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TOURIST

**Competence centres for the development of sustainable
tourism and innovative financial management strategies
to increase the positive impact of local tourism in
Thailand and Vietnam**

Erasmus+ Capacity Building in Higher Education

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TOURIST 1st Training Hue/Vietnam

An Introduction to Sustainable Tourism



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Topic 6. Stakeholders and Indicators of Sustainable Tourism

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Outline of the Presentation

□ Stakeholders in Sustainable Tourism

1. Introduction
2. Who are the stakeholders in Sustainable Tourism?
3. Stakeholders and challenges in sustainable tourism
4. How should the stakeholders be involved in the sustainable tourism development?
5. Main conclusions

□ Sustainable Tourism Indicators

1. Sustainable tourism indicators: what for?
2. Classification
3. Possible sources





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Learning Objectives

Learning Objectives of this Topic

- **Learning Objective 1:** to create a common ground on the concept of stakeholders in sustainable tourism
- **Learning Objective 2:** to be able to identify the stakeholders of sustainable tourism (local/regional/national/international level)
- **Learning Objective 3:** to better understand the need of involving stakeholders in ST development and planning
- **Learning Objective 4:** to get familiar with the indicators used in sustainable tourism
- **Learning Objective 5:** to know what sources are generally used and/or recommended for sustainable tourism indicators



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Topic 6.1. Stakeholders of Sustainable Tourism

Content

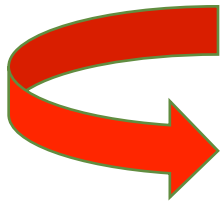
1. Introduction
2. Who are the stakeholders in Sustainable Tourism?
3. Stakeholders and challenges in Sustainable Tourism
4. How should the stakeholders be involved in the sustainable tourism development?
5. Main conclusions

1. Introduction

- WTO (1998) → Sustainable tourism development meets the **needs of present tourists and host regions** while **protecting and enhancing opportunities for the future**. It is envisaged as *leading to the management of all resources in such a way that economic, social and artistic/visual/aesthetic needs can be fulfilled while maintaining cultural integrity, essential ecological processes, biological diversity, and life support systems*
- ST → based on the principles of sustainable development, taking “full account of its current and future economic, social and environmental impacts” (UNEP/WTO, 2005) and **addressing the needs of stakeholders**.
 - ⇒ recognizes the *three pillars* that:
 - ✓ reinforce sustainable development,
 - ✓ acknowledges the need to *act responsibly* (the 1987 Brundtland report – World Commission on Environment and Development),
 - ✓ and *emphasizes the concerned parties (the stakeholders)* as critical in the implementation of ST.

1. Introduction

- For tourism planning and development **sustainability** has become vital.



Stakeholders are one of the corner stones for **successful sustainable tourism development**

- Thus:
 - **who** should be considered ***stakeholders*** in sustainable tourism development
 - **what challenges** are faced by ST stakeholders?
 - **how** should planners and developers ***involve stakeholders*** in the development of sustainable tourism?

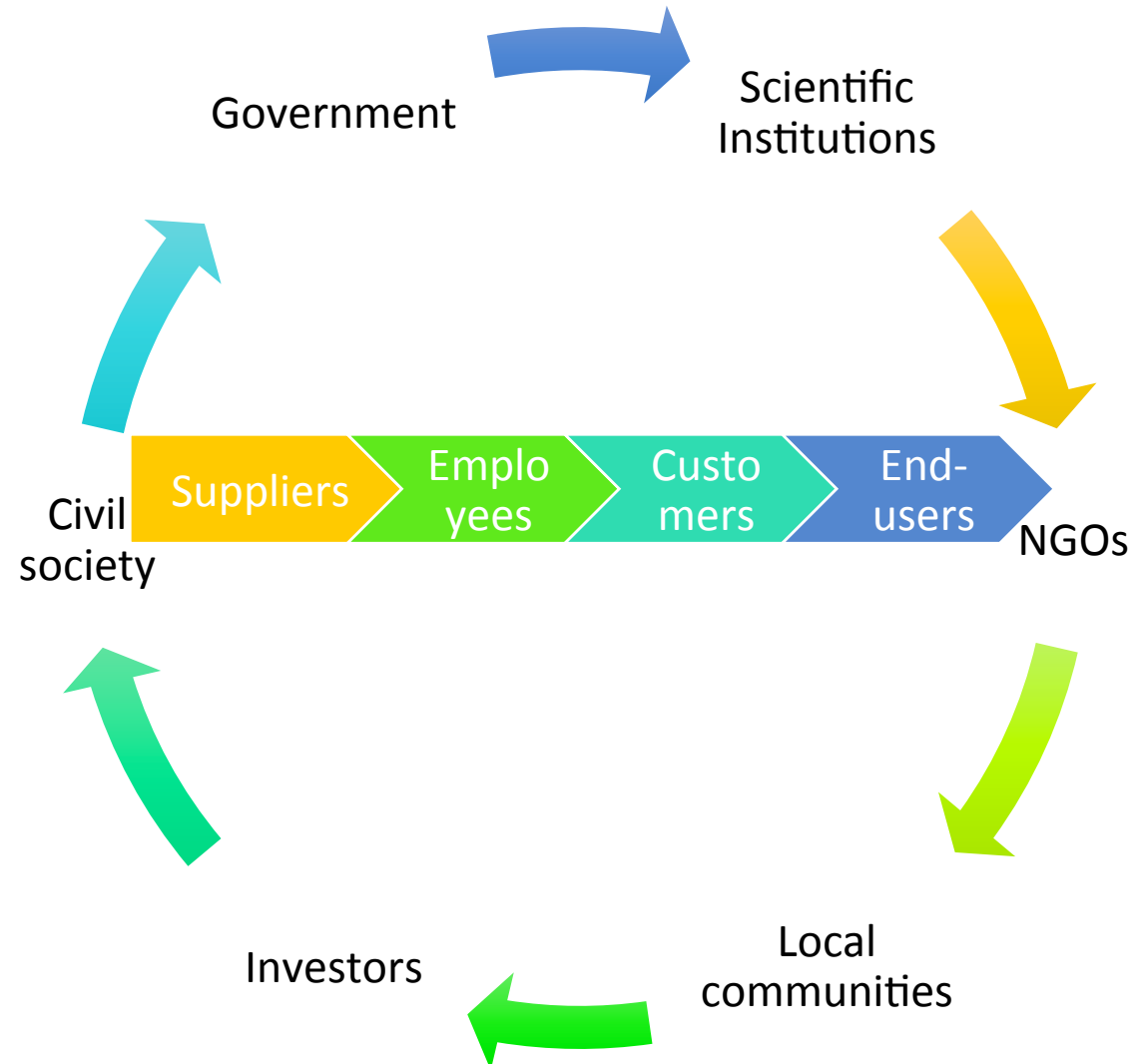
2. Who are the Stakeholders?

- Sustainable development is defined as “development that meets the needs of the present without compromising the ability of future generations to meet their own needs”
 - ⇒ the present use of resources does not adversely impact the potential use of resources in the future.
- A stakeholder is identified as “any group or individual who can affect or is affected by” tourism development in an area
 - ⇒ two stakeholder groups clearly identified in the sustainable tourism definition (based on the definition of sustainable development):
 - ✓ the **present users** of a resource;
 - ✓ the **future users** of a resource.
- The **organizational structure of a destination** is supposed to be a **network of interdependent and multiple stakeholders** on which the quality of the experience and hospitality offered by the destination depends.
 - ⇒ One main **key to the success and implementation of sustainable tourism development** in a community is the **support of stakeholders**, (e.g. example citizens, entrepreneurs, and community leaders).
 - ⇒ The focus on more stakeholder participation emphasizes its ability to handles multiple perceived issues as:
 - ✓ tourism development decisions are made from the top down, where “**experts**” make decisions... This might be perceived by the local community as not being reflective of community interests and opinions.
 - ✓ the decision making system is perceived to have competing interests within itself => the decisions made are again not reflective of the public’s interests

2. Who are the Stakeholders?

The value chain of each sector includes the following (types) of stakeholders....

- Internal stakeholders
- External stakeholders



Please take **no more than 5'** to identify the internal and external stakeholders in tourism at regional/national level (one group per country)

2. Who are the Stakeholders?

Example: InterContinental Hotels Group



Tourism value chain (UNWTO, 2013)



INDIRECT

Merchandising of Eastern Anatolia

Ministry of Tourism and Culture

Promotional activities

Communication, press & media

Travel organisation and booking

Customs Office

Port Authority

Ministry of Transportation

Immigration Agency

Transportation

Support Institutions: Ministry of Tourism and Culture; Chamber of Commerce; Ministry of Interior, Banks, etc

Agricultural and Aquaculture Suppliers: textile, wood, food

Constructors & Real Estate

Furniture and equipment

Shops (In accommodation)

Food factories and rural areas

Manufactures

Maintenance

Storage & Distribution

Marketing & Sales

Food suppliers

Handcrafts suppliers

Artists (painting, musicians, etc)

