

Basiago

"Essential Principles of Sustainability"

- futurity
- equity
- global environmentalism
- biodiversity

Basiago also looks at sustainability as a methodology.

- Before a new development or activity is undertaken... ask the following

A- will the activity leave, on behalf of future generations, an undiminished stock of natural capital?

B- Is it equitable, now and for the future?

C- what will be its impact on the global environment

D- will biodiversity be lost?

①
TSES 2002 2017
Feb 16

Intergenerational Equity

(2)

TSES 3002 2017
Feb 16

↳ look for continually rising, or non-declining, indicators of development (or some composite)

↳ UN Human Development Index

↳ Actions now that will significantly impair the well-being of the future must be "compensated."

↳ How do you compensate the future?

↳ transfer of ~~the~~ capital

↳ our generation leaves a stock of capital no smaller than it has now.

Some types of capital

Human-made capital (machines, artifacts, infrastructure, ...)

Human capital (knowledge, skills, ...)

Natural capital (natural resources, biodiversity, habitat, clean air & water, ecological processes)

(3)
TSES 3802 2017
Feb 16

very weak sustainability

↳ overall stock of capital is constant over time

↳ infinite substitution of one type of capital for another

↳ decreases in natural capital would be compensated by increases in other capitals

weak sustainability

- ↳ identify some critical natural capital
 - ↳ natural processes that are essential to life

- ↳ these forms of natural capital should not be substituted
- ↳ substitution of other ~~not~~ (non-critical) natural capital is allowed

strong sustainability

- ↳ wider definition of critical natural capital
- ↳ use of the precautionary principle (PP)
- ↳ use of natural resources should be compensated

(PP) Whenever there is the possibility of harm to human health or the environment, action must be taken even if there is no scientific consensus or proof. Also: the burden of proof is on the proponent of the action.

④
TSES 2002 2017
Feb/6

Very strong sustainability

↳ biocentric

↳ may question / require reductions in human-made capital in order to enhance natural capital

↳ radical, biocentric, bioregionalism, deep ecological

"New Science" insights

↳ (complexity, chaos, self-organization, dissipative structures)

What do we know about forest fires (what do you need to have them?)

↳ you need 4 things

- drought (to dry materials)

- fuel

- ignition

- connectivity of fuel

1. IGNITION
2. FUEL (growth)
3. FUEL CONNECTIVITY
4. DROUGHT

TIME SPACE

SHORT (secs)	Small space
Plant growth (months)	local
months/years	larger scale (regional)
Months/many years	(large scale)

TSF 3002 2016
Feb 16
⑥

Adaptive Cycle

