

Green Initiative in Higher Education

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Abstract

Greening of higher educational institutions can be defined as the process of reducing the impact by the activity within the campus and outside the campus environment and resulting from campus decisions and activities to develop the curriculum as well as raising environmental awareness among students within the human societies of a college or university in higher education. In a time faced with increasing environmental challenges, the tertiary sector is being recognized as well suited to take on the leadership for environmental protection by greening their own campuses, higher educational (HE) institutions can teach and demonstrate the principles of awareness and stewardship of the natural world, as well as increasing the chances of clean and pleasant local and global environments for the implementation of academic institutions.

Introduction: In the late 1990s the concern about greening, sustainable development, protection of the natural world and natural environment, and matching of human activity with the natural world, have gradually become common. Looking to that scenario higher education committee planned to strengthen the training of sustainable development of researchers, through educational courses, work-based training and extension activities. Specific activities were proposed, which include: the development of educational curriculum and materials in the universities and colleges, ranging from science, engineering, agricultural, medical, liberal arts, teachers' colleges to universities; the introduction of post-graduate courses on environment and Sustainable development in the affiliated universities; the establishment of training centers for post-graduates and doctoral students in the same universities, as pilot schemes for training advanced researchers in the area of environmental studies; and the compilation and publication of advanced teaching materials for the field of environmental and sustainable development. Constructed on these suggestions, it could be concluded that

education, including higher education, is viewed as fundamental for progress in sustainable development. (Dongjie Niu, Vol. 11 No. 2, 2010) Various efforts have been made to reorient courses and research in Indian universities.

National Economic and Social Development on Education in 2001 (Zhu, 2004), which underlined the important role of higher education institutions in this effort. In 2007, Hu Jintao's Report at the 17th Party Congress put forward the Scientific Outlook on Development and expressed willingness to "optimize the educational structure" and "improve the quality of higher education," endorsing of environmental and Sustainable development as a simple requirement (Hu). These policies form an important educational platform for the promotion of ESD in higher education, however further change will still be needed to close the gap between policy vision and realities in practice across the full range of Indian universities.

Reorientation of the curriculum is the essential vehicle for the implementation of ESD in higher education. Since 1997, developments have taken place in more than 50 percent of universities to improve the curriculum for ESD at different levels and in different subject areas. General introductory courses on SD have been offered in more than 300 universities so far. Series of courses has been available to undergraduate students from all disciplines since 1998 on topics relevant for ESD, such as "Introduction to cleaner production," "Industrial ecology," "Risk assessment," "Introduction to environmental law" and "Energy and environment". An integration of environmental education and ESD within the curriculum, courses on travel resource management and environment protection have already been offered. Courses at different university have also been integrated with projects on energy-saving and emissions reduction in a power plant (Wang, 2009).

Green Campus Plan, stating that the "green campus" ideal means education with green curricula, research with green science and technology, and green operations to influence student activities. The State Environmental Protection Administration (SEPA) replied to the plan submitted by Tsinghua **University and gave financial support** to this project in China. Universities have committed to promoting the philosophy of "green education" or ESD into future experimentation in a range of social practices and extra-curricular activities. In line with this aim, green associations have been founded by undergraduate students in several institutions conducted a series of activities on themes such as "refuse paper greeting cards to

save trees,” “refuse single use utensils” and “replace plastic bags with cloth bags,” “reuse of old fabric by donating it,” “rain water harvesting,” “reuse of printing paper .” These activities for improving campus operations and to promote practical actions show the variety of activities taking place in universities all over the country, although it can be argued that these types of learning opportunities could be more widely encouraged.

Ecology, economy, society and culture have all been identified as key intertwined aspects of sustainability. One set of definitions of these different areas – aspects of sustainability (TeacherNet, 2006) – is presented as follows:

Culture: An understanding of the values we cherish, including the role of world faiths and philosophies, the ways in which we perceive our relationship with others and with the natural world, and the creative means that we use to express these values and relationships.

Competencies for inter disciplinarily Society: An understanding of social institutions and their role in change and development, as well as the democratic and participatory systems which give opportunity for the expression of opinion, the selection of governments, the forging of consensus and the resolution of differences.

Environment: awareness of the resources and fragility of the physical environment and the effects on it of human activity and decisions, with a commitment to factoring environmental concerns into social and economic policy development.

Economy: Skills to earn a living as well as sensitivity to the limits and potential of economic growth and its impact on society and on the environment, with a commitment to assess personal and societal levels of consumption out of concern for the environment and for social justice.

