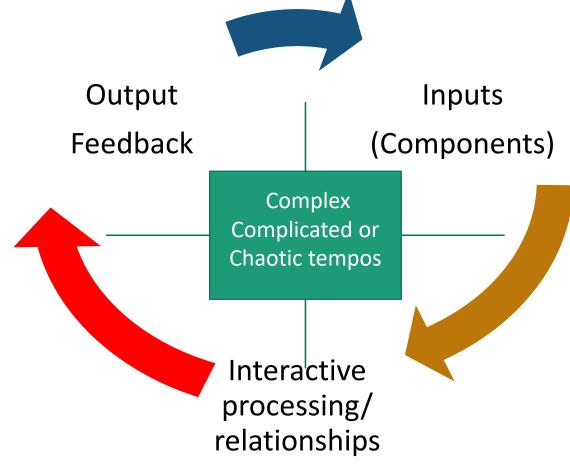


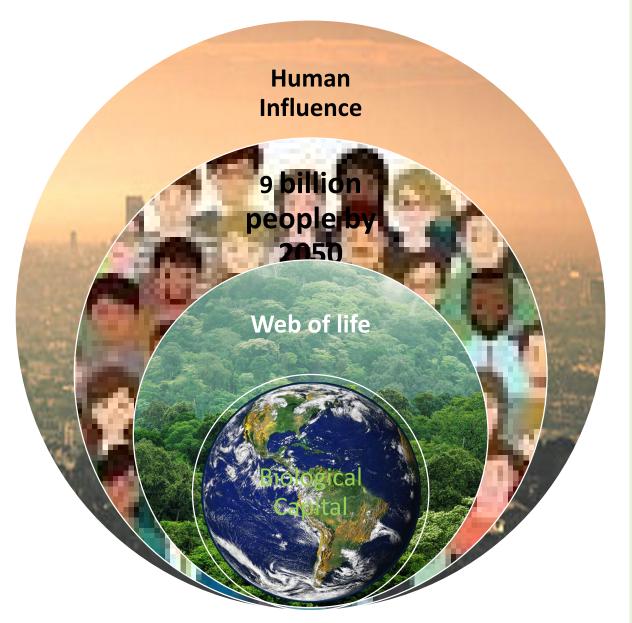
A WORLD OF SUPER- SYSTEMS

INTERACTIONS, CONFLICTS AND SYNERGIES

- 1. **INTERACTIONS:** inputs determine the interaction of process controls/output
- 2. CONFLICTS: processing components are at variance, incompatible or clash to determine a negative out-turn of process controls/ output
- 3. SYNERGIES: processing components are in harmony to determine a positive out-turn of process controls/output



Systems: Interactions, Conflicts & Synergies



Environmental giftings in a complex world

- Rich and diverse array of living organisms
- Supplying Food, Fuel & Fiber
- Raw materials & medicines
- Maintain the ecological processes
- Regulate planet's chemical balance
- Recreational resources
- Other eco- goods & services

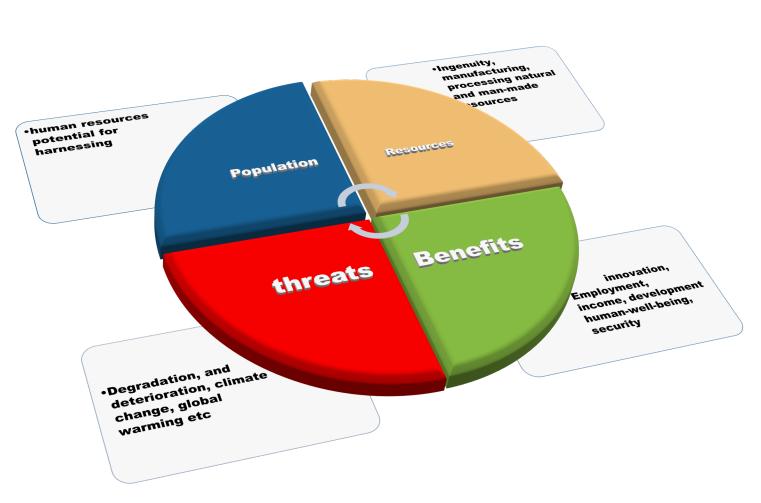
THE CHALLENGE

THE WAY NATURE WORKS & HOW HUMANS THINK DOMINANCE of

Domination of the eco-sphere

Explores, exploits & utilizes natural resources

Environmental opportunities and constraints model



Upward spiral with upward positive/downward negative effects

Opportunities

*Rise of civilizations

*Revolutions

*Technology

*Urbanization



Human

Constraints

*Misuse of land and resources

- *Increased production
- *Excessive consumption & wastages
- *Industrial Farming
- *Increase in pollution levels.
- *Eco-crisis