Books, CD's and DVD

Signposts

Restoration

Management

Maintenance

Brochures

Trade Companies

Wholesalers and single suppliers

Technology shops/Imports

Industrial factories

Oil Station

Accommodation

Food & Beverage

Handcrafts

Tourism assets in destination

Leisure, excursions and tours

Support services

Car rental

In

Hotels

Bars

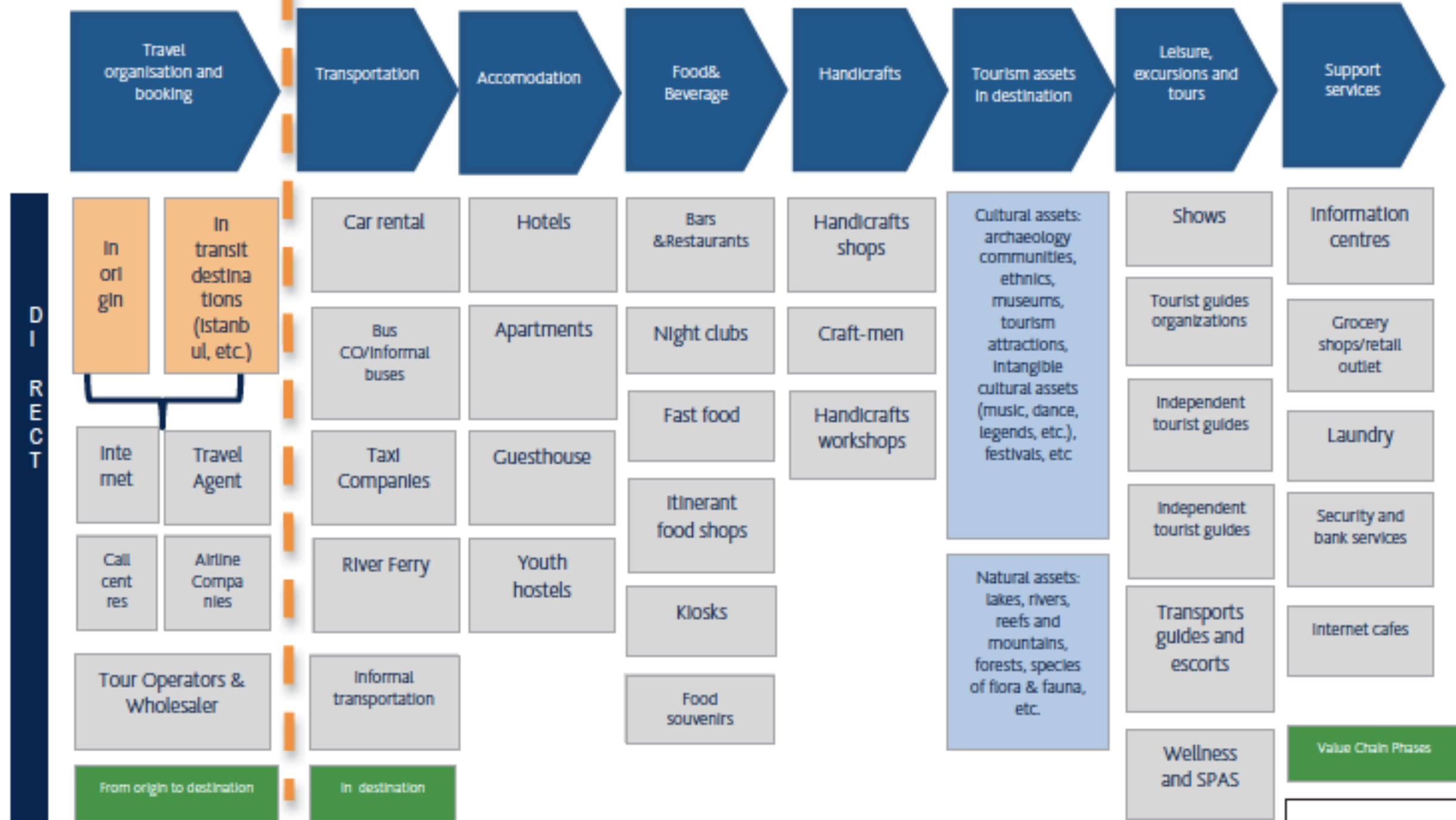
Handcrafts

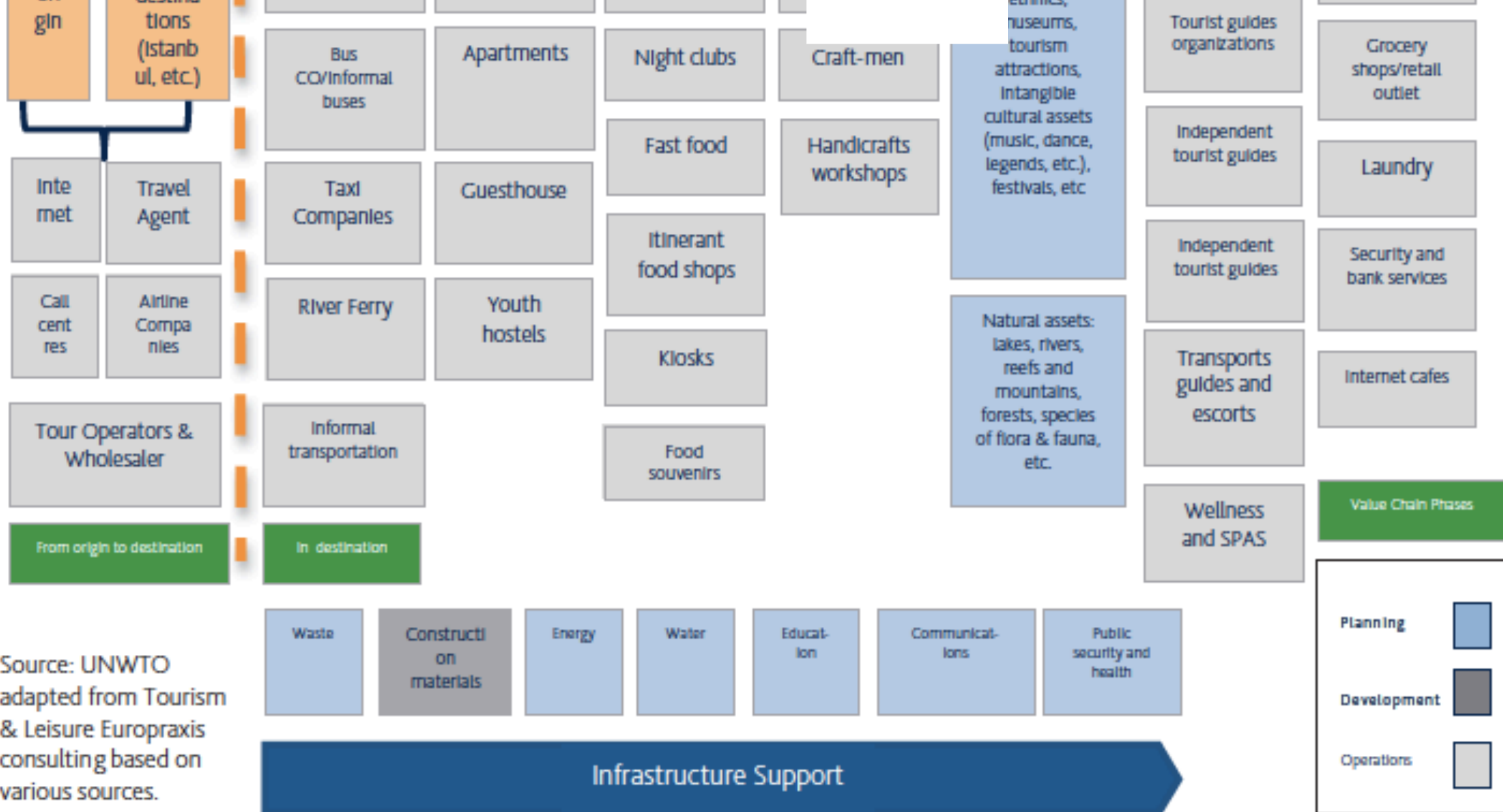
Cultural assets: monuments, etc

Shows

Information

Information

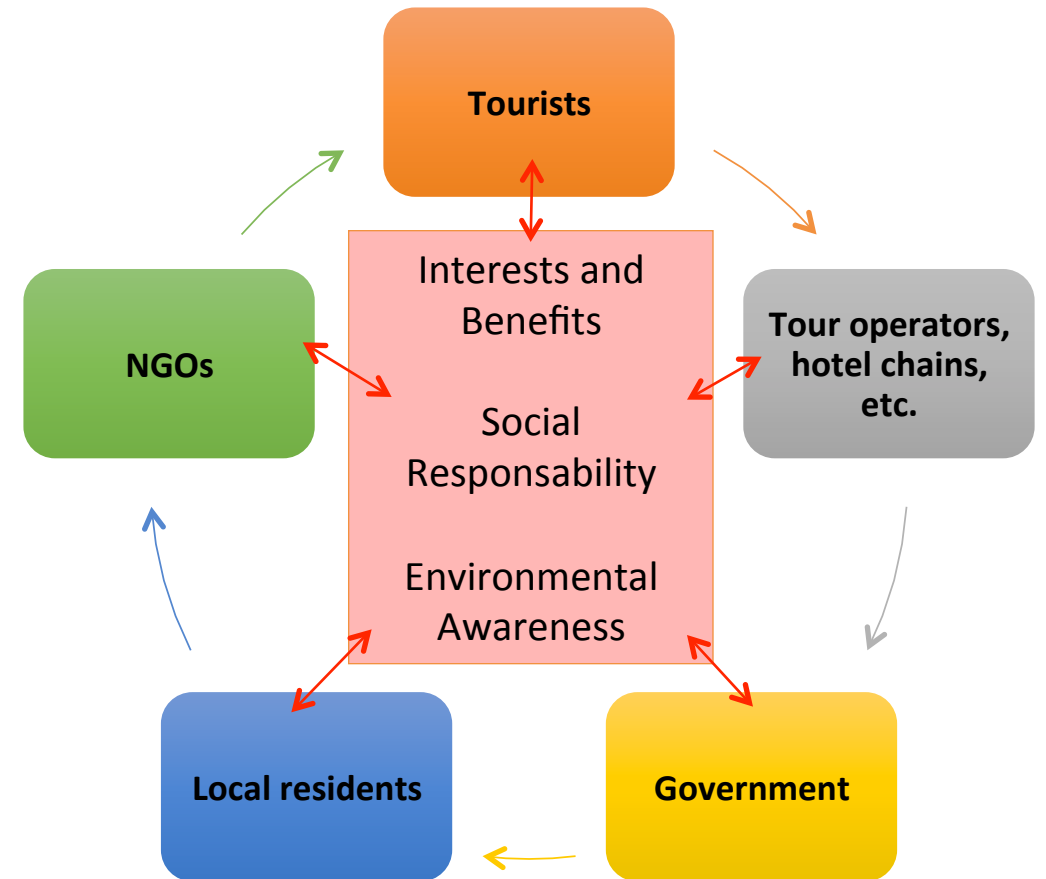




2. Who are the Stakeholders?

- There are many typologies, but the most common classification of stakeholders in ST includes six broad groups:

- ✓ *Tourists*
- ✓ *Industry*
- ✓ *Local community*
- ✓ *Government*
- ✓ *Special interest groups*
- ✓ *Educational institutions*



Please review your list of internal and external stakeholders previously identified in the tourism sector of your region/ country and make sure you classify them correctly

3. Stakeholders and challenges in Sustainable Tourism

- Despite the too little consideration of the role stakeholders play in the concept of sustainable tourism and its practice in the field, it is worth mentioning that:
 - ⇒ **External stakeholders** (the academics, industry and NGOs operating outside of communities) → shape the theoretical foundations of the sustainable tourism concept, i.e., define the “ideal” and propose best practice models for implementation.

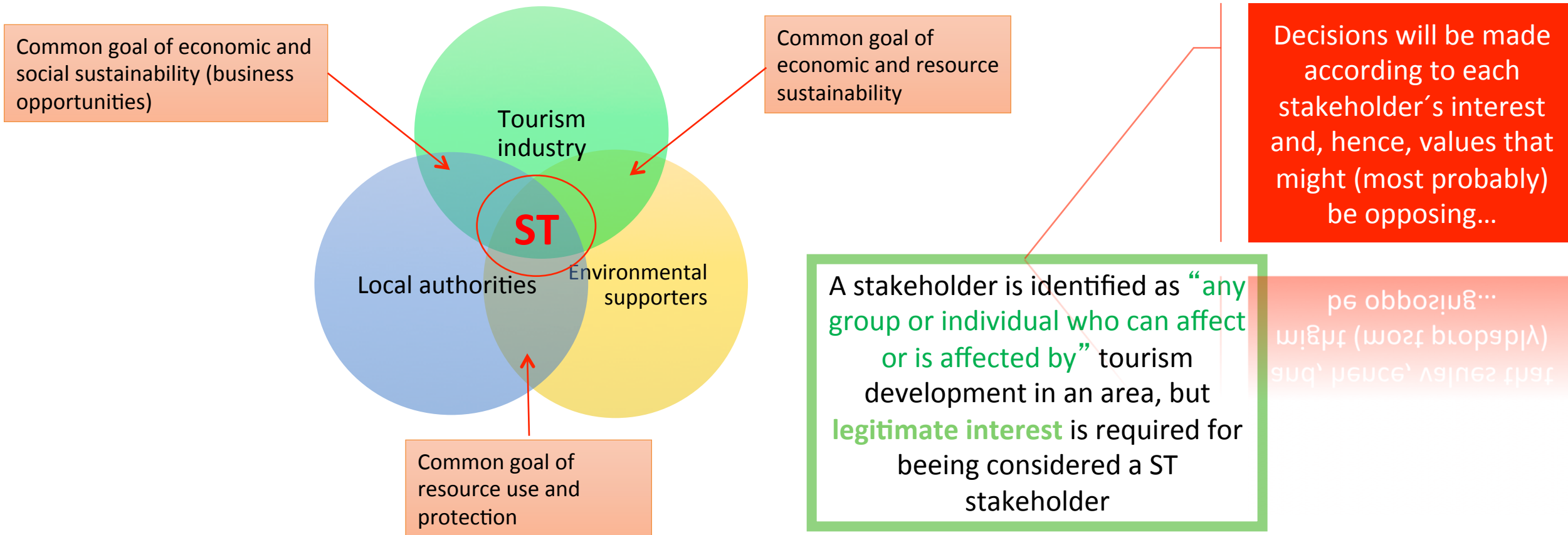
But, is this “ideal” addressing (all) the issues faced by internal (NGO and community) stakeholders in the field?