Greening efforts in higher education, such as application of environmental management systems and greening of the campus prospectus, several challenges may occur attributed to different factors. Lack of commitment from all members of the community (Thomas, (2004))

Greening of academic institutions also include social capital which indicates major four components of academic greening such are: Social trust, Institutional trust, Social norms and Social networks

Social trust: Perception that other members of the community act in a collective manner
Level of accepting changes driving from environmental initiatives and Cooperation costs.

Institutional trust: Build up by Level of reliability towards the performer(s) responsible for environmental initiatives. Effectiveness of external control (from administrative performers)
Effectiveness of previous greening efforts Level of acceptance of information deriving from performer(s) responsible for environmental initiatives.

Social norms: Tendency of the community to comply with new regulations and cooperate during greening efforts Pre-existent norms and attitudes regarding environmental goods also have internal control among members of the community.

Social networks: Flow of information for environmental issues Participation in the context of environmental management initiatives.

Chemicals depleting the ozone layer, causing increased human, animal, and plant exposure to ultraviolet radiation, are common in cooling and refrigeration systems, libraries, automobiles, and fire extinguishers. Moreover, transportation to and from campus can lead to crowding, noise, and air quality problems for local communities (Creighton) Universities and colleges also generate vast amounts of harmful, solid and dangerous wastes.

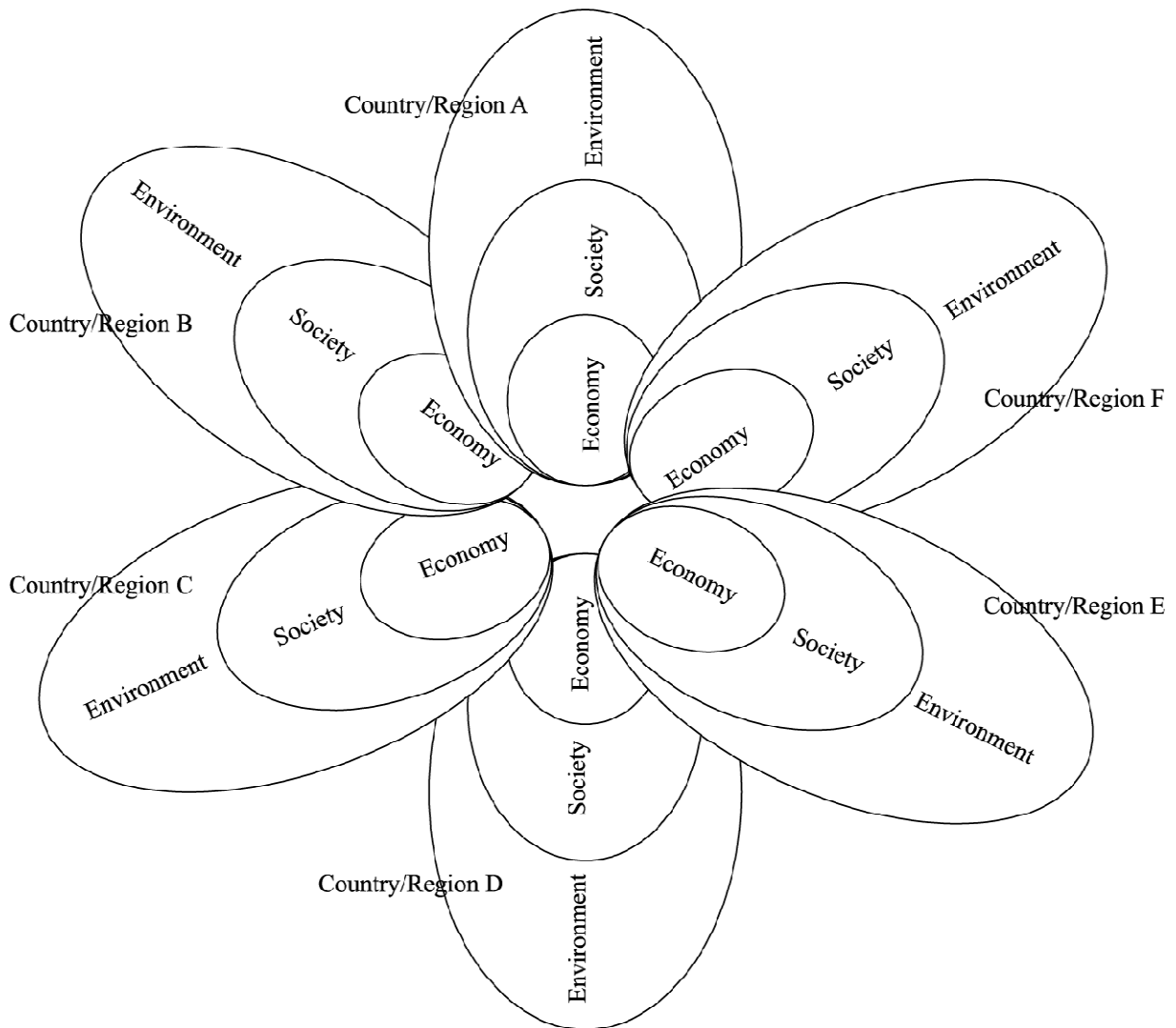
Implementing "greening" actions on their campuses, as in higher education institutions can reduce the cumulative effect of these environmental problems, and thereby prevent environmental degradation. As many of the people whose decisions will affect the future attend colleges and universities today, Higher education institutions have the prospective of teaching green literacy to the politicians, teachers, and decision-makers of tomorrow (Keniry) green university can furthermore become a green model for the external community gathering and sharing effective ideas on environmental issues and practices.

