Perspectives about measuring of development in Romanian agriculture

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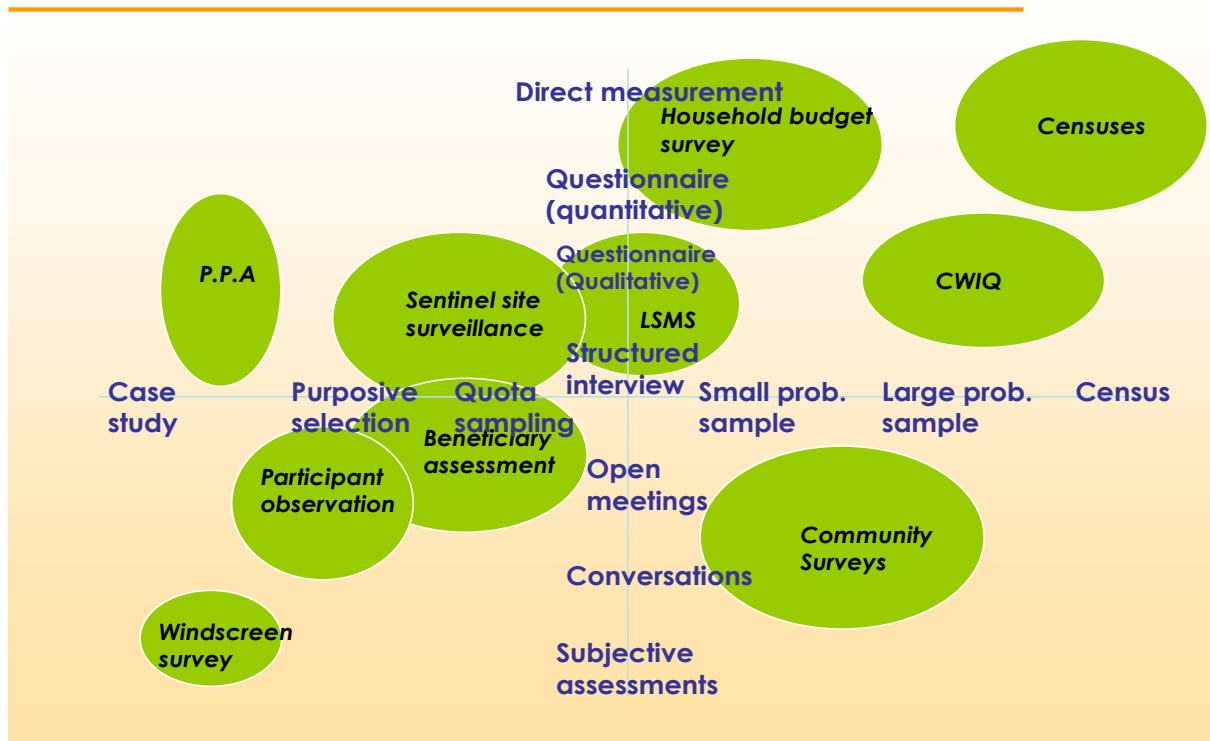
What is development?

- Development: The process of **economic and social transformation** that **is based on** complex **cultural and environmental factors** and their **interactions.**

  (http://www.businessdictionary.com/definition/development.html)

  Harvey S. Moskowitz and Carl G. Lindbloom in their book "The complete illustrated book of development definitions " (2015), **found about 2.000 distinct definitions about development.**

How we can measure development indicators?

FAO Methodology in *Wye Group Handbook on Rural Household Livelihood and well-being* (2009, pp. 11 -12)
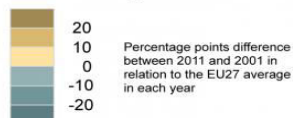
Main difficulties in data management

The following main problems are common to many developing countries:

1. limited staff and capacity of the units that are responsible of for collection, compilation, analysis and dissemination of agricultural statistics;

2. lack of adequate technical tools, packages and framework to support countries data production efforts;

3. insufficient funding allocated of agricultural statistics from development partners and national budget;

4. lack of institutional coordination which results in the co-existence of not harmonized and integrated data sources;

5. lack of capacity to analyze data in a policy perspective which results in a significant waste of resources as large amounts of raw data are not properly used;

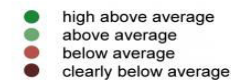6. difficult access to existing data by users with no metadata and indication of quality.