- Maybe the question at this point should be addressed as follows:

- ⇒ What are the goals, values and interests of the stakeholders?
- ⇒ Could these aspects get stakeholders to any kind of conflicts?
- ⇒ Is there any possible way to avoid potential conflicts between stakeholders?

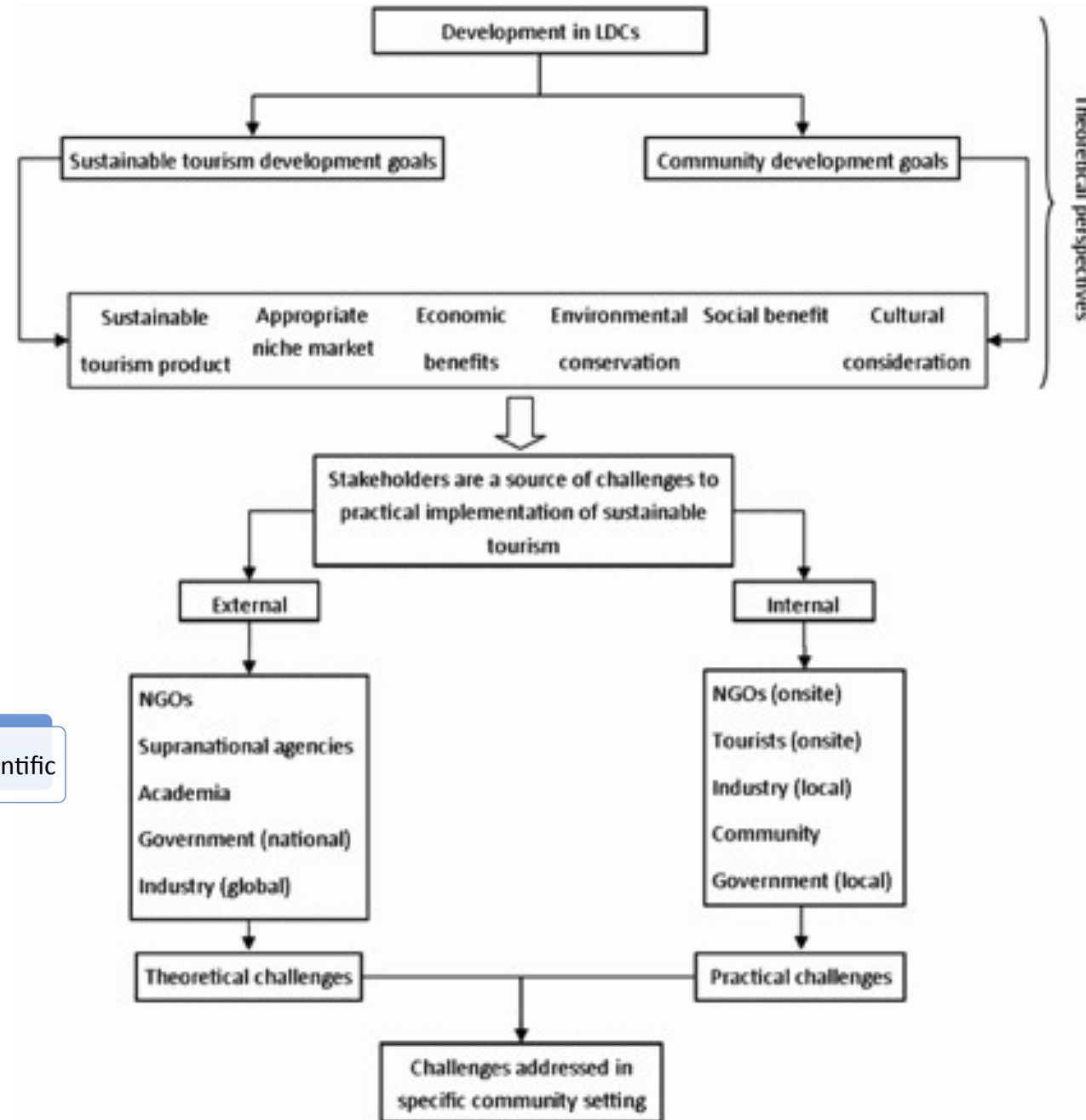
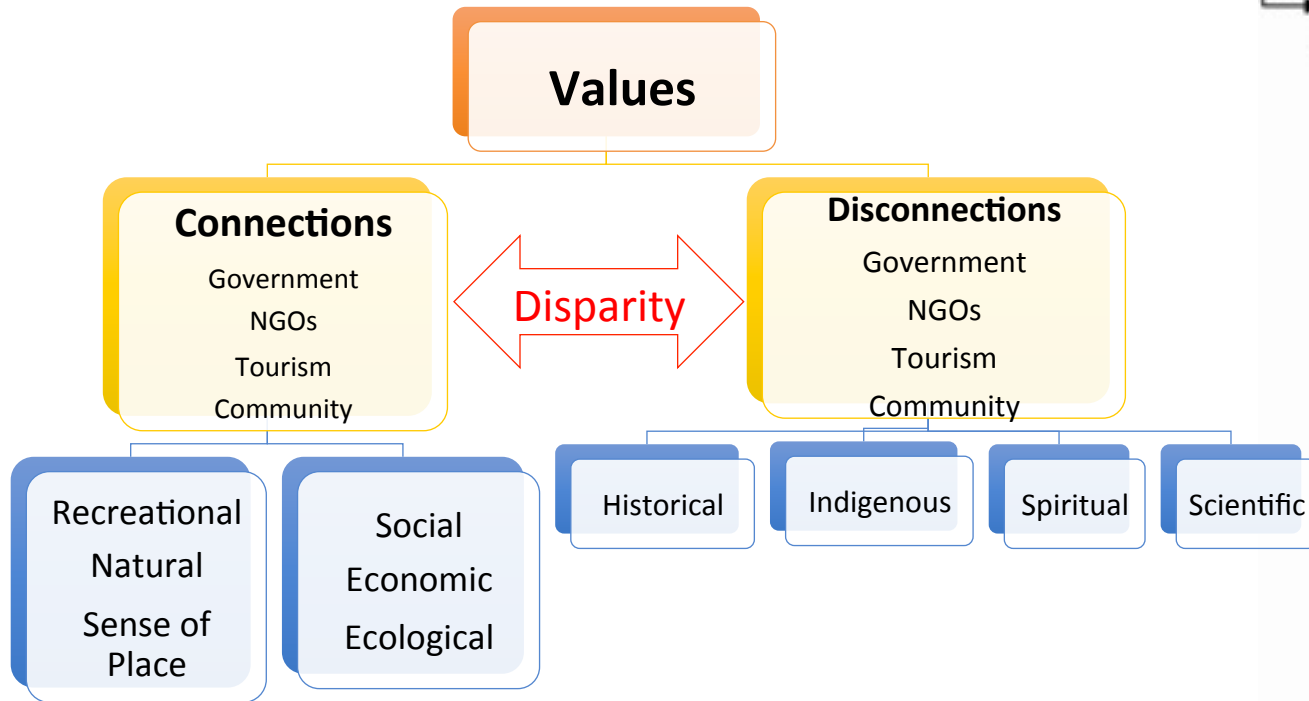
These questions will be answered by groups of 5-6 persons each once the presentation regarding the ST stakeholders will be finalized.
You will have about 20-30' to discuss and prepare the presentation for which, one representative per group will expose (no longer than 5')

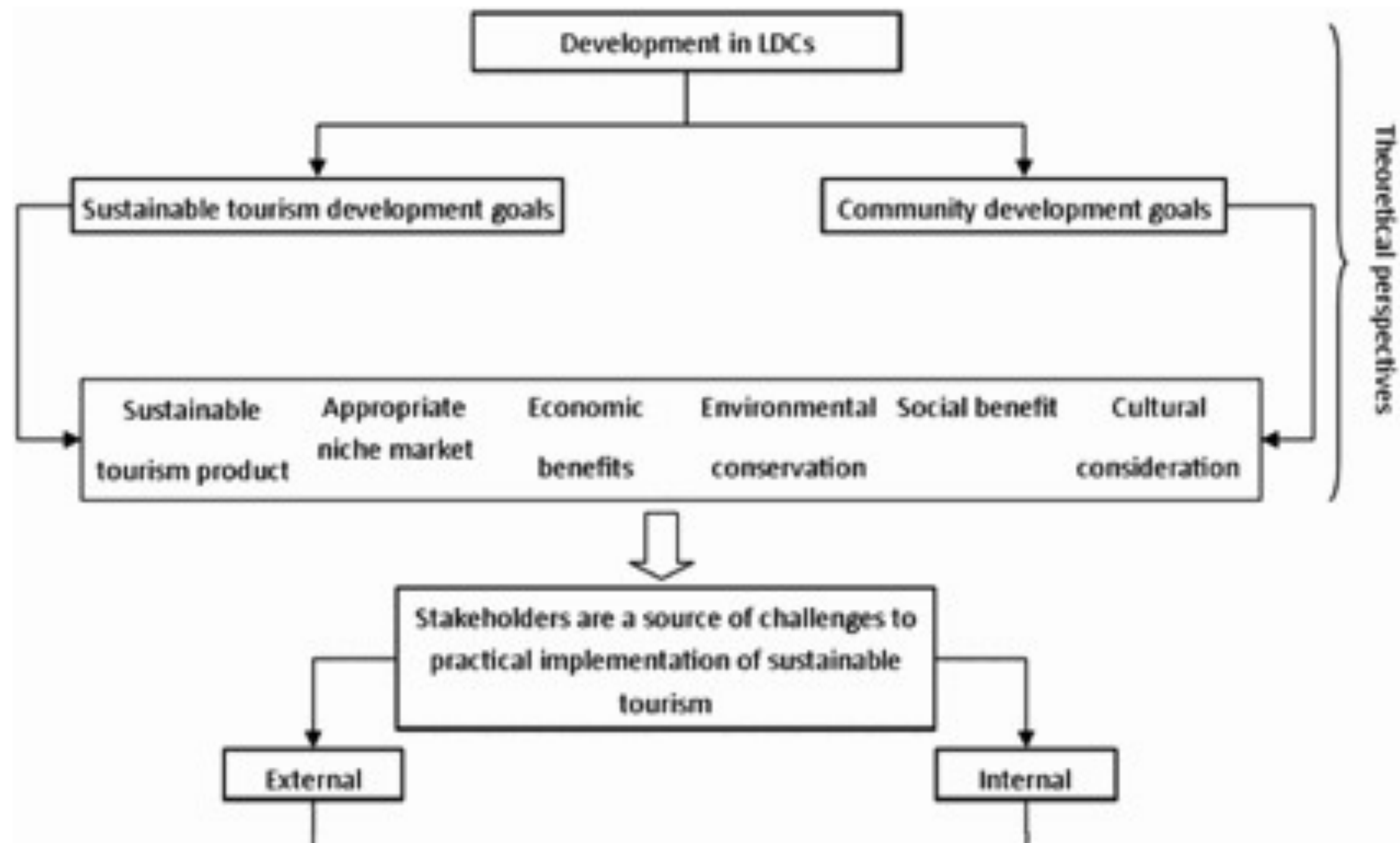
3. Stakeholders and challenges in Sustainable Tourism



- If sustainable tourism cannot be achieved long term in the field, in certain scenarios, maybe the ideas and strategies proposed by external stakeholders should be questioned and a tighter collaboration between all stakeholders should be considered.
 - ⇒ The multiplicity and heterogeneity of tourism stakeholders makes the process complicated, still the success of ST implementation and development depend on the involvement of stakeholders independently of their power.

3. Stakeholders and challenges in Sustainable Tourism







3. Stakeholders and challenges in Sustainable Tourism

Objectives & reasons to cooperate	Some theoretical examples	Asian partners' practical examples
Objectives of cooperation among stakeholders	<ul style="list-style-type: none"> • Give/receive information • Collaboration in joint initiatives, ... 	?
Reasons of cooperation among stakeholders	<ul style="list-style-type: none"> • Problem-solving • Collective learning & recommendations • Maximize available resources • Elaborate proposal for tourism development, ... 	?

