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

Informe

Información del proyecto

SASPARM

Identificador del acuerdo de subvención: 295122

Sitio web del proyecto

Proyecto cerrado

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AN-NAJAH NATIONAL UNIVERSITY
Palestine

Final Report Summary - SASPARM (Support Action for Strengthening Palestinian-administrated Areas capabilities for Seismic Risk Mitigation)

Executive Summary:
The aim of SASPARM project was to reinforce the cooperation with Europe's neighbours in the context of the European Research Area. The An-Najah National University (NNU) in the Palestinian-administrated

Areas (PS) coordinated the project, supported by the European Centre for Training and Research in Earthquake Engineering (EUCENTRE) and the Institute for Advanced Study of Pavia (IUSS) in Italy. During the project the supporting action of EUCENTRE leaded NNU to increase its competitiveness as a Research Centre in the field of seismic risk mitigation and disaster management. Furthermore, the participation of IUSS as a partner was fundamental for the training activities for students and young researchers, thanks to the long experience of IUSS in the field of earthquake engineering and engineering seismology post-graduate programmes for doctoral and master students.
SASPARM identified a number of programmatic objectives which drove its implementation and the definition of the activities of the Consortium, as well as the detailed schedule of deliverables and milestones. The SASPARM strategic objectives were:

- Assess the status of seismic risk mitigation resources and identify the knowledge gaps in seismic risk reduction capacities of the NNU research centre;
- Increase the role of NNU in the field of seismic risk mitigation in the national, regional and international panorama. Training modules and exchange of knowledge for NNU personnel, young students and practitioners were fundamental ingredients to increase the project visibility and improve the competitiveness of the consortium partners – NNU, EUCENTRE and IUSS. In addition, the reinforced research capacities of NNU enable the facilitation of effective training on disaster risk reduction and emergency response in the local community;
- Improve the competitiveness of NNU by strengthening its leading role in the seismic risk mitigation field and improving its training capacity by expanding the bachelor's degree courses in structural engineering to include laboratory-based experimentation and problem solving in addition to lecture-based teaching methods currently employed;
- Create networks of researchers and research centres that are fundamental for the reinforcement of cooperation with Europe's neighbours in the context of ERA through mobility of scientists and exchange of experts that is pursued with the aim of exchanging knowledge and ideas, and beginning new joint research projects;
- Promote initiatives of general public awareness, establish two-way communication channels with stakeholders and policymakers, and disseminate information about SASPARM, its objectives, approaches and ongoing results;
- Foster the exploitation of project results and build the competency to facilitate the PS participation in EU Framework Programme regarding seismic risk mitigation research. This enhances EU-regional cooperation and networking and increases the role of the European Commission in general and of the FP7 in particular.

The project activities were identified and planned with the goal to meet the aforementioned objectives. An integrated set of six work packages were identified. In pursuing these multiple strategic and thematic objectives, the six milestones and the twenty-seven deliverables (reports, web site, etc.) resulting from the SASPARM activities are a tangible proof of the increased capacities of NNU in the field of seismic risk mitigation.
Project Context and Objectives:
SASPARM aimed to reinforce 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) coordinated the project, supported by the European Centre for Training and Research in Earthquake

Engineering (EUCENTRE) and the Institute for Advanced Study of Pavia (IUSS) in Italy. All the activities of SASPARM were carried out believing that the creation of networks of researchers and research centres is fundamental for reinforcing cooperation with Europe's neighbours in the context of European Research Area (ERA).

Project objective: Assess the status of seismic risk mitigation resources and identify the knowledge gaps in seismic risk reduction capacities of the NNU research centre.

Implementation during the project: A comprehensive overview of the research data available in NNU and in other local institutions has been undertaken according to WP2. Even if most of WP2 activity was undertaken in the 1st reporting period with the submission of the deliverables (D2.1 D2.2) and the achievement of milestone (MS2), the research data have been continuously updated and integrated also during the 2nd reporting period.

Project objective: Increase the role of NNU in the field of seismic risk mitigation in the national, regional and international panorama. Training modules and exchange of knowledge for NNU personnel, young students and practitioners are fundamental ingredients to increase the project visibility and improve the competitiveness of the partners – NNU, EUCENTRE and IUSS. In addition, the reinforced research capacities of NNU will enable the facilitation of effective training on disaster risk reduction and emergency response in the local community.

Implementation during the project: In SASPARM, WP3 was dedicated to training of young researchers, students and practitioners.
The courses for young researchers and students 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.

The courses, thought by EUCENTRE and IUSS personnel, are listed below:
- Fundamentals of seismic vulnerability and seismic risk,
- Fundamentals of structural dynamics,
- Ground response analyses and near-surface site characterization,
- Basic of signal processing, design of a specimens, system acquisition,
- Training on the new shaking table for dissemination and educational purposes.

