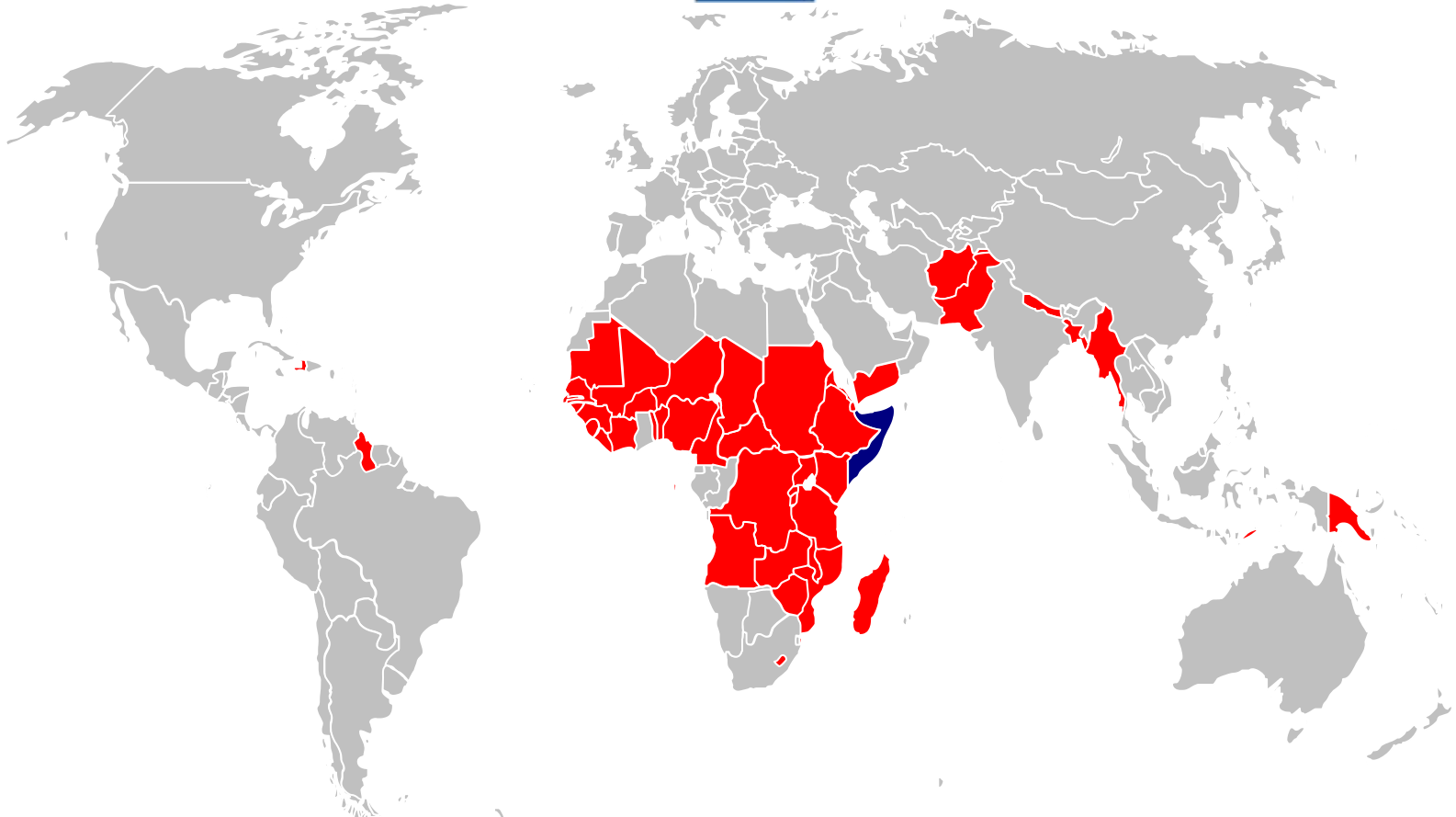
- ❖ *Promoting **sustainable agriculture** for inclusive growth*
- ❖ *Increasing **resilience** to food crisis*
- ❖ ***Nutrition**: Commissioner Piebalgs pledge of committing EUR 3.5 billion in 2014-2020 for fighting malnutrition (target: 7 million children)*



II.4. DRIVERS OF EU DEVELOPMENT ACTIONS IN AGRICULTURE

- ❖ *Promoting inclusive and sustainable growth (focus on smallholders)*
- ❖ *Supporting sustainable agriculture*
- ❖ *Bolstering sustainable management of natural resources: climate change prevention and adaptation; ecosystem services*
- ❖ *Improving crisis prevention and enhancing resilience*
- ❖ *Increasing nutrition-sensitive actions; reducing stunting and wasting*

