FIFTH ISLAMIC CONFERENCE OF ENVIRONMENT MINISTERS

Draft updated version of the General Framework of the Islamic Agenda for Sustainable Development

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I. Background

The decade after the World Summit for Sustainable Development in Johannesburg, 2002, has witnessed numerous social, environmental, economic, and political crises including a rapid escalation of food prices, unprecedented volatility in energy prices, the unfolding of financial crises in some developed countries and the ensuing global recession. With these renewed challenges, the efforts towards achieving sustainable development have suffered some setbacks and failed to meet their objectives. In addition, new evidences equipped with scientific consensus emerged to suggest that climate change was a more eminent danger and more dramatic challenges to the sustainability besides other environmental trends leading to increased frequencies and magnitudes of disasters. Consequently, sustainable development efforts were badly affected by such abrupt changes in the social, economic and environmental dimensions.

Known for inheriting the world old and famous civilization, Islamic countries have got the richest social and cultural diversity in time and space. Some countries do possess a mix of old and modern culture and traditions. Possessing the world largest group of population of 1.16 billion persons (as of 2007), some Islamic countries are facing pressures due to high population growth rate. OIC member countries like Indonesia, Pakistan and Bangladesh are amongst the most populous countries in the Islamic world. High growth of population exerts pressure on other social and economic indicators in most of the developing and under developed States. Heath, education and livelihoods opportunities in most of the Islamic countries require immediate attention. Thus the overall social indicators in the Islamic world present a challenging picture.

The per capita GDP growth rate in OIC member countries recovered from -0.2 per cent in 2009 to 3.5 percent in 2010 and it was slower compared to pre-crisis levels. On the whole, the pace of the real per capita GDP growth in the OIC member countries has followed closely that of the world and compared even favourably to the pace of growth in the developed countries over the period under consideration. The gap between the rich and the poor OIC countries is substantial. The per capita GDP based on purchasing power parity (PPP) in the richest member country was 17.1 times higher than the average of the OIC countries in 2010. 18 OIC member countries are currently classified by the World Bank as low income countries and 32 are Middle income countries (18 lower middle-income and 14 upper middle-income). In contrast only 7 OIC member countries are classified as high income countries. The total output (GDP) and trade of the group of the OIC countries are still heavily concentrated in a few OIC countries; in 2010, only 10 countries accounted for 71.3 per cent of the total GDP, based on purchasing power parity (PPP), of the OIC countries (SESRIC, 2011).

Economies of Islamic countries vary from low to medium and high income, however only 10 member countries accounts for 74% of the total GDP and 76% of the total exports. Mixed nature of economies of OIC member states reflects high level of heterogeneity and divergence in economic structure and perfor-

mance. Most of the Islamic countries do not possess major industrial base, however, almost 17 Oil Producing and Exporting Countries (OPEC) do possess crude oil and refinery industries, services sector constituted a considerable global proportion of manufacturing (Industry) 38.4% however agriculture is only 11.6% of the GDP in OIC countries. Growth in developing countries stood at fairly high. Out of the total 50 least developed countries of the world 22 are OIC member states.

Stretching from the South East Asia to West Asia and Central Asia in the Asian Continent the whole of middle East and from East to West and North Africa in the African Continent and parts of Europe, Islamic countries have great deal of diversity in terms of their environment, location, landscape, geography, production and consumption patterns, poverty ratios and natural resources base. Climate of most of Islamic Countries is arid and semi arid and land area is therefore experiencing desertification in most of the cases. Agricultural and livestock potential is therefore highly vulnerable to climate change. In addition Islamic countries located along the coastal areas and Small Island states like Maldives are threatened by the sea level rise due to climate change.

Water is the major vulnerability in the Middle East and North Africa, the world's driest region, where per capita water availability is predicted to halve by 2050 even without the effects of climate change. The region has few attractive options for increasing water storage, since close to 90 percent of its freshwater resources are already stored in reservoirs. The increased water scarcity combined with greater variability will threaten agriculture, which accounts for some 85 percent of the region's water use. Violence and conflict have not been banished: one in four people on the planet, more than 1.5 billion, live in fragile and conflict affected states or in countries with very high levels of criminal violence. Many countries and sub-national areas now face cycles of repeated violence, weak governance, and instability (World Development Report, 2011).

The proportion of land area under forests is very small in Islamic countries due to very high proportion of land (60% of the total) experiencing arid and semiarid conditions. Further, the existing forests are also experiencing increased pressure from man and their livestock. Urbanization in Islamic countries is increasing at a very high rate as the urban population constitutes 45.75% of the total population in Islamic world. This tendency is much higher in countries like Bahrain, UAE, Turkey and Malaysia compared to others such as Afghanistan, Ethiopia, and Somalia. Urban centers contributes more to the global warming due to increased road densities, increased use of energy and increased use of GHG emitting substances. Sustainable development challenges posed by climate change illustrate well the importance of a holistic response from the international community. In addition expansions in urban centers are done on fertile land by clearing the green vegetation. Another problem of urbanization is dumping of solid and sewage waste in open due to lack of recycling facilities. Consequently, unregulated solid waste landfills may emit GHG into the atmosphere.

Based on severe climate and hard topography, Islamic countries are vulnerable to vagaries of extreme weather conditions. The most important prevalent calamity of which is drought as countries of North Africa, the Middle East, Central Asia

and South Asia, in addition to sub-Saharan African Islamic countries are badly affected by drought and are frequently experiencing recurring dry and harsh years coupled with major rainfall irregularities. Likewise, the intense humidity and heavy downpours in tropical zones often result in dangerous floods, such as those that take place every year in Bangladesh and Indonesia and the unprecedented floods in Pakistan, which severely affect life and property in these countries. However, the most important problem is the weak capacity to mitigate the impacts of these climatic change related calamities in Islamic countries.

Recent observation shows that the frequency of natural and man-made disasters have greatly increased due to climatic changes and other such anthropogenic factors. Developing Islamic countries with fragile economies suffers the most in terms of loss of life and property in such an eventuality. The intensity and losses of Tsunami that hit Indonesia and the 2005 earthquake and the floods that hit Pakistan was increased due to unsustainable exploitation of mangrove forests and coral reefs in the former and forests on fragile mountains in the later. Member States may learn from these recently occurred disasters for devising sustainable development strategies to mitigate the effects of such calamities in future by adopting response strategic to sustain the losses.

The 1992 Earth Summit recognized the important role that sustainable development indicators can play in helping countries to make informed decisions concerning sustainable development. This recognition is articulated in Chapter 40 of Agenda 21 which calls on countries at the national level, as well as international, governmental and non-governmental organizations to develop and identify indicators of sustainable development that can provide a solid basis for decision-making at all levels. Moreover, Agenda 21 specifically calls for the harmonization of efforts to develop sustainable development indicators at the national, OIC levels, including the incorporation of a suitable set of these indicators in common, regularly updated and widely accessible reports and databases. To put the countries policies and strategies on the path of sustainable development, Islamic countries have to develop sustainable development indicators as per the UN Commission on Sustainable Development guidelines.

The United Nations General Assembly, following the invitation of the COP-10 Has declared 2011-20200 the United Nations Decade of Biodiversity to contribute to the implementation of the strategic Plan for Biodiversity. Climate change, globalization and overexploitation, population growth and other factors are leading to an alarming loss of biodiversity and habitats across the globe. While a significant number of animals and plants species have already been wiped off the planet, several species are fighting for their very existence. Letting large amounts of biodiversity continue to disappear forever, we will destroy the creation and huge benefits associated with it. It would take millions of years to replace what we are losing, even in part today. It is necessary to protect the biosphere and its millions of years old natural heritage. Islamic countries should take stern measures to protect their ecosystem, and develop effective landscape management approaches to help reduce biodiversity loss. Spreading awareness among the masses, persuading from common people to economic planners and scientists, on countless benefits and the long-term implications, will definitely help them to take strong remedial action to safe variation of life forms in the ecosystem.

Though majority of Islamic countries support the integration of the three dimensions of sustainable development and the fact that most of them belong to the G-77 and China group, they believe that environmental conservation will not be possible without addressing the economic dimensions of poverty and social dimensions of illiteracy and health. Therefore, based on their social, economic and environmental situation, different Islamic countries may adopt sustainable development policies and strategies best suited to their respective situations. Unfortunately, very few Islamic countries have so far developed their National Sustainable Development Strategies (NSDS). In the absence of NSDS, neither the sustainable development indicators nor any bench marks could be set for putting the country on the path of sustainability.

Therefore, Islamic countries must develop their own home grown national sustainable strategies and a joint strategy at the OIC level to address the issues of sustainability in line with the Johannesburg Plan of Implementation. This will also facilitate the Islamic countries in initiating preparatory process for the Rio+20 scheduled for June 2012 at Rio, Brazil. Islamic countries must seriously attend the Rio+20 preparatory meetings at various levels and suggest favourable recommendations for inclusion in the main and sub-themes of the proposed summit. OIC and ISESCO are in appropriate positions to attend the global proceedings of WSSD+20 as observers and present the collective point of the member States.

II. Vision of Sustainable Development

Sustainable Development means "development that meets the needs of present generation without compromising the ability of future generations to meet their own needs". There are two important things that require our special attention; Need and Limitations. Needs in particular the essential needs of the world poor deserve overriding priority and the Limitation imposed by the social organizations and by the technology on the environments ability to meet present and future needs. Thus sustainable developments protect the rights of the poor in accessing the resources and teach them for their long term uses in a long term basis. The teachings of Islam manifest that Allah has created Man in the best of moulds and that everything in the universe has been created in a balanced form and for a special purpose. Thus, Almighty Allah has entrusted Man with the preservation of the natural resources. He has bestowed on him, and taught him to use them in a judicious and rational way, assuming his full responsibility in caring for them. Allah has created human being as vicegerent, with the duty to judiciously and equitably use the resources the humanity is blessed with. Muslim Ummah can play a leading role in the protection and conservation of environment.

Sustainable Development in its true sense ensures social and economic development in line with the environment protection. As against the previous model of development sustainable development also takes care of social development and environment protection, while progressing on economic fronts.

1. Dimensions of sustainable development

Agenda-21 gave a blue print of sustainable development by coining the phrase for the first time, though the focus of the earth conference was on environment and development. In follow-up to the earth summit, the international community

worked on various aspects of sustainable development and a dedicated World Summit on Sustainable Development was held in 2002, thereby paving way for adopting the concept formally. By definition sustainable development is the development that meets the needs of the present without compromising the ability of the future generation to meet their own needs. It embodies a wider concept of addressing the greatest benefit of the greatest number, in long term everlasting manner, without damaging or in any way reducing the potentials of the productive resources. The concept of sustainable development currently advocated by the international organizations has got three dimensions; social, economic and environmental development. These dimensions of sustainable development are vast and inclusive in their thematic and regional connotation, having their global, regional, sub-regional and national implications. This multifarious dimension rather different combination of priorities has consequently polarized the world into different blocks by adopting these three dimensions of sustainable development.

While some developed countries are pursuing an environment alone agenda without any considerations for the social and economic dimensions of the sustainable development, the G 77 & China group comprising most of the developing and under developed countries including Muslim countries in majority advocate the integration of the three dimensions of sustainable development. This emanates from their conviction that environmental conservation will not be possible without addressing the economic dimensions of poverty, social dimensions of illiteracy and health consideration for instance. Therefore, based on the social, economic and environmental situation, different global, regional, sub-regional and national groups have adopted sustainable development policies and strategies best suited to their respective situations. Accordingly, it is quite possible that various definitions may be adopted based on adopted policies. Thus for the Muslim countries sustainable development will mean integrating all the three dimensions of sustainability and taking it holistically based on their specific situations.

1.1 Economic dimension of sustainable development

The economic dimension has always been the basis for development; however, development has most of the time taken place at the expense of the environmental and of social development. Over the years the process of economic development has passed through various phases; fifties and sixties saw the era of economic growth irrespective of development, in seventies and eighties economic progress was measured by development irrespective of its sustainability. In blind pursuit for growth and development, the natural resources and reproductive assets of the society were destroyed in a ruthless manner, thus undermining the potential for further growth. This random growth besides destroying the natural resources also deprived the poor segments of the society to partake the benefits of growth leaving them high and dry. From nineties onward, we entered in an era of sustainable development requiring all the economic development to be in line with social and environmental development.

The economic dimension of sustainable development has different implications for different countries, global political/economic blocks, regions and groups. Economic dimensions of sustainable development as seen by developed countries differ from the way they are perceived by the group of developing

countries (G-77). The former will try not to compromise on productivity of their industry that pollutes environment in favour of enforcing the Kyoto protocol aiming at reducing the emission of Green House Gases (GHG) to the level of 1990, whereas the later being mostly poor will try to get the official development assistance agreed at Rio for their capacity building to pursue environmental conservation agenda, as was observed during CoP=17 in Durban in 2011. As the economies of most of the countries of the Islamic world depend on agriculture and mineral deposits, they are not falling in the group of green house gas emitters at large; hence they will follow the policies and strategies of G-77 & China in pursuing the economic dimension of sustainable development. However, the voluntary reduction as non-Annex Countries under United Nations Framework Convention on Climate Change (UNFCCC) and the Kyoto Protocol, will definitely bind them to an emission reduction regime. The Bali Conference on Climate Change held from 8-15 December 2007 flagged the voluntary reduction in GHG emission in a more emphatic way.

1.2 Environmental dimension of sustainable development

Ever since Stockholm Conference on Human Environment held in early seventies, environmental dimensions of development appeared on the global agenda by adopting the Stockholm declaration. As a follow-up to the Stockholm Conference, many global and national institutional arrangements were made. Agenda-21 a major outcome of the Earth Summit (1992) provided the basis of sustainable development; however the focus was more on the environmental aspects of development. The World Summit on Sustainable Development (2002) clearly defined the three pillars of sustainability; social, economic and environmental development paving the way for including environmental considerations in all the developmental initiatives. In all subsequent international, regional, sub-regional and national initiatives, environmental considerations are progressively gaining a central position. There is however a dire need to enhance Islamic countries research and development capacities.

1.3 Social dimension of sustainable development

Social aspect of sustainable development includes all the social, cultural, ethical, traditional considerations, practices, norms and values that not only a society possesses but which can affect the process of development. Population, literacy, health, poverty and social behavior for instance are the major social indicators that can define or indicate the level of development in a country. Higher the level of population increase as compared to increase in resources base and the resultant widespread poverty will grade a country underdeveloped but higher literacy will certainly place it in a category of relatively more developed countries. Similarly, malnutrition, high incidences of disease and poor national health will place a country in the lower bracket.

Sustainable development therefore, takes heed of the social aspects, namely meeting the population's basic needs for health, education, poverty eradication, marginalization, ensuring food security and eliminating starvation. Thus sustainable development can be realized through the following interventions:

- Applying the principle of equal opportunity in the field of education so that education can be for all.
- Providing health care and fighting epidemics and contagious diseases.
- Respecting human rights and involving all citizens in planning, in general policies and in decision-making, improving woman's position in society, and protecting vulnerable groups, especially children, the elderly and persons with disabilities.
- Applying social equality among all the groups of society, and creating a balance between geographical areas in terms of development.
- Providing basic services in urban areas through adequate municipal planning that meets people's needs broadly in fields like housing, transportation, and the various human activities, and secures a respectable life for the citizens.
- Adopting an awareness policy that would help effecting change in the production and consumption patterns that cause the waste and destruction of natural sources.
- Establishing real partnership between the most important actors in the field of development at the local, national, regional and international levels administration, people's elected representatives, scientific research institutions, the private sector, civil society, and the related regional and international organizations.

III. Sustainable Development Issue in the Islamic Countries

Most of the economist who have searched and researched the reason for socioeconomic backwardness of the under developed countries have admitted that the geographic location of the undeveloped countries is an important factor in retarding their development. As most of the Muslim countries fall in hot and tropical and subtropical zones most prone to natural calamities, they are no exception to this general rule. They are therefore prone to vagaries of extreme weather conditions. The most important prevalent calamity of which is drought as countries of North Africa, the Middle East, Central Asia and South Asia, in addition to sub-Saharan African Islamic countries are badly affected by drought and are frequently experiencing recurring dry and harsh years coupled with major rainfall irregularities. Likewise, the intense humidity and heavy downpours in tropical zones often result in dangerous floods, such as those that take place every year in Bangladesh and Indonesia, which severely affect the environmental and exploitation conditions in these countries. However, the most important problem is the weak capacity to mitigate the impacts of these climatic change related calamities in Muslim countries.

It has been observed that the frequency of natural and manmade disasters has greatly increased over the years due mainly because of global warming and other such anthropogenic factors. The intensity and losses of tsunami that hit Indonesia and the 2005 earthquake that hit Pakistan was increased due to

unsustainable exploitation of mangrove forests and coral reefs in the former and forests on fragile mountains in the later. Muslim countries may learn from these recently occurred disasters for devising sustainable development strategies to mitigate the effects of such calamities in future by adopting response strategic to sustain the losses.

The situation is more alarming for many Islamic countries because of the multifarious problems facing them, in the absence of serious thinking and planning that could enable them to handle these issues on sustainable basis. Major problems hindering sustainable development in most of the Muslim countries are as follow:

- Weaker productivity base, stagnant growth and rising unemployment in most Islamic countries.
- Increasing numbers of poor people, which constitutes a major challenge for the Governments.
- The numerous local and border conflicts in many Islamic countries, which at present is the case for more than 20 Islamic countries.
- The increasing pressure on the fragile environment, which leads to the emergence of the various deterioration aspects such as the depletion of nonrenewable natural resources, like energy sources; the excessive exploitation of renewable resources, as fisheries and forests; soil erosion; the emergence of water and air pollution; and the recession of land and sea biodiversity.
- The inadequacy of capacity for dealing with these problems; these resources are often incompatible with the magnitude and seriousness of these problems, as well as with their ensuing impact in the short and long terms.
- The aggravated and increasing food security problems especially after the food shortage at global level coupled with food and fuel price hikes Nonetheless, Islamic countries do possess tremendous potentialities for economic and social development, despite the relative shortage of water resources in some countries. Islamic countries have important economic potentials associated with various natural resources, such as oil and gas in the Gulf, the Caspian Sea, sub-Saharan Africa and North Africa. They also possess enormous mineral resources, eg. phosphates in Morocco, whose soil contains more than half of world reserves, and iron in Mauritania, Algeria and Egypt, in addition to other precious minerals found in the rest of the Islamic countries.

Likewise, Islamic countries have huge agricultural potentials in North Africa, sub-Saharan African countries, Syria, Iraq, Turkey, Bangladesh and Pakistan. They also command enormous water resources in the form of strategically located marine resources and water ways like Suez canal in Egypt, major rivers, such as the Ganges Delta in Bangladesh, the Nile River in Egypt and the Sudan, the Niger River in Mali, Niger and Nigeria, the Euphrates and the Tigris in Turkey, Syria and Iraq, Indus in Pakistan and other local rivers. However, these huge potentialities have so far not been adequately exploited.

The human resources of Islamic countries are immense as well; they constitute one fifth of the world's population. These resources are mainly young and can be invested through creating job opportunities within the framework of a global strategy aimed to raise people's living standards, thus eradicating poverty and achieving sustainable development.

The Holy Quran provides a lot of inspirational and practical guidelines for deep thinking for scientific and philosophical research to tame and exploit phenomena for human wellbeing. The Islamic world is heir to a rich developmental legacy, which dates back to the golden period of Islamic civilization being the periods of Islamic prosperity in the middle and modern ages, which is a source of pride for Muslims, and on which they relied in highlighting the genuine character of their development-related choices and the comprehensive and open nature of the Islamic civilization paradigm from which they emanate. This paradigm constitutes indeed a lofty Islamic human model of exploiting, managing and consuming natural resources on a sustainable basis, as it is the case of other fields, original and translated works of the Muslim philosophers, historians, mathematics, scientists, and physicians testify to this truth, as they provide a great source of knowledge and rich material for research with regard to the human approach to the issue of development, and contribute with an outstanding input to the Islamic culture within the general process of human civilizations.

IV. Historic Perspective of SD from 1972-2012

In modern age human efforts to understand the relationship between human activity and its impact on environment has traveled through the following stages:

The United Nations Conference on the Human Environment in 1972 held in Stockholm brought the environmental concerns to the center stage. The movement thus initiated encompassed the rights of people to adequate food, to sound housing, to safe water, to access to means of family planning. The recognition to renew humanity's connection with Nature, led to the creation of global institutions within the UN system.

The concept of Sustainable Development was given the World Conservation Strategy (WCS) published by the International Union for the Conservation of Natural Resources (IUCN) in 1980. The Strategy asserted that conservation of nature cannot be achieved without development to improve poverty and misery of majority of people and stressed the interdependence of conservation and development in which development depends on caring for the Earth. Unless the fertility and productivity of the planet are safeguarded, the human future is at risk.

WCS initiative culminated with the approval of the World Charter for Nature in 1982. The Charter emphasized that "mankind is a part of nature and life depends on the uninterrupted functioning of natural systems". It also stressed on global interdependence and the relationship between economics and the environment.

World Commission on Environment and Development (WCED) was created in 1983 and with in a year it was transformed as an independent body by the

United Nations General Assembly. WCED was asked to formulate 'A global agenda for change'. In 1987, in its report "Our Common Future", it advanced the understanding of global interdependence and the relationship between economics and the environment. The report interlinked social, economic, cultural and environmental issues and proposed global solutions. The main message was that "the environment does not exist as a sphere separate from human actions, ambitions, and needs, and therefore it should not be considered in isolation from human concerns. The environment is where we all live; and development is what we all do in attempting to improve our lot within that abode. The two are inseparable."

The first UN Conference on Environment and Development (UNCED) held in Rio de Janeiro in June 1992 was a major milestone in environmental movement. It adopted the Agenda 21; A Programme of Action for Sustainable Development, the Rio Declaration on Environment and Development, which recognizes each nation's right to pursue social and economic progress and assigned to States the responsibility of adopting a model of sustainable development; and, the Statement of Forest Principles. UNCED instituted the Commission on Sustainable Development (CSD) to follow-up on the implementation of Agenda 21 in 1993. Ten years after the Rio Declaration, a follow-up conference, the World Summit on Sustainable Development (WSSD) was convened in Johannesburg popularly known as Rio+10 to renew the global commitment to sustainable development. The conference agreed on the Johannesburg Plan of Implementation (JPOI) and Water Energy, Health, Agriculture and Biodiversity (WEHAB) Strategy, besides paving way for partnership.

