

SOCIAL INNOVATION: DRIVING THE DIGITAL FUTURE

Opportunities for Communities, Citizens & Businesses

Francisco Pérez Trejo, Next-Step International



**Global
Forum**
Shaping the future **2013**

Monday 28th October and
Tuesday 29 October 2013

Trieste, Italy

Palazzo dei Congressi della
Stazione Marittima



The Development Process

- An innovation driven process of unpredictable structural change of whole social, economic and ecological systems (Clark, Pérez-Trejo and Allen 1995)



- It involves qualitative changes in economic sectors, cultural shifts; the emergence of new forms and reconfiguration of political and administrative structures, the advent and adoption of new technologies. The development process generates complex dynamics with continuously evolving spatial and temporal patterns that are non-linear and unpredictable in nature.

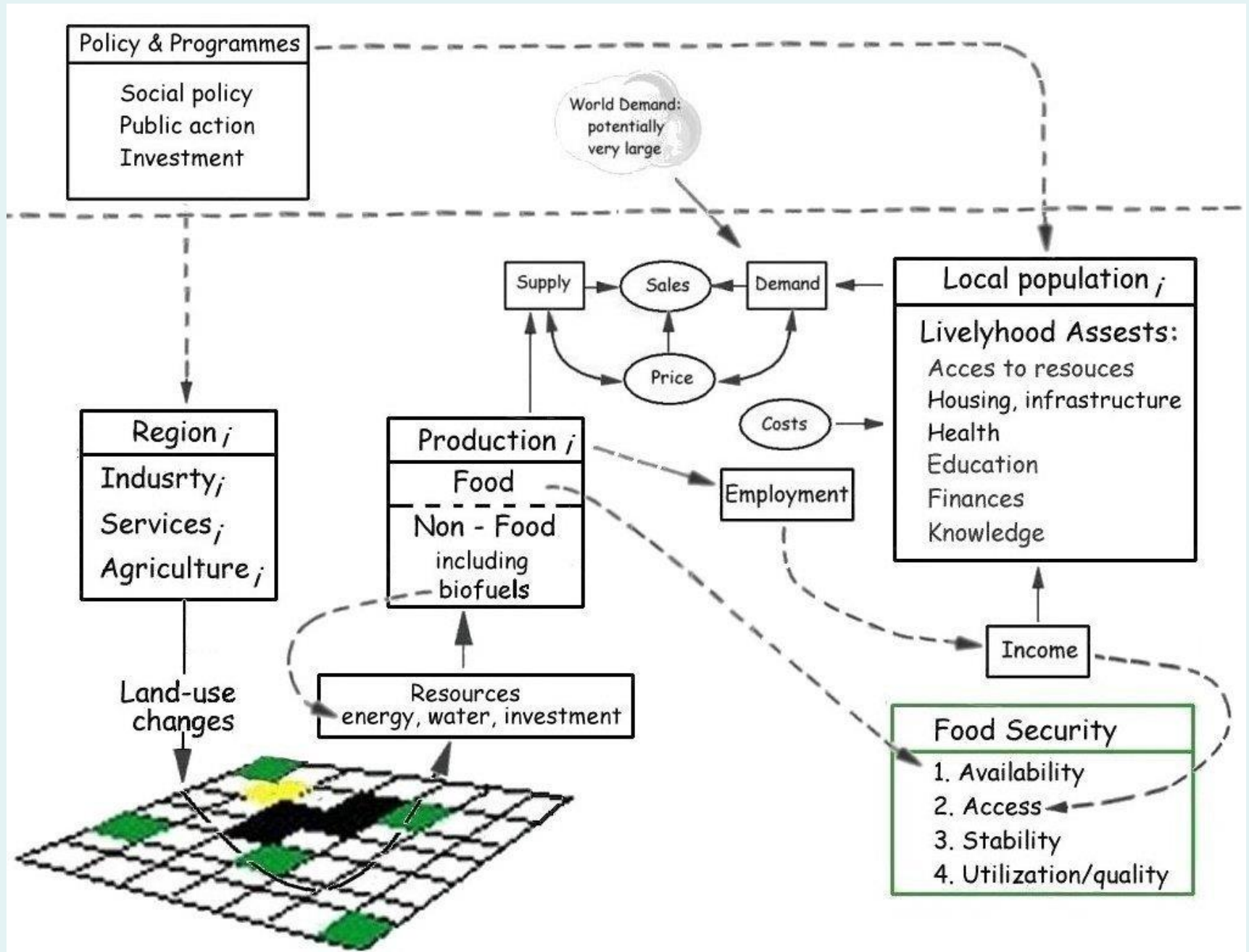
Implications

The development process is:

- Continuous, medium to long-term
- Complex
- Non-linear
- Not controllable
- Multi-directional
- Results from multiple interacting driving forces over space and time



The complexity-based conceptual framework

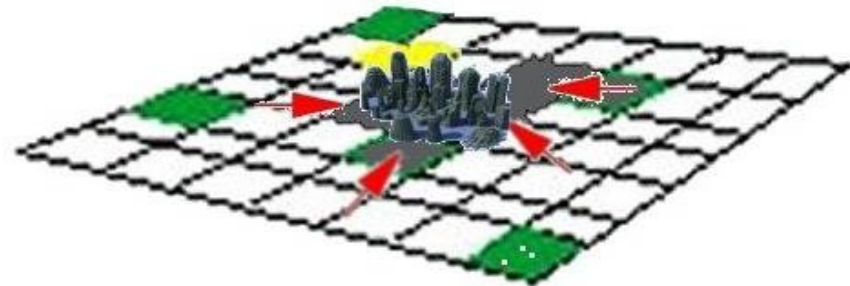


The driving forces of the development process

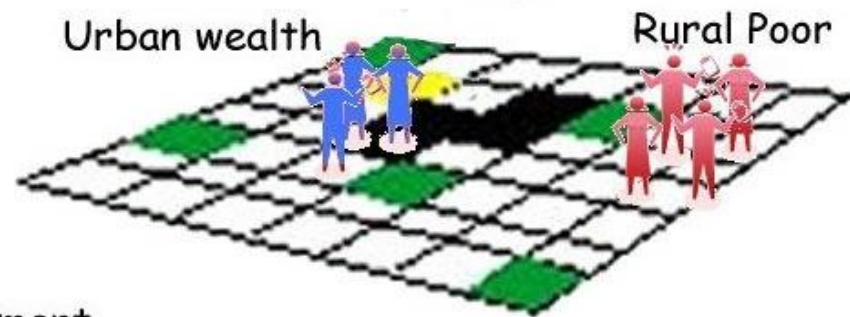
1. Globalization & Trade Liberalization



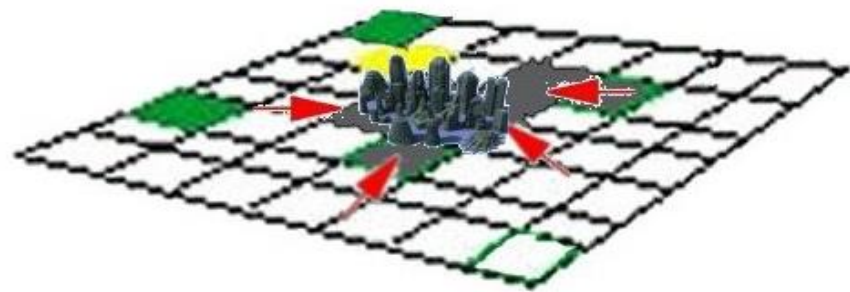
2. Rapid urbanization



3. Increasing spatial disparities



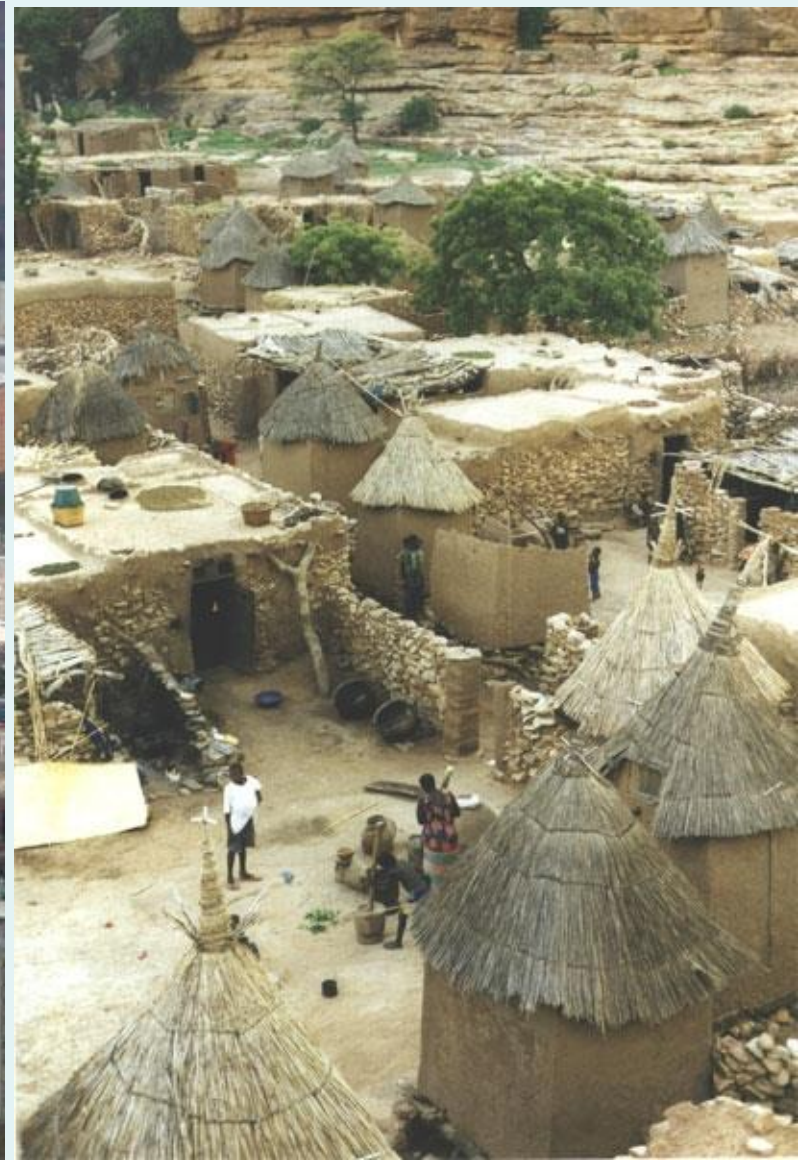
4. Investment & economic development driven by high returns leading to spatial agglomeration



