

4-3-4 INCEDE Open Lectures

INCEDE also holds open forums several times a year. Because we believe that for disaster mitigation, it is very important for the general public as well as specialists to get exact knowledge on disasters and understand what happens during and after hazards.

So far, we have held 15 INCEDE Open Lectures. The 3rd, 7th, 8th, 12th, 13th and 15th were co-organized by INCEDE and the United Nations University and the 10th was held in cooperation with the Earthquake Resistant Structure Research Group (ERS) in IIS, KOBE net and INCEDE. Themes and speakers of the INCEDE Open Lectures are listed in the previous page.

4-4 Reconnaissance Surveys on Natural Disasters

As the most fundamental research for disaster mitigation, we have carried out site investigations after the disasters. With the limited staff available, INCEDE has been able to carry out studies on only a few numbers of disasters^{15), 16), 17), 18)}. However, the emphasis was placed on making these studies as complete as possible. The archives on these disasters such as reports, local publications and other data are available on the WWW INCEDE Home Page (<http://incede.iis.u-tokyo.ac.jp/>). Followings are natural disasters that INCEDE investigated.

With regards to floods, so far,

Typhoon No.19, Japan (1991), Saiko lake high water, Japan (1991), Flood in Leyte island, Philippines (1991), Flood in Hong Kong (1992), Flood in Colombo, Sri Lanka (1992), Flood in Mississippi and Missouri valleys, USA (1993), Flood in the Tokyo Metropolitan District, Japan (1993), Flood in Nagano and Niigata, Japan (1995), Floods in Oder river basin (Germany, Poland and Czech Republic) (1997), and Floods in Fukushima, Japan (1998).

With the collaboration of INCEDE network members

Floods in China (1991), Pakistan (1992), Nepal (1993), India (1993), Thailand (1995), Earthquake in China (1996, 1998), Cyclone in India (1998).

Earthquake reconnaissance Surveys

Erzincan earthquake, Turkey (1992), Kushiro-Oki earthquake, Japan (1993), Hokkaido-Nansei-Oki earthquake, Japan (1993), Latur earthquake, India (1993), Northridge earthquake, USA (1994), Hokkaido-Toho-Oki earthquake, Japan (1994), Sanriku-Haruka-Oki earthquake, Japan (1994), Hyogo-Ken-Nambu (Kobe) earthquake, Japan (1995), Qayen earthquake, Iran (1997)

Disaster due to volcanic eruption,

INCEDE has investigated lahar disaster due to the Mt. Pinatubo, the Philippines (1993), and debris flow at the Mt. Fugen, Unzen, Japan (1994).

5. INCEDE ACHIEVEMENTS

Achievements are something that can be better judged from outsiders. Being insiders, as staff members, it would not be wise to judge INCEDE by us. For us, INCEDE activities itself reflect its achievements. Here, we would like to focus on a very few points from our own realizations from years' of experiences in the center.

When INCEDE was established, one of its prime objectives was to establish a strong network of disaster related societies. During the 8-year period, INCEDE has been aggressively working towards establishing a strong INCEDE network, and now the result of this effort can be felt with about 1,000 active members or



*Damage due to lahar from Pinatubo eruption, 1992
(Philippines)*



Northridge earthquake, 1994 (USA)



Kobe earthquake, 1995 (Japan)



Qayen earthquake, 1997 (Iran)



Floods in Europe, 1997



Floods in Fukushima, 1998 (Japan)

Disaster Investigations by INCEDE Staff



*INCEDE Director is being interviewed
for German TV*



*INCEDE report
translated to Chinese
language*

organizations from about 100 countries INCEDE supports the network members many different ways in their activities from providing information, to inviting them to participate in various INCEDE activities such as joint research activities, disaster related workshops, open lectures, forums organized by INCEDE, etc. In return, the network members help INCEDE getting more and more information about their countries. When a disaster strikes in a country, local INCEDE network members are very prompt in sending first hand information to INCEDE and these information are distributed to other members of INCEDE network through WWW or newsletters and that have benefited many interested people in getting proper information in right time. Network has established a strong task force in increasing the awareness against disaster in different countries around the world.

INCEDE publications are well received around the world. It is noteworthy to mention about the special issue of INCEDE newsletter aftermath of Kobe earthquake. As the first report written by Japanese specialists in English soon after the Kobe earthquake, the special issue entitled 'The first 55 Hours, Great Hanshin Earthquake, January 17, 1995' was published. They were distributed to more than 4,000 researchers and organizations in over 140 countries, resulting in gaining a very high reputation from all over the world for its quick publication and excellent quality. In the last few years, many disaster related organizations in different countries have been taking initiative in translating INCEDE newsletters and reports to their own languages, e.g., INCEDE reports and newsletters are already published in Chinese, Persian, etc.

As an organization from university environment, we have enjoyed the freedom of conducting fundamental research along with our other activities. During 8-year period research activities in the three laboratories of INCEDE have reached high spectra. Especially, these three laboratories have strongly contributed in advancement of research works in the fields of distributed hydrologic modeling for flood simulation, integrated database for hydrologic analysis, discrete element or applied element simulation for building collapse behavior and real time evacuation simulation, and have come out with their own models for practical applications toward disaster reduction.

Recently, established many centers or organizations in the same areas of interest, have followed the footstep of INCEDE activities and many have come to us to get suggestions for their new plans or proposals.

6. INCEDE FUTURE

Disaster-mitigation is a complex issue and solutions, if there are any, require a large amount of resources and years of dedicated involvement. Since the inception of INCEDE, our activities were focused on achieving maximum results in the disaster-mitigation field through the optimum use of available resources by limiting the focus both geographically and subject matter, considering what INCEDE could do best as a University organization. As mentioned beforehand, these activities included training, workshops, seminars, lectures, joint research projects and basic research on selected subject areas. This has produced results that are useful and contributed new knowledge in the areas of interest.

With the experience and learning of the past 8 years, and the network of disaster-mitigation specialists, we should re-organize and refocus in order to serve the society better, keeping in mind these new strengths. As an organization affiliated to the engineering department of a university, INCEDE should focus on the engineering aspects of disaster-mitigation as it had done so far. However, in order to make engineering solutions serve society better, these contributions should be motivated by the needs and the capabilities of each society. There-

fore firstly, we need to have a continuous dialogue with researchers in the social and medical fields to find out how and what types of engineering solutions are needed so that societies can cope with disasters better. Secondly, disaster-mitigation should be actively promoted as part of the development process to ensure sustainable prosperity. Looking at experiences of different countries at different levels of economic development, it is necessary to identify the engineering strategies that promote sustainable development. Fusing these new criteria to the present activities, INCEDE should re-organize and focus in four main areas; (a) Disaster-mitigation technologies, for reducing the impact of disasters, including harnessing new technologies (b) Monitoring and response systems, for reducing the losses after the disaster. (c) Engineering strategies for disaster-mitigation, to identify optimum disaster-mitigation policies in harmony with national development planning and (e) Interfacing actively with social and medical disciplines to serve the society better. We believe that such an approach of looking at the total process of disasters and their impacts on society would help us prepare and manage disaster impacts better in the coming millennium.

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