

OPENING
SPEECHES

OPENING SPEECH BY
HIS EXCELLENCY İHSAN SABRİ ÇAĞLAYANGİL
THE PRESIDENT OF TURKEY

Honorable delegates and participants to the Seventh World Conference on Earthquake Engineering.

I extend to all of you my warm welcome to Turkey on the occasion of this important Conference. Turkey is one of the countries which suffer the most from seismic disasters. In order to mitigate the effects of earthquakes, our related Ministries and Universities are making a concerted effort in the framework of the Turkish National Committee on Earthquake Engineering.

It is also a point of interest to note that UNDR0 which is a United Nations body to take post disaster measures, had been proposed by the government of Turkey ten years ago. And as the Minister of Foreign Affairs of the Turkish Government of that time I have the personal honor of having made this proposal. I have the greatest pleasure of opening the Conference of the International Association of Earthquake Engineering on its twenty fifth anniversary.

I trust that the Conference will serve the purpose of advancing the state of the art of Earthquake Engineering in Turkey and all over the world.

It is an inspiring accomplishment for humanity that the effects of natural disasters such as earthquakes may be diminished by scientific and technical intervention.

I wish all the success to the Conference and extend my warmest welcome and regards to all the participants and delegates.

area where 95 percent of its population lives has been designated as earthquake-prone, such measures are vitally important. My country has been subjected to 46 major earthquakes during the 57 years since the founding of the republic. Statistics indicate that these earthquakes have caused, on the average, 1250 deaths, 1980 injuries and 7526 total or irreparable damage for dwellings every year. I want to emphasize that no really major earthquake has occurred in highly industrialized regions with the heaviest concentration of the population. It is evident that with 99 percent of the major industrial centers and 92 percent of large dams located in areas likely to be subjected to varying degrees of earthquake hazard, the protection of national resources against the negative influences of seismic events is of the utmost importance.

Statistics such as I have quoted do not fully reflect the effect of what we term as earthquake hazard, because they do not express social and psychological losses. Also, indirect losses such as unemployment price increases caused by the interruption of industrial output, domestic or external emigration, tax fluctuations, expenditures required for the repair or replacement of lost industrial components and the consequent high interest loans are capable of triggering economic and social problems on a major scale. Developing countries such as Turkey therefore need to protect their resources against earthquakes with a good deal of care. My ministry is in charge with this important task. We are also charged with the responsibility of considering the earthquake contingency for urban and regional planning and preparing or updating building codes and other regulations.

We have reached the conclusion that during the immediate future, reduction of the loss of lives is possible through the repair and strengthening of existing rural housing. At the present, 75 percent of rural homes in Eastern, Southeastern, and Central Anatolia have inadequate resistance against earthquakes or have reached the end of their economically useful lives. Prevention of death and injury caused by earthquakes is possible only through replacing or renovating these units with simple and effective means. Such an undertaking has been initiated by the Government of Turkey with financial support provided by the European Housing Fund. I am particularly pleased that in addition to professional studies on the design and construction of earthquake resistant buildings, attention is also being paid to the repair and strengthening of existing structures during this Conference. I am, of course, aware that discussions and presentations concerned with the entire spectrum of activities related to earthquake engineering will be made during this Conference. Mitigation of earthquake hazard is possible with the active participation of people from all branches of science in the effort directed toward the solution of problems caused by earthquakes, and a vigorous campaign involving political leaders, administrators, and the people at large. The rapid growth and maturity attained by earthquake engineering and engineering seismology indicates that much can

be accomplished in realizing this ultimate goal. I am also hopeful that as a result of untiring efforts that you will be making in the near future, great strides will also be taken towards predicting the occurrence of earthquakes with a large degree of accuracy, or controlling their size.

Before concluding, my remarks I wish to express my hope that this Conference will prove to be beneficial for all mankind. I also hope that you will find it possible to explore the historical, cultural, and touristic wealth of my country, and become familiarized with the traditional Turkish hospitality. Finally, I wish to acknowledge gratitude on behalf of my government to all those who have contributed towards the organization of the conference, to our host universities, to members of the Earthquake Research Institute of my Ministry and to Professor Rifat Yarar, president of the Turkish National Committee on Earthquake Engineering. May God spare mankind from natural disasters and aid you in your honorable effort.

Thank you.

OPENING SPEECH BY
MR. NEVZAT AYAZ
THE GOVERNER OF ISTANBUL

Honorable delegates to the Seventh World Conference on
Earthquake Engineering, Ladies and Gentlemen'

It is a great privilege for me to welcome you on behalf of the City of Istanbul. We are honored to host the seventh of these conferences whose aim is the dissemination of knowledge aimed at reduction of the damaging consequences of earthquakes through engineering measures.

