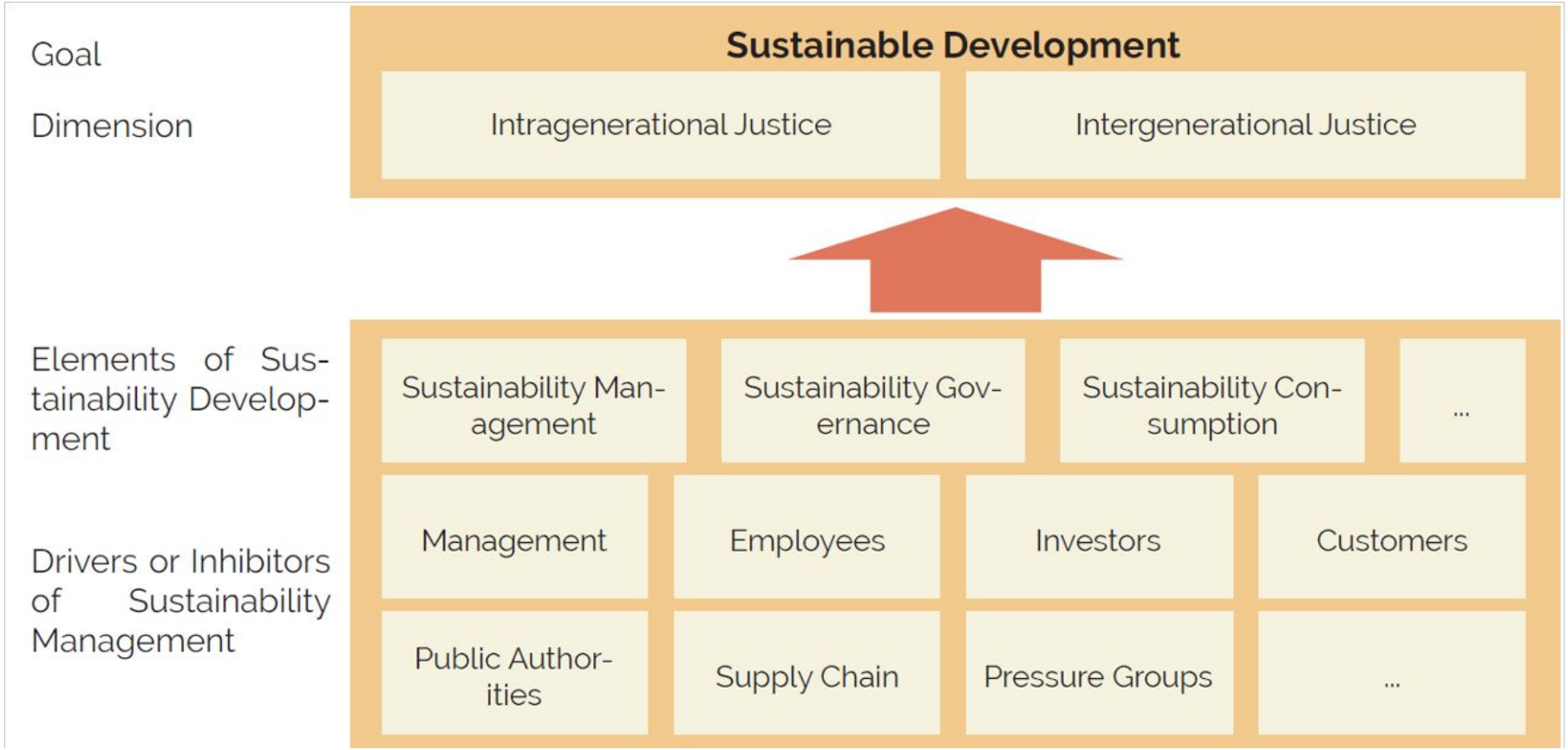
Lezione 5

An Example: Levi's vs Apple

The Story of Stuff Project


Goal
Sustainable Development
Dimension
Intragenerational Justice
Intergenerational Justice
Elements of Sustainability Development
Sustainability Management
Sustainability Governance
Sustainability Consumption
...
Drivers or Inhibitors of Sustainability Management
Management
Employees
Investors
Customers
Public Authorities
Supply Chain
Pressure Groups
...

