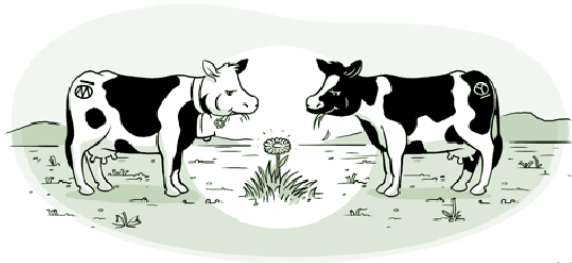


# Sustainability in theory

Garrett Hardin, *The Tragedy of the Commons*, 1968

Metaphor of pressure to the uncontrolled growth of human population on land resources, presenting it as a tragedy of freedom in a common property

Model free free access to pasture  
by several rational economic agents in the same time

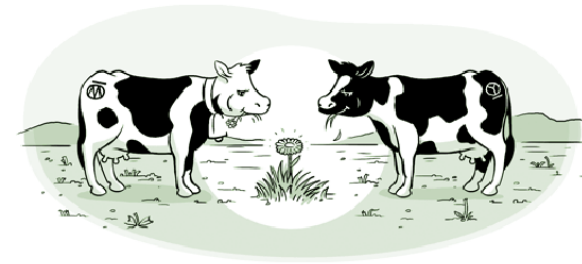


11

Garrett Hardin, *The Tragedy of the Commons*, 1968

Individual and private rationality - self interest, profits

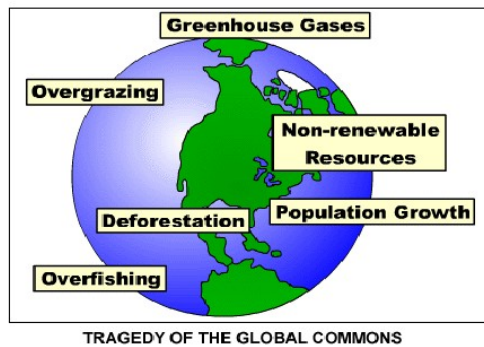
Social rationality - social interest, benefits