Advantages of cooperative networks

- Greater competitiveness and resources, complementarity, ...
- Joint strategies, overcome crisis, improved response to challenges, etc.

Disadvantages of cooperative networks

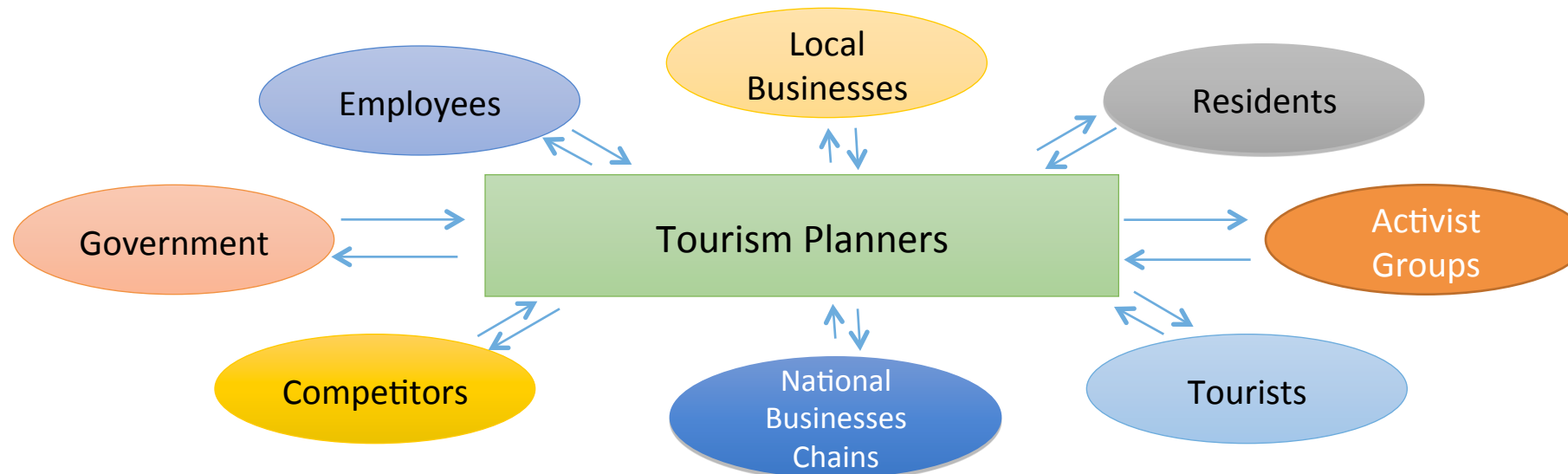
- Slow decision-making, possible blockages, disagreements and breakdown of networks
- Low or no advantages for large stakeholders' cooperation with smaller ones etc.

Barriers of cooperative networks

- Family structure of many of the tourism businesses
- Disagreement between local authorities, lack of dialogue, lack of leadership
- Bureaucracy, etc.

4. How should the stakeholders be involved in sustainable tourism development?

- It will rest on the policy development view of stakeholder: the type and extent of *stakeholder involvement* will greatly depend on **time, available resources, and leadership**.
 - ⇒ There are occasions when one or more stakeholders are not available → the level of stakeholder involvement will be narrowed.
 - ⇒ Methods to include stakeholders under these conditions: *public hearings, advisory committees, surveys, focus groups, and written comments*. (What was your experience with the FOCUS groups?)
 - ⇒ If time, resources and leadership are available, the stakeholders then need to be **empowered to make decisions** throughout the process and understand that their participation has the potential to influence the decision.
 - ⇒ This type of involvement must begin through educational process regarding the issues and interests that are involved in the ST development. **Collaboration, partnerships, and collaborative learning** are three methods that allow for this type of involvement of all stakeholders.



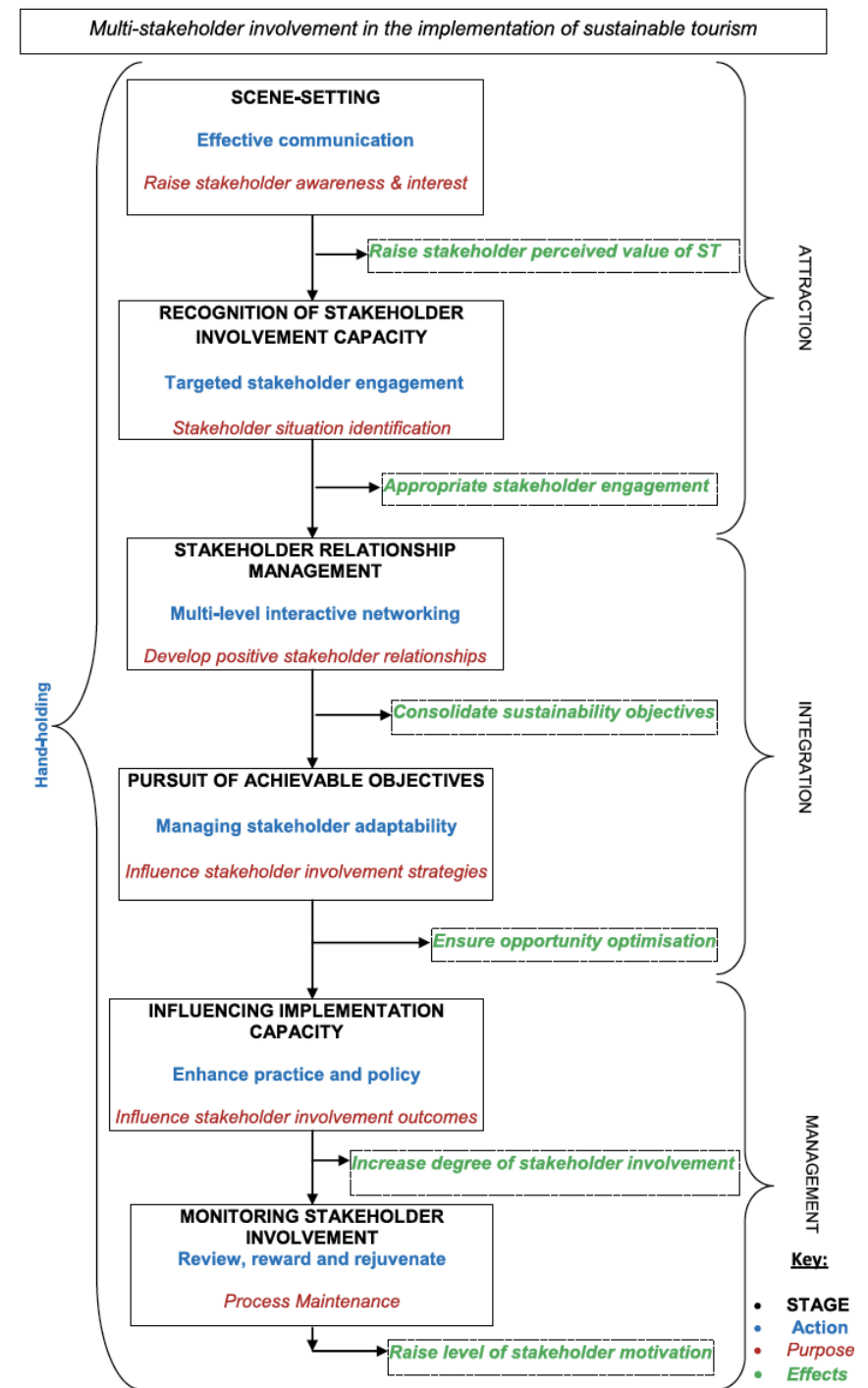
4. How should the stakeholders be involved in sustainable tourism development?

- How do tourism professionals include stakeholders in the decision making process?
 - ⇒ Step 1: **identify** who the stakeholders are.
 - ⇒ Step 2: the question is how should the **stakeholder be included** in the decision making process.
 - ✓ There are many methods, however the tourism literature and tourism professional give multiple examples of how to include the current residents
 - collaboration, public meetings, tourism advisory boards, and surveys.
 - Inclusion of this group can be formal or informal. It is important that the people involved are representative of the entire local resident population, even though their level of participation can be different.
 - ✓ Future residents may be more difficult to include in the decision making process in a formal manner. Future residents cannot physically be brought into a public meeting or be part of a collaborative work group.
 - ⇒ Step 3: how can **their interests be included** in the decision making process?
 - ✓ One method would be monitoring community demographic trends so that tourism planners can predict what the future resident population will be like
 - ✓ Monitoring community demographic trends allows planners to make informed decisions about what the needs of the future residents will be.
 - ✓ Clearly, tourism planners need to have a vision of the future and develop long-term plans in conjunction with the entire community including economic development, education, infrastructure, and emergency management.

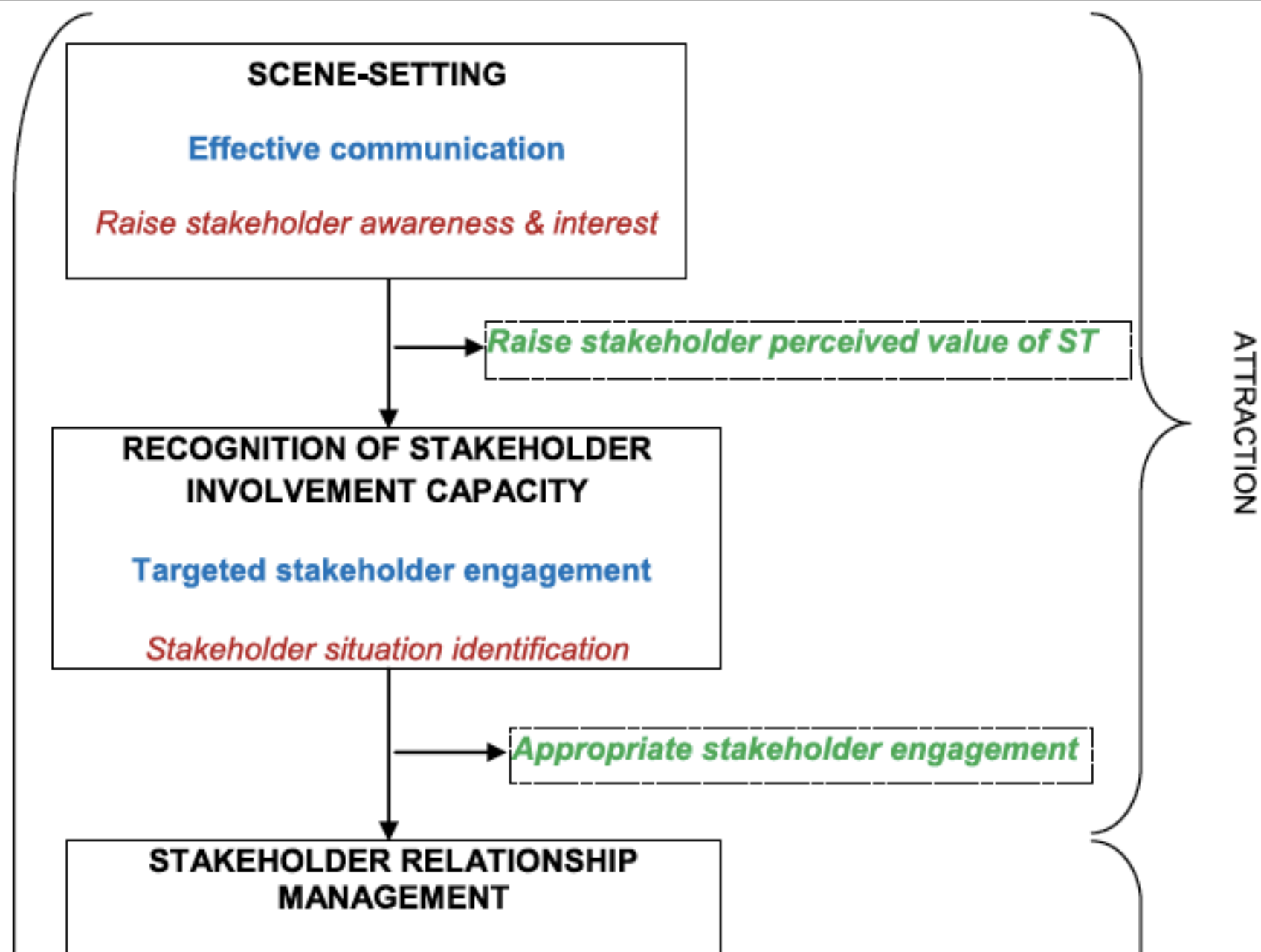
4. How should the stakeholders be involved in sustainable tourism development?

