ADDRESS OF WELCOME

BY

ENGR. HUSNAIN AHMAD

PRESIDENT

PAKISTAN ENGINEERING CONGRESS

AT

WORLD ENVIRONMENT DAY – JUNE 05, 2010

AT

"MASHHADI HALL" of

Pakistan Engineering Congress

Honourable Chief Guest Engr. Senator Humayun Khan Sahib,
Distinguished Delegates, Members of Pakistan Engineering Congress,
Ladies and Gentlemen,

Assalam-o-Alaikum

I take this opportunity on behalf of Pakistan Engineering Congress in general and on my own in particular, to welcome you all, to this gathering, for observing "World Environment-Day" on the theme of

"Bio-Diversity Connecting with Nature – Many Species, One Planet, One Future"

I in particular extend my heartfelt gratitude to Engr. Senator Humayun Khan Mandokhel & all of you for finding some time to attend this event, which is though of global significance, yet of much more relevance in the context of Pakistan.

It is indeed my profound privilege to speak before this distinguished assembly of engineers, environmentalists as well as the stake holders concerning with the protection and conservation of the environment.

Ladies & Gentlemen!

From several years, one of the main concerns of humankind has been the ecological system and its protection. However, it is heartrending that at the same

time we, humans, the major part of this ecosystem, have almost failed to guard and preserve our natural environment, as it is.

Numerous programs have been set worldwide to overcome such problems, of which one with the support of the United Nations is the Environment Protection and Conservations Development Programme in Pakistan, which draws its inspiration from Stockholm Convention 1972. An Environment Protection Ordinance was enacted in 1983 as a starting followed by National Conservation Strategy (NCS) in 1992, culminating in 1997 with endorsement of Pakistan Environment Protection Act specifying the National Environment Quality Control Standards as a Bench Mark.

In 2001, the Government of Pakistan formulated the “National Action Plan” to arrest the ever increasing degradation of environment mainly due to man made errors of commission. However, its objectives have remained very sad to point out far cry due to individuals & institutional apathy.

Ladies and Gentlemen, connecting your attention once again with the theme of the day, I would like to focus on the importance of Bio-Diversity. Our planet is the embodiment of a multiplicity of life, which includes all plants, animals and their habitats. Around 1.75 million is the estimated number of the discovered species of organisms and according to scientists, hundreds of millions is yet to be discovered.

Life extinction, being a natural process, threatens the survival of many plants and animal species and their respective ecosystems, disappearing at alarming rates from the surface of earth which is rarely seen in history. This is mainly a result of human actions. One of the biggest threats to biodiversity is Climate Change, which has been predicted to play a major role in biodiversity loss. Incidents such as fires, floods and insect plagues are expected to become more frequent. Marine life too, is getting affected because of factors including rise in sea temperatures and increased acid levels in oceans because of higher concentration of dissolved atmospheric carbon dioxide. These effective changes in climate will also greatly impact polar ecosystems, such as thawing frost, decreased snow cover and losses from ice sheets.

Other threats to biodiversity include nutrient loading/pollution, habitat change, over-hunting and overexploitations.

According to UNDP, “Poverty and biodiversity are intimately linked. The poor, especially in rural areas, depend on biodiversity for food, fuel, shelter, medicines and livelihoods. Biodiversity also provides the critical ‘ecosystem services’ on which development depends, including air and water purification, soil conservation, disease control, and reduced vulnerability to natural disasters such

as floods, droughts and landslides. Biodiversity loss exacerbates poverty, and likewise, poverty is a major threat to biodiversity."

In the long term, the value of services lost because of change in biodiversity may greatly exceed the short term economic benefits that are gained from transforming ecosystems. When we modify an ecosystem to improve a service it provides, this also results in changes to other ecosystem services. For example, actions to increase food production can lead to number of associated detrimental results. Instances are degradation of many services, such as fisheries, water supply and protection against natural hazards.

Ladies & Gentlemen!

Let us first draw some inspiration from the Quran-e-Pak which embodies broad outlines of a complete code of life for all times to come.

> **"And it is He (i.e Allah) who has produced gardens trellised and untrellised, and the date-palms and the corn of varied produce and the olives and the pomegranates alike and unalike. Eat the fruit when ripened and pay the due of it on the day of its reaping and do not squander Surely He (i.e Allah) does not love the squanderers". (Ayat. 141 S.6 Al-An'am)**
>
> **"And the cattle. He creates them for you; in them there is warm clothing and (other) benefits, and of them you eat, And for you there is a beauty in them when you bring them home in the evening, and when you take them out to pasture in the morning."(Ayat. 5&6 S.16 Al-Nahl)**
>
> **"And sent down, from the clouds, water pouring forth abundantly. So that we may bring forth grain and herbs, and gardens thick with trees and luxuriant". (Ayat 14: 15&16 S.78 Al-Naba)**
>
> **"He (i.e Allah) has created the heavens without any pillars that you can see, and has Cast Mountains on the earth lest it should shake with you, and He has spread on it all kinds of living creatures. And we send down from the heaven (rain) water, then cause to grow therein all kinds of good things". (Ayat. 10 S.31 Luqman)**
>
> **"And those who, when they spend, are neither extravagant nor niggardly, but hold a medium way between those (both)". (Ayat. 67 S.25 Al-Furqan)**

Ladies & Gentlemen!

