Introduction

The working group on Higher Education for Sustainable Development began with a warm welcome to all participants by the Chair of the first session, Prof Peter Blaze Corcoran of the Florida Gulf Coast University. He congratulated Dr. Goolam Mohamedbhai, President, International Association of Universities, for his wonderful presentation on the role of higher education in promoting sustainable development at the inaugural session, which provided a good base for taking forward the discussion in the working group.

Session 1: The ideal university graduate of the 21st century

The first session was a panel discussion on what would be the ideal university graduate in the 21st century; what this ideal graduate should know and be able to do in order to be a responsible and capable citizen of the earth. This set the tone for further discussion on what a university would need to be and to do to be able to produce this ideal graduate.

The first panelist, Dr Heila Lotz-Sisitka of Rhodes University, South Africa, questioned whether it is possible to have an ideal graduate as ‘ideal’ is that which cannot be achieved. She however went on to list characteristics of an ideal graduate, who should essentially be critical, curious and connected. She talked about the role of higher education in consolidation of human resource, sustainable development, democracy and peace in a context of justice. She presented stories of some of her students who are doing incredible work and are source of motivation for her. She concluded by saying that as a 21st century professor, one needs to listen and learn from students, be socially sensitive and have hands-on experience.

“Universities are the problem but they are also a hope”. This was the opening remark by Vinod Raina from India. He was critical of the codification of knowledge at institutes of higher learning. He was of the opinion that knowledge generation would be useful only if it is used for the welfare of society, and those who engage in such efforts would be the ideal graduates of the 21st century.
Bringing in the perspective of the youth, Yudai Sato, Kensei Yamaji, two young students from Japan, presented their views, and summarized the characteristics of the ideal graduate as one who has “a high specialty, a broad outlook of a lot of study areas, applies his/her knowledge, abilities and experiences to the society and the world without being selfish and ... [is] endowed with passion and sense of mission.”

**Dr Lau Kin Chi** from Hong Kong started with the equation Idealism = Utopia=Not achievable or impossible,. She expressed her concerns that the student of the 21st century should have the understanding about why idealism is impossible and then should have the capacity and commitment to make it possible. She was of the opinion that habits of the mind and body cannot be changed only through curriculum development. She urged that we redefine the concept of Peace, and that sustainability should be linked to peace. In her opinion absence of war in not peace but that peace is the outcome of synergies and wise use of natural resources,

For Prof. Shakti Kak from India the influence of the celebrity culture on the youth of today and its link with unsustainability was a matter of concern. In her opinion it was easy to talk about environmental problem but difficult to deal with the complex relationships of environmental problem and socio-political aspects. The dominance of power and profit were seen as the major obstacles in achieving sustainability.

The commentator for the session Prof. Hans van Ginkel, former rector of the United Nations University, reviewed the status of environmental issues and felt the need to critically analyze the reasons behind the delay in environmental issues coming on the political agenda. The group discussed the issue of fragmentation and levels of fragmentation and that an ‘open mind’ may help in solving some of the problems. This was followed by an interesting discussion on Higher education and survival, and on the challenges of reorienting the university teacher in the context of ESD.

**Session II: Social Learning**

**Dr Harold Glasser** facilitated the session on social learning. He posed the question of the gap between the collective ambition and practical relation which marginalized the environment education community from reaching out to the right people. He was of opinion that the higher education institutions couldn’t help in bridging the gap rather, they have helped in widening the gap. He referred to Gandhi for his efforts in bridging the gap just few decades ago and the Samrat Ashoka an emperor turned Buddhist monk in ancient India. He was of the view that a healing approach for change was the need of the time. The rationale for the same was the lack of skills in student community in differentiating between data and information, knowledge and wisdom. He defined his understanding of wisdom as the ability to integrate knowledge in the background of the analysis the concept of social leaning jaws discussed.
The active social leaning process was defined as a conscious interaction and communication by at least two living beings. Then the participants were divided in five groups and were told to find the answer of what makes the gap between the behavior and sustainability world. The representatives of the five groups had different point to make. Some believed that the gap was not a new concept and was the outcome of the profit motivated systems pressures at international level, long term and short term mentality, different perspective about quality of life etc. The second question was that of what ideas and strategies could be used to bridge the gap. The responses could be seen as key recommendations.

