



UNIVERSITÀ DI PARMA

The role of GIs in public goods production and SDGs achievement: a methodological proposal

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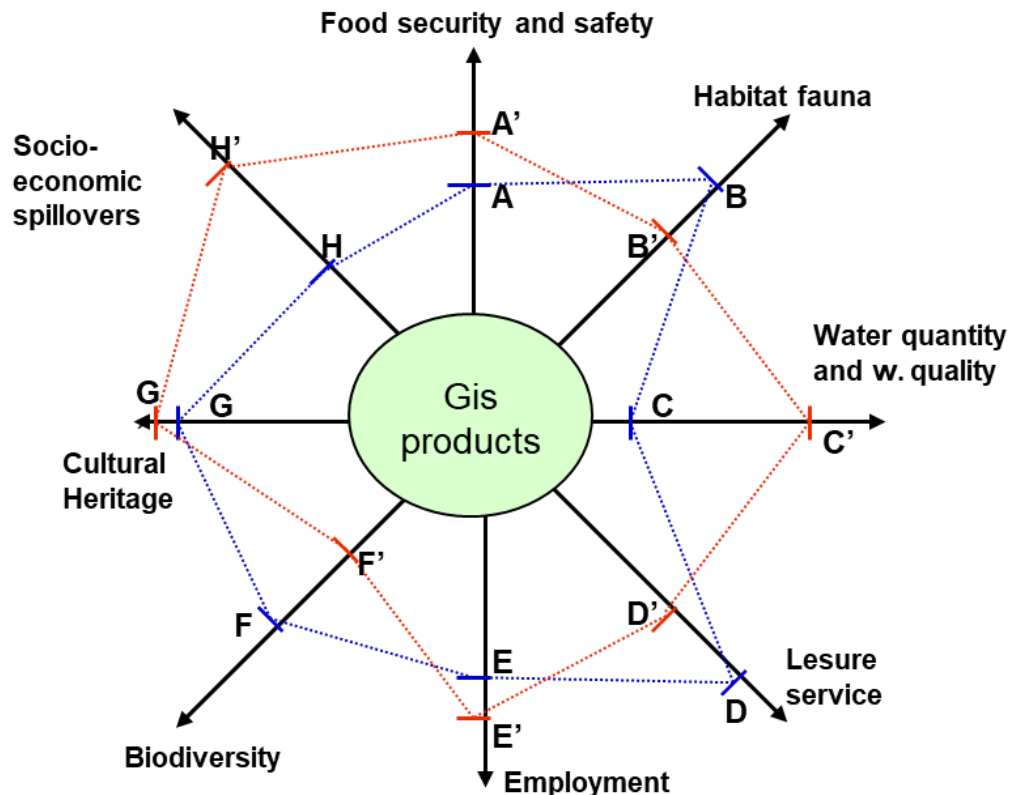
Research questions

- PGs, Geographical Indications and SDGs: where is the link?
- Why and how to assess SDG and related public goods externalities?
- How to analyse and to assess the capacity of the GI systems to impact on SDGs through the code of specification and management rules?

Theoretical framework (1/4)

Public goods and agriculture

Public Goods refer to the concept of multi-functionality which consider a role for agriculture, as well as a productive one, also of social and environmental interest.



Static dimension:

The same process generates different sets of outputs if applied in different geographical contexts (*joint production outputs*)