- How do tourism professionals include stakeholders in the decision making process?
 - ⇒ To include current visitors in the tourism planning process, as with each group, they must be identified and contacted.
 - ✓ Current visitors can be included in the process either formally or informally → will only be a part of the process for a short period of time.
 - ✓ The most feasible forms of inclusion for this group of stakeholders are **focus groups, surveys** (with questions about what would improve the destination), and intercepting visitors while they are at the destination.
 - ✓ Tourism planners must make sure that this is not a one time occurrence. Current visitors must be included as part of an on-going process. A yearly survey of current visitors about the destination would be an example of an ongoing process.
 - ✓ In addition to incorporating the current visitors' interests into the sustainable tourism development process, planners need to identify other groups that may become future visitors. Future visitors may be the most difficult group to include because of the problem associated with identifying this group.
 - ⇒ Planners must monitor and understand the demographics and preferences of the current visitors in an attempt to predict who may be the future visitor.
 - ⇒ Tourism planners need to be aware of potential new markets and, before trying to attract them, know their interests and if the area can meet the visitors' interests.
 - ⇒ The first step to sustainable tourism development in a community is the identification of stakeholders. Once the stakeholders are identified, they can be included in the tourism development process. Only then will the tourism development have its best chance to be truly sustainable.
 - ⇒ All stakeholders do not need to be involved equally in the decision making process, but it does require that all interests are identified and understood.

Steps to be taken in multi-stakeholder involvement and implementation of ST development



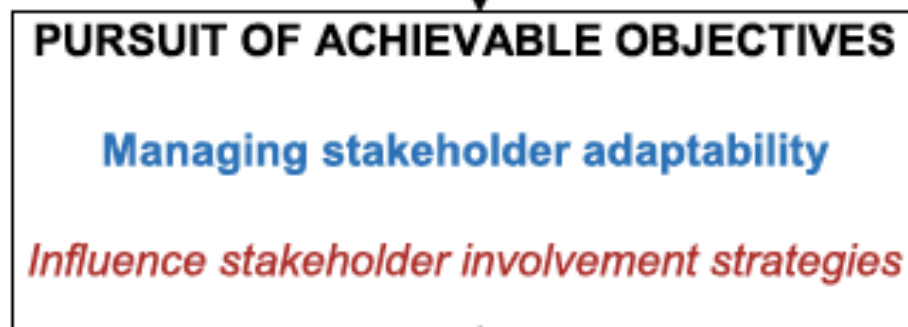
Multi-stakeholder involvement in the implementation of sustainable tourism