Driving Forces of Development - Structural Change

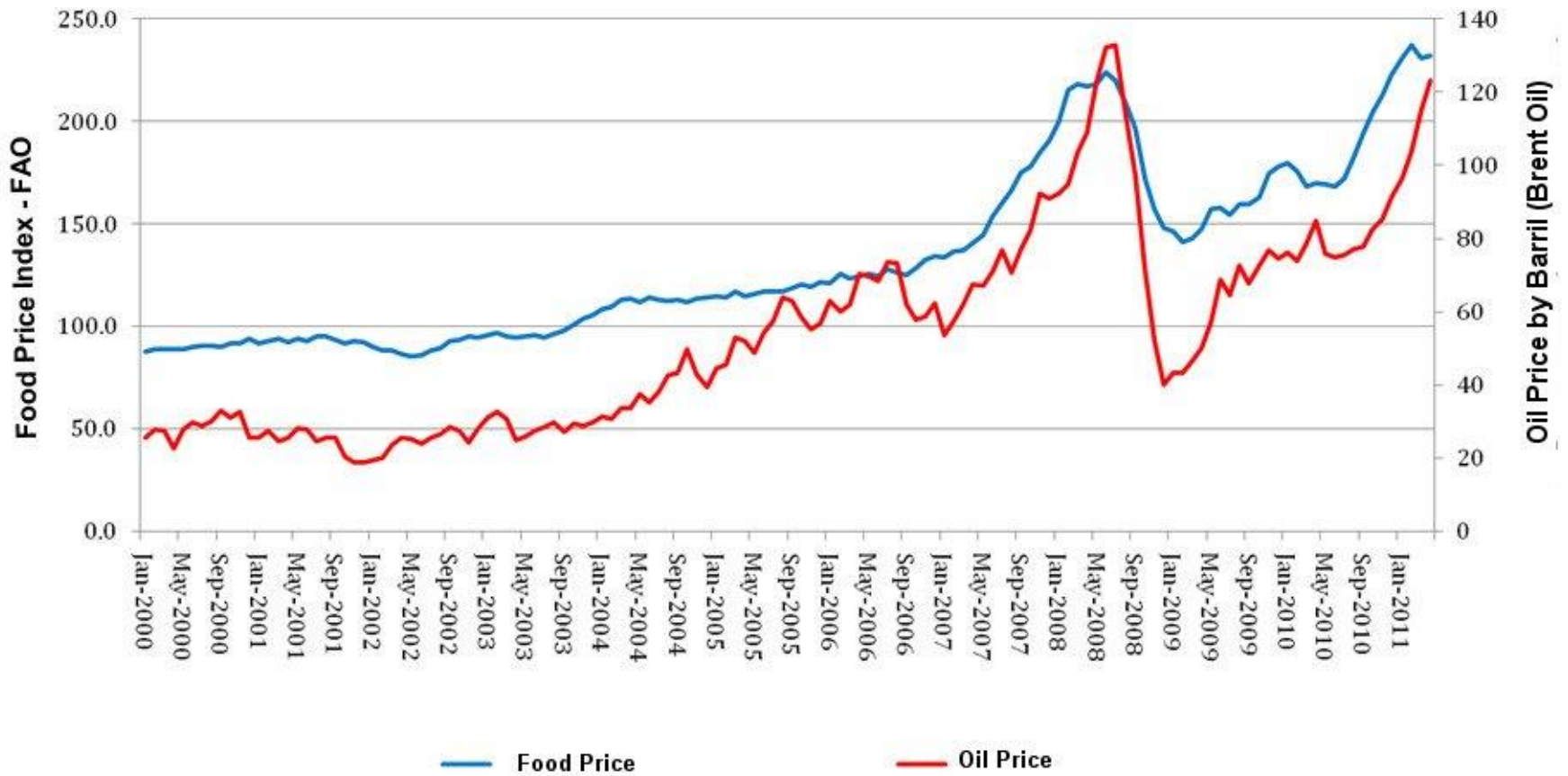
Regional Disparities

Urban vs. Rural



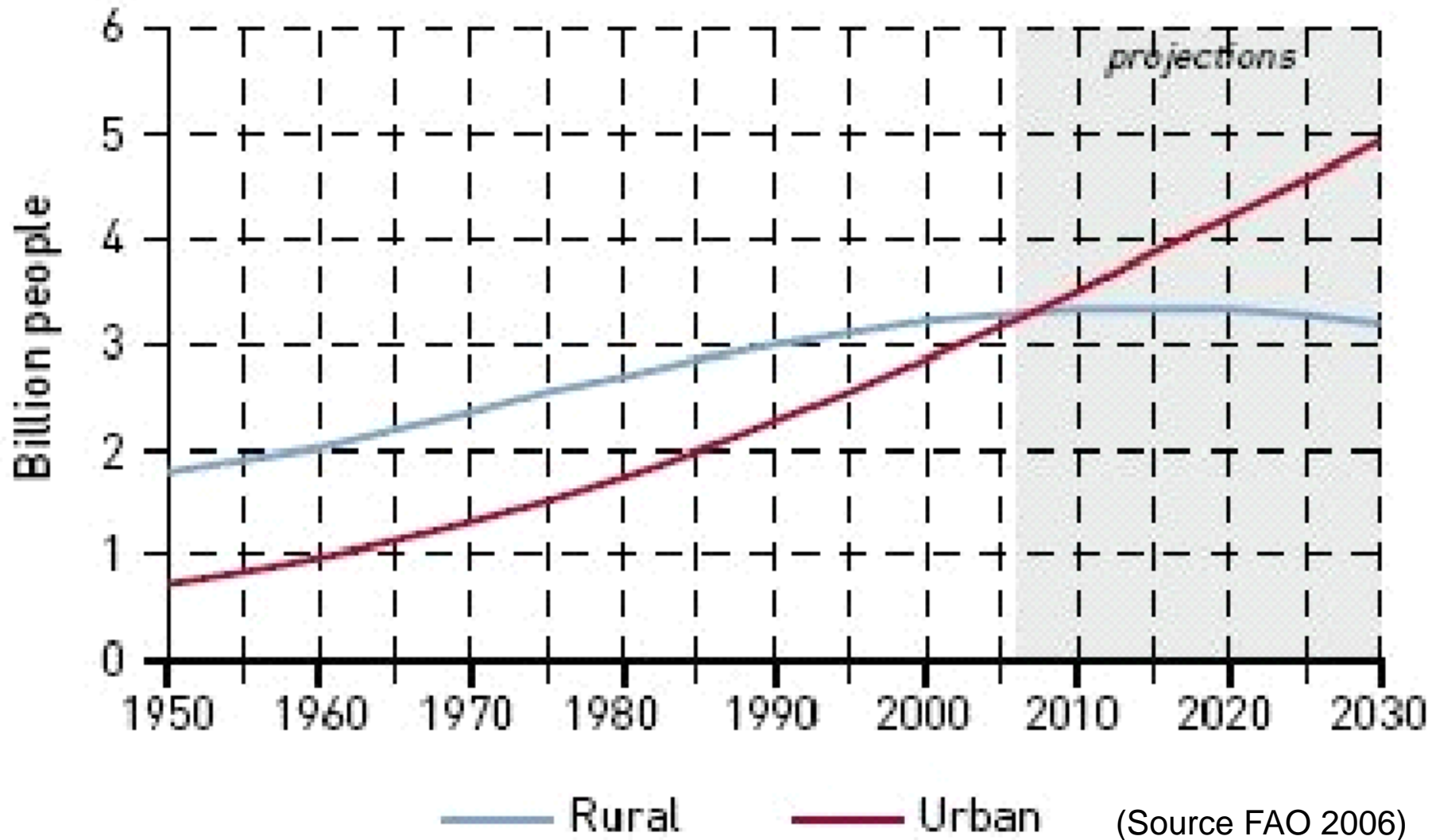
Future Development Scenarios

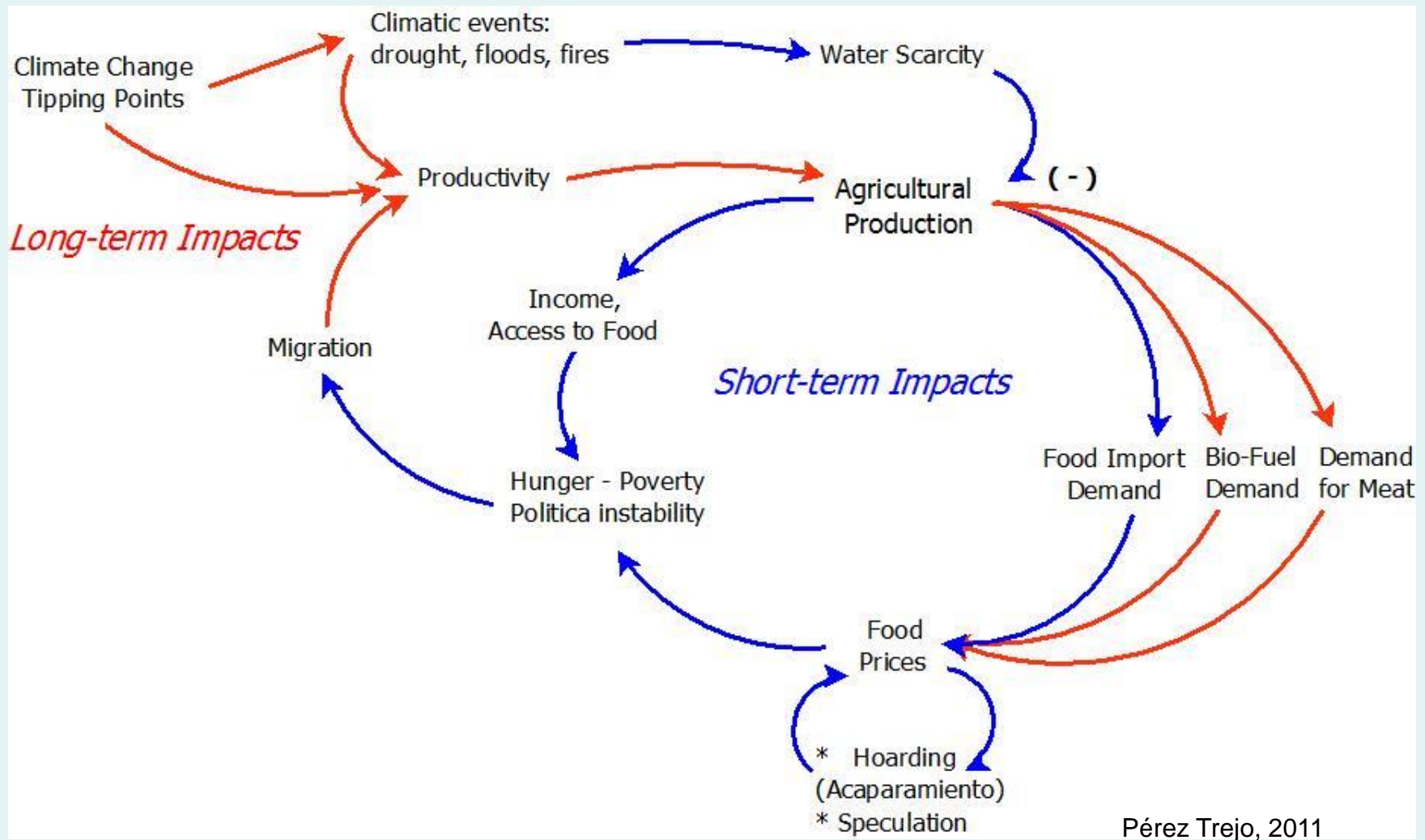




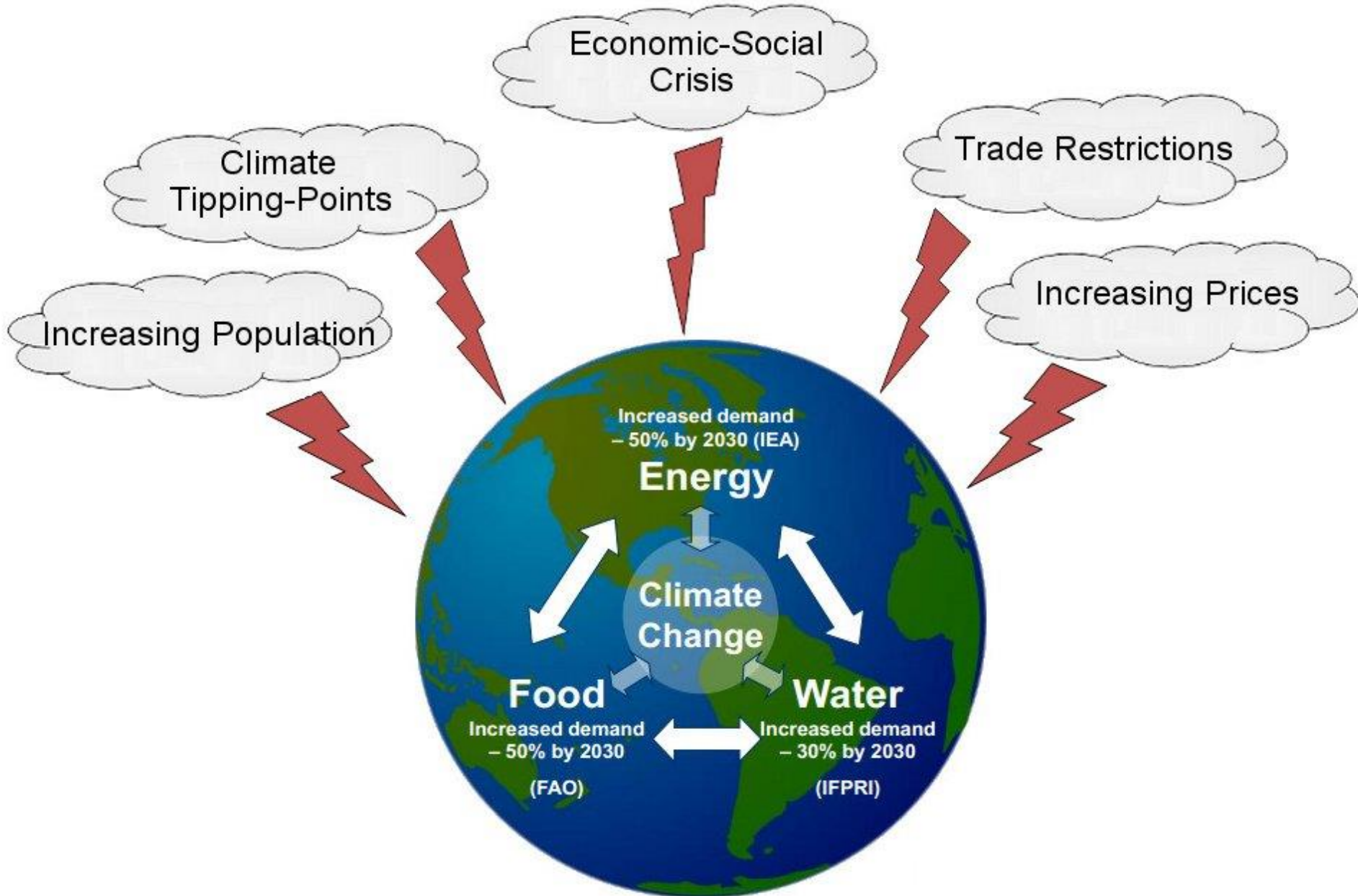
EIA (Energy Information Administration) & FAO.

