

A few reflections around the diversity of rural areas (and their links with the cities)

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PROXIMITY 

The persistence of rural areas

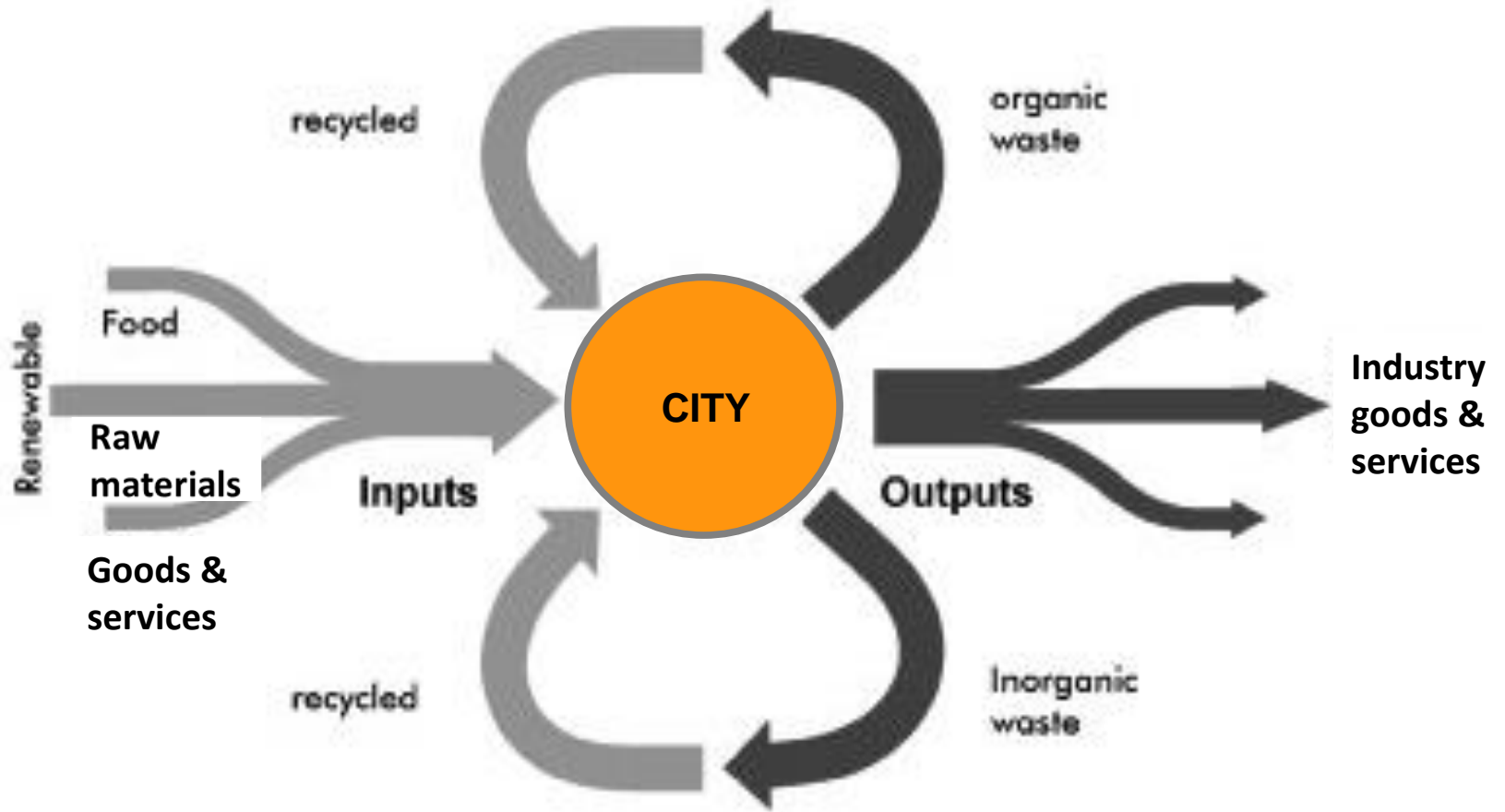
- Rural areas represent the **major part of world's surface** area – including 37.7% of all agricultural land
- They are home to approximately **3.4 billion inhabitants**, i.e. 46% of the global population (2014 World Bank),  an essential player in the present and future of humanity and Earth
- They are characterized by **high diversity** between and within regions and countries; they are highly coveted and are the object of strong competition between nations and regions
- They contain almost all **the resources necessary for human existence**: daily food, sources of energy, metals and polymers necessary for manufacturing, and oxygen they absorb
- They are therefore **central** to the public policies and strategies of interest groups and nations