After UNCED in Rio, sustainable development became an integral part of the international environmental agenda. The concept has been incorporated in many UN declarations. Its implementation though complex has been at the forefront of world's institutions and organizations working in the economic, social and environmental sectors. However, they all recognize how challenging it been to acknowledge environmental pillar the same recognition enjoyed by the other two pillars.

As a follow-up to WSSD, the UN General Assembly adopted a Resolution in 2009 agreeing to hold the United Nations Conference on Sustainable Development (UNCSD) also known as 'Rio+20' in June 2012 at Rio de Janeiro (UN General Assembly Resolution is given at Annex-I).

V. Themes of the United Nations Conference on Sustainable Development (UNCSD)

The Conference will focus on the following two themes:

(a) A green economy in the context of sustainable development and poverty eradication; and

(b) The institutional framework for sustainable development.

1. Green Economy

Twenty years after the Rio Summit, the world is still facing two major and interlinked challenges: meeting the demands for better lives for a global population set to

grow by over a third by 2050, and addressing environmental pressures that if not tackled, will undermine the world's ability to meet those demands. Responses to these challenges will not come from slowing growth, but rather from promoting the right kind of growth. What is needed is an economy that can secure growth and development, while at the same time improving human well-being, providing decent jobs, reducing inequalities, tackling poverty and preserving the natural capital upon which we all depend. Such an economy - called as green economy - offers an effective way of promoting sustainable development, eradicating poverty and addressing emerging challenges and outstanding implementation gaps.

The concept of a "green" economy has become the center of global policy debate in recent years. This concept embraces low carbon economy, resource efficiency and social inclusion and in a way tries to solve the conviction between economy and ecology addressing the poverty and inequality as well as environmental degradation. The concept of green economy is very much appealing but the developing countries including majority of Islamic countries presently lack ample resources to get out of the vicious circle of poverty and inequality. The challenges of rapidly growing population, food, water and energy security are hovering over many economies. The threats of climate change, uncertainty and climate extremes are adding to the adversities. Islamic countries like other countries of the developing world very much like to join hands with the international community by "going Green" but find themselves unable to respond to the challenges of transformation. Availability of financial as well as technological assistance of the world community to effectively address this issue although the agenda of cleaner environment and green economy is already indoctrinated in many national planning processes is a major impediment towards sustainable development.

2. Institutional Framework for Sustainable Development

The United Nations Conference on Environment and Development (UNCED), created new international institutions, among them the Commission on Sustainable Development, tasked with the follow-up to the Rio Conference, and led to the reform of the Global Environment Facility.

The concept of three mutually reinforcing pillars of sustainable development was incorporated into the 2002 Johannesburg Plan of Implementation (JPOI). The need to strengthen the Institutional Framework for Sustainable Development (IFSD) is addressed in Chapter XI of the JPOI. Sustainable development was recognized as an overarching goal for institutions at the national, regional and international levels. The JPOI stressed the demand to enhance the integration of sustainable development in the activities of all relevant United Nations agencies, programmes and funds, and the international financial institutions, within their mandates. The IFSD discussion thus also encompasses the role of institutions comprising the economic and social pillars, e.g. considering how to step up efforts to bridge the gap between the international financial institutions (IFIs) and the multilateral development banks (MDBs), and the rest of the UN system.

Following institutional framework within the UN System share important responsibility towards promoting and achieving sustainable development through the following institutional arrangements:

UN General Assembly

It is the apex body in the UN system, the GA plays a pivotal role in devising the institutional framework for sustainable development. The GA can translate into legal form the content of summit and conference outcomes, e.g. the establishment of CSD after UNCED. The GA can also initiate processes of consultation and negotiation on institutional arrangements, based on the recommendations of other organs. It could be expected that the GA would need to play an important role in implementing the outcome of Rio+20.

Economic and Social Council (ECOSOC)

The role of Economic and Social Council (ECOSOC) is recognized as a principal body for coordination, policy review, policy dialogue and recommendations on issues of economic and social development, as well as for implementation of the international development goals agreed at the major United Nations summits and conferences, including the Millennium Development Goals. It is expected that ECOSOC will play a key role in the overall coordination of funds, programmes and agencies, ensuring coherence among them and avoiding duplication of mandates and activities. ECOSOC is considered to be uniquely placed as a bridge between normative and operational capacities of the United Nations, having a pivotal role to play in ensuring coherence and coordination in the area of development.

Commission on Sustainable Development (CSD)

CSD was established under GA resolution 47/191 of 22 December 1992 as a high level commission, a status that was re-affirmed in the JPOI. It was tasked, among other things, with monitoring progress in the implementation of Agenda 21 and reviewing the progress in the implementation of the commitments set forth in Agenda 21, including those related to the provision of financial resources and transfer of technology. Representatives of various parts of the United Nations system and other intergovernmental organizations, including international financial institutions and regional development banks, assist in this initiative. The JPOI provides for the role of the Commission which includes assessing progress in the implementation of Agenda 21 and fostering coherence of implementation, initiatives and partnerships.

International environmental governance

The proliferation of multilateral environmental agreements (MEAs) and fragmentation of environmental institutions has emphasized the need to strengthen the environmental pillar of sustainable development. A number of processes have addressed the scope and options for reform of international environmental governance (IEG). Topics under the functions covered by the IEG agenda include strengthening the science-policy interface with the full and meaningful participation of developing countries and encouraging synergies between

compatible multilateral environmental agreements. Institutional, or form-related questions, make up the other part of the IEG discussions. In this regard the following options for broader reform have been identified:

(a) enhancing UNEP;

(b) establishing a new umbrella organization for sustainable development;

(c) creating a specialized agency such as a world environment organization;

(d) introducing possible reforms to ECOSOC and the CSD; and

(e) enhanced institutional reforms and streamlining of present structures

Institutional arrangements in Islamic countries include, OIC, ISESCO and IDB.

VI. Sustainable Development in Islamic Countries

Islamic countries participated in the World Summit on Human Environment in 1972, Rio Conference in 1992, World Summit in Sustainable Development at Johannesburg in 2002 at state level and as part of OIC, ISESCO, Islamic Development Bank (ADB) and other multilateral institutional platforms. Islamic countries implemented the JPOI, WSSD Action Plan and WEHAB Strategy as part of WSSD implementation. ISESCO developed the Water Resources, CDM and Adaptation Strategy for the Islamic countries besides, which are being implemented.

Most of the Islamic countries signed the Millennium Declaration in 2000 but no conscientious efforts have been made at the country-level to own and champion Millennium Development Goals (MDGs) implementation.

Overall, Islamic countries are Off-track on 29 MDG related indicators (18 of which are regressing and 11 are Off-track-Slow). The major indicators are poverty, income distribution, job creation, hunger and nutrition, gender parity in education, mortality (infant and maternal), skilled health personnel, clean water and sanitation and global warming.

The member countries are however On-track and earlier achiever on 16 indicators related to access to information technology (internet, mobile phones and telephone lines), tuberculosis (prevalence, detection, treatment and death) and birth-related health (antenatal care and adolescent births).

In absolute terms, the number of extremely poor people in member countries as a group increased from 369 million in 1990 to 389 million in 2007, although this is expected to drop to 275 million in 2015 (compared to the target of 184 million in 2015). The upturn in youth bulge, high dependency ratio, rising number of slums in major cities, falling standard of living, rising inflation, and unemployment are some of the reasons one can ascribe to the increase in extreme poor people in member countries.

Goal related to Ensuring Environmental Sustainability show that in terms of the percentage of land covered by forest, the number of countries on track (adding early achievers with On-track) and Off-track are close to each other. But for land protected for biodiversity, about 60 percent of member countries are early achievers while 15 countries are On-track. Most member countries (40 of them) are Off-track of reducing CO_2 emission with only 16 countries being Early achievers. Nearly 70 percent of member countries are early achievers in reducing the

consumption of ozone-depleting CFCs with 16 countries regressing. Fourteen member countries are early achievers of halving the proportion of people without access to safe drinking water in urban areas, while one country is On-track and 40 are Off-track (of which 11 countries are regressing). Halving the proportion of people without basic sanitation by 2015 is more likely to be achieved in urban than in rural areas. Four member countries are early achievers of meeting the target in urban areas compared to 6 countries in rural areas. In terms of countries that are Off-track, the difference between urban areas and rural areas is tenuous: 50 countries are Off-track in urban areas compared to 44 countries in rural areas.

Identification of gaps

Situation of Seven critical areas have been identified for Rio+20 summit include:

Energy

Energy is central to nearly every major challenge and opportunity the world faces today. Employment generation, education, transport requires energy security. Sustainable energy is needed for strengthening economies, protecting ecosystems and achieving equity. United Nations Secretary-General Ban Ki-moon is leading a Sustainable Energy for All initiative to ensure universal access to modern energy services, improve efficiency and increase use of renewable sources. Almost 80% of the population in Islamic countries use biomass ; wood, animal dung etc. as source of domestic energy. Fossil fuel is increasingly used in transportation and industry.

Cities

Cities are hubs for ideas, commerce, culture, science, productivity and social development. At their best, cities have enabled people to advance socially and economically. However, many challenges exist to maintaining cities in a way that continues to create jobs and prosperity while not straining land and resources. Common city challenges include congestion, lack of funds to provide basic services, a shortage of adequate housing and declining infrastructure. The challenges cities face can be overcome in ways that allow them to continue to thrive and grow, while improving resource use and reducing pollution and poverty. Like other developing countries, cities in most of Islamic countries are facing the common urban problems.

Food

It is time to rethink how we grow, share and consume our food.

If done right, agriculture, forestry and fisheries can provide nutritious food for all and generate decent incomes, while supporting people-centered rural development and protecting the environment.

But right now, our soils, freshwater, oceans, forests and biodiversity are being rapidly degraded. Climate change is putting even more pressure on the resources we depend on.

A profound change of the global food and agriculture system is needed if we are to nourish today's 925 million hungry and the additional 2 billion people expected by 2050.

The food and agriculture sector offers key solutions for development, and is central for hunger and poverty eradication. Food security is a real issue in most of Islamic countries and countries like Sudan and Ethiopia had faced food related famine in the past.

Water

Clean, accessible water for all is an essential part of the world we want to live in. There is sufficient fresh water on the planet to achieve this dream. But due to bad economics or poor infrastructure, every year millions of people, most of them children, die from diseases associated with inadequate water supply, sanitation and hygiene. Water scarcity, poor water quality and inadequate sanitation negatively impact food security, livelihood choices and educational opportunities for poor families across the world. Drought afflicts some of the world's poorest countries, worsening hunger and malnutrition. By 2050, at least one in four people is likely to live in a country affected by chronic or recurring shortages of fresh water. Like other developing countries, Islamic countries are facing water scarcity, sanitation and hygiene related issues.

Water is the most important natural resource, essential for sustaining life on earth. Although it is the most widely occurring substance on earth, only about 2.5 percent of it is fresh. About two thirds of this freshwater is locked in glaciers and permanent snow cover which is inaccessible for human uses. The other 0.8% is accessible in aquifers, rivers, lakes, and 8,000 cubic kilometers of manmade storage reservoirs. Globally, it is estimated that the per capita annual water availability will fall from an average of 7800 cubic meter (m3) in 1990 to 4800 m3 in 2025. Asia is the most vulnerable continent in the world from water availability standpoint. The water withdrawals also show increasing trend as a result of economic, population and irrigation expansion.

Equitable and sustainable management of water resources in the Islamic world, both fresh water as well as coastal and marine, has remained one of the prime objectives under ISESCO various medium and short term action planning. Under ISESCO Water Programme a Strategy for Management of Water Resources was adopted by the Second Islamic Ministerial Conference held at Tripoli, Great Socialist People's Libyan Arab Jamahiriya, in September, 2003, and was approved by the 10th Session of the Islamic Summit Conference held at Putrajaya, Malaysia, in October, 2003. Basic principles of this strategy are that; fresh water is limited resource, essential for life continuity, therefore, needs to be protected, adequate supplies of good quality water must be maintained for all population, integrated water resources management is a collective responsibility of all, therefore, it is extremely important to increase water awareness to preserve it from pollution. An implementation mechanism of the water Strategy as well as the General Framework of Islamic Agenda for Sustainable Development has been adopted by the Third Islamic Conference of Environment Ministers (ICEM3), held at Rabat, Kingdom of Morocco, in October, 2008 which is now under implementation. Further, the Islamic Council of Water Resources recommended by the Islamic

Executive Bureau of Environment be strengthened to tackle water issues of the Islamic world in an appropriate manner.

The water related problems encountered by Muslim countries are generally categorized as follows:

o Unequal distribution of water, as some countries experience a critical water situation, while other countries have a convenient situation. However, the fact that the latter countries have plenty of water resources is not enough to make them secure when it comes to the potential of exploitation of these resources with a view to improving the living standards of the population and achieving sustainable development. Economic development places tremendous demand on water resources.

- The lack of appropriate financial and technological resources in the countries undergoing a critical water situation to deal with this shortage, while the countries with important financial means can afford, thanks to modern techniques, to have access to water, despite the very high cost of such a process.
- Some Muslim countries have plenty of water resources, as well as an appropriate drainage system, while other countries suffer from the gathering and stagnation of surface water, which eventually leads to epidemics.
- The growing scarcity of water along with its high cost, desertification, soil erosion and depletion of some water layers along with their over-exploitation. For instance, in some countries, the extraction of groundwater is excessive by 25% to 30%, compared to its recharge rate, which only causes the loss of their groundwater reserves and the deterioration of their quality. Moreover, some developed countries in South-East Asia witness a degradation of their water quality, let alone the extent to which their water is polluted and wasted, and the non-rationalization of its use, which led to the rise of the level of suspended deposits in rivers as a result of the corrosion of water canals.
- The pollution of water with organic matter, disease-causing substances, and toxic wastes, represents a serious problem facing the countries of South-East Asia. The low rate of oxygen has reached critical levels because of the organic content of water. In fact, Asian rivers are loaded with thrice as much excrements as the world levels, and ten times as much as the levels set by OECD. Also one third of Asians do not have clean water in a 200-meter perimeter from their residence. Besides, only 10% of their waste water is treated, and still with inadequate methods.
- The equipments, data and expertise available in Islamic countries are considered to be inadequate. Besides, in the absence of appropriate programmes liable to provide the qualified human resources, and as the research and training equipment is deficient, cases of mismanagement of water resources are reported more and more often.
- Non-existence or inadequate level of research on quantity and quality of water in the Islamic Countries, to address the problem thus relying on the research and data of outsiders, the International Organizations and the developed countries.

The Commission on Sustainable Development, at its twelfth session (2004) reviewed and assessed implementation of three thematic issues, including water and sanitation. Most recently, in 2005, at its thirteenth session the Commission explored policy options for furthering implementation on the issues of water and sanitation as well as on human settlements as reflected in its decision. It was also decided to monitor and follow up the implementation of CSD-13 decisions on water and sanitation, and their interlinkages in 2008 (CSD-16) and 2012 (CSD20).

Considering that the critical minimum limit is 1000 cubic metres a year per individual, the individual's share in more than half the Arab countries is less than this average. Even more, in such countries as Jordan, Kuwait, Lebanon and Yemen this average is not more than 500 cubic metres a year per individual.

More so, it is expected that the countries of Sub-Saharan Africa, the Middle East and the Horn of Africa will face water availability problems, which will lead to a decrease in the individual's share (Johns Hopkins, 1998).

Islamic equatorial and tropical countries are marked by their abundant water resources, such as Indonesia, Malaysia, Bangladesh and the Guinean Gulf countries in Africa. The remaining Islamic countries suffer from a shortage in water sources, exacerbated by severe draughts, hence reliance on fresh water in agriculture which consumes 80% of water resources. In view of the severe insufficiency in rainfall waters and stream waters, reliance on groundwater prevails; in fact, groundwater in Libya is a main source, as it represents 95% of its water consumption, which makes consumption exceeds the rates of natural compensation.

Water demand in Syria exceeded the quantity available in the year 2005. The excessive pumping of groundwater along coasts has increased the salinity of coastal agricultural lands in Morocco, Pakistan, Tunisia and Libya, as well as in Oman and Bahrain. Added to this is the emerging problem of invasion of the continent by sea waters to replace the depleted fresh waters. In Bahrain for example, salty sea waters move forward at a rate between 75 and 130 m/year. Such a situation requires serious reflection to overcome this problem scientifically and administratively.

Oceans

The world's oceans - their temperature, chemistry, currents and life - drive global systems that make the Earth habitable for humankind. Our rainwater, drinking water, weather, climate, coastlines, much of our food, and even the oxygen in the air we breathe, are all ultimately provided and regulated by the sea. Throughout history, oceans and seas have been vital conduits for trade and transportation. Careful management of this essential global resource is a key feature of a sustainable future. Islamic countries are mostly situated on coastlines of Pacific and Indian Ocean, Gulf of Aden, Persian Gulf, Red Sea and Mediterranean Sea and are largely dependent on sustainable management of marine resources.

Jobs

Economic recession has taken a toll on both the quantity and quality of jobs. For the 190 million unemployed youth in the world, and for over 500 million job seekers

over the next 10 years, labour markets are vital not only for the production and generation of wealth, but equally for its distribution. Economic action and social policies to create gainful employment are critical for social cohesion and stability. It's also crucial that work is geared to the needs of the natural environment. "Green jobs" are positions in agriculture, industry, services and administration that contribute to preserving or restoring the quality of the environment. Majority of people in Islamic countries are engaged in agro-pastoral activities and their socio-economic condition depends on the productivity of agricultural and livestock.

Disasters

Disasters caused by earthquakes, floods, droughts, hurricanes, tsunamis and more can have devastating impacts on people, environments and economies. But resilience -- the ability of people and places to withstand these impacts and recover quickly -- remains possible. Smart choices help us recover from disasters, while poor choices make us more vulnerable. These choices relate to how we grow our food, where and how we build our homes, how our financial system works, what we teach in schools and more. With a quickening pace of natural disasters taking a greater toll on lives and property, and a higher degree of concentration of human settlements, a smart future means planning ahead and staying alert. Islamic countries like Indonesia, Turkey, Pakistan, Afghanistan, Sudan and Bangladesh had faced various natural and man made disasters in the past. Be it tsunami of 2004, earthquake of 2005, floods of 2010 or droughts of 2009, the impacts of disasters were aggravated by the life style, unsustainable production and consumption practices. The relief and resilience depended on the ability of nations to adapt to the changed situation and life style.

VII. The Future of "Sustainable Development"

The world is in even graver crisis almost two decades after the promises made at the 1992 Earth Summit. A new Rio Summit in 2012 initiated by H.E the Mr. President of Brazil during 62nd session of UN General Assembly in 2007 will aim to fill the gaps and discuss new problems.

The objective of the 2012 Conference is "to secure renewed political commitment for sustainable development, assessing the progress to date and the remaining gaps in the implementation of the outcomes of the major summits on sustainable development and addressing new and emerging challenges. The focus of the Conference will include the following themes to be discussed and refined during the preparatory process:

> *A green economy in the context of sustainable development and poverty eradication and the institutional framework for sustainable development"* paragraph 20(a) of the Resolution.

It's been almost two decades since the land mark Earth Summit of 1992 in Rio (Brazil) that woke up the world to the crises in the environment as well as development.

Despite the great declarations of that meeting, which most government heads attended; the environment today is in even greater crisis.

An important reason is that globalization, spurred by the creation of the World Trade Organization in 1995, ushered in new forces of economic competition among countries. They had to keep costs low so that their companies could survive in the globalised market and less and less priority was given to environmental protection or to assist developing countries.

It has been business as usual, with more forests chopped, minerals exploited and factories and cars pumping pollutants and warming the world's temperature.

Though climate change has hogged the news recently, there are also many other ecological problems and crises. The loss of biodiversity is causing even more economic loss than global warming, according to a new United Nations report.

There is also the increasing scarcity of water, which will affect large numbers of countries in the next decade and has the large potential to cause conflicts.

The latest sign of this is the fight over the rights to the use of the waters of the River Nile among seven upper and lower riparian countries in Africa. This has the potential to develop into a major regional problem.

Many commitments by the developed countries have not been met, and there must now be more effective implementation of what was agreed at previous summits, with greater funding, he added.

The underling fear of the developing countries (including Islamic World and Arab States) is that too much stress on the environmental aspect of a new economic model would neglect the development needs of developing countries, and thus be a step backwards from the concept and practice of "sustainable development" which took so long to reach agreement on.

Another major controversial issue is what kind of institutions should govern sustainable development in the future.

Should the existing institutions, such as the UN Environment Programme (UNEP), the Commission on Sustainable Development, the UNDP and UNCTAD, be strengthened and work better together? Or should there be a more radical restructuring or even the creation of a new institution altogether and what would its mandate be? With such interesting and important topics, the road to the 2012 Summit will be paved with much intense discussion and negotiations. ISESCO is in suitable place to collaborate with UNESCO, ALECSO and AU to play effective role in enhancing coordination and partnership for upgrading national capacities in reforming science and technology to strengthen the governance of sustainable development.

The specialized studies examined by the First Islamic Conference of Environment Ministers held in Jeddah, which reviewed the major challenges faced by the Islamic world in the field of sustainable development, materialized mainly in the *poverty, illiteracy, accumulation of foreign debts, degradation of economic and social conditions, disequilibrium between population growth and available natural resources, the weakness of technical capabilities, the lack of expertise and skills in environment management, along with the negative impacts left by regional conflicts, foreign occupation of parts of its land and despoiling of its*

resources, one may chart out the general framework of an Islamic agenda liable to help overcome these obstacles and lay down sturdy foundations for cooperation and coordination among the Islamic countries to the concept of sustainable development, with a view to being updated and resubmitted to the World Summit on Sustainable Development in Rio+20.

Islamic Countries hope that the institutional theme will also focus on the broader institutional landscape. While strengthening the environmental pillar should continue, there is a need to expand the scope of the discussion to encompass finance, social and development institutions at all levels and address how to improve coherence of the full multilateral development system, including inter-regional system wide coherence. The following layout is designed to satisfy the needs of updating sustainable development issues in Islamic World.