Hand-holding



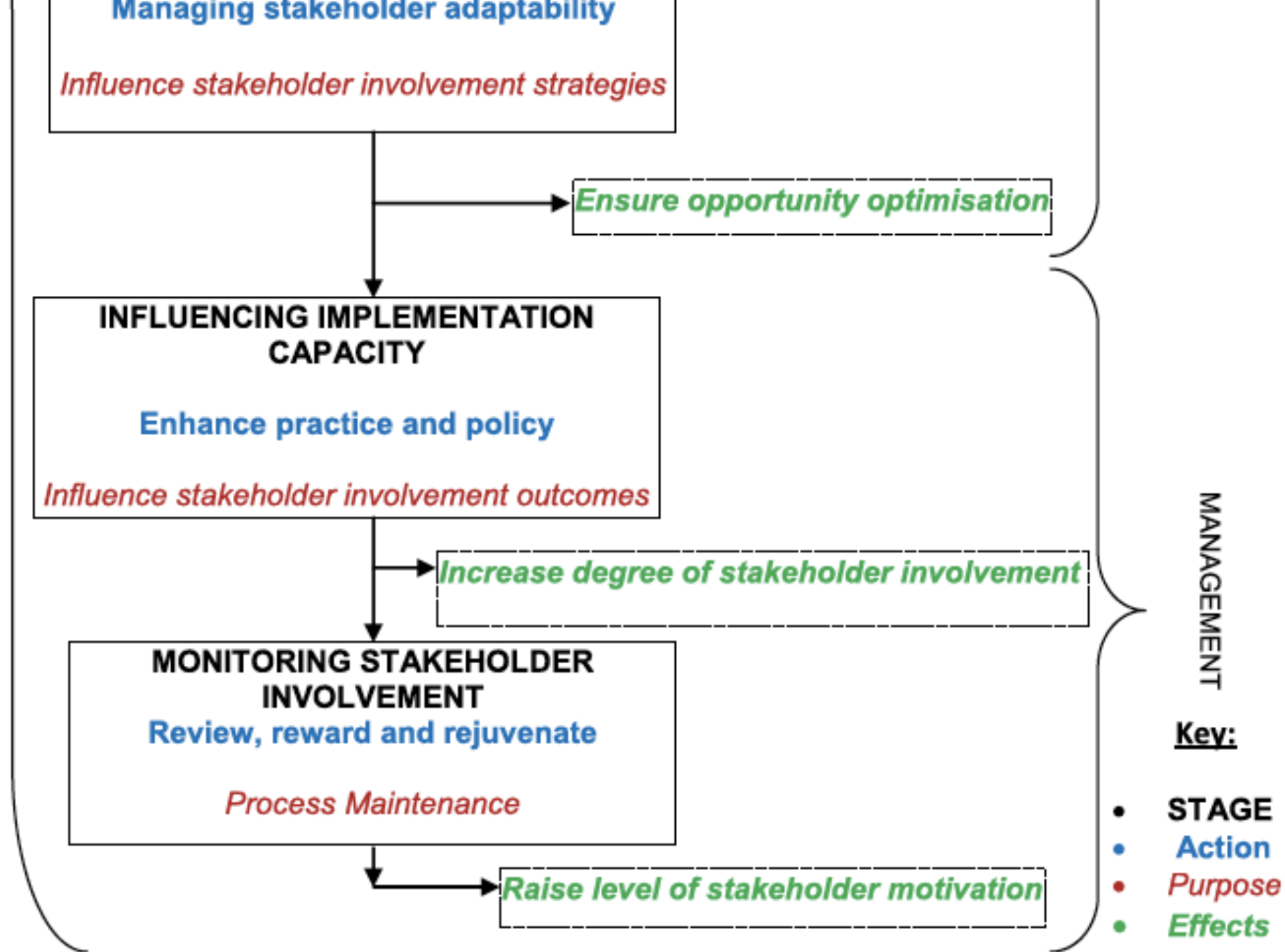
Consolidate sustainability objectives



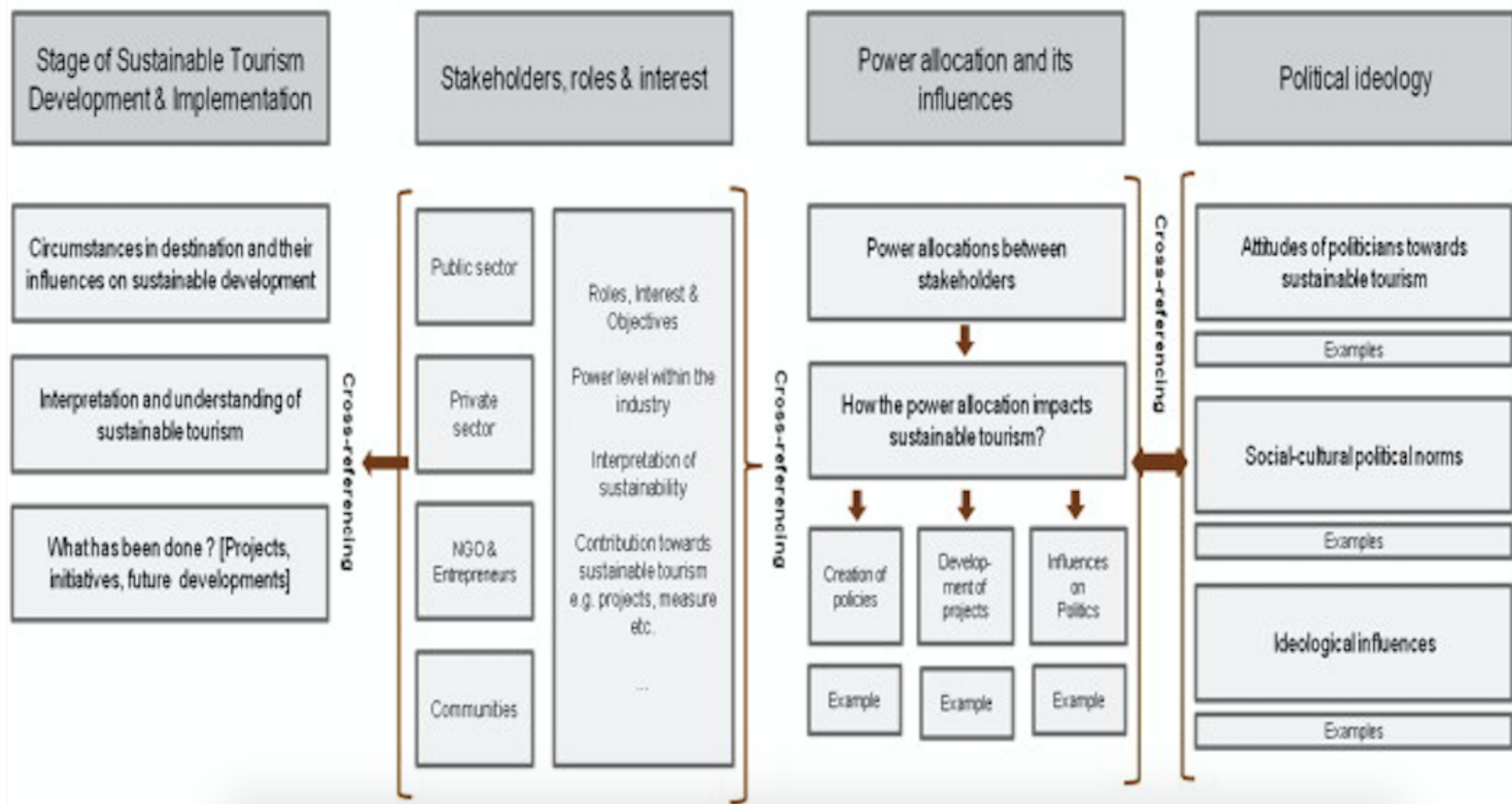
Ensure opportunity optimisation



INTEGRATION



Tourism Politics

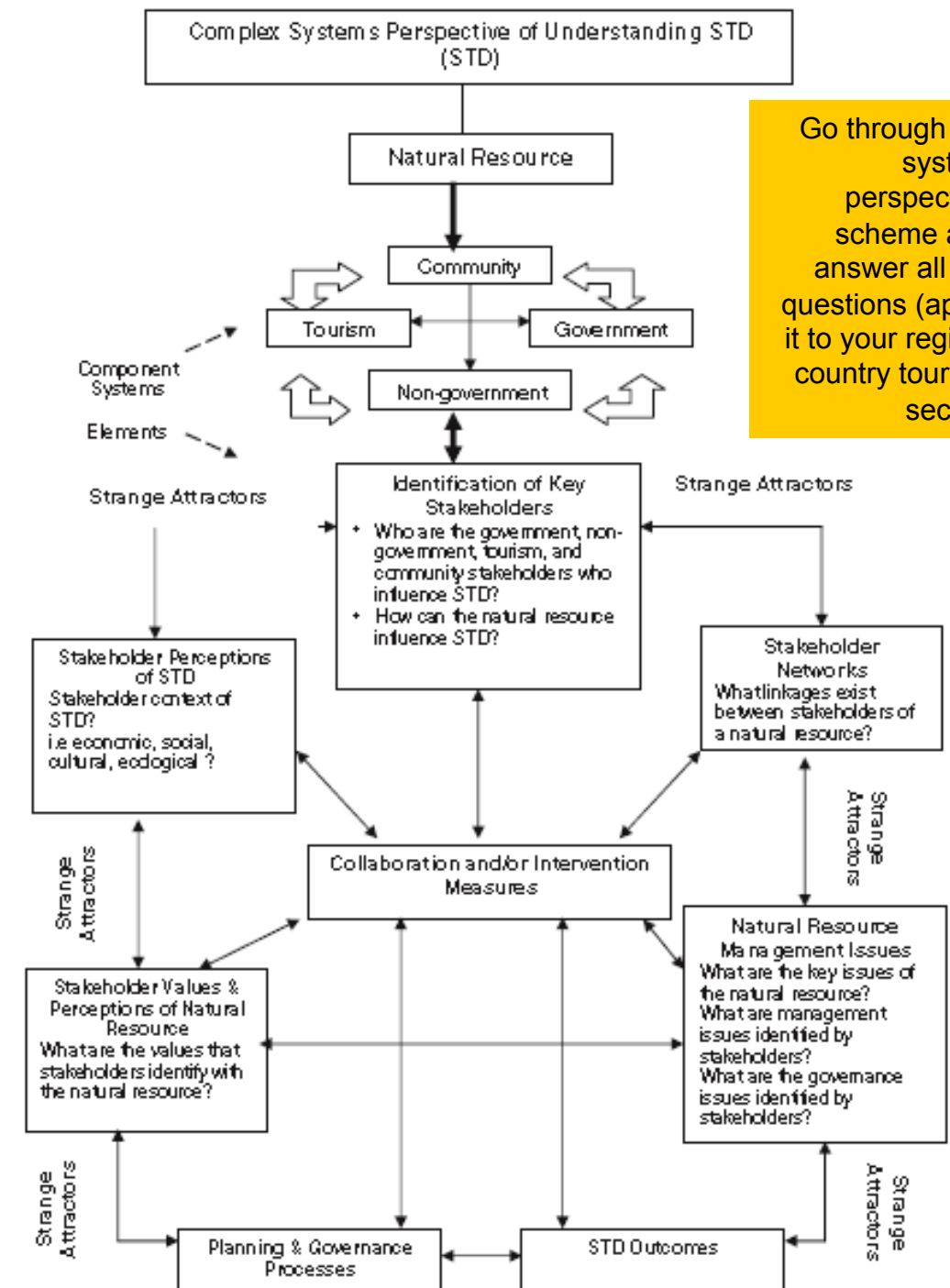


4. How should the stakeholders be involved in sustainable tourism development?

Stakeholder type	Role in delivering sustainable tourism
<u>National Government</u> Tourism Ministry Other Ministries' Tourism agencies, e.g. Tourist Board Other government delivery agencies Resource management bodies e.g. National Parks Service	Tourism policy and strategy development and implementation Relating tourism to wider policies and strategies Legislation, standards and regulation relating to the sector Infrastructure planning and development Resource management Communication, information and marketing
<u>Local Government and destination bodies</u> Regional government Local authorities e.g. District Councils Destination management organisations, e.g. public-private	Local strategic direction and planning Implementation of policy and regulations Local infrastructure development and management Stakeholder engagement, coordination and support
<u>Private sector businesses</u> Tourism trade associations, national and local Tourism service providers. e.g. hotel businesses Tour operators – international and incoming Suppliers to the sector, e.g. food producers Investors – international and domestic	Representation of, and influence on, the tourism sector Operation of tourism services Link to domestic and international markets Product development, investment and improvement Employment creation and generating local income Reflecting economic, social and environmental sustainability issues in development and operations
<u>NGOs – International, national and local</u> Sustainable development NGOs Environment, conservation and cultural NGOs Social and community NGOs	Representing different stakeholder interests Engaging in strategic planning and development Stakeholder coordination and supporting implementation Capacity building and provision of expertise
<u>Local community</u> Community councils and representative bodies Traditional structures –e.g. tribal chiefs/bodies Organised groups, e.g. women, youth Local formal and informal traders Individual households	Engaging in planning and decisions on tourism at a local level Representing and communicating local community interests Pursuing equitable benefit sharing within communities Interacting with tourists to mutual benefit Receiving income from tourist spending
<u>Consumers/tourists</u> Individual tourists Consumer networks, clubs and societies Travel media and social media users	Providing the main source of income to the sector Behaving responsibly towards the environment and local communities in travel choice and actions Communicating information and opinions on destinations and sustainability issues accurately and fairly

4. How should the stakeholders be involved in sustainable tourism development?

- After identifying the key stakeholders, their interest (of all stakeholders) are requested as decisions need to be based on updated/real information.
- Once a decision or plan is developed, it should have flexibility and the option of renegotiation.
- Proper stakeholder involvement has multiple outcomes depending on the process used and the stakeholders. The outcomes of involvement include:
 - ✓ The public is informed and educated about the topics and issues.
 - ✓ Public values and opinions are incorporated in the decision making process.
 - ✓ The quality and legitimacy of the decisions are improved. New ideas are generated.
 - ✓ An increase in trust between all parties.
 - ✓ A reduction in conflict and lawsuits.
 - ✓ A cost effective process.
 - ✓ The promotion of shared responsibility.
 - ✓ Even if parties cannot resolve a particular issue, the process should be able to help them understand the goals and perspectives of others by fostering communication and build relationships.



5. Main conclusions

- To be presented by the trainees through the presentation containing the results of the different activities/exercises
 - ✓ The preparation of the presentation must be carried out during the training sessions (while solving the exercises) in groups of 5 to 6 persons
 - ✓ The presentation should take no more than 5' per group



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Topic 6.2. Sustainable Tourism Indicators

Content

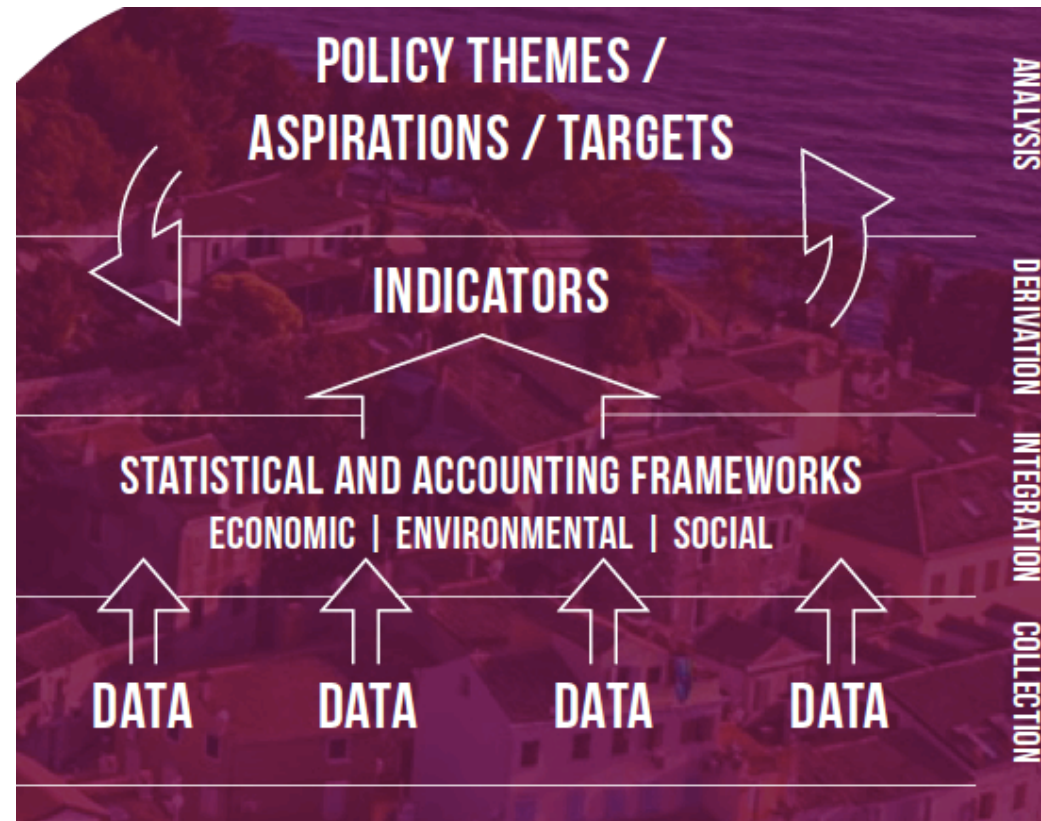
1. Indicators of ST: what for?
2. Classification
3. Possible sources

1. Indicators of ST: what for?

- Tourism has significant potential to drive socioeconomic development and environmental conservation. Academics and practitioners stated and tested the causality between tourism and economic growth
- Sustainable Development Goals by 2030 → SUSTAINABLE TOURISM mentioned in 3 out of the 17 SDG
- Under the current context characterized by a large globalization and keeping in mind the each time more complex economy with large dependence on foreign investors and economies, the design, implementation and monitoring of each economic activity is vital.
- Thus, a common and robust set of data is critical for both governments and stakeholders also in the area of sustainable tourism and the policies designed and implemented in this sector.

1. Indicators of ST: what for?

=> a rigorous, statistical approach to the measurement of sustainable tourism is required for the decision making process based on accurate data.



2. Classification

- Based on the dimensions considered in the ST, indicators of ST are classified in 3 main categories:
 - ✓ Social dimension indicators
 - ✓ Economic dimension indicators
 - ✓ Environmental dimension indicators

2. Classification

Social dimension indicators

Indicator	Formula/assessment
Sport facilities per inhabitant	$I_1 = \frac{\text{Number of sports facilities}}{\text{Total population of the municipality}}$
Health care equipment	$I_2 = \frac{\text{Number of health centers}}{\text{Total population of the municipality}}$
Number of passenger transport vehicles per inhabitant	$I_3 = \frac{\text{Number of passenger transport vehicles}}{\text{Total population of the municipality}}$
Number of financial establishments per inhabitant	$I_4 = \frac{\text{Number of financial institutions}}{\text{Total population of the municipality}}$
Number of services sector establishments per inhabitant	$I_5 = \frac{\text{Number of establishments in the service sector}}{\text{Total population of the municipality}}$
Number of pharmacies per inhabitant	$I_6 = \frac{\text{Number of pharmacies}}{\text{Total population of the municipality}}$
Evaluation of destination safety by tourists	Safety assessment by tourist (provincial approach)
Number of protected designated sites	$I_8 = \frac{\text{Number of cultural assests (heritage building)}}{\text{Surface of the municipality}}$
Number of cultural volunteers	Number of volunteers in cultural voluntary associations
Pressure on cultural heritage	$I_{10} = \frac{\text{Number of tourists/365}}{\text{Number of cultural assests (heritage building)}}$
Number of expert guides in interpretation	Number of expert guides in interpretation (provincial approach)
Number of festivals and customs preserved	Number of local festivals and traditions of the destination
Variation of population level	$I_{11} = \left \frac{\text{Population (2006)}}{\text{Population (1996)}} \times 100 - 100 \right $
Percentage of young population	$I_{12} = \frac{\text{Population under 20 years}}{\text{Total population of the municipality}} \times 100$
Percentage of non-active older population	$I_{13} = \frac{\text{Population over 65 years}}{\text{Total population of the municipality}} \times 100$
Number of individuals per unit destination area	$I_{14} = \frac{\text{Total population of the municipality}}{\text{Area of the municipality}}$
Net migration rate	$I_{15} = \text{Inmigrants} - \text{Emigrants} $
Rate of natural increase	$I_{16} = \text{Vegetative growth} $
Percentage of foreign population	$I_{17} = \frac{\text{Foreign population}}{\text{Total population of the municipality}} \times 100$
Ratio of tourists to locals	$I_{18} = \frac{\text{Tourist population assisted}}{\text{Total population of the municipality}} \times 100$
Life expectancy	Life expectancy at birth (provincial approach)
Variation of available income	$I_{20} = \frac{\text{Declared income 2005} - \text{Declared income 2004}}{\text{Declared income 2004}} \times 100$
Percentage of population enrolled in non-compulsory education	$I_{21} = \frac{\text{School population (non-compulsory levels)}}{\text{Total population of the municipality}} \times 100$
General demographic dependency index	$I_{22} = \frac{\text{Population under 15 and over 65 years}}{\text{Population between 15 and 65 years}} \times 100$
Property value of real estate per inhabitant	$I_{26} = \frac{\text{Taxable property value}}{\text{Total population of the municipality}} \times 100$
Percentage of renovated buildings	$I_{CU1} = \frac{\text{Number of renovated buildings}}{\text{Total number of homes in the municipality}} \times 100$
Funds for building renovation	$I_{CU4} = \frac{\text{Amount of funds for building renovation}}{\text{Total population of the municipality}}$
Funds for the improvement of the physical urban environment	$I_{CUS} = \frac{\text{Public funds for the improvement of the physical urban environment}}{\text{Area of the municipality}}$

Source?