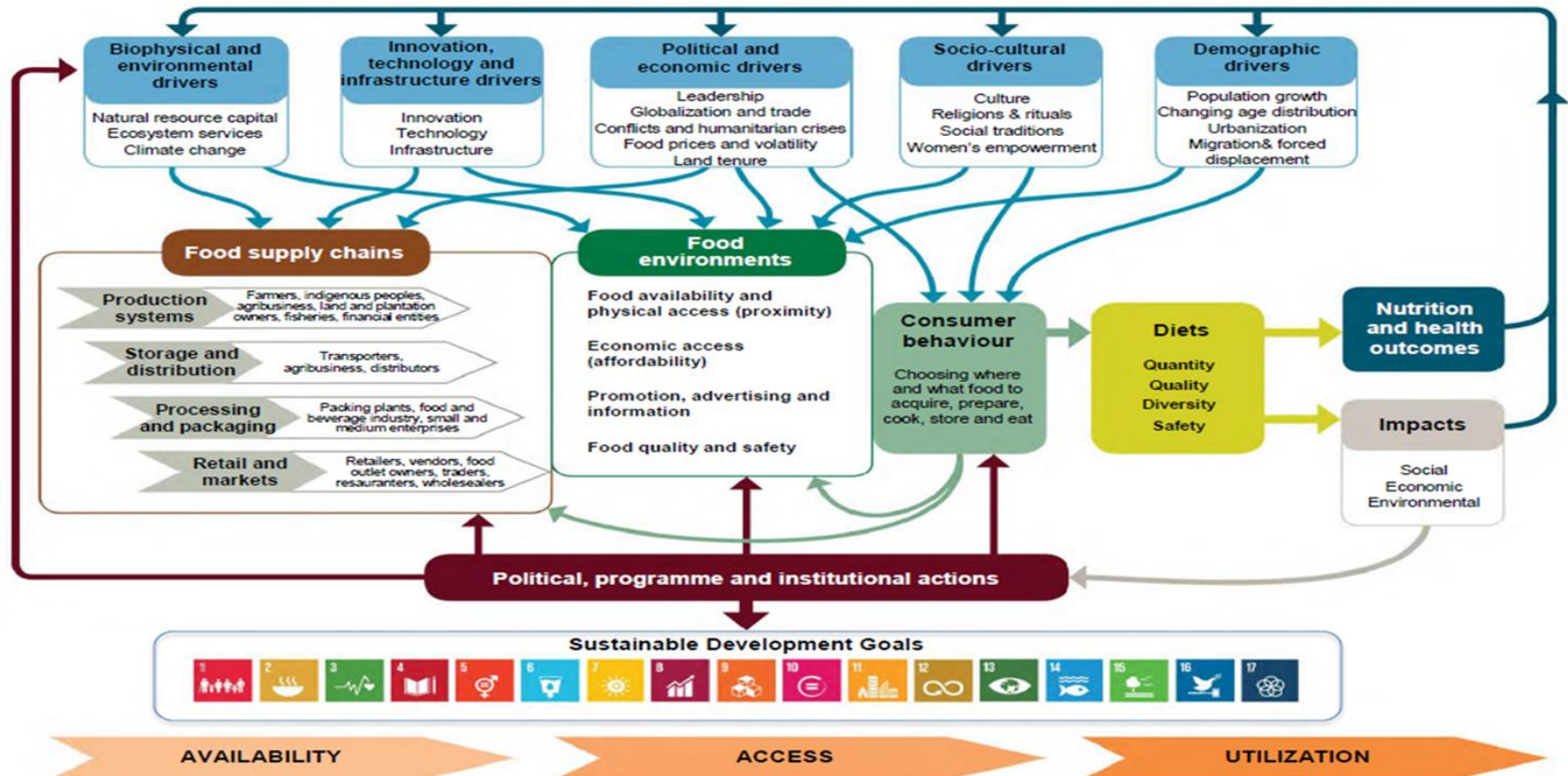
Dynamic dimension:

Effects on all the secondary goods as a result of changes in the production process (*innovation*)

Theoretical framework (2/4)

