Text of the speech

Ladies and Gentleman,

It is indeed a matter of great satisfaction that the learned congregation at this notable conference would be dealing with a very vital issue that has Global significance and a substantial impact on sustenance of planetary conditions conducive to human life and habitation alike.

It's a matter of common knowledge that in the solar system earth is the only planet which by virtue of the facilitating naturally evolved conditions have resulted in evolution of life and its sustenance over a period of time. One of the most significant aspect, which one is required to take note of is, the rapid degradation of air quality, which has become a matter of grave concern because the same has come to stay as a cause of substantial consequence that has endangered the human life as a whole.

We are all aware that air pollution occurs when harmful substances including particulates and biological molecules are introduced into earth's atmosphere. The resultant consequence is degradation of the air quality, which causes diseases, allergies, morbidities of wide and varied types which also end up in substantial mortality. This environmental degradation as a result of air pollution causes substantial harm to other living organisms, to food crops and also damages the natural environment. Human activity and natural processes also add to the air pollution.

Indoor air pollution and poor urban air quality are listed as two of the world's most toxic pollution problems. According to the 2014 WHO Report Air Pollution in 2012 caused the deaths of around 7 million people worldwide. In the Indian context it is quite a serious issue in terms of the material fact that major sources of air pollution are fuel wood and biomass burning including large scale crop residue burning in the autumn and winter months. A 2013 study on non smokers revealed that Indians have 30% lower lung function capacities as compared to Europeans.

India is the World's largest consumer of fuel wood, agricultural waste and biomass for energy sources. The available records bring out that India uses nearly 148.7 million tons

coal replacement worth of fuel wood and biomass annually for domestic energy use. India's National Average Annual Per Capita Consumption of fuel wood, agri-water and biomass cakes is 206 kgms. coal equivalent. In addition the country burns over 200 million tons of coal replacement worth of fuel wood and biomass each year to meet its energy need for cooking and other domestic use. As such, the overall contribution of fuel wood, including sawdust and wood waste is about 46% of the total, the rest being agri-waste and biomass dung cakes. The extent of emission which is generated is about 165 million tons which is put into indoor and outdoor air every year.

In contrast, it is estimated that the fire wood smoke contributes about 4.26 lac tons of particles throughout the United States mostly during the winter months. United States consumed about 1/10th fuel wood consumed by India and that too it is availed mostly for fire place and home heating purposes. It is also estimated that residential wood combustion in USA accounts for 44% of total organic matter emissions. The fuel wood source residential wood smoke makes up over 50% of the winter time particle pollution problem in America, specially more significantly in California. It is interesting to note that the State of California alone has the number of vehicles which would be more than the total number of vehicles in India.

Realistically speaking the generic causes of Air Pollution Worldwide in addition to burning of fossil fuels are –

- 1) Agricultural Activities
- 2) Exhaust from Factories and industries
- 3) Mining operations
- 4) Indoor Air Pollutions
- 5) Vehicles and Transportation

The important effects of Air pollution broadly are –

- 1) Respiratory and heart problems
- 2) Global warming
- 3) Acid rain
- 4) Eutrophication
- 5) Adverse effect on wildlife

6) Depression of ozone layer

As such, the inevitable conclusion is that if the malady of degradation of quality of air remains unchecked, it will endanger the human life in its entirety. It is therefore, an inevitable imperative that diligent stock of the same is undertaken at all levels, so as to tackle the problem with definitive action plans including required policy frames across the world.

The Global burden of disease study for 2010 published in 2013 had found that outdoor air pollution was the 5th largest killer in India and around 6,20,000 early deaths occurred from Air pollution related diseases in 2010. According to a WHO study 13 of the 20 most polluted cities in the world are in India, however, the accuracy and methodology of the WHO study was questioned by the Government of India.

It is true that developmental perspective cannot be lost, but then the same cannot be at the cost of grossest environmental degradation including air pollution in a rampant manner. Precisely for this reason the concept of 'sustainable development' needs to be deciphered in its letter and spirit and also give a translatory mode in terms of a judicious blend between mechanized techno-based development along with environmental protection.

In operational reality 'sustainable development' is the core organizing principle for meeting 'human development goals' while at the same time sustaining the ability of natural systems to provide the natural resources and eco system services upon which the economy and the society depends. The desirable end result is a state of society where living conditions and resource use continue to meet human needs without under mining the integrity and stability of the natural systems.

The Brundtland Report clearly spelt out that 'Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs. The two key concepts incorporated in it are the concept of needs, which embodies the needs of the poor and marginalized of the world which are to be prioritize and the idea of

limitations on the environments ability to meet present and future needs'. This therefore, mandated the UN General Assembly to formally adopt in September, 2015 the 'universal, integrated and transformative agenda of sustainable development conceptualizing 17 sustainable development goals, which are to be achieved by every country from 2016 to 2030'.

It is for this significant reason as well, the 'modes, manners and mechanisms' on this count also have to be viewed seriously in the context of grave inequities that govern the developed and the developing part of the world including their compulsions and also palpable paucity of the available resources required for a focused, meaningful and purposive protection of the environment. This will mean and means Global integration and co-operation in the name of 'hand-holding' and also 'resource sharing' because it is not a problem of a country in isolation but is a Global issue and hence needs to be tackled Globally through the process of concerted efforts, holistic in nature and 'integrated' in character.

It is a matter of reality that the problem of Air pollution can be tackled by the approaches, which may include –

- 1. Conservation of energy
- 2. Availing the concept of Reduce, Reuse and Recycle
- 3. Emphasis on clean energy resources availing clean energy technologies
- 4. Optimal use of energy efficient devices
- 5. Use of public mode of transportation

The venturing in the direction of availing clean energy technologies like Solar, Wind and Geothermal is a substantial avenue to deal with the problem of air pollution. Governments of various countries have been providing grants to consumers for installation of solar panels for the energy usages, which has turned out to be a modality of substance to curb air pollution.

The core purpose of flagging these issues is not an exercise of 'informational update', but is to make all of us ponder over the 'vital concerns and the inevitable challenges',

which are confronting the entire human population of the World and making everybody realize that 'piecemeal approach' will not generate desired dividends and results on the contrary concerted efforts with committed understanding alone would be in a position to create a silver lining to the otherwise dark hovering clouds.

Let us therefore venture into serious well meaning and focused discussions and deliberations at this Summit to generate a decisive directional initiative, which would make a difference for our mother planet, so as to be a worthy place of human habitation and render an answer to the otherwise bleeding pathos of mother earth weeping and saying 'Oh. Man What You have made me as from what I used to be for you'.

Jai Hind