Theme 1: Assessing the progress to date and the remaining gaps in implementation of the outcomes of the major summits on sustainable development

1. Progress in implementing the goals and objectives of the 1972 Stockholm Conference on the Environment, the 1992 Conference on Environment and Development and the 2002 World Summit on Sustainable Development has been inconclusive and uneven. Despite some achievements on the ground, most notably on reducing poverty, improving access to education and better health in some areas, substantial challenges remain. Achievements that have been made are unevenly distributed with wide disparities across regions.
2. Persistent implementation gaps relating to poverty eradication, food security, income inequality, maintenance of biodiversity, combating climate change, reducing pressure on ecosystems and fisheries, access to clean water and sanitation and the full participation of women in implementing internationally agreed goals exists, which reflect a fragmented approach to achieving sustainable development goals.
3. The income and development gap between many low-income countries and the high-income countries has continued to widen, and that this poses a challenge for sustainable development.
4. A remaining gap is a lack of mutually coherent policies and approaches supportive of sustainable development in the areas of finance, investment, trade, capacity building, and technology transfer.
5. Efforts at achieving sustainable development goals, including the MDGs, have been further hindered by the recent financial and economic crises which have adversely affected economic performance, eroded hard won gains and increased the number of people living in extreme poverty.
6. Strong political impetus is needed to bridge implementation gaps, and Africa, least developed countries, landlocked developing countries and Small Island developing States were mentioned by several delegations as deserving special attention and support.
7. Slow progress points to the need for enhanced means of implementation, including the strengthening of existing processes of financing for development,

and a fair and equitable multilateral trade system, including a fair outcome of Doha round and elimination of harmful subsidies. Technology transfer, technology cooperation, and training and capacity development were also highlighted by many delegations as essential, and several delegations called for scaled-up financial support for capacity building in Small Island developing States in particular. It was mentioned that human capital is central to sustainable development. A number of delegations stressed the importance of strong national leadership and strengthened national implementation to progress on sustainable development.

8. Inadequate financial support has hampered the ability of developing countries to undertake action on sustainable development and has limited their access to modern, environmentally sound and clean technologies. Official Development Assistance (ODA) has lagged behind commitments in some cases, although many donor countries have substantially increased aid and have undertaken action for a more coordinated and efficient distribution of aid. It was noted by several delegations that the commitment to double aid to Africa by 2010, as agreed by the Group of Eight at Gleneagles in 2005, may not be reached. In addition to an increase in ODA, many proposed that innovative financial measures and mechanisms be fully explored.

9. High indebtedness poses a constraint for some developing countries and an effective, equitable, durable and development-oriented solution would be a positive step towards sustainable development.

10. An integrated, holistic and balanced approach to sustainable development needs to be adopted at the national, regional and international levels, one that fully accounts for economic, social and environmental aspects elaborated at the UN Conference on Environment and Development in 1992 and reiterated at the World Summit on Sustainable Development in 2002. Many noted that a refinement of strategies and sharper policy perspectives aimed at the effective implementation of the outcomes of major summits on sustainable development are needed at the national level. This in turn needs to be complemented by stronger and effective mechanisms of international and regional support as well as significantly greater financial commitments. A broader notion of rebalancing was introduced by some delegations with a view to closing gaps between developed and developing countries.

11. There is also need to enhance efforts on concrete actions and measures to achieve sustainable development. Success stories and policies that have worked need to be identified and analyzed, including how best those policies fit and can be implemented in different contexts and how they can be replicated in Islamic countries.

12. Good governance at all levels is important for achieving sustainable development goals. The involvement of the private sector, including through public-private partnerships, is particularly important as noted by some delegations. Several delegations and Major Groups emphasized enhanced corporate social responsibility.

13. Indicators to measure progress on achieving sustainable development goals exist and have been utilized by some countries, but information and data gaps remain. Current GDP indicators are inadequate to measure the vulnerabilities of countries to the different crises confronting them, including climate change and the financial crisis. Developing vulnerability indicators and related data sets was mentioned by some delegations as a useful tool. In this regard, population related data, including demographic and health surveys and censuses, can be a valuable resource.

14. The collection of quantitative information on financial and technology flows could be beneficial in addressing inadequate funding for sustainable development and analyzing technology transfer needs.

15. Undertaking further quantitative assessments on implementation gaps and shortfalls and measures to improve the reliability and availability of indicators relevant for measuring progress on sustainable development.

16. Input by relevant UN entities, agencies and programmes, including UNDP and UNEP, on gap assessment will enhance the preparatory process and contribute positively to the UNCSD outcome. Several delegations called for improved inter-agency collaboration and coordination so that the UNCSD could benefit from the expertise and competence of different agencies, for example UNDP on reporting and awareness-raising instruments related to poverty eradication and UNEP through assessment tools such as the Global Environment Outlook. Contributions by multilateral institutions and the scientific community to assessments on progress made and identification of gaps in implementation would also be valuable during the preparatory process, as noted by many delegations and Major Groups.

17. No major changes have been made in patterns of consumption and production since UNCED and that fundamental changes are indispensable to global sustainable development. Actions are required to promote sustainable production and consumption

1.1. Addressing new and emerging challenges

1.1.1. New and emerging sustainable development issues that have arisen recently such as the financial and economic, food, water and energy security. Important challenges also include climate change, biodiversity, desertification, water scarcity, disasters and the ability to prepare for and recover from them. As noted by one delegation, globalization, while facilitating growth and poverty eradication, has also increased economic instability. These crises and challenges have great impacts on standards of living, the achievement of the MDGs and the health of people in developing countries, in particular the most vulnerable.

1.1.2. The UNCSD is expected to address pertinent new and emerging issues, including with a view to increasing resilience at national and international levels, supporting efforts to cope with negative impacts, and preventing, if possible, recurrence of similar crises in the future.

1.1.3. Challenges to sustainable development are not necessarily new, but taken together with the multiple global crises, they compromise the ability of developing countries to respond effectively. Immediate and collective efforts are needed if sustainable development is to be achieved.

1.1.4. The multiple crises call into question the prevalent global development model. A number pointed to the need for indicators of well-being that go beyond GDP. Others called for a review of the performance of markets over the past 20 years, suggesting that they may not have been adequate to the challenges of conserving scarce natural resources, protecting the environment and promoting social development.

1.1.5. The global food crisis has not yet been overcome and it was widely noted that hunger, malnutrition and lack of food security remain a great challenge to sustainable development.

1.1.6. Access to clean drinking water and sanitation also remains a crucial sustainable development challenge. It was noted by many delegations that a range of efforts are under way to protect increasingly scarce freshwater resources, including through improved water resources management and reduced water pollution, but that increased action is imperative. The mid-term review of progress in the implementation of the International Decade of Action "Water for Life", 2001-2015, was cited as being important in this regard.

1.1.7. Public health and prevention of communicable diseases important area for national action and international cooperation.

1.1.8. Investment in childhood and adult education is necessary for sustainable economic growth and can contribute to supporting a green economy. Efficient education and training systems at all levels with a view to enhancing career pathways in the sciences, technology and engineering should be available to all, as one delegation stressed.

1.1.9. Mitigating climate change and adapting to its anticipated impacts involve new and emerging issues, technologies and areas for international cooperation. Climate change poses particular challenges for sustainable development of the small island developing States. New global partnerships for transferring technologies have been proposed, notably in the context of the ongoing climate change negotiations, with a view to enhancing a global transition to a low carbon economy.

1.1.10. Recent natural disasters have shown the importance of preparedness and increased international cooperation in response efforts. New information and communication technologies can inform decision making and real-time problem solving, including in times of disaster, as stressed by some delegations.

1.1.11. Continuing global biodiversity loss as well as loss of cultural diversity di;ute the sustainable development vision. Many resources, and in particular fish stocks, are facing serious depletion. As noted by one delegation, the current oil spill in the Gulf of Mexico highlights the vulnerability of all countries, developed and developing, to environmental disasters.

1.1.12. Imbalances in international economic governance should be addressed at Rio+20, not just strengthening the G20; but rather ensuring the competitiveness of developing countries, There is thus a need to explore innovative financing mechanisms and assess the resource mobilization potential of any proposed innovative source or mechanism of international financing.

1.1.13. International migration (particularly talent drain) is an emerging issue, limiting the development of scientific and technological capabilities in developing countries. Developing country expertise and perspectives should be incorporated into scientific and technical assessments, in order to strengthen links among science, education and policy aiming at discouraging talent drain.

1.1.14. There is a need for consideration of new forms of collaboration or international mechanisms that can enhance the accountability of developed countries and ensure the implementation of their commitments, whilst developing countries require more effective enabling approaches and support to enhance sustainable development.

1.1.15. UNCSD should identify ways for the UN system to ensure capacity building support for implementing national sustainable development plans and strategies in developing countries.

1.1.16. Green job creation was cited by several delegations and Major Groups as an important element of the response to the current global economic crisis, and it was stressed that workforce, including worker retraining, aspects of a green economy transition need to be adequately addressed.

1.1.17. Emerging challenges require the involvement of all stakeholders, including women and youth as well as farmers to address the challenge of food security.

1.1.18. While recognizing the importance of addressing the above new and emerging issues and challenges, these can be accommodated within the thematic focus on a green economy and the institutional framework for sustainable development. Therefore, the agenda for UNCSD need not be expanded.

1.2. A green economy in the context of sustainable development and poverty eradication

1.2.1. Definitions and interpretations

1.2.1.1. There is no broad consensus on the meaning of a green economy. There is, however, a consensus that a green economy must be understood in the context of sustainable development and must be consistent with the Rio principles. Many delegations stated that there is no need to redefine sustainable development, and a green economy is not a substitute for sustainable development. In one formulation, green economy can be conceived as a means to achieving sustainable development goals, which by and large have yet to be realized. In another, a green economy is a pathway to sustainable development; or rather

a set of pathways as many delegations emphasized that there is no "one size fits all" but many possible green economy, or green growth, paths depending on national circumstances, priorities and challenges.

1.2.1.2. A green economy promotes efficiency in the use of natural resources and energy, and by promoting new technologies for clean energy and cleaner production, can create new opportunities for economic growth. Several delegations referred to decoupling economic growth from resource use and environmental degradation as a feature of a green economy, while some delegations highlighted the need to understand better with a view to addressing the impact of decoupling on resource-based economies.

1.2.1.3. Emphasis on the important role of the private sector in a green economy transition, contributing critical investment and technological innovation. A number of delegations noted that suitable national policy frameworks need to be put in place to drive a green economy transition, to promote sustainable consumption and production patterns, and to bring economic activity within the carrying capacities of ecosystems.

1.2.1.4. Emphasis on the contribution that a green economy can make to strengthen the environmental pillar of sustainable development by among others combating climate change, protecting biodiversity and reducing pollution that has negative impacts on health, well-being and agricultural productivity.

1.2.1.5. The green economy concept needs to be broad and flexible enough to be relevant and adaptable to the needs of countries at different levels of development with differing national capacities and differing priorities. A green economy is about making more forward-looking choices whatever economy one has. The green economy framework should not be a straightjacket but a guide and support to national initiatives and policies. Many policies and measures are already being implemented at national level as well as at the grass roots which could be classified as building a green economy. Local authorities referred to the rich menu of innovative green economy policies and measures, like eco-budgeting, being introduced at the municipal level. Employing a green economy framework may be able to assist governments in taking a more holistic view of economic policies for sustainable development.

1.2.1.6. Interpretation of the concept of a green economy which was equated with the "marketization" of nature and natural resources. Unregulated markets have been a contributing factor to environmental degradation and thus their contribution to a solution is questionable.

1.2.1.7. Valuing ecosystems and their services is seen not as facilitating their further exploitation and degradation but rather as impressing upon human beings the full costs of destroying nature and the full benefits of protecting the natural resource base for present and future generations.

1.2.1.8. There is no clear distinction between green growth and green economy.

1.2.2. Green economy, poverty eradication and social development

1.2.2.1. The social content of the concept of a green economy. It seems to focus on the economy-environment interface without explicitly accounting for the social pillar of sustainable development.

1.2.2.2. Green economy transition might reduce poverty by creating new job opportunities and decent work. The importance of education and skills development of the workforce was stressed for this potential to be realized. Green growth is in general more labor-intensive than "brown" growth, and should therefore lead to net job creation. Others referred to work of International Labour Organization (ILO) and UNEP on green jobs, which identifies employment opportunities associated with green economy policies and measures. One speaker cited the numbers of jobs created in various 'green' sectors in different countries such as renewable energy. Still, concerns persist about possible job losses in some economic sectors during a green economy transition and the need to address adjustment costs for workers and others was underlined, including through investment in job retraining and social protection. The role of small and medium enterprises is respect to job creation and innovation. Green economy involves the sustainable management and use of the natural resource base, it is essential to achieving the MDGs, including the poverty eradication goal, as poor people depend heavily on the natural resource base for their livelihoods. Green economy, in the national context, must address the need to create sustainable livelihoods, including for poor people in rural areas. There is close link between agriculture and sustainable development noting the importance of food security for poverty eradication. The question of what kind of agricultural methods and technologies would be considered consistent with the concept of a green economy was left open. SIDS and LDCs in particular expressed the expectation that a green economy should address their concerns of poverty eradication, reducing vulnerability and strengthening resilience. Green economy is the only way forward to address challenges like climate change and its impacts.

1.2. 3. The international context for a green economy

1.2.3.1. Supportive international policy and institutional environment is essential to promoting a green economy. The international trade is essential to sustainable development and in some countries has contributed to poverty reduction. International support to a green economy transition should not lead to conditionalities, parameters and standards which might generate unjustified or unilateral restrictions in the areas of trade, financing, ODA or other forms of international assistance. Rather, the multilateral trade system should foster free trade using environmentally sound technologies and products, improved market access for developing countries, and technology transfer from developed to developing countries. International green economy initiatives must not limit the sovereign rights of countries over their natural resources as reflected in principle 2 of the Rio Declaration; however, green protectionism must be avoided.

1.2.3.2. UNCSD should focus on concrete actions, policies and measures that support the achievement of the Rio and Johannesburg agendas and the MDGs. Some mentioned that impacts on the achievement of the MDGs should be a criterion to assess proposed policies for a green economy. UNCSD should aim to produce a set of principles to guide a green economy transition, a roadmap for that transition, and a well-stocked tool kit which countries at different levels of development and with differing national circumstances could use to guide them on a green economy, green growth path. UNCSD must go beyond agreeing principles to practical implementation, and for that purpose there is a need to consider the means of implementation, including trade, technology transfer, capacity building, and financial resources.

1.2.3.3. UNCSD is requested to reach consensus on a global green new deal, with a clear indication of the investments needed - both public and private - for developing countries to realize a green economy transition; the policies needed to support and stimulate such investments, which would be at the discretion of individual countries.

1.2.3.4. Green economy is considered "green stimulus package" for developing countries, including Small Island developing States. This would include new and additional financing and technology transfer. Relaxation of intellectual property rights was proposed by some countries, while others argued that this would stifle innovation.

1.2.3.5. Enhancement of the link between a green economy and sustainable consumption and production. Rio+20 Conference could contemplate the adoption of the 10-year framework of programmes on sustainable consumption and production patterns which is expected to have more attention. Stimulating the global economy in a way that promotes sustainable consumption and production could be a "win-win".

1.2.3.6. Cooperation between UN DESA, UNEP and other relevant organizations is required to assess both the benefits and the challenges and risks associated with a green economy transition. Among the issues which the assessment should address are:

a. Macroeconomic policy implications of pursuing a green economy transition;

b. Potential loss of competitiveness of some industries, sources of comparative advantage of some countries;

c. Risk of "green protectionism", legitimating of certain 'green' subsidies which could distort trade;

d. Potential contribution of a green economy to poverty eradication through the creation of sustainable livelihoods. Compilation of existing experiences and good practices with green economy policies and measures in different countries will avoid duplication between green economy and green growth strategy.

1.2.3.7. Policy options and policy mixes guides could be used by countries embarking on green economy pathways, referring to the seven areas contained in the Secretary-General's report, namely:

a. Internalizing externalities into prices to reflect true environmental and social costs;

b. Sustainable public procurement policies;

c. Ecological tax reforms;

d. Public investment in sustainable infrastructure-including public transport, renewable energy, or retrofitting of existing infrastructure and buildings for improved energy-efficiency-as well as natural capital, to restore, maintain, and where possible, enhance the stock of natural capital;

e. Public support to green innovation, R&D on environmentally sound technologies;

f. Strategic investment and development policies to lay the foundation for socially inclusive and environmentally sustainable economic growth;

g. Social policies to reconcile social goals with existing or proposed green economy policies.

1.2.3.8. Cooperation with international financial and trade institutions in the preparations for the Rio+20 Conference is important.

1.2.3.9. The creation of a new Global Green Growth Institute (GGGI) which will develop country-specific green growth models, and looks forward to collaborating with the UN system on analytical work relating to assessment of green growth/green economy strategies and policies, particularly in developing countries.

1.3. Institutional framework for sustainable development

1.3.1. An effective institutional framework for sustainable development would generally agreed to be crucial in ensuring the full implementation of Agenda 21 and the follow-up to the outcomes of the WSSD in meeting emerging sustainable development challenges. Sustainable development was highlighted as important in achieving the MDGs.

1.3.2. The 2012 Conference should ensure renewal of political commitment and redoubled efforts to ensure that institutions currently involved in implementing the sustainable development agenda within the United Nations system to be more efficient and effective, through improved synergies and with the provision of adequate resources.

1.3.3. Lack of progress on the sustainable development agenda was attributed by many delegations to the diffuse, fragmented nature of the existing architecture for sustainable development, which resulted in increased incidence of duplication and poor coordination.

1.3.4. The best way to enhance efficiency and effectiveness of the sustainable development architecture within the UN system would be by strengthening of the profile of the environmental dimension of sustainable development. On the other, it is important to promote greater convergence among the environmental, social and economic pillars.

1.3.5. It is expected from UNCSD to define the following:

addressing the current imbalance at the global economic governance level; restoring the institutional balance between the three pillars; strengthening implementation on all three pillars; and providing a strong and predictable financial basis for action.

1.3.6. The UN should provide stronger leadership and a more coherent framework to support both policy formulation and implementation of sustainable development objectives.

1.3.7. The provision of new and additional resources is crucial to enhance the United Nations and ISESCO capabilities in the area of implementation. In this regard, to ensure the predictability and adequate funding for the effective implementation of all mandated development activities, including those related to sustainable development, it is suggested that the regular budget of the United Nations and ISESCO should be increased.

1.3.8. Reaffirming that the CSD is the high-level intergovernmental body responsible for sustainable development and the principal forum for the consideration of issues related to the integration of the three dimensions of sustainable development.

1.3.9. The Commission should become more forward-looking and action-oriented, enhancing its implementation capacities including by considering measures emanating from the CSD. Enhanced role for the CSD would include not only reviewing and monitoring progress in the implementation of Agenda 21, but also ensuring coherence in implementation of sustainable development objectives through the promotion of initiatives and partnerships.

1.3.10. The role and working methods of the CSD should be revisited, making it more interactive and exploring a more dynamic framework for future needs while respecting its Multi-Year Programme of Work.

1.3.11. Underscoring the important role played by the Commission in facilitating the meaningful participation of civil society through its major groups programme, and the valuable contribution to implementation made through the promotion of multi-stakeholder partnerships.

1.3.12. There is need for an integration of CSD decisions into the work programmes of other UN bodies.

1.3.13. More effective inter-agency coordination is required to ensure greater information sharing and cooperation among all UN entities within the sustainable development framework. Some referred to the historical precedent of an interagency coordination mechanism on sustainable development.

1.3.14. There is the need to strengthen and enhance coordination and cooperation among existing bodies and structures rather than to create new ones. Consideration of creating a unified framework for sustainable development, giving due consideration to the possible roles and functions of the CSD, ECOSOC, UNEP, ISESCO and others.

1.3.15. Broader embrace of institutions in pursuing greater systemic coherence on the sustainable development agenda, recognizing that the UN agencies are not the only actors in the global institutional architecture on sustainable development. Thus the need to engage the international financial institutions fully in the preparations for UNCSD is imperative.

1.3.16. The need to strengthen international governance of shared oceans and marine resources, including the strengthening of marine protected areas and related capacity-building and technical cooperation for marine protection. In addition, it highlighted the need to work within the existing organizations and arrangements to promote sustainability of global fish stocks and mitigate the impacts of fishing activities on the global marine environment.

1.3.17. There is need to address the challenges presented by the existing institutional complexity within the environmental governance framework. The strengthening of international environmental governance (IEG) within the context of the institutional framework for sustainable development was identified as being of particular concern. The current system of IEG is characterized by incoherence, fragmentation, lack of synergies, inefficiency and ineffectiveness, resulting in duplicative processes and imposing heavy meeting and reporting burdens on developing countries in particular.

1.3.18. Affirming rationalization of the international environmental institutional framework. The consultative process inaugurated by the 11th Special Session of the UNEP Governing Council on IEG system reform is an important contribution to the debate on sustainable development governance in the context of UNCSD and enhancing synergies among international environmental institutions, including the multilateral environmental agreements (MEAs) in addition to the simultaneous cooperation on chemicals and wastes as an important step.

1.3.19. The transformation of UNEP into an action oriented implementation programme with sufficient resources, comparable to UNDP, not into a normative, enforcement oriented world organization comparable to the WTO.

1.3.20. A gradual approach toward governance reforms is essential to be sought. Much interest would be expressed in the IEG process, the conclusion of which would require strong political will. The importance of improved public participation in the IEG reform process would be emphasized by all states including Islamic World.

1.3.21. Assisting developing countries in implementing environmental commitments and MEAs is important issue major goal of strengthened IEG, requiring capacity-building, financial resources, technology transfer, information sharing and more effective review and monitoring systems.

1.3.22. Emphasizing the need for rationalizing sustainable development decision-making and for implementing actions at the national and local levels in line with the principle of subsidiary.

1.3.23. Focusing the need for strengthened scientific and technological capacity; support for the development and strengthening of local and national institutions within the sustainable development framework; support for the development of national sustainable development strategies; and the need for increased funding, particularly in developing countries.

1.3.24. Highlighting the importance of ensuring that institutional frameworks for sustainable development at the national level are made part of the UNCSD process. Among the suggestions are the establishment of multi-stakeholder national councils of sustainable development and their integration into national decision-making processes, as well as the establishment of dedicated institutions to promote an integrated approach to sustainable development.