12

# Sustainability in theory

Garrett Hardin, *The Tragedy of the Commons*, 1968

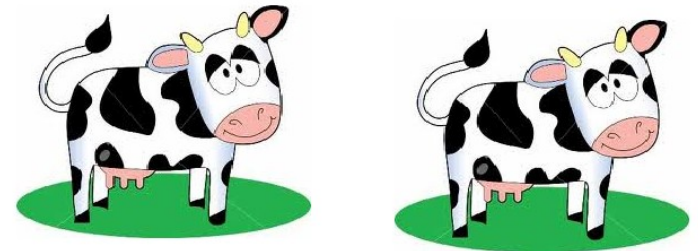


13

Garrett Hardin, *The Tragedy of the Commons*, 1968

**limit**

1 ha pasture = 2 cows per year



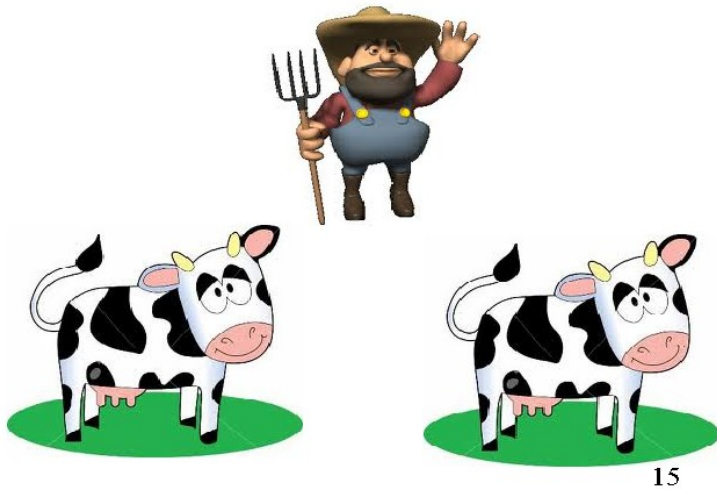
14

**Natural**

**Technological**

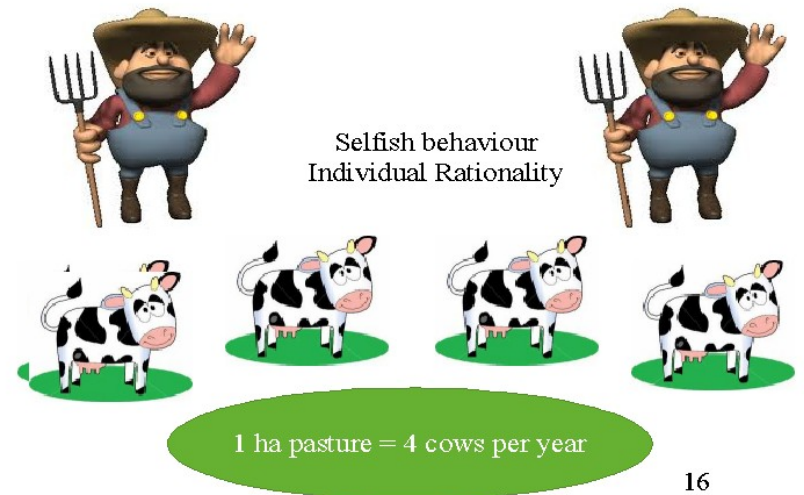
# Sustainability in theory

Garrett Hardin, *The Tragedy of the Commons*, 1968



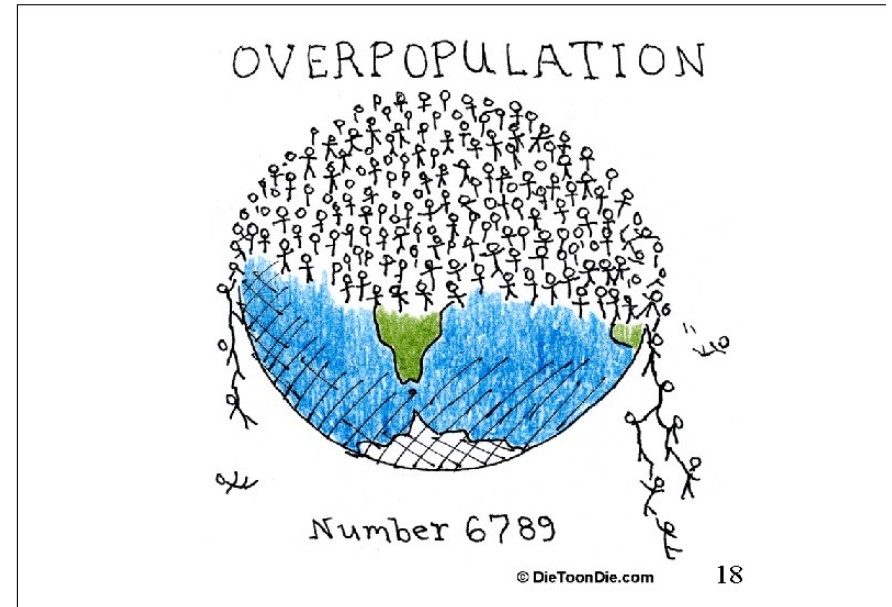
**Technology = 2 cow / 1 ha**

Garrett Hardin, *The Tragedy of the Commons*, 1968



**Egoism and free resource**

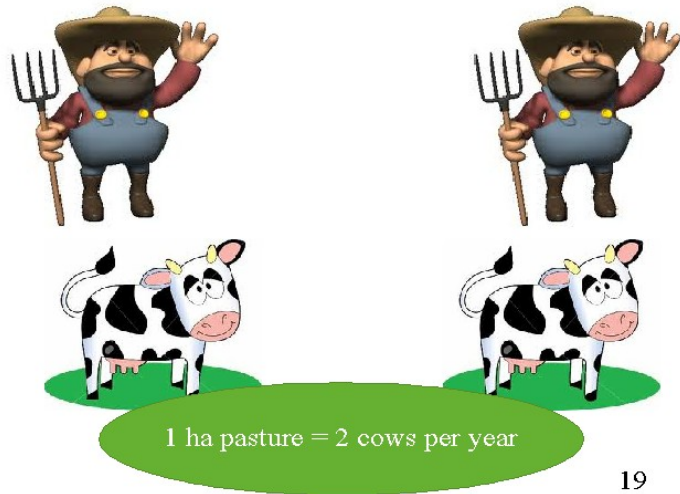
## Sustainability in theory



# Sustainability in theory

## Cooperation and free resource

### Agreement - Cooperation



Garrett Hardin, *The Tragedy of the Commons*, 1968



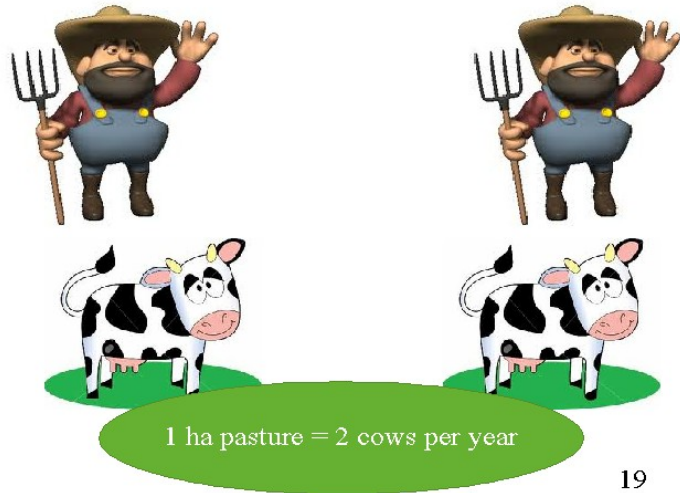
**We may assimilate free resource to limited resource**

**We may consider a destination a limited resource and tourists as cows (!)**

# Sustainability in theory

## Cooperation and free resource

### Agreement - Cooperation



Garrett Hardin, *The Tragedy of the Commons*, 1968



**Reality shows free individuals are not cooperative (selfish and short time decisions)**

**Policy is necessary trying to induce cooperation and resource conservation**

**Policy in destination management is rationing accesses**

## What is sustainability in real world? Why we need international agreements!

There is no universally agreed definition on what sustainability means. There are many different views on what it is and how it can be achieved. The idea of sustainability stems from the concept of sustainable development which became common language at the World's first Earth Summit in Rio in 1992.

The original definition of sustainable development is usually considered to be:



"Development that meets the needs of the present without compromising the ability of future generations to meet their own needs." **Bruntland Report for the World Commission on Environment and Development (1992)**

<http://www.un-documents.net/our-common-future.pdf>

**Since then**, there have been many variations and extensions on this basic definition. Many argue that sustainability has been hijacked and twisted to suit government and business that really want to continue with business as usual.

**The quotes below** will provide some ideas on what constitutes sustainable development and sustainability.



"A process of change in which the exploitation of resources, the direction of investments, the orientation of technological development and institutional change are all in harmony and enhance both current and future potential to meet human needs and aspirations" [The World Commission on Environment and Development](#)

"Sustainable development is a dynamic process which enables people to realise their potential and improve their quality of life in ways which simultaneously protect and enhance the earth's life support systems" [\(Forum for the Future\)](#)

"In essence sustainable development is about five key principles: quality of life; fairness and equity; participation and partnership; care for our environment and respect for ecological constraints - recognising there are 'environmental limits'; and thought for the future and the precautionary principle". [\(From Making London Work by Forum for the Future's Sustainable Wealth London project\)](#)

"The environment must be protected... to preserve essential ecosystem functions and to provide for the wellbeing of future generations; environmental and economic policy must be integrated; the goal of policy should be an improvement in the overall quality of life, not just income growth; poverty must be ended and resources distributed more equally; and all sections of society must be involved in decision making". [\(The Real World Coalition 1996, a definition based on the work of the World Commission on Environment and Development\)](#)

"We cannot just add sustainable development to our current list of things to do but must learn to integrate the concepts into everything that we do." [\(The Dorset Education for Sustainability Network\)](#)

"A sustainable future is one in which a healthy environment, economic prosperity and social justice are pursued simultaneously to ensure the well-being and quality of life of present and future generations. Education is crucial to attaining that future." [\(Learning for a Sustainable Future - Teacher Centre\)](#)

"The first and perhaps most difficult problem, one that seldom gets addressed, is the time frame...Is a sustainable society one that endures for a decade, a human lifetime, or a thousand years?" [\(The shaky ground of Sustainable Development Donald Worster in Global Ecology 1993\)](#)

What is sustainability?

Atlas or Hercules supporting the Globe  
Metropolitan Museum of Art - Gallery Images



## Sustainable Development Timeline

**1962 Silent Spring, by Rachel Carson**, brings together research on toxicology, ecology and epidemiology to suggest that agricultural pesticides are building to catastrophic levels, linked to damage to animal species and human health.