Urban-rural population dynamics

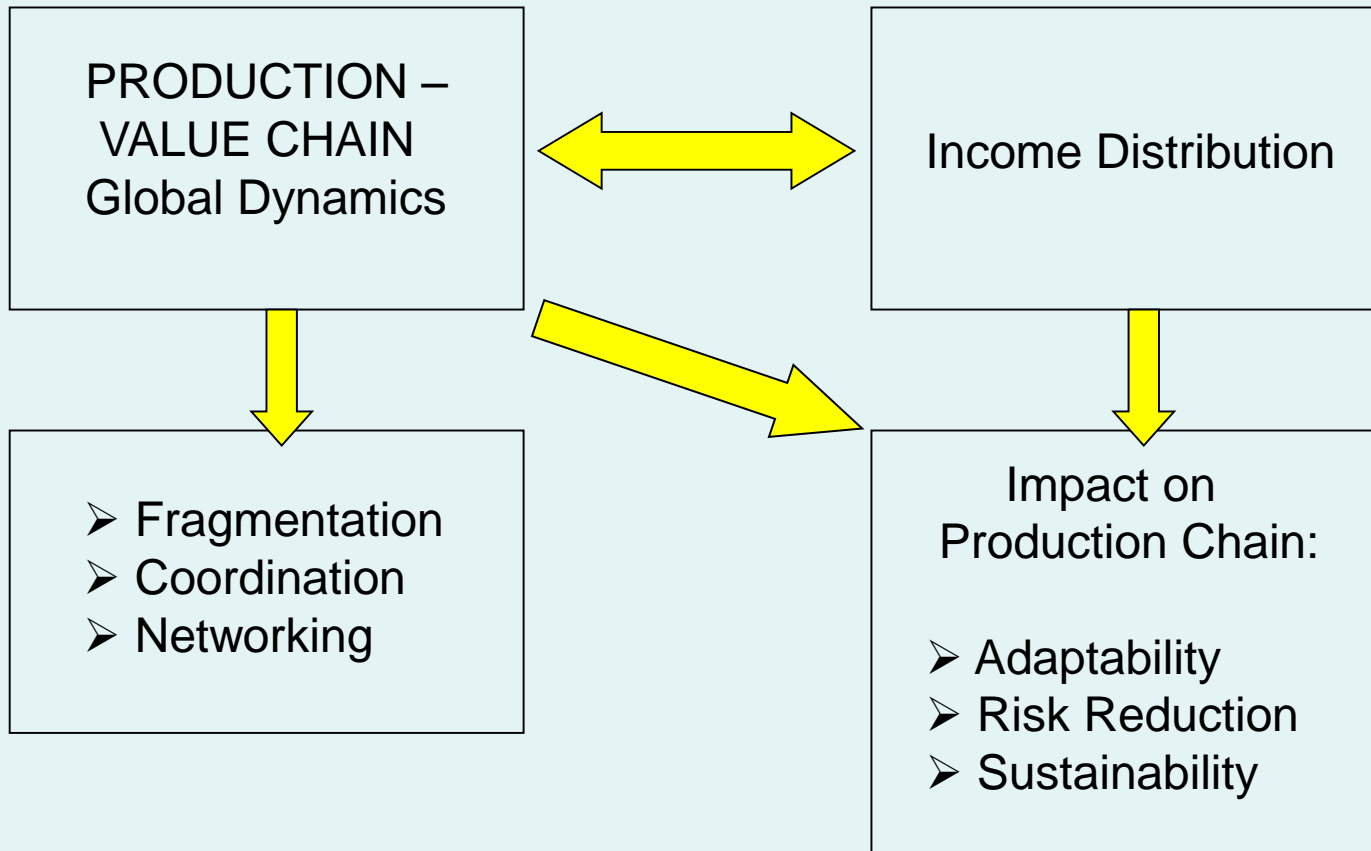




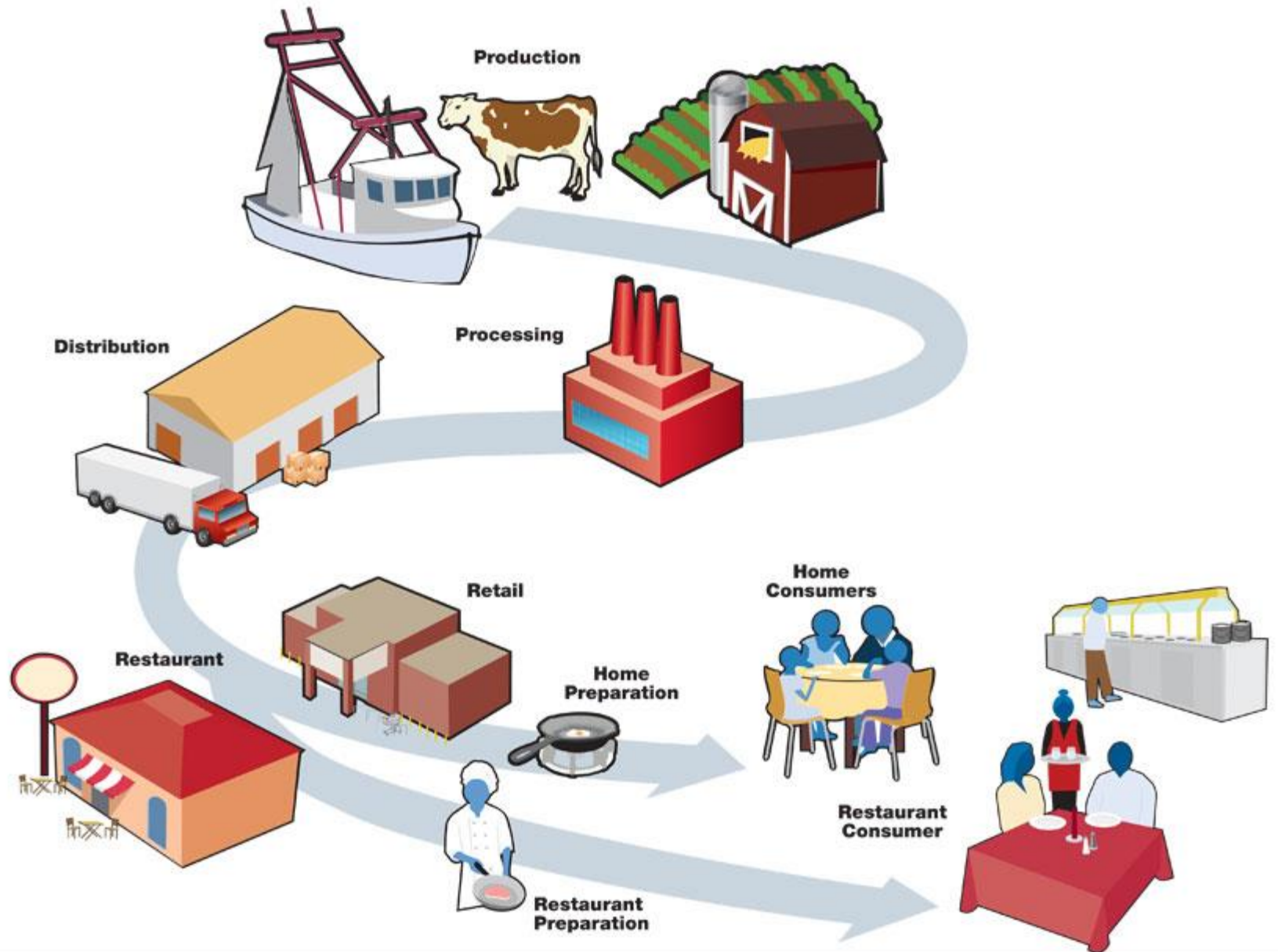
Production-Chain Sustainability in face of 'Perfect Storm'



