



# Mainstreaming of Higher Educations into Sustainable Development

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Climate talk 32  
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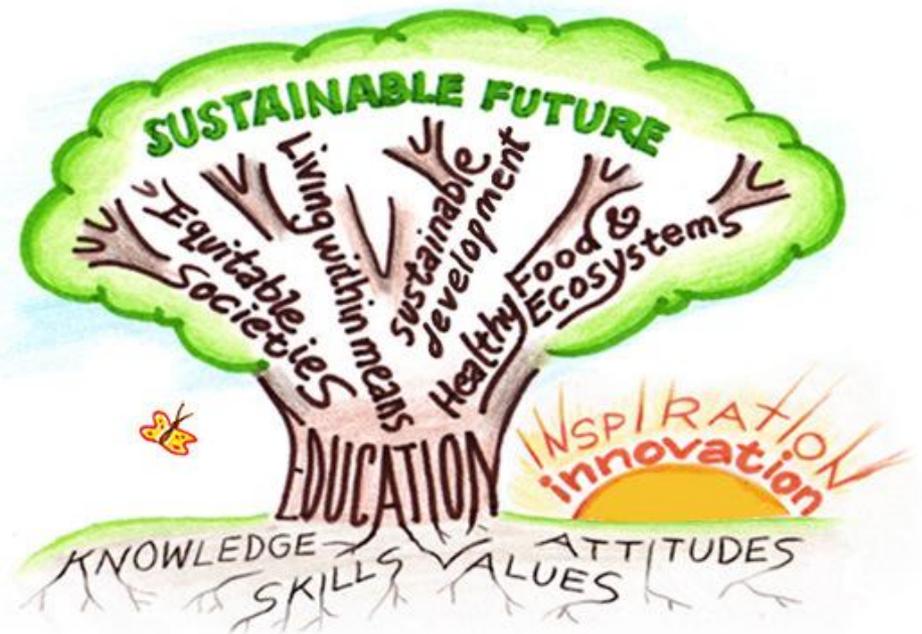


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# Education for Sustainable Development: a definition

Enable people to develop the knowledge, values and skills to participate in decisions about the way we do things, individually and collectively, locally and globally, that will improve the quality of life now without damaging the planet of the future".



- Education at, all levels, can be a powerful tool in promoting sustainable development (SD).
- SD is meeting the needs of the present without compromising the ability of future generations to meet their own needs.

UN Decade of Education for Sustainable Development  
2005 - 2014



The DESD at a glance





# Education and the Search for a Sustainable Future

Since the start of human existence people have :

- lived with each other (society),
- used and shared goods and services (economy),
- have been supported by natural resources and life support systems (environment),
- have shared ways of life, beliefs, values and symbols (culture).

With industrial and technological development in the last three centuries, lifestyles, communications, production systems and consumption patterns have changed rapidly.

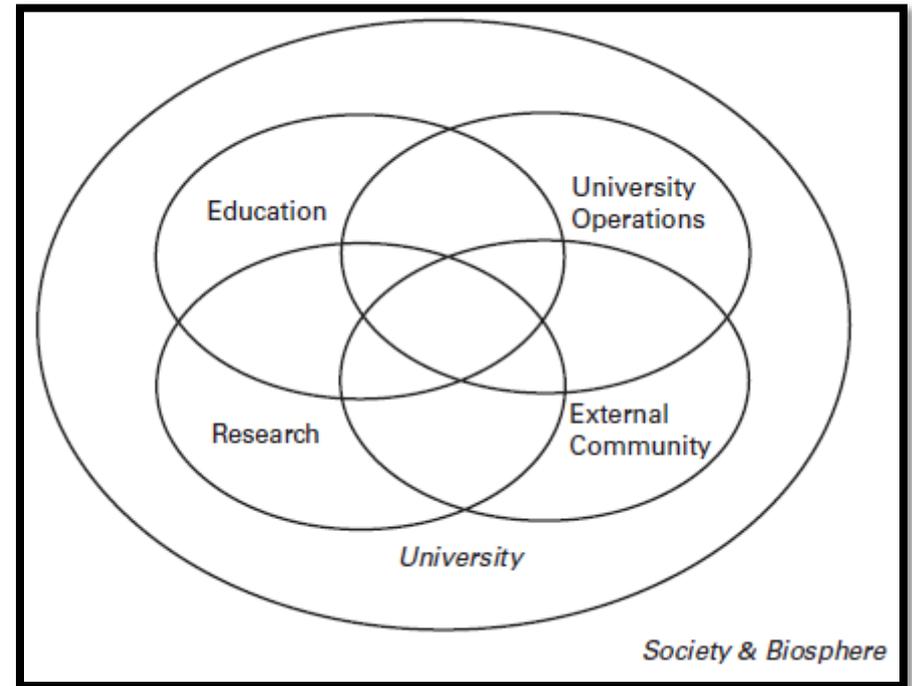
The challenge for humanity today is to transform its development path.

