

## **English Version**

*In the name of God, the Compassionate and the Merciful*

**Remarks of HE, Mr. Hassan Shafti  
Vice-Minister of the Communications and Information Technology  
&  
President of the Iran Space Agency (ISA)**

**In the opening ceremony of the  
United Nations/Islamic Republic of Iran Regional Workshop on the Use of Space  
Technology for Environmental Security, Disaster Rehabilitation and Sustainable  
Development  
8-12 May 2004, Tehran**

Obeisance to the Heaven that,

Put the concept of the infinity in the boundless space and blessed the mankind with wisdom and knowledge and put no end to the extent of his intellect, thought and potential.

I appreciate presence of all the distinguished guests attending this gathering for interaction and to exchange their views, and knowledge for effective use of space.

I appreciate His Excellency Dr. Motamedi, the Honorable Minister of Communications and Information Technology that due to the importance of the issue will open the workshop. I also extend my gratitude to the Office for Outer Space Affairs that jointly with the newly established Iran Space Agency organized this workshop. I present my appreciation to the United Nations High Commissionaire for the Refugees, the Food and Agriculture Organization of the United Nations, the International Strategy for Disaster Reduction, and European Space Agency for their cooperation in organizing the workshop. My sincere thanks are given to Iran Air (Homa), Ministry of Foreign Affairs, and the director and staff of the Homa Hotel Group for their kind cooperation and assistance. I cordially welcome all the distinguished guests from different countries that are present here and finally I appreciate presence of the scholars, experts and colleagues that are actually the hosts of this workshop.

Excellency the Minister,

Dear International Friends and Guests,

Excellencies,

Scholars and Scientists,

Colleagues and Experts,

Ladies and gentlemen,

The importance and position of the space technology for sustainable development, environmental protection, disaster rehabilitation, is not well recognized at least in the developing countries, however, I believe that all participants in this hall agree on this point that the space technology may considerably contribute to the management of the disasters such as disaster reduction, and preparedness, rehabilitation and assistance to refugees. Furthermore, environmental protection, preventing of losses and finally sustainable development are very interrelated.

To reach a unified point of view and taking practical measures, it seems that firstly the philosophy and proper trend by the leaders of the world is required in exploiting and development of space science and technology for increasing the quality of life. Secondly it is necessary to exert this philosophy through the effective use of space technology by the experts and specialists. Thirdly, strengthening the fundamentals of the culture of use and the space technology infrastructure in each country, in addition to the regional and international cooperation and finally strengthening the role of international bodies particularly the United Nations are highly required.

My further comments will be mainly aimed to elaborate about my previous comments.

Let me commence my remarks with a glance to some amazing phenomena taking place in our small planet:

- The humanity commenced last century with the recognition of the structure of the **atom**; recognition of what was known as the tinniest object or “zarreh” [particle], the name that we have given to it in Persian language. However, last century came to the end with the recognition of the universe; what has been ever supposed to be infinite.
- At the same period, from the long list of the natural disasters occurring in different corners of the earth, approximately thousand times the earth trembled and caused heavy losses and casualties, let alone the other natural catastrophes and disasters
- Last century was also witnessing the most tragic crimes and social damages like poverty, contempt, starvation, deprivation and other unnatural or manmade disasters ever in the history of the humanity.
- At the last three or four decades of the last century the growth of the science and technology in the fields of micro-electronics and aerospace led to more broader achievements than what the humanity gained during the whole history. However, at the same time the natural resources were also consumed or destroyed at the same amount or more as in the human history.
- Broadness and diversity of the types of environmental destruction, deforestation, decrease of the aqueous resources, greenhouse gases impacts, warming of the planet Earth, decrease in water and air quality, and tremendous and effective loss of the land degradation are the samples of the environment’s trend towards the destruction. The disasters are ever responsible for the large losses and damages.
- It is said that the Earth’s age is 4.5 billion years and in this long period of time the natural environment has blown the healthy gases to the atmosphere of the earth. On the hand, the population of the planet Earth has grown from one billion in the seventy century to six billion presently. Each person releases one tone of carbon to the

atmosphere yearly, while the population of the earth augments 90 millions in a year and the population of ten billion for the year 2050 is predicted. This leads to the decrease of their share for water, air and land day after day.

What is said above briefly, shows clearly that since the time of the recognition of the tiniest particle- atom – to the recognition of the biggest reality-infinite space- although the humanity has had many solutions before himself, the solutions that was presented by the scientists, researchers and experts, however, the appropriate philosophy, wisdom and optimal management for leading the issues in the direction of the growth and accomplishment of the humanity have not been applied.

In other words, the world has not been so successful in the implementation of the solutions, not for the reason that the solutions have not been correct but due to the failure in our approach and philosophy in recognition of problem or lack of justice in the implementation of the solutions.

Presently, at the beginning of the third millennium, the humanity has before him a huge amount of scientific findings in one hand and the large number of risks on the other hand. More than two third of the world population are threatened by malnutrition or starvation and the world is ever divided to developed and developing societies.