Baseline aspects	Sustainability issues		Indicator	Formula/assessment
Socio-cultural effects of tourism on host community	Capacity of sports services activities	Source?	Sport facilities per inhabitant	$I_1 = \frac{\text{Number of sports facilities}}{\text{Total population of the municipality}}$
	Capacity of health services		Health care equipment	$I_2 = \frac{\text{Number of health centers}}{\text{Total population of the municipality}}$
	Capacity of transport services		Number of passenger transport vehicles per inhabitant	$I_3 = \frac{\text{Number of passenger transport vehicles}}{\text{Total population of the municipality}}$
	Capacity of financial services		Number of financial establishments per inhabitant	$I_4 = \frac{\text{Number of financial institutions}}{\text{Total population of the municipality}}$
	Capacity of other services		Number of services sector establishments per inhabitant	$I_5 = \frac{\text{Number of establishments in the service sector}}{\text{Total population of the municipality}}$
Local public safety	Capacity of pharmaceutical services		Number of pharmacies per inhabitant	$I_6 = \frac{\text{Number of pharmacies}}{\text{Total population of the municipality}}$
	Tourist satisfaction with the safety of the destination		Evaluation of destination safety by tourists	Safety assessment by tourist (provincial approach)
Conservation of cultural heritage	Protected cultural heritage		Number of protected designated sites	$I_8 = \frac{\text{Number of cultural assests (heritage building)}}{\text{Surface of the municipality}}$
	Voluntary contributions to preservation of cultural heritage		Number of cultural volunteers	Number of volunteers in cultural voluntary associations
	Heritage use intensity		Pressure on cultural heritage	$I_{10} = \frac{\text{Number of tourists/365}}{\text{Number of cultural assests (heritage building)}}$
	Heritage interpretation		Number of expert guides in interpretation	Number of expert guides in interpretation (provincial approach)
	Protection of cultural traditions		Number of festivals and customs preserved	Number of local festivals and traditions of the destination

Baseline aspects	Sustainability issues		Indicator	Formula/assessment
Effect on local population structure	Sustaining population levels	Source?	Variation of population level	$I_{11} = \left \frac{\text{Population (2006)}}{\text{Population (1996)}} \times 100 - 100 \right $
	Increase in the young population		Percentage of young population	$I_{12} = \frac{\text{Population under 20 years}}{\text{Total population of the municipality}} \times 100$
	Aging of the population		Percentage of non-active older population	$I_{13} = \frac{\text{Population over 65 years}}{\text{Total population of the municipality}} \times 100$
	Population density		Number of individuals per unit destination area	$I_{14} = \frac{\text{Total population of the municipality}}{\text{Area of the municipality}}$
Social carrying capacity of the destination	Sustaining population levels		Net migration rate	$I_{15} = \text{Inmigrants} - \text{Emigrants} $
	Sustaining population levels		Rate of natural increase	$I_{16} = \text{Vegetative growth} $
	Imposition of foreign culture (pressure on host culture)		Percentage of foreign population	$I_{17} = \frac{\text{Foreign population}}{\text{Total population of the municipality}} \times 100$
	Social carrying capacity		Ratio of tourists to locals	$I_{18} = \frac{\text{Tourist population assisted}}{\text{Total population of the municipality}} \times 100$
Effects on level of well-being in the local population	Effect on social conditions that affect population longevity		Life expectancy	Life expectancy at birth (provincial approach)
	Effects on available income		Variation of available income	$I_{20} = \frac{\text{Declared income 2005} - \text{Declared income 2004}}{\text{Declared income 2004}} \times 100$
	Effects on educational levels of population		Percentage of population enrolled in non-compulsory education	$I_{21} = \frac{\text{School population (non-compulsory levels)}}{\text{Total population of the municipality}} \times 100$

Baseline aspects	Sustainability issues		Indicator	Formula/assessment
Improvement of the urban landscape	Effects on population dependency	Source?	education	
	Effects on access to housing		General demographic dependency index	$I_{22} = \frac{\text{Population under 15 and over 65 years}}{\text{Population between 15 and 65 years}} \times 100$
	Renovation of buildings		Property value of real estate per inhabitant	$I_{26} = \frac{\text{Taxable property value}}{\text{Total population of the municipality}} \times 100$
	Renovation of buildings (cost of cultural protection)		Percentage of renovated buildings	$I_{CU1} = \frac{\text{Number of renovated buildings}}{\text{Total number of homes in the municipality}} \times 100$
	Improvement of the urban environment		Funds for building renovation	$I_{CU4} = \frac{\text{Amount of funds for building renovation}}{\text{Total population of the municipality}}$
			Funds for the improvement of the physical urban environment	$I_{CU5} = \frac{\text{Public funds for the improvement of the physical urban environment}}{\text{Area of the municipality}}$

2. Classification

Economic dimension indicators

Baseline aspects	Sustainability issues	Source?	Indicator	
Economic benefits of tourism for the host community and destination	Volume of tourism demand		Total number of tourist arrivals	Total number of tourist arrivals to the municipality
	Length of stay		Average length of stay	Average length of stay
	Tourism revenues		Tourist expenditure	$I_{25} = \frac{\text{Overnights} \times \text{Average daily expenditure (provincial)}}{1\,000\,000}$
	Investment in real estate		Property value of real estate	$I_{26} = \frac{\text{Taxable property value}}{\text{Total population of the municipality}} \times 100$
	Employment generated by the service sector		Proportion of employees in the service sector	$I_{27} = \frac{\text{Population employed in the service sector}}{\text{Population employed in the municipality}} \times 100$
	Level of unemployment at the destination		Unemployment rate	Total unemployment rate at the municipality
Sustaining tourist satisfaction	Investment in service sector		Volume of registered service sector investment	$I_{29} = \frac{\text{Investment in service sector (industrial registry office)}}{\text{Number of establishments in service sector}}$
	Telephone communications		Number of telephone lines in service	$I_{30} = \frac{\text{Number of telephone lines in service}}{\text{Total population of the municipality}/1000}$
	Online communications		Number of RDSI lines in service per 1000 inhabitants	$I_{31} = \frac{\text{Number of RDSI lines in service}}{\text{Total population of the municipality}/1000}$
	Online communications		Number of ADSL lines in service per 1000 inhabitants	$I_{32} = \frac{\text{Number of ADSL lines in service}}{\text{Total population of the municipality}/1000}$
	Available income per inhabitant		Declared net income per inhabitant	$I_{33} = \frac{\text{Declared net income}}{\text{Total population of the municipality}}$
	Global tourist satisfaction		Global satisfaction level of tourists	Global satisfaction level of tourists (provincial approach)
Development control	Tourist satisfaction with price-quality relationship		Evaluation of the price-quality relationship by tourists	Evaluation of the price-quality relationship by tourists (provincial approach)
	Tourist demand faithfulness		Percentage of return visitors	Percentage of return visitors (provincial zones approach)
	Satisfaction with the visit to cultural sites of the destination		Level of satisfaction with the visit to cultural sites of the destination	Level of satisfaction with the visit to cultural sites of the destination (provincial approach)
Tourism facilities on offer – provision of a variety of experiences	Planning of the tourist area		Existence of land use planning, including tourism	Existence of land use planning of destination
	Official tourism accommodation on offer		Vacancies in official tourism accommodation establishments	$I_{38} = \frac{\text{Official tourism accommodation on offer}}{\text{Total population of the municipality}} \times 100$
	Quality of official tourism accommodation on offer		High quality vacancies of official tourism accommodation establishments	$I_{39} = \frac{\text{High quality vacancies of official tourism accommodation establishments}}{\text{Total number of places offered}}$

Baseline aspects	Sustainability issues	Source?	Indicator	
Destination competitiveness	Occupancy rates for official accommodation establishments		Average occupancy rate for official tourism accommodation establishments	Average occupancy rate for official tourism accommodation establishments
Tourist routes	Tourist routes created		Number of tourist routes that include the destination in their itinerary	Number of tourist routes that include the destination in their itinerary
	Exploitation routes		Number of expert tourist guides	Number of expert tourist guides (provincial approach)
Cultural investment	Cost of cultural protection		Funds for building renovation	$I_{CU4} = \frac{\text{Funds for building renovation}}{\text{Total population of the municipality}}$
Agglomeration	Spatial distribution of sites that may be visited at the destination		Number of routes and itineraries within the municipality	Number of routes and itineraries within the municipality

Baseline aspects	Sustainability issues	Source?	Indicator	
Economic benefits of tourism for the host community and destination	Volume of tourism demand		Total number of tourist arrivals	Total number of tourist arrivals to the municipality
	Length of stay		Average length of stay	Average length of stay
	Tourism revenues		Tourist expenditure	$I_{25} = \frac{\text{Overnights} \times \text{Average daily expenditure (provincial)}}{1,000,000}$
	Investment in real estate		Property value of real estate	$I_{26} = \frac{\text{Taxable property value}}{\text{Total population of the municipality}} \times 100$
	Employment generated by the service sector		Proportion of employees in the service sector	$I_{27} = \frac{\text{Population employed in the service sector}}{\text{Population employed in the municipality}} \times 100$
	Level of unemployment at the destination		Unemployment rate	Total unemployment rate at the municipality
	Investment in service sector		Volume of registered service sector investment	$I_{29} = \frac{\text{Investment in service sector (industrial registry office)}}{\text{Number of establishments in service sector}}$
	Telephone communications		Number of telephone lines in service	$I_{30} = \frac{\text{Number of telephone lines in service}}{\text{Total population of the municipality}/1000}$
	Online communications		Number of RDSI lines in service per 1000 inhabitants	$I_{31} = \frac{\text{Number of RDSI lines in service}}{\text{Total population of the municipality}/1000}$
	Online communications		Number of ADSL lines in service per 1000 inhabitants	$I_{32} = \frac{\text{Number of ADSL lines in service}}{\text{Total population of the municipality}/1000}$
Sustaining tourist satisfaction	Available income per inhabitant		Declared net income per inhabitant	$I_{33} = \frac{\text{Declared net income}}{\text{Total population of the municipality}}$
	Global tourist satisfaction		Global satisfaction level of tourists	Global satisfaction level of tourists (provincial approach)
	Tourist satisfaction with price-quality relationship		Evaluation of the price-quality relationship by tourists	Evaluation of the price-quality relationship by tourists (provincial approach)
	Tourist demand faithfulness		Percentage of return visitors	Percentage of return visitors (provincial zones approach)
Development control	Satisfaction with the visit to cultural sites of the destination		Level of satisfaction with the visit to cultural sites of the destination	Level of satisfaction with the visit to cultural sites of the destination (provincial approach)
	Planning of the tourist area		Existence of land use planning, including tourism	Existence of land use planning of destination