The Quranic injunctions are for a balanced utilization of natural resources so that the ecosystem created by nature is not disturbed and negation of which

will spell doom for the very survival of all living beings. However, what is happening is over-utilization / over-exploitation of resources due to utter consumerism, commercialism and human avarice, achievement of higher GDP growth (Gross Domestic Product) and complete over-shadowing of percolation of economic benefits to the common folk (i.e. General Welfare of the People). It has brought havoc.

The matter has been admirably enunciated in an article "Towards Green Socialism" by Mr. Iqbal Jaffar that appeared in a Daily News paper recently.

"Global warming, dying forests, vanishing life-forms, polluted soil, air and water, fast depletion of non-renewable resources, are some of the wages of our sins against Mother Nature. The earth, ravaged, mauled and battered by greedy humans would, in time, be a desolate place where birds may sing no more nor flowers bloom. Each of those catastrophic changes in ecological equations can be traced to unrestrained consumerism that feeds on human greed and the primordial instinct of acquisition, intensified by saturation advertising that makes invention the mother of necessity. It has created what Alvin Toffler calls 'throwaway culture' where the level of prosperity can be measured by the amount of garbage produced. It has been calculated that if the whole world were to consume at the level of a typical West European consumer, we would need the resources of two more planets like this earth. India and China alone would need one whole planet for themselves".

What causes our world to face this menace is predominantly the Global Warming, which is though, entirely due to man made depredation.

- Environmental experts have visualized that unless the present levels of **"carbon emissions"** are drastically reduced, there will be earth-shattering 2-degree-celsius increase in global temperatures by 2050. The "Copenhagen" formulations will even if scrupulously implement would arrest the increase at the most by 1-degree Celsius.
- A second study by sustainability institute of USA reveals that "Copenhagen" proposals will possibly result in 3.9 degree increase in world temperatures by 2100.
- A German study reveals that even if "Copenhagen" proposals are fully implemented, there will be approximately 3.2 degree Celsius increase in temperatures by 2100.
- The UNEP's chief spokesman Nick Nuttal is reported to have said,

  "It becomes increasingly difficult to achieve reduction and increasingly costly if you wait".

Pakistan ranks amongst lowest greenhouse gas emitters on the world (i.e.135th), but in terms of impacts / vulnerability it ranks in the top 20 category.

The leading greenhouse gas emission polluters & further predictions in their respect are as,

		Million Metric Tons of CO_2		
		2007	**2020**	**2050**
1	China	8106	11,292	16,232
2	U.S.A	6087	6308	7098
3	European Union	4641	4804	6912
4	India	1963	3194	5027

Likewise, the Deforestation rate is increasing simultaneously, as a Harvard university icon has characterized the destruction of 50-Million acres of tropical rain forests annually to the extinction of the age of dinosaurs. A study about determination of Gross Forest Cover Loss (GFCL) has revealed that the;

- Gross forest cover loss both due to natural and human induced causes has been estimated at 10, 11,000 km^2 from 2000-2005. It is 3.1% of the total forest area of 32,688,000 km^2.
- The loss was greatest in Brazil (165,000 km^2) & in Canada (160,000 km^2).
- Every day 80,000 acres of forests vanish from the earth.
- The menace of deforestation has increased by 8.5% from 2000-2005.
- In Brazil the forests are being decimated for expanding human habitats and agriculture. In Indonesia, it is to raise Palm plantation, edible oil plants.

An extract from an article, by Mir Muhammad Ali Talpur (Dawn Lahore), says;

“Greed prompts rampant deforestation whose effects include destruction of corals, degraded watersheds, denuded uplands, landslides, flooding, silting of rivers and dams, extinction of thousands of species, heavy soil erosion and the greenhouse effect. Forests influence climate change mainly by absorbing atmospheric carbon dioxide. When forests grow, wood, leaves and soil absorb atmospheric carbon; because of the forests’ ability to absorb and store carbon they are considered “carbon sinks”. Deforestation insidiously strangles all life support systems on earth and has serious consequences for all ecosystems and biodiversity.”