Sustainability of the Production-Value Chain

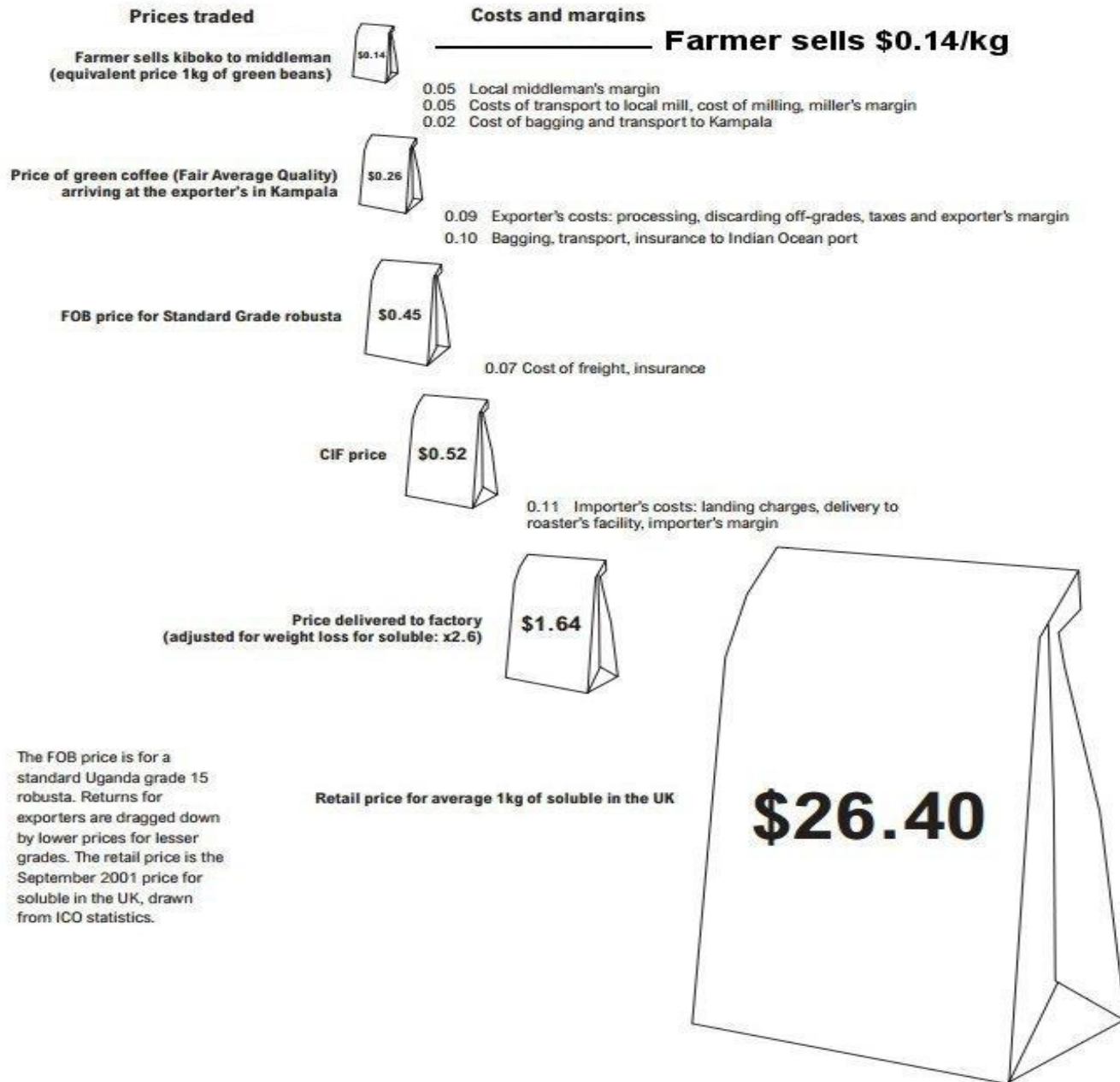


The Food Production Chain

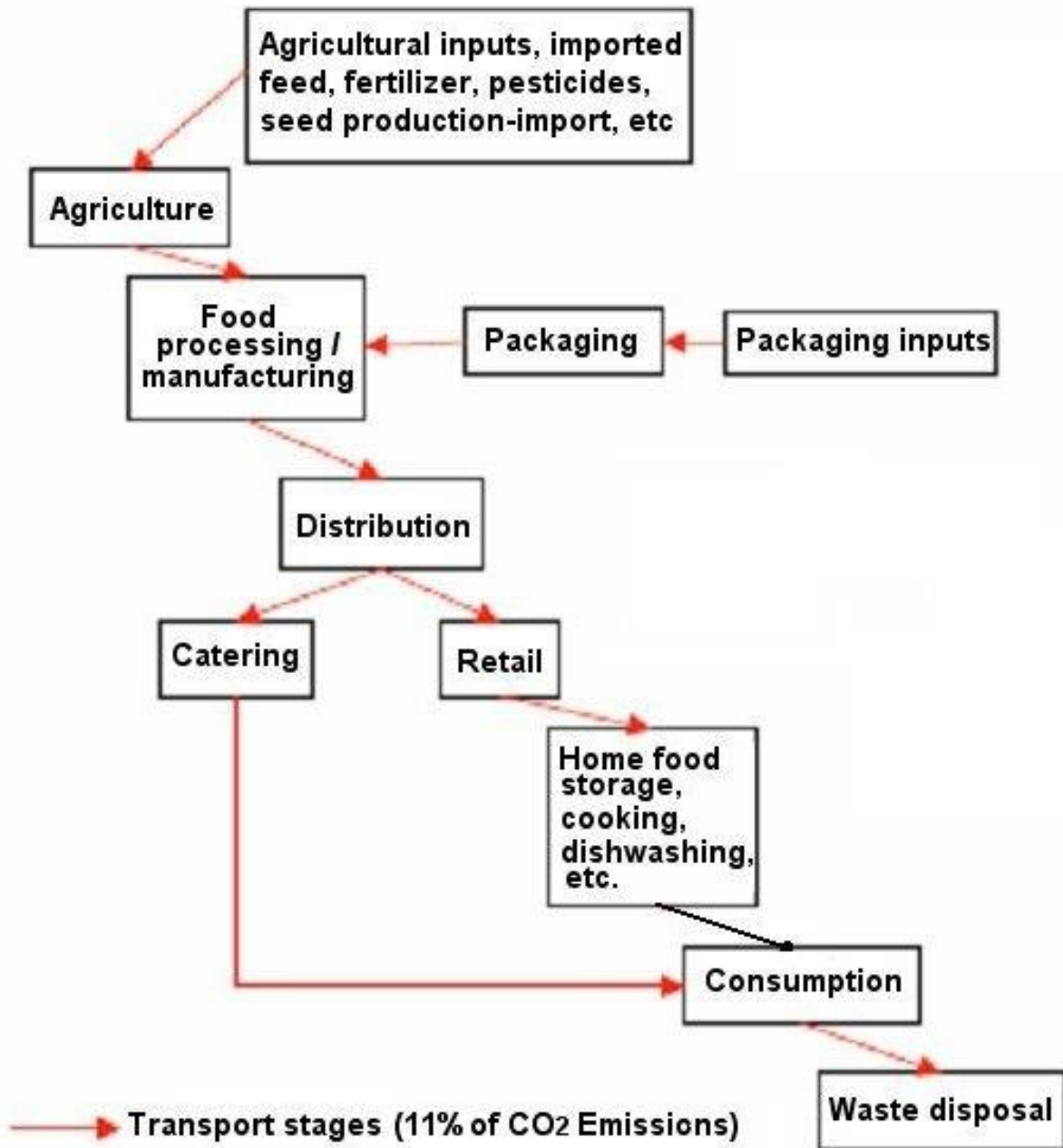


Coffee Value Chain

All prices in US\$/kg November 2001 – February 2002



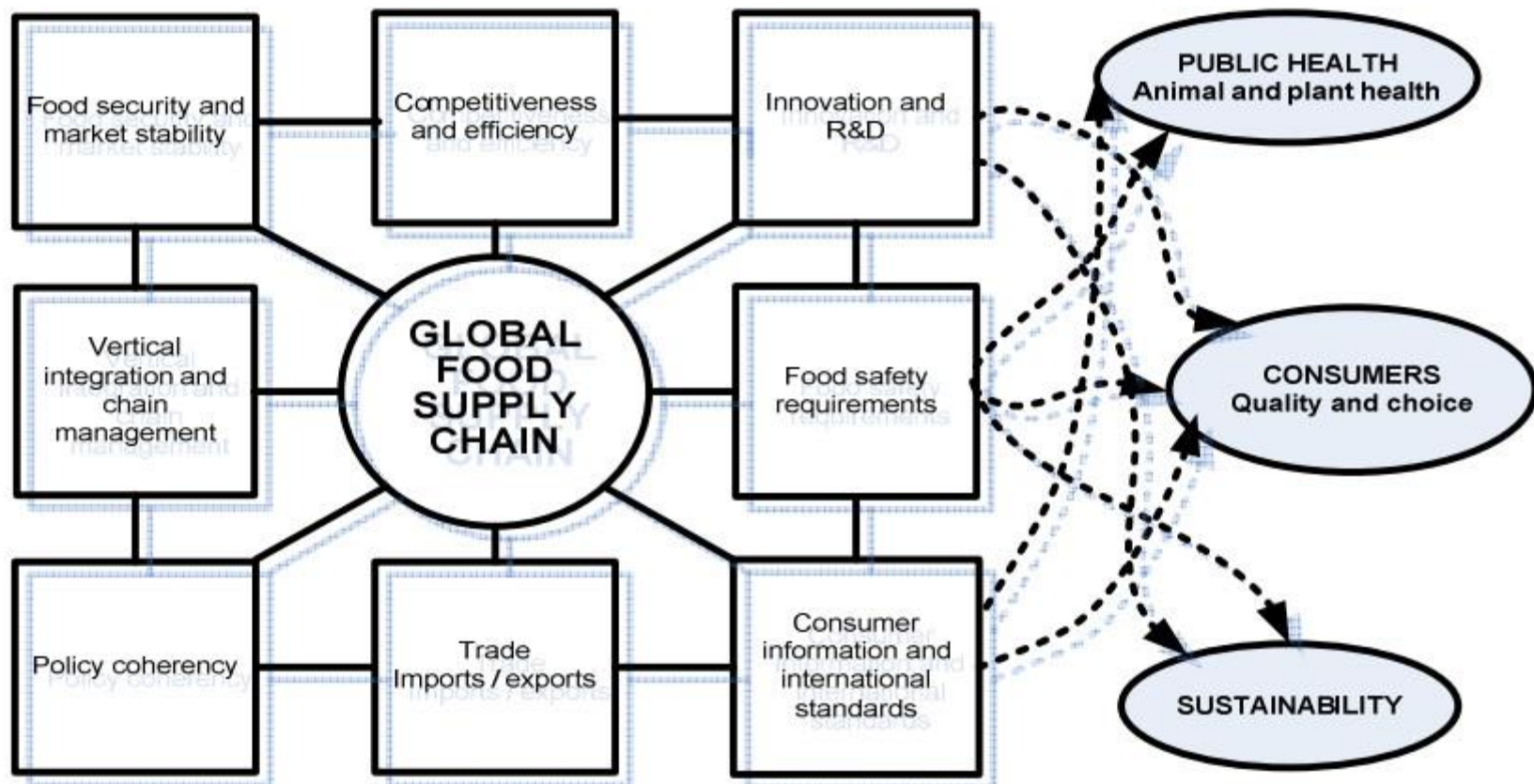
The FOB price is for a standard Uganda grade 15 robusta. Returns for exporters are dragged down by lower prices for lesser grades. The retail price is the September 2001 price for soluble in the UK, drawn from ICO statistics.





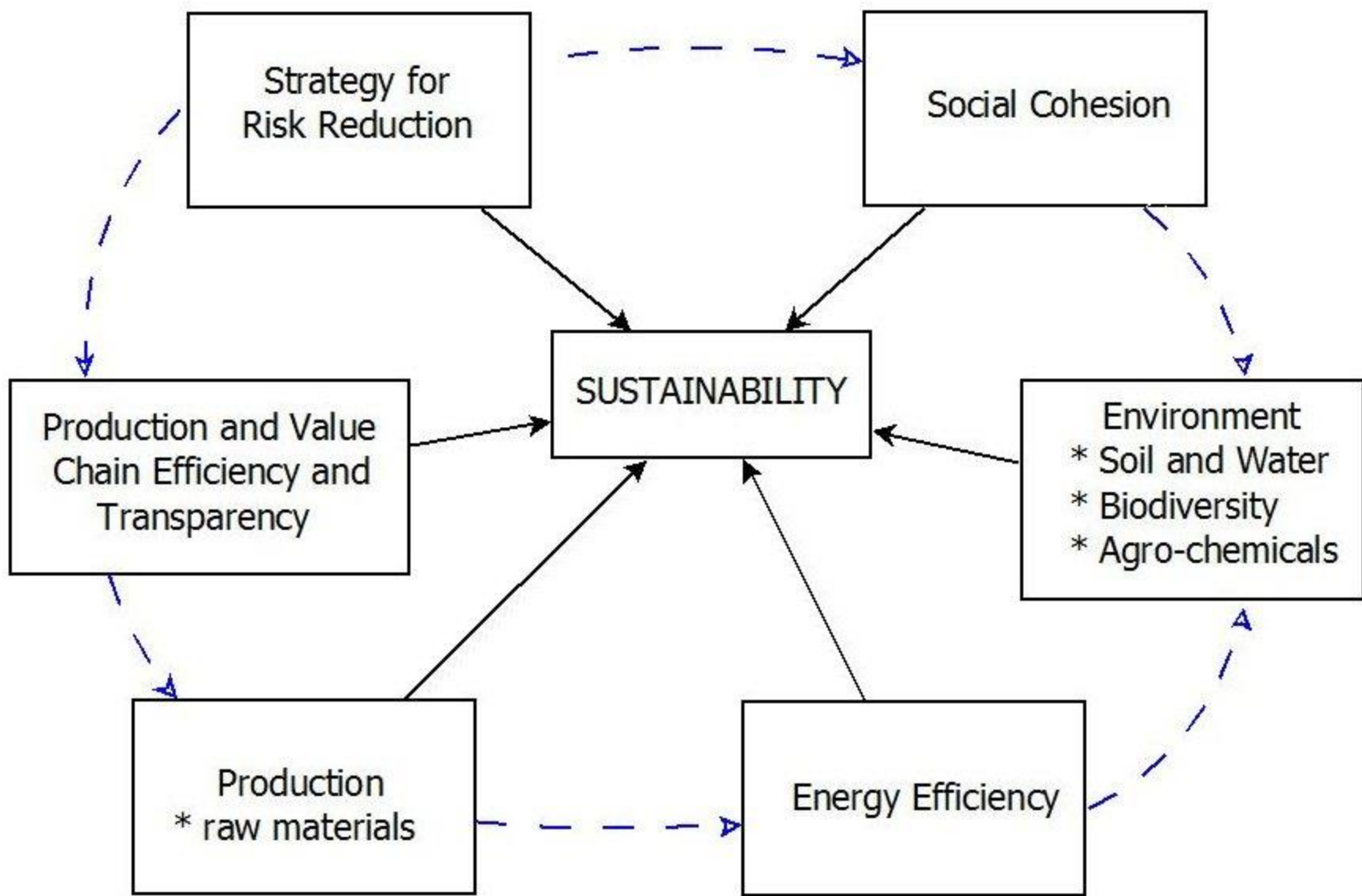






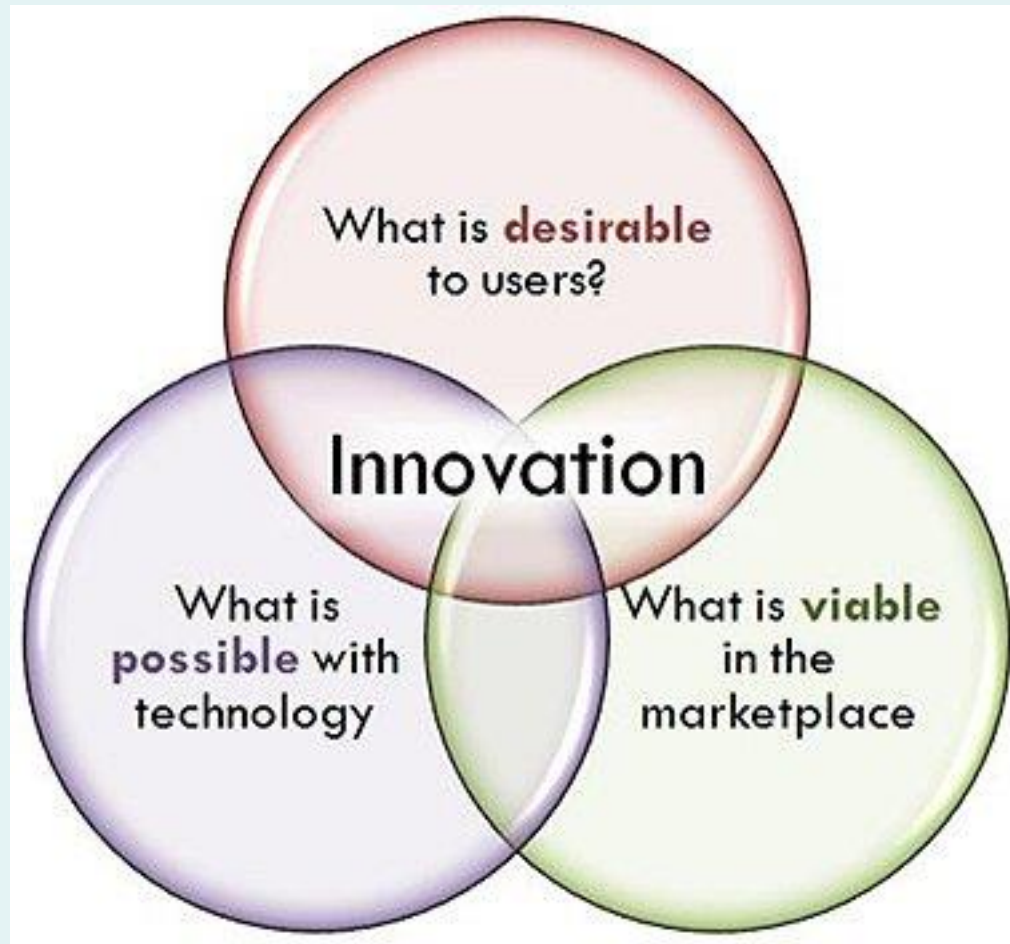
Source: SANCO 02 (based on ETP³)

