



Jean Monnet Chair

Small Area Methods for Monitoring of Poverty and Living conditions in EU (SAMPL-EU)

**The decision-making framework and
the estimation of Income, Consumption,
Poverty and Prices
in the European Statistical System**

Luigi Biggeri

Aims and content of teaching activities

- The Chair aims at introducing students and stakeholders to the study of **local statistics** on **poverty and living conditions** in order to provide reliable evidence to **monitor EU regional policy** (for **evidence-based policy making**)
- Enhancing the students' and stakeholders' abilities to:
 - ✓ **understand and analyse**
 - ✓ **existing set of poverty and living conditions indicators in Europe**

Aims and content of teaching activities

Short intensive course on:

“The decision-making framework and the estimation of Income, Consumption, Poverty and Prices in the European Statistical System”

The intensive course will be structured into three modules:

- **Evidence-based policy making**
national and
Role of statistics to support the policy intervention at local level
- **European Statistical System**
Fundamental principles of the ESS and their application
Organization of the ESS with attention to the data production model and privacy issue
- **Sources of data** on Income, Consumption, Poverty and Prices in ESS.
Characteristics of data available at the ESS web site



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I.1. The role of statistics in supporting the decision making

An overview

Statistical Reasoning born with the humanity

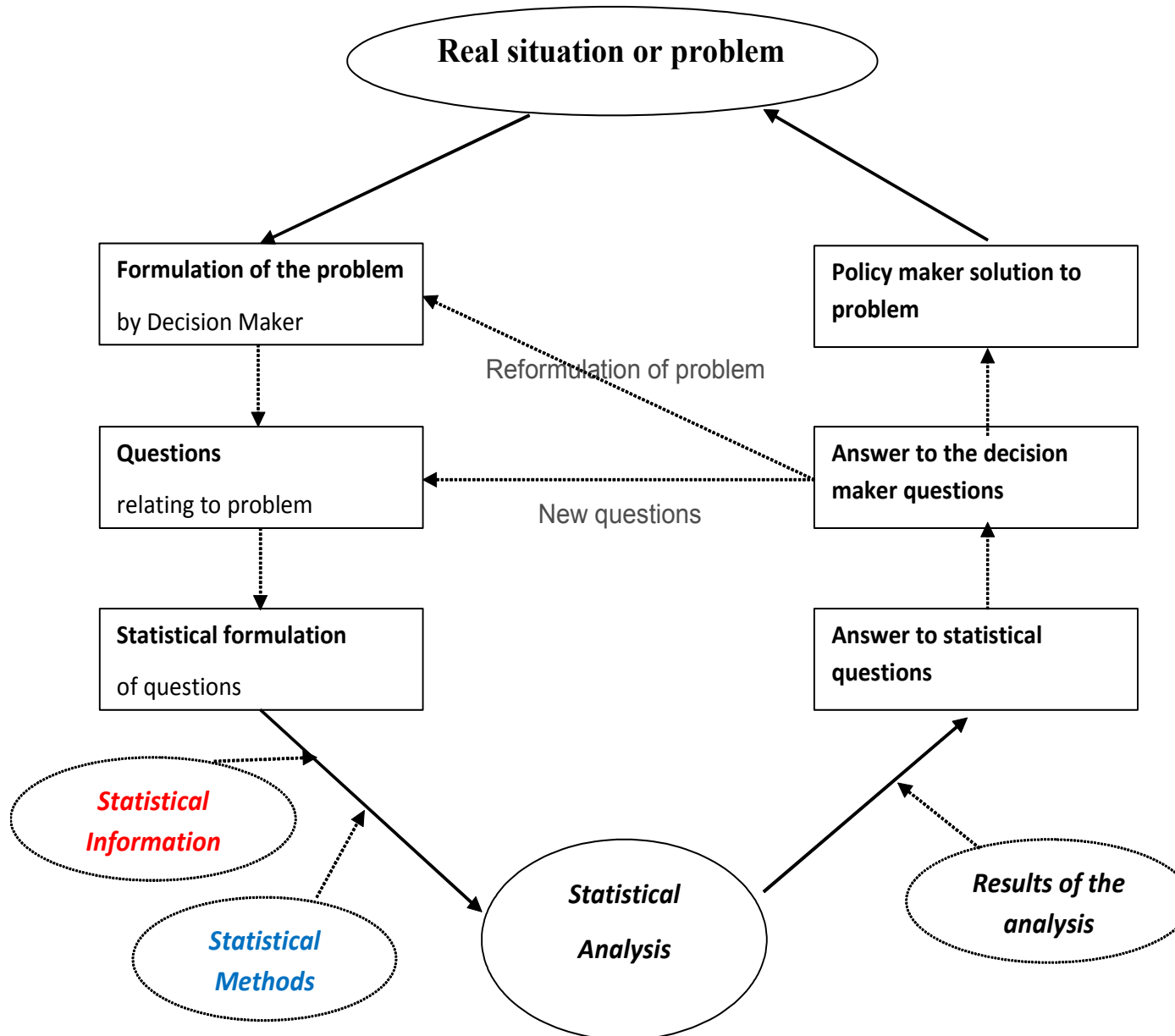
STEPS OF GENERAL REASONING

- Problem to be solved
- Information useful
- Collection of information
- Analysis of information
- Decision (choice of the action)