Baseline aspects	Sustainability issues		Indicator	Formula/assessment
Tourism facilities on offer – provision of a variety of experiences	Official tourism accommodation on offer	Source?	Vacancies in official tourism accommodation establishments	$I_{38} = \frac{\text{Official tourism accommodation on offer}}{\text{Total population of the municipality}} \times 100$
	Quality of official tourism accommodation on offer		High quality vacancies of official tourism accommodation establishments	$I_{39} = \frac{\text{High quality vacancies of official tourism accommodation establishments}}{\text{Total number of places offered}}$
	Non-official tourism accommodation on offer		Number of non-official tourism accommodation establishments	$I_{40} = \frac{\text{Unoccupied housing}}{\text{Total number of housing}} \times 100$
	Restaurant services on offer		Vacancies offered in restaurants	$I_{41} = \frac{\text{Vacancies offered in restaurants}}{\text{Total population of the municipality}} \times 100$
	Promotion of activities for tourists		Number of tourist information offices per tourist	$I_{42} = \frac{\text{Number of tourist information offices per tourist}}{\text{Total number of tourists in the municipality}}$
Seasonality of tourism activity	Promotion of tourist experiences		Existence of a website that provides information about the destination	Existence of a website that provides information about the destination
	Seasonality of accommodation on offer		Percentage of official tourism accommodation establishments that are open all year	$I_{44} = \frac{\text{Accommodation establishments open in low season}}{\text{Total number of official tourism accommodation establishments}} \times 100$
	Seasonality of tourist demand		Ratio of low-season tourists to peak-season tourists	$I_{45} = \frac{\text{Number of tourists in the month of lowest demand}}{\text{Number of tourists in the month of greatest demand}}$
	Seasonality of tourism employment		Ratio of low-season tourism employment to peak-season tourism employment	$I_{46} = \frac{\text{Low-season tourism employees}}{\text{Peak-season tourism employees}}$
Tourism employment	Volume of tourism employment		Total number of individuals employed in the tourism sector	Number of employees in the hotel industry
	Relative contribution of tourism employment to total employment at the destination		Percentage of employees in the tourism sector relative to total employment	$I_{48} = \frac{\text{Employees in hotel industry}}{\text{Population employed in the municipality}} \times 100$
	Capacity of transport services		Number of passenger transport vehicles per inhabitant	$I_3 = \frac{\text{Number of passenger transport vehicles}}{\text{Total population of the municipality}}$

Baseline aspects	Sustainability issues	Source?	Indicator	Formula/assessment
Tourism-related transport	Access to the destination by airport		Access time from the closest airport	Estimated access time from the closest airport
	Access to the destination by highway		Access time from the closest highway	Estimated access time from the closest highway
	Access to the destination by road		Access time from the closest road	Estimated access time from the closest road
	Access to the destination by railway		Access time from the closest railway station	Estimated access time from the closest railway station
	Network of roads for public transport		Density of roads	$I_{74} = \frac{\text{Total length of the road network}}{\text{Area of the municipality}}$

2. Classification

Environmental dimension indicators

Baseline aspects		Sustainability issues	Source?	Indicator	
Protection of the natural ecosystems		Protection of valuable natural assets		Percentage of the destination considered to be a protected natural area	Percentage of the destination's surface considered to be a protected natural area
Energy management		Energy Renewable energy		Energy consumption Percentage of energy consumption from renewable resources	$I_{55} = \frac{\text{Energy consumption}}{\text{Population} \times ((365 - 30)/365) + (\text{Overnights}/365)} \times \frac{\text{Overnights}}{365}$ $I_{56} = \frac{\text{Renewable energy consumption attributable to tourism (Ktep)}}{\text{Electricity consumption (Mwh)} \times (0.086/1000)} \times 100$
Water availability and management		Water use Water saving		Total volume consumed per day Volume of reused water attributed to tourism	$I_{57} = \frac{\text{Average water consumption}}{\text{Population} \times ((365 - 30)/365) + (\text{Overnights}/365)} \times \frac{\text{Overnights}}{365}$ $I_{58} = \frac{\text{Volume of reused water in Andalusia}}{\text{Total population in Andalusia} \times ((365 - 30)/365) + (\text{Overnights in Andalusia}/365)} \times \frac{\text{Overnights}}{365}$
Wastewater treatment		Treatment Treatment installations		Volume of treated wastewater Existence of wastewater treatment plans	Volume of treated wastewater (equivalent load approach) Existence of wastewater treatment plans in the municipality
Management of solid urban waste		Waste production		Volume of waste produced at the destination	$I_{61} = \frac{\text{Volume of waste}}{\text{Population} \times ((365 - 30)/365) + (\text{Overnights}/365)} \times \frac{\text{Overnights}}{365}$
		Recycled waste (glass)		Volume of recycled waste compared to total volume of waste	$I_{62} = \frac{\text{Volume of recycled glass}}{\text{Total population of the municipality}}$
		Tourist satisfaction with cleaning services		Evaluation of the cleaning services by tourists	Evaluation of the cleaning services by tourists (provincial approach)
		Treatment installations		Existence of solid-waste treatment installations	Existence of solid-waste treatment installations (or other treatment facilities)
Atmospheric pollution		Separate collection of waste (paper and cardboard)		Number of paper and cardboard recycling bins per unit area	$I_{65} = \frac{\text{Number of paper and cardboard recycling bins}}{\text{Area of the municipality}}$
		Recycled waste (paper and cardboard)		Volume of collected paper and cardboard	Volume of collected paper and cardboard per inhabitant
		Separate collection of glass		Number of glass recycling bins per inhabitant	$I_{67} = \frac{\text{Number of glass recycling bins}}{\text{Total population of the municipality}}$
		Noise pollution Noise pollution Pollutant emissions		Daytime noise levels Night-time noise levels Pollutant emission levels	Daytime noise levels Night-time noise levels $I_{70} = \frac{\text{Annual emissions in tons}}{\text{Resident population} + \text{Tourists}}$
Management of the visual impact of facilities and infrastructure		Impact of construction Erosion		Construction density per unit area Total surface area with erosion problems	$I_{71} = \frac{\text{Number of constructions}}{\text{Area of the municipality}}$ Percentage of surface with erosion problems (provincial approach)
Intensity of use		Landscape conservation		Total area of natural landscape	Percentage of municipality's surface of natural landscape
		Impact of the road network		Road network density	$I_{74} = \frac{\text{Total length of the road network}}{\text{Area of the municipality}}$
		Intensity of tourist use		Total tourists per unit area	$I_{75} = \frac{\text{Number of tourists received in the month of maximum influx}}{\text{Area of the municipality}}$
Environmental management		Land-use		Unoccupied buildings	$I_{76} = \frac{\text{Number of unoccupied housing}}{\text{Total number of housing}} \times 100$
		Environmental managers		Existence of an environmental administrative unit	Existence of an environmental administrative unit

Baseline aspects	Sustainability issues	Source?	Indicator	
Protection of the natural ecosystems	Protection of valuable natural assets		Percentage of the destination considered to be a protected natural area	Percentage of the destination's surface considered to be a protected natural area
Energy management	Energy Renewable energy		Energy consumption Percentage of energy consumption from renewable resources	$I_{55} = \frac{\text{Energy consumption}}{\text{Population} \times ((365 - 30)/365) + (\text{Overnights}/365)} \times \frac{\text{Overnights}}{365}$ $I_{56} = \frac{\text{Renewable energy consumption attributable to tourism (Ktep)}}{\text{Electricity consumption (Mwh)} \times (0.086/1000)} \times 100$
Water availability and management	Water use Water saving		Total volume consumed per day Volume of reused water attributed to tourism	$I_{57} = \frac{\text{Average water consumption}}{\text{Population} \times ((365 - 30)/365) + (\text{Overnights}/365)} \times \frac{\text{Overnights}}{365}$ $I_{58} = \frac{\text{Volume of reused water in Andalusia}}{\text{Total population in Andalusia} \times ((365 - 30)/365) + (\text{Overnights in Andalusia}/365)} \times \frac{\text{Overnights}}{365}$
Wastewater treatment	Treatment Treatment installations		Volume of treated wastewater Existence of wastewater treatment plans	Volume of treated wastewater (equivalent load approach) Existence of wastewater treatment plans in the municipality
	Waste production		Volume of waste produced at the destination	$I_{61} = \frac{\text{Volume of waste}}{\text{Population} \times ((365 - 30)/365) + (\text{Overnights}/365)} \times \frac{\text{Overnights}}{365}$

Baseline aspects	Sustainability issues		Sign	Indicator	Formula/assessment
Management of solid urban waste	Recycled waste (glass)	Source?	destination		
			Volume of recycled waste compared to total volume of waste	$I_{62} = \frac{\text{Volume of recycled glass}}{\text{Total population of the municipality}}$	
	Tourist satisfaction with cleaning services		Evaluation of the cleaning services by tourists		Evaluation of the cleaning services by tourists (provincial approach)
	Treatment installations		Existence of solid-waste treatment installations		Existence of solid-waste treatment installations (or other treatment facilities)
	Separate collection of waste (paper and cardboard)		Number of paper and cardboard recycling bins per unit area	$I_{65} = \frac{\text{Number of paper and cardboard recycling bins}}{\text{Area of the municipality}}$	
	Recycled waste (paper and cardboard)		Volume of collected paper and cardboard		Volume of collected paper and cardboard per inhabitant
Atmospheric pollution	Separate collection of glass		Number of glass recycling bins per inhabitant	$I_{67} = \frac{\text{Number of glass recycling bins}}{\text{Total population of the municipality}}$	
	Noise pollution		Daytime noise levels		Daytime noise levels
	Noise pollution		Night-time noise levels		Night-time noise levels
Management of the visual impact of facilities and infrastructure	Pollutant emissions		Pollutant emission levels	$I_{70} = \frac{\text{Annual emissions in tons}}{\text{Resident population} + \text{Tourists}}$	
	Impact of construction		Construction density per unit area	$I_{71} = \frac{\text{Number of constructions}}{\text{Area of the municipality}}$	
	Erosion		Total surface area with erosion problems		Percentage of surface with erosion problems (provincial approach)
	Landscape conservation		Total area of natural landscape		Percentage of municipality's surface of natural landscape
	Impact of the road network		Road network density	$I_{74} = \frac{\text{Total length of the road network}}{\text{Area of the municipality}}$	
Intensity of use	Intensity of tourist use		Total tourists per unit area	$I_{75} = \frac{\text{Number of tourists received in the month of maximum influx}}{\text{Area of the municipality}}$	
	Land-use		Unoccupied buildings	$I_{76} = \frac{\text{Number of unoccupied housing}}{\text{Total number of housing}} \times 100$	
Environmental management	Environmental managers		Existence of an environmental administrative unit		Existence of an environmental administrative unit

3. Possible sources

- To be identified and discussed by the trainees → by groups of up to 6 persons each (recommended to have the groups by regions and/or countries)
- A summary of the sources used for each type of ST indicator will be compared between the two Asian PCs



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Additional Reading Materials

Additional Reading Materials

- UNWTO (2013): Sustainable Tourism for Development Guidebook
<http://cf.cdn.unwto.org/sites/all/files/docpdf/devcoengfinal.pdf>
- Other additional materials will be facilitated by the trainer in electronic version

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**Competence centres for the development of sustainable
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to increase the positive impact of local tourism in
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