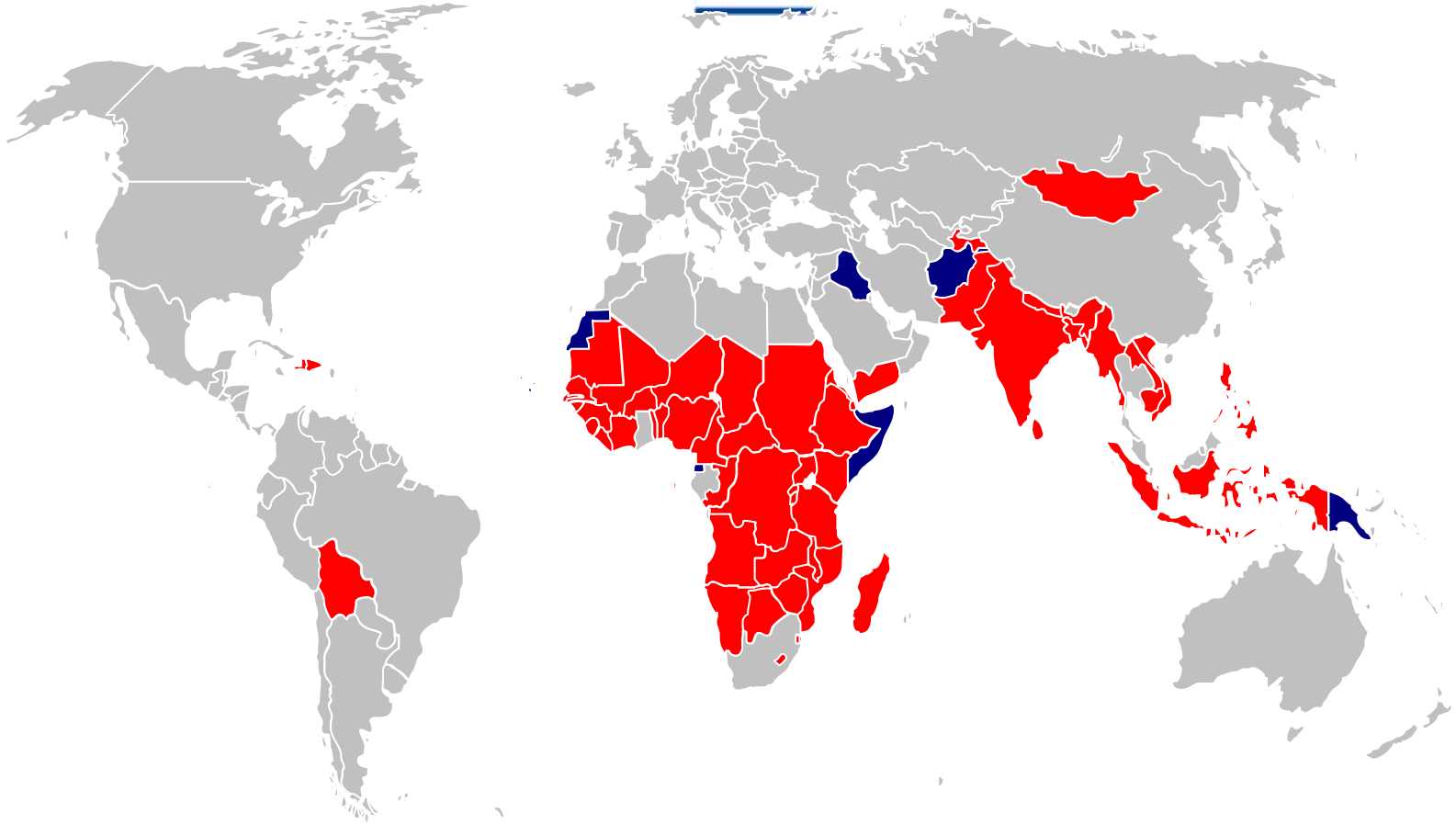
III. An evidence based approach to target EU assistance towards Food and Nutrition Security



1. HUMAN DEVELOPMENT INDEX HDI - COUNTRIES WITH Low HDI (< 510)

(RED = CONFIRMED DATA; BLUE PARTIAL DATA) (UNDP 2011)