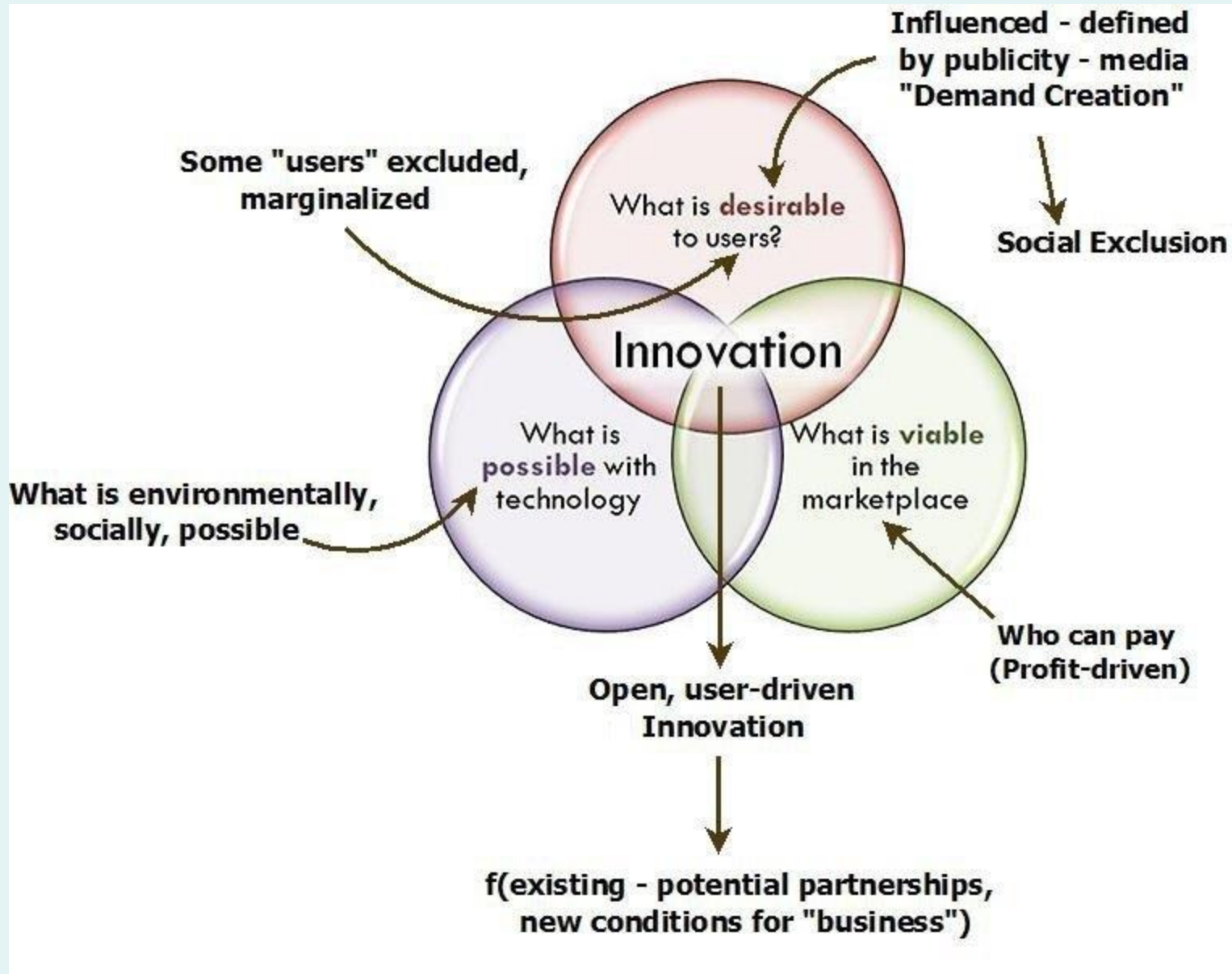
How to Address the Sustainability Challenges of the Production-Value Chain System



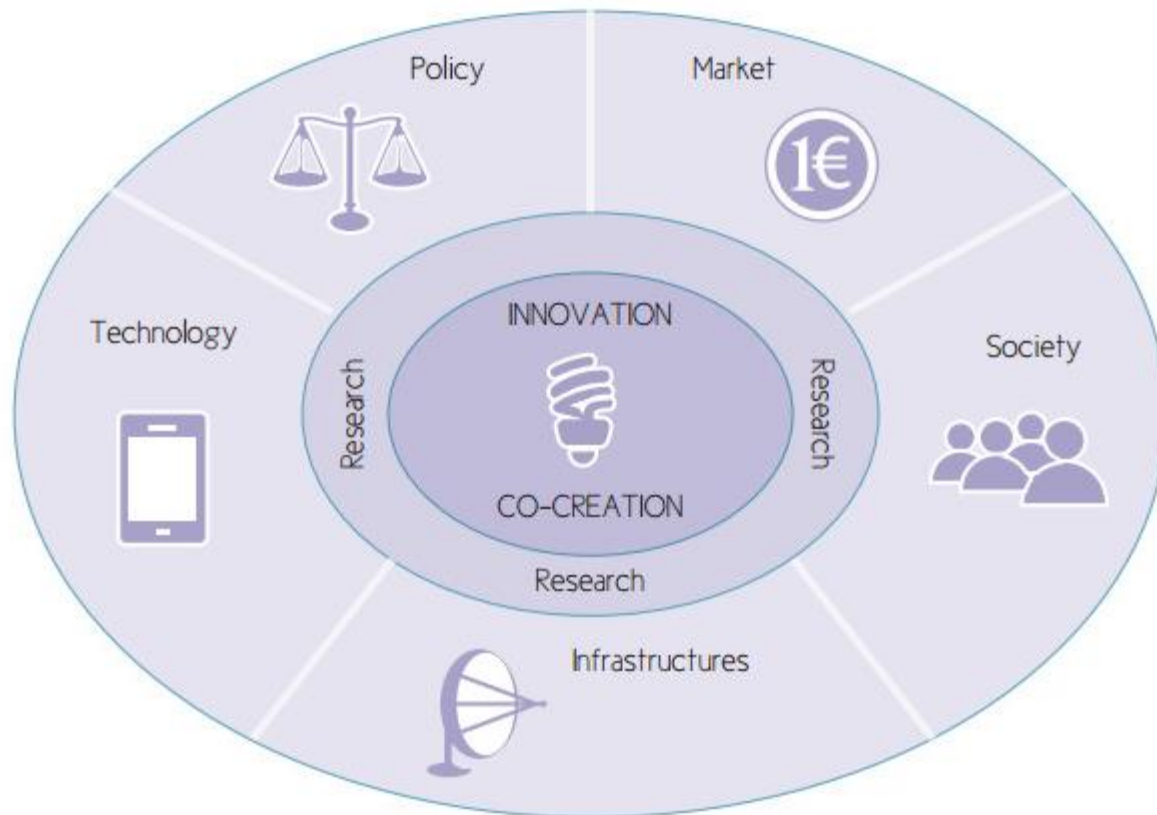
The Innovation Process as the Motor of Development

The traditional conception of innovation

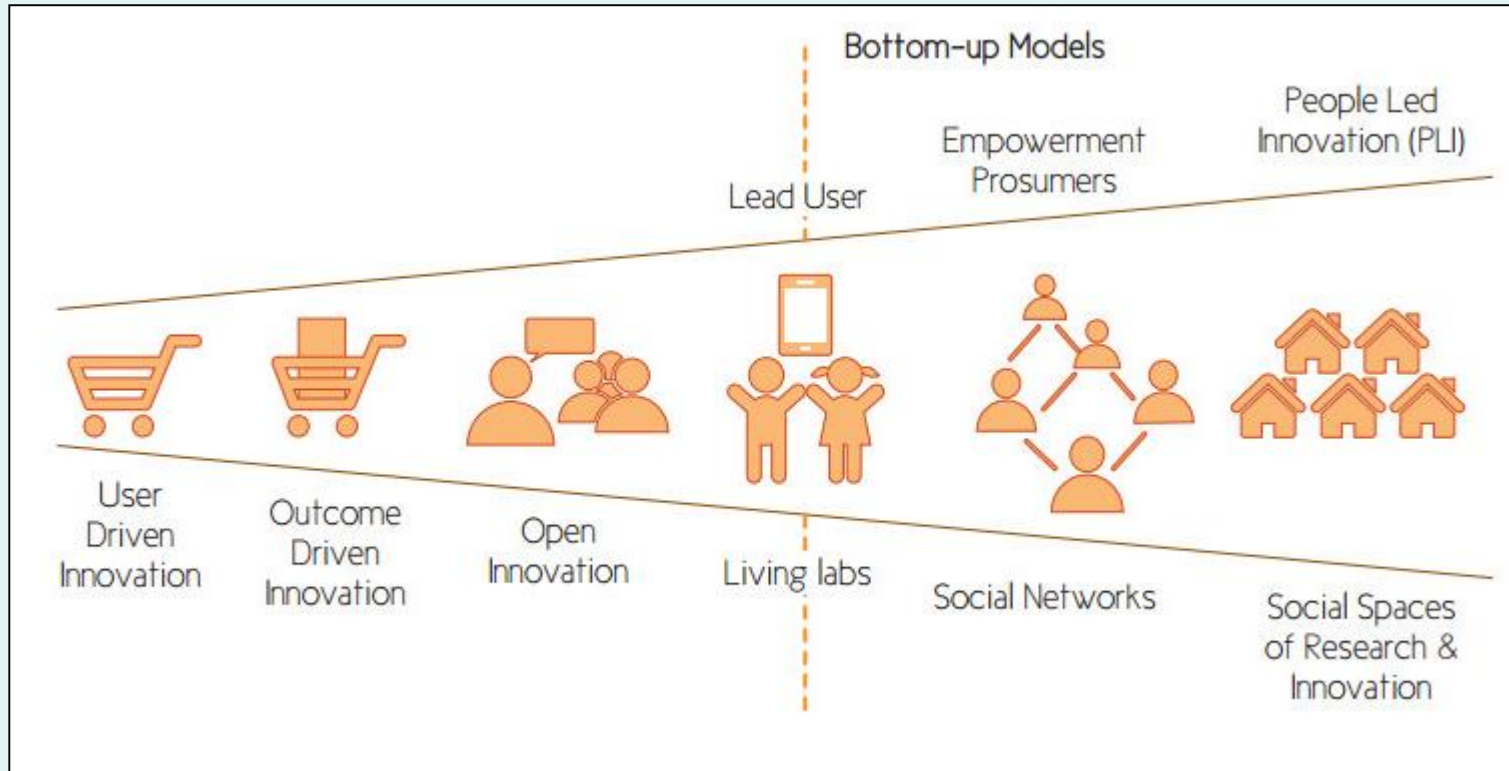




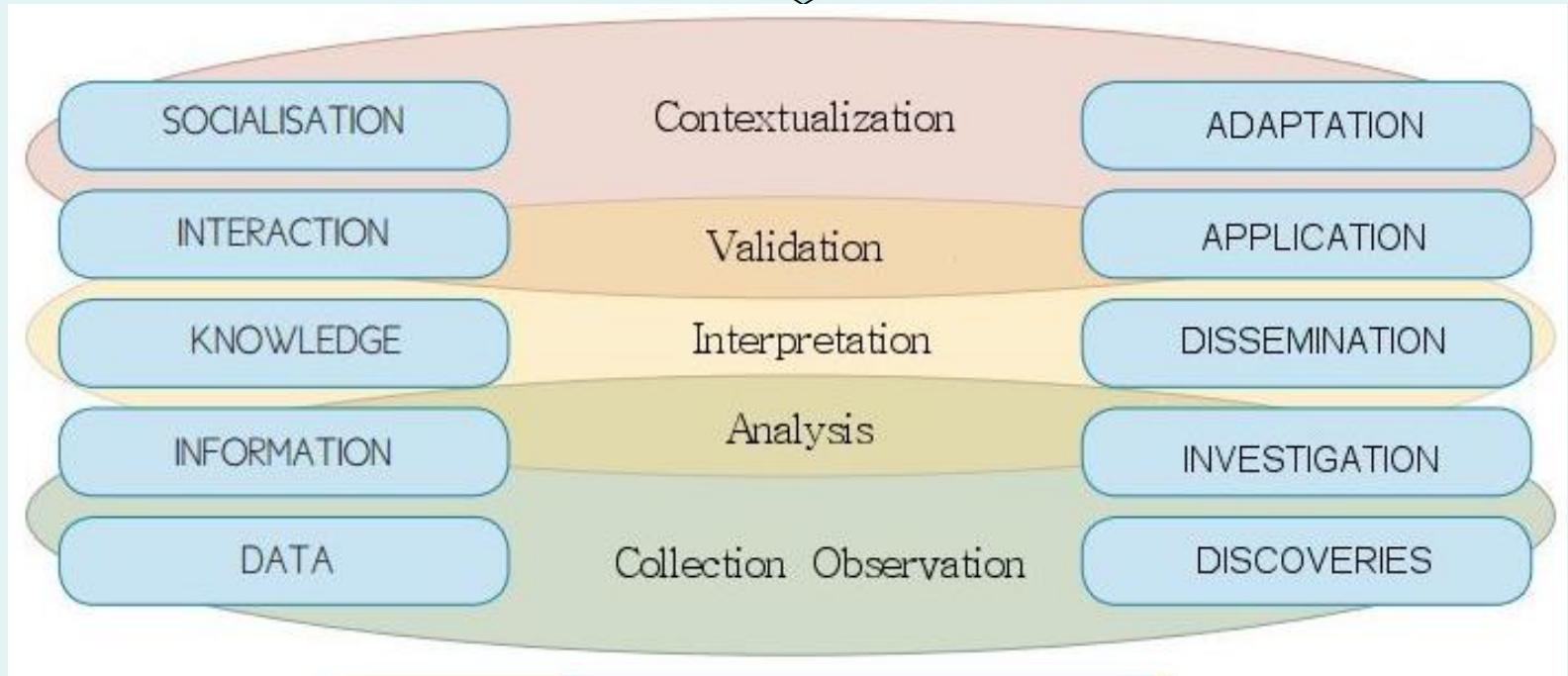
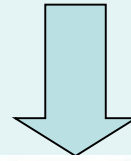
Social Spaces for Research and Innovation five elements:
policy, market, society, infrastructures
and technology



The Social Validation Process in Social Spaces for Research and Innovation (SSRI)