This involves addressing interrelated issues such as:

- poverty (economy),
- social inequality, peace and health risks (society),
- natural resource depletion, biodiversity loss and global climate change (environment) and culture

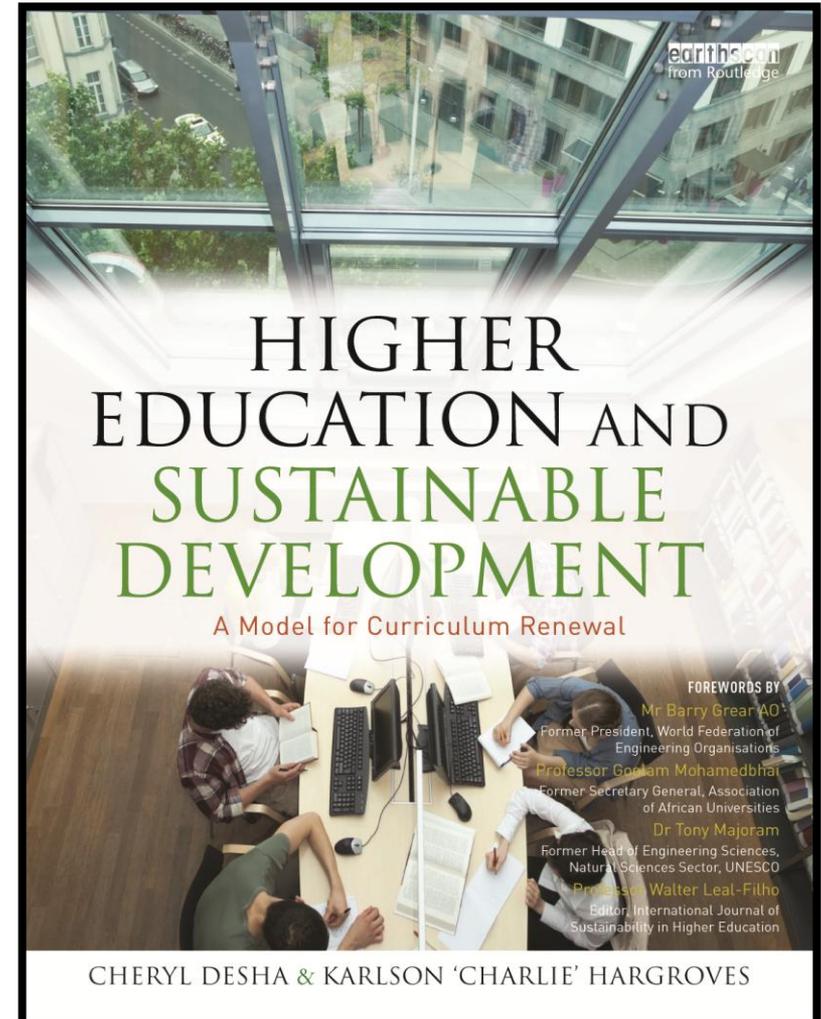
# Roles of Higher Education

- ❑ Teaching and learning,
- ❑ Research,
- ❑ Community outreach.



# History of HEIs and SDGs

- ❑ 1972 Human Environment (Stockholm).
- ❑ 1992 Rio Conventions (3) (Environment and Developments).
- ❑ 2002 Johannesburg (Sustainable Development).
- ❑ 2005-2014 UN DESD.
- ❑ 2012 Rio+20 (Future We Want) (science and policy).
- ❑ 2012 Rio+20 Treaty on Higher Education
- ❑ 2012 UNGA (ESD).
- ❑ 2014 Nagoya Declaration (HESD).
- ❑ 2015 Transforming Higher Education for Sustainable Development.



# NAGOYA declaration on HE for SD

(9<sup>th</sup> of November 2014)



United Nations  
Educational, Scientific and  
Cultural Organization



Education for Sustainable Development 2014  
World Conference, Aichi-Nagoya (Japan), 10-12 November  
Stakeholder Meetings, Okayama (Japan), 4-8 November

- Advancing aspiration of UNDES D to benefit everyone from education and learn the values, attitudes and lifestyles required for sustainable future.
- Scaling up UNDES D.
- Recognizing the role of HEIs in SD.
- Supporting GPA on ESD.
- Ensuring transformative changes in the vision and leadership of HE.
- Undertaking actions at all levels.