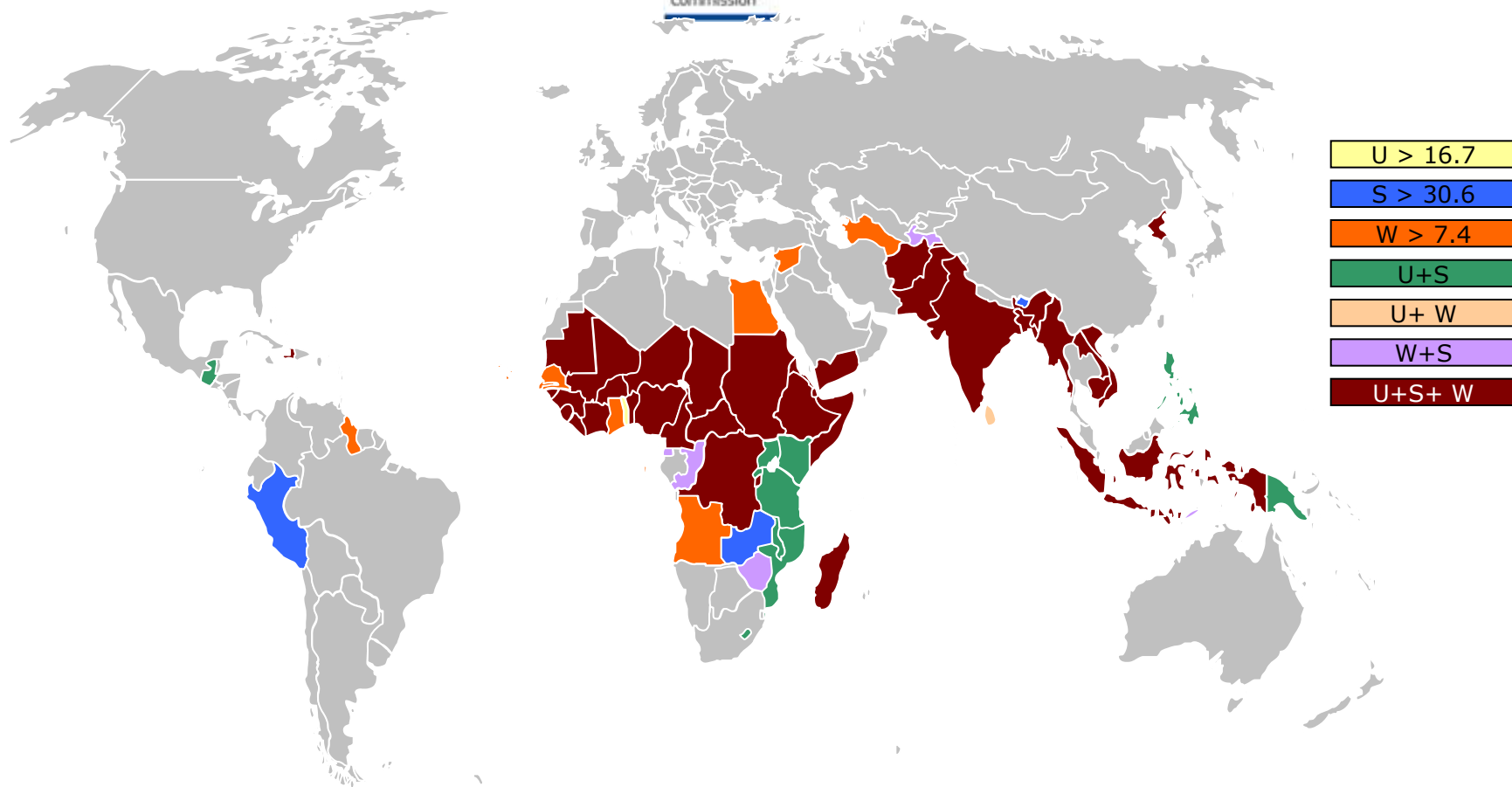
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2. GLOBAL HUNGER INDEX GHI - COUNTRIES WITH GHI > 10

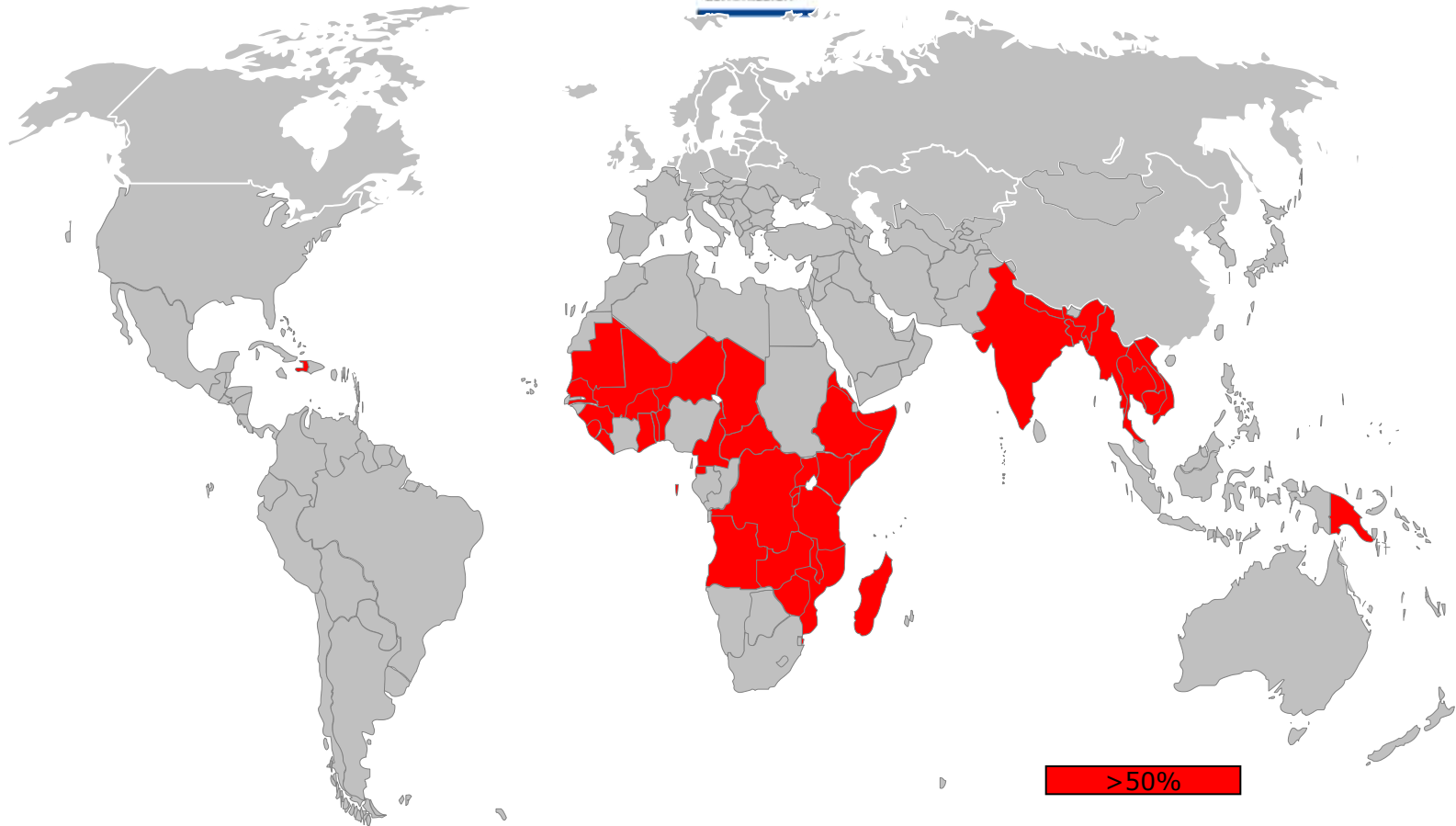
(RED = CONFIRMED DATA; BLUE PARTIAL DATA)