(Creighton) Found the main barriers to greening at the Tufts University to be a fundamental lack of interest and commitment towards green initiatives among managers, staff and students. Added to this barriers were established to be a lack of financial resources and environmental education within the campus community.

(Marianne Dahle and Eric Neumayer, 2001) Explains about the greening of higher educational institutions although several HE institutions have started to implement prudent environmental practices, few are vigorously pursuing greening initiatives throughout their campus operations. Typically, particular efforts are carried out in one part of a university, while other operative units of the same institution will lag behind and with the clear benefits of "going green", such as potentials for saving money, demonstrating new and clean technologies, and increasing student learning.

Greening of higher educational by looking to the barriers to greening they research and explore the barriers and overcome to this barriers Financial: the lack of financial resources. Awareness about the lack of environmental education some cultural effects of non-environmental attitude prevailing at campus Urban area has lack of space for storing waste and constructing new, more energy efficient buildings. The possible solution is for a university to use a shared saving plan. Such programs are particularly applicable for electrical efficiency programs with quick financial payback. As equipment for energy saves and waste reducing initiatives can be expensive, a economical solution for a university is to lease the equipment. Grants and favors from private companies, foundations, government, and administrations, can also be used to cover initial capital investments of institutions.

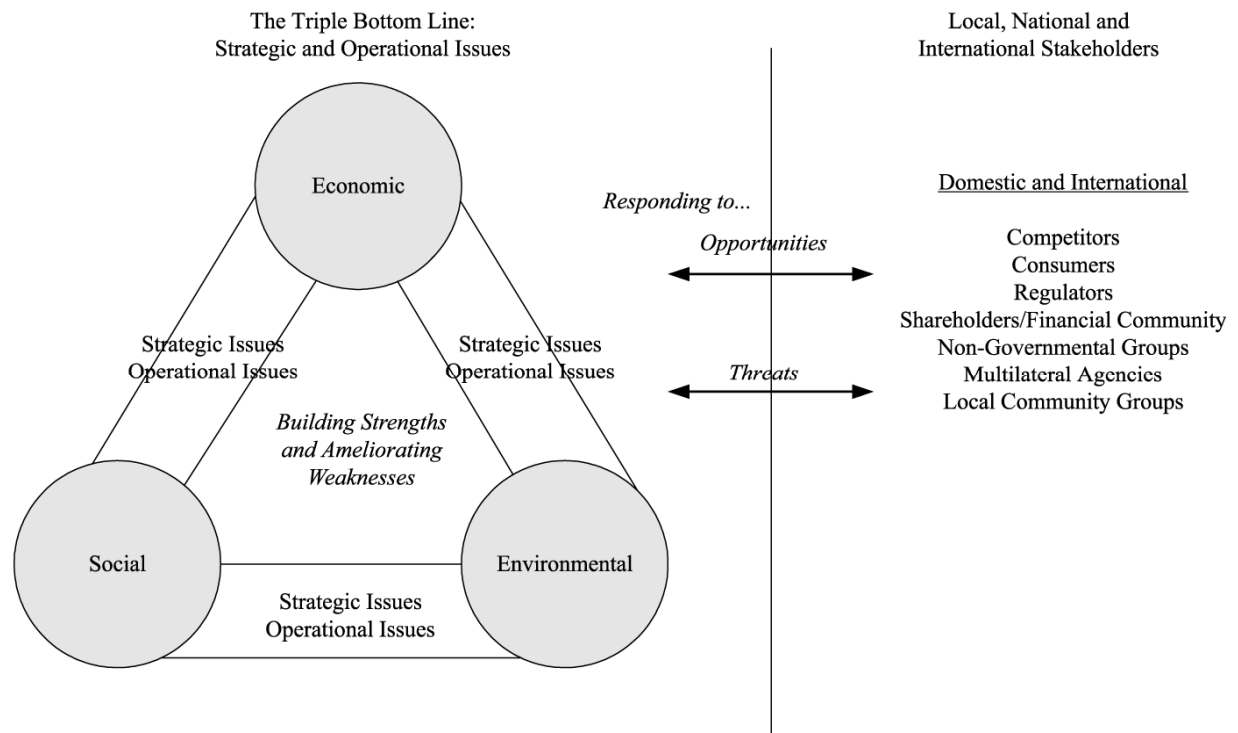
(Neumayer, 2001)