1.3.25. Emphasizing the need for a stronger institutional framework for sustainable development imbued with a sharper policy perspective and giving greater emphasis to implementation. In order to facilitate greater convergence and coherence of the activities of the UN system on sustainable development, it is suggested that synergies within existing frameworks such as the UN strategy for system-wide coherence: Delivering as One, be explored and pursued, with a view to enhancing coordination and more efficient implementation. There is a need for adequate funds to support the international institutional framework for sustainable development. It is suggested that a role for the Global Environment Facility (GEF) in this regard be explored. The traditional international cooperation should be improved and complemented by a new paradigm that will strengthen the autonomy of recipient countries and include other forms of cooperation such as south-south and triangular cooperation.

Theme 2: New Foundations for the Future: Looking Ahead to Earth Summit 2012

While millions have been lifted out of poverty since 1992, many more have found themselves in worse situations. Moreover, the world has yet to properly succeed in economic growth without damaging environmental sustainability. It is necessary to examine which commitments have not been adequately fulfilled, and address problems of enforcement and efficient governance.

The Green Economy could help to provide an answer to the challenges of equity and issues related to the economic and financial crisis. The Green Economy paradigm also needs to answer the sustainable development agenda from a significant set of target perspectives such as poverty or employment. Furthermore, there is a challenge to make the footprint of industrialized nations consistent to the commitments outlined in Agenda21. There is also a need for huge global public investment, re-regulation and greater alignment in the relationship between environment and economy. There needs to be a discussion concerning what Rio+20 can deliver for the institutional framework for sustainable development. At the centre of this process, there must be a much needed discussion on the future role and strengthening of the Commission on Sustainable Development. There is a need to link the Rio+20 process with other ongoing dis-

cussions under the UN General Assembly, such as the Working Group on the Follow-up to Conference on the World Financial and Economic Crisis (June 2009). In this regard, Rio+20 could be framed as a response to the economic crisis and lead to possible reform of the Breton Woods Institutions.

2.1. Equity and Sustainability in a Green Economy: Including commitments to Poverty Eradication, Sustainable Consumption and Production, and Climate Sustainability in the Rio+20 Agenda

The open debate facilitated by the Executive Director of the Centre for Environment and Development/ Sri Lanka and the representative from Citizens Network for Sustainable Development who started with the argument that since 1992, international negotiations on sustainability have not brought the desired results. The climate is changing and the poor are still trapped in a vicious cycle of poverty. The speakers participating in the debate shared ideas and thoughts on how Rio+20 can provide greater hope for a sustainable world by:

a. *Bringing to focus the equity issues of a green economy and sustainable market place;*
b. *Combining a renewed commitment to eradicating poverty that is very critical in achieving sustainable development;*
c. *The critical importance of poverty eradication in achieving sustainable development;*
d. *Lobbying for an international agreement on Sustainable Consumption and Production as pre-requisite for sustainability on earth;*
e. *Create a holistic vision on climate sustainability.*

2.2. Environmental Governance and Sustainable Development Governance

The contribution of IEG to the institutional framework for sustainable development could be understood in a broader context in the following phrase summarized from the UNEP Governing Council debate:

The international environmental governance debate can be addressed in the broader context of environmental sustainability, sustainable development and the green economy. Reform to international environmental governance can be based on the principles of sustainability with incremental reforms involving UNEP involvement in the UNDG, engagement and partnership with civil society and private sector. Improved IEG can function within the UN system to create strong, credible science base and policy interface, securing sufficient and coherent environmental funding and ensuring a responsive approach to countries' needs.

2.3. Sustainable Development, Governance and Rio+20

The purpose is to help focus issues around the two themes on green economy and governance, and start mapping out the views pertaining to stakeholders in the North and the South, to see if there are differences of approach, analysis etc. and to reach a possible common platform for civil society on these issues. Further it may help to find ways to start engaging civil society in the further work

on the Rio+20 process in order to maximize input into the regional preparatory meetings next year and to start outreach work to disseminate information on the upcoming UN Conference on Sustainable Development.

2.4. Green Economy - National level experiences and opportunities for poverty alleviation and sustainable development

By sharing national experiences in developing a green economy, UNEPs Executive Director highlighted green economy commitments made by a growing number of countries and emphasized opportunities for developing countries. Other issues would share experiences in advancing the green economy in developing respective countries, including green stimulus responses to the financial and economic crisis, as well as long-term green growth and development strategies. The commitments made by Governments to the goal of sustainable development and poverty eradication can be advanced through the practical implementation of a green economy.

Theme 3: Implementation of the Programme of Work and Areas of Priority Actions for the Islamic States (Health and Sustainable Development): Addressing the Issues and Challenges

The emergence of the concept of sustainable development as a guiding principle for policy formulation, the adoption at the UN Conference on Environment and Development (UNCED) in 1992 of Agenda 21, and subsequent adoption of the Programme for the Further Implementation of Agenda 21, have been important stimuli at international, regional, national and local levels including Islamic World, for innovative programmes of action to address current environment, health and development problems.

The Rio Declaration, for example, states that, "Human beings are at the centre of concerns for sustainable development. They are entitled to a healthy and productive life in harmony with nature." Further, Chapter 6 of Agenda 21 emphasizes the fundamental commitment within sustainable development to "protecting and promoting human health". Recent international meetings have reinforced the importance of health, environment and development issues on the international development agenda. For the first time, meetings of the G8, the United Nations Security Council, the World Economic Forum, as well as follow-up to major international conferences have explicitly addressed health issues requiring attention as development or security issues. Health is in fact recognized as a central concern in development - both as a resource for, and as an indicator of, sustainable development.

The Commission on Macroeconomics and Health, appointed by WHO, has assembled powerful evidence suggesting that the role played by health in determining the economic prospects of the world's poor communities has been significantly underestimated. Recent evidence shows how disease undermines economic progress. Major diseases, such as HIV/AIDS, malaria and TB directly affect the poorest countries' ability to develop. They slow down economic

growth and thus perpetuate poverty. Childhood illnesses and maternal morbidity and mortality keep the most vulnerable groups trapped in vicious cycles of deprivation and despair.

A major shift in thinking regarding the role of health in poverty reduction and development is occurring. Health is far more central to poverty reduction than previously thought, and that realization is now beginning to shape governments' and global policies. It has been known for years that people who are poor are more likely to get sick. But now knowledge is accumulating about how ill health creates and perpetuates poverty, triggering a vicious cycle which hampers economic and social development and contributes to unsustainable resource depletion and environmental degradation. Evidence suggests that health gains trigger economic growth: if the benefits of that growth are equitably distributed, this can lead to poverty reduction.

The Millennium Declaration sets a number of inter-related goals and targets which are based on principles of sustainable development and are aimed at making further progress in eradicating poverty and advancing healthy and sustainable human development. In addition to these commitments, health, sustainable development and poverty reduction is being addressed at country level in comprehensive development strategy and planning tools such as the United Nations Common Country Assessments (CCAs) and the United Nations Development Assistance Frameworks (UNDAFs).

Theme 4: Global Challenges for Sustainable Development

Strategies for Green Jobs

- This background note covers the implications for employment and decent work policies of shifting to more sustainable development paths. It focuses in particular on climate change and the search for ways to combine growth, the reduction of poverty and equitable development with a much reduced emission of green house gases. The overarching framework for this note is the concept of sustainable development agreed at the Johannesburg Summit in 2002 which assumed *"a collective responsibility to advance and strengthen the interdependent and mutually reinforcing pillars of sustainable development - economic development, social development and environmental protection - at the local, national, regional and global levels."*

- The time horizon for the transition to a sustainable development trajectory for the global economy is medium to long term although there is an urgent need to halt the upward trend in green house gas emissions. Following agreement in Bali in December 2007 on a road map for international action on climate change, negotiations have started with a view to an agreed outcome at the Conference of the Parties in Copenhagen in December 2009 followed by Cancun in 2010 and Durban in 2011. The Executive Secretary of the UN Framework Convention on Climate Change recently described the challenge for these negotiations in the following terms:

  "according to the IPCC's scientific findings, the solutions that we come up with in the context of advancing the Bali Road Map need to significantly

increase the extent of adaptation to reduce vulnerability; stop the increase of global emissions within the next 10 - 15 years; dramatically cut back emissions by mid-century at the latest, and do so in a way that is economically viable world-wide."

- Many countries have developed national programmes for sustainable development including addressing the challenges of climate change. There is growing awareness that employment and labor policies can contribute to a smooth transition to more sustainable growth by identifying opportunities for green jobs, greening existing jobs and easing the phasing out of unsustainable jobs. Strategies for green jobs are set to become an increasingly important part of employment and labor minister's responsibilities as well as the activities of employers' organizations and trade unions.
- Green jobs strategies need to be placed in the context of the challenge of shaping a social dimension to globalization discussed at the 2007 Dresden Conference of G8 Labor and Employment Ministers. G8 Heads of state and government expressed their conviction that *"a globalization that is complemented with social progress will bring sustainable benefits to both industrial and developing countries. Islamic States would recognize their responsibility for an active contribution towards this objective. Therefore, ISESCO is supporting the International Labor Organization's (ILO) Decent Work Agenda with its four pillars of equal importance: the effective implementation of labor standards, especially the ILO core labor standards, the creation of more productive employment, further development of inclusive social protection systems and the support of social dialogue between the different stakeholders."*
- Just as there is increasing concern that the current path of globalization is yielding too few decent jobs, so is there concern that we cannot continue with growth at the expense of environmental quality. We are therefore in a period of transitions searching for the policies and the leadership that can take us into a sustainable development path where social and environmental dimensions of globalization are an integral part of economic policy-making. Transitions in employment structures and in workplaces are central to this process.
- Employment patterns and labor markets are in constant change driven by many factors including technology, trade, finance, demographics and as well as the environment. Maintaining a policy framework that facilitates and encourages change is one of the main responsibilities of employment and labor ministers. Climate change and other environmental issues add a new dimension to that process of change which needs to be better understood so that policies can be well-tuned to meet the new challenges.
- This background note sets out what we know so far about the impact on employment of climate change and policy responses. It concludes by suggesting issues on which Ministers may wish to exchange ideas and information and ways in which G8 leadership could reinforce the initiative of the ILO to develop and implement a global green jobs strategy in collaboration with partner international agencies and its national tripartite constituency.

4.1. Environmental Challenges to Sustainable Development

4.1.1. Climate Change

4.1.1.1. Global temperatures have risen by 0.74oC over the last century, the largest and fastest warming in the history of the Earth detected by scientists. The trend is accelerating and has affected all continents and most oceans. Temperatures could rise by 3°C over pre-industrial levels by the end of the century. Global warming follows emissions with a long time lag. The world will experience further climate change even if emissions stopped today, albeit to a much lesser extent than otherwise. Adaptation to climate change in an effort to reduce its negative impacts is therefore inevitable.

4.1.1.2. Most impacts in the short to medium term will come from increased variability of weather and more frequent and extreme events like storms, droughts, floods and heat waves. Although developing countries have historically contributed least to emissions causing climate change, they stand to suffer most because many are vulnerable and least able to adapt to extreme environmental events. Particularly at risk are the heavily-populated areas such as developing country mega-deltas and small island states. The economic sectors most dependent on the weather, such as agriculture and tourism, are likely to be most affected along with settlements and industry located in coastal and river flood plains as well as other areas prone to storms.

4.1.1.3. In the medium to long term, projected climate change from current trends will lead to serious disruption of economic and social activity in many sectors on all continents. However, the technical and economic potential exists to reduce emissions to levels of climate change considered tolerable. Mitigation, i.e. measures to reduce emissions or remove GHG from the atmosphere are both necessary and may prove cheaper than inaction.

4.1.1.4. Scientists suggest that in order to avoid dangerous, possibly irreversible and self-reinforcing climate change, atmospheric concentrations of GHG should not exceed the equivalent of 450 parts per million (ppm) CO_2. This would result in a warming of 20C on average. Stabilization scenarios show that a 450 ppm maximum requires global emissions to peak over the next 10-20 years. At the same time the trend scenario of the International Energy Agency projects a 60 per cent increase in global demand for energy until 2030, needing a total investment of US$20 trillion of which about half in developing countries.

While historically, industrialized countries have been responsible for the bulk of emissions, developing, in particular the rapidly industrializing countries are becoming major emitters in aggregate despite comparatively low emissions per capita. Action by the industrialized countries alone will therefore not be sufficient and poses starkly the issue of how to balance achievement of international commitments to poverty reduction and the containment of climate change.

4.1.1.5. Making economic growth and development compatible with stabilizing the climate calls for 'low carbon economies' worldwide. A reduction of emissions by half compared to trend would take cuts of the order of 60-80 per cent in industrialized countries and still need 30 per cent lower levels in developing countries. Decoupling economic growth from emissions supposes major advances in energy efficiency of products and services, in power generation, in buildings and transport, a significant increase in the use of renewable energy as well as lower emissions from land-use. New technologies will be needed, including carbon capture and storage, together with additional development assistance to the Least Developed Countries in particular.

4.1.1.6. Equity in responding to the climate change challenge is likely to be a key determinant of success. Ministers of the Group of 24 developing countries expressed support for urgent collective action to mitigate and adapt to climate change in their statement to the IMF and World Bank Spring meetings. "They stressed however, that in line with the principle of common but differentiated responsibilities, these cooperative actions need to be equitable taking into account the low historical contribution and still much lower per capita energy use by developing countries, the much more adverse impact on them from climate change, and their unmet development needs."8 For industrialized countries equity in the handling of employment transitions is key to the political sustainability of effective global action to reduce green house gases.

4.1.2. Natural resources

4.1.2.1. Commodity prices have soared over the last 4-5 years and nearly doubled for energy and industrial inputs. Food prices have risen sharply after an almost continuous decline over three decades. Commodity prices have a long history of boom and bust cycles, but as the April 2008 IMF World Economic Outlook notes, the current commodity boom is long, big and broad-based by historical standards.

4.1.2.2. While some downward adjustments and fluctuation over time are likely, there is reason to believe that commodity prices and thus inputs for industrial production and services will remain high in the future. For a number of commodities, the best quality and lowest cost resources are already near to being fully exploited. World petroleum production for example may have already peaked. Raw material scarcity and prices are likely to trigger adjustments in production patterns and processes. Recycling and reuse can be expected to become increasingly competitive relative to primary raw materials.

4.1.2.3. Demand for food has grown significantly, not least through the change of consumption patterns towards more protein-rich diets as incomes rise in fast growing and large developing countries such as China and India. Food security is a major international concern and some countries have taken measures to try to prevent shortages.

4.1.2.4. There exists a harbinger of increased pressure on global natural resources and thus the need to shift to an economic model that values resource

productivity much more highly. As with climate change, the implications for production and consumption, and thus employment, patterns are significant.

4.1.2.5. For developing countries, especially the least developed, a vital issue of economic, social and environmental sustainability is the promotion of rural employment for poverty reduction. Rising commodity prices, especially for food, gives added urgency to the reinvigoration of policies that would enable rural working women and men to improve their living standards while containing the cost of living for the urban poor. Climate change is a threat to rural livelihoods in many countries, but well-designed adaptation measures through building social and economic resilience could contribute greatly to increased rural decent work opportunities. International donor assistance should be increased to fund this urgent dimension of poverty reduction strategies.

4.1.2.6. Middle-income developing countries also face significant transitions to move towards a development path that continues to fuel higher living standards but in a more carbon-efficient way. Foreign direct investment and the technology transfers will be important. It will however be equally necessary to generate local innovation to meet the specific production possibilities of developing countries, not least through strengthened human resource development policies.

4.2. Employment Impacts of Climate Change and Policies of Adaptation and Mitigation

4.2.1. Climate change itself, adaptation to it and efforts to arrest it by reducing emissions have far-reaching implications for economic and social development, for production and consumption patterns and therefore for employment, incomes and poverty reduction. These implications harbor both major risks and opportunities for decent work in all countries but particularly for the most vulnerable in the least developed and small island States.

4.2.2. One of the most visible risks concerns food and economic security, particularly in regions and sectors based on agriculture. The Stern Review has drawn attention to the fact that 22 per cent of the global population are dependent on agriculture and that the sector also has the highest concentration of the world's poor (75 per cent of the poorest people in the world, the 1 billion people who live on less than US$1 a day). Not least because of its impact on agricultural livelihoods, climate change poses a threat to the achievement of the MDGs. A further MDG-related impact is on health which will also affect the workforce, particularly in developing countries. Another climate dependent sector is tourism where employment has been growing fast. In all three, agriculture, tourism and health, women are likely to be affected more than men.

4.2.3. More frequent and severe natural disasters are likely to trigger or accelerate migration flows and could increase existing political tensions and instability. The response to such crises could help to make local societies

more resilient if it aimed at adapting livelihoods rather than short-term disaster relief to return to the original situation. Access to basic social protection systems also cushion the impact of disasters and help prevent temporary loss of earnings becoming chronic poverty.

4.2.4. Major investments in adaptation could offer significant employment and income opportunities in areas such as extending coastal defenses, reinforcing buildings and infrastructure, water management and harvesting. Adaptation will require the transfer of new technologies on a large scale and involve the relocation of exposed settlements and industry. Adaptation in agriculture could have positive or negative impacts on employment and income depending on the labor inputs of new crops and farming practices and their compatibility with smallholder farming. The availability of finance on affordable terms to low income farmers, small enterprises and poor communities is an essential element in adaptation investment.

4.2.5. A literature review for the ILO of the limited number of quantitative assessments of the impact of mitigation measures on labor markets, mostly in industrialized countries, finds that a transition to a low carbon economy should lead to a net increase in employment.12 This typically small net gain is, however, the result of major labor market transitions with substantial losses of some jobs more than compensated by increases in others.

4.2.6. Most of these transitions are likely to take place within economic sectors such as agriculture, power generation, energy-intensive industries or transport. All aspects of adaptation and of mitigation require new technical and often also entrepreneurial skills. Increases in energy efficiency and in renewable will be a big part of the equation. While the IPCC report has emphasized the significant potential to create new employment through adaptation and mitigation measures, generally employment has only featured marginally in the climate debate as a "co-benefit" of mitigation measures. This view overlooks the fact that the benefits for employment and development are vital for making many mitigation measures technically feasible, economically viable, socially acceptable and politically sustainable.

4.2.7. The climate change challenge is global but meeting it requires sustained transformations in enterprises at local level over a medium term perspective. The reflex to "reduce, reuse and recycle" can enter the culture of investment, production and employment but requires leadership by labor and employment ministers, business and trade unions. There are also several sectoral initiatives aimed at promoting responsible business practice on both the environment and also labor and social issues.

4.2.8. Links between climate change and development are still in their infancy, but the potential can be seen, for example, in the United Nations Industrial Development Organization's projects linking power generation to youth employment programmes in Mexico and Cuba or by the promotion of solar energy by the Self-Employed Women's Association in India. The ILO has been invited to contribute to UN system programmes in China and Brazil focusing on energy efficiency and bio-energy, respectively. In China,

this will include design and testing of ways to improve energy efficiency in small enterprises along the lines of the successful ILO programme "Work improvement in small enterprises". The potential for synergies and for the need to make the response to climate change part of wider efforts for sustainable development is recognized. However, not least because of the limited role or even absence of the ILO constituents in most of the policy debates, there are still rather few examples where the substantial potential has been tapped.

4.2.9. We need to expand the climate change debate to include the investment, production and employment implications of adaptation and mitigation measures. The transformation to a greener economy will take place in enterprises all over the world where the perspectives of the ILO's constituents - employers' and workers' organizations and ministries of labor and employment - can determine the success with which progress is achieved on global goals.

4.3. Decent Work in a Greener Economy

4.3.1. "Green jobs" does not lend itself to a tight definition but certainly includes the direct employment which reduces environmental impact ultimately to levels that are sustainable. This includes jobs that help to reduce the consumption of energy and raw materials, decarbonizes the economy, protect and restore ecosystems and biodiversity and minimize the production of waste and pollution. Green jobs can lead to lower environmental impacts directly e.g. in the transport sector as railway or subway operators providing energy efficient mass transportation or indirectly e.g. as technicians in industry or logistics managers in services reducing energy consumption in manufacturing and delivery of services.

4.3.2. The range of profiles of green jobs stretches from highly skilled research and development or management functions through technical and skilled levels to the relatively low skilled. The largest numbers of already existing and future green jobs is concentrated in sectors directly linked to the use of energy and the recovery of raw materials:

- *Improvements in energy efficiency, particularly in the building sector (Renovation), but also industry and transport*
- *Renewable energy*
- *Mobility: mass transportation*
- *Recycling and reuse*
- *Sustainable use of natural resources: agriculture, forestry and fisheries*
- *Environmental services*

4.3.3. A somewhat wider concept of "green jobs" might embrace any new job in a sector which has a lower than average environmental footprint, contributes to improving overall performance, albeit perhaps only marginally. This more relative notion poses a problem to those who set out to count and monitor the numbers of green jobs. For example workers assembling hybrid cars or cars with less than say 120 g/km of CO_2 emissions

are performing "greener" jobs than other car workers because these types of cars contribute significantly less to greenhouse gas emissions. However, if transport volumes continue to rise as projected, a larger number of cars, even if they are cleaner, will still not be sustainable.

4.3.4. The different shades of green complicate accounting, but the real significance of the concept of "green jobs" is not so much in the precise volume of direct green jobs that are being created but it focuses as to how the drive for sustainable development transforms employment patterns and the labor market. A new job maybe greener but ultimately not green enough. Nevertheless it is part of a process that is continuous and positive.

4.3.5. A further consideration is the quality of green jobs. Many green jobs in recycling, construction or in the bio-energy sector for example are currently informal. Recycling especially in developing countries is often precarious employment, involves serious occupational as well as public safety and health hazards and generates less than living wages and incomes. Feedstock production for bio-fuels also can involve excessive work loads, exposure to hazardous chemicals and even the violation of fundamental rights such as the use of child and slave labor. This highlights the developmental character of any path to sustainability. It is not possible to address the purely environmental dimension without also focusing on the national and international social and economic policies needed to expand opportunities for decent work.

4.3.6. International labour standards provide practical guidance for green jobs that are also decent, particularly instruments on safety and health, chemicals and on working conditions. The transformation of economies and workplaces can become a major driver for the broader application of labor standards through a combination of awareness raising, regulation and inspection as well as corporate social responsibility.

4.3.7. Green growth and clean production are part of an overall drive towards production and consumption patterns which are compatible with sustainable development through transitions that take as a point of departure the developmental needs of each country. It is one of the key challenges in the transformation to clean development to ensure that the green jobs associated with it are decent work and contribute to socially sustainable development.