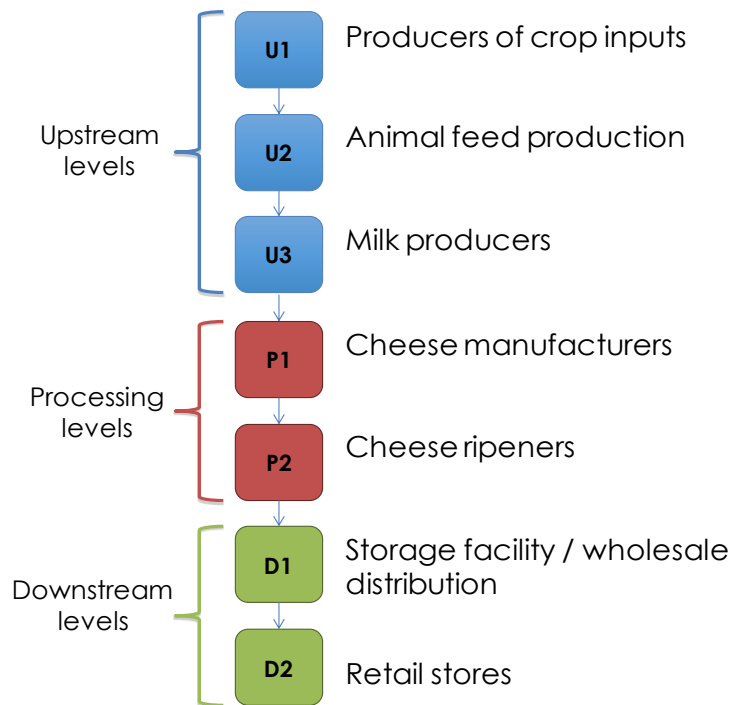
Food environments and SDG

Figure 1 Conceptual framework of food systems for diets and nutrition

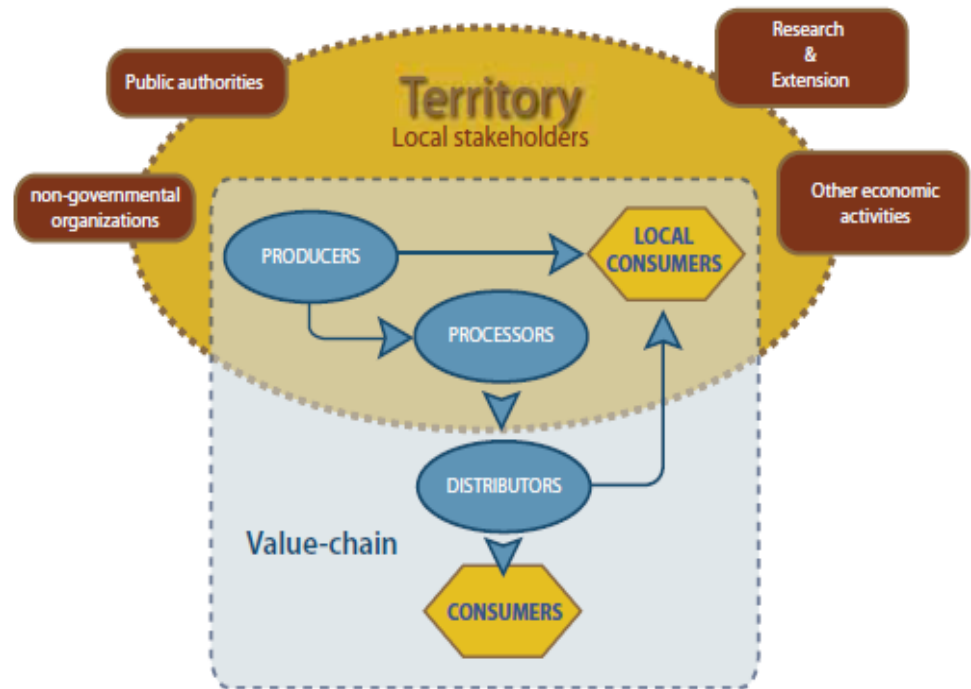


Theoretical framework (3/4)