STEPS OF STATISTICAL REASONING

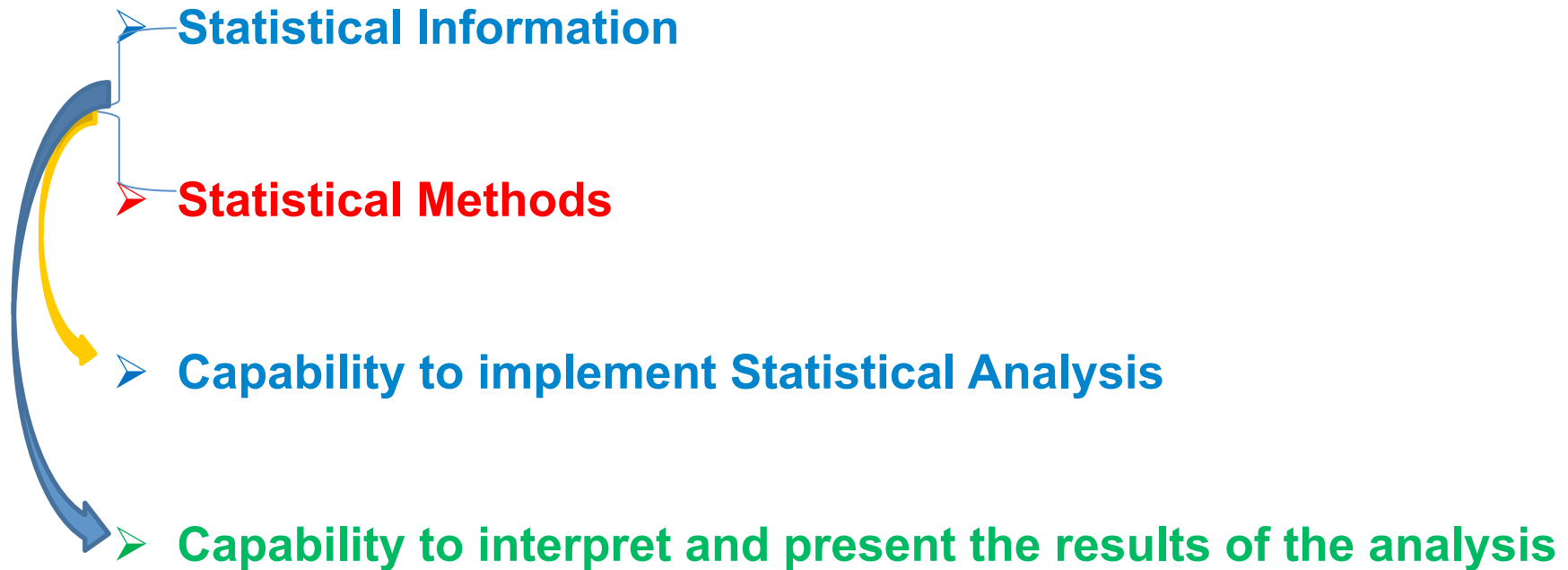
- Problem to be solved
- Definition of data need
- Collection of data (Surveys) ←
- Statistical Methods for Anal.
- Decision (support alt. choices)

Role of Statistics to know and analyze a situation



What we need to know -1-

From the presented sketch:



What we need to know -2-

Statistical Information

➤ **Crucial importance of the definitions to:**

- ✓ conduct measures and estimations
- ✓ understand the content of the information

What is the relevant population?

What is the variable(s) of interest?

➤ **Knowledge of data sources and of their characteristics at**

- ✓ **EU level** European Statistical System ESS)
(Daniela Ghio)
- ✓ **Local level** Usually very few data is available and
need to use SAE to produce them
(Monica Pratesi et al.)

What we need to know -3-

➤ General characteristics of population to measure

✓ Methods of producing data

at macro-level

at micro-level

Abstract concepts and populations for which it is impossible to find a population of units

Population of units

Only using data integration

Complete or sample surveys

➤ Interpretation

Quality of data

➤ Comparisons

Never plain: need for standardisation

Statistical Methods for producing and analyzing data

- **Need to the adequate methods but overall need to know**
- ✓ The intrinsic logic
- ✓ Learn to use and interpret data and methods in order to evaluate the results obtained

References

- McClave J.T., Benson P.G. and Terry T.T., (2014), Statistics for Business and Economics, Pearson (Chapter 1, What is Statistics?)
- Biggeri L, Bini M., Coli A., Grassini L and Maltagliati M., (2012), Statistica per le Decisioni Aziendali, Pearson (Chapter 1)