The diversity of rural areas

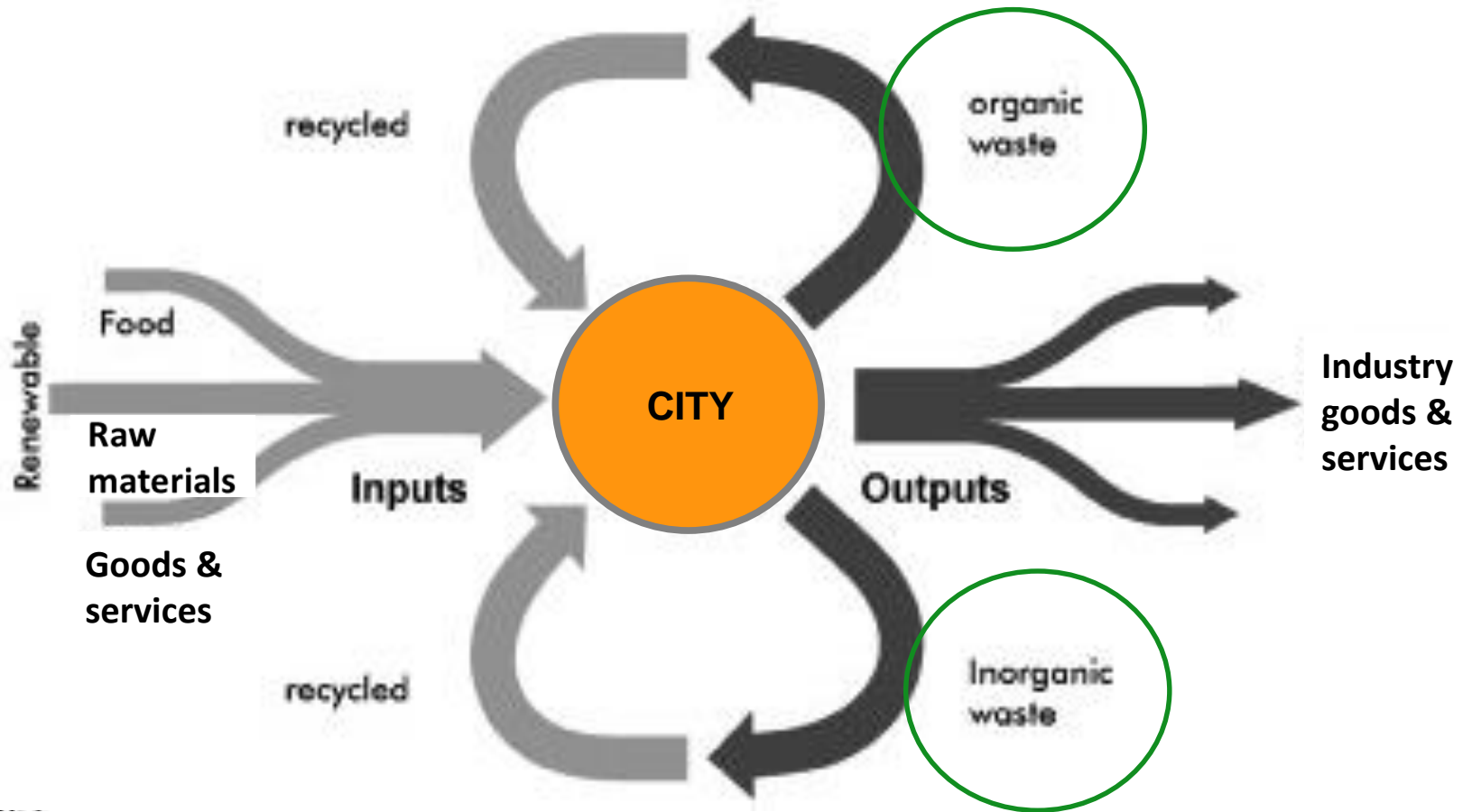
- **City-close** rural areas: more or less integrated with the cities
- **Intermediate regions** with both urban and rural areas often show a positive development
- **More peripheral** rural regions: some of them might have a potential to achieve smart development through exploiting local amenities and other resources: tourism, nature- and culture based amenities
- **Rural peripheral regions may have varying potential** when it comes to their access to resources and social infrastructures:
 - access to different types of amenities (tourism, leisure, e.g., protected areas, coastal areas)
 - value creation and innovations based on local resources (cultural environments and built heritages, local food...)