Value Chain Vs LAFS



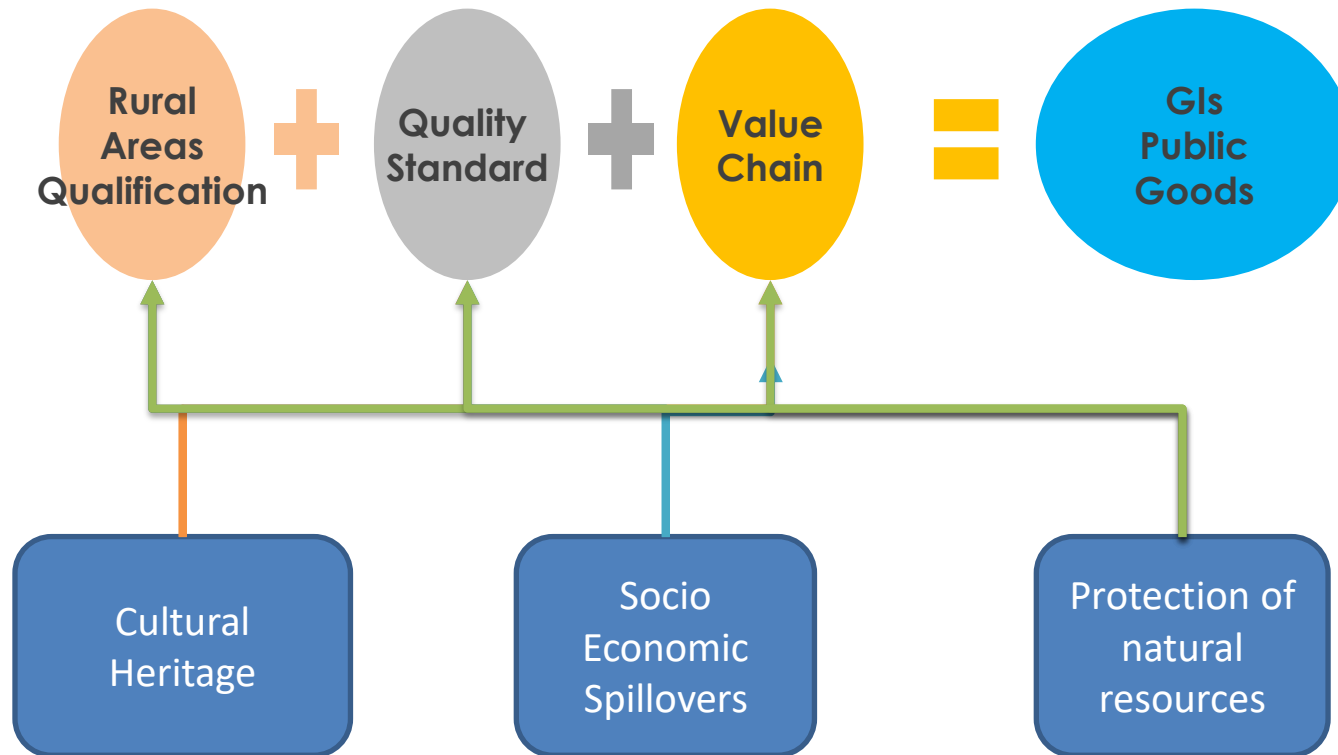
Source: Bellassen, V. et al.
(2017)



Source:
FAO

Theoretical framework (4/4)

The GIs rules towards sustainability



The assumption is that **GIs**, through **collective rules**, set through the Cos, contribute to the generation of Public Goods for the benefit of value chains and rural areas thanks to their positive impacts on natural resources, cultural heritage and socio-economic spillover effects...but **their value must be assessed, communicate and payed ...**



The assessment of SDGs

Defining indicators to measure the impact of the PGs produced by GIs trough SAFA indicators

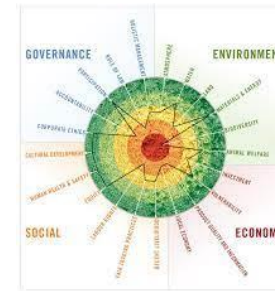
GI case study (analysis of CoS)

Definition of the criteria for assessing the identified indicators

Normalisation of dimension index

Assessment of SDGs trough synthetic index.

The objective is to assess the potential contribution of CoS to the achievement of the SDGs