**1971 René Dubos and Barbara Ward write *Only One Earth***, which sounds an urgent alarm about the impact of human activity on the biosphere, but expresses optimism that shared concern for the planet could lead humankind to create a common future.

**1972 Club of Rome publishes the controversial *Limits to Growth***, which predicts dire consequences if growth is not slowed. Northern countries criticize the report for not including technological solutions; Southern countries are incensed because it advocates abandonment of economic development.

**1973 OPEC oil crisis.** Shortage of oil supply from producing countries

**1987 *Our Common Future (Brundtland Report)***, a report of the World Commission on Environment and Development, weaves together social, economic, cultural and environmental issues and global solutions. It popularizes the term “sustainable development.”

**1992 Earth Summit.** UN Conference on Environment and Development (UNCED) is held in Rio de Janeiro. Agreements are reached on the action plan **Agenda 21**, the **Rio Declaration**, and the non-binding **Forest Principles**. Two “Rio Conventions” are opened for signature: the **Convention on Biological Diversity** and the **Framework Convention on Climate Change**. Negotiations on a third, the Convention to Combat Desertification, are called for.

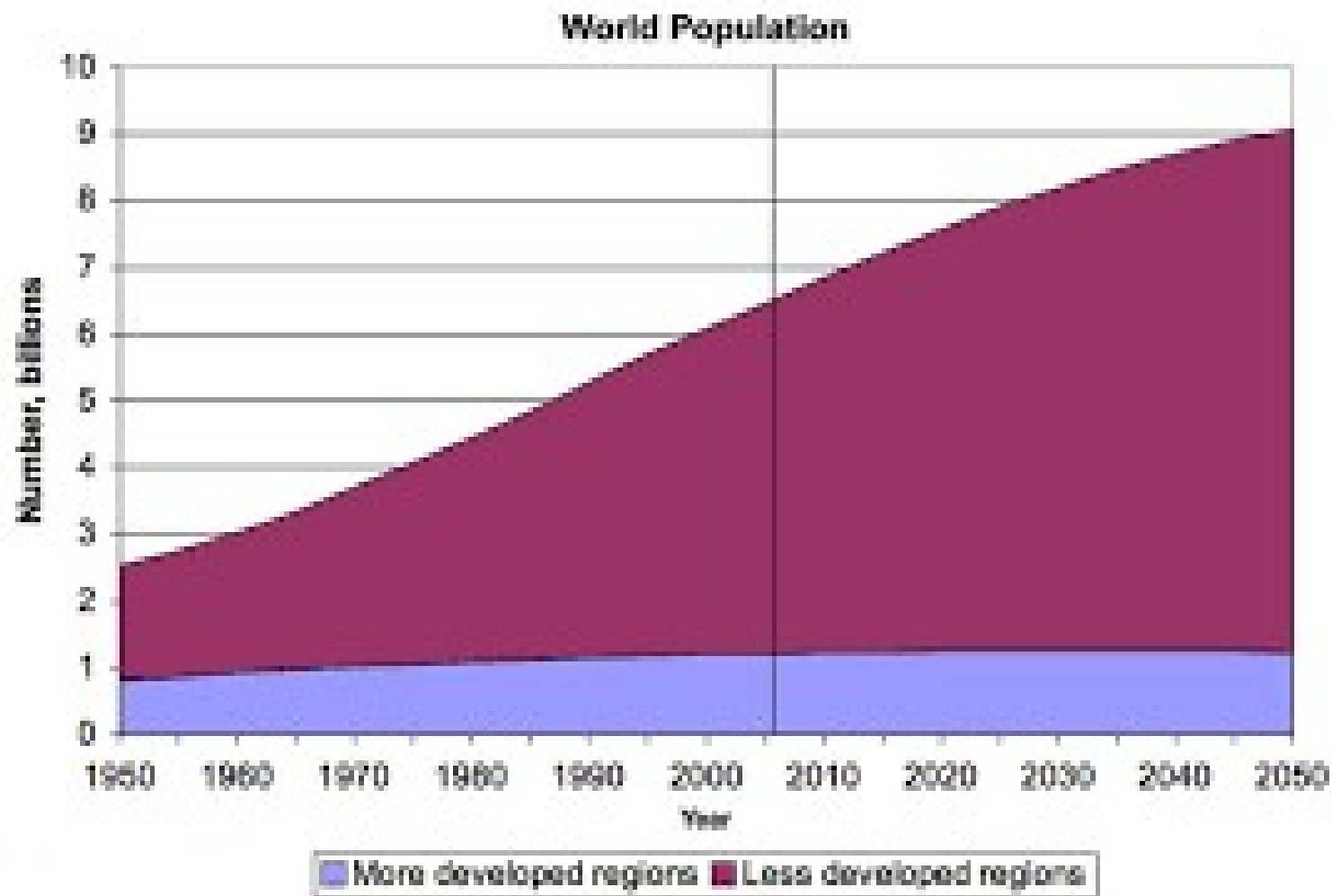
## Sustainable Development Timeline

**2005 Kyoto Protocol enters into force**, legally binding developed country parties to goals for greenhouse gas emission reductions, and establishing the Clean Development Mechanism for developing countries. Emissions reductions obligations expire at the end of 2012

**2000 UN Millennium Development Goals.** The largest-ever gathering of world leaders agrees to a set of time-bound and measurable goals for combating poverty, hunger, disease, illiteracy, environmental degradation and discrimination against women, to be achieved by 2015.