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3. NUTRITION % CHILDREN UNDER 5 YEARS OLD : UNDERWEIGHT, STUNTING, WASTING AND COMBINATIONS (UNICEF: PROGRESS ON CHILD AND MATERNAL NUTRITION, 2009)

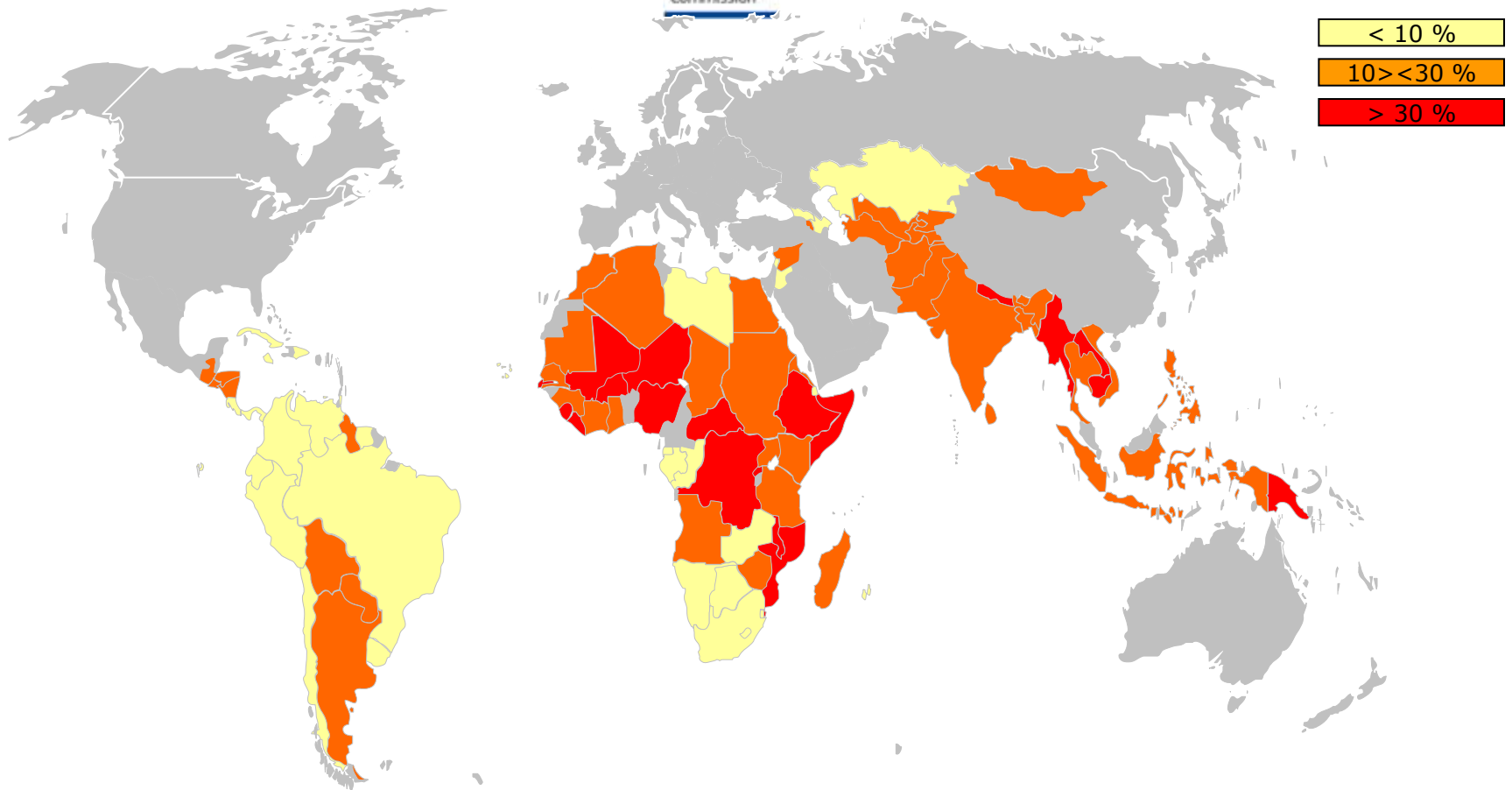
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4. AGRICULTURAL EMPLOYMENT (% OF TOTAL EMPLOYMENT)