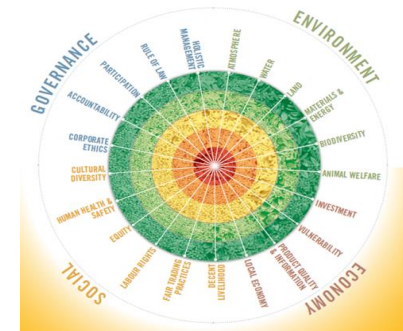
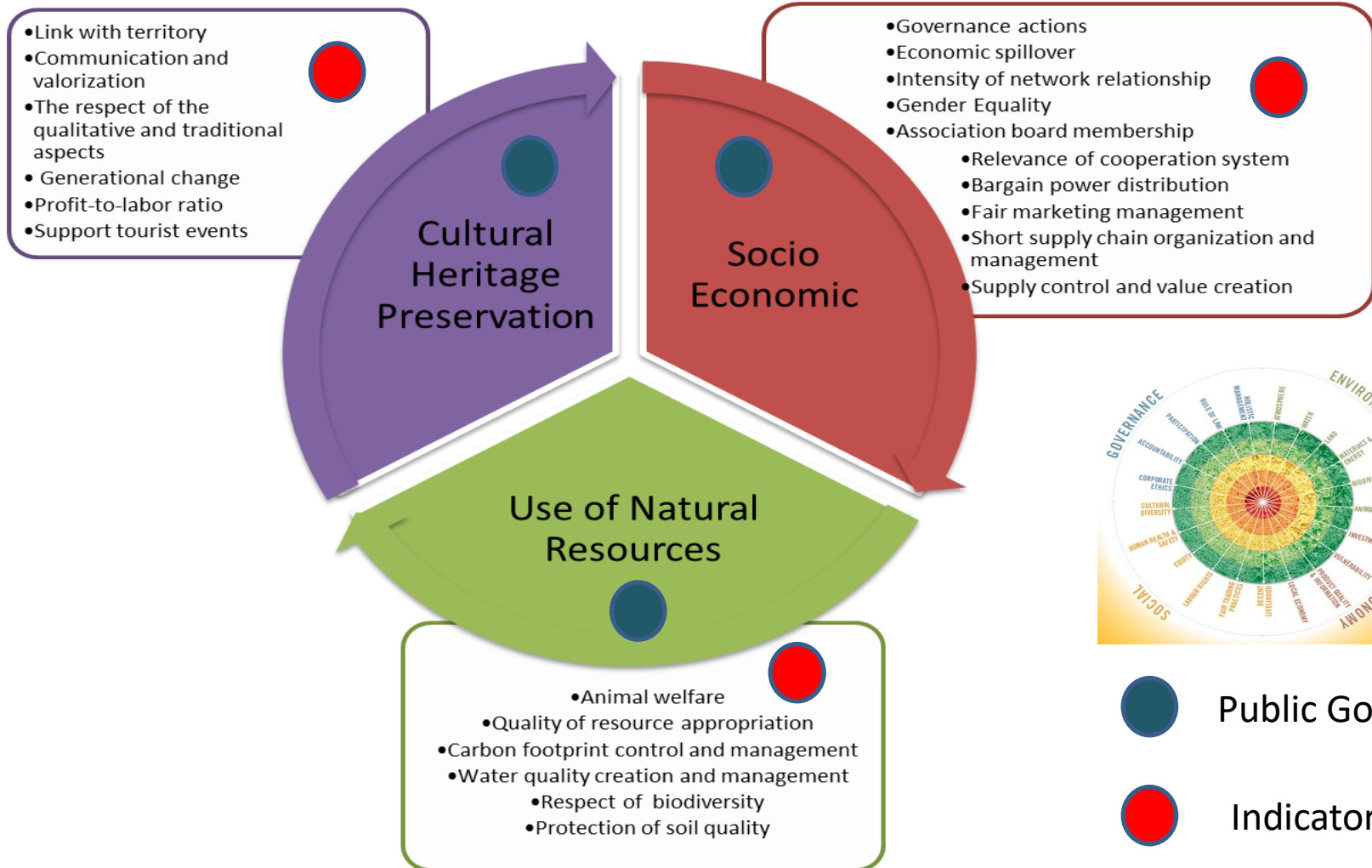


$$\text{Dimension index} = \frac{\text{actual value} - \text{minimum value}}{\text{maximum value} - \text{minimum value}}$$