# SUSTAINABLE DEVELOPMENT GOALS

1 NO POVERTY



2 NO HUNGER



3 GOOD HEALTH



4 QUALITY EDUCATION



5 GENDER EQUALITY



6 CLEAN WATER AND SANITATION



7 RENEWABLE ENERGY



8 GOOD JOBS AND ECONOMIC GROWTH



9 INNOVATION AND INFRASTRUCTURE



10 REDUCED INEQUALITIES



11 SUSTAINABLE CITIES AND COMMUNITIES



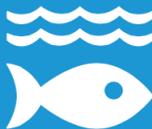
12 RESPONSIBLE CONSUMPTION



13 CLIMATE ACTION



14 LIFE BELOW WATER



15 LIFE ON LAND



16 PEACE AND JUSTICE



17 PARTNERSHIPS FOR THE GOALS



**THE GLOBAL GOALS**  
For Sustainable Development

# Sustainable Development Goals(17 SDGs) and Higher Educations (HE)



**GOAL 4**

ENSURE INCLUSIVE AND EQUITABLE QUALITY EDUCATION AND PROMOTE LIFELONG LEARNING OPPORTUNITIES FOR ALL

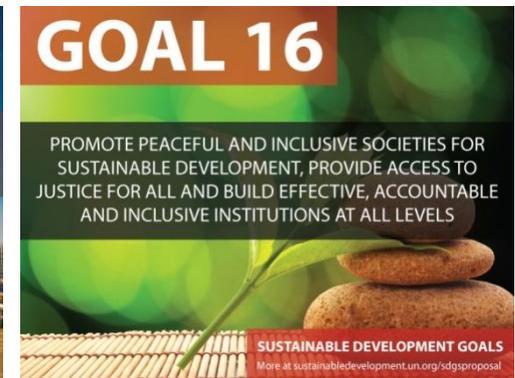
**SUSTAINABLE DEVELOPMENT GOALS**  
More at [sustainabledevelopment.un.org/sdgsproposal](https://sustainabledevelopment.un.org/sdgsproposal)



**GOAL 9**

BUILD RESILIENT INFRASTRUCTURE, PROMOTE INCLUSIVE AND SUSTAINABLE INDUSTRIALIZATION AND FOSTER INNOVATION

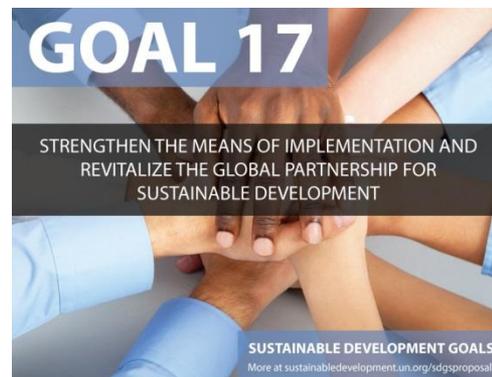
**SUSTAINABLE DEVELOPMENT GOALS**  
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**GOAL 16**

PROMOTE PEACEFUL AND INCLUSIVE SOCIETIES FOR SUSTAINABLE DEVELOPMENT, PROVIDE ACCESS TO JUSTICE FOR ALL AND BUILD EFFECTIVE, ACCOUNTABLE AND INCLUSIVE INSTITUTIONS AT ALL LEVELS

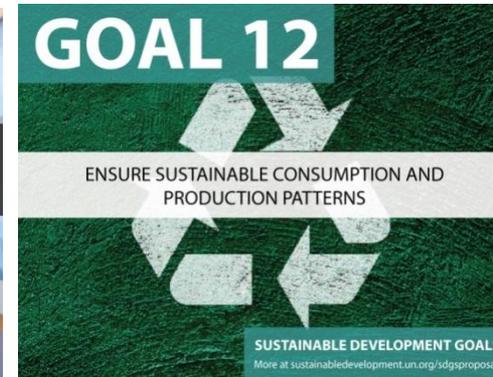
**SUSTAINABLE DEVELOPMENT GOALS**  
More at [sustainabledevelopment.un.org/sdgsproposal](https://sustainabledevelopment.un.org/sdgsproposal)