Wye Group Handbook on Rural Household Livelihood and well-being (2009, p. 15)

GUVERNUL ROMÂNIEI

POCA
Programul Operaţional Capacitate Administrativă
Competenţa face diferenţa!

Instrumente Structurale
2014-2020

Lisbon performance and regional economic development

**GDP per capita, 2001-2011
in Purchasing Power Standard (PPS)**

20	
10	Percentage points difference
0	between 2011 and 2001 in
-10	relation to the EU27 average
-20	in each year

Composite Lisbon performance

- high above average
- above average
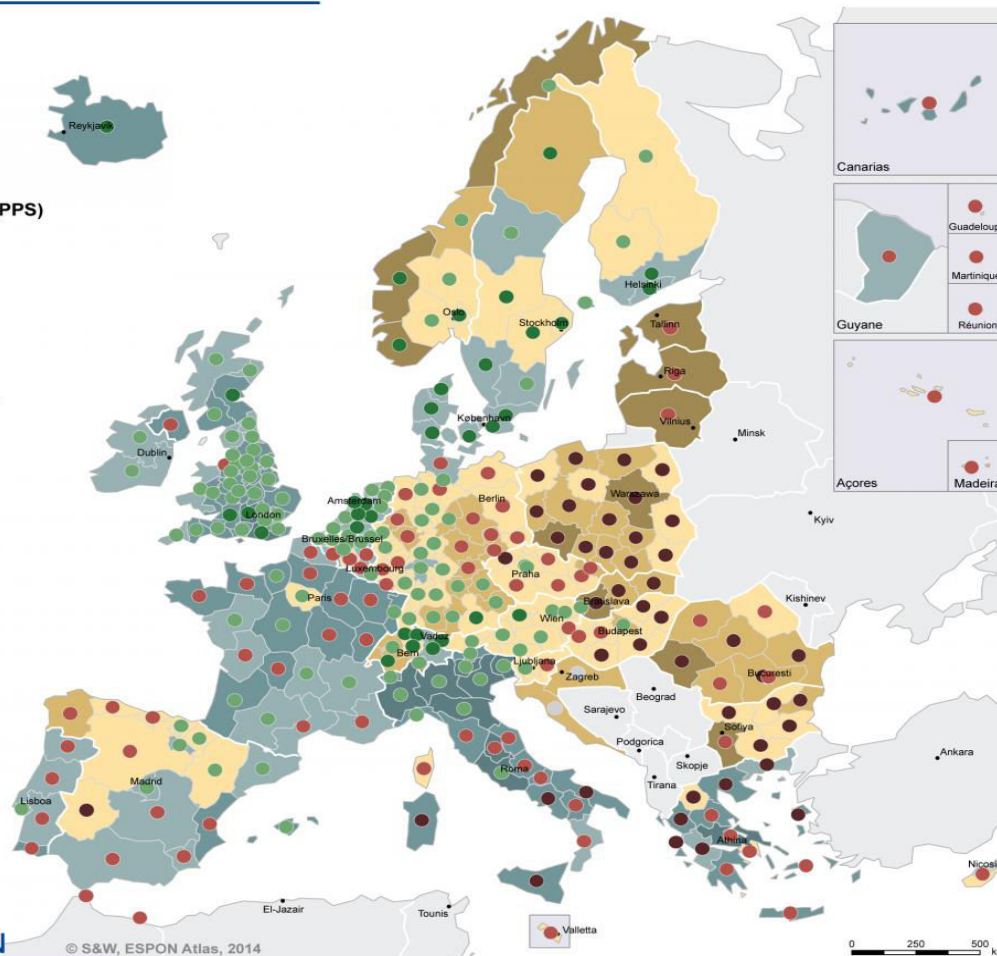- below average
- clearly below average

no data

Regional level: NUTS2 (2010)
Source: ESPON Territorial Observation 3, 2010
Origin of data: Eurofutures Finland, 2009,
Eurostat, 2014
© UMS RIATE for administrative boundaries

This map does not
necessarily reflect the
opinion of the ESPON
Monitoring Committee