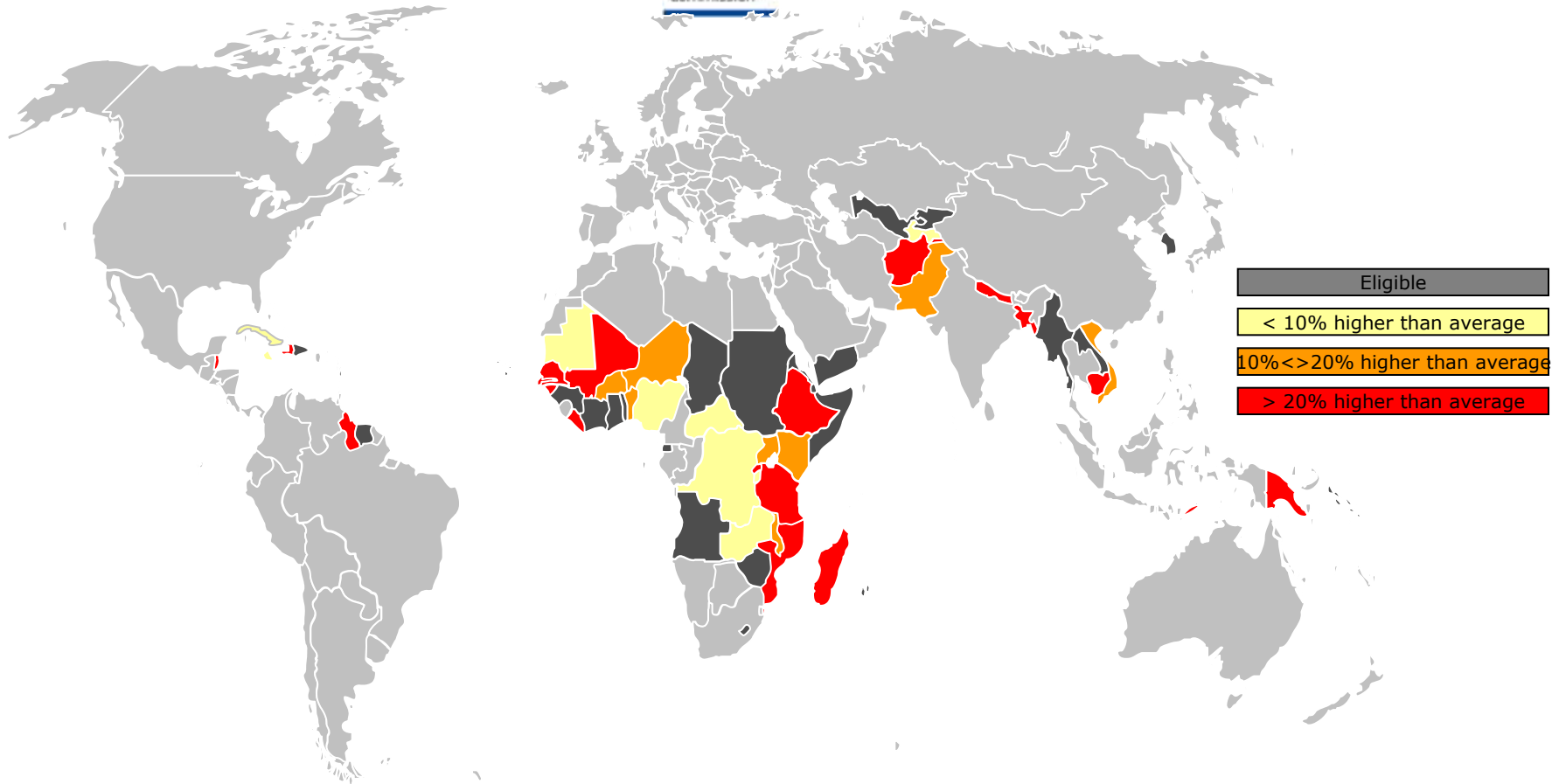
IFAD RPR 2011 (CLOSEST 2007)

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5. VALUE ADDED OF AGRICULTURE (AS % OF GDP) WB 2011