The world population



## Sustainability is still disputable

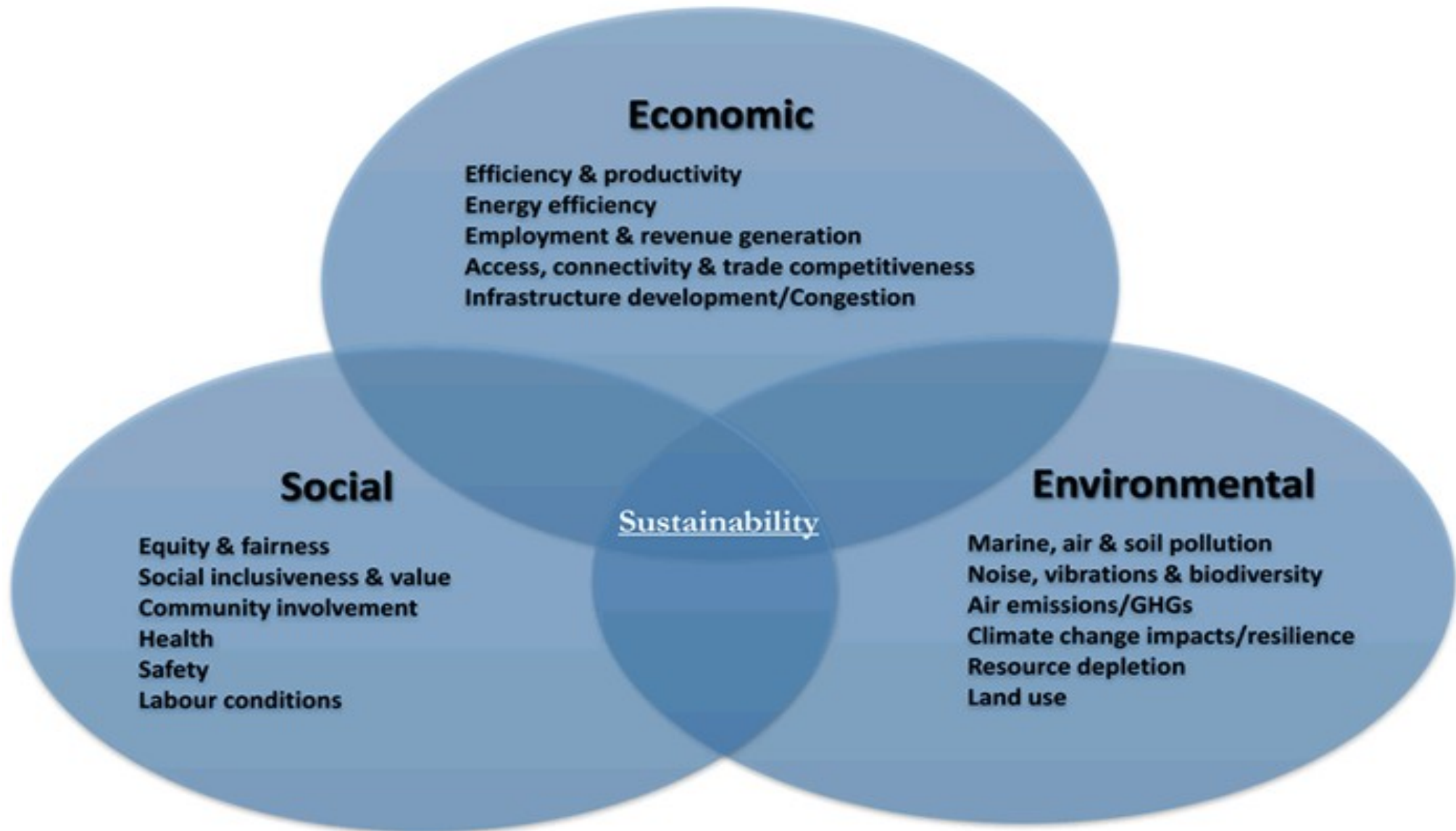


## Transforming our world: the 2030 Agenda for Sustainable Development

This Agenda is a plan of action for people, planet and prosperity. It also seeks to strengthen universal peace in larger freedom. We recognize that eradicating poverty in all its forms and dimensions, including extreme poverty, is the greatest global challenge and an indispensable requirement for sustainable development. [follows at the above link]



## Sustainability has dimensions



## **What are we talking about?**

### **Definition of Destination (everywhere in literature)**

**A destination is a geographical area consisting of all the services and infrastructure necessary for the stay of a specific tourist or tourism segment.**

**Destinations are the competitive units of incoming tourism. Destinations are therefore an important part of a tourism product.**

**However, different types of tourist destinations compete for the same markets, today**  
**type A**

**Centrally managed destinations and owned by one or few companies or individuals**

- cruise ships (mobile destinations)
- amusement parks
- winter sport resorts in Northern America
- summer vacation resorts, e.g. in Asia and in the Middle East

**type B**

**Destinations consisting of a system of fragmented services delivered by many companies and actors (numerous SMEs)**

- traditional tourist regions/ destinations with community character (e.g. in Europe) cities