1. To do research and incorporate the concept of ecological clock at the various levels.
2. Promotion of interdisciplinary experiential leaning spaces.
3. To establish centers for environment education for teaching sustainable development at every university.
4. The education for empowerment self esteem, experimentation and aggressive advertisement of sustainability.

Session III: Humane and Sustainable Agriculture

The session was facilitated by Dr Rick Clugston and Prof. Peter Blaze Corcoran. Dr Clugston of the Humane Society of United States started with the comments that if the teaching and learning at a university contributes to a sustainable future then that would be the ideal university. He critically analyzed three hurdles in the way of the universities to be sustainable:
1. Economically dominated set up in which universities have to function.
2. The loyalties of the university professors was with the discipline than the institution
3. Competition between and amongst the student and professors.

He drew the attention of the participants towards the key issues of climate change in the context of Food and Agriculture. He discussed the crucial link between the two, and the efforts made by the Association of American Colleges and Universities in making climate change commitments to be climate neutral as soon as possible by reducing their Greenhouse Gas emissions and to come up with an action plan on Climate Change. Then he critically examined the subsidies provided by the United State Department of Agriculture on food products which are unsustainable as per the nutrition policy. He mentioned the trend in the Agricultural universities to sell their demonstration lands and going back to the laboratories to do research. The sustainability aspect was missing in these processes as the high tech research was strongly supported by the Agro business houses.
Prof Corcoran added that every individual has three chances every day to make this world a better and more sustainable place, i.e. breakfast, lunch and dinner. He told participants about the guide to eat sustainably developed by students at some American universities(?) in the spirit of the Earth Charter recommendations. He was of the view that universities should understand the educational value of the food served at the university cafeterias and its links with the larger sustainability concerns.

Sessions IV & V: Regional Centres for Expertise

This was an optional session for the higher education working group. Drs Zinaida Fadeeva and Yoshihiro Natori of the Institute of Advance Studies-United Nation Universities facilitated the session. (See Report for Working Group on RCEs, Group 5)

Session VI: Environmental education in higher education in India

The chair of the session, Prof. M K Prasad, reported on the status on the recommendations made by the higher education working group at the Education for Sustainable Development conference organized by CEE in January 2005. He regretted the lack of response from the University Grants Commission, and stressed that recommendations must result in actions. He appealed that India should have a National Environment Education Act like the United States of America in 1990, for better
outcomes of the decision taken by the Supreme Court of India to make Environment Education compulsory at all levels of education.

Ruby Adeshir presented a critical view of the University Grants Commission’s core model course on environmental studies for all undergraduate programmes in India. The presentation was based on a study of its implementation in several undergraduate colleges in Maharashtra. She stressed the need for a strong mechanism for teacher training.

There was difference of opinion among participants about what was going wrong with the implementation of the Supreme Courts directive on a mandatory course on Environment. Some believed that no course should be compulsory and it was a better strategy to restructure the subject with an infusion approach. However, there was unanimity on the need of capacity building of teachers. Some of the suggestions included the setting up of Environment Councils at all 275 universities in India, a special program on capacity building and quality improvement of orientation and refresher courses offered by the Academic Staff Colleges for professional development. Vinod Raina was of the view that the course constituted only a minor tinkering with the curriculum. What was needed was a much more radical reform of the economic order.

Goolam Mohamedbhai, President, International Association of Universities was of opinion that there was need to use creative and innovative educational methods for teaching the course.

Peter Blaze Corcoran said he would not like the imposition on universities of any course by Supreme Court of USA, but he saw the situation in India as an opportunity to be utilized for generating awareness among the faculty, student and administration communities.

Prof van Ginkel, former Rector of the United Nations University, stressed the need to sensitize university students, and for all to have an open mind.