The courses for practitioners, originally planned for month 4 and 14 (January and November 2013), have been delivered directly by NNU personnel with the support of both EUCENTRE and IUSS staff. The courses have been delivered from month 9 up to month 12 (from June to September, 2013). Due to the requirements of engineering associations that have shown a big interest in the training of practitioners, the courses were repeated in three different locations (Center, South and North of West Bank) and the number of hours of each course was increased from 24 to 48. It has to be highlighted that the courses have been held by NNU personnel as a demonstration of the transfer of EUCENTRE, IUSS experience not only to undergraduate and graduate students, but also to practitioners.

Project objective: Improve the competitiveness of NNU by strengthening its leading role in the seismic risk mitigation field and improving its training capacity by expanding the bachelor's degree courses in structural engineering to include laboratory-based experimentation and problem solving in addition to lecture-based teaching methods currently employed.

Implementation during the project: The object of increasing the training capability is showing important achievements. NNU is trying to gather additional resources to run a new Master programme on "Disaster Risk Management". This action was strongly encouraged by the Ministry of Education. A first draft of the proposal was written during the visit in Italy of the NNU senior researcher (May-Jun 2014), who is the project coordinator. The experience of IUSS in running doctoral and Master programmes in Understanding and Managing Extremes (www.umeschool.it) strongly supported the writing of the new proposal for NNU.

Project objective: Create networks of researchers and research centres that will be fundamental for the reinforcement of cooperation with Europe's neighbours in the context of the ERA through mobility of scientists and exchange of experts that will be pursued with the aim of exchanging knowledge and ideas, and beginning new joint research projects.

Implementation during the project: The program also foresaw to host NNU people in EUCENTRE and IUSS Institutions (according to WP3). During the 2nd reporting period the following visits took place:
- A young researcher, Dr. Hatim Alwash, in June-July 2013. He was trained to use the seismometer bought with project fund
- A senior researcher, Prof Jalal Al-Dabbeek, in May-Jun 2014. During his visit he took the advantage of understanding how to apply for funds to run a master program in NNU;
- A young researcher, Dr. Hatim Alwash, and a technician, Mr. Wala' Ajaj. They are now in charge to train students in NNU using the equipment (seismometer and shaking table) bought with project funds.
After young researcher and technician returned to NNU, they have been running training on the new equipment. Their training courses are carried out according to the experience and the knowledge exchange gained i) after the attendance of the courses held by EUCENTRE and IUSS personnel at NNU and ii) during their stay at the partners' institutions.

Project objective: Promote initiatives of general public awareness, establish two-way communication channels with the stakeholders and policymakers, and disseminate information about SASPARM, its objectives, the approaches and the ongoing results.

Implementation during the project: A number of important stakeholders and policy makers have been actively involved in the project activities since the beginning. The up-to-date list of stakeholders is given in Section "Potential Impact and main dissemination activities and exploitation of results" of this Final Report. Furthermore, Palestinian media have been very interested in the project and in the subject of seismic risk mitigation. Several TV and radio programmes have invited NNU personnel to exploit the main project results and goals. Hence, the target to inform citizens is achieved and now local target groups (stakeholders, practitioners, constructors, citizens and students) are ready to contribute to the phase 2 of the project, named SASPARM 2.0 "Support Action for Strengthening PAlestine capabilities for seismic

Risk Mitigation", briefly presented in the following sections of this Final Report.

Project objective: Foster the exploitation of project results and build the competency to facilitate the PS participation in EU Framework Programme regarding seismic risk mitigation research. This will enhance EU-regional cooperation and networking and increase the role of the European Commission in general and of the FP7 in particular.

Implementation during the project: A strong relationship between EU and PS partners has been established. The partners already found a new opportunity to continue the cooperation in the field of seismic risk mitigation. The new project, SASPARM 2.0 involves the same Consortium (NNU, EUCENTRE and IUSS) for further 2 years, starting from January 1, 2015.

Project Results:
All the SASPARM deliverables and milestones have been achieved. The deliverables have been uploaded on the EC web page dedicated to SASPARM and are available for download on the project website (www.sasparm.ps).
The main deliverables of the SASPARM are the training courses for young researchers and students, and for practitioners. The Table of Contents (ToCs) of the aforementioned courses are given below. The success of the training activities was such that Engineering Associations required further training. Training was also a tool for disseminating project results (see "Potential Impact and Main Dissemination Activities and Exploitation of Results" section) and to increase awareness on seismic risk in local communities. Different target groups were trained and made aware of project results such as