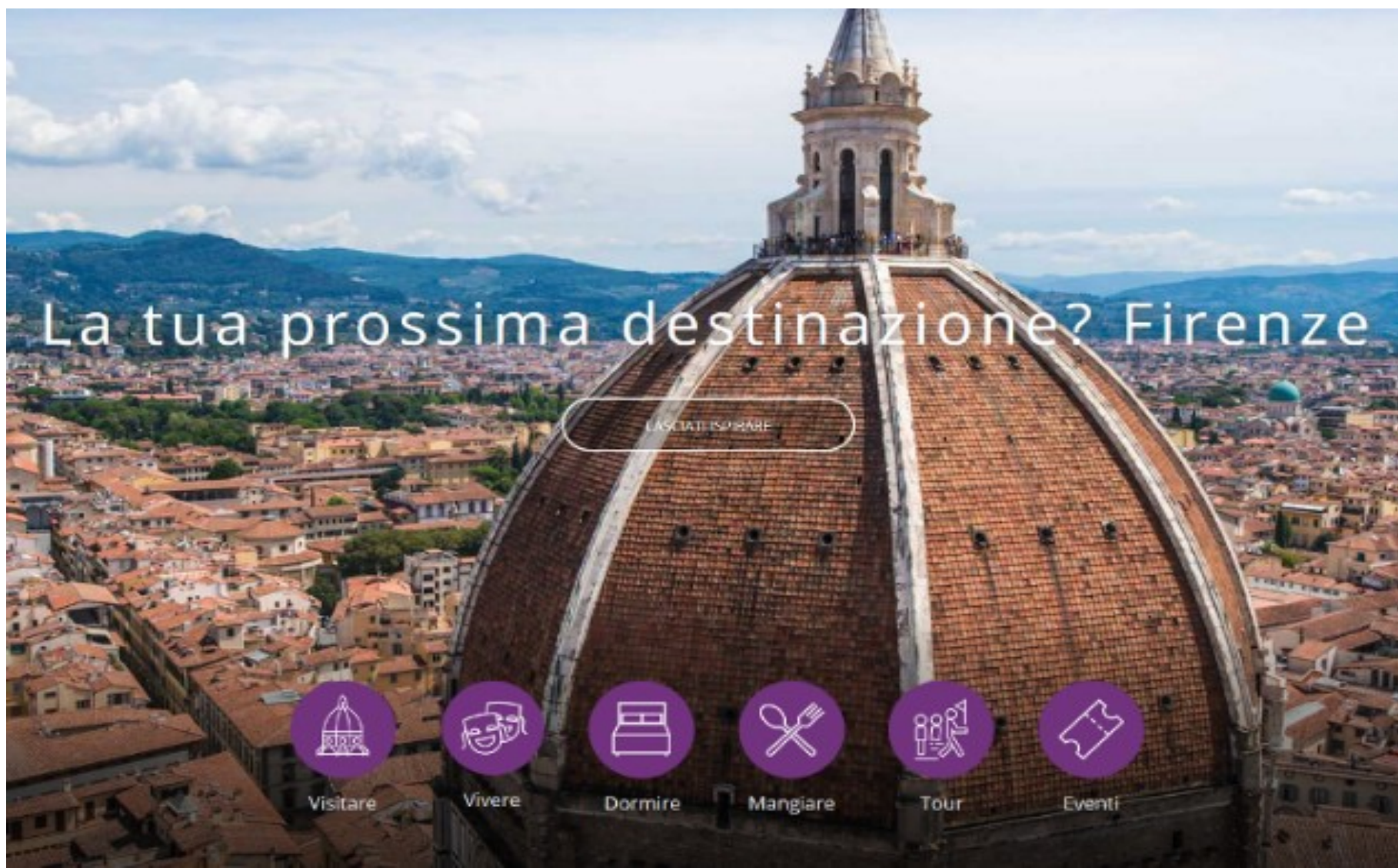
**What are we talking about?**

**Orlando, Florida in one of the Top Destinations in USA**



What are we talking about?

Florence, in one of the Top Destinations in Italy



Orlando, Florida, Stati Uniti

Walt Disney World Resort

Aggiungi destinazione

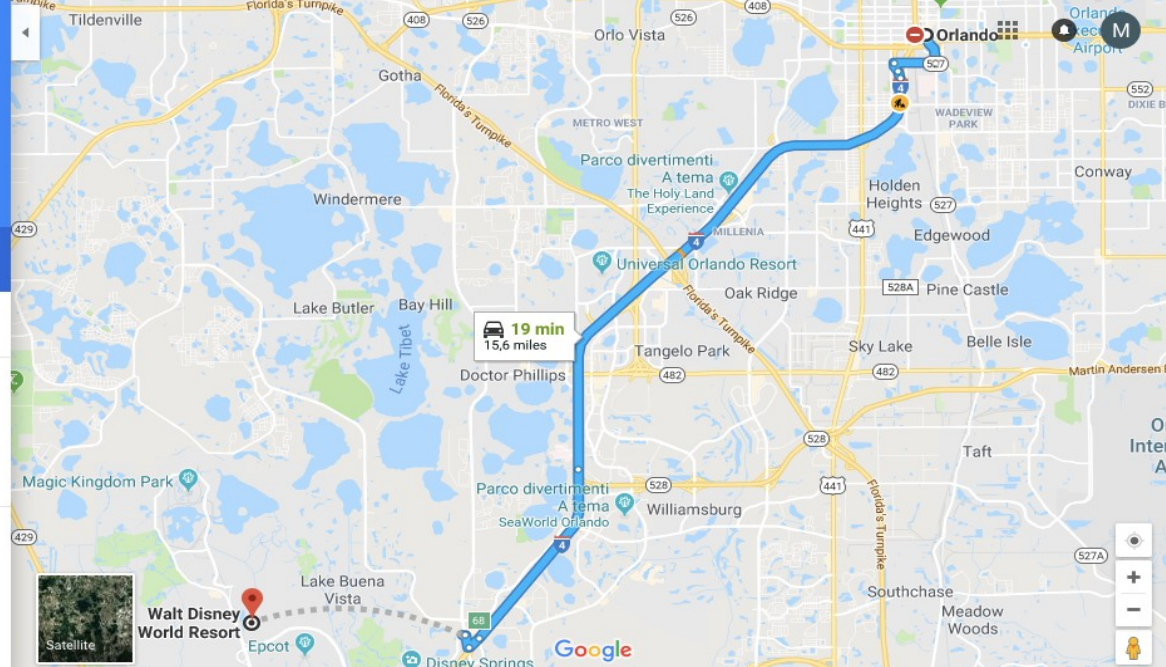
## Orlando, FL

OPZIONI

Invia indicazioni stradali al tuo telefono

tramite I-4 W **19 min**  
 Percorso più veloce ora; evita chiusura stradale su W South St  
 15,6 miglia

DETTAGLI



**Orlando: Record 68 million people visited last year**

Firenze, Città Metropolitana di Firenze

Dome, 16 Via dell' Oriuolo, 50122 Firenz

Aggiungi destinazione

## Florence, IT

OPZIONI

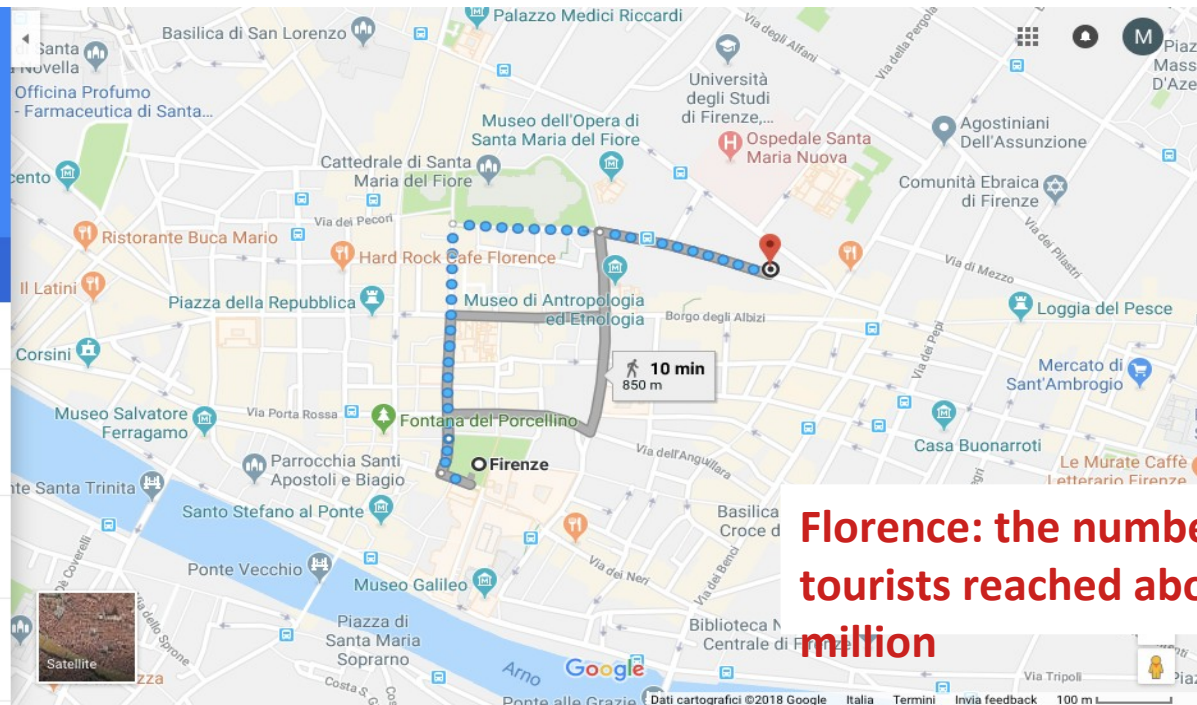
Invia indicazioni stradali al tuo telefono