$$Si = (I_{Economic} \cdot I_{Environmental} \cdot I_{Social})^{1/3}$$

How to assess the sustainability and PGs

The SAFA indicators for sustainability



The SDGs

SDG1 → No Poverty

SDG4 → Quality education

SDG5 → Gender equality

SDG6 → Water and Sanitation

SDG8 → Decent work and economic growth

SDG12 → Responsible Consumption and Production

SDG13 → Climate action

SDG15 → Life on land

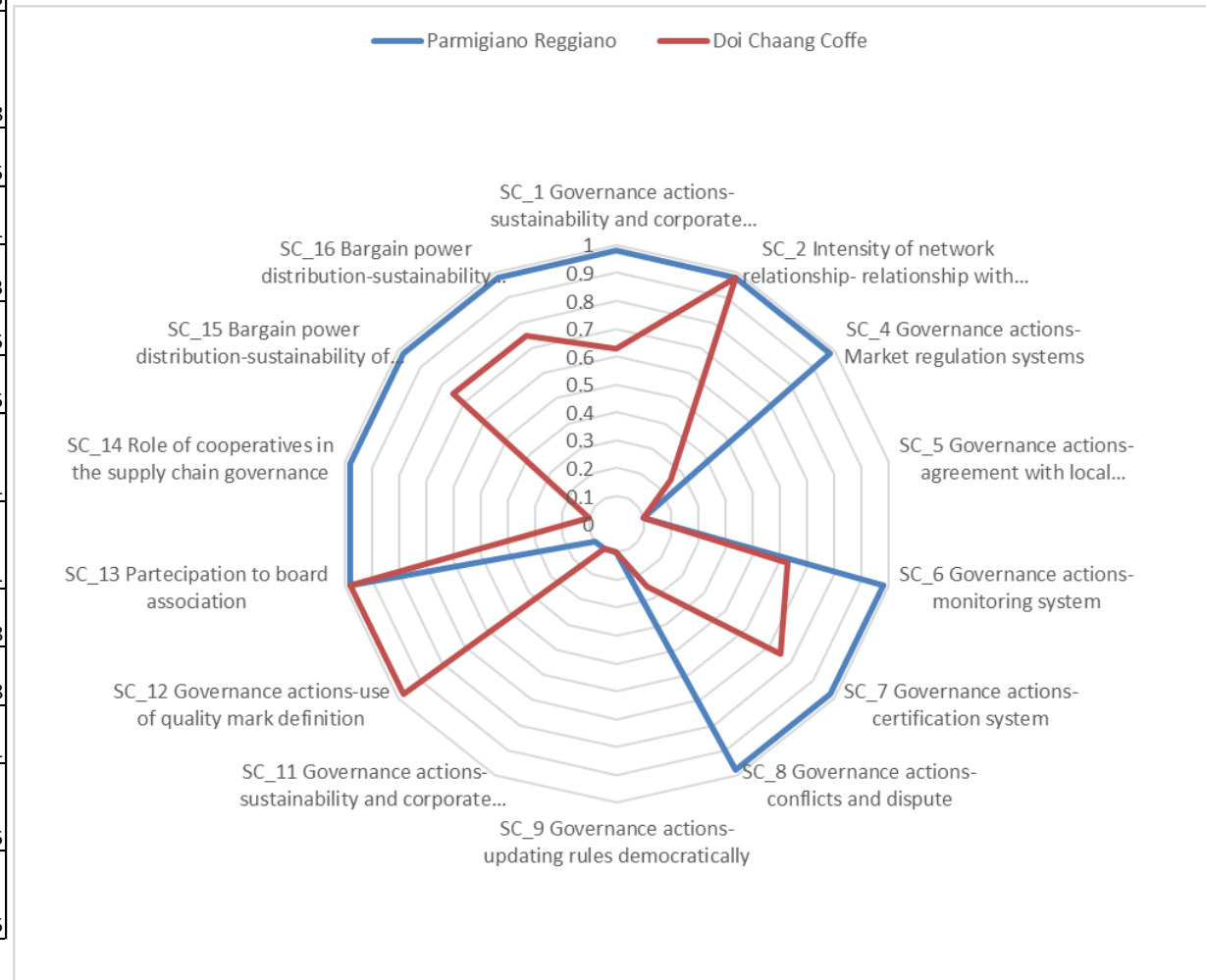
SDG16 → Peace, justice and strong institutions

