



SASPARM

Support Action for Strengthening Palestinian-administrated Areas capabilities for seismic Risk Mitigation

Project objectives and achievements



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The SASPARM Project

The project aims to enhance the cooperation with Europe's neighbours in the context of the European Research Area. The An-Najah National University (NNU) in the Palestinian-administered Areas (PS) is coordinating the project with the support of the European Centre for Training and Research in Earthquake Engineering (EUCENTRE) and the Institute for Advanced Study of Pavia (IUSS), Italy. The project activities' goal is to create a research infrastructure and develop and strengthen international cooperation with PS in the field of scientific technology and capacity building, i.e. human resources, research policy, networks of researchers and research institutes.

To start

The first step was to assess the status of seismic risk mitigation resources and identify the knowledge gaps in seismic risk reduction capacities of the NNU research centre.

Courses

To increase the role of NNU in the field of seismic risk mitigation in national, regional and international panorama, courses to train young researchers, students and practitioners have been organized.

Who benefits from courses?

There are two types of courses: i) courses for practitioners and ii) courses for young researchers and students. The courses scheduled for young researchers and students are also open to practitioners.

The modules for young researchers and students were fivefold:

- Module 1: Fundamentals of seismic vulnerability and seismic risk
Lecturers: Dr. Jalal Al-Dabbeek, Dr. Barbara Borzi, Dr. Paola Ceresa;
- Module 2: Fundamentals of structural dynamics
Lecturer: Dr. Alessandro Dazio;

- Module 3: Ground response analyses and near-surface site characterization
Lecturers: Prof. Carlo G. Lai, Dr. Maria-Daphne Mangriotis;
- Module 4: Basic of signal processing, design of specimens, system acquisition
Lecturer: Dr. Simone Peloso;
- Module 5: Training on the new shaking table for dissemination and educational purposes
Lecturers: Dr. Paola Ceresa, Dr. Simone Peloso.

These courses were a big success largely increasing the knowledge of the participants and giving them the capability of spreading similar training modules to other researchers and students.



Figure 1 - Training course on "Ground response analyses and near-surface site characterization", Nablus City, May 2013.



Figure 2 - Training course on "Fundamentals of structural dynamics", Nablus City, April 2013.

The modules for practitioners were:

- Module 1: Fundamentals of seismic analysis and seismic design
Lecturer: Dr. Barbara Borzi;
- Module 2: Seismic design according to codes used in Palestine (UBC 97, Jordanian Seismic Building Code)
Lecturer: Dr. Jalal Al-Dabbeek.

These courses have been directly delivered by NNU personnel with the support of both the EUCENTRE and IUSS staff. Due to the requirements of engineering associations, that have shown a big interest in the training of practitioners, the courses have been repeated in three different locations (Centre, South and North of West Bank) and the number of hours for each course was doubled.



Figure 3 - Practitioner's Course, Nablus City, September 2013.



Figure 4 - Practitioner's Ceremony, Hebron City, September 2013.

New instrumentation

To enhance the NNU laboratories capability, new equipment has been bought:

- Shaking table prototype;
- Seismograph 24 channels.



Figure 5 - Shaking table prototype.



Figure 6 - Seismograph 24 channels.

Network of researchers

The purpose of the new equipment is to train students and organize practical experiences. It also aims to raise the competitiveness of NNU, strengthening its leading role in the seismic risk mitigation field, and improve its training capacity. This included visits of NNU staff to the EUCENTRE and IUSS Institutions.

Thanks to the visit of a senior researcher to Italy, NNU will be able to expand bachelor's degree courses in structural engineering and master courses, including new ways of teaching and training, and new topics related to seismic risk mitigation. Moreover, two of the NNU researchers spent one month in Italy during which they were trained on the new equipment, such as the seismograph 24-channels and the shaking table prototype. Therefore, the structural engineering courses at NNU will from now on include laboratory-based experimentation and applied research, in addition to lecture-based teaching methods.