A Holistic Interoperability Paradigm for Innovation Using Social Validation



SOCIALISATION	Stances are formed, groups interact, decisions taken that influence others
INTERACTION	Actors and actions interact in causal linkages influencing process outcomes
KNOWLEDGE	Information is contextualised into dynamic processes and conditions of relevance
INFORMATION	Metadata applying interoperable semantic models is applied and information processed
DATA	Raw data is collected, stored and made available for access

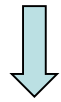
Processes

Economic, Social, Climatic,
Environmental, Ecological, Policy, Financial

Response Units



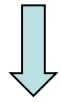
Future Scenarios



Stakeholder
Analysis



Policy,
Programmes

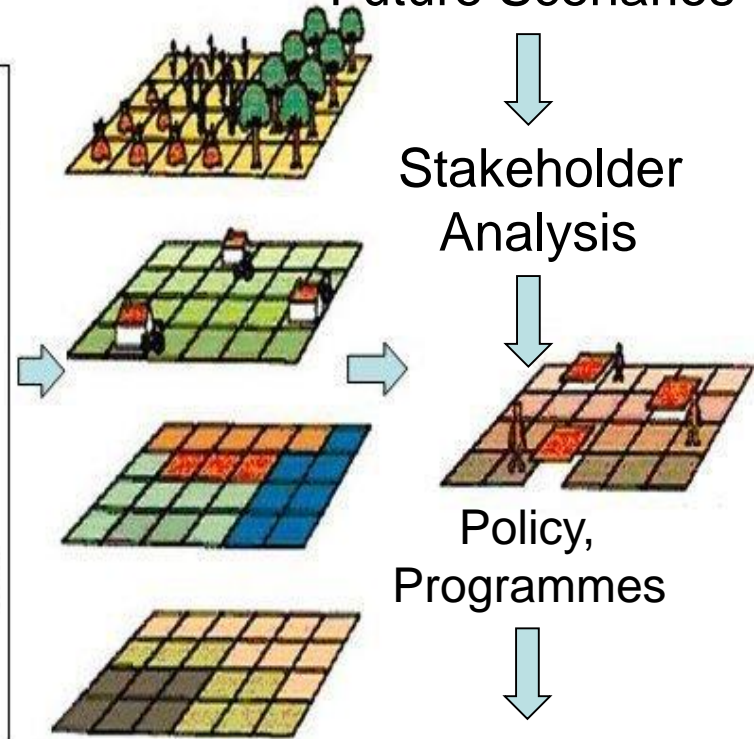
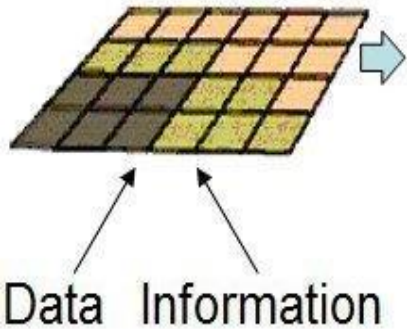
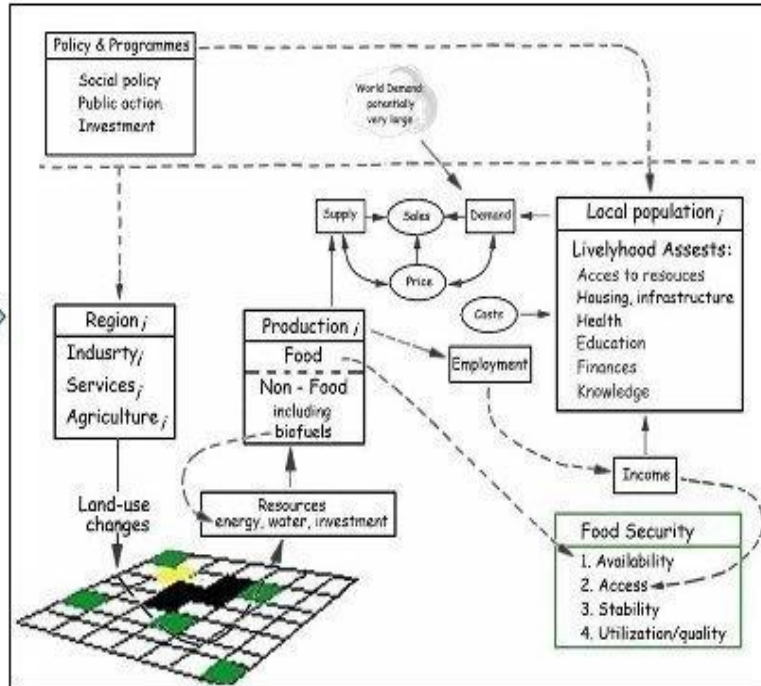