Session V: Teaching sustainability, Living Sustainably
(Joint session with Formal education and Youth and ESD working groups)
(See report on Plenary sessions)

Session VI: Ideal University
Chaired by Harold Glasser

The first participant Carolyn Roberts, Director, Centre for Active Learning, University of Gloucestershire, U K. expressed the need and mechanism of change and sense of urgency. She informed the participants that her university’s vision on sustainability “is to create a dynamic and sustainable portfolio of learning opportunities for the communities
it serves. Within this overarching mission, the University will contribute fully to the economic, social and cultural life of Gloucestershire and its region, while fostering national and international links. It will also develop an approach to social responsibility which reflects its commitment to sustainability and social justice.”

Her university was the first English university to achieve British Standard ISO14001 Environmental Management System for the whole institution in July 2005. ISO14001 provides a framework for targets, responsibility and accountability, and is a driver for continuous improvement. Sustainability should underpin the strategic priorities every university and informs all elements of its life. In her opinion, the creation and transformation of knowledge, providing accessible opportunities for learning at all ages and levels to achieve diversity, sustainability and social justice should be the vision of the ideal university.

Developing a Whole-of-University Approach to Educating for Sustainability: Linking Curriculum, Research and Sustainable Campus Operations was the title of the paper by Jennifer McMillin, from the Australian National University. She emphasised the need for an integrative approach to give student tools to look at how the university could link curriculum, research and campus functions to achieve institutional sustainability. The said approach can provide practical experience, systems, valuable research and reputational benefits, and saves money as well for the universities. The benefit of taking whole of university approach to the students was that it offers practical experience for future careers, builds problem solving and critical thinking skills, creates context for learning, promotes interdisciplinary knowledge and systems thinking, knowledge of local issues, provides a framework for appreciation of global issues, and empowers students to effect change.

N.N. Alekseeva from Moscow State University focused her presentation on Environmental Education and Education for Sustainable Development in Universities of the Russian Federation, and how Russian Universities are meeting the challenge of creating ideal graduates. During the last decade the Russian Federation has created comprehensive system of environmental education in higher education institutions. Fundamental environmental education has delivered through university faculties of geography, biology, economics, ecology of state and private universities. The mechanisms being used are “penetrating education”, i.e. integration of ideas of sustainable development in the existing curricula; by building and developing new content by means of independent educational blocks or special courses on sustainable development; and by developing and publishing series of textbooks and learning materials on sustainable development. Russian students have to do 6 to 9 weeks of fieldwork in each year of their program. During this field visit the Students were given number of tasks to assess environmental effects of certain economic activities and to suggest the alternative ways of sustainable development of the area.

Rudite Grabovska from Institute of Sustainable Education, Daugavpils University, Latvia shared her experience with the participants. She drew the attention of participants to reforms in higher education after Latvia entered the EU in May 1, 2004. The two main
reforms were the reorientation of higher education towards the principles of the Bologna declaration and the re-evaluation of curricula, teaching methods, resources, structure and content of teacher education. She described the several actions taken and concluded that higher education that welcomes a holistic understanding of a humane person and sustainable development of society transforms the meaning of education.

Mahesh Pradhan from UNEP presented the case study of Tongji University in China. The model is based on the social, environmental and economic pillars. This was an attempt to apply the Mainstreaming Environment in South Africa (MESA) model in Asia pacific region for the first time. The focus of the project was to develop a Masters programme in Sustainable Development with a joint degree and an outreach programme in collaboration with Griffith University and the University of New South Wales (Australia); Institute of Advance Studies-United Nations University, Japan; Asian Institute of Technology, Thailand; and Nangyang Technological University, Singapore.

Yoshihiro Natori, Senior Fellow, Institute of Advanced Studies - United Nations University, presented the idea of Promotion of Sustainability in Postgraduate Education and Research through Networking, i.e. ProSPER.Net. The key roles of proposed network are to create an international community of scholars, to act as a bridge between UN and academia, to work as think-tank for the UN system, build capacity and provide a platform for dialogue and creative ideas. The proposed joint activities of ProSPER.NET include the promotion of graduate students’ engagement with SD issues, faculty and teacher training, training of government officials, SD and business schools case studies on SD, mapping of sustainability issues in higher education, community engagement, faculty collaboration and summer schools for masters and doctoral students.

Session VII: Recommendations
Chaired by Peter Blaze Corcoran, facilitated by Harold Glasser.

The outcome of the proceedings of this session are the key recommendations.