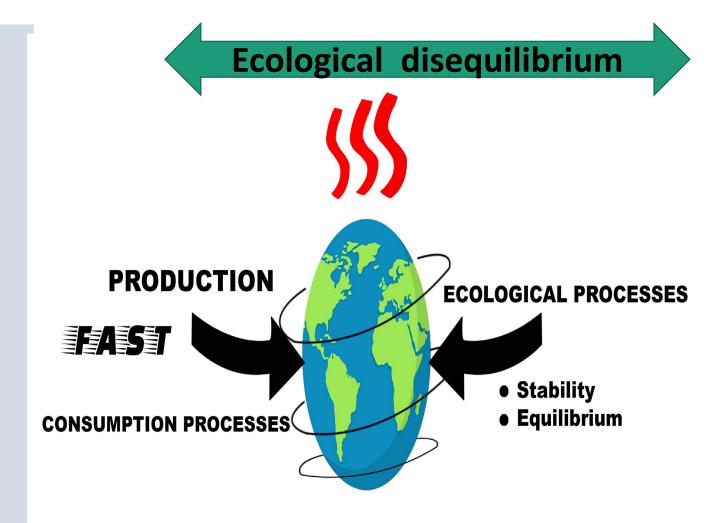


Eco-dominance concept

 Intense control or influence upon all other species.

Dominance Triggers

- Population growth
- Modern state capitalism
- Economic Policies
- Global in-equalities
- Technological dominance
- Intensive production
- Consumption trends
- Human-environment ignorance



CLASH OF TEMPOS

© Elizabeth Andrew-Essien

Eye on Africa: Prospects/Challenges for emerging economies

Africa is the world's second-most populous continent.

Focus on future population and natural resources- rich economies Sub-Saharan Africa high fertility rates estimated at 5.2%

High fertility rates with low contraceptive prevalence.



Reproductive Health challenges:

Socio-cultural & economic pressures with emphasis on local constructs:

- ➤ Ignorance & Education
- ➤ Empowerment and low-living standards
- ➤ Limited access to RH facilities
- > Issues of rights, pressures, & cultural dictates,
- ➤ Marginalization, Gender gap & GBV

Kick-point to urban growth & eco-fragility

- ➤ Nigeria: powerhouse of Africa (Population est. 200 million)
- ➤ Contributes 3.67% of world's total population
- > Average growth rate for next 50 years is increasing at rate of 2.09%.
- ➤ By 2100, top five most populous countries
- ➤ Mexico, Indonesia, Nigeria, and Turkey(MINT) economies (Fidelity Investments(2011); Jim O'Neill (2013),
- > Frontier markets with strong potential to drive international growth.

The challenges of harnessing growth opportunities:

- Weak state & governance institutions
- Heavy reliance & consumption of imported materials
- Dearth of infrastructure to support livelihood
- Weak waste management frameworks (plastic invasion)
- Wastages, recurring poverty & environmental degradation

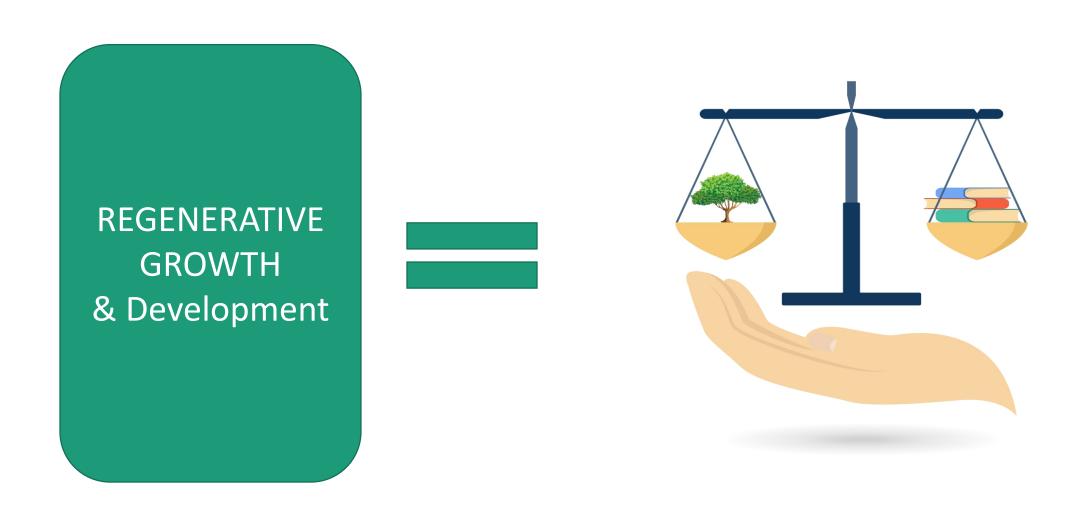
Points of convergence resulting in clashes/collapse of services