4.4. Opportunities and Challenges for Employment

4.4.1. Energy efficiency

4.4.1.1. Energy efficiency gains have historically been one of the biggest contributors to reductions in emissions. They will require the transfer and deployment of new technology. Much of the capital stock of buildings and equipment is long-lived and has slow renewal rates. The significant and often low cost contributions from improvements in existing processes and facilities can only be achieved by the active involvement of managers and workers.

4.4.1.2. Energy efficiency gains are often the result of investment in better technology, but there is a large and often untapped potential for improving working methods and procedures. Joint initiatives by employers and workers for 'greening of workplace' can lead to significant improvements in energy efficiency and resource use with little or no capital investment and at low overall cost. There are numerous examples of such schemes reducing consumption by 15 per cent or more. Gains in energy efficiency can be achieved in all sectors, but the potential is particularly is large in industry, transport and construction.

4.4.1.3. Buildings consume the largest share of total energy. They typically account for 30-40 per cent of demand and a similar share of GHG emissions. According to the IPCC buildings also have the highest potential of all sectors to reduce emissions. The energy efficiency of buildings can often be improved by 50 per cent and more. In many countries zero or negative energy houses will become the building standard in the near future increasing the cost of new construction by as little as 5-10 %. However the useful life of a building can be 60- 100 years. The building stock in most countries is therefore relatively old.

Renovation of these older buildings is labor intensive and requires customized work typically provided by local enterprises and skilled workers.

4.4.1.4. More than half of the energy savings potential in buildings is in developing countries and almost a third of the emissions reductions carry negative net cost over a relatively short period of time, i.e. they pay for themselves through the savings on the energy bill. Germany has been recently further expanded fourfold a renovation programme which had already been in place for a number of years. Under this programme probably the largest worldwide every ¤1 billion invested in the building stock safeguards or creates around 25,000 jobs. The social partners in the construction sectors played an active role in the design and implementation of the programme. A recent US study finds that "retrofitting" buildings calls for skilled workers who are amongst the most "in-demand" workers according to the Department of Labor. When linked to training and apprenticeship programmes, "retrofitting" can provide an important pathway for groups of workers at risk of poverty since the jobs are relatively well-paid.

4.4.1.5. In addition to the employment potential, energy efficiency measures can contribute to poverty alleviation. Poor households tend to spend disproportionate shares of their incomes on energy for electricity, heating and transport. Efficiency gains often translate into improvements in real incomes for the poor.

4.4.2. Renewable energy

4.4.2.1. Renewable energy in wind, solar thermal and photovoltaic, small hydro, geothermal and bio-energy represents the most readily counted source of green jobs. There are at least 2.2 million jobs in equipment manufacturing, installation and operation of renewable energy already with

half of them in the developing world. Investments have been rising at 20 per cent per year and the employment in this sector could exceed 20 million jobs by 2030. All forms of renewable energy have significantly higher employment elasticity than fossil or nuclear alternatives per unit investment, per unit installed capacity as well as per unit output. They also tend to concentrate employment less in the manufacturing and equipment installation phase and provide more continuous employment during operation and maintenance.

4.4.2.2. Bio-energy such as alcohol produced from starch or sugar and biodiesel derived from oil crops to be used as fuel for cars or wood and other biomass for power generation have the highest employment elasticity of all. Studies for India for example suggest that every hectare of energy plantation can generate as much as 1 full-time job. These would be green jobs in most cases. In the tropics, and based on efficient feedstock crops and processing, bio-energy can have a rather favorable energy balance and substantially lower emissions compared to fossil fuels. On the other hand, bio-energy tends to compete for agricultural land with food production and is often associated with low incomes and very poor job quality. In the midst of the emerging food price crisis, this issue has acquired added visibility and is the subject of urgent discussions nationally and internationally.

4.4.2.3. Small-scale renewable energy including biogas from animal dung and biomass could be used for decentralized power generation for the 1.6 billion or more people who currently don't have access to any modern form of energy. Project experiences demonstrate improvements to the quality of life of the poor, employment and income opportunities in power generation itself and, importantly new economic opportunities for small enterprise development once people have access to electricity or other forms of power.

4.4.3. Recycling and the circular economy

4.4.3.1. Recycling and the circular economy are essential to gradually eliminate waste and close the material cycle of production and consumption. Recycling already accounts for a large proportion of identifiable green jobs and rising commodity prices is making it more and more competitive. Materials in particular metals like Aluminum but also glass and paper, which are energy intensive to produce, can be profitably recycled, significantly reducing energy inputs and emissions. In European countries recycling rates for such materials are 50-80 per cent. This contributes to protecting natural environments and has turned out to be a cheaper source of raw material than primary resources in many cases.

4.4.3.2. Total employment in recycling in China for example is estimated to be 10 million. A relatively recent but fast growing segment is the recycling of information technology products in China as part of a global production chain. In this case, as in ship-breaking in Bangladesh, very poor working conditions and serious hazards for health and the environment

are widespread. Turning recycling into a contributor to sustainable local development and into a source of decent jobs remains a challenge as well as a major opportunity.

4.4.3.3. More advanced approaches towards a circular economy form of recycling like remanufacturing and cradle-to-cradle production are still in their infancy. Several Japanese companies have been among the pioneers of this concept. Hardly any research appears to have been done on the implications of remanufacturing and cradle-to-cradle for employment, although a European case study suggests that is could be twice as labor intensive and requires higher skills than conventional manufacturing.

4.4.4. Sustainable management of renewable natural resources

4.4.4.1 Sustainable management of renewable natural resources is a key area from an environmental as well as from a food security and employment perspective. Agriculture and forestry are among the sectors most affected by climate change but have also been contributing substantially to greenhouse gas emissions. Conversion of forests for agriculture or other land uses has been responsible for 20-25 per cent of CO2 emissions. Emissions resulting from deforestation rather than industry or transportation are particularly strong in Indonesia and Brazil.

4.4.4.2. After decades of relative neglect dwindling food stocks are leading to renewed attention to agriculture and rural development. Major efforts are needed to develop agricultural and forestry production systems which provide decent incomes and livelihoods and at the same time reduce emissions, consume less water and maintain soil fertility and biodiversity. Such sustainable production systems are not likely to reverse the steady decline in agricultural employment although working conditions may be improved. It will therefore be necessary to take a wider view of sustainable rural employment. A recent study by the Centre for Science and Environment in New Delhi of the new National Rural Employment Guarantee Act suggests that a focus on local level programmes for water conservation and afforestation would have an enhanced impact on poverty reduction and sustainable livelihoods.

4.5. Labor Market Dynamics

4.5.1. Millions of green jobs exist already. Moreover, in areas like renewable energy the numbers are growing fast. While research on green jobs has mainly focused on industrialized countries, it would appear that the same technological drivers and mechanisms are behind transformations in developing countries, which should lead to broadly similar outcomes in terms of job creation. While identifiable green jobs are real and look set to be a growing source of employment into the future, an exclusive focus on the number of direct green jobs is misplaced. Their significance for the economy and for the labor market can only be assessed by taking a broader look at the transformation of the economy in which green jobs

play a key role. 50. Anticipating the effect of green jobs on labour markets needs to recognize the forward linkages of greening economic activity; take account of the interactions of new job creation, substitution, destruction and transformation; consider the often large effects via indirect employment and the restructuring of economies towards more labour and less resource intensive production, and recognize the potential of green jobs for development and poverty reduction.

4.5.2. The number of green jobs reported and expected to be created over the next years is substantial but modest relative to the total size of national and global labor markets. 100 million green jobs would represent just over 3 per cent of the global labor force of over 3 billion. That would still be significant if all green jobs were new and additional employment, but typically they are at least partially a substitute for existing jobs. This is the case for example when jobs in renewable energy replace those depending on fossil fuels. The direct substitution effects of green jobs are often favorable on balance as they tend to have higher employment elasticity but this may not be of much consolation to displaced "carbon economy" workers.

4.5.3. In addition green growth and clean production will transform many if not most jobs in the economy towards more energy and resource efficiency and less environmental impact. Rather than replace existing jobs with totally different green jobs, it is the content of jobs, the way work is performed and the skills of workers that will change.

4.5.4. Green technologies and green jobs have impacts through forward linkages to other sections of the economy and employment that are neither particularly brown nor green. Jobs in renewable energy for example substantially lower the environmental footprint of the sectors it supplies.

4.6. Policy Responses

4.6.1. Anticipating the economic transformation that a shift to more sustainable patterns of production and consumption and the net effects on labor market dynamics is complex. However, as might be judged from the preliminary evidence gathered so far such an effort does help to focus attention on key issues for policy and further analysis. The full range of employment adjustment policies will be needed to facilitate and stimulate change. How they are applied will require a better understanding of the scale, speed and focus of change.

4.6.2. Three of the ILO's main tools are labor market analysis, social protection and social dialogue. Good analysis of possible labor market impacts is vital to good policy design, social protection policies provide a cushion for those who may find themselves on the down side of transitions and as the Director- General said to environment ministers at the UNEP Council in Monaco in February, *"We need social dialogue among those most affected by these transitions-workers, employers and governments-to work towards fair policies that are efficient and balanced in their costs and benefits because that is the way to make them sustainable."*

4.6.3. One issue that emerges strongly is the impacts on small and medium-sized enterprises which are major employers are not well understood. There may be a risk that structural change in the economy set in motion by green growth policies and energy and raw material prices will sideline smaller enterprises as only larger, better-informed and more sophisticated businesses will be in a position to grasp opportunities. In addition to ODA for adaptation and mitigation, arrangements for financial transfers such as the Clean Development Mechanism under the Kyoto protocol should modified so as to put them within reach of initiatives by small enterprises, by local government and those directly benefiting the poor.

4.6.4. Similarly, skills development will play an essential role in making green growth possible. There are already shortages of professionals and skilled workers in many countries resulting in energy efficiency standards not being met, in a slowing down of improvements in energy efficiency and the deployment of renewable energy and other high performance technologies.

4.6.5. More frequent and severe natural disasters call for anticipatory investments to make local societies more resilient including through basic social protection systems. Major investments in adaptation could offer significant employment and income opportunities in areas such as extending coastal defenses, reinforcing buildings and infrastructure, water management and harvesting and the relocation of exposed settlements and industry. Adaptation in agriculture could have positive or negative impacts on employment and income depending on the labor inputs of new crops and farming practices and their compatibility with small holder farming.

4.6.6. Key political decisions about climate change will be made over the next 20 months as a new international climate regime for the period after 2012 is drawn up. International trade unions, business leaders and employers' organizations have endeavored to connect the economic and social dimensions of development to these international discussions. Employment, enterprise development, social dialogue, social protection and poverty reduction are, however, rarely referenced in these negotiations. There is also large untapped potential for social dialogue and alliances at national, sectoral, company and workplace levels to help arrive at better informed and more integrated policy responses. An example of a tripartite mechanism to facilitate such transitions is the national sectoral roundtables for the implementation of the Kyoto commitments in Spain.

4.7. ILO Green Jobs Initiative

4.7.1. During 2007 the ILO has stepped up its work on green jobs. The Director General's report to the International Labor Conference highlighted the importance of ILO constituents working together to anticipate the employment changes that a more environmentally sustainable development will engender.

4.7.2. The ILO together with UNEP, the International Trade Union Confederation (ITUC) and others has set in motion a "Green Jobs Initiative". It is a contri-

bution to the development and implementation of a UN system-wide strategy on climate change. The objective is to promote and identify the many technological innovations, investment opportunities, enterprise and quality job creation potential of a sustainable development path. At the same time it will look at the adaptation and social protection needs of enterprises and workers affected by the production and consumption shifts involved.

4.7.3. ILO green jobs initiative with UNEP, the ITUC and other partners includes:

- A Green Jobs report prepared by the World watches Institute and published in June 2008.
- Mapping labor market impacts: an analysis of methodological options. A first application is planned as part of a larger UN project in China.
- An initial background study on energy efficiency in buildings in developing countries and emerging economies.
- Energy efficiency and SMEs -- research and integration of results into ongoing programmes on enterprise development.
- Skills development: a preliminary review has been carried out for the report on skills to be discussed at the International Labor Conference in June 2008. A major dedicated report on this key subject will be prepared for 2009.
- Adaptation to climate change - impacts in rural areas: together with FAO, ILO plans to develop a methodology to factor employment into national plans and programmes for adaptation to climate change. One of the countries where the methodology is to be tested is Bangladesh.
- Bio-energy and smallholder farming: the ILO has been developing tools to assess the employment and income impacts of bio-fuels in Brazil. It has also been requested to assist the Government of the State of Bahia with the design of a sustainable biodiesel programme to improve livelihoods of smallholder farmers. The programme includes the definition of criteria and indicators on economic, social and environmental sustainability to monitor policy impacts and to certify products for marketing and trade.
- Documentation of good practices: a study on the role of the social partners in the implementation of the Kyoto protocol in Spain has been completed. Other case studies related to the role of social dialogue and to green jobs for development are under way.
- Together with the ILO International Training Centre in Turin a first training module on green jobs will be developed by the end of 2008. It will be primarily aimed at building the capacity of ministries of labor, employers' organizations and trade unions to bring green jobs strategies into Decent Work Country Programmes.
- 'Green Jobs for Asia and the Pacific' is a programme which the ILO is rolling out as the its contribution to the regional priority on 'green growth' spearheaded by UN/ESCAP.

4.8. G8 Leadership for a Global Green Jobs Strategy

4.8.1. Addressing the challenges posed by climate change is on the top of the international agenda but is one of the most complicated issues of multilateral cooperation. Global warming is directly related to the way we work and ultimately can only be halted by changing the way we work. The policies to achieve such a major transformation will thus require close collaboration across a number of policy fields. Employment and labor ministers will need to be part of such national and international efforts to generate and facilitate change at workplaces - factories, offices, farms, mines and transport installations. Together with employers and workers and their organizations, global goals can be translated into tangible progress on all three of the pillars of sustainable development.

4.8.2. A globalized market economy has become increasingly evident. With employment prospects for the year ahead more gloomy, the sharper focus on policies for recovery creates an opportunity to shape a new global framework for economic, social and environmental sustainability. Full and productive employment and decent work for all is at the core of such a framework.

4.8.3. G8 leadership on green jobs is a major contribution to arresting and eventually reversing the growth of GHG emissions. Furthermore through their engagement in multilateral processes G8 governments and their partners can strengthen the cooperation vital to action over the long term. Employment and labor ministers have a particular contribution to make in supporting the engagement of their developing country counterparts in the formulation and implementation of national green jobs strategies within Decent Work Country Programmes. Ensuring that progress is developed and maintained on adapting employment patterns to environmentally sustainable development paths at a time of global slowdown and economic uncertainty is a further dimension to current policy-making.

4.8.4. Some of the key issues emerging for green jobs strategies are:

- Identification of the likely increases and decreases in employment opportunities consequent on policy changes to stimulate more sustainable growth patterns;
- The promotion of dialogue at national, sectoral, company and workplace level on greening of employment;
- Review of skills policies to prepare for green job opportunities;
- Integration of green jobs approaches with policies to make labor markets more inclusive;
- Support for programmes for smaller enterprises to promote energy conservation, more resource efficient and cleaner production, recycling etc.
- Measures to promote green jobs in possible counter-cyclical policies;

- Dialogue with national ministerial colleagues, particularly ministers of environment, on policy initiatives with a view to anticipating and grasping employment opportunities;
- Dialogue with developing country counterparts and development ministry colleagues on for example basic social protection systems and collaboration on employment intensive investment in climate change adaptation programmes (climate proofing of infrastructure, rehabilitation of watersheds, of mangroves and construction of flood barriers, water conservation, etc.)
- Cooperation with developing country counterparts and colleagues in ministries of development and environment in charting pathways to clean development and avoidance of greenhouse gas emissions which also deliver on creating more and better jobs and on reducing poverty. Great strides could be made with decentralized access to energy, rehabilitation of slum areas and social housing to save energy, avoided deforestation and sustainable agriculture as well as through improved energy efficiency in small and rural enterprises.

Theme 5: Governance for Sustainable Development

One of the greatest disappointments for those who worked hard for a meaningful agreement at the Earth Summit in 1992 and Rio+10 has been the general lack of political commitment from governments, institutions and civil society for the implementation of sustainable development. The failure to adequately protect environmental integrity and support social welfare on the ground is largely due to a lack of coherent, forward-looking and integrated global-local frameworks for sustainable development. The picture of the global governance regime depicts narrow mandates, limited budgets and a lack of legal authority, staffing and political support.

The global sustainable development partnership called for in Rio is foundering due to a failure of social and political will. With an ever expanding international environmental law and policy making regime, the international community must now consider how the existing institutional machinery can be strengthened and better coordinated to ensure that it can confront the sustainable development challenges of the new millennium. The debate on IEG that has been initiated offers the chance for the international community to take a serious looks at the global framework for sustainable development that we are trying to create.

The Challenges for International Environmental Governance recognized by, Poor people and poor countries have little influence and voice in global governance. Developing countries are often marginalized from the multi-lateral negotiations and policy making due to deficiencies in negotiating regimes and the lack of support for capacity building and access to technical, human and financial resources. Therefore it is no surprise that industrialized country priorities continue to dominate environmental debates. Most developing country governments argue that global environmental governance processes are dominated by the politics of North and do not adequately reflect the most pressing

environment and development priorities of the South. Developing country governments further assert that environmental negotiation processes are most often carried out without any due regard to the larger equity and social justice concerns, thereby disregarding the development dimension of the sustainable development agenda.

There has been also widespread failure to integrate environmental consideration across all policy areas of government and international institutions. This is in part due to the lack of a strong central environment anchor point for global environmental governance. There has also been a wide failure to link up and support collaborative action between institutions and groups at different ends of the sustainability scale. The principles of subsidiary and bottom up decision-making have not been effectively applied at the international level. Finances for international environmental policy making and the implementation of sustainable development have declined since 1992. Regular supply of funds from donor countries remains unreliable and even the voluntary contributions fall short of required levels to carry out mandated functions. The current discrepancy between commitments and action is increasingly widespread in both developed and developing countries alike. There is little evidence of joined up policy making and in many countries, environment ministries still rank very low in the political hierarchy. As a result the national environmental agenda is not given the prominence, nor the degree of political commitment that is due. The low level of commitment is in part reflected in the very small number of countries who have actually yet implemented national strategies for sustainable development. Industrialized countries have not taken adequate and coordinated measures to assist their developing counterparts, in terms of ensuring the provision of financial, human, technical, information and other capacity building resources.

Steps toward Change could be started with the nature of sustainable development problems which becomes more complex, new mechanisms may be needed to set common goals, priorities and actions. In order to maximize its chances of success, the reform of environmental governance should be based on existing structures and above all aim to strengthen them. In the interests of overall consistency, the reform should concern the environment and sustainable development within the context of globalization. A strong governance regime for sustainable development will be critical to ensuring that the programmes emanating from the World Summit are a success. Global governance systems must ensure the provision of visionary leadership that inspires nation states to overcome their preoccupation with narrow national interests and recognize that national security is indivisible from global security and requires sustained commitments to long-term ecological and human security. The mandates and functions of the global governance architecture must be realigned, based on the principles of subsidiary with well-defined linkages amongst them so that they can cooperate more systematically, effectively and cohesively. In particular, this should include much closer relationships between the United Nations and the Bretton Woods Institutions (BWI) in respect of economic, financial and monetary issues that impact on the political, social and environmental fields for which the UN is the primary forum. An important guiding principle in global governance reform is the fair and equitable distribution of bargaining power to ensure that

the influence and voice of the world's poor is heard and indeed reflected in the decisions of international environmental governance processes. Imbalances in the structures of global governance must be remedied with new efforts to create a more inclusive system. The process for taking decisions and setting priorities will therefore have to be scaled up to account for the new complexities.

This is where global governance will be instrumental in providing clear norms and processes for reconciling differences. Decision-making must be made more transparent and independent evaluations of international policies can be a first step towards increased accountability. Action by governments alone will not solve the problems underlying the global failure to implement sustainable development. In order to transcend political conflicts and vested interests, multi-stakeholder participation and partnerships need to be established and developed in decision-making and implementation. In this way the burden of responsibility for progressing good governance and the ethic of sustainable stewardship are more likely to be fairly shared. Local and national participation remains at the heart of integrated policy for the implementation of sustainable development. Further resources are vitally needed to invest in building the capacity of developing and transitional countries and, more crucially, local capacities to influence and inform international negotiations and policy making. We urgently need to encourage and facilitate wider public awareness, education (both formal and informal) and capacity building to help empower individuals and communities to take direct action towards sustainable development and environmental protection. Adequate resources must be made available to all international institutions that are working to further progress in sustainable development in order that they are able to carry out their mandates.

It is also essential to provide resources for developing and transitional countries to effectively prepare, participate and follow-up processes. Thus new and increased forms of financial support for sustainable development must be urgently sought. Most international law has direct bearing on the nation-state but not on multilateral institutions. In the current globalised context, fundamental changes will have to take place in WTO, Bretton Wood's Institutions and regional economic bodies, as well as the UN, to better incorporate principles of good governance and sustainability at a global level. International environment, social, cultural, financial and trade agendas need to be mutually supportive and make more explicit the linkages to support the overarching goal of sustainable development. This will require systematic and coherent coordination between UN, Bretton Woods Institutions and WTO, with a long-term view to drawing the latter institutions under the auspices of the UN. Improving institutional accountability is a key priority in the reform of international environmental governance systems. This is a challenging area that requires considerable work in the future to identify modes for self and/or independent regulation, monitoring and assessment, which will be crucial to enhance the accountability and transparency of all international institutions. In the re-design of the international environmental governance systems, it is important to bear in mind the need for new mechanisms to avert problems of non-compliance that undermine current global governance systems. There are important governance issues related to the implementation and compliance problems of the environmental treaty regimes.

The emergence of a body of increasingly binding international environmental law raises the issue of the mechanisms required to monitor the implementation of the commitments into which States have entered. The process of monitoring the implementation of conventions is essential to good governance: its aim is to ensure that commitments made are fully effective.