SDGs	SDG Targets	PG Indicators
SDG1	1.2: Reduce poverty	Productive system reaction to generational change
		Profit-to-labor ratio
		Contribution to local economy
SDG4	4.3: Equal access to affordable technical, vocational, and higher education	Educational activities for producers and consumers
		Education-Professional training on the FQS
SDG5	5.1: End discrimination against women and girls/ Target 5.5: Ensure full participation in leadership and decision-	Role of women
SDG6	6.6: Protect and restore water-related ecosystems	Water quality creation and management
SDG8	8.1 Sustainable economic growth	Contribution to local economy
		Governance actions-research actions
		Education-Professional training on the FQS
	8.2: Diversify, innovate and upgrade for economic productivity	Fair marketing management- segmentation of product
		Communication activities-guarantee the quality certification mark
		Communication activities-external communication
	8.4: Improve resource efficiency in consumption and production	Fair marketing management- marketing strategies
		Short supply chain organisation and management-direct sales
		Supply control and value creation- production quotas
		Productive system reaction to generational change
	8.6: Promote youth employment, education and training	Role of cooperatives in the supply chain governance
		Bargain power distribution-sustainability of supply chain structure
		Bargain power distribution-individual or collective management of sustainable issues
	8.9: Promote beneficial and sustainable tourism	Support turistical events
	SDG12	Link with territory-Historical elements and sustainability
		Respect of the qualitative and traditional aspects
		Intensity of network relationship- link between society and producers
		Short supply chain organisation and management-direct sales
		Support touristic events
		Quality of resource appropriation
		Governance actions- sustainability and corporate mission
		Governance actions-monitoring system

SDGs	SDG Targets	PG Indicators
SDG13	13.2: Integrate climate change measures into policy and planning	Carbon footprint control and management
SDG15	15.3: End desertification and restore degraded land	Animal health
		Animal stress from freedom
		Protection of soil quality- soil quality
	15.5: Protect biodiversity and natural habitats	Protection of soil quality- land quality
		Respect for ecosystem biodiversity
		Respect for species biodiversity
SDG16	16.6: Develop effective, accountable and transparent institutions	Respect for genetic biodiversity
		Governance actions- sustainability and corporate mission
		Governance actions-agreement with local administration
		Governance actions-accounting for sustainable and good management
		Governance actions-monitoring system
		Governance actions-certification system
	16.7: Ensure responsive, inclusive and representative decision-making	Governance actions-use of quality mark definition
		Governance actions-updating rules democratically
		Governance actions-manage of conflicts and dispute
		Bargain power distribution-sustainability of supply chain structure
		Bargain power distribution-individual or collective management of sustainable issues
		Role of cooperatives in the supply chain governance
	16.8: Strengthen the participation in global governance	Partecipation to board association
		Intensity of network relationship- relationship with local politics or administrations
		Governance actions-Market regulation systems