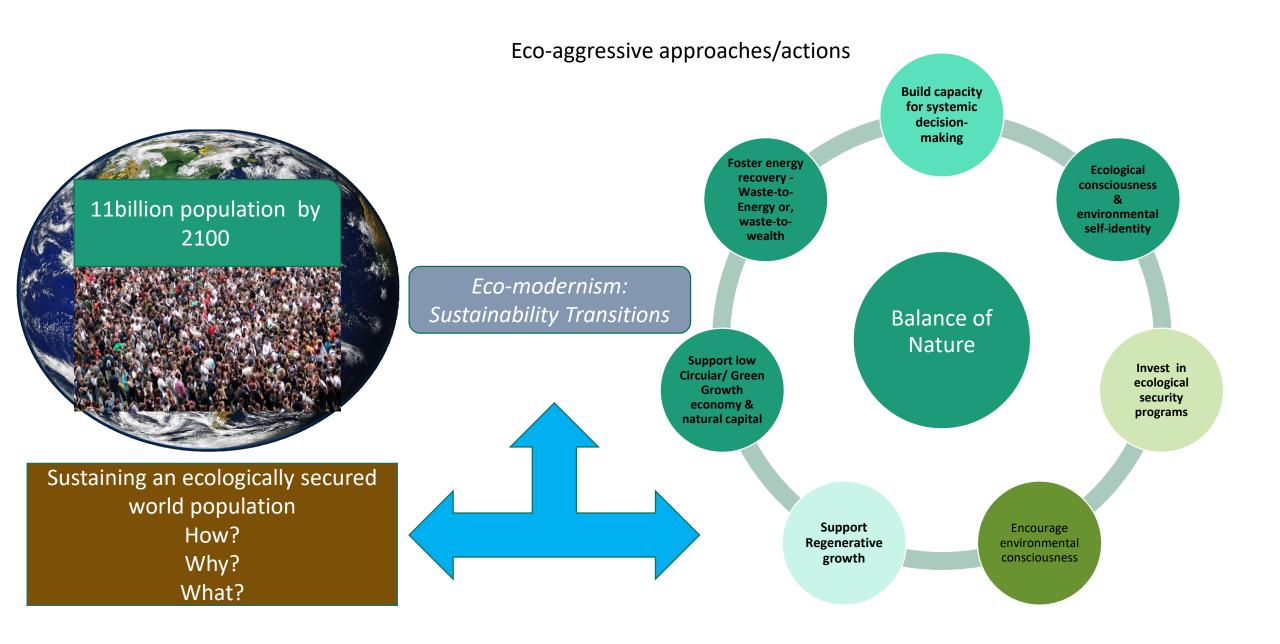
Eco-alert symptoms:

- 1. Declining Forests Increasing global temperature.
- 2. The altered rainfall patterns/regimes.
- 3. Changes in animal migration and life cycles
- 4. Changes in Plant life cycle/extinction
- 5. Warmer seas and oceans
- 6. More wildfires & droughts
- 7. Rising sea levels
- 8. Damaged corals
- 9. Changing rain and snow patterns
- 10.Ocurrence of frequent of natural events/calamities.

- *Ecosystem Stress/Collapse
- * Climate Crisis
- *Biodiversity loss
- *Environmental Degradation
- *Economic Pressures
- *Poverty
- *Unsustainable Development
- *Global insecurity

BALANCE OF NATURE: COLLECTIVE ECO-RESPONSE





NATURE EVENTUALLY OVERCOMES WITH TIME!!!