The challenges ahead are considerable, to move to a more balanced approach embracing the environment, social and good governance as well as economic concerns. We need a comprehensive rules-based approach to sustainable development, with the necessary legal back up and capacity to ensure the implementation by all signatories. Transformation and enhancement of institutions to allow for greater coherence between global, regional, national and local frameworks will be seen as key for making real progress towards sustainable development beyond the Johannesburg Summit in 2002. There is an urgent need for political leadership and global advocates for sustainable development, to assist policy-making and seeking out solutions. All institutions and stakeholders have a part to play in ensuring that sustainable development is the overarching goal throughout decision-making. International management of environment and sustainable development needs to command greater credibility, coordination and authority through universal commitment to the process, commitment that gives sufficient mandate to these institutions to enable them to enhance and improve their mandates. A crucial element in a successful outcome for both the future of international environmental governance and the World Summit on Sustainable Development will be the full recognition by the governments and peoples of industrialized countries of the scale of the problems confronting many developing countries in achieving sustainable development. This requires the full acceptance by industrialized countries of their responsibility for helping to resolve those problems through limiting their own adverse impacts, and helping positive developments in the South through better market access, technology transfer and financial support.

5.1. General Expectations for the International Environmental Governance Process

5.1.1. Global Outcomes

- Enable science and technology to inform policy-making and policy implementation at local, national and international levels.
- Increase funding and programmes for capacity building in policy-making and implementation.
- Promote vision values and above all, joined up thinking (horizontal, vertical and temporal) to secure sustainability.
- Provide a system, which facilitates a dynamic approach to sustainability and is itself flexible and dynamic.
- Integrate global environmental policy development and sustainable development strategies.
- Promote education in sustainability.

- Incentivize the creation of inclusive organizations (in their policy formulating roles), willing to delegate (i.e. accept subsidiary) in policy implementation; resourced at realistic levels (from sources preferably independent of national treasuries), and commanding respect of individuals/ civil society; technical/managerial expertise, and nation state politicians.
- Encourage clustering across the social/cultural spectrum, across environmental, economic and political divisions and avoid the environmental ghetto.
- Take an ecosystem approach (with man and biosphere as part of those systems) and a problem-oriented one.
- Reduce territoriality through sticks and carrots in favor of collective thinking and action.
- Demand greater public accountability at a global scale.

5.1.2. National Outcomes

- Reduce national government's burden of reporting under different convention and Intergovernmental Organization (IGO) processes.
- Create the enabling frameworks for national level implementation of multi-lateral environmental agreements (MEAs).
- Help governments establish priorities for the allocation of domestic resources and for external technical and financial support to implement MEAs.
- Help governments keep track of and coordinate preparations for different convention/IGO processes so that decisions taken reinforce each other in relation to national commitments, internal agency policies, and agency program/budgets.
- Clarify, for specialized resource managers, policy-makers, and others which international bodies to turn to for information, expertise, and financial assistance in a given field or to seek improvements in specialized international (and thus national) policies.
- Support national mechanisms to promote communication among the groups and stakeholders working on different conventions at the national and local level: in some cases, national sustainable development councils could perform this function; in some cases, the convention focal point serves as liaison with relevant stakeholders.
- Policy guidance for projects (through donor agencies) and action plans which promotes the implementation of the Rio conventions in a mutually supportive manner.

5.2. Improving Coherence in Policy Making

The Role and Structure of the Global Ministerial Environment Forum (GMEF). The highlighted need for a high level forum for policy dialogue and coordination and in this regard for giving the Global Ministerial Environment Forum (GMEF)

greater authority as the umbrella environmental policy forum within the United Nations system, which could also provide broad overarching policy advice to other entities is welcomed indeed. However, efforts must be undertaken to ensure that the work of the GMEF does not become undermined and/or paralyzed by the unconstructive political dynamics, which have impaired the work of the CSD, and which have dominated many recent international environmental negotiations. There must be a clear division of responsibility between the goals, objectives and work programmes of the GMEF and the CSD as well as the many Conference/ Meeting of the Parties to MEAs. The process to re-enforce the GMEF is welcomed, however there are still some unanswered questions:

1. *Clarify the role of major group representation on the Global Environmental Ministerial Forum, including the modalities of their participation at the global, regional and national levels.*
2. *Should the body be set up with a universal membership?*
3. *How can the issue that different countries have ratified different conventions be addressed within the make up of the GMEF?*
4. *What relationship will the GMEF have to the UN as a whole and to the WTO?*
5. *What relationship will the GMEF have to the UN Commission on Sustainable Development?*

5.3. Improving Coordination and coherence

The Clustering of Multilateral Environmental Agreements (MEAs). Broad changes must be made to enhance the coherence, coordination, compliance and capacity building around MEAs. MEAs should also apply common principles for compliance, reporting, dispute, funding, information systems, methodologies, administration to assist ease of ratification for governments and administration. The links and crossover between environment and trade agreements need to be openly assessed and revised. The move towards bringing the conventions under eight main topics; biodiversity, seas, chemicals, nuclear, energy/climate, land-related, air and freshwater is important. If the Summit can act as a focus to increase the speed of doing this then that would be a very good outcome as a first step to more fundamental reform of the international environmental governance regime. In particular there is a need to look at:

- Review of regional conventions. The great number of regional conventions requires a comprehensive review to see if they can be grouped under the clusters with regional hubs to simplify their structures and maximize possible financial and technical opportunities.
- Joint secretariat functions. There are considerable financial savings to be made from each cluster having one centre of administrative staff to organize meetings and service the programme staff.
- Joint meetings of the Bureaus within a cluster. Bureau meetings might be backed on to a meeting of the Environmental Ministers Forum to ensure that a joint line is presented to the Ministers to enable action taken by the Ministers when they meet.

- Joint meetings of the heads of the scientific and technical committees within a cluster and where relevant between clusters. The need to share knowledge between the different scientific and technical bodies is an area that is often over looked. A meeting on a bi-annual basis would enable there to be a greater understanding of overlaps, gaps and actions required. The use of the Internet to integrate the information provision of the committees would also help.

- Overall Head of each cluster. Each cluster would benefit from an overall head to ensure that the conventions within the cluster are being coordinated. The overall Head of all the clusters should be the Executive Director of UNEP. UNEP should be seen as the facilitator of the clusters to ensure joined up thinking between them and within them.

- Introduction of knowledge management (KM) within clusters and between clusters. KM offers a great way of sharing knowledge and experience both vertically and horizontally. Many of the clusters will experience similar issues which do not have to be learnt six times but can be learnt once and the information shared into a knowledge bank to the benefit of the others.

- Agreement of a methodological framework for indicators to enable measuring of enforcement and compliance. The discussion on indicators has focused more recently on the need to define a series of key global indicators. This has not been a particularly good idea. What we should be agreeing too is a methodological framework that indicator packages can operate within. For examples it would outline the process of their development, application (monitoring, assessment and revision of plans). This process should help clarify the most appropriate set of indicators for the national and sub national level, as they may differ with global indicators, depending on the particular context and level at which they are going to be utilized.

- Integrate early warning systems. The need for the development by UNEP of their early warning system for environmental disasters through coordination from the different information bases of each convention would be an important aspect of the way forward. This will enable appropriate discussion on the prioritization of issues.

- Subsidiary. The principle of subsidiary and bottom up decision-making has not been effectively applied at the international level. One option may be to establish through UNEP with CSD, WTO, UNDP, etc, a UN Assembly Task Force on subsidiary to tackle the issue of defining the best level at which specific sustainable development policies and arrangements for their implementation (i.e. management) should be determined and then delivered, and to report the implications of their conclusions in terms of both governance and responsibilities.

5.4. Capacity Building, Technology Transfer and Country Level Coordination for Environment and Sustainable Development

5.4.1. The Relationship between Science and Decision-Making.

Full introduction of the Precautionary Principle (PP) would ensure that policy decision-making is based on anticipating problems in conditions of uncertainty. Utilizing the PP could increase the dialogue with society in general to ensure that the benefits and the problems are known and discussed before moving forward. Although scientists are a Major Group in Agenda 21 they have generally not been actively involved in the discussions at a political level other than as government advisors. The introduction of Stakeholder Dialogues at the UN Commission on Sustainable Development does offer a new space for scientists to become involved without being beholden to governments or industry. What might be a move forward would be the setting of a Risk Management Scientific Body within UNEP. This could work off an annual Earth Assessment Report (developing the GEO Report) this could produce some joint work between the different areas of scientific research. The Convention Secretariats should work towards a common approach to the Internet. This could include one portal for entry into the Convention section of the web. This would enable a more integrated approach to information provision and would help to see work being conducted within and between convention clusters. We have an enormous overload of information coming at us and this could enable it to be managed in a way that helps everyone. The web could also be used as a place to collect good practices and allow for horizontal information provision between stakeholders across the world and governments. There needs to be an acceptance that the scientific research institutions remain independent from the state and from commercial interests. If this can be achieved then there will be a greater chance that the information and analysis produced is seen as trustworthy. One suggestion would be to create a science for sustainability "cluster" within the UN embracing inputs from UNESCO, UNEP, CSD, FAO, UNPF, etc, and other relevant creators/collators/recipients/consumers of science advice on sustainability which would provide collective and authoritative advice widely and openly to policy framing bodies at all levels.

5.4.2. Country Level Coordination for Sustainable Development

National reporting would benefit from a harmonization of reporting systems not only to the conventions but also to other intergovernmental bodies (e.g. World Bank) and to donors. Guidelines, such as UNEPs "Draft guidelines for effective national environmental enforcement, international cooperation and coordination in combating violations of multilateral agreements" and their "Draft guidelines on options for enhancing compliance with multi-lateral environmental agreements" need to be more readily available, with training where necessary, to assist governments and other stakeholders. Within the structure of the national reports there could be information on:

- *Frameworks for planning and strategies.*
- *Capacity building requirements.*
- *Financing.*

- *Problems faced.*
- *National targets.*
- *Stakeholder involvement.*
- *Compliance.*
- *Legislative gaps.*
- *Common set of indicators for monitoring and review.*

5.4.3. Global Accountability and Compliance

The common criticism of environmental conventions is the lack of mechanisms for effective enforcement and compliance with international norms. Compliance is closely related to the issue of accountability. In the re-design of global governance systems, it is important to bear in mind the need for new mechanisms to avert problems of non-compliance that undermine current global governance systems. A number of ongoing and proposed approaches could be instructive in the design of compliance mechanisms. They include the following:

- New approaches to "common but differentiated responsibilities", convention financing mechanisms and non-compliance procedures have provoked a shift in national attitudes to international reporting and monitoring:
- The development of collective review procedures, such as the non-compliance procedures of the Montreal Protocol, use non-confrontational techniques to overcome impediments to compliance, and these have proven more effective than the imposition of sanctions in many cases.
- A wide variety of formal and informal partnerships have developed for monitoring compliance with environmental norms.
- Compliance monitoring must be entrusted to one centralized body, such as a reconstituted Trusteeship Council or UNEP. The enforcement in international environmental law could also learn from good practice in other international conventions. This places a form of peer group pressure on countries to report more accurately. The present environmental conventions could adopt a similar approach for reviewing reports. Another option to deal with compliance would be the establishment of environmental tribunal or environmental ombudsman. Stakeholders could take their complaints to such a person if they couldn't find recourse in their own country. The Earth Council has been doing some work on this idea. The possibilities for this to be successful require a certain independence from governments. This can either be through a body such as the Earth Council or through the constitution of such a body within the UN e.g. International Court of Justice. Another institution that is not utilized properly is a country's parliament. It would be useful to produce a review of parliaments to see how they address sustainable development issues and draw up recommendations on how parliaments might be able to review national reports before they are submitted to the UN. To further enhance compliance of legislation an, International Environment Court could be utilized. This would require either the creation of a new body

or enhancement of the Environmental Chamber of the International Court of Justice (rarely used) common regulations on international environmental liability would assist legal enforcement. Regional bodies and agencies could play a stronger role in monitoring and enforcing compliance to international agreed standards; regions (regional protocols annexes) should reflect incentives and sanctions.

5.4.4. Involving Stakeholders in International Environmental Governance

There is a need for global governance systems to be more participatory, transparent and accountable. It is imperative that civil society be more actively engaged in those decision-making forums. More effective and systematic mechanisms are needed to ensure enhanced civil society involvement generally, especially for those groups who are underrepresented in the formal structures, but also in respect of those issues where civil society organizations possess important expertise. Each convention has developed a set of norms and standards on how it interfaces with the different stakeholders. It is a good time to reflect on what each of the conventions norms are. A review of this would help set a standard through which would be of benefit to the process of integrating the involvement of stakeholders in the work of the UN Commission on Sustainable Development. Perhaps the most interesting is the Montreal Protocol where stakeholders have a formal role in the non-compliance procedure. A set of possible Good Governance Indicators to measure the level of participation in international governance is attached in the annex to the submission. The World Summit on Sustainable Development process also offers an opportunity to look seriously at not only the way we are designing the involvement of stakeholders in the intergovernmental machinery but also in recognizing that they will have a role in implementing many of these agreements. We therefore may have to use a toolkit of approaches to the involvement of stakeholders at all levels. This may range from consultation to dialogue to partnership and involvement in the decision-making process to finally implementation. Participation needs to be founded on clearly defined principles (transparency, collaboration, learning, equity, flexibility), ground rules (for communication, procedures, agenda and issues of process, facilitation, reporting) and objectives (outputs such as report, actions plans, impact on "official" governmental processes). Effective participation at any level requires the active support from the facilitating body, including ensuring equitable access to: information (including policy-based, technical and scientific data); justice; funds; capacity building and training, in addition to creating the space for participation in decision-making and implementation. Governments should continue to be encouraged to facilitate the establishment of national multi-stakeholder forums, e.g. National Council for Sustainable Development, which would be set up to offer:

- Outreach, for consultation and feedback, to their constituencies in the country;
- Development of guidance on implementation strategies within a country;
- Review: Development of national reports;
- Development of national targets for policy, strategies and future implementation.

National multi-stakeholder forums have developed differently in different countries. For them to be seen as independent from government is a crucial indicator of whether their input will be taken seriously by the stakeholders in their countries. The Earth Council has done some interesting work in this area. As an approach to organizing multi-stakeholder dialogues, UNED Forum (2001) has a step-by-step guide.

5.5. Enhanced coordination Across the United Nations System

In recognition that environmental policies cannot exist in total isolation from human activities, one proposal is to integrate the work of UNEP and UNDP. Since UNDP carries operational functions, which UNEP does not, it might offer an opportunity to further integrate environmental elements into development operations. In relation to other UN Agencies, Agenda 21 was full of recommendations for the UN Agencies and Programmes. One of the problems has been to try and ensure that these agencies place sustainable development and Agenda 21 at the heart of their work. Some of the ways this might be approached beyond 2002 are:

- The Inter Agency Committee on Sustainable Development (IACSD) to produce a report on implementation of Earth Summit 2002 each year for the CSD and for governments to review it. The one UN system being modled in seven countries is yet to bring fruits, however the initiative aims at removing the coordination gap among the UN agencies, which hopefully will bring positive change in the working of the UN system. This will create the opportunity for holding UN agencies and programmes answerable in a forum other than their own governing councils.
- The UN Development Group (UNDG) to be empowered to produce reports on implementation at the national level.
- All relevant UN agencies and programmes commit to the follow up of World Summit 2002 through requiring a standing agenda item on their governing council's meetings up to 2012.

As regards the establishment of new bodies within and outside the UN system to address sectoral environmental issues, there is no doubt that bodies such as UNEP, UNDP, the Commission for Sustainable Development have played important roles in promoting the sustainable development agenda. However, the main problem as concerns the establishment of new bodies within and outside the UN relates to the overall lack of coordination and coherence between these entities. Another matter of priority concern is the extent to which Bretton Wood's Institutions (BWI) such as the World Bank and the IMF are increasingly engaged in the formulation and delivery of sustainable development policy and programmes. There is continuing tension between those bodies and the UN system to ensure that the sustainability goals articulated by central UN bodies such as UNEP and UNDP and the CSD are indeed respected and promoted within the Bretton Woods institutions. On numerous occasions high-level officials of those bodies have asserted the paramount of the BWI and refused to adhere to the policy guidance expressed by many of the key Conferences of the Parties (COPs).

5.5.1. The Role of the Commission on Sustainable Development

A strengthened and enhanced role for the CSD is urgently needed. Touching on the need to tighten the implementation of recommendations and commitments, one proposal is for the relevant institutions, stakeholders and governments to make specific commitments and outline strategies during the CSD sessions and report back on their progress the following year. This would help ensure better follow-up of CSD recommendations that have been endorsed by the General Assembly. For the period beyond 2002, the need for more joined up thinking between the CSD and the other UN commissions that are actively involved in monitoring aspects of Agenda 21 and whatever comes out of Earth Summit 2002 will be very important.

5.5.2. The Possibility of Utilizing the Security Council

Under the Charter of the UN, the functions and powers of the Security Council allow for it: "*to maintain international peace and security in accordance with the principles and purpose of the United Nations*". The World Resources Institute (WRI) argued that this allows for issues of environmental security to be brought to the Security Council. WRI went further, by suggesting that under articles 22 and 29 of the UN Charter, a Standing Committee on Environment and Development should be created which as one of its tasks, would raise in the Security Council, issues of environment and development that could undermine international peace and security." It is only recently that the issue of environmental security has come further up the political agenda. UNEP's Global Environmental Outlook Report (GEO) 2000, registered for the first time, that environmental refugees are now a greater number than those caused by conflict. The GEO 2000 report also highlighted other issues that might cause conflict in the future where we will see two thirds of the world's population. The Future of the Commission on Sustainable Development, November 2001 by the year 2020 living in water stressed areas. NATO and other bodies are now seriously looking at environmental security issues - so should the Security Council.

5.5.3. The Impacts of Globalization

More attention must be directed towards understanding how economic globalization is fundamentally changing the nature of environmental management, and what measures are needed to mitigate the adverse impacts. On the one hand, globalization heightens the influence of market forces, most importantly, competition, on the making and enforcement of environmental policy. On the other hand, globalization subjects national environmental policy to the discipline - or chaos- of international institutions. The impacts of globalization on environmental management capacities cut two ways: they constrain governments and they enhance the influence of markets on social and economic outcomes. Markets in turn influence environmental performance through a variety of channels, including technology transfer, changes in the level of demand for environment-intensive goods, substitution effects, green consumerism and others. Rather than triggering a downward spiral, the primary impact of globalization is to keep environmental policy initiatives "stuck in the mud". On the one hand, the constraints of competitiveness induced by globalization retard the capacity

and willingness of nation states to take any unilateral measures, which impose costs of good environmental management on domestic producers. On the other hand, the pressures of policy convergence mean that measures, which are taken, will only be those in step with primary competitors. The net results are first, that markets become the primary drivers of changes in environmental performance, and second, that environmental managers are pressured to maintain the status quo or to change it only incrementally. Many groups are keen to see a better integration of environment and social development within the regulation of global trade. One proposal to make this more explicit is for the negotiation of a new Agreement on Trade Related Environment Measures. A second proposal is to set into motion a process to "mainstream" environment and social priorities throughout the WTO's constitutional rules, agreements and legislative frameworks. Environment and development experts could be brought into WTO panels and appeal to institutions to ensure a more integrated approach to dispute resolution and decision-making. The wider participation of key stakeholder groups within dispute and negotiation processes would also help ensure a more open and legitimate process. A full assessment of the WTO's relationship with the hundreds of bilateral trade agreements that currently exist and are being newly created could be undertaken. In particular to take account of the implications of these agreements for sustainable development and fair trade. Another proposal, referring explicitly to improving fair competition and good /sustainable conduct between corporations is to formally agree a framework convention on regulating transnational corporations e.g. along the lines of the OECD guidelines for multinational corporations.

5.5.4. The Role of the World Trade Organization (WTO)

Sustainable development is also defined as an objective of the WTO, however social and environmental concerns continue to take a back seat when it comes to taking decisive action on trade decisions. It is felt that the WTO provisions to protect human, animal or plant life and health (e.g. as referred to in Article XIV of the Agreement of Trade in Services) are inadequate measures to fully account for costs incurred (directly and indirectly) by the misuse and over use of both human resources and environment goods and services. Trade rules and regulations tend to assess the impact of sustainability upon their mandated functions (i.e. how sustainable development impacts the liberalization of trade) and do not address the impact of their objectives on sustainability. Therefore, whilst social and environmental arguments should not be used as a "protectionist "disguise for imposing national trade restrictions - free trade should not be given precedence over these essential considerations. The internal democratic framework and transparency underlying these institutions has been widely questioned. Particularly, relating to the level of participation, frequency, scheduling and feed back of meetings, the status of informal meetings and lack of technical assistance have all been called to question. Towards enhancing the sustainability of the global trading system, the WTO should apply the following principles within its frameworks, rules and agreements:

- *Integration of immediate, long term and potential global economic, social and environmental concerns.*

- *Set development and poverty eradication as core aims of trade, and regulate trade toward enabling greater social equity.*
- *Respect for workers' rights and labor standards within these agreements.*
- *Regulation of world markets should also include the conditions for investment and fair competition, e.g. a convention on Multi-national Corporations.*
- *Sustainability Impact Assessments (covering environment, basic rights, poverty) of future trade policy, agreements, programmes.*
- *To address areas of potential conflict between trade policy and multi-lateral agreements e.g. through the establishment of a referral body to resolve disputes between trade law, customary law on human rights and multi-lateral agreements.*
- *Enhancing principles of democracy, participation and good governance within the WTO's architecture e.g. develop a system of accreditation for different stakeholders to observe and even participate in Committee and Council meetings, ensuring that stakeholders are balanced by region and sector.*
- *To provide capacity building for governments to enable their effective deliberation of trade policy and to better carry out technical cooperation to implement agreed policies e.g. through an enhanced Technical Cooperation and Training Division.*
- *Encourage public and parliamentary scrutiny of negotiations and agreements at national and regional levels e.g. publicizing who is accountable to take decisions for a country at the international level, which member states spoke on particular issues and support particular positions, who is present in Green room meetings. To define criteria about when confidentiality is justified.*
- *Consultations (for evaluating trade policies and negotiations) should allow for stakeholder and parliamentary participation. A system of accreditation should be developed to allow for stakeholder observance in Committee and Council meetings.*
- *Governments should disclose all written evidence, agreements and payments received from all stakeholders (private sector, trade unions, NGOs, etc) relating to trade negotiations.*
- *Establishing the Implementation Review Mechanism as a permanent institution to assess the progress in implementing particular agreements.*

5.5.5. World Bank and IMF

A key proposal for the Bretton Woods Institutions (BWI) to ensure these institutions take better account of sustainability is to bring them back under the auspices of the UN, therefore making those institutions directly accountable to the broad mandate for sustainability that the UN supports. This might also help to ensure greater tie-in of processes that cross over, where countries have committed to act but are facing problems in terms of prioritizing and lack adequate capacity to implement. For example, the Poverty Reduction Strategy Papers (PRSPS), of

the WB's enhanced HIPC initiative could contribute a large part of the framework necessary for development of a National Strategy for Sustainable Development (which governments have committed to implement by 2005). One proposal to tackle this it to utilize the findings of the OECD Development Assistance Committee (DAC) pilot initiative, which looked precisely at the issues of tie-in between PRSPs, Country Assistance Strategies and National Strategies for Sustainable Development (NSSD's) could be expanded to all countries. The sixth paper in this series, due for release in January 2002, will focus on economic governance for sustainable development.