Topic 2

Sustainability Foundations

Have you ever heard about the IPAT?

The IPAT Equation

$$I = P \times A \times T$$

emissions = # of people × $\frac{\text{consumption}}{\text{person}}$ × $\frac{\text{emissions}}{\text{consumption}}$

Population

In 2019, the world's populati on reached 7.7 billion people

By 2100, this figure will be between 9.4 and 12.7 billion people

Affluence

Poorer population tends to consume less resources than the richer population

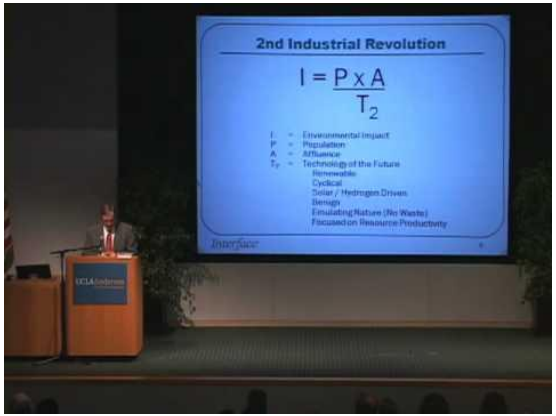
Wealthiest 10%of the world population are responsible for more than half of the cumulative emissions between 1990 and 2015

Technology

This includes energy needed to make and deliver material flows, multiplied by the environmental impact per unit of energy

Technological advancements can reduce (or increase) environmental impacts

Ray Anderson & Interface



The IPAT Equation

$$I = P \times A \times T$$

emissions | # of people | $\frac{\text{consumption}}{\text{person}}$ | $\frac{\text{emissions}}{\text{consumption}}$

$$I = \frac{P \times A}{T}$$

Weak or Strong?

Weak Sustainability

Keep the total sum of anthropogenic capital and natural capital constant

Focus on:
- Role of Technology
- Resource Effectiveness

Drawback:
Natural capital is fully substitutable with human-made capital?
Non-renewable resources?

Quasi-Sustainability

Do not pass critical levels of consumption

Focus on:
- Identify the “Critical Levels”
- Define the “Tipping Points”

Drawback:
Define new strategies?
What is their technological feasibility?

Strong Sustainability

Live from the interest of natural capital

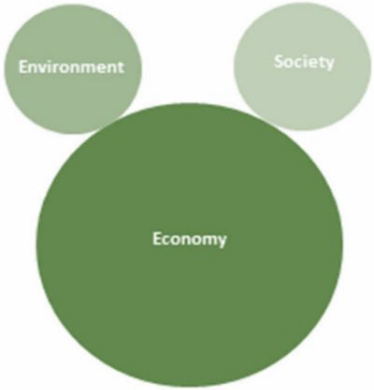
Focus on:
- Individual consumption
- Renewable resources

Drawback:
Does the “people” agree with the reduce life standard?
No growth?

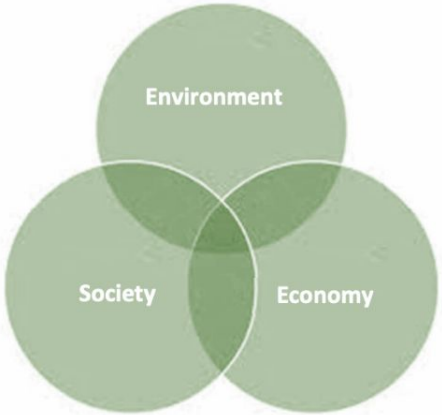
Planet - People - Profit

I modelli per la rappresentazione della sostenibilità

Present



***Mickey Mouse Model**
(economic primacy flanked by 'heeding' offshoots)



Three Pillars Model
(convergence represents 'sustainability space')

Three Nested Ring Model
(componential, 'Russian Doll' cored/anchored by economy)

Nested Dependencies Model
(ecologically-bounded hierarchy ordered)