Dissemination

A number of important stakeholders and policy makers have been actively involved in the project activities, including the following institutions:

- Engineers Association (EAJC);
- Palestinian Federation of Insurance;
- Ministry of Local Government;
- Ministry of Public Works and Housing;
- Ministry of Education;
- Ministry of Health;
- Palestinian Red Crescent;
- Civil Defense (High Council of Civil Defense, National Agency for Disaster Risk Mitigation and the Civil Defense Directorate);
- Municipalities (within the Governorates of: Nablus, Ramallah, Hebron, Qalqiliya, Jenin, Bethlehem, Tulkarm and Jericho);
- Media (Ministry of Media and Palestinian Journalists Association).

Meetings and lectures were also undertaken with support from the following organizations and institutions:

- General Contractors Union;
- Schools and Universities;
- Private sector;
- Local and regional Media;
- Other Ministries and Municipalities.



Figure 7 - A mini-workshop with the Committee of Seismic Building Code in Palestine, Al-Bireh City, 4 August 2013.

Furthermore, Palestinian media showed huge interest in the project and in the topic of seismic risk mitigation. Several TV and radio programmes have invited NNU personnel to present the project and address the topic.



Figure 8 - Media Coverage: AlQuds Newsletter, 29 March 2013.

Multimedia

A new website has been created (www.sasparm.ps). Its implementation included uploading of all available and related contents to the website, in English as well as in the Arabic language. Documents, reports, videos and photos can be freely downloaded from the project website. A YouTube channel was also created to be used as a video library for all project activities and media coverage. The channel can be viewed at the following address: www.youtube.com/sasparm.

The screenshot shows the home page of the SASPARM Project website. At the top, there is a date '25/02/2014' and a 'Members login' link. The main header includes the SASPARM logo and the project title: 'Support Action for Strengthening Palestinian-administrated Areas capabilities for seismic Risk Mitigation'. Below this is the An-Najah National University Project Coordinator logo and name. A navigation menu includes: Home, About, News & Events, Partners, Media Coverage, Announcements, Results, Project Meetings, Contact Us, and عربي. The page is divided into several sections: 'Funded By' (EUROPEAN COMMISSION, EUCENTRE, IUS), 'Supported by' (Instituto Universitario di Studi Superiori di Pavia (IUS)), and 'Project Overview'. The 'Project Overview' section states: 'This project aims to reinforce the cooperation with Europe's neighbours in the context of the European Research Area. An-Najah National University (NNU) in the Palestinian-administrated Areas (PA) will coordinate the project, supported by the European Centre for Training and Research in Earthquake Engineering (EUCENTRE) and the Institute for Advanced Study of Pavia (IUS) in Italy.' There is also a 'Project Calendar' for February 2014 and a 'Resources' section with links to References, Articles & Research, Public Awareness, Seismic Hazard Map, Earthquake Bulletin, and External Links. A 'What's New' section lists recent announcements, including 'Important Announcement For Building Engineering and Civil Engineering Students' and 'Exposed area of southwest Turkey earthquakes'. The footer contains 'All Rights Reserved, SASPARM Project 2013'.

Figure 9 - Home page of SASPARM website.

Exploitation of project results

A strong relationship between EU and PS partners has been established. The partners are already looking forward to other new opportunities of cooperation in the field of seismic risk mitigation.



الأستاذ الدكتور رامي حمد الله
مخاطر الكوارث السيدة ماجريتنا والستروم

بين SASPARM، وزيارة السيدة ماجريتنا والستروم

وحدة علوم الأرض وهندسة الزلازل في الجامعة

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مسرح سمو الأمير تركي بن عبد العزيز

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Research in Earthquake Engineering



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الأمم المتحدة للحد من مخاطر الكوارث



تحت رعاية رئيس جامعة النجاح الوطنية
وبمشاركة الممثل الخاص للأمين العام للأمم المتحدة للحد من

وبمناسبة إطلاق فعاليات مشروع "تخفيف مخاطر الزلازل في فلسطين"

يعقد مركز التخطيط الحضري والحد من مخاطر الكوارث /
ورشة عمل بعنوان

تخفيف مخاطر الكوارث

(Mitigation in Palestine)

الزمان: الثلاثاء الموافق ٦