Enhanced Innovation

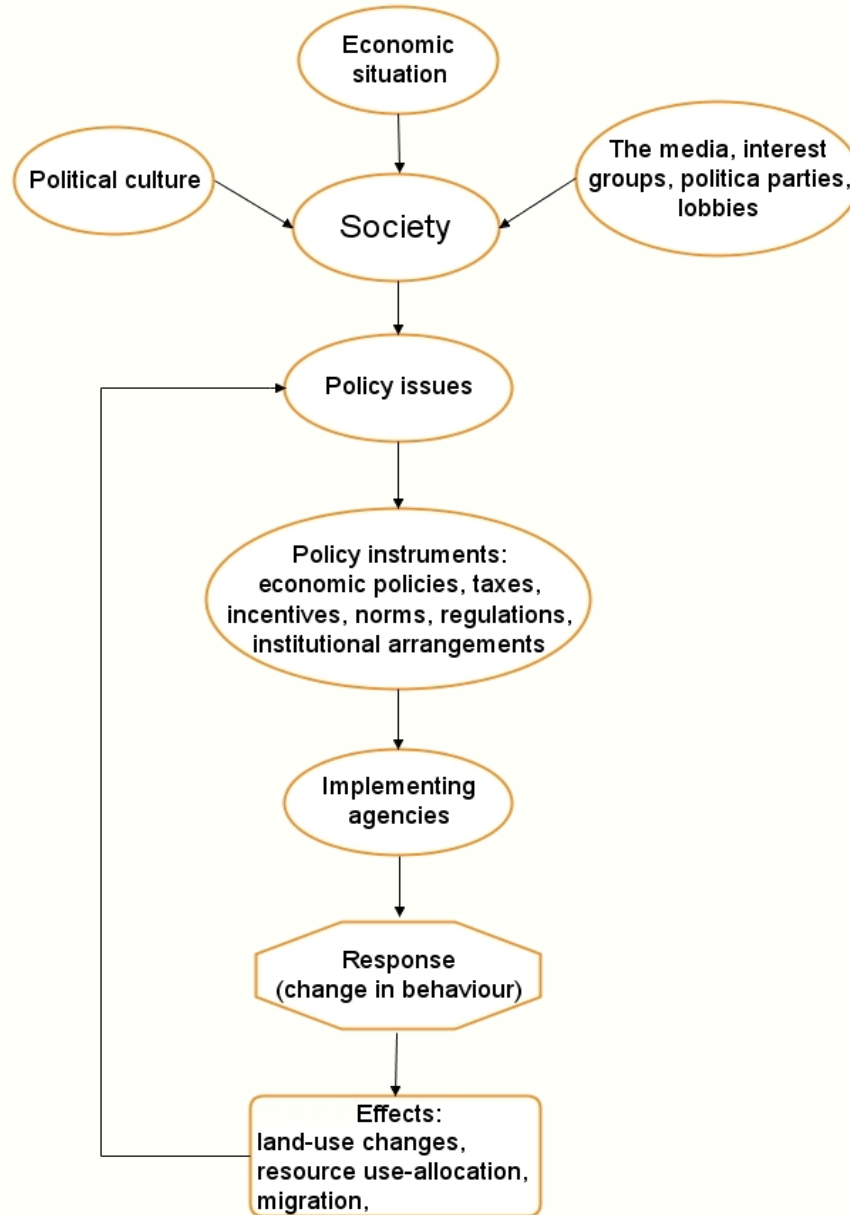


Sustainable Livelihoods
& Development

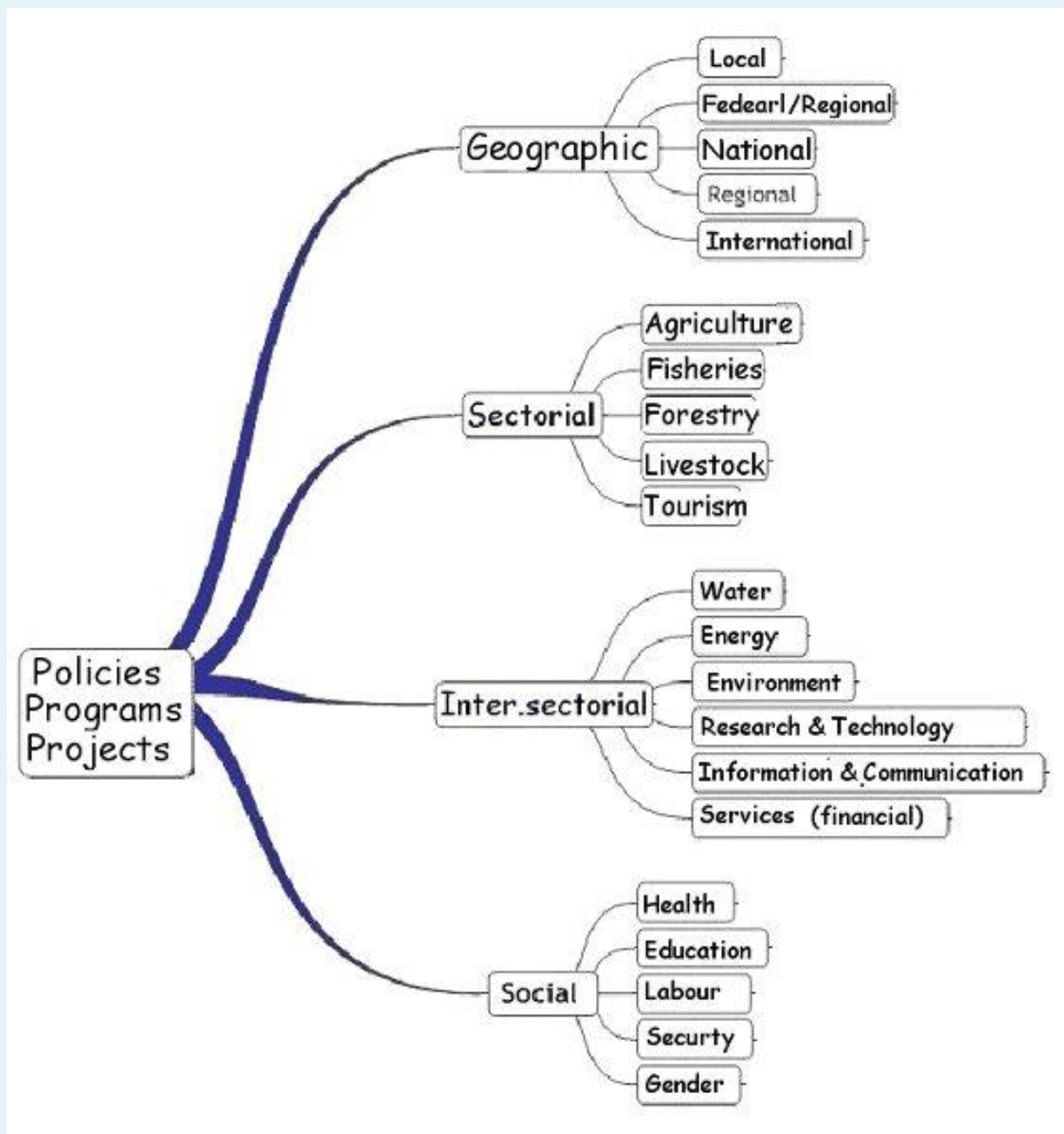
Dynamic Model



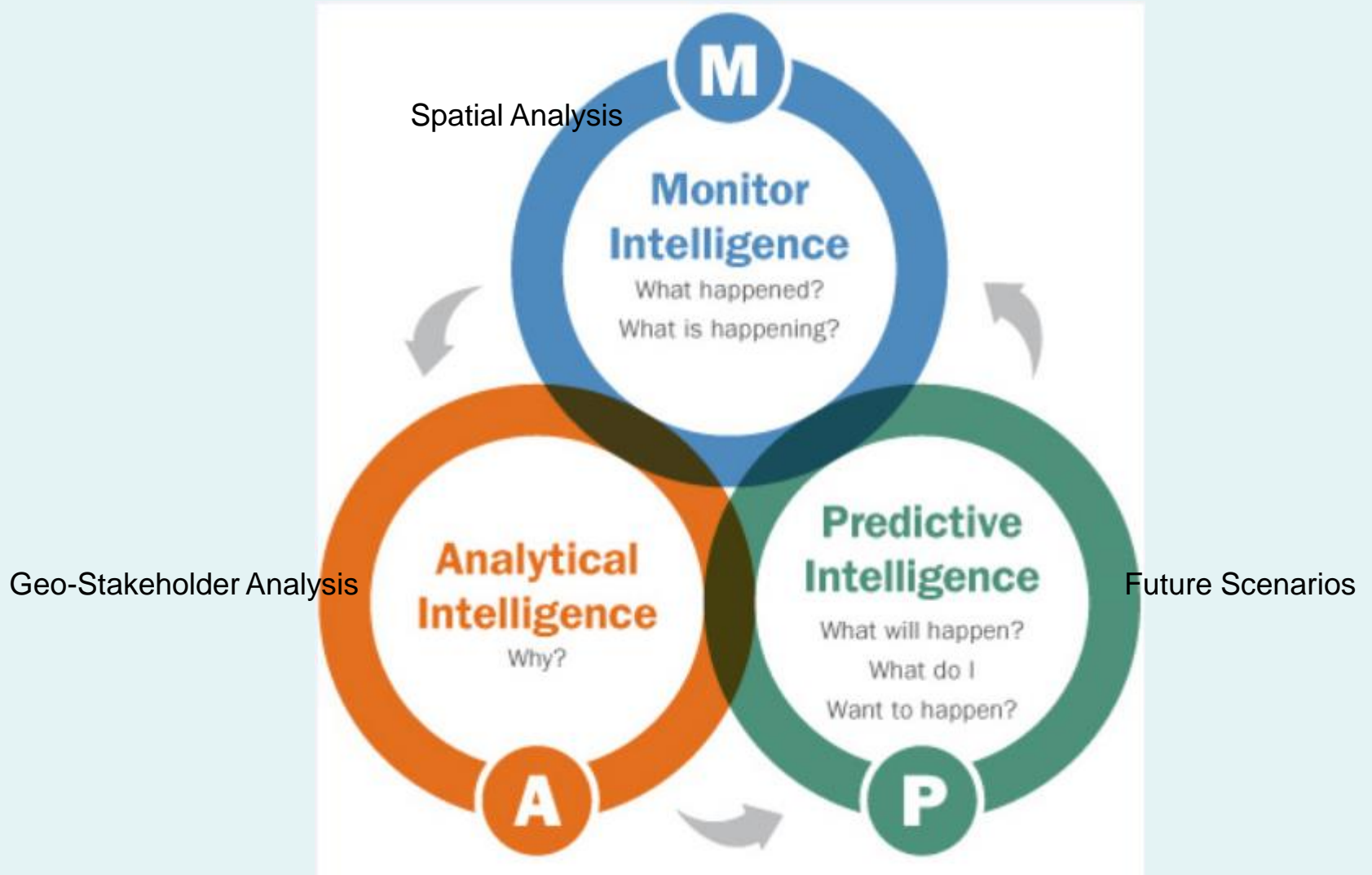
The Policy Dimension



The Dimensions of Policy Considered in Future Scenarios

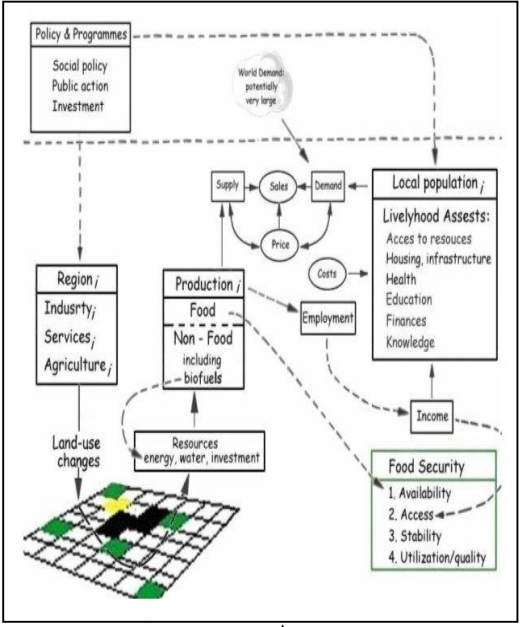
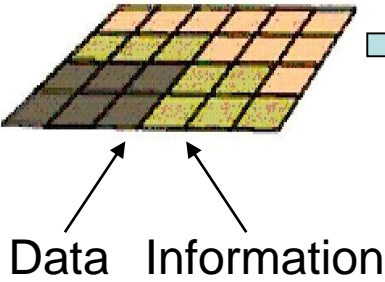


Components of the Innovation Intelligence Platform For Developing and Mapping Future Scenarios

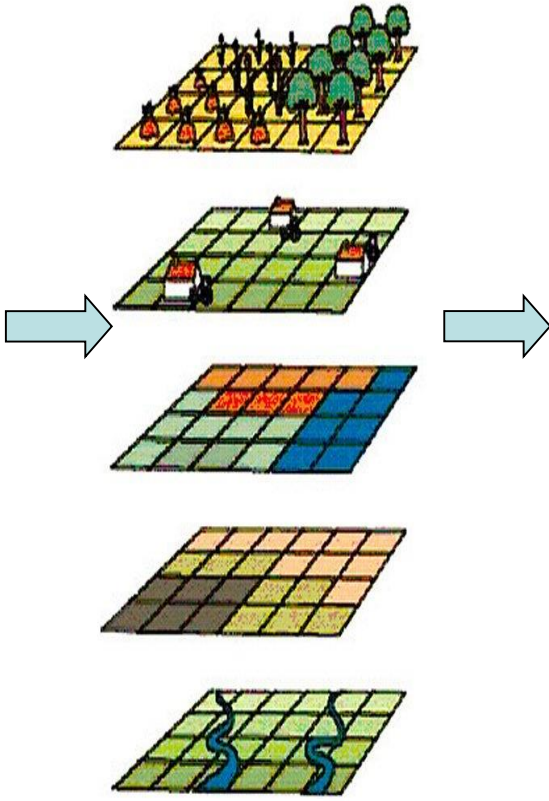


Policy and Innovation Assessment Scenarios

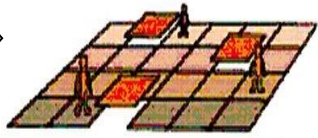
Dynamic Models



Stakeholder Analysis

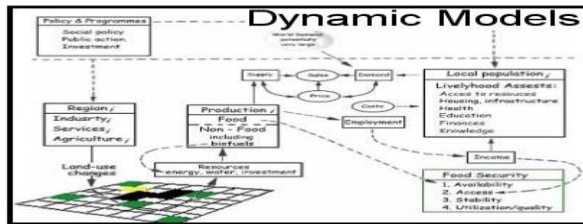


Key Constraints
Obstacles
Threats



Alternative Solutions
Priorities for Successful Innovation

Cloud Computing



DATABASES





Visor Habitats | La Palma | Cuadros de mando

Bienvenido: SpagoBI User | Cerrar sesión

Mapa

sbi.georeport.controlpanel.title

sbi.georeport.layerpanel.title

- Background layers
 - OpenStreetMap
 - GoogleMap
 - Google Hybrid
- Overlays
 - La Palma

Misurazione

sbi.georeport.analysispanel.title

Indicador: Turismo

Método: Intervalos

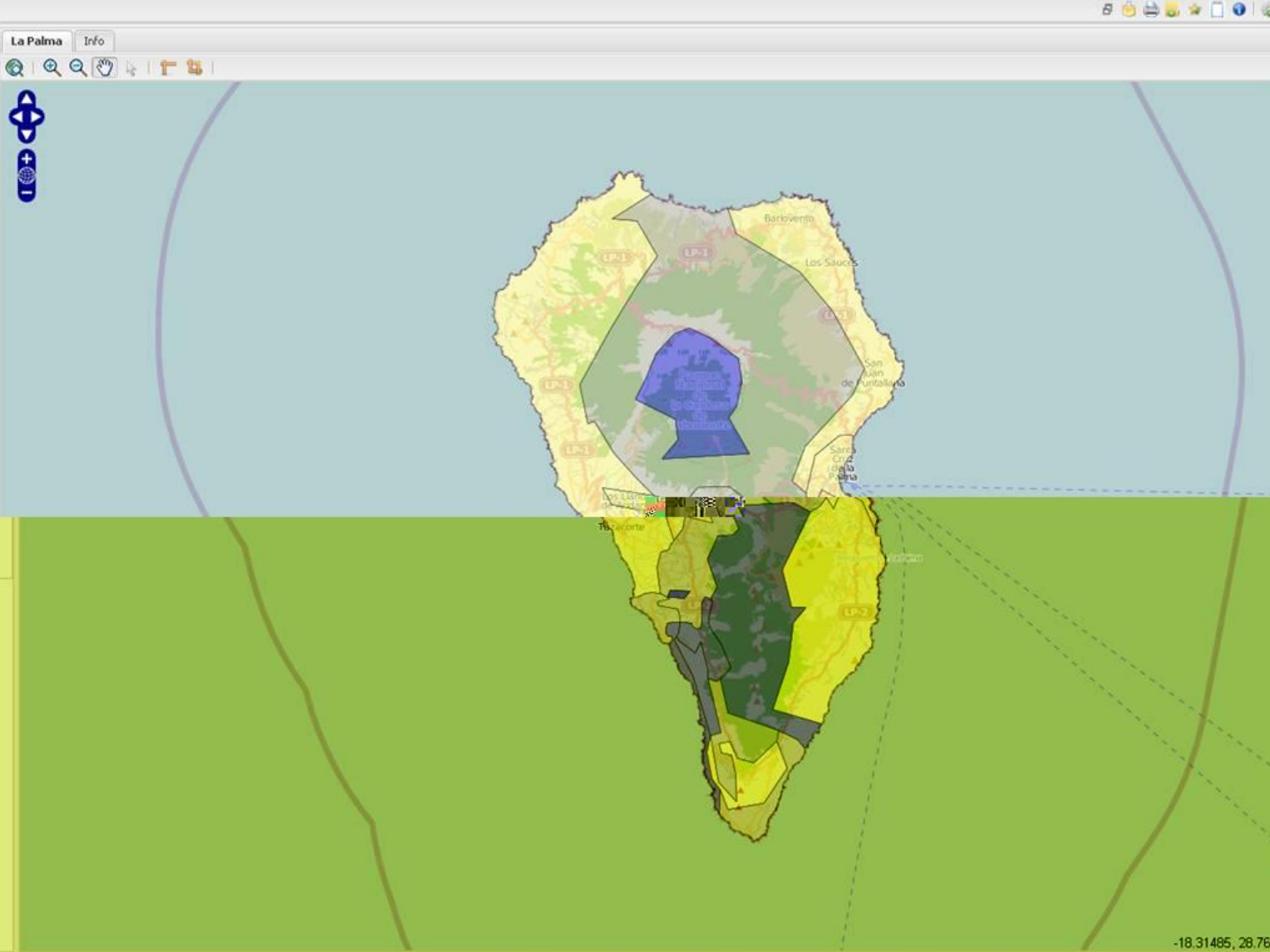
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Color: #0000FF

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■	0.6 - 1.2 (5)
■	1.2 - 1.8 (0)
■	1.8 - 2.4 (5)
■	2.4 - 3 (1)





Mapa

sbi.georeport.controlpanel.title

sbi.georeport.layerpanel.title

- Background layers
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- Overlays
 - La Palma

Misurazione

sbi.georeport.analysispanel.title

Indicador: urbano

Método: Cuantiles

Número de intervalos: 5

Color: #FFFF99

Color: #FF6600

sbi.georeport.legendpanel.title

	0 - 0 (0)
	0 - 1 (4)
	1 - 1 (0)
	1 - 3 (8)
	3 - 3 (5)