**GOAL 17**

STRENGTHEN THE MEANS OF IMPLEMENTATION AND REVITALIZE THE GLOBAL PARTNERSHIP FOR SUSTAINABLE DEVELOPMENT

**SUSTAINABLE DEVELOPMENT GOALS**  
More at [sustainabledevelopment.un.org/sdgsproposal](https://sustainabledevelopment.un.org/sdgsproposal)



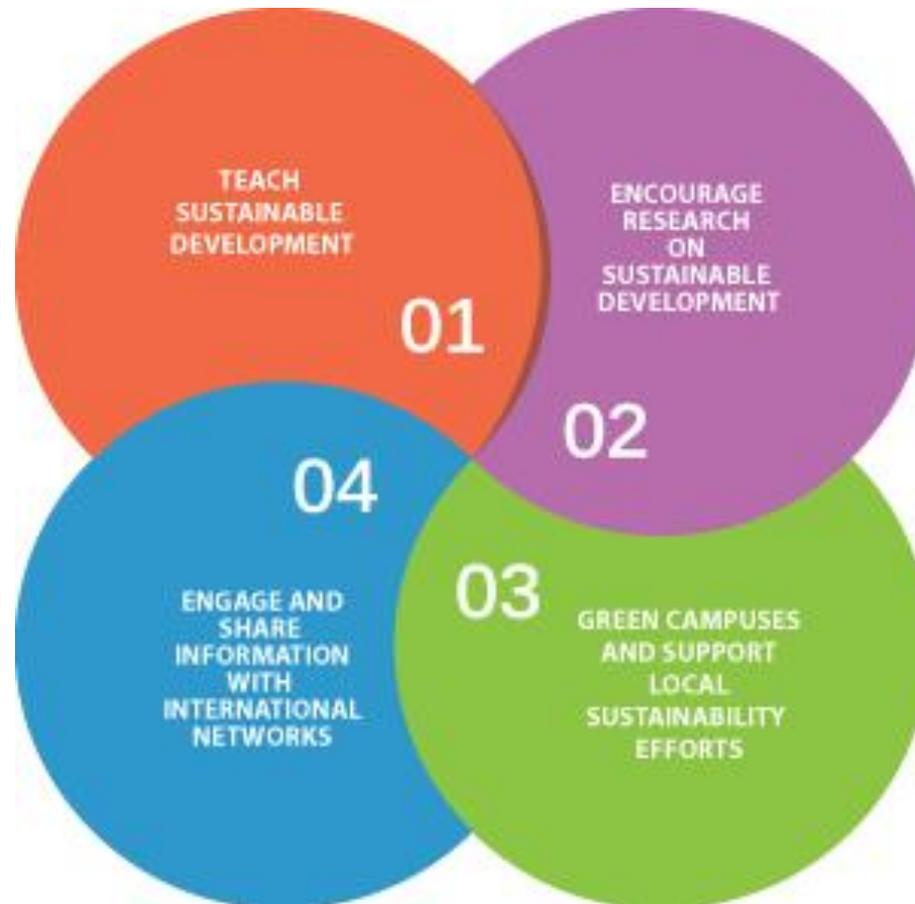
**GOAL 12**

ENSURE SUSTAINABLE CONSUMPTION AND PRODUCTION PATTERNS

**SUSTAINABLE DEVELOPMENT GOALS**  
More at [sustainabledevelopment.un.org/sdgsproposal](https://sustainabledevelopment.un.org/sdgsproposal)