tramite Via dei Calzaiuoli e Via dell' Oriuolo **10 min**  
 850 m

DETTAGLI

tramite Via dell' Oriuolo **10 min**  
 850 m

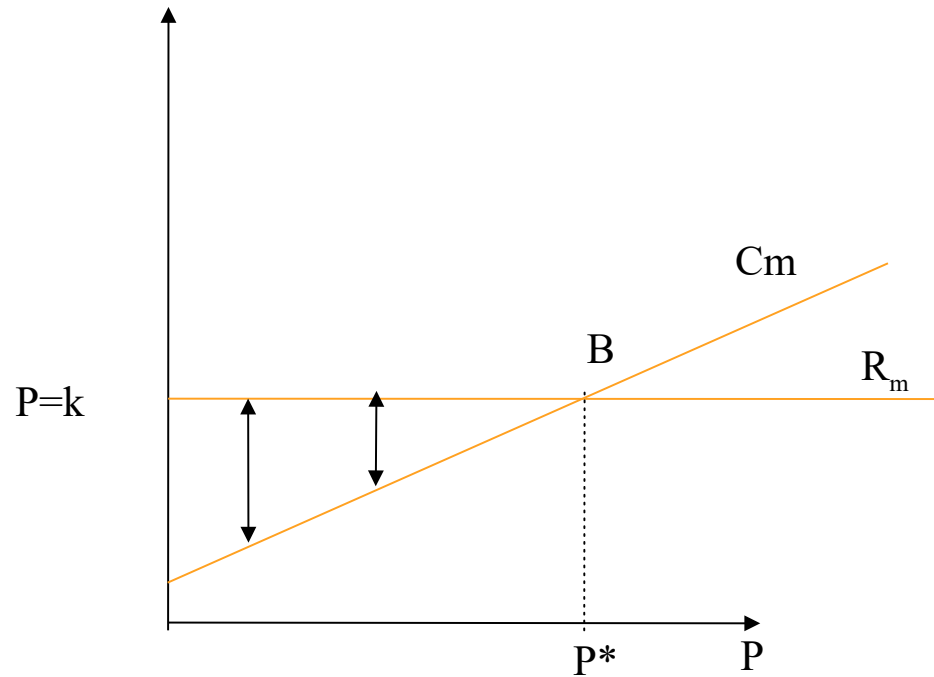
tramite Via del Proconsolo e Via dell' Oriuolo **10 min**  
 850 m



**Florence: the number of tourists reached about 9.4 million**

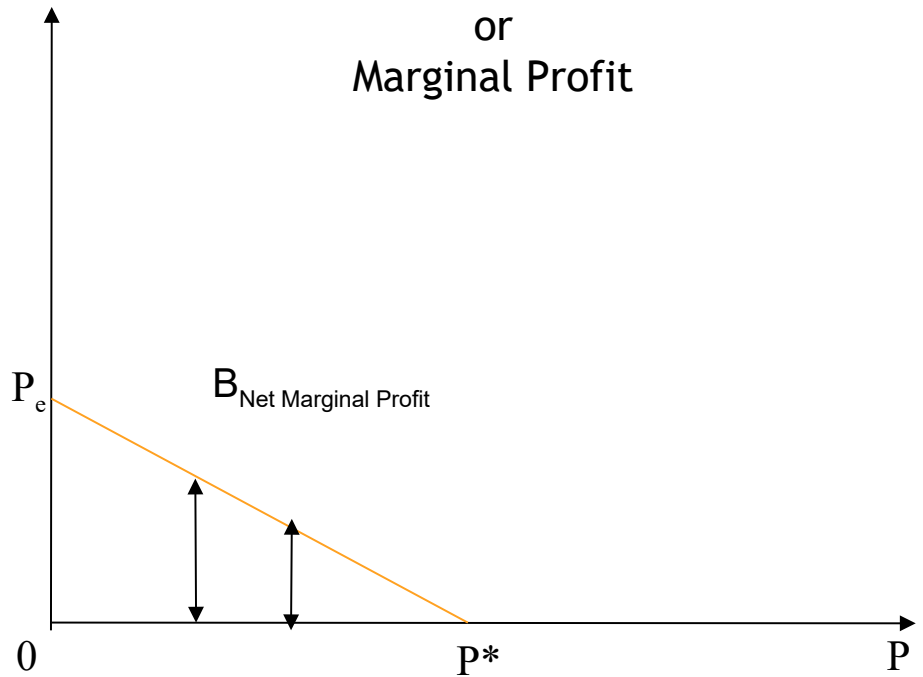
# Economic Optimal Tourist Density: Max Private Profit Competitive Market