III. An evidence based approach to target EU assistance towards Food and Nutrition Security

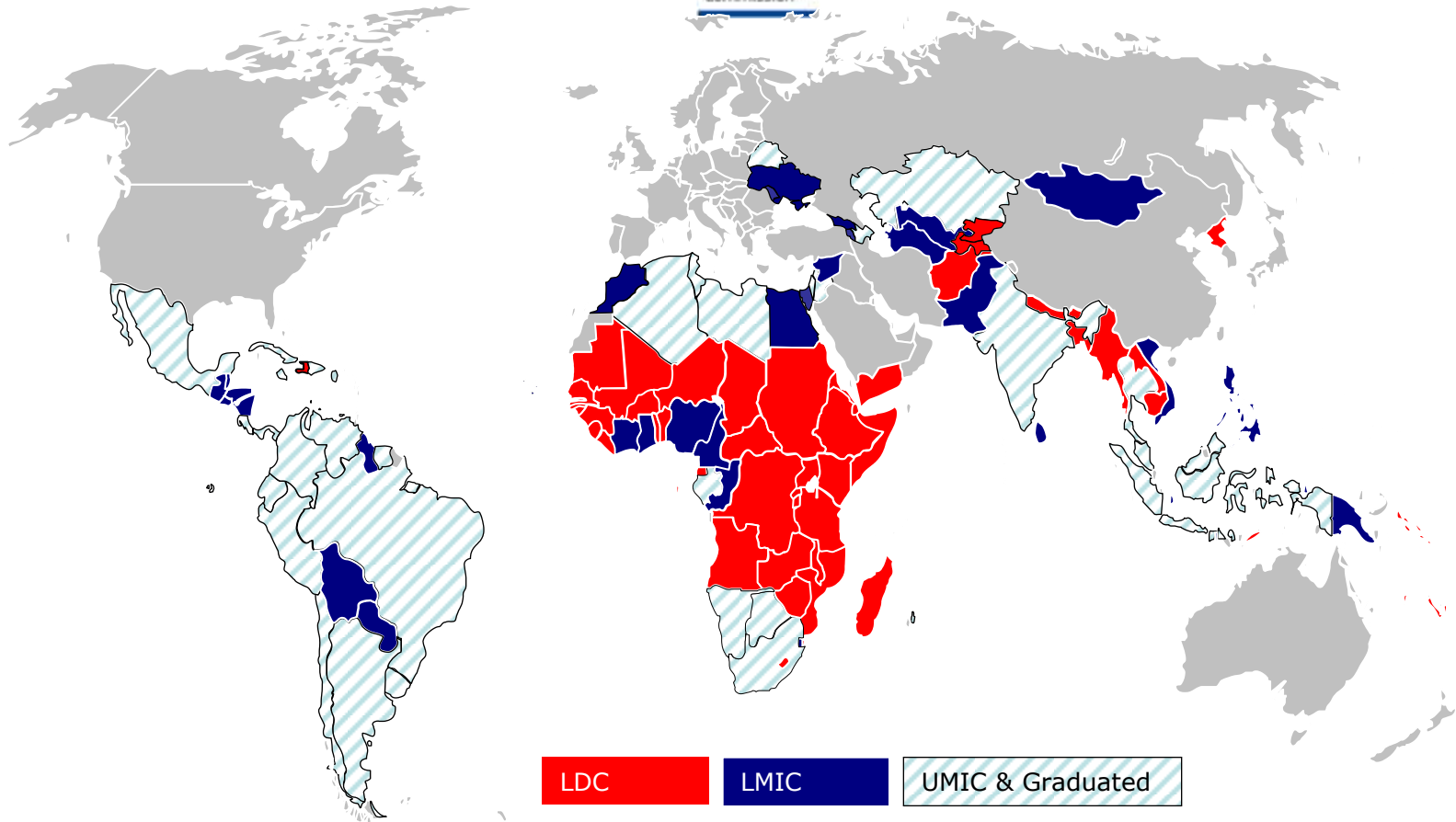


6. GCCA SCORES

(0 = LOWEST PRIORITY, 10 = HIGHEST PRIORITY) – AVERAGE FOR THE CONCERNED LIST OF COUNTRIES: 4.27

SOURCE: DEVCO

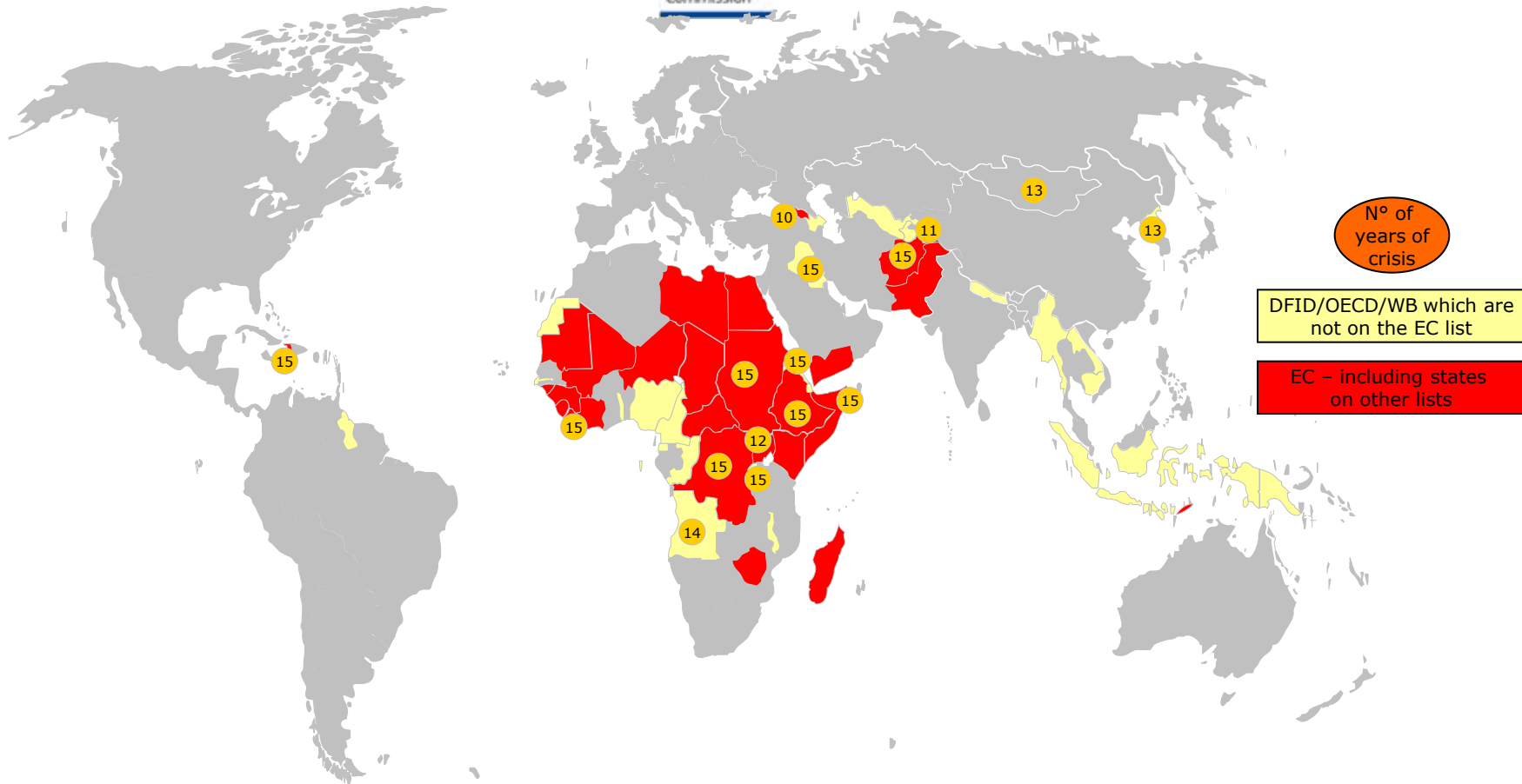
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7. DIFFERENTIATION