Whereas the population of Pakistan is 169 million and it is increasing at an annual rate of 2.49% i.e. the sixth most populated country. Pakistan ranks at 6th number in population & at 110 numbers in terms of forest with 2.28% of the land area, a miserable position. With 4.6% decrease in woody biomass due to indiscriminate & un-checked deforestation by Timber Mafia, Housing Barons over-grazing and cutting of trees for fuel wood. At this rate, the forests will hardly survive 10-15 years.

Grazing and Fodder Collection

The direct cause of degradation is increase of domestic live-stock. There is a continued increase at the rate of 2% per year with the result that persistent over grazing reduces the forage production in range land to one-third of the potential – a loss of almost 50 million tons per year. The problem is rather serious in Balochistan.

Soil Erosion

Both wind and water erosion is exacerbated by a reduction in vegetation cover. Water erosion is not only a particular problem in the Northern Areas and the NWFP (now Khyber Pakhtunkhawa), but it also affects the agro-ecosystems of the barani lands. About 11 million hectares are affected by water erosion and the consequent washing away of soil. Water erosion results in increasing sedimentation of wetlands and results in habitat degradation.

While wind erosion is not as severe a problem as water erosion, some 2 million hectares of the land (of which 1.5 million hectares are in the Punjab) are experiencing moderate to severe wind erosion. The light soils of the Potohar Plateau and the sandy soils of the Thal and Cholistan deserts are particularly vulnerable. The sandy deserts of Thal, Cholistan, Thar and Chagai-Kharan suffer from the linked problem of shifting sand dunes. In Balochistan, excessive pumping of groundwater has led to falling water-tables, with the result that vegetation cover is decreasing and soil erosion is on the rise.

Drainage

Many small but valuable wetlands created by seepage or overspill from the massive irrigation system in the Punjab are threatened by drainage for agricultural land use. Others are threatened by the discharge of saline water into the wetland, or by falling groundwater levels due to drainage programmes.

Hunting and Trapping

Due to illegal hunting for sport, meat and trade, many bird and animal species are experiencing population declines. Some species are ruthlessly persecuted for their depredations on livestock or agricultural crops. Virtually all large mammals have declined in number and their range has been reduced.

Fishing

Marine catch has steadily increased and further catch increases are not possible without depleting stocks. The valuable shrimp fishery has already begun to show signs of over-exploitation: the number of boats has risen rapidly; there is a tendency to fish in shallower waters; and there is an increased proportion of young shrimp in the catch. Concern has also been expressed about the incidental take of marine turtles by commercial shrimp trawlers using mechanized nets. The introduction of new technology and bigger fishing trawlers has also increased the tendency to over-exploit the fishery resources.

Overfishing is also native fish species in some rivers in Balochistan and Kinjhar Lake. The extent of marine pollution is deplorable considering the fact that the country had certain agencies to check marine pollution and the country is a signatory to various international conventions on marine pollution.

The industrial waste discharged into the environment deteriorates the quality of aquatic environment and affects the fish resources as well as aquaculture in coastal waters. The fish collected from the coastal waters are likely to be unfit for human consumption.

Pollution of coastal areas, rivers and the sea

Chemicals are extensively in use. Eighty per cent pesticides were used to protect cotton crops. The use of pesticides had tremendously increased over the years, about 71.56 tonnes of pesticides worth about Rs.198.48 million was in use at present. The use of chemicals is totally banned in a number of countries but not in our country. Now the world has moved to Biological Agriculture.

The release of untreated waste from factories and power plants are two major sources of contamination of the coastal soil and seawaters. The POPs pesticides are hard to destroy and gradually affect the entire ecosystem and enter the food chain. The agricultural wastes loaded with pesticides and fertilizers also reach the coastal waters through River Indus and its tributaries.

Disposal of Solid Waste

Karachi with a population of 18 million generates about 8,700 tonnes of municipal waste, besides about 2,000 tonnes of industrial waste, construction waste and hospital waste everyday. About eighty per cent of the waste is generated in the areas governed by the city government.

It is a general practice that people through their hired sweepers get garbage dumped at roadside collection points. Garbage trucks of the city government, towns and cantonment boards are driven on defined routes, largely main roads, to collect waste from these dumps and transport it to designated landfill sites. However, garbage bins are inadequate in many areas where

rubbish is dumped in the open and in the shanty towns where garbage is not collected at all, people throw rubbish into open drains and any vacant piece of land. Less than half of the total waste generated in the city (i.e. about 4,000 tonnes per day) finally reaches the two regulated dumping sites. Half of the remaining garbage is scavenged through by those hired by privately run recycling units, and the other half is burnt in kutchra kundi by the sweepers of the municipality and other scavengers to pick metal objects from the ashes.

Many areas of the city are exposed to the poisonous smoke which is certainly hazardous for health. As the use of non-degradable plastics is very common, dioxin and other hazardous chemicals are also produced in addition to carbon dioxide and carbon mono-oxide. Dioxin is dangerous at extremely low levels. In addition to dioxin, carbon monoxide and carbon dioxide may also be poisonous in high concentrations.