Cm & Rm



$P$  annual presences in a destination

Net Marginal Benefit  
or  
Marginal Profit

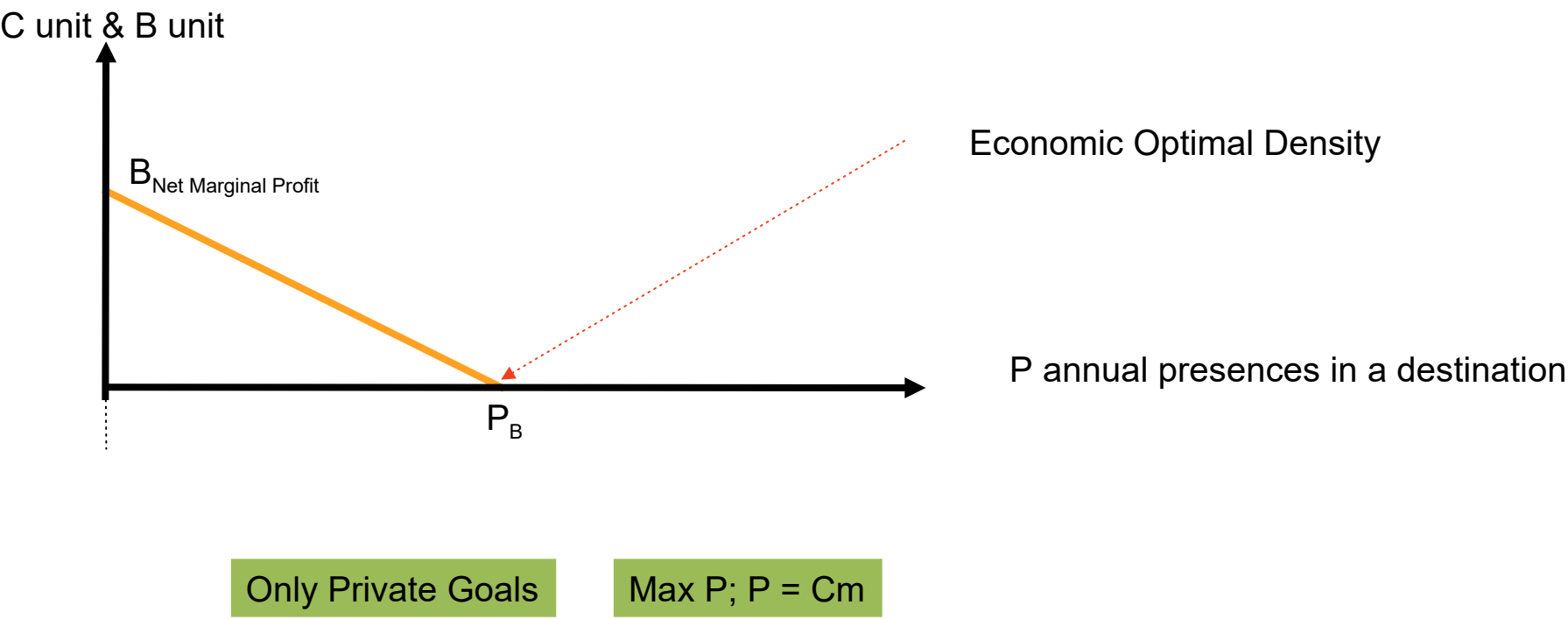


$P$  annual presences in a destination

In a competitive market  $P = k$ , the company is price taker: cannot change prices; Marginal Cost is increasing