The assessment of SDGs

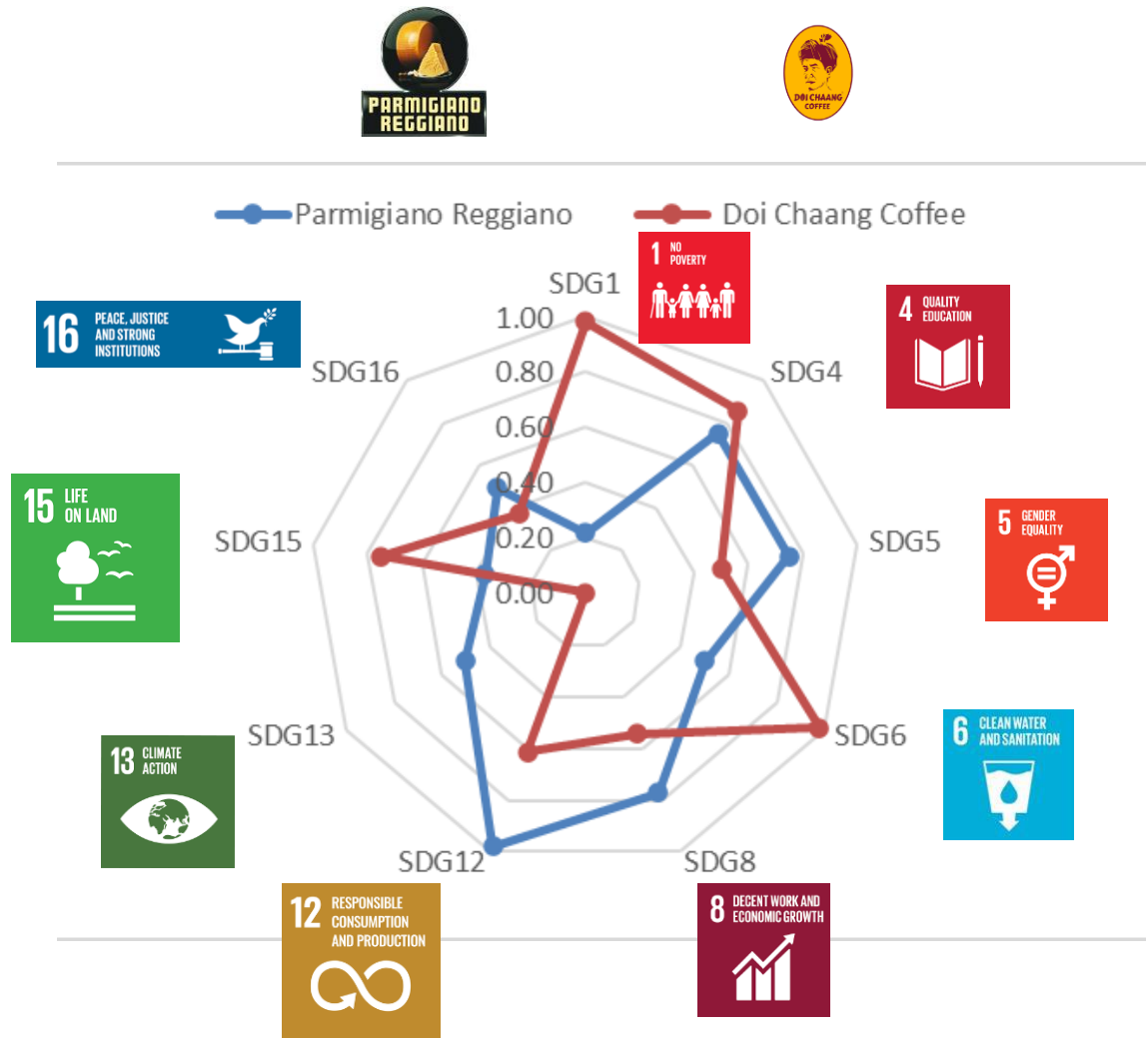
Code	Indicator	Parmigiano Reggiano	Doi Chaang Coffe
SC_1	Governance actions-sustainability and corporate mission	0.98	0.63
SC_2	Intensity of network relationship- relationship with local politics or administrations	0.98	0.98
SC_4	Governance actions-Market regulation systems	0.98	0.25
SC_5	Governance actions-agreement with local	0.1	0.1
SC_6	Governance actions-monitoring system	0.98	0.63
SC_7	Governance actions-certification system	0.98	0.75
SC_8	Governance actions-conflicts and dispute	0.98	0.25
SC_9	Governance actions-updating rules democratically	0.1	0.1
SC_11	Governance actions-sustainability and corporate mission	0.1	0.1
SC_12	Governance actions-use of quality mark definition	0.1	0.98
SC_13	Participation to board association	0.98	0.98
SC_14	Role of cooperatives in the supply chain governance	0.98	0.1
SC_15	Bargain power distribution-sustainability of supply chain structure	0.98	0.75
SC_16	Bargain power distribution-sustainability issues managment	0.98	0.75



The assessment of SDGs



	Parmigiano Reggiano	Doi Chaang Coffee
SDG1	0.21	0.98
SDG4	0.75	0.86
SDG5	0.75	0.5
SDG6	0.5	0.98
SDG8	0.77	0.55
SDG12	0.98	0.61
SDG13	0.5	n/a
SDG15	0.37	0.75
SDG16	0.49	0.37



Key messages

- ✓ Sustainability and the compliance with SDGs should be proof and valorised
- ✓ Synthetic Index helps to assess the evolution of the GIs system considering the role of PGs and the SDGs targets, providing information to stakeholders and policy makers

Recommendations

- ✓ The use of indicators requires a great effort in selection, collection and elaboration of data with the cooperation of GIs local stakeholders
- ✓ CoS represents the tool aimed to reach the goal set by the SDGs.