

Monitoring & Impact

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IRTA at a glance

- Public Research Organization
- 5 areas: plant-animal-foodtech-environmental-economics
- 700 staff, 250 Researchers, 21 locations
- 30% structural funds - 70% own funds (contractual/IP/competitive)
- 40% funding comes from international sources (EU, contractual research, tenders...)
- Ongoing projects in 33 countries
- Agriculture and food – 30% GDP Catalonia (Pork, Fruit, arable, Wine...)

Mission Guides Monitoring

- IRTA's mission is to contribute to modernizing, improving, stimulating competitiveness and promoting the sustainable development of the agricultural, livestock, agri-food and environmental industries
- Resources are limited and funding is complicated
- We focus our constant monitoring on
 - Economic contribution of research groups to organization
 - Extension activities
 - Research performance

Measuring performance, 3 axis

- Economic - amount of funds from private sector and full cost projects that contributes to cover the gap between the costs of structure and operation to break even (not profit)
- Sectorial - technology transfer activities and extension services - quality rankings. Government mandate
- Scientific Results - excellence in delivering science (sci, excellence, %Q1... and other SCIMAGO indexes)
- We dont have super humans! Everyone knows what do we expect from them, both at science group level and individually. Excel in one axis and be good on at least other.

What to do with results?

- based on performance, the organization may take different decisions based on transparent, public, well known information
- Performance influences on strategy
 - regarding allocation of new resources,
 - where to put efforts for new projects,
 - closing research lines, opening emergent ones
 - promotions, career development...
- bureaucracy is lately helping us to measure also the time dedication, (science timesheets!?) and therefore to measure also productivity
- at this time we do an ex post evaluation on productivity

Science Impact

- Flavour of the month word in science
- But experience at IRTA is still limited, and somehow started with basic theoretical methodology
- Our experience has been learnt from advanced research organizations (INRA, WUR, UC, INIA Uruguay, EMBRAPA), (with similar results)
- We try to engage any running initiative on science impact measurement

First stage: Measuring productivity

- Based on standard methodology measuring impact of any investment
- Variable is PRODUCTIVITY not PRODUCTION
- Total productivity of different factors (Capital, labour, land, fertility....) has been studied based on historical available data for 32 years in the case of IRTA
- Total productivity=output value/input value

Second Stage: regression

- Regression of total productivity of factors and correlated to IRTA investment
- IRTA Investment has an estimated duration of 10 years that has influence in impact, and then decreases
- Studied over batches of 10 years periods
- Preliminary studies were made only in agriculture, not considering food industry
- First results conclude that the internal rate of profit in catalan agriculture has increased in 28% over the total studied period

Next steps

- Other impacts, social, environmental.
- Setting up networks for impact measurement of Agricultural Research Organization
- Find a new project:
- **EU commision H2020 SFS-27-2018: Monitoring food R&I investments and impacts - 7M€ - to be published on oct 27th????**

Thanks for your attention

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