Theme 6: Engineering Education for Sustainable Development

Scholars and professionals committed to fostering sustainable development have urged a re-examination of the curriculum and the restructuring of research in engineering-focused institutions of higher learning. The focus is on engineering, more than on the natural and physical sciences or on social science, because the activities that drive the industrial state - the activities that implement scientific advance - are generally rooted in engineering. Moreover, engineers are known as 'problem solvers' and if economies are becoming unsustainable because of engineering, it is natural to ask whether engineering as an activity and as a profession can be re-directed toward achieving sustainable transformations. Of course, engineering cannot do it alone; scientific as well as social and legal changes must occur as well. This paper addresses the challenges ahead, if this optimistic vision is to be more than wishful thinking.

Following a treatment of the philosophical and intellectual foundations of technological, organizational, social, and pedagogical innovation necessary for sustainable transformations of existing institutions and mindsets, this note ends by addressing the following themes and questions:

(1) How can multi- and trans-disciplinary research and teaching coexist in a meaningful way in today's university structures?

(2) Does education relevant to sustainable development require its own protected incubating environment to survive, or will it otherwise be gobbled up and marginalized by attempting to instill it throughout the traditional curriculum and traditional disciplines?

(3) Even if there exist technical options to do so, how can it be made safe for courageous students to take educational paths different from traditional tracks?

(4) What can we learn from comparative analysis of universities in different nations and environments? And

(5) What roles can national and EU governments have in accelerating the needed changes?

6.1. Unsustainable Industry

Those that argue that the industrialized states, whether developed or developing is currently unsustainable are in fact pin pointing to a number of problems. These are depicted schematically in the figure on the next page. The major environ-

mental problems associated with industry include toxic pollution, climate change, resource depletion, and problems related to the loss of biodiversity and ecosystem integrity. The environmental burdens are felt unequally within nations, between nations, and between generations, giving rise to inter-national, intra-national, and intergenerational equity concerns that are often expressed as 'environmental injustice'. The Brundtland formulation of sustainability seems to focus concern on intergenerational equity, but all three kinds of mal-distributions are important.

The environmental problems stem from the activities concerned with agriculture, manufacturing, extraction, transportation, housing, energy, and services -- all driven by the demand of consumers, commercial entities, and government. But in addition, there are effects of these activities on the amount, security, and skill of employment, the nature and conditions of work, and purchasing power associated with wages. An increasing concern is economic inequity stemming from inadequate and unequal purchasing power within and between nations - and for the workers and citizens of the future.

Whether solutions involving industry initiatives, government intervention, stakeholder involvement, and financing can resolve these un-sustainability problems depends on correcting a number of fundamental faults in the characteristics of the industrial states:

1. Fragmentation of the knowledge base leading to understanding of fundamental problems and the resulting fashioning of single- purpose or narrowly-fashioned solutions by technical and political decision-makers,
2. The inequality of access to economic and political power
3. The tendency towards governance of industrial systems by old ideas,
4. The failure of markets both to correctly price the adverse consequences of industrial activity and
5. To deal sensibly with effects which span long time horizons for which pricing and markets are inherently incapable of solving. It is to the first failure that this essay is directed.

6.2. Conceptualization of Sustainable Development

It makes quite a difference whether you look at sustainable development as just an environmental issue, or alternatively as a multidimensional challenge in the context of the three dimensions: economic, environmental, and social. We argue that competitiveness, environment, and employment are the operationally-important dimensions of sustainability - and these three dimensions together drive sustainable development along different pathways and go to different places than environmentally-driven concerns alone, which may otherwise require trade-offs, for example, between environmental improvements and jobs.

A *sustainable development* agenda is, almost by definition, one of systems change. This is not to be confused with an *environmental policy* agenda, which is - or should be - explicitly effect-based, and derived from that, a program of policies and legislation directed towards environmental improvements, relying on specific goals and conditions. The sustainable development policy agenda

focuses at least on processes (e.g., related to manufacturing, transport, energy, construction, etc.), and may extend to more cross cutting technological and social systems changes.

Note that *current strategy agendas*, even those that go beyond environmental goals, are defined as those that are focused on those policies that (1) improve profit and market share by improving performance in current technologies or cutting costs, (2) controlling pollution/making simple substitutions and changes, and conserving energy and resources, and (3) ensuring an adequate supply of appropriately skilled labor, and safe and healthy workplaces. We would describe these strategies as 'reactive' vis-à-vis technological change, rather than proactive. They are usually pursued separately and by different sets of government ministries and private-sector stakeholders. At best, policies affecting competitiveness, environment, and employment are coordinated, but not integrated.

In contrast, *sustainable agendas* are those policies that are focused on technological changes that alter the ways goods and services are provided, the prevention of pollution and the decreased use of energy and resources through more far-reaching system changes, and the development of novel socio-technical systems -- involving both technological and organizational elements - that enhance the man dimensions of 'meaningful employment' through the *integration*, rather than coordination, of policy design and implementation. The kind of innovation likely to be managed successfully by industrial corporations is relevant to the differences between current and sustainable technology agendas. We argue that the needed major product, process, and system transformations may be beyond those that the dominant industries and firms are capable of developing easily, at least by themselves. Further, industry and other sectors may not have the intellectual capacity and trained human resources to do what is necessary.

6.3. Inter-, Multi- and Trans-disciplinary Research and Education

Appreciating the distinctions between these three terms is essential to understanding why well-meaning efforts at solving complex problems by assembling professionals from different disciplines or expanding a traditional education in a particular direction often leads to disappointing results.

Inter-disciplinary research (and teaching) - literally 'between disciplines' -- often precedes the creation of a new well-defined field. Thus, biochemistry begins with a focus of traditional chemistry principles and knowledge applied to biological systems; it adapts and grows; and the intellectual boundaries are refocused and redrawn. Finally, biochemistry becomes a field unto its own, different, but not necessarily broader or narrower than the parent disciplines that spawned it.

Multi-disciplinary research (and teaching) - literally 'several or many disciplines' - brings together several disciplinary focuses, and thus deals with more than one traditional concern. For example, costing out different energy options necessarily involves knowledge of both energy technology and economics. Multi-disciplinary research and teaching can be carried out by multi-disciplinary teams or by one individual who has been trained in more than one discipline.

Trans-disciplinary research (and teaching) - literally 'across disciplines' - transcends the narrow focus of one or more disciplines and is not constrained to adopt pre-

existing models for problem definition or solution. Boundaries might necessarily have to be drawn as a practical matter, but they are not dictated by limitations of the analyst or designer. Where broad system changes are desirable, trans-disciplinary approaches are essential. Trans-disciplinary approaches really 'open up the problem space of the engineer'. By their nature, trans-disciplinary approaches synthesize and integrate concepts whose origins are found in different disciplines, and system innovation requires synthesis.

6.4. Dimensions of Policy Analysis and Design

A conceptualization of the many activities that constitute policy analysis and design are used in both multi-disciplinary and trans-disciplinary policy research, but in different ways. There are both 'policy sciences' and 'policy engineering'. The policy sciences are grounded in the disciplines of science and mathematics and include both inter-disciplinary studies, such as biostatistics - and multidisciplinary studies, such as life-cycle analysis or cost-benefit analysis. Policy engineering focuses on changing, rather than merely assessing science and technology, e.g., the design of environmentally sound materials, which requires knowledge of physical properties, toxicity, economics, and industrial processes. Policy engineering makes use of the policy sciences, but design and assessment are different endeavors. For one thing, 'art,' as well as knowledge, is involved in both defining what needs to be changed and how it is to be changed. If the policy engineer is narrowly focused, he/she may come up with a single purpose design with unanticipated problems down the road. For example, in an effort to design energy-efficient buildings during the various energy crises, buildings were constructed that created serious indoor air quality problems.

Multi-disciplinary approaches may borrow many tools from the policy sciences, but full conceptual integration and co-optimization of sustainability goals are usually not achieved. These approaches, though well-motivated, give the appearance of inclusiveness in analysis and design options, but they fail to identify multiple win options necessary for sustainable industrial transformations. This author regards undue reliance on, and satisfaction with, multidisciplinary approaches to be a serious impediment to more trans-disciplinary creative problem solving.

Theme 7: Partnerships for Sustainable Development

Partnerships for sustainable development are voluntary, multi-stakeholder initiatives by Governments, intergovernmental organizations, major groups and/or others, which aim to contribute to the implementation of inter-governmentally, agreed sustainable development goals and commitments in Agenda 21, the Programme for the Further Implementation of Agenda 21 and the Plan of Implementation of the World Summit on Sustainable Development. The present note summarizes information on the 348 partnerships for sustainable development that have been registered thus far with the Secretariat of the Commission on Sustainable Development (CSD), and provides a more detailed summary of 74 partnerships that identify one or more of the themes in the current CSD cycle-namely transport, chemicals, mining, waste management, and sustainable

consumption and production-as the primary focus of their work. While these initiatives vary significantly in terms of the sustainable development issues they seek to address, their management structures, number of partners, and scope of their activities, they tend to share some common features as well. In particular, all registered partnerships aim to pool knowledge, skills and resources, find innovative solutions to sustainable development challenges, and build knowledge networks that can contribute to informed decision-making. This not serves as a basis for the Islamic world delegations in Rio+20 Summit conference discussion, on the contribution of partnerships to the implementation of inter-governmentally agreed sustainable development goals and commitments.

7.1. Partnership Trends

Partnerships for sustainable development must have certain key characteristics (identified in the criteria and guidelines on partnerships set out at the eleventh session of the Commission on Sustainable Development, the Bali guiding principles and General Assembly resolution 56/76), including sectoral and geographical balance; multi-stakeholder involvement; a relationship to the World Summit on Sustainable Development; and a predictable and sustained resource base.

7.2. Partnership Implementation

7.2.1. Implementation mechanisms

7.2.1.1. Partnerships for sustainable development address global economic, social and environmental challenges by strengthening cooperation in areas of institutional and human capacity-building, research, information-sharing and technology transfer.

7.2.1.2. Partnerships work to foster capacity at all levels: 80 percent of registered partnerships are working to educate and build awareness of sustainable development issues; 69 per cent are engaged in activities related to building human resource capacity by providing training; 49 percent are engaged in some form of direct technology transfer; and 47 per cent carry out activities that focus on building and strengthening institutional capacity.

7.2.1.3. Partnerships actively engaging in advocacy, education and building awareness are committed to improving communication and knowledge exchange among their partners and stakeholders. These initiatives are utilizing web-based communication and information dissemination platforms to collaborate on data collection, select indicator methodologies, report on best practices and propose models and tools for managing technologies and natural resources. The use of online tools enables communities geographically spread across the globe to collaborate and maintain information on common web spaces, take advantage of collective global expertise, identify cooperative research agendas and apply the relevant information to their local needs.

7.2.1.4. Most partnerships conduct national-level workshops and training sessions, which enable country-specific needs assessment to take place. Based

on those assessments, partners are able to identify the political, technical, structural, regulatory and financing barriers that need to be overcome in order to address specific sustainable development issues.

7.2.1.5. Technology transfer by registered partnerships mostly takes the form of targeted technical assistance; helping developing country partners procure technology; and facilitating transfer of technology and know-how from private-sector partners in developed countries to their counterparts in developing countries and countries with economies in transition.

7.2.1.6. Many partnerships play a convening and facilitating role by bringing together and engaging key leaders and stakeholders in national legislation and international processes. Some partnerships are building institutional capacity by helping to foster new partnerships and providing information on project and funding opportunities to their partners.

7.2.2. Progress since initiation

7.2.2.1. In general, progress reported remains within the broad categories of partnership building; capacity-building; information-sharing; publications; and technical cooperation projects implementing partnership activities at the local level.

7.2.2.2. Partnership progress included reports of successful fund-raising; confirmation of additional partners; the development of organizational principles to define the terms of collaboration and cooperation among partners (including memorandums of understanding); and the development of an internal governance and coordination mechanism through the formation of steering committees and partnership secretariats. The identification of regional and national focal points as part of a partnership's coordination structure was also reported. In addition to coordination activities within partnerships, many partnerships have continued to develop formal collaborative arrangements with other partnerships active in similar complementary focal areas.

7.2.2.3. Capacity-building activities reported included the organization of conferences, workshops, symposiums and training sessions and the formation of expert networks.

7.2.2.4. The information-sharing activities most frequently mentioned included the establishment of partnership websites and newsletters, the publication of case studies, directories, educational and training materials and policy papers and the creation of toolkits. The creation of web portals and a clearing-house mechanisms providing access to online tools, databases and software is another trend in partnership information-dissemination activities.

7.2.2.5. While most partnerships continue to work to create and maintain an effective organizational structure and focus on partnership and stakeholder relationship-building, these efforts appear to be taking place in parallel to on-the-ground implementation activities, pilot projects and research studies at the regional and country levels.

7.3. Partnerships in Thematic Cluster: Transport, Chemicals, Mining, Waste Management, and the 10-Year Framework of Programmes on Sustainable Consumption and Production Patterns

7.3.1. In keeping with the focus of the current review session of the Commission on the thematic cluster of transport, chemicals, waste management, mining, and the 10-Year Framework of Programmes on Sustainable Consumption and Production Patterns, the present section examines in greater detail those partnerships whose primary focus is this thematic cluster, and features brief summaries of the most relevant partnership initiatives.

7.3.2. Of the 348 registered partnerships, 74 have a primary focus on one or more of the issues in the thematic cluster of transport, chemicals, waste management, mining, or changing unsustainable patterns of consumption and production, with some listing more than one primary area. Transport is listed as a primary focus by 13 partnerships, while 5 partnerships list chemicals, 19 partnerships list waste management, 6 partnerships list mining, and 45 partnerships list changing unsustainable patterns of consumption and production as a primary focus.

7.3.3. With regard to the sectoral coverage totals (both primary and secondary focus) for the partnerships in this thematic cluster, 170 partnerships initiatives list either a primary or secondary focus in one or more of the thematic issue areas. Within this subset, 71 percent (120) have a primary or secondary focus on changing unsustainable patterns of consumption and production, 42 percent (71) on waste management, 23 percent (39) on transport, 15 percent (25) on chemicals, and 11 percent (18) on mining.

7.4. Partnerships for Infectious Disease Control

Specific diseases of childhood illustrate well the benefits of an integrated approach. Every year some 12 million children die before reaching their fifth birthday, many of them during their first year of life. Of these, 70% are killed by one of five causes: diarrhea, pneumonia, measles, malaria or malnutrition, or a combination of more than one. Because their signs and symptoms may overlap, recognizing which of these conditions is present in a sick child can be difficult, and a single diagnosis is often inappropriate. Treatment of the sick child may also be complicated by the need to combine therapies for several conditions. In response, WHO in collaboration with UNICEF, has developed the "Integrated Management of Childhood Illness" (IMCI) initiative.

The outcome, of updated ISESCO document on sustainable development is expected to be one of the major document representing Islamic World during Intergovernmental Meetings as well as for Rio+20 Conference on 2012, and without ignoring the following obstacles.

7.5. Major Obstacles to Sustainable Development in the Islamic World

i. Poverty and Debt Accumulation: Poverty is a multi dimensional concept that is mainly the result of an unequal division of the world's wealth. Poverty leads to the overexploitation and irrational use of limited natural resources resulting in reduced agricultural production capacity and forest depletion. This didactic of poverty and overtaxing of natural resources may also be the result of the

pressure of foreign debt of which the servicing may reach important percentages of a country's exports of goods and services, and thus constitute a heavy burden on its economy.

Islam has through its principles endeavored to fight against poverty. This fight can either occur through employment which provides a source of income for a person and his dependants, or through government assistance and the zakat fund that is unique to Islam and that ensures that man is freed from the shackles of poverty.

ii. Wars, lack of stability and safety: During the 20th century and since the start of the Arab-Israeli conflict, most Islamic countries have experienced conflicts and civil wars caused by the desire to control land and natural resources and that have hindered their development march. Of these conflicts and wars we can mention the Arab-Israeli conflict, the land mines left from wars, border wars among Arabs and Muslims, the first and second Gulf Wars, the sanctions against Libya and Iraq and many others.

iii. Lack of technical means and expertise and of modern techniques as a result of low financial resources. Many Islamic countries are still way behind in education in spite of compulsory schooling. This can only widen the gap between developed and developed countries in terms of the quality of education, leading ultimately to a widening educational gap between North and South and between rich and poor.

iv. Deterioration of Economic Conditions: This deterioration, a result of a low GDP per capita and investment capitals in most Islamic countries, unemployment, illiteracy, demographic growth, economic dependency and many other factors, impacts on a given country's commitment to world sustainable development.

v. Discrepancy between population growth and available natural resources: Population growth has resulted in the expansion of agricultural lands, overgrazing, and desertification and in the depletion of potable water resources. Many Islamic countries had to adopt programmes that aim at developing renewable water resources.

vi. Failure of Developed Countries to provide the aid promised to developing countries. During the Rio Earth Summit, developed countries undertook to extend 0.7% of their local GDP to assist emerging countries considering that industrialized countries are more responsible for environment pollution than developing ones. Unfortunately only some Scandinavian countries fulfilled their promise. In the Johannesburg Earth Summit, Islamic countries aspire to obtain the conversion of their debts and interests into financial resources for serving sustainable development.

VIII. Aspiration of Islamic Countries from the Rio+20

Islamic countries being part of the developing countries at global level has to adopt and implement the following action Aspiration of Islamic Countries from the Rio+20:

i. Peace and security (resolution of the Arab-Israeli conflict)

ii. **Eradication of poverty** (aid to developing countries, abolishing all types of economic sanctions)

iii. **Debt alleviation** (cancellation of debts and use of additional resources to finance sustainable development)

iv. **International trade** (more WTO commitment, liberalization of trade)

v. **Globalization** (assist developing countries face up to globalization and benefit from equal opportunities in globalization)

vi. **Capacity building in research and technology transfer** (support of academic and research institutions in developing countries in priority fields, assisting the private sector in converting to cleaner technology and ensuring access to information technology)

vii. **Arbitration and participation in decision making** (consolidating the role of the United Nations and calling for closer cooperation with the Arab League and the OIC)

viii. **Population, urban development, health and environment** (devising an integrated population management policy, supporting the efforts of developing countries in achieving complementarily between all their strategies)

ix. Supporting Islamic Institutional Arrangement

Existing institutions needed to support the Sustainable Development process should be strengthened and their capacities enhanced. Integrated assessment and policymaking for sustainable development should be one of the main tools used and promoted by national institutions. There are three levels of integration that we should not lose sight of in the planning and decision making process, these include: integration of the environmental and social dimension with the economic one; ensuring integration of policy recommendations in the decision making process; and the integration of the relevant stakeholders and actors, including affected and marginalized communities in the planning and decision making process. It is imperative that the capacities of the relevant institutions in the design and implementation of supportive and complimentary economic, social, and environmental policies are enhanced. Environmental and social policies have to be an integral part in the design and implementation of macroeconomic and sectoral policies.

There is a need to depart from the practice of introducing environmental regulations as distinct from other regulations. Regulations introduced to provide a code of conduct for the different sectors should be designed to cater for and take into account environmental, social, economic and developmental considerations. Islamic countries cannot continue to have environmental regulations designed to address environmental considerations in isolation. Building regulations, for example, have to consider the environmental, social, health, and general human aspects. Regulations dealing with industry, agriculture, tourism, etc. should be designed in the same manner. The full cost of regulations should be accounted for and their implications on the economy, environment and different segments of the population taken into consideration. Capacities to develop integrated regulatory measures need to be enhanced and tools to assess and measure

their full cost and implications on the economy, environment, and social fabric of the society developed and strengthened.

Techniques for assessing the economic viability of projects from the public and private sector need to be enhanced. From the public perspective, social and environmental externalities should be taken into consideration in assessing the viabilities of policies, programmes, plans, and projects. Governments can introduce policies and incentive measures that promote public sector finance and investment in green economy such as renewable energy, waste management, green transport, green buildings, etc. Public and private sector capacities for undertaking such assessments need to be developed and strengthened.

Campaigns specifically designed for different target groups are essential in demonstrating the benefits of investing in the environment for different stakeholders. This includes different government departments, the private sector, and the general public. In many instances, due attention is not given to the environment because the message given was not the right one. Information provided failed to communicate the right message and hence attract the attention of policy and decision makers. It failed to demonstrate the clear link between investing in the environment and sustainable development. Capacities to develop communication strategies and conduct public participation campaigns need to be enhanced to ensure active involvement and participation of all relevant stakeholders in the design and implementation of proposed policies, programmes, and plans.

The active involvement of the private sector and promotion of public-private partnership through finance and expertise is critical for transitioning to the green economy. Providing the enabling environment in terms of policies, regulations, and incentive measures is necessary in engaging effectively the private sector in supporting government policies aiming at transitioning to a green economy. National capacities are needed to design policies and introduce measures that encourage the involvement of the private sector in support of the green transition.

Apart from the national and local level institutions in the public sector in Islamic countries, a number of environmental organizations and associations are working in civil society and private sector on issues related to environment and sustainable development, either directly or indirectly/partly through their support to various sustainable development interventions. However, except the public sector institutions and a few civil society and private sector institutions, most of these institutions are not organized under an institutional arrangement at national, regional and international level. To develop synergies and benefit from the potential and expertise of these organizations, it would be appropriate to set up network of OIC member States and their respective national bodies at intergovernmental and non-governmental level.

It is proposed that the Member States encourage and persuade all those institutions which are working on sustainable development issues at national and Ummah level to join this network of Environment Associations for enhancing cooperation, flow of information, technology transfer and development of synergies for capacity development.