I am confident that scientists from many countries of the world will have the opportunity to share the results of the newest discoveries and research with one another. The work you accomplish will enable great progress to be made towards the ultimate objective of protecting mankind against earthquakes. I wish all of you success in this task which requires long and hard work. Thank all those individuals who have contributed towards the organization of what we hope will be a most successful and fruitful gathering for the benefit of mankind. Thank you.

OPENING SPEECH BY
PROF. JAI KRISHNA
PRESIDENT OF THE INTERNATIONAL ASSOCIATION
OF EARTHQUAKE ENGINEERING

The Honorable Minister, Mr. Governor of Istanbul, Distinguished Guests, Delegates to the Conference, Ladies and Gentlemen.

On behalf of the International Association of Earthquake Engineering, I have a great privilege and honor of extending to you all and specially your Excellencies a very cordial welcome to this conference. First of all, I wish to thank the Turkish Government and the Turkish National Committee for Earthquake Engineering for the invitation to the International Association to hold the 7th World Conference in Istanbul. I have no doubt that the National Committee led by Prof. Rifat Yarar has put in long hours in arranging such a big conference and I am sure all the delegates will join me in voicing our deep appreciation for the effort they have put in. I hope our Turkish friends will find it satisfying to have managed such a successful conference.

Ladies and Gentlemen, among natural phenomena, earthquakes constitute the most unpredictable and unpreventable occurrence. In terms of loss of life due to earthquakes, the figures may not be impressive, since a common event like a road accident results in ten times more loss during the same time but, in terms of property destruction, they have no parallel, nor have they one in terms of speed with which they strike and bring about a disaster. Bulk of the destruction that an earthquake causes takes place in 5 or 10 seconds. It is this type of force and its consequences on man-made structures and the remedies to minimize disaster that this gathering is meeting this week to discuss and, I hope, the delegates return home wiser through exchange of experience and information.

Most of the countries of the world suffer from earthquakes - some less and some more, but so far only 33 countries have organized groups of people working in this field. These countries constitute the International Association at present but I hope others will also join soon. The association is rather young in years having been formed in 1963 after the 2nd World Conference but has rendered useful service. Turkey is one of the founding members.

Turkey is one of those countries that has suffered continuously through a series of earthquakes particularly in the last 20 years. Other recent disasters have overtaken countries like Iran (repeatedly), China, Peru and Guatemala. It will be seen that in most cases disasters result from the failure of the common man's dwelling. It will be a safe estimate to say that more than 80 to 90 % lives

and property are lost through the collapse of such construction. I would, therefore, like to draw the attention of the scientific community to this aspect and request them to devote as much time as they could spare on this single problem. It is recognized that this problem does not have a common solution for all countries but there are certain basic principles which are applicable everywhere.

The International Association is attempting to prepare a Monograph containing information on the common principles which the international community may make use of in establishing design practices in their countries, and in this, very special attention is being paid to the problem of the common man's dwelling.

It may be appropriate to mention that, although earthquakes have been occurring from times immemorial, yet major scientific advances have been made to understand the occurrence of the phenomenon only in the last 25 to 30 years. It may perhaps not be too much to claim that the credit for accelerating the pace of research goes to the holding of the World Conferences by the International Association since it provided a forum to the scientists to exchange ideas and share experiences with each other. It will be borne out by the fact that the number of papers submitted to the world conferences, inspite of the several regional conferences held in various parts of the world, has multiplied into a large or maybe almost an unmanageable number. The association may have to think of changing the pattern of the conference or the pattern of its publications to make the task of selecting and printing papers within a reasonable size. Total number of pages printed this time is about 6000. All those engaged in this task of getting this job done deserve our sincere thanks. I should also like to take this opportunity of thanking all the reviewers who fully cooperated with me, inspite of their being busy otherwise, in giving their views about the papers submitted. It made our task much easier.

It is my hope that in the next few days all delegates will have ample opportunities to express their views and discuss the important problems in relation to preventing disasters in future earthquakes and thereby serve humanity, which can ill - afford to divert its attention and resources repeatedly to reconstruct what was useful before an earthquake.

I once again thank our Turkish hosts for their hospitality and congratulate them on excellent arrangements made for the conference. I specially thank you Mr. Minister, for gracing the occasion.

Thank you.