Conceptualization of the intersection of global sustainability issues Source:(Harry, 2005, p. 1)

Conceptualization of sustainable development in a global context this diagram shows the concentric domains of multiple nations' economies, societies and natural environments, and the overlap of the each of these domains across borders. Thus, the diagram suggests, first, the hierarchy of dependencies of the economy, society and natural environment. Second, it reveals the degree of interdependencies inherent in the globalized world across economic, social and environmental domains. It applies to a variety of discussions including trans-boundary pollution, ethnic conflict and North-South trade dependencies. This diagram was designed by (Harry, 2005)and develop a framework to be referenced in the topic areas of the

“Global context of sustainability” and “The opportunities for and challenges to global sustainability”.



Sustainability and the global firm source: www.wbcsd.ch

Sustainable development and sustainability to a multi-level perspective, addressing the interrelationships between institutions, industries, and companies. The global sustainability issue, industry and corporation framework served as a reference point for students throughout the term, as it pertained to each theme and topic discussed. From broad discussions of global sustainable development issues, to different levels of institutional actors, to corporate level sustainability-oriented strategies, this framework served as a general guide for all topics. In doing so, It also emphasizes that any sustainability issue under discussion needs to consider impacts in all three areas of sustainability – social, environmental and economic and, in relating sustainability to the strategic issues confronting global industries and corporations. as the purposes served by the figure the importance of strategic, as well as operational issues that link each pillar of the triple bottom line. It suggested a firm might be able to improve its

competitive position (building strengths and ameliorating weaknesses) by attending to strategic and operational issues.

Discussion and Conclusion: As a research community we have to say, of course, that any guiding outline will be revisable, there will be extensive negotiation, interpretation and uncertainty about exactly how specific areas of knowledge can be related. In order to do this effectively the primary intentions of Greening of academic institutions was to give students new insights into how global businesses address global environmental and social issues they confront. Thus, the course context was initially framed around global sustainability issues, such as global warming, deforestation, desertification, extreme poverty and HIV/AIDS virus. From a business student's perspective, this approach puts the students into different country contexts based on the relevance of these issues to different countries. Greening of academic institutions incurred costs with educational efficiency, social convenience and socio-economic benefits of higher education, whether by conventional or distance methods of delivery. The other main reason is that almost all policy and practice regarding HE and the environment has focused on conventional campus institutions and has thus concerned reducing the impacts of the campus estate and/or "greening" the curriculum. as in the case of distance learning systems, regardless of the media used, have low-environmental impacts; namely elimination of much of the travel and built infrastructure required for campus-based systems (Cheltenham, 2008) distance learning systems produce eco-efficiency gains by the greater utilization of existing infrastructure, such as students' own homes and ICT equipment, and educational buildings used as study centers. Another key factor is the economies of scale in the utilization of campus infrastructure when developing distance learning courses that are offered to large numbers of home-based students, whether mainly through print or electronic media. As studied in by two-thirds of the courses had an environmental content and, in particular, we identified some significant changes in behavior of students who took the OU courses. For example, many students of the environmentally focused Working with Our Environment course claimed they had reduced car use, improved home energy efficiency, begun recycling or to shop for locally produced food, mainly as a result of studying the course (Yarrow, 2002) Such examples of changes in behavior provide support for the emphasis placed on "greening the curriculum" in most programs on HE and sustainability.

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