ESPON

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Canarias

Guadeloupe

Martinique

Guyane

Réunion

Açores

Madeira

Reykjavík

Oslo

Helsinki

Stockholm

Tallinn

Riga

Vilnius

Minsk

København

Kyiv

Dublin

Amsterdam

Berlin

Warszawa

London

Bruxelles/Brussel

Luxembourg

Praha

Kishinev

Paris

Wien

Bratislava

Budapest

Bern

Vaduz

Ljubljana

Zagreb

Bucuresti

Beograd

Sofiya

Podgorica

Ankara

Skopje

Tirana

Roma

Madrid

Lisboa

Athina

Nicosia

El-Jazair

Tounis

Valletta

0   250   500 km

GUVERNUL ROMÂNIEI
SECRETARIATUL GENERAL
AL GUVERNULUI

starea
naţiunii

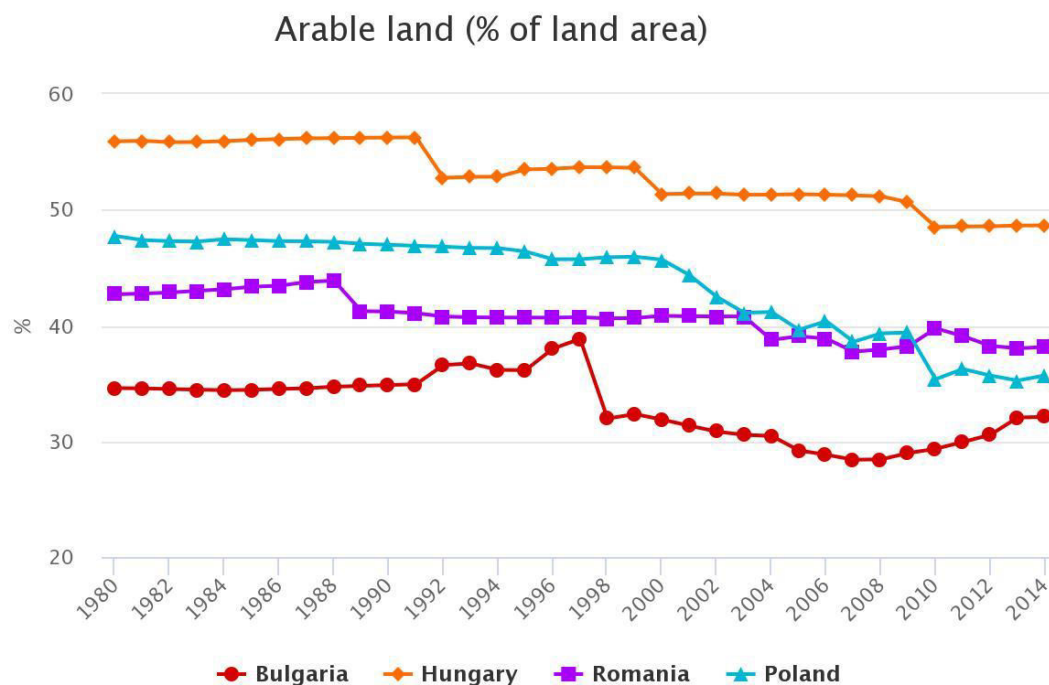SNSPA
ŞCOALA NAŢIONALĂ DE STUDII
POLITICE ŞI ADMINISTRATIVE

Typology of indicators used in agriculture

Multiple typologies:

I.   Direct & Indirect measured
II. Simple, aggregate & composite
III. With high, average & low impact
IV. Local, sectorial & trans sectorial impact

1. Measuring the impact of a simple indicator - *Arable Land*

Arable land (% of land area)