OECD LIST OF ODA RECIPIENTS

III. An evidence based approach to target EU assistance towards Food and Nutrition Security



8. FRAGILE STATES (DFID, WB, OECD AND EC LISTS)

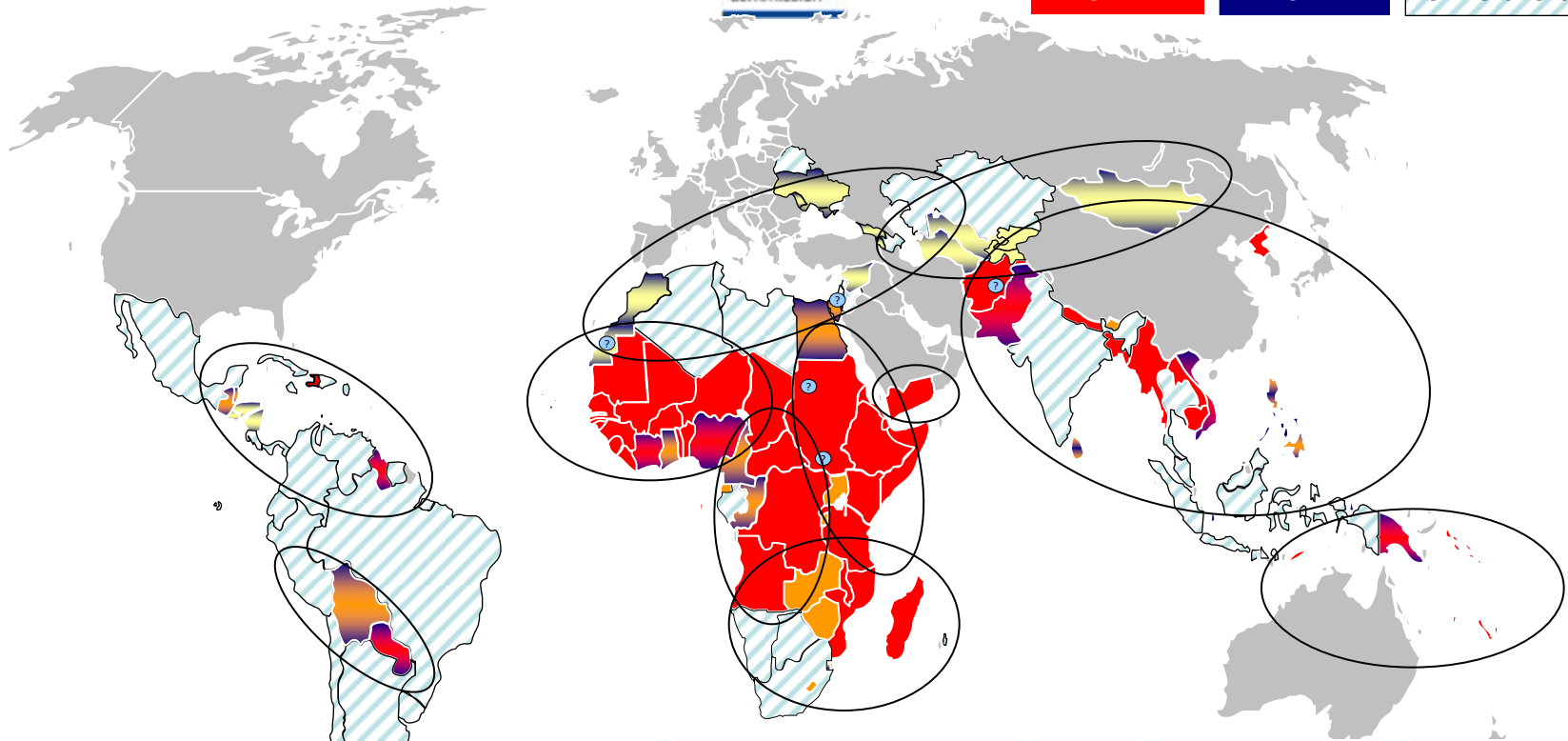
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LDC