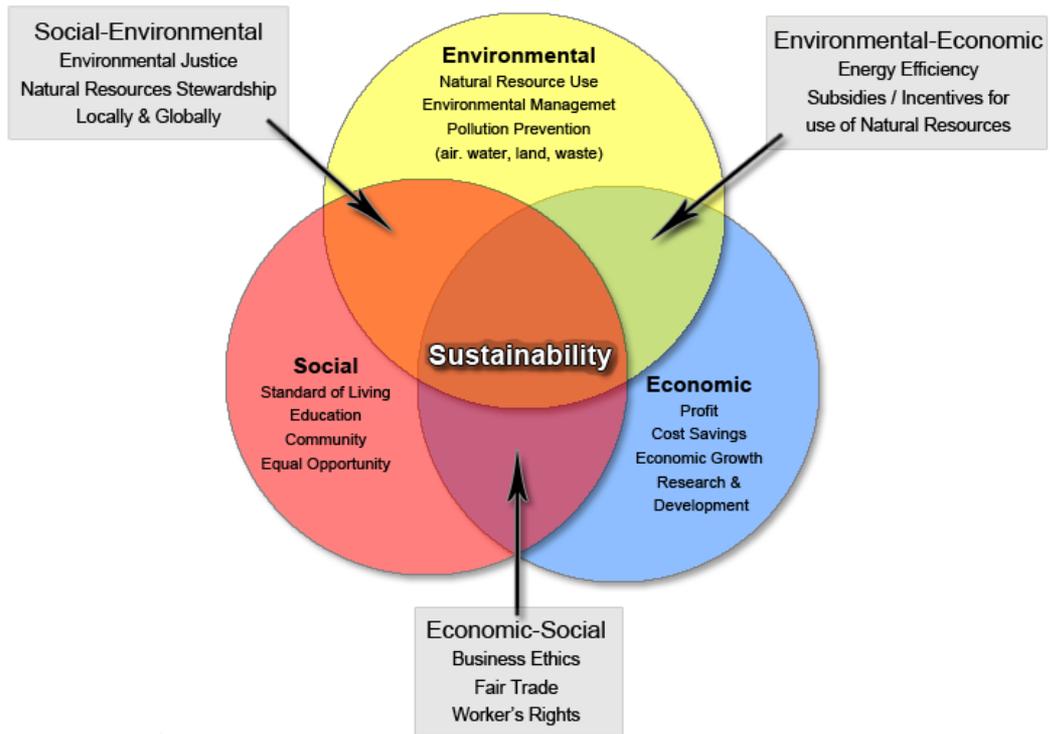


# Higher Education Sustainability Initiatives



# Sustainability

- ❑ Saving energy
- ❑ Efficiency in every thing
- ❑ Integrated management of solid and water resources
- ❑ Biodiversity conservatio





***Education  
for Sustainable Development  
is everyone's business.***



***Education  
for Sustainable Development  
is not an option  
but a priority.***



## Comparative Assessment of Egyptian and German Higher Education and Research Systems

- ❖ Higher education is supposed to be one of the main contributors to the trend toward a “knowledge society”.
- ❖ Although significant progress has been made in Egypt to increase **human capital** base, through improved education system, still the quality of education experience is unsatisfied and unequally distributed.

Cross correlation between higher education and research system in Egypt and Germany reveals several interesting points for brainstorming of improving Egyptian one. Despite the fact that Education crisis in Egypt is very complicated, herein, we only emphasis on three different conflicting issues for the special focus of our attention, dealing mainly with centralized education regime, researcher competition concept and funding resources.

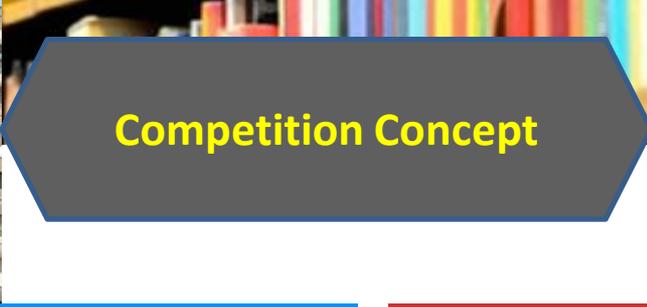


## Centralized System



- ❖ The Egyptian education is steered by a centralized system with institutions having little control on the decisions of the curriculum, program development and deployment of staff and faculty.
- ❖ The performance and quality of higher education is currently severely compromised by overly centralized order.
- ❖ Significant efficiencies will need to be introduced into the system just to maintain quality at its current inadequate level.
- ❖ To improve the already outdated system, rigid curriculum and teaching practices, decentralization should be considered.
- ❖ Higher education institutions should frequently react proactively to different approaches and methods.

- ❖ Decentralized is typical of the German system, with its federalist structure.
- ❖ Self-organized activities and regional cooperation of higher education institutions.
- ❖ Independent organizational structure of higher education institutions (efficiency, management, and budget); the work of departments (performance and leadership, curricular innovation); transparency of course programs (study and examination regulations, duration of studies, degrees); and the quality of teaching.
- ❖ Evaluation of research, inside as well as outside higher education institutions. For example, the German Research Association (DFG) has stimulated activities in which their practice and procedures of research promotion are evaluated, in addition to the Science Council, which has stimulated further self-evaluation.