Between 1980 - 2014, in Romania the value of indicator decrease from **42,69%** to **38,15%**
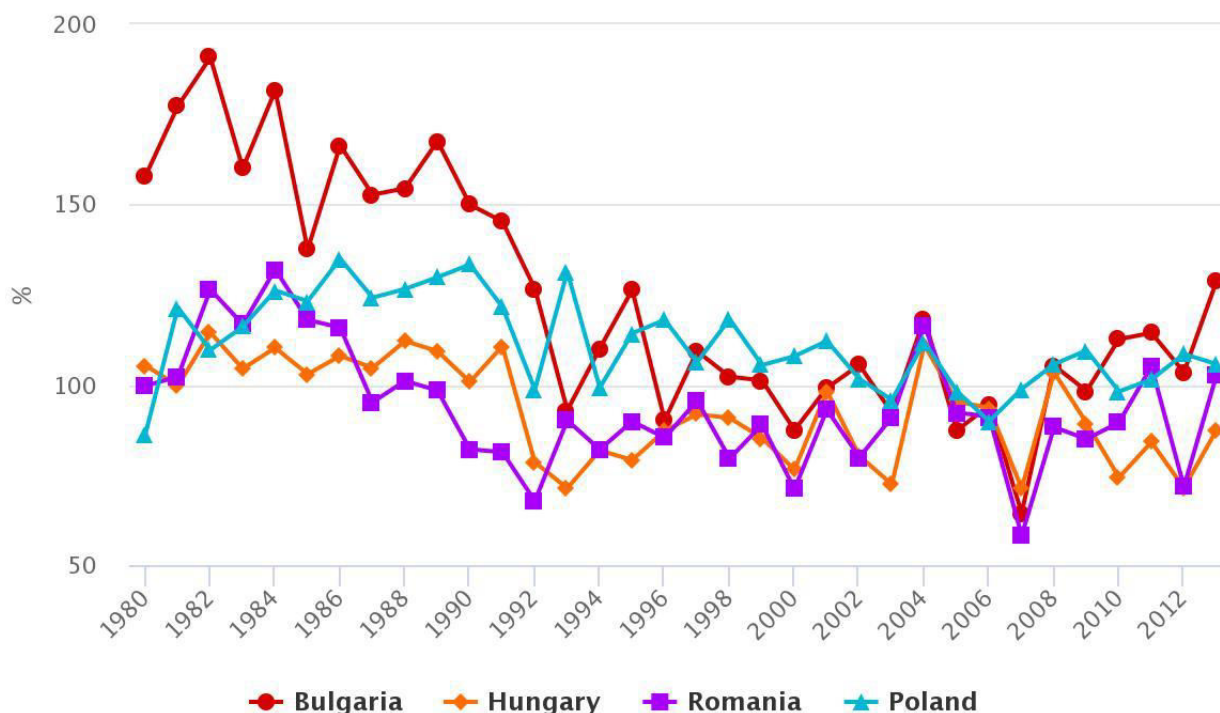(**lost about 4% of surface**)

Impact:
- **decreasing of agriculture production (%)**
- **loosing of agriculture potential (%)**

2. Measuring the impact of an aggregate indicator (non dimensional)- *Crop production index*

Crop production index (2004–2006= 100)

Romania **does not record big differences** regarding this index in the last 30 years (99,74 in 1980, versus 102,54 in 2013).
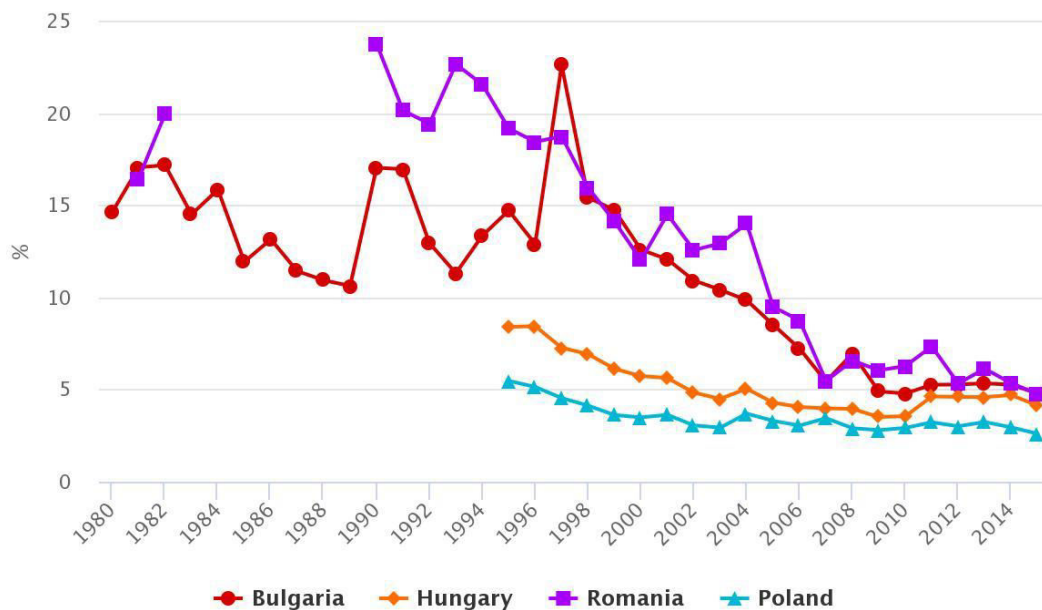
Impact:
- **decrease cereals productivity (%)**
- **efficiency of the mechanization of agriculture (% in the last 30 years)**