La Palma Info



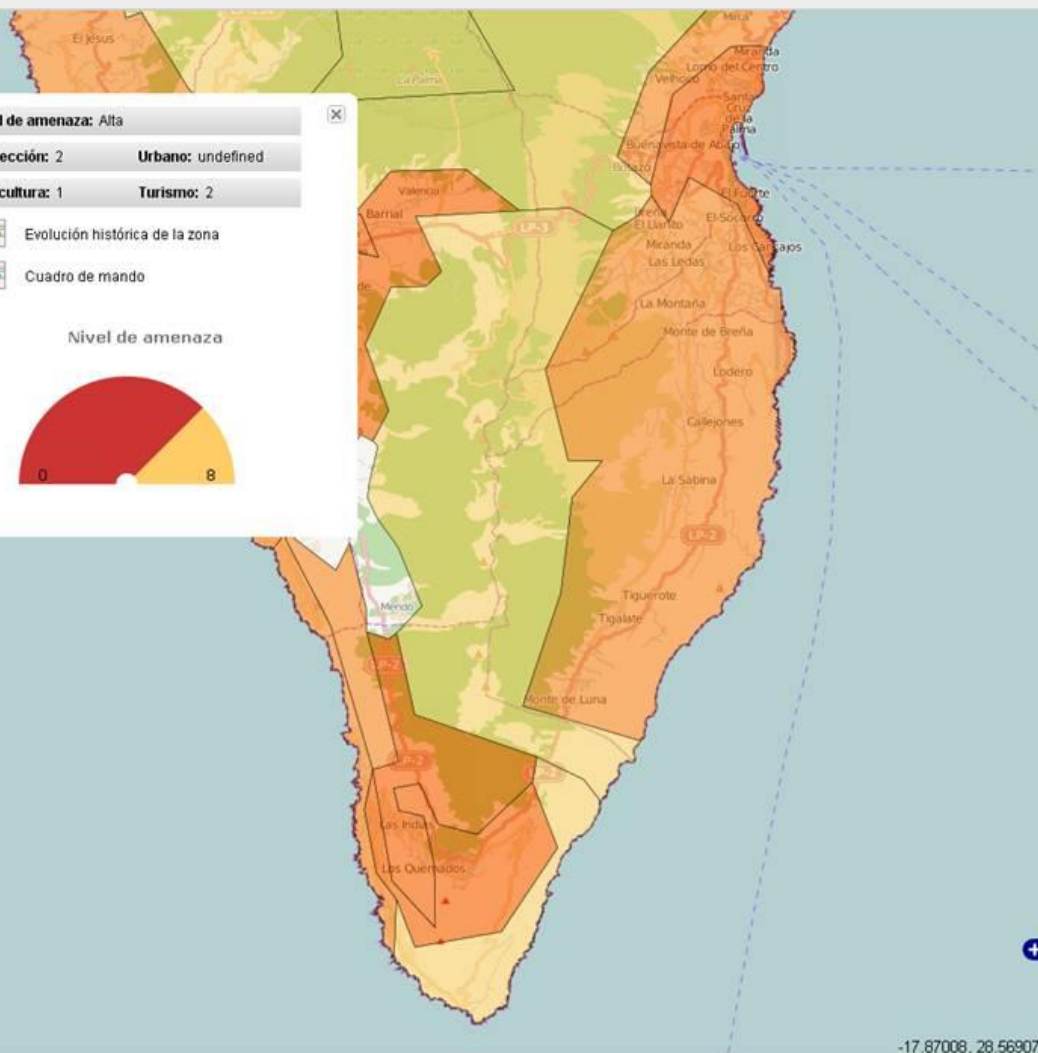
Nivel de amenaza: Alta

Protección: 2 Urbano: undefined

Agricultura: 1 Turismo: 2

- Evolución histórica de la zona
- Cuadro de mando

Nivel de amenaza





Mapa

sbi.georeport.controlpanel.title

sbi.georeport.layerpanel.title

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Misurazione

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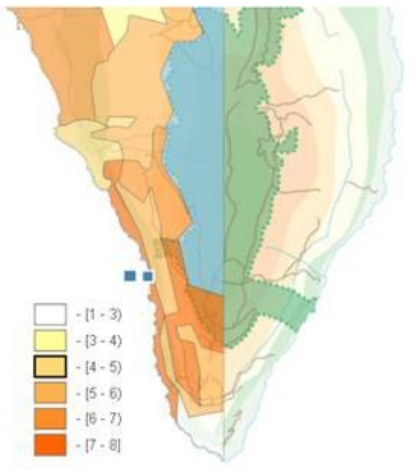
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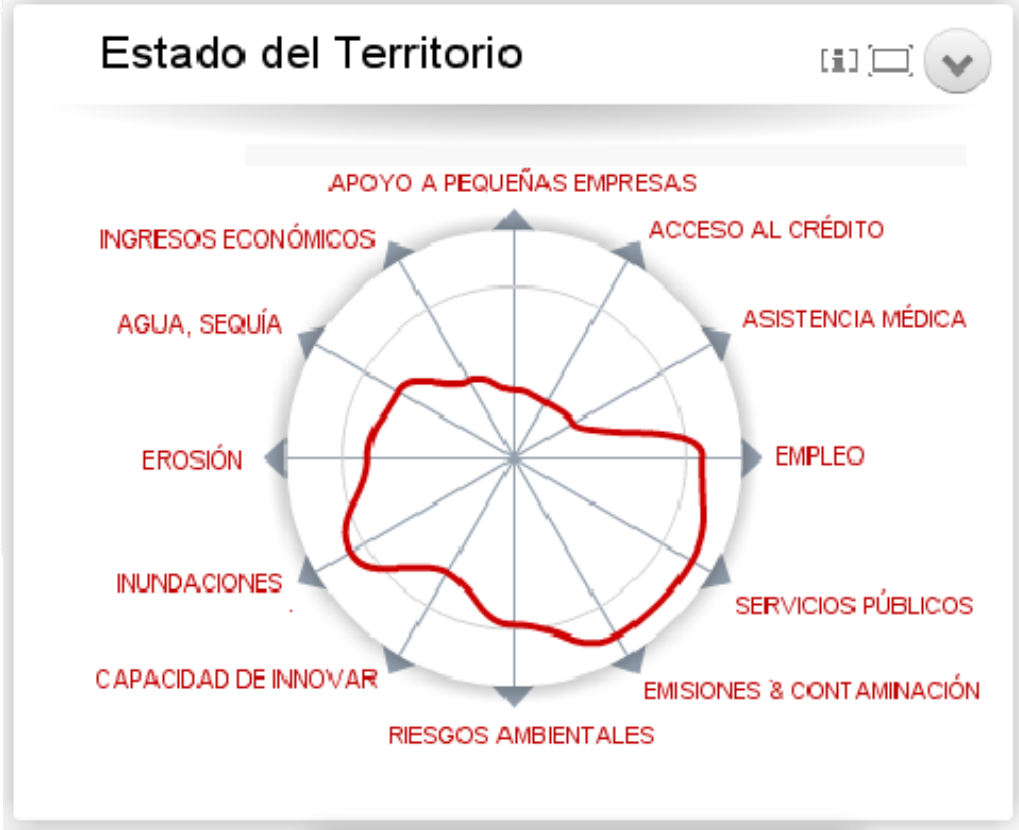
0 - 0 (0)
0 - 1 (4)
1 - 1 (0)
1 - 3 (8)
3 - 3 (5)

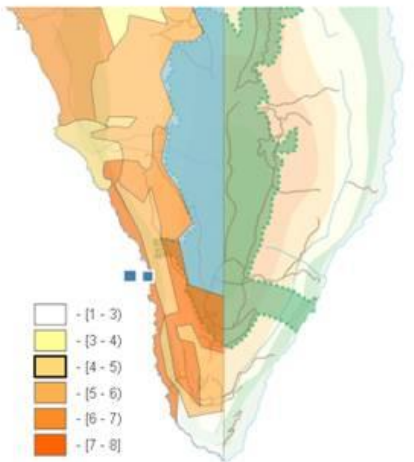




Zona 5

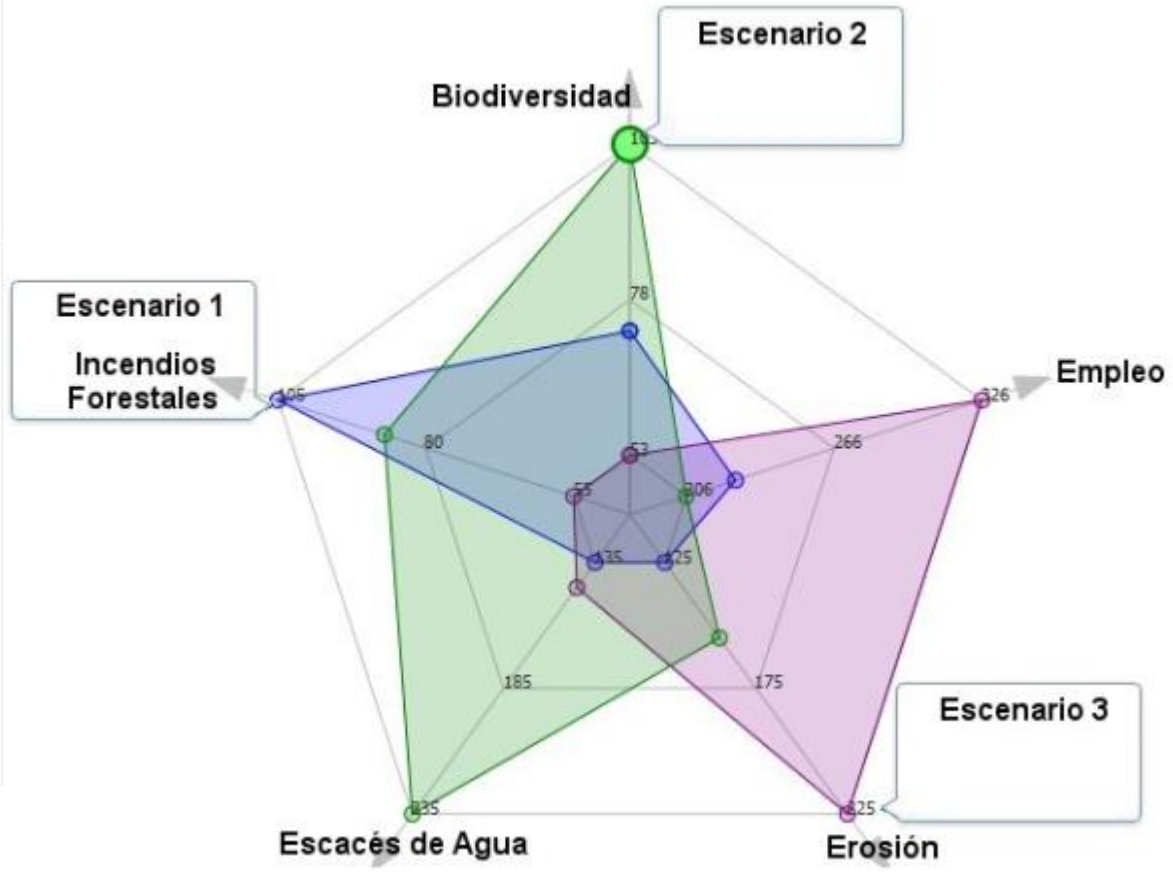
Ver detalle
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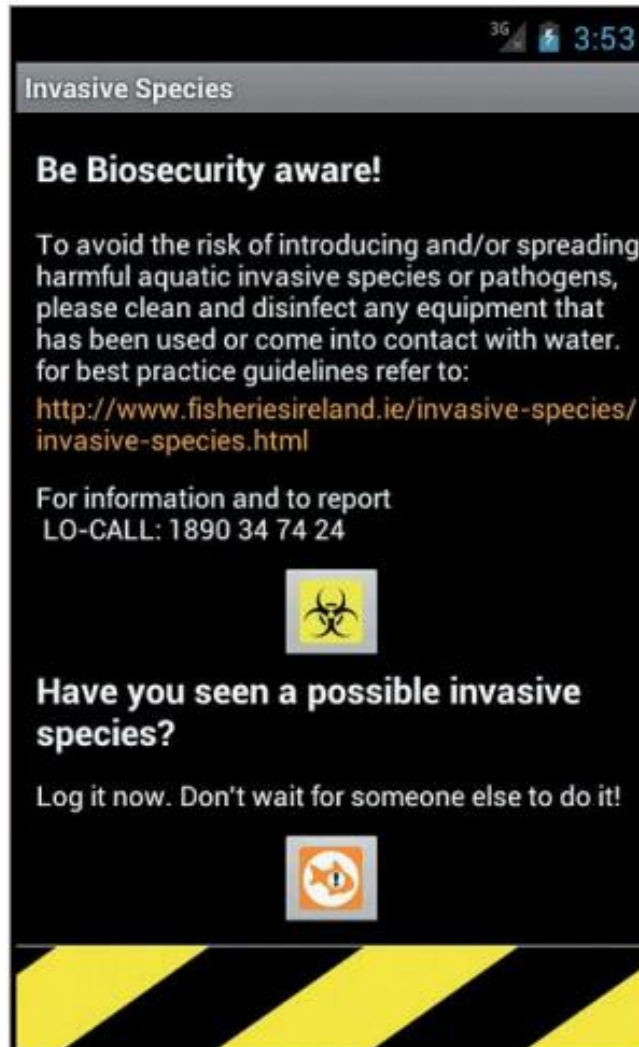
Zona 5

Ver detalle
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Wild Salmon Conservation Monitoring 1

HABITATS AIS Phone app various screenshots



Wild Salmon Conservation Monitoring 2

HABITATS AIS Phone app various screenshots

Invasive Species

Add Upload Verified

-  **Curly-leaved Waterweed**
Lagarosiphon major
-  **New Zealand Pygmyweed**
Crassula helmsii
-  **Nuttall's Pondweed**
Elodea nuttalli
-  **Water Fern**
Azolla filiculoides
-  **Giant Rhubarb**
Gunnera tinctoria
-  **Giant Hogweed**
Heracleum mantegazzianum
-  **Japanese Knotweed**
Fallopia japonica
-  **Himalayan Balsam**
Impatiens glandulifera
-  **Bloody-red Shrimp**

Invasive Species

Signal Crayfish 

Pacifastacus leniusculus



Impact:
This aggressive species directly preys on native crayfish but also competes directly for food and space. It is a carrier of 'crayfish plague', a fungus that is lethal to native crayfish. Can undermine river banks through burrowing activities.

Invasive Species 

Chinese Mitten Crab

Erocheir sinensis

24 Apr 2012 14:54:37 GMT
Latitude: 0.0
Longitude: 0.0
Recorded By:

Notes:

Photo Prompt:
Try and get a clear, close-up photo of the whole animal. 

Invasive Species

Add Upload Verified



The map displays the region around Athlone, Ireland, with major roads (M6, M7, E20, E201) and towns (Strokestown, Longford, Roscommon, Mullingar, Tullamore, Portlaoise, Roscrea, Birr, Portlaoise, Mountmellick, Portlaoise, Nenagh) marked. A red location pin is placed near Athlone, indicating the recording site.



Sighting verification Map

Welcome jcantwell [Log out]

[Home](#) | [Sightings](#) | [User Management](#)

Home screen: Invasive Species Management System

Verified Sightings Unverified Sightings -- All --



For Sustainability, the innovation-driven development process:

- Needs to engage communities of citizens, businesses & public authorities in a co-creation-based innovation process of uptake & adoption;
- Open Social innovation must go much further in promoting interoperability & inter-connection of groups & communities, engaging user community stakeholders to overcome the tendency of industry to build closed systems;
- Support the linkage of multi-level governance & inter-community networking at various cultural & geographical scales

Thank You