## Competition Concept

- ❖ Un-competitive (stagnation) system is represented by **permanent** staff positions.
- ❖ The personal allocation of funds is irreversible and cannot be reduced if a researcher's performance declines.
- ❖ In this pore system, researchers from their post-graduate position till professorship are restricted in single university or institute.
- ❖ Cross academic staff exchange between those universities and institutes are not allowing, universities reduce its opportunities to attract excellent researchers.
- ❖ The competitive mechanism and **promotion** process is quite limited and has not gone in the direction of a regular and comprehensive evaluation of teaching and research performance.
- ❖ lack of cooperation and exchange between high education institutions, creates specific area of stress that deserve further evaluation and consideration from the decision maker.

- 
- ❖ Competitive system is represented by **temporarily**, staff positions, based only on performance-related element of competition.
  - ❖ attract best stuff by allocating resources from their institutional funds to a chair to recruit a particular person.
  - ❖ An excellent researcher can apply for other professorships position from time to time to increase his or her personally allocated funds, which creates efficient **promotion** process.
  - ❖ Allocation of institutional funds varies with an individual's research achievements, resulting in a broad variety of activities and approaches in the different federal states and institutions of higher education.
  - ❖ Performance-based allocation of resources to universities, departments, or individual professors.



## Funding Resources



❖ One of the most influential factor for shaping German higher education and research system is Multi-funding resources.

- ❖ Single common pool, which is government-fund for both teaching and research.
- ❖ Reference to the limited economic growing constraints in developing country budgets and lower economic growth rates. Adjusted for inflation, the funds provided to higher education institutions have hardly increased.
- ❖ All this would have been less serious if student numbers had remained constant instead, they continuing increase.
- ❖ Higher education institutions have perceived the growing discrepancy between available resources and demand for services, as a deep financial crisis. At the same time, they are criticized for drops in efficiency and quality.
- ❖ Public higher education is free in Egypt, and Egyptian students only pay registration fees. Egypt has a very extensive higher education system. About 30% of all Egyptians in the relevant age group go to university



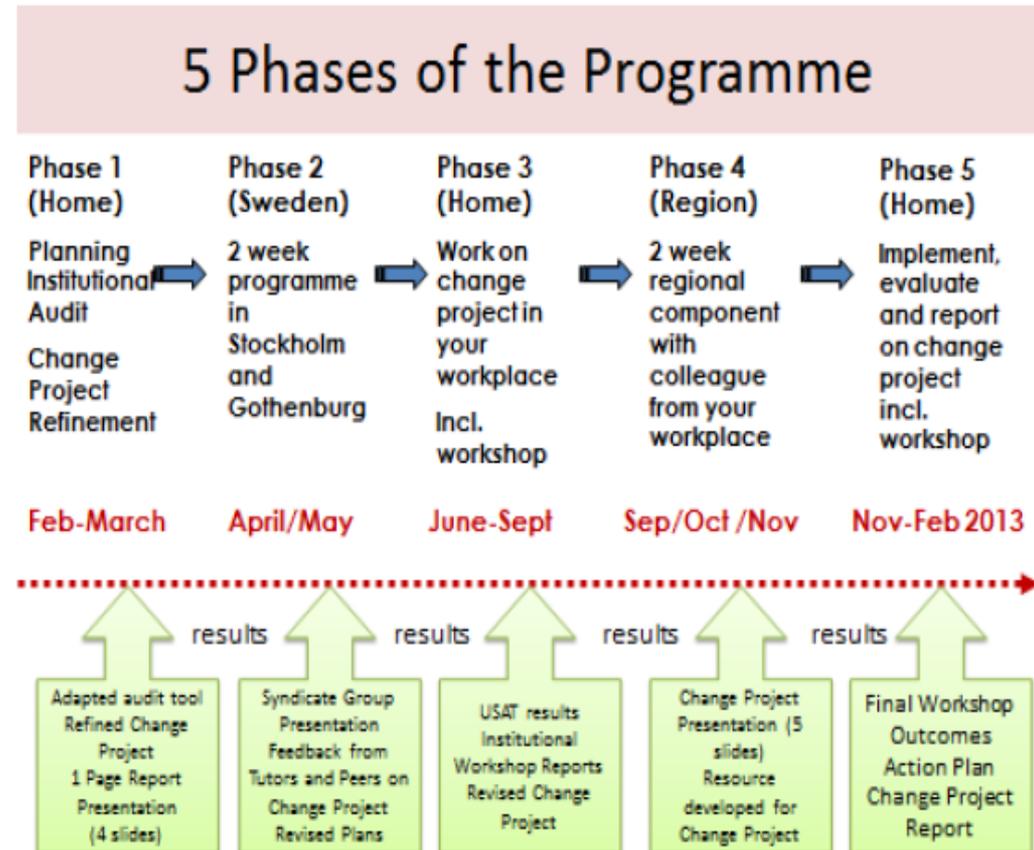
# Ministry of Environment and Universities in Egypt

- ❑ MoU with many universities,
- ❑ Establish Vice-Chancellor and faculties,
- ❑ Establish communication and liaison officers in many faculties,
- ❑ Implement several projects such as green campus and integrated management of solid and water resources,
- ❑ Consider SD in curricula,
- ❑ Implement awareness programs.
- ❑ Quality education (accreditation).
- ❑ Free time for creative actions.