Few recommendations are put forward in order to bring some stability in the ecosystem like,

- A crash programme for enhancing forest area needs to be launched with the public private participation especially mobilization of students community.
- Deforestation by timber mafia and Housing Barrons needs to be checked sternly to combat decrease in forest area, spread of desertification and drainage in catchment areas.
- Environment Protection Agencies are in place in all provinces and ministries at provincial / federal level. Also Pakistan Environmental Protection council established as far back as 1983. It was regulated to meet bi-annually. However, since its inception 27-years ago, it met 11-times only.
- The air we breathe is more poisonous than ever, the water of streams, rivers & even groundwater is unsafe for human consumption, that garbage ends up in streets, that lakes & forests are receding and above all climate change is threatening the supply of food & fiber. What is needed is a well through-out and co-ordinated plan of action both at private & public level to stem this rot.
- Establishment of commercial nurseries on a massive scale for supplying saplings needs to be done. It will also generate hefty profits.
- Great potential exists for irrigated plantation in the country. It involves cost free supply of 10% canal water & land. The practice is missing in Balochistan. This lacuna may be removed

- Juniper & Chilghoza pine forests of Baluchistan need to be protected. Some of the juniper trees are stated to be 1500 years old.
- Big-chunks of forest land are being allotted for non-forest uses. It should be banned and need necessary legislation.
- Wetlands i.e. coastal wetlands, lagoons, coastal peeps, delta's, mangrove swanks, wetlands associated with streams, lakes need conservation as these provide habitat for mammals, birds, fish etc as well as source of fuel wood, rice paddies.
- Waste disposal should be privatized / used for generation of electricity and supply of re-cycled materials.
- Alternate sources of energy ought to be exploited to control greenhouse gas emissions (solar, wind, nuclear etc).

Our considerations should, therefore, flow accordingly. We need to think to protect our future from the associated negatives of dishonor to the biodiversity, so as to keep our globe healthy and live for our generations to come.

WORLD DAY-2010
GLIMPSES THE EVENT



From Left Engr. Husnain Ahmad President, Pakistan Engineering Congress, Engr. Senator Humayun Khan Mandokhel Chief Guest of the event and Engr. Ch. Ghulam Hussain Vice-President / Secretary Pakistan Engineering Congress.



Engr. Husnain Ahmad, President Pakistan Engineering Congress presenting his Welcome address on World Environment Day-2010.



Chief Guest Engr. Senator Humayun Khan Mandokhel speaks at the event.



From Left Engr. R.K. Anver, Vice-President, Pakistan Engineering Congress, Engr. Senator Humayun Khan Mandokhel, Chief Guest of the event, Engr Husnain Ahmad President, Pakistan Engineering Congress, Engr. Ch. Ghulam Hussain Vice-President / Secretary, Pakistan Engineering Congress



Engr. Husnain Ahmad President Pakistan Engineering Congress answering questions of news media, 2nd from left Engr. Senator Humayun Khan Mandokhel, the Chief Guest



Engr. Senator Humayun Khan Mandokhel answering questions of the news media. From second to left Engr. Husnain Ahmad President Pakistan Engineering Congress. Also seen in the picture are Engr. R.K. Anver Vice-President & Engr. Ch. Ghulam Hussain Vice-President / Secretary Pakistan Engineering Congress



From Left Chief Guest Engr. Senator Humayun Khan Mandokhel and Engr. Ch. Ghulam Hussain Secretary Pakistan Engineering Congress



From Left Engr.Husnain Ahmad President, Pakistan Engineering Congress, Dr. Izhar-ul-Haq Vice-President Pakistan Engineering Congress and Engr. Ch. Ghulam Hussain Secretary, Pakistan Engineering Congress



Engr. Husnain Ahmad President Pakistan Engineering Congress presenting shield to Dr. Izhar-ul-Haq Vice-President, Pakistan Engineering Congress on the eve of World Environment Day -2010



Chief Guest Engr. Senator Humayun Khan Mandokhel presenting shield to Mr. Usman-E-Ghani, Joint Commissioner in the office of Pakistan Commissioner for Indus Water.



Engr. Husnain Ahmad President Pakistan Engineering Congress Presenting Shield to Chief Guest Engr. Senator Humayun Khan Mandokhel.



Engr. Dr. Izhar-u-Haq Vice-President Pakistan Engineering Congress presenting Shield to Ms. Umarah Mubeen, 2nd from left Engr. Ch. Ghulam Hussain Vice-president / Secretary Pakistan Engineering Congress



A view of the audience



A view of the audience



A view of the audience



A view of the audience



A view of the audience