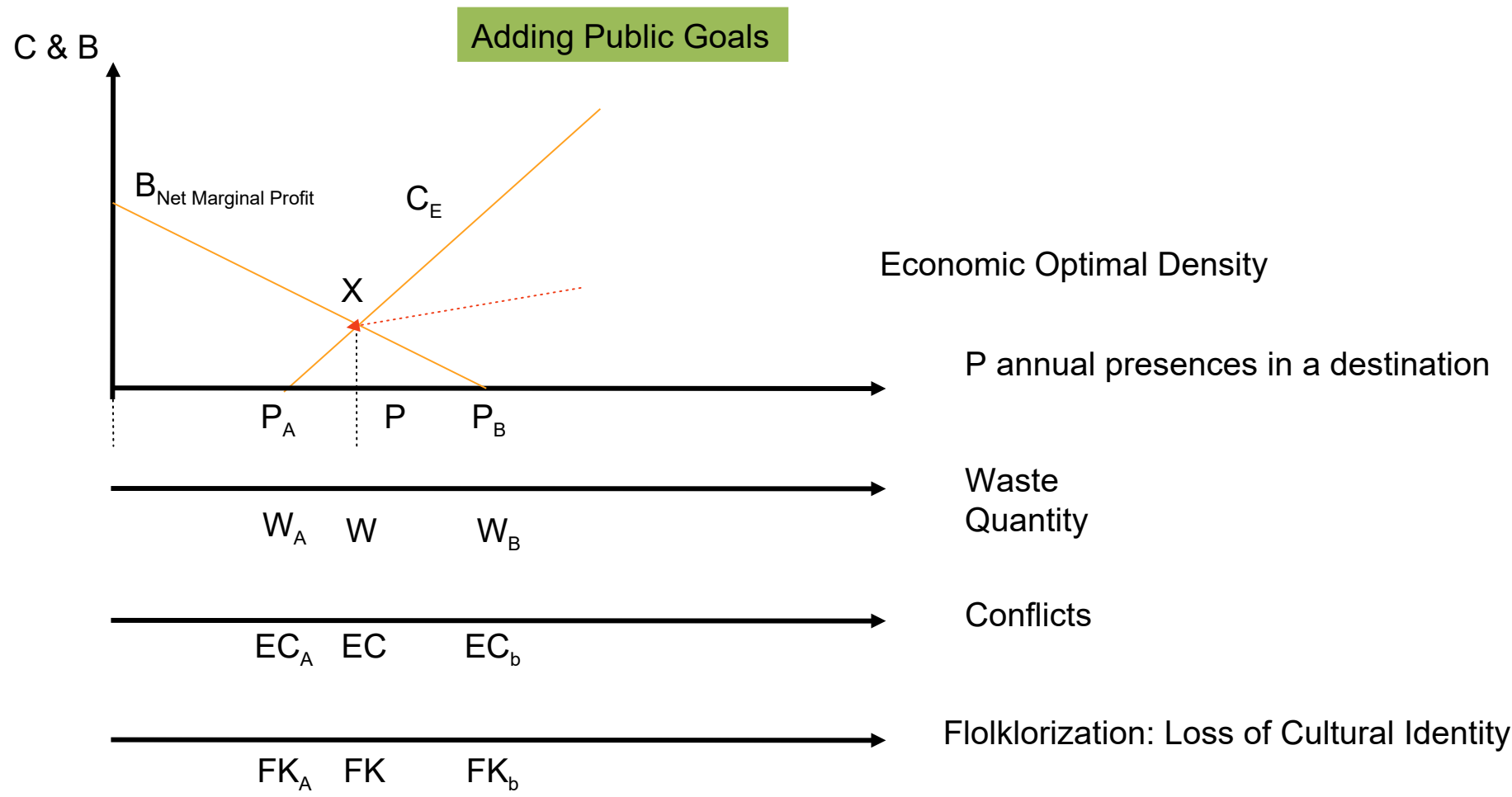
# Dimensions of Sustainable Tourism

## Tourism Costs and Benefits



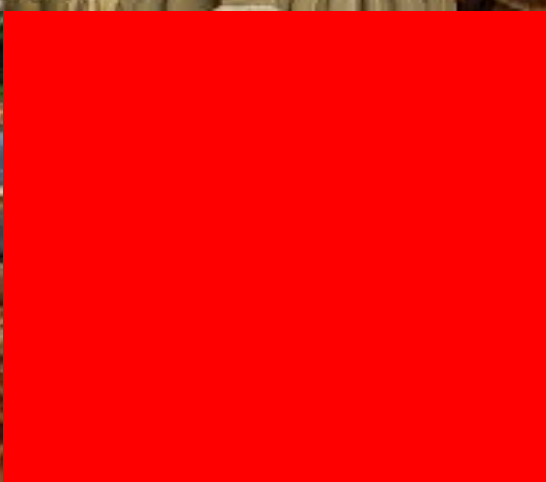
# Dimensions of Sustainable Tourism

## Tourism Costs and Benefits





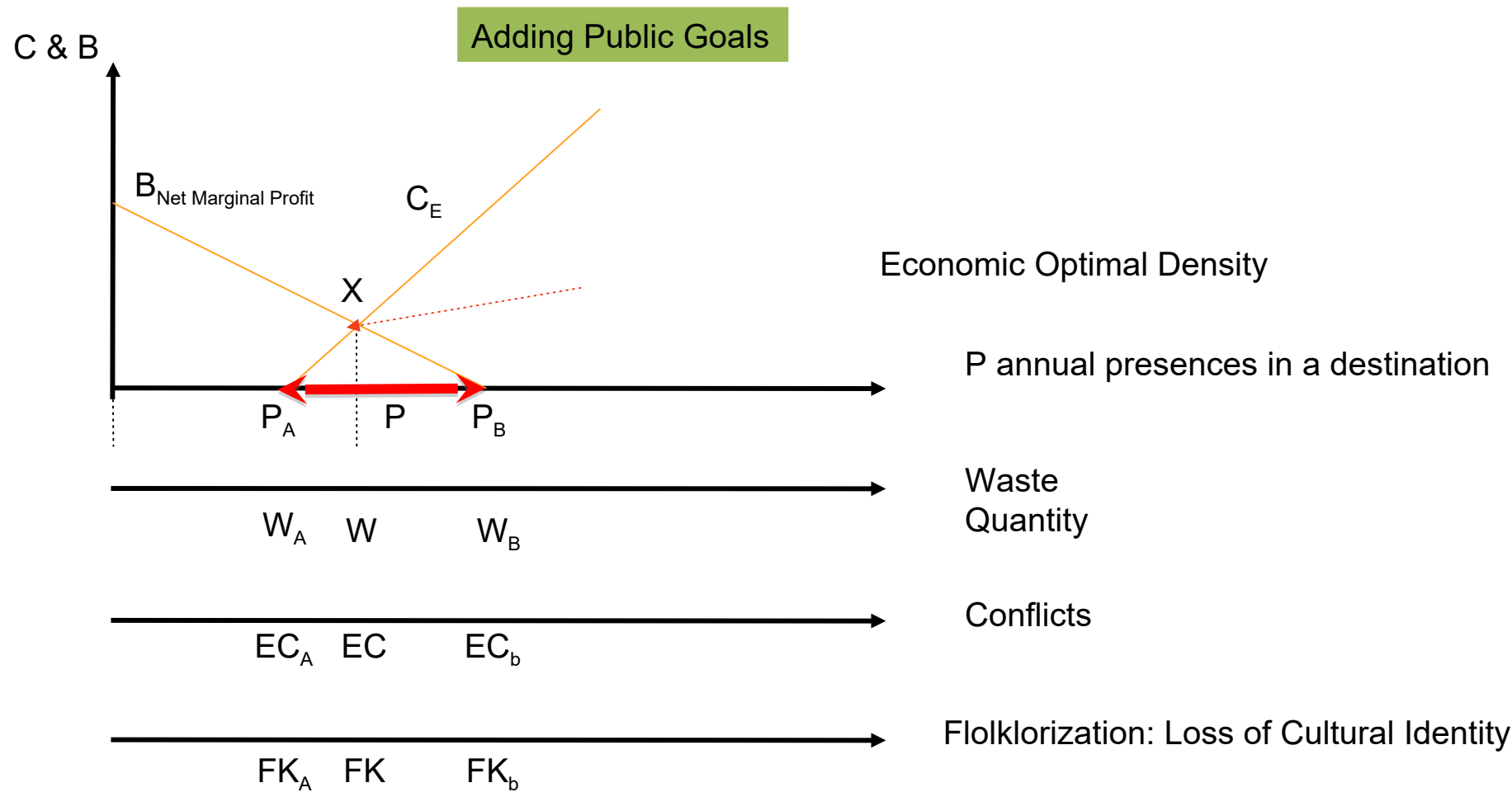






# Dimensions of Sustainable Tourism

## Tourism Costs and Benefits



## Destination Management

Max Public Benefit



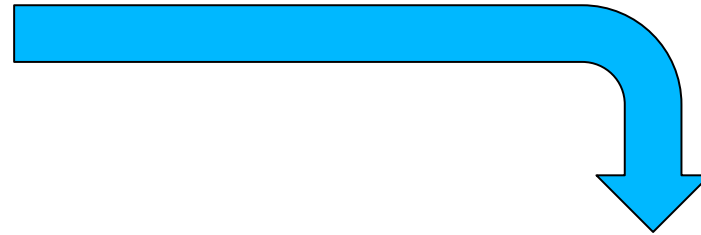
Max Private Profit

(Policy – Governance)

## Model of Strategic Relations between Residents and Visitors

### Payoff - Externalities

Private Payoff		Residents			
		Good		Bad	
Visitors	Good	2	2	1	3
	Bad	3	1	0	0



Visitor	Resident	Model
Good	Good	Liken
Good	Bad	Displacement of Visitors
Bad	Good	Displacement of Residents
Bad	Bad	Grasshoppers

# Different Approaches to Sustainability and Limits of the Tourism Development

	<b>Resource–Based</b>	<b>Activity–Based</b>	<b>Community–Based</b>
Origin/Example	Carrying Capacity Model	Product Cycle (TALC)	Participatory Planning
Orientation	Environment (physical)	Industry	Community
Limits to growth Resource/system view	Objective/Measurable Static	Relative/Changing Dynamic	Constructed/Negotiated Dynamic and/or Static
Governance	Public: top–down	Private: markets	Joint: Partnership
Time scale	Long	“Now”	Mid–term

Fonte: modificato, da Saarinen (2014).

# **Policy Process and Stakeholder Analysis**

## **(...)**