OPENING SPEECH BY
PROF. DR. RIFAT YARAR
PRESIDENT OF THE TURKISH NATIONAL COMMITTEE
FOR EARTHQUAKE ENGINEERING
CHAIRMAN OF THE ORGANIZING COMMITTEE

Your Excellency, the Minister, the Governor of Istanbul
Distinguished Guests, Ladies and Gentlemen:

On behalf of the Organizing Committee, I should like to express my heartfelt gratitude to all the guests from far and near who have graciously accepted to participate in our conference. I would also like to thank His Excellency the President of the Republic of Turkey for opening the conference in the midst of his important and varied duties. This is an indication of the importance given by the Turkish Government to earthquake disasters and their related subjects.

I am also obliged to extend my sincere appreciation to Professor Jai Krishna, President of IAEE, Vice President Professor Hudson and Secretary Professor Osawa for their continued interest and support as well as the worthy contributions and suggestions of our colleagues from all over the world.

We are extremely pleased to welcome the delegations from several countries for their first participation in the World Conference, especially from that the Peoples Republic of China.

The foundation of our confidence and success has been the understanding attitude of the Turkish Government and the Honorable Minister of Reconstruction and Resettlement and the qualified personnel of the said Ministry and their totally selfless attitude in helping us organize the Conference. Finally, it is my duty to thank the respective member organisations such as Istanbul Technical University, Middle East Technical University, Earthquake Research Institute and Bogazici University, and acknowledge the valuable assistance of public organizations, in particular of the State Water Works Directorate and the private sector, in the realisation of the conference.

Honorable Members,

It is beyond doubt that the field of Earthquake Engineering which has a very short scientific history has demonstrated important advances. In celebrating the 25th Anniversary of our Organization we witness with great pleasure the rapid progress occurring in the field of Earthquake Engineering. Within the framework of the Turkish National Committee, close to a hundred engineers and scientists have undertaken duties in the 16 working groups encompassing the varied problems arising in Earthquake Engineering. Within the framework

of this organization we expect to make valuable contributions to the progress of Earthquake Engineering. Our National Committee is working in close cooperation with the associated national organizations and is carrying out its duties in scientific contact with foreign countries. At present a joint venture with the Engineering Seismology Department of Hokkaido University relating to the 1976 Caldiran earthquake is in progress. Beside our technical and scientific contacts we expect cooperation on an organisational level in initiating several projects. We also expect close cooperation in the ISMAC projects whose scheduled meeting will be held during this conference.

The discipline of Earthquake Engineering comprises the determination of the characteristics of strong ground motion that engineering structures experience and response of these structures to the specified ground motion. World and European Conferences on Earthquake Engineering as well as regional and national symposia and seminars have contributed to the rapid advancement of these important studies. The Turkish National Committee on Earthquake Engineering is fulfilling its duties in this respect.

Apart from the goal of preventing damage and collapse of structures in order to protect life and property, it is becoming important to predict the occurrence of earthquakes. We are benefitting from valuable knowledge obtained from work being carried out in the field of prediction by several countries. It is with great pleasure that we welcome the contributions proposed by several foreign organizations, in particular, the decision of our Japanese colleagues to participate in the prediction studies on the North Anatolian fault in Turkey, commencing in May 1981. We believe that the realisation of such close cooperation organised by National Committees will be of great value to the science of earthquakes.

We observe that awareness of the consequences of major earthquakes installs fear in the minds of people living in earthquake prone areas. Indeed such an event is capable of causing major problems in the social and economic structures of a society. We therefore need to look into the subject of earthquake prediction with increasing attention.

Besides the various ventures carried out by the Ministry of Reconstruction and Resettlement, the cooperation with the Ministry of Rural Affairs aims at strengthening, 2000 village dwellings of varied kind, in our Eastern earthquake region.

I wish to add a few statements on the proceedings of this conference. The proceedings containing the papers and progress reports have been published in 9 volumes. However, with the 10th volume including ceremonies, list of participants, list of contents and author index the total number of pages will reach to 6000. This has created quite a problem. As the host country, keeping the same

procedure as before we had to limit either the number of pages to be presented or the possibilities of their presentation, and we count on your understanding our obligation in imposing a certain limit. IAEE should consider this matter and arrive at a suitable conclusion.

Distinguished Guests,

In these troubled times of humanity and worldwide social or political struggles, I should like to present for your appreciation the great significance of hundreds of scientist gathering together with the philosophy of saving human lives. We believe in the necessity for scientists from all countries to cooperate closely so that people of the world can live in peace and dignity.

In closing my speech, I express my sincere wish that the 7th World Conference may benefit mankind and the science of Earthquake Engineering. I am confident that you will fully profit from your short stay in Turkey and hope that our sincere efforts will suffice to make your visit enjoyable. To this end, I should also like to state that the entire organization will be always at your disposal. Thank you.