**Rural areas, strongly linked with the
cities**

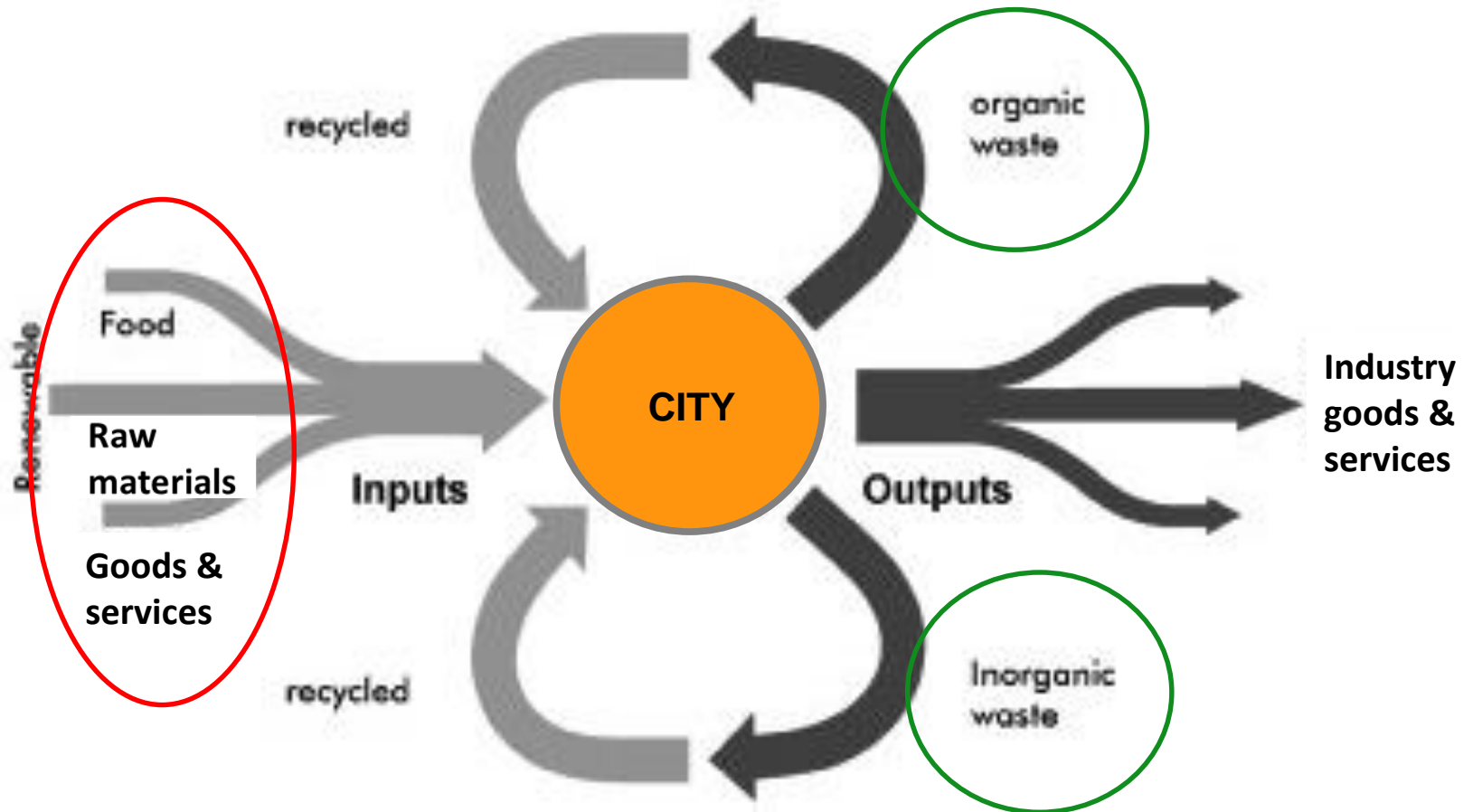
Urban metabolism



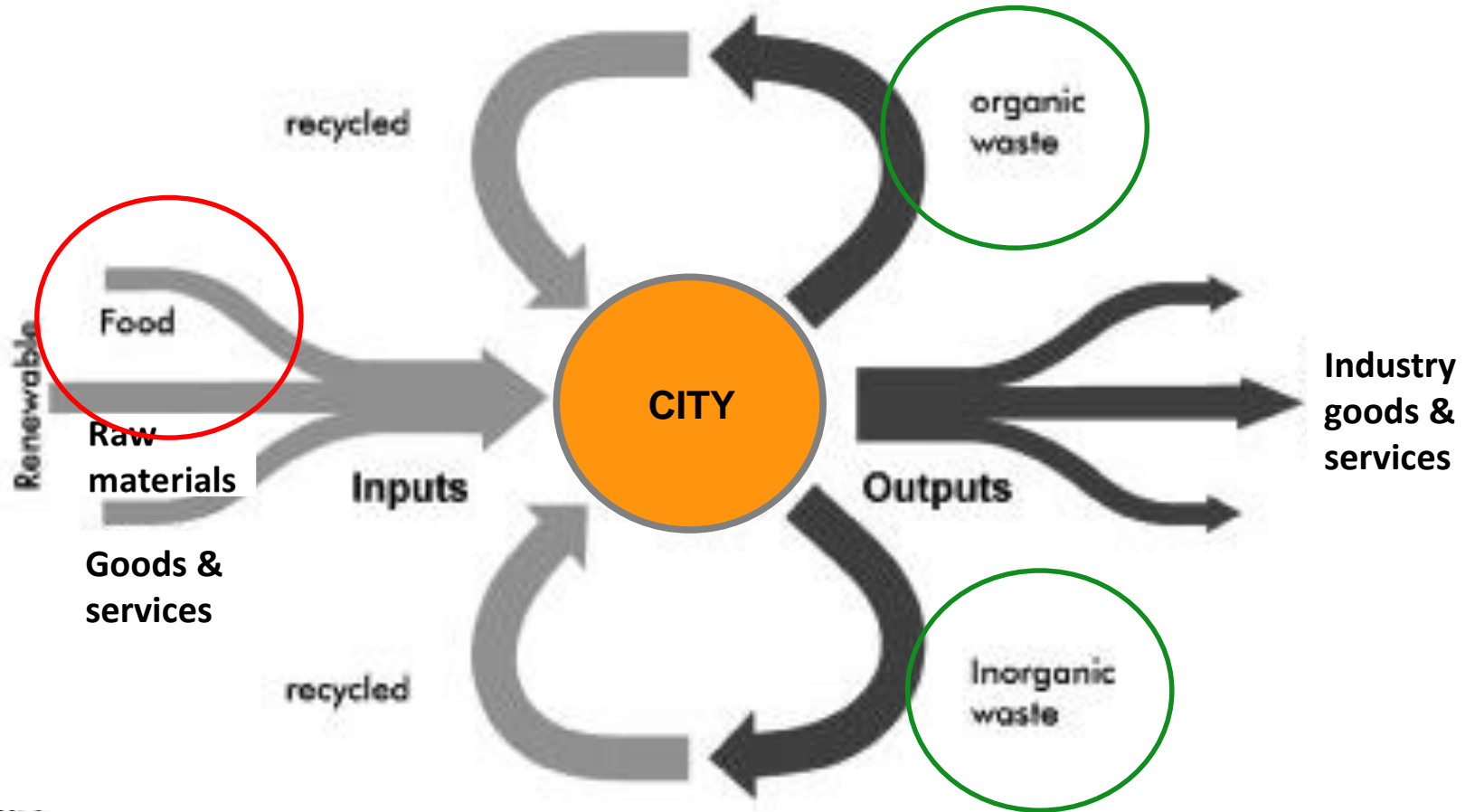