# Change project

To achieve objectives of strengthening ESD in universities, it is required to define and implement a Change project in Higher Education. It should focus on:

- ❑ Improving teaching, research, community service and institutional development practices.
- ❑ Aim to improve quality and relevance to of higher education in the context of global change and be relevant to the discipline , programme institutional mandate and sustainable development issues and opportunities of the country/region.
- ❑ Have a clear rationale and be theoretically, practically and academically defensible.

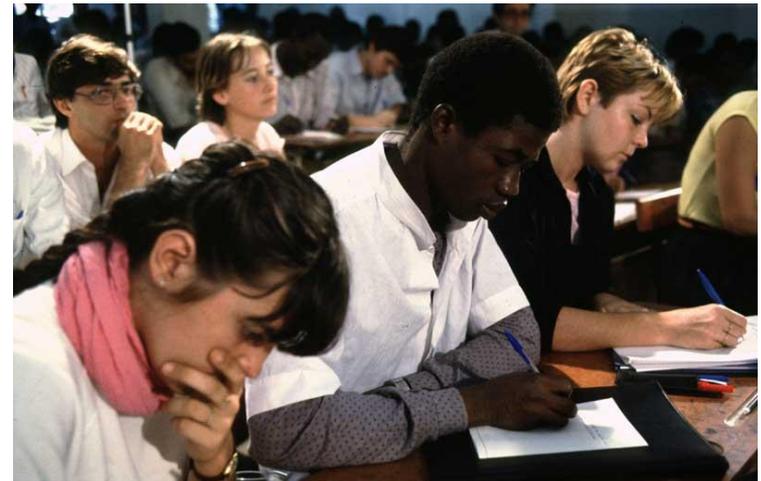


# Achievements

- ✓ HEIs started implementing sustainability into E, R and operation programs.
- ✓ Activities are still limited to green campus initiatives, or integrating S related topics into exiting curricula or research.

***Holistic actions are still lagging behind.***

Mainstreaming will be achieved when sustainability is accepted and integrated into universities and its day to day operations.



# Enabling Leadership for Sustainability

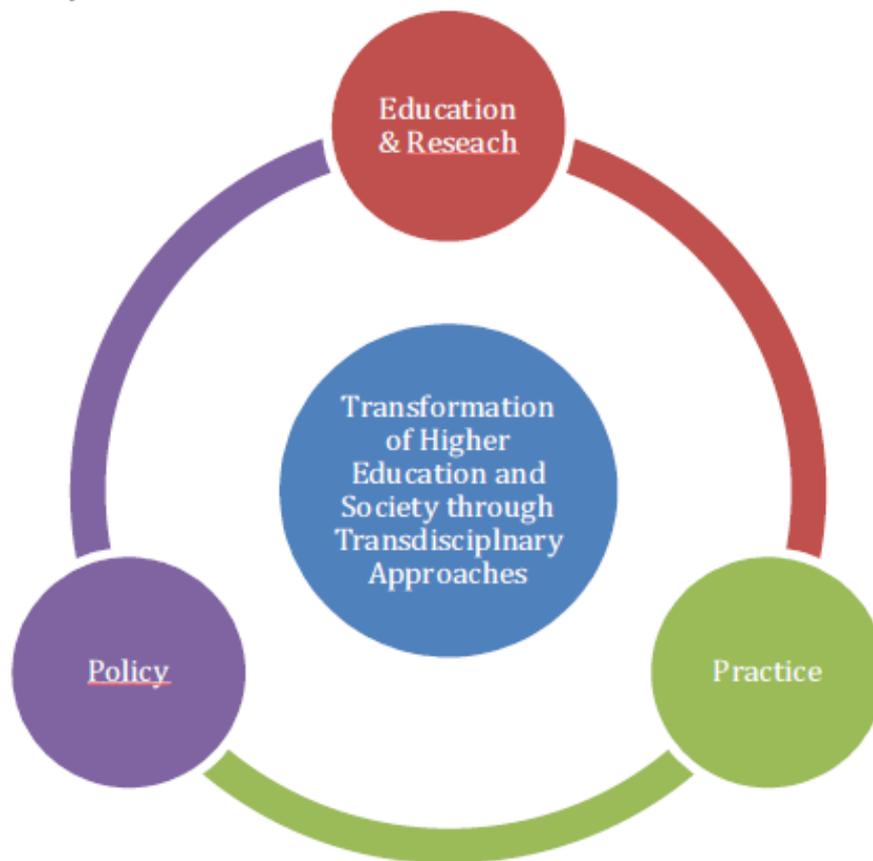
Empowerment through capacity building that focus on inter-and trans disciplinary approaches for SD education and research.