LMIC

UMIC & Graduated



9. OVERVIEW FOOD INSECURITY

1/ Overview by OECD classification	#	Several "red flags"	Single "red flag"
LDC	54	52	2
Africa	36	36	0
Asia	10	9	1
Caribbean, Pacific, Middle East	8	7	1
LMIC	27	15	12
Africa	7	5	2
Asia*	7	4	3
Caribbean, Pacific, Latin America	13	6	7
Occupied Palestinian Territories**	1	1	

* With the concept of differentiation, the bilateral aid to countries members of the G-20 is phasing out (India, Indonesia)

** Neighbourhood countries are not indicated except, for reference, Occupied Palestinian Territories



As a result of the evidence-based approach:

❖ *Priority countries are in broad terms:*

- The poorest
- The most food insecure
- The ones with the highest percentage of agricultural population
- The most exposed to adverse consequences of climate change
- The main recipients for ODA
- Often fragile states

❖ *Focus on smallholders and staple crops*

IV. Sustainable agriculture: scope and specificities



**Is it actually possible to evolve
towards a more sustainable
agriculture in extreme contexts...?**

Let's see...

IV. Sustainable agriculture: scope and specificities



Terroir in Niger 19 km North of the Niger-Nigeria Border



IV. Sustainable agriculture: scope and specificities



Terroir in Niger 8.5 km North of the Niger-Nigeria Border



Source: Google Earth, 2005

IV. Sustainable agriculture: scope and specificities



Terroir in Nigeria 1.5 km south of the Niger-Nigeria Border



Source: Google Earth, 2005

IV. Sustainable agriculture: scope and specificities



Terroir in Nigeria 38 km south of the Niger-Nigeria Border



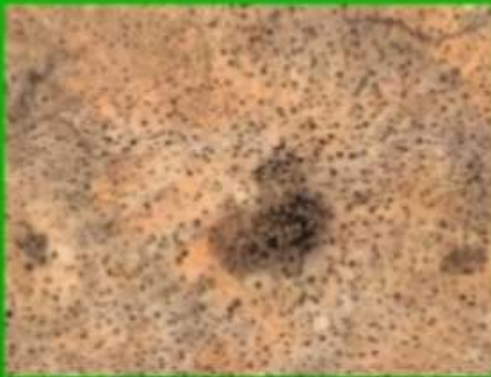
Source: Google Earth, 2005

IV. Sustainable agriculture: scope and specificities



Comparative Overview of Terroirs on Opposite Sides of the Niger-Nigeria Border

Niger



Nigeria



Source: Google Earth, 2005

IV. Sustainable agriculture: scope and specificities



Location of 12 Terroirs Used for Comparing Tree Density Across the Niger-Nigeria Border





Which kind of agriculture should be promoted?

Conventional agriculture (or Green Revolution)?

- High yields
- High labour productivity

But

- Highly capital-intensive and needing heavy consumption of non-renewable inputs,
- And responsible for negative environmental externalities

Evolving towards sustainable agricultural solutions ?

- Optimised natural resources use (same or less land and water)
- Efficient use of inputs
- Minimized GHG emissions
- Increased natural capital
- Strengthened resilience
- Reduced water/air pollution

But...



...But some specific constraints...

- ❖ *Uncertainty on feasibility of reaching needed yields*
- ❖ *Long-term return on investment*
- ❖ *No unique model (huge and changing diversity of technical solutions)*
- ❖ *Very knowledge intensive (need for soft investments: technical assistance and training); strong link with research*
- ❖ *Little interest from investors (low level of inputs)*
- ❖ *Highly labour-intensive*

IV. Sustainable agriculture: scope and specificities



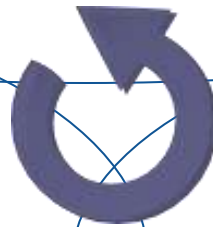
Sustainable agriculture implies necessarily assuring not only environmental but also both economic and social viability

Environmental viability

- Maintaining Natural Capital
- Optimizing of biomass production

Economic viability

- Profitability
- Meeting farmers' food and non-food needs



Social viability

- Natural resources governance
- Farmers' representativeness (public policies, value chains)



Key elements for engaging towards sustainable agriculture

- ❖ *Subsidies and incentives are crucial to increase productive assets and promote technical changes profitable only in the long term*
- ❖ *Soft investments in knowledge should be assumed mainly by public sector*
- ❖ *Innovative risk insurance schemes to be developed through public-private partnerships*
- ❖ *Securing land tenure giving preference to community-based models (VGGT)*



Which kind of financing strategies?

- ❖ *Key role of public sector: sector support to governments policies*
- ❖ *Mobilising local private investments ('missing middle')*
- ❖ *Public-private partnerships involving governments, research institutions, companies and smallholders' organisations: blending loans and grants*
- ❖ *Making best use of innovative capacities of civil society organisations (non-profit sector)*
- ❖ *Payment for ecosystem services of agriculture*



Staple crops: a big potential and an urgent need to focus on

- ❖ *Fertiliser use in SSA 8 kg/ha on average (mostly in cash crops, near to zero for staple crops...)*
- ❖ *Most important market and first employment provider sector in SSA*
- ❖ *Smallholders (less than 2 ha) are the main staple food producers in SSA*
- ❖ *From 60s', gain in yields came mainly from newly cultivated lands; not anymore possible...*

(cash crops would also benefit from a re-greening...)



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Thank you