With a view to integrate social, economic and environment dimensions of development in decision making in the Muslim world, it is essential to establish the OIC Commission for Sustainable Development (OIC-CSD) on the lines of the United Nations Commission for Sustainable Development. The mandate of the OIC-CSD will be to serve as a secretariat for coordinating issues relating to sustainable development among member states of the OIC and with other international organizations working in the field of sustainable development, hold meetings, conduct studies on emerging issues related to sustainable development, support the process of developing sustainable development indicators, national sustainable development strategies and monitor implementation of sustainable development policies in OIC member states. Therefore OIC-CSD will provide a platform for facilitating and steering the process of increasing cooperation for promoting Sustainable Development among the Muslim countries.

x. Human Resource Development

Islamic countries have to devise a policy and strategies to use the available human resource and build the capacity of others to fill the gap in various sectors of the economy. The promotion and acquiring green jobs shall be adhered to where possible using a slow process of transition from the traditional to green jobs.

National capacities to absorb and develop appropriate and environmentally sound technologies are keys in the transition to a green economy and in achieving sustainable development. Budgetary allocations should be provided by different ministries for technological advancement, research and development. The introduction and use of environmentally sound technologies will enhance resource efficiency, reduce waste, and contribute towards creating new market opportunities and increasing competitiveness of products in local and international markets. National capacities need to be strengthened to develop and use the necessary technologies needed to make the transition to a green economy.

Education curricula should be revamped to provide skilled and professional labour that can support the transition to a green economy. Environmental and social considerations need to be integrated into all subjects and disciplines, and not taught separately. Training courses or seminars should be designed as part of long-term training programme and not as a one-off exercise, and should be based on a needs assessment targeting different target groups, i.e. trainers, professional, decision and policy makers, etc. On-the-job training is also essential in providing the necessary skills needed to make the transition to a green economy. Capacities to undertake needs assessments and develop educational and training programmes and courses need to be developed and strengthened.

IX Capacity Building for Sustainable Development in Islamic countries

Most of the Islamic countries are characterized as belonging to the developing blocks; however only five are listed among the countries with a high human development, according to UN reports. They are: Brunei, Kuwait, Qatar, the United Arab Emirates and Bahrain. These constitute only about 0.58% of the total population of Islamic countries (that is 7 million people out of the total

population of 1.2 billion people in the Islamic world). As the main reason being high oil revenues in these countries, hence their classification as high-income countries. By contrast, there are 30 countries of the Islamic world that are classified as middle-income countries, the population of which is about 843 million and are divided into the following three categories:

Category 1: countries with high-medium human development:

Population of the countries falling in this category is about 174 million people. There are a total of 14 countries in this category; Albania, Libya, Malaysia, Oman, Saudi Arabia, Kazakhstan, Lebanon, the Maldives, Turkey, Tunisia, Turkmenistan, Jordan and Azerbaijan.

Category 2: countries with low-medium human development:

Population of countries falling in this category is about 670 million, which altogether constitutes almost half of the population of the Islamic world. This category includes 16 countries; Iran, Palestine, Syria, Uzbekistan, Algeria, Equatorial Guinea, Kyrgyzstan, Indonesia, Tajikistan, Egypt, Gabon, Morocco, Comoros Islands, Bangladesh, the Sudan and Cameroon.

Category 3: countries with weak human development:

Population of countries falling in this category is about 400 million and there are 16 countries altogether and most of them are sub-Saharan African countries, in addition to Pakistan and Yemen. They are the weakest category in terms of human development and represent one third of today's world Muslim population.

Over a billion Muslims belong to countries that have a medium-low to weak human development, and which include the countries with a high population density, such as Bangladesh, Pakistan, Indonesia, Iran, Egypt, Morocco and Algeria. Therefore, they are having very limited capacity in the field of environment especially in developing policy, strategy, programme, action plan and projects and their implementation. Therefore, these weak human development countries will require special attention for capacity building from amongst the Islamic countries enabling them to implement the sustainable development policies and strategies in an effective manner.

With a view to develop the capacities of developing and least developed Muslim countries, Bali Strategic Plan for Technology Support and Capacity-building (2004) would greatly help in the environment-related technology support and capacity building. This will not only facilitate the Muslim countries in acquiring state of the art technology but also support the implementation of Johannesburg Plan of Implementation thereby putting them on the path of sustainable development. As the implementation mechanism of the Bali Strategic Plan accords special attention to strengthening the support given to regional ministerial environmental forums to enable them to play a role in the implementation and review of the plan and identification of emerging needs, the Islamic countries may take benefit from those mechanisms through there relevant regional and sub-regional institutions.

Islamic countries in their individual capacity can benefit from the capacity building programmes initiated by various secretariats of Multilateral Environment Agreements (MEAs) and other multilateral agencies working for environment and sustainable development. In addition Muslim countries may also initiate their own capacity building programme in coordination with the ISESCO to address priority capacity development needs.

Identify priorities for regional capacity building of the Member States as part of their agenda for sustainable development. These priorities should be considered by the Governing Council of the United Nations Environment Programme (UNEP) to be taken into account under the Bali Strategic Plan accords. In addition the Plan also provides that the existing regional ministerial environmental bodies, their subsidiary bodies and other relevant entities are encouraged to consider the plan, make policy recommendations and identify priorities on a regular basis. They are also encouraged to recommend strategic approaches to the implementation of the respective components of the plan in their regions.

i. Natural Resource Management (NRM)

Islamic countries have to utilize the existing natural resources on sustainable basis. The focus of NRM shall be at ensuring food and energy security using the existing resources in line with the existing national and MEAs. Muslim countries enjoys both marine and terrestrial natural resources that must be managed on sustainable basis using state of the art techniques. As most of the poor Islamic countries are facing poverty, NRM shall specifically focus on the Poverty alleviation programmes.

ii. Commerce and Trade

Islamic countries must develop a mechanism of boosting their internal trade using various free trade regimes. The European Union model of free trade, currency and boundary less block comprising of Islamic states has to be developed for the promotion of trade and commerce in the Islamic Countries.

These include tools such as taxes, subsidies, charges, and fees. Such tools need to be designed to complement regulations and address environmental, social and economic considerations. In many instances green taxes continue to be designed as distinct from traditional or grey taxes. Taxes need to be designed not just simply to generate income for the government, but also to alter behavior towards more sustainable patterns of consumption and production. So instead of taxing income and employment, we need to tax damaging behavior on the environment. Specific attention should be given to equity considerations and the distribution of the tax burden among different segments of society. Capacities for the selection and design of incentive measures to complement regulations need to be strengthened to support the transition to a green economy.

Capacities need to be enhanced to develop trade policies that support sustainable development objectives. Trade policies can be designed to promote and encourage green investments through facilitating the importation of environmentally sound technologies. Trade policies can also be designed to maximize the net development gains and reduce the potential negative impacts of trade on the environment, human well-being and the economy.

iii. Combat disasters

Disasters especially natural disasters have greatly increased over the recent past and even developed countries are not in a position to face the situation in isolation. To reduce the impact of disasters, Islamic countries has to develop a state of art early warning system and work together in coordination for the relief and rehabilitation response to the disasters in the Ummah. It is therefore proposed to develop a unified strategy of combating disasters in Islamic countries.

iv. Monitoring and evaluation:

Monitoring and evaluation should be part and parcel of the planning, decision-making and implementation processes. It is intended to ensure that the proposed policies have or are achieving their set objectives through the introduction of necessary corrective measures and actions, if needs be, to achieve the desired outcomes. Capacities to develop follow-up, monitoring, and evaluation tools and techniques are needed to ensure that policies, plan, and programmes are on target and are yielding the desired outcomes.

ANNEX

Further Implementation of Agenda 21 and the outcomes of the World Summit on Sustainable Development (A/RES/64/236) in Rio+20 (2012)

The General Assembly,

Recalling its resolutions 55/199 of 20 December 2000, 56/226 of 24 December 2001, 57/253 of 20 December 2002, 57/270 A and B of 20 December 2002 and 23 June 2003, respectively, 62/189 of 19 December 2007 and 63/212 of 19 December 2008, and all other previous resolutions on the implementation of Agenda 21, the Programme for the Further Implementation of Agenda 21 and the outcomes of the World Summit on Sustainable Development,

Recalling also the Rio Declaration on Environment and Development,1 Agenda 21, the Programme for the Further Implementation of Agenda 21, 3 the Johannesburg Declaration on Sustainable Development 4 and the Plan of Implementation of the World Summit on Sustainable Development ("Johannesburg Plan of Implementation"), as well as the Monterrey Consensus of the International Conference on Financing for Development6 and the Doha Declaration on Financing for Development: outcome document of the Follow-up International Conference on Financing for Development to Review the Implementation of the Monterrey Consensus,

Recalling further the Programme of Action for the Sustainable Development of Small Island Developing States,8 the Declaration and state of progress and initiatives for the future implementation of the Programme of Action for the Sustainable Development of Small Island Developing States, and the Mauritius Strategy for the Further Implementation of the Programme of Action for the Sustainable Development of Small Island Developing States,

Reaffirming the commitment to implement Agenda 21, the Programme for the Further Implementation of Agenda 21, the Johannesburg Plan of Implementation, including the time-bound goals and targets, and the other internationally agreed development goals, including the Millennium Development Goals,

Recalling the 2005 World Summit Outcome,

Reaffirming the decisions taken at the eleventh session of the Commission on Sustainable Development,

Recalling the adoption by the Commission of a multi-year programme of work designed to contribute to advancing the implementation of Agenda 21, the Programme for the Further Implementation of Agenda 21 and the Johannesburg Plan of Implementation at all levels,

Recalling also the decision taken by the Commission at its eleventh session that in review years it should discuss the contribution of partnerships towards supporting the implementation of Agenda 21, the Programme for the Further Implementation of Agenda 21 and the Johannesburg Plan of Implementation with a view to sharing lessons learned and best practices, identifying and addressing problems, gaps and constraints and providing further guidance, including on reporting, during policy years, as necessary,

Reiterating that sustainable development in its economic, social and environmental aspects is a key element of the overarching framework for United Nations activities, and reaffirming the continuing need to ensure a balance among economic development, social development and environmental protection as interdependent and mutually reinforcing pillars of sustainable development,

Noting that challenges remain in achieving the goals of the three pillars of sustainable development, particularly in the context of the current global crises,

Taking note with appreciation of the offer of the Government of Brazil to host a United Nations conference on sustainable development in 2012,

Reaffirming that eradicating poverty, changing unsustainable patterns of production and consumption and protecting and managing the natural resource base of economic and social development are overarching objectives of and essential requirements for sustainable development,

Recognizing that good governance within each country and at the international level is essential for sustainable development,

Recalling that the Johannesburg Plan of Implementation designated the Commission to serve as the focal point for discussion on partnerships that promote sustainable development and contribute to the implementation of intergovernmental commitments in Agenda 21,

Recognizing that eradicating poverty is the greatest global challenge facing the world today and an indispensable requirement for sustainable development, in particular for developing countries, and that although each country has the primary responsibility for its own sustainable development and poverty eradication and the role of national policies and development strategies cannot be overemphasized, concerted and concrete measures are required at all levels to enable developing countries to achieve their sustainable development goals as related to the internationally agreed poverty-related targets and goals, including those contained in Agenda 21, the relevant outcomes of other United Nations conferences and the United Nations Millennium Declaration,

Recalling that the Economic and Social Council should increase its role in overseeing system-wide coordination and the balanced integration of economic, social and environmental aspects of United Nations policies and programmes aimed at promoting sustainable development, and reaffirming that the Commission should continue to be the high-level commission on sustainable development within the United Nations system and serve as a forum for consideration of issues related to the integration of the three dimensions of sustainable development,

Welcoming the outcome of the seventeenth session of the Commission on the thematic issues of agriculture, rural development, land, drought, desertification and Africa,

Recalling that the themes of the eighteenth and nineteenth sessions of the Commission, namely, transport, chemicals, waste management, mining and a ten year framework of programmes on sustainable consumption and production patterns are interlinked and should be addressed in an integrated manner,

taking into account the economic, social and environmental dimensions of sustainable development, related sectoral policies and cross-cutting issues, including means of implementation, as identified at the eleventh session of the Commission,

Reiterating that fundamental changes in the way societies produce and consume are indispensable for achieving global sustainable development and that all countries should promote sustainable consumption and production patterns, with the developed countries taking the lead and with all countries benefiting from the process, taking into account the Rio principles,1 including the principle of common but differentiated responsibilities as set out in paragraph 7 of the Rio Declaration on Environment and Development, and also reiterating that Governments, relevant international organizations, the private sector and all major groups should play an active role in changing unsustainable consumption and production patterns, financial institutions, the Global Environment Facility and other intergovernmental organizations, in accordance with their respective mandates, as well as major groups, to take action to ensure the effective implementation of and follow-up to the commitments, programmes and time-bound targets adopted at the World Summit on Sustainable Development, and encourages them to report on concrete progress in that regard;

Calls for the effective implementation of the commitments, programmes and time-bound targets adopted at the World Summit on Sustainable Development and for the fulfillment of the provisions relating to the means of implementation, as contained in the Johannesburg Plan of Implementation;

Reiterates that the Commission on Sustainable Development is the high level body responsible for sustainable development within the United Nations system and serves as a forum for the consideration of issues related to the integration of the three dimensions of sustainable development, and underlines the need to further support the work of the Commission, taking into account its existing mandate and the decisions taken at its eleventh session;

Encourages countries to present, on a voluntary basis, in particular at the Commission's review sessions, national reports focusing on concrete progress in implementation, including achievements, constraints, challenges and opportunities;

Emphasizes the importance of a consensus outcome and action-oriented policy sessions;

Encourages Governments to participate at the appropriate level, in the eighteenth session of the Commission, with representatives, including ministers, from the relevant departments and organizations working in the areas of transport, chemicals, waste management, mining and sustainable consumption and production, as well as finance;

Recalls the decision of the Commission at its eleventh session that activities during Commission meetings should provide for the balanced involvement of participants from all regions, as well as for gender balance;

Invites donor countries to consider supporting the participation of representatives from the developing countries in the eighteenth session of the Commission, inter alia, through contributions to the Commission's trust fund;

Reaffirms the objective of strengthening the implementation of Agenda 21 including through the mobilization of financial and technological resources, as well as capacity-building programmes, in particular for developing countries;

Also reaffirms the objective of enhancing the participation and effective involvement of civil society and other relevant stakeholders, as well as promoting transparency and broad public participation, in the implementation of Agenda 21;

Requests the secretariat of the Commission to coordinate the participation of the relevant major groups in the thematic discussions at the eighteenth session of the Commission and the reporting on the fulfillment of corporate responsibility and accountability with respect to the thematic cluster of issues, in accordance with the provisions of the Johannesburg Plan of Implementation;

Reaffirms the need to promote corporate social responsibility and accountability as envisaged by the Johannesburg Plan of Implementation;

Requests the secretariat of the Commission to make arrangements to facilitate the balanced representation of major groups from developed and developing countries in the sessions of the Commission, and in this regard invites donor countries to consider supporting the participation of major groups from developing countries, inter alia, through contributions to the Commission's trust fund;

Encourages contributions by the regional implementation meetings and other regional events to the Commission at its eighteenth session;

Reiterates its invitation to the relevant United Nations funds and programmes, the regional commissions and specialized agencies, the international and regional financial and trade institutions and the Global Environment Facility, as well as the secretariats of the multilateral environmental agreements and other relevant bodies, to actively participate, within their mandates, in the work of the Commission at its eighteenth session;

Encourages Governments and organizations at all levels, as well as major groups, to undertake results-oriented initiatives and activities to support the work of the Commission and to promote and facilitate the implementation of Agenda 21, the Programme for the Further Implementation of Agenda 21 and the Johannesburg Plan of Implementation, including through voluntary multi-stakeholder partnership initiatives;

Requests the Secretary-General, in reporting to the Commission at its eighteenth session, on the basis of appropriate inputs from all levels, to submit a thematic report on each of the five issues contained in the thematic cluster to be considered at the session, namely, transport, chemicals, waste management, mining and a ten-year framework of programmes on sustainable consumption and production patterns, taking into account their inter-linkages as well as cross-cutting issues, including means of implementation identified by the Commission at its eleventh session, and takes into account the relevant provisions of paragraphs 10, 14 and 15 of draft resolution adopted by the Commission at its eleventh session;

Decides to organize, in 2012, the United Nations Conference on Sustainable Development at the highest possible level, including Heads of State and Government or other representatives, in this regard accepts with gratitude the

generous offer of the Government of Brazil to host the Conference, and decides that:

1. The objective of the Conference will be to secure renewed political commitment for sustainable development, assessing the progress to date and the remaining gaps in the implementation of the outcomes of the major summits on sustainable development and addressing new and emerging challenges. The focus of the Conference will include the following themes to be discussed and refined during the preparatory process: a green economy in the context of sustainable development and poverty eradication and the institutional framework for sustainable development;
2. The Conference will result in a focused political document;
3. The Conference and its preparatory process should take into account the decision taken at the eleventh session of the Commission to carry out, at the conclusion of the multi-year programme of work, an overall appraisal of the implementation of Agenda 21, the Programme for the Further Implementation of Agenda 21 and the Johannesburg Plan of Implementation;
4. The Conference, including its preparatory process, should ensure the balanced integration of economic development, social development and environmental protection, as these are interdependent and mutually reinforcing components of sustainable development;
5. It is important that there be efficient and effective preparations at the local, national, regional and international levels by Governments and the United Nations system so as to ensure high-quality inputs without placing undue strain on Member States;
6. It must be ensured that the Conference and related preparations do not adversely affect other ongoing activities;

Encourages the active participation of all major groups, as identified in Agenda 21 and further elaborated in the Johannesburg Plan of Implementation and decisions taken at the eleventh session of the Commission, at all stages of the preparatory process, in accordance with the rules and procedures of the Commission as well as its established practices related to the participation and engagement of major groups;

Invites relevant stakeholders, including organizations and bodies of the United Nations, international financial institutions and major groups involved in the area of sustainable development, to provide ideas and proposals reflecting their experiences and lessons learned as a contribution to the preparatory process;

Decides that a preparatory committee will be established within the framework of the Commission to carry out the preparations for the United Nations Conference on Sustainable Development, which will provide for the full and effective participation of all States Members of the United Nations and members of the specialized agencies, as well as other participants in the Commission, in accordance with the rules of procedure of the functional commissions of the Economic and Social Council and the supplementary arrangements established

for the Commission by the Council in its decisions 1993/215 of 12 February 1993 and 1995/201 of 8 February 1995;

Invites regional groups to nominate their candidates for the ten-member Bureau of the Preparatory Committee no later than 28 February 2010 so that they can be involved in its preparations in advance of the first session of the Preparatory Committee;

Decides that:

1. The first meeting of the Preparatory Committee was held in 2010 for three days, immediately after the conclusion of the eighteenth session and the first meeting of the nineteenth session of the Commission to discuss the substantive themes of the Conference, as decided in accordance with the present resolution, and pending procedural matters, as well as to elect the Bureau;
2. The second meeting of the Preparatory Committee was held in 2011 for two days immediately after the conclusion of the Intergovernmental Preparatory Meeting for the nineteenth session of the Commission to discuss further the substantive themes of the Conference;
3. The third and final meeting of the Preparatory Committee will be held in Brazil in 2012 for three days to discuss the outcome of the Conference, immediately preceding the United Nations Conference on Sustainable Development, which will also be held for three days. In this regard, the Commission will postpone its multi-year programme of work for one year;
4. Regional implementation meetings will become regional preparatory meetings for the Conference in 2011;

Requests the Secretary-General to submit a report on progress to date and remaining gaps in the implementation of the outcomes of the major summits in the area of sustainable development, as well as an analysis of the themes identified above, to the Preparatory Committee at its first meeting;

Also requests the Secretary-General to provide all appropriate support to the work of the preparatory process and the Conference, ensuring inter-agency participation and coherence as well as the efficient use of resources;

Encourages international and bilateral donors and other countries in a position to do so to support the preparations for the Conference through voluntary contributions to the Commission's trust fund and to support the participation of representatives of developing countries, and invites voluntary contributions to support the participation of major groups of developing countries in the regional and international preparatory processes and the Conference itself;

Decides to include in the provisional agenda of its sixty-fifth session the sub-item entitled "Implementation of Agenda 21, the Programme for the Further Implementation of Agenda 21 and the outcomes of the World Summit on Sustainable Development", and requests the Secretary-General, at that session, to submit a report on the implementation of the present resolution, including on the progress of the preparations for the United Nations Conference on Sustainable Development.

This Resolution of PREPCOM was adopted by the General Assembly, March 2010 based on the following UN documents

1 Report of the United Nations Conference on Environment and Development, Rio de Janeiro, 3-14 June 1992, vol. I, Resolutions Adopted by the Conference (United Nations publication, Sales No. E.93.I.8 and corrigendum), resolution 1, annex I.

2 Ibid. annex II.

3 Resolution S-19/2, annex.

4 Report of the World Summit on Sustainable Development, Johannesburg, South Africa, 26 August-4 September 2002 (United Nations publication, Sales No. E.03.II.A.1 and corrigendum), chap. I, resolution 1, annex.

5 Ibid, resolution 2, annex.

6 Report of the International Conference on Financing for Development, Monterrey, Mexico, 18-22 March 2002 (United Nations publication, Sales No. E.02.II.A.7), chap. I, resolution 1, annex.

7 Resolution 63/239, annex.

8 Report of the Global Conference on the Sustainable Development of Small Island developing States, Bridgetown, Barbados, 25 April-6 May 1994 (United Nations publication, Sales No. E.94.I.18 and corrigenda), chap. I, resolution 1, annex II.

9 Resolution S-22/2, annex.

10 Report of the International Meeting to Review the Implementation of the Programme of Action for the Sustainable Development of Small Island Developing States, Port Louis, Mauritius, 10-14 January 2005 (United Nations publication, Sales No. E.05.II.A.4 and corrigendum), chap. I, resolution 1, annex II. 11 See resolutions 60/1.

12 Official Records of the Economic and Social Council, 2003, Supplement No. 9 (E/2003/29), chap. I.

13 Ibid, draft resolution I, para. 23 (e).

14 Resolution 55/2.

15 Official Records of the Economic and Social Council, 2009, Supplement No. 9 (E/2009/29), and chap. I, Resolution 17/1.

16 A/64/275.

17 Official Records of the Economic and Social Council, 2003, Supplement No. 9 (E/2003/29), and chap. I, sect. A, draft resolution I, Para. 2 (j).