If we accept that the physical and mental health, environmental health, human rights, peace and tranquility, research and training, joyful and pleasant coexistence with the nature and all the constructive and peaceful aspects that are all the achievements of the human civilization, are not a privilege but is indeed a need, then we will be convinced that the environmental protection, disaster rehabilitation and management, and sustainable development are also not a privilege but a need of the whole human society.

Now at the beginning of the third millennium, space science and technology are in our disposal, and there are many unknowns and uncertainties yet to be discovered -the infinite blessings for the limited needs- that their management and exploitation affects our future and next generations, and this is a common ground in the fate and future of the humanity. Furthermore, the threats caused by the disasters, hazardous environment and finally the dangers of underdevelopment are the common threats.

Increase in the exploitation of that blessings and decrease in the losses of this threats is a common ground and the goal for each community. This common ground needs exchange of views, interaction, international and regional dialogue and cooperation by the experts, scientists, scholars, politicians and economists. In other words a collective effort and close cooperation are strongly needed so that the future will be set as its must be and not in the way as it goes to be.

This workshop is being organized with such the aim and goal of exchanging views, interaction, international and regional dialogue and cooperation in the effective use of space technology for the environmental protection, disaster rehabilitation and sustainable development.

Nowadays, in the applications, space science and technology in general and remote sensing in particular plays an important role in the human resources, effective protection and use of the natural resources, population control, communications, natural resources

management, meteorology, geology, surveying, transportation and many other fields needed for increasing the quality of life.

The topics such as space technology application for salvage and disaster rehabilitation, sustainable development, climate change, draught, environmental pollution, sea level fluctuation and other issues like the social impacts, space technology and infrastructure in each country, as well as small satellite applications, communication satellites, meteorology, navigation and high resolution earth observation satellites are suitable for exchange of views.

On the other hand, remote sensing and its applications, despite of its excellent potentials, still has different limitations, for instance:

- 1) Remote Sensing cannot yet practically provide data from the depth of the land and oceans, and is confined only to surface or near surface. Furthermore, although it is capable of pre-warning about some disasters, it is not capable of pre-warning about all disasters, further research and investigation in this connection is well needed and is under way.
- 2) Although the number of the remote sensing satellites seems to suffice the needs of the world's people, the distribution and access to the data is limited and is not sufficient. Most of the data that are effective for the peaceful as well as development purposes are available in some countries but inaccessible by the others, and the data exchange is not carried out conveniently and effectively.
- 3) The increased trend for quantitative mapping of earth resources as compared to the traditionally used qualitative maps is an example of resulting innovation, leading to more precise analysis, mapping and monitoring of Earth system. Although these advances are very encouraging, as long as the problem of data availability and training opportunities for effective use of the data are considered, major differences exist between the developing and the developed countries.  
  
There is a need for development of more efficient policy for distribution, capacity building and intensive use of the technology to fill the existing gaps between different countries.
- 4) Education and research especially in the developing countries have not properly found its way and its place, the culture and importance of the use of space sciences is not popularized at least in the developing countries.
- 5) Exploitation and use of satellite data in the developing countries is not still popularized and the close connection between the developing and developed countries for solving the problems is a necessity.
- 6) The problems such as study and preparing the land cover maps, water resources management, education, training and capacity building, climate change, and natural disaster management needs to be tackled in the global level in addition to the local level.
- 7) The need for strengthening regional activities, setting an action plan for space technology applications and establishing a regional database for knowledge and data distribution for environmental and disaster management, as well as contributing in research studies are evidently felt.

It seems that overcoming the scientific and technical obstacles only some of which as examples were mentioned above could be achieved through the continuation in the exchange of views, research and gatherings like this. Furthermore, strengthening the existing offices of the United Nations for a global and wider role in the fields of knowledge based development and distribution of data cannot be overemphasized. In general, the need for a kind of strategy and global supervision in each case is felt completely and its time has reached.

Our country with the area of 1,648,195 square kilometers, and the variety of climate, environmental and geographical conditions is amongst the countries under the risk of the natural disasters such as floods, earthquakes, draught and so on. Good study has been carried out in Iran concerning the natural disaster management, meteorology and environmental protection and valuable experience has been gained in this connection.

Moreover, in the field of the aerospace, we have taken effective steps forward in capacity building in aerospace sector through training the specialized manpower in undergraduate, postgraduate and PhD levels in the recent two decades.

Furthermore, with the establishment of Iran Space Agency in the recent months, our country took a very fundamental step forward. Iran Space Agency will have an important role at the outer space, enhancement of knowledge and experience, and extensive cooperation at the regional and international level. This cooperation will also include the design, manufacturing and launching national and regional satellites.

Our expertise now with an appropriate background of knowledge and expertise are prepared to take more active role in the international collaboration and cooperation.

In conclusion, I wish to praise the United Nations Office for Outer Space for follow-up action of workshop activities until its final international consensus to arrive at immediate and practical solutions. I wish success for the workshop in achieving all its goals and also wish a pleasant and enjoyable stay for all our guests from different countries.

I hope our mutual efforts will lead to serving the present and future generation in somehow different to the past century but more appropriate to human dignity and needs, and that our effort will have a share in the global efforts for better quality of life by benefiting from wise and effective use of outer space technology for human prosperity.

Thank You