Urban metabolism



Urban metabolism and rural functions



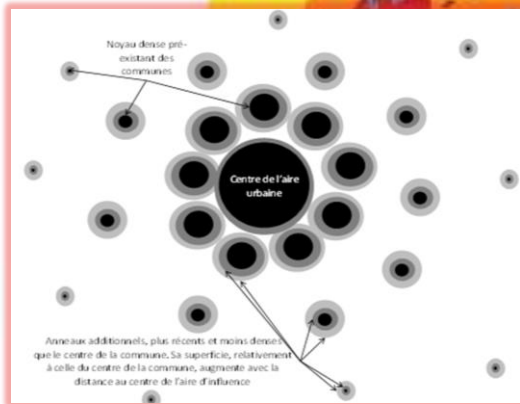
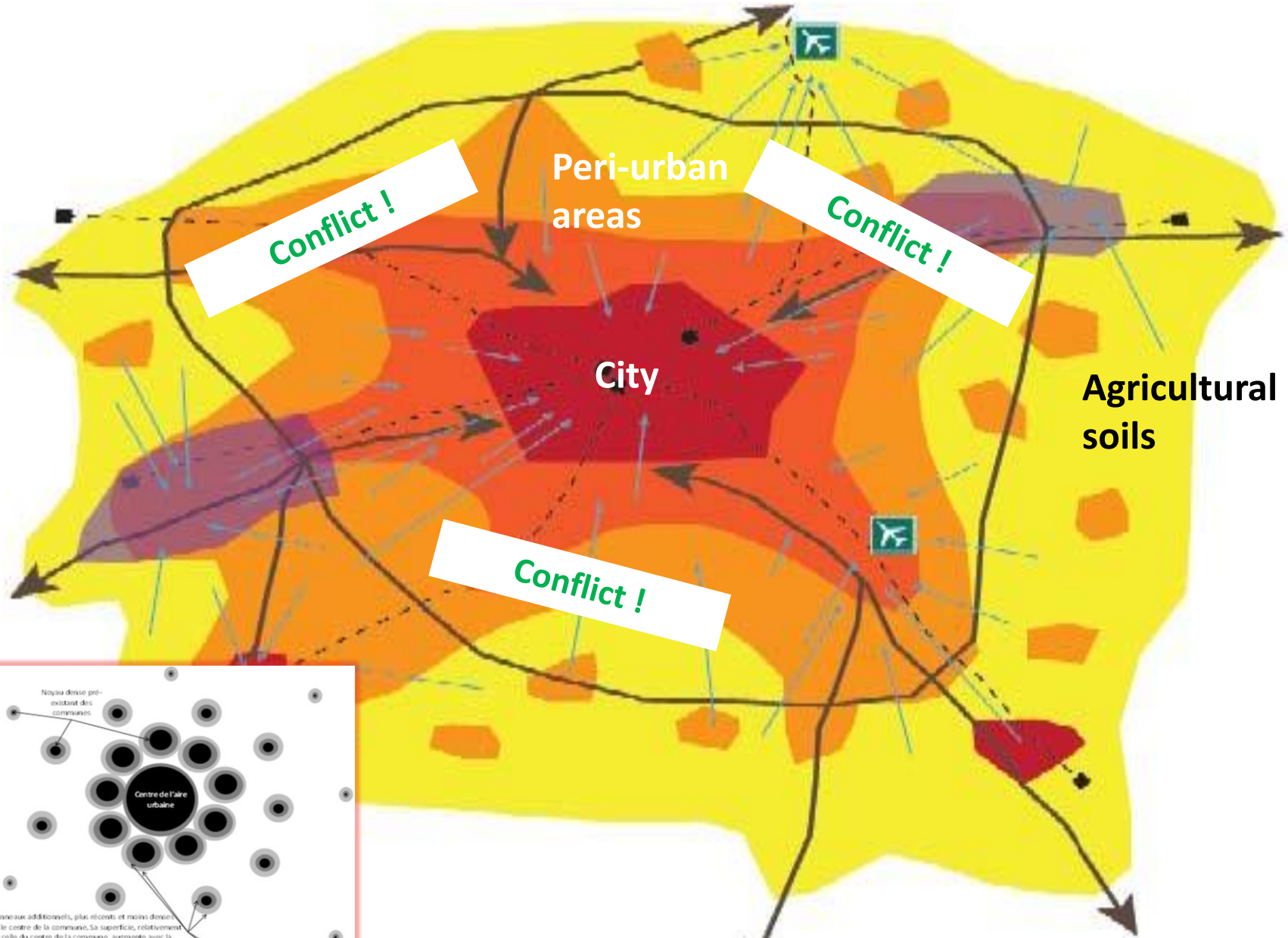
Food for the city