Highcharts.com

Measuring the impact of an aggregate indicator (dimensional) – Contribution of the agriculture to the GDP

Agriculture, value added (% of GDP)

Bulgaria • Hungary • Romania • Poland

Highcharts.com

The **contribution of the agriculture to the GDP** decrease from **23.74% in 1990** to **4,75 % in 2015 (about 5 times in only 35 years)!**

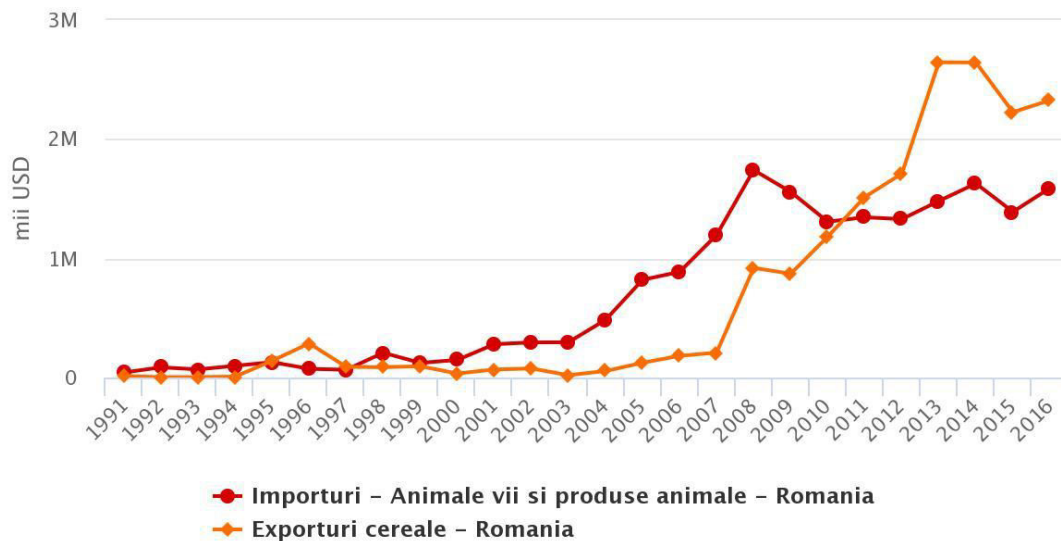**Impact:**
- **decreasing of competitiveness(%)**
- **loosing of agriculture potential (%)**
- **decreasing of employment in agriculture (%)**

Measuring the impact of an composite indicator (dimensional) –
Import/export balance for cereals

Import/export balance for cereals, livestock and livestock products (Importuri – Animale vii si produse animale/Exporturi cereale)

- Importuri – Animale vii si produse animale – Romania
- Exporturi cereale – Romania

Highcharts.com

The **exports of cereals increased more than 180 times between 1991** (12.304 thousand USD) **and 2016** (2.326.568 thousand USD). The livestock and livestock products **increased more 36 times between 1991** (42.242 thousand USD) **and 2016** (1.589.947 thousand USD).

Impact:
- **increasing the dependence of import(%)**
- **increasing of revenues(%)**

Conclusions

1. The analyzing of a complex sector (as agriculture) involves a set of correlate indicators, not only simple measurements
2. The measurement of an indicator could be made both directly (analyzing the evolution) but also through the impact generated by the indicator
3. Romania record o dramatically evolution of some representative indicators in the last 20 years:

   - lost about 4% for the arable land

   - has approximatively the same production index like in the 80th

   - the contribution of the agriculture to the GDP decreased approximatively 5 times in the last 25 years

   - the exports of cereals increased more than 180 times and the imports of livestock and livestock products more than 36 times in the last 25 years

Thank you!

Questions?