**SUSTAINABILITY  
LEADERS  
AWARDS**



# Transforming Higher Education for Sustainable Development





## A good Practice in ESD involves

- ❑ Focus on the educational and learning dimensions of sustainable development
- ❑ Offer new and creative solutions to common problems
- ❑ Make a difference and demonstrate a positive and tangible impact
- ❑ Contribute to sustained improvement of living conditions
- ❑ Can be used as models to generate policies and initiatives elsewhere
- ❑ Can be evaluated for innovation, success and sustainability by experts and users

# Policy Formulation

HEIs and higher education policy need to change not only single curricula, research programs or waste systems within institutions but enable a whole of institution and system-wide transformation in collaboration with practice. **This requires HEIs reform**

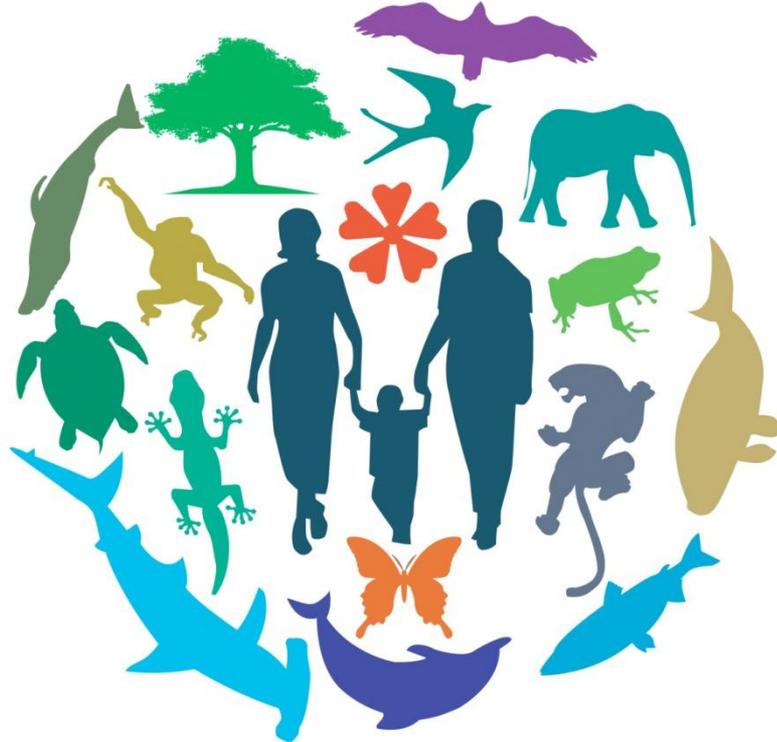


# Suggested Actions for Transformation

- Establish Tran disciplinary settings for Research and Education.
- Capacity development for leadership.
- Initiate assessments at all levels.
- Sustainability as base line for HE policy.
- Institution approach to reflects people s needs and competences.
- Inspire transformations at the interface of E., R., P., and practice.
- Focus on transformative education and new types of teaching and learning.



# We are all connected.



**From the smallest ant to the tallest tree,**

FROM THE BIRDS ROAMING THE SKIES TO THE FISH SWIMMING IN THE SEA,

Each and every creature is part of the biodiversity family.

**LET'S PROTECT OUR FAMILY.**

Conserve biodiversity now.

FOR MORE INFORMATION ON BIODIVERSITY CONSERVATION, LOG ON TO

[www.aseanbiodiversity.org](http://www.aseanbiodiversity.org) or [chm.aseanbiodiversity.org](http://chm.aseanbiodiversity.org)



# How Sustainable Are You?





*Change  
towards a better quality of life  
starts with education.*



*Thank you...*