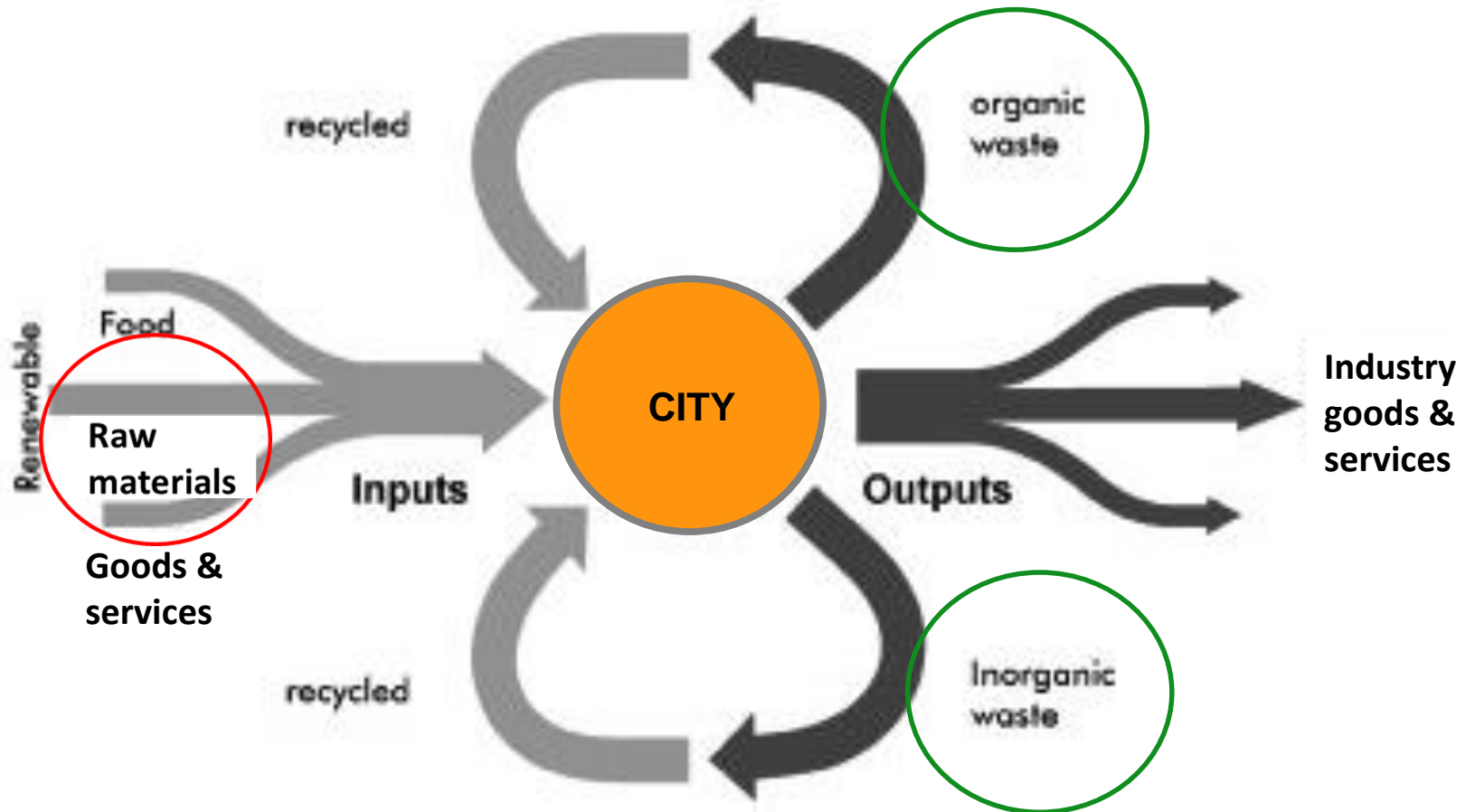
Food for the city

- The ongoing process of urbanization brings **urban poverty** and **food insecurity** (due to high prices of food and shortage of inputs)
- Main question on the agenda: **How to feed the cities?**
- Types of **alimentary goods**:
 - Nutrition
 - Food security or sovereignty
 - Quality of goods (organics, goods of origin, local foods)
- How to **provide** food to the Cities?
- Agriculture within and proximate to the City
- Land use occupation for food production in the World
- Land grabbing

Urban sprawl and land consumption



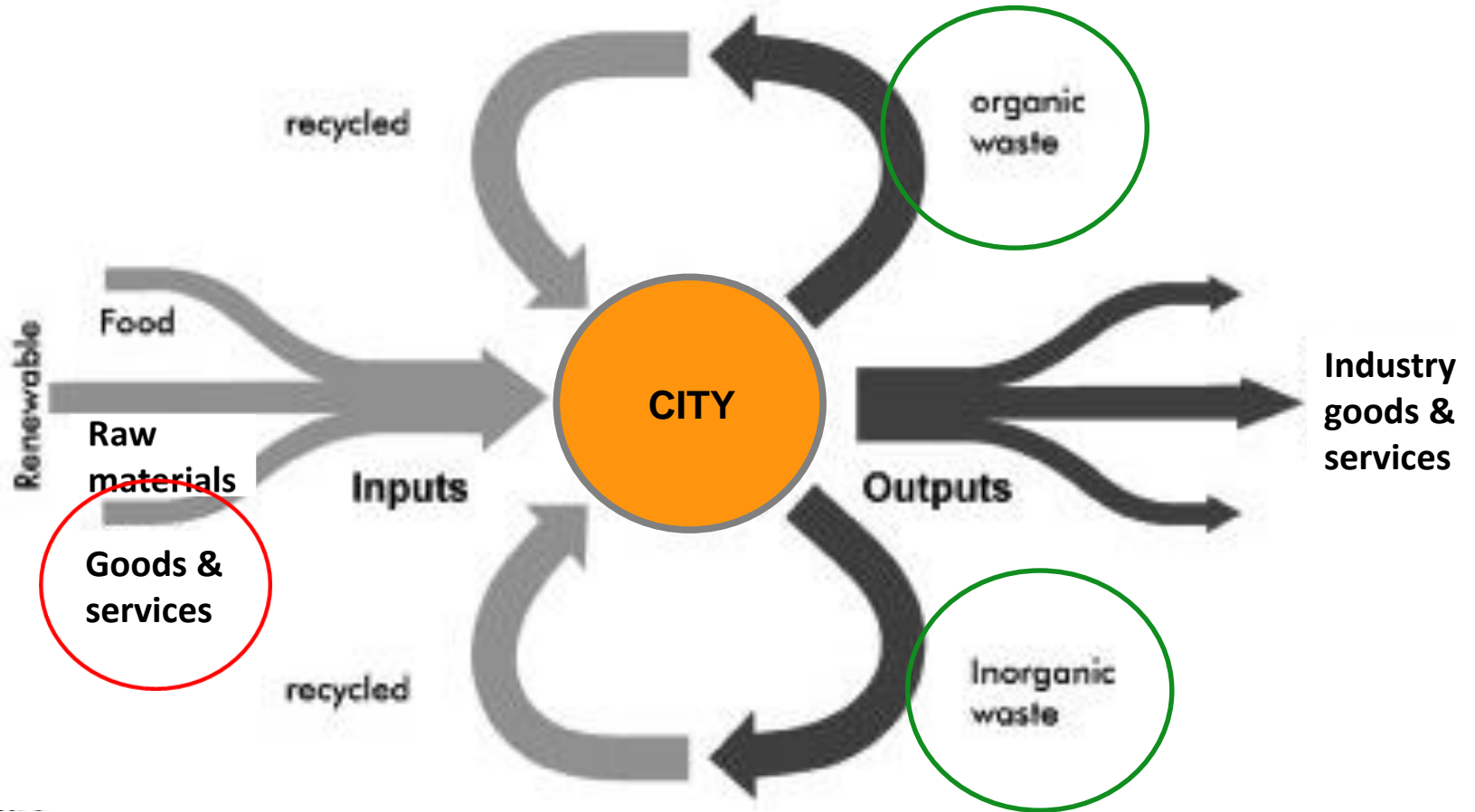
Raw materials/resources



Raw materials/resources

- Cities and urbanized areas need various **raw materials** in order to function
- **Energy**
 - How to provide it to the city: coal, gas, oil, dams... and their impact on rural areas (shell gas for example)
 - Transportation: pipe lines...
 - How to produce it nearby: plants, nuclear energy
 - The question of energy transition, alternatives energies (wind mills)
- **Metals and polymers**
 - Mining
 - Impact on environment and local populations (pollutions, health diseases)
- **Water** supply
 - quality, quantity
 - How to supply it to the city: transports, pipe lines, reservoir, aquifers

Goods and services



Goods and services for the city

- All types of **consumption goods** are needed for urban consumption
- A part of these goods is produced in plants and factories outside the city
- **Services** for urban dwellers provided by rural areas
 - Medicine goods
 - Leisure
 - Tourism (especially mountain areas and coastal zones) (heritage areas)
 - Natural amenities outside the city: preserved zones, natural parks
- Most of these services are provide by rural areas

What future for rural areas?

**Scenarios for possible development
paths**

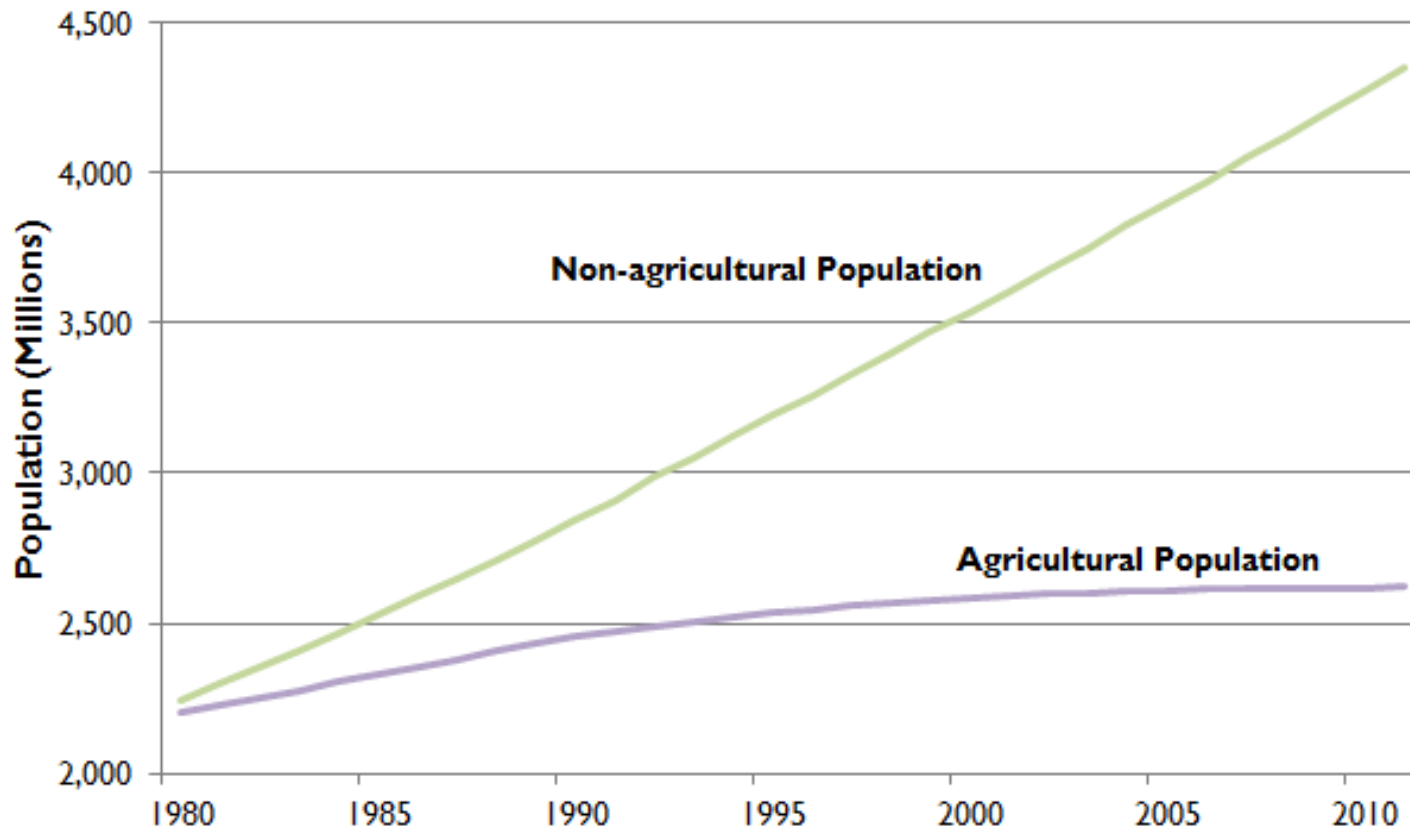
Different scenarios for rural areas related to urban development

- Major **changes** and developments experienced by rural areas throughout the 20th century
- These changes have placed them in a relatively **unstable** and **shifting** position
- It contrasts sharply with their position in earlier historical periods
- These changes and the link with urban areas raise the question of their **future evolution**
- **Prospective** study, based on future scenarios
 - identify the **main potential avenues of development** for rural areas
 - foster reflection on the **various possibilities**, by envisaging extreme **trajectories** of **change**
 - reflect upon **differentiated development** processes, adapted to the idiosyncrasies of rural and peri-urban areas, and their links with urban areas

1) The possible preservation of the prevalence of agricultural activities

- **Rapidly declining** role of agriculture in rural areas (population and activity)
- But **soil occupation remains very high**, and still dominant
- Process of **rationalization of production**: mechanization, use of fertilizers and pesticides, expansion of cultivated land areas, growth of farms 'size
- Possible **changes or threats**:
 - seriousness of **climate disruptions** and their impact on agricultural production
 - changes in the **diets** of urban and rural populations
 - changes in **food-supply chains** and the respective roles of long and short food-supply chains (local and organic food, local networks...)

Global agricultural population 1980 – 2011



Source: FAOSTAT, World-watch institute

2) The unavoidable progress of peri-urbanization

- Generalized urbanization and intense urban sprawl lead to **urban fabric** and to **peri-urbanization** phenomena
- **Peri-urban areas**: horizontal, low-density urban development (low-rise housing, parks and gardens, + major urban infrastructures (large shopping centers, power stations, waste treatment plants))
- Dispersed land use, with extensive **artificialization** of land, and housing areas in which people reside but seldom work
- **Competition over land uses**, leading to land use conflict (housing vs agriculture, natural areas, infrastructures, production plants...)
- Questions of **territorial governance** of these areas

3) Intensification of industry and business

- Place of **industry** important in rural areas since the XVIIIth century and remains crucial
- Rural areas are home to important **non-agricultural and non-service activities** that are conducted and organized differently in different regions and countries
- Their development is based on **two converging dynamics**
 - a) significance of **small-scale production facilities** in rural areas (resilience of **traditional** small productions, but also **new entrepreneurs** willing of rural amenities or lower wages)
 - b) persistence of **traditional rural industries**, with a high technical level, such as **forestry, agribusiness...** monocultures, haciendas, and the attached **value added agribusiness channels**

4) The countryside: a new El Dorado for the service sector?

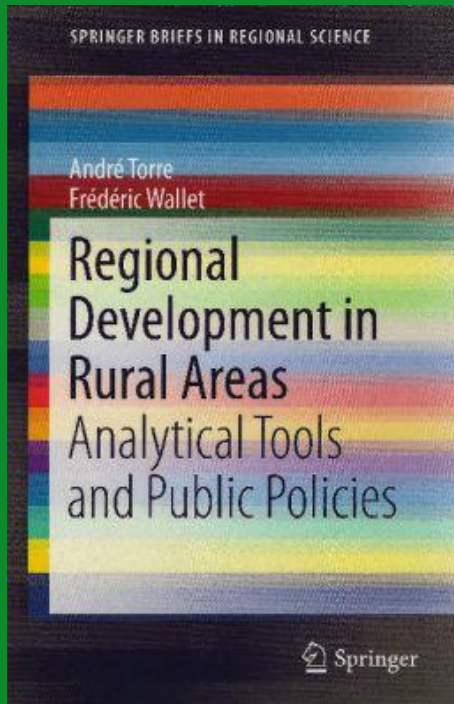
- Rural areas are facing a significant rise in **service activities** (tertiary sector)
- It now **exceeds that of agricultural production** and industry in many regions, e.g. in the **most developed countries**
- Three parallel mechanisms
 - a) **services to the person**, mostly observed in small towns of rural areas (medical and paramedical services, assistance for elderly people, early-childhood services)
 - b) **tourism and leisure activities** and the increasing number of short- and medium-term migrations of urban and rural dwellers to places outside their place of residence
 - c) **“residential economy”**. Massive influx of people migrating permanently to specific regions, or even to neighboring countries, which offer attractive amenities

Conclusion

**Endogenous development for
rural areas?**

Three profiles of innovative rural areas

	Laboratory territory	Heritage territory	Cooperative territory
Rationale	Experimentation and exploration	Differentiation and valorizing	Complementarity and cooperation
Issue	<ul style="list-style-type: none"> - New solutions to meet the specific challenges and needs of rural areas, including low density - New solutions related to a diversification of uses and forms of resource development (including natural) 	Valorizing and specification of peculiar local resources (environment and cultural heritage) , or industrial know-how	Playing on complementarities with others territories to build innovative cooperation
Examples	<ul style="list-style-type: none"> - Telemedicine - Valorizing biomass 	<ul style="list-style-type: none"> - Tourism - Local food products 	<ul style="list-style-type: none"> - Borrow size of a city - Experimentation among low density areas (Leader network) - Cross-border cooperation
Territorial advantages related to innovation	Capacity to create new organizational forms based on local involvement and opportunities of new tech (ICT, downsizing tech...)	Capacity to build specific local resources (creating rent) and to enlarge it to an integrative territorial development project	Capacity to mobilize organized and/or geographical proximities to create innovative complementarities

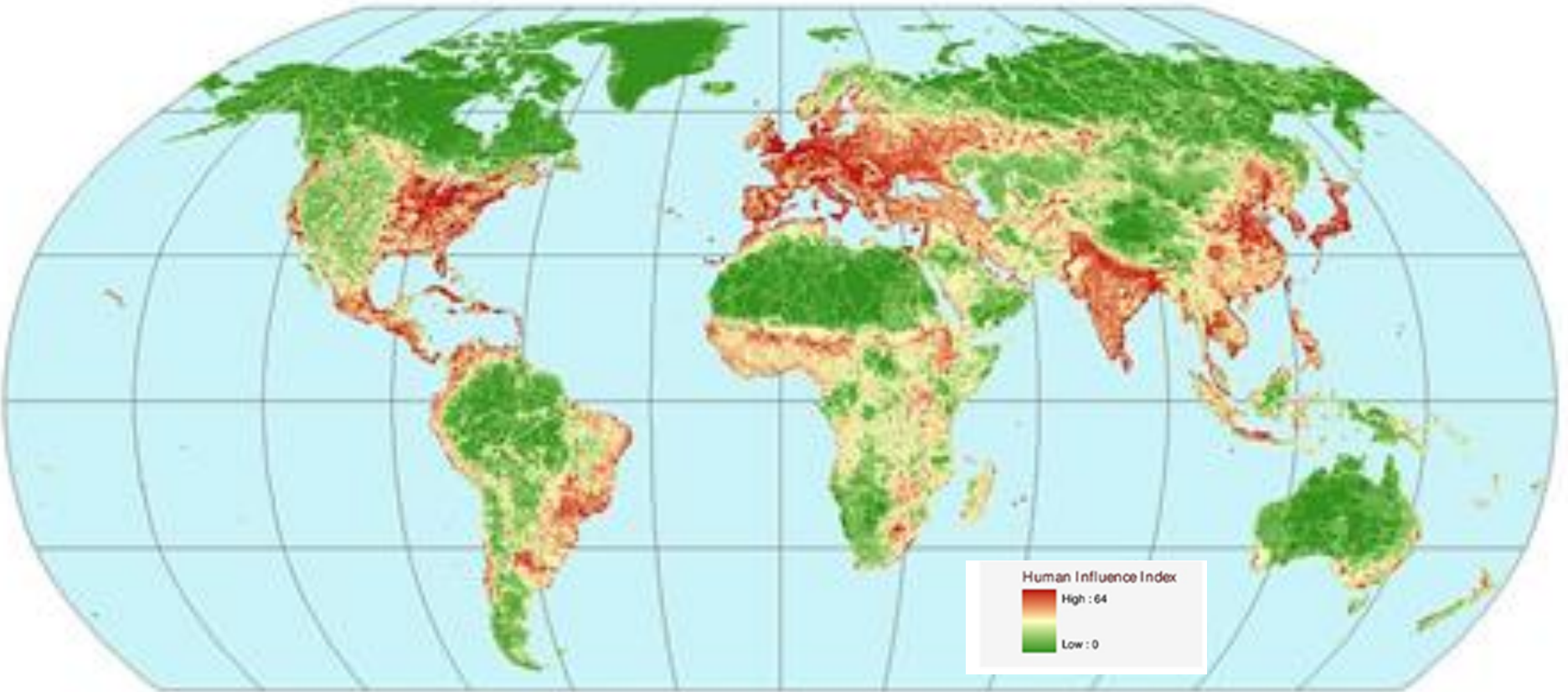


Thanks for attention

www.andre-torre.com

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The human influence index (2014)



Source: NASA's Earth Observing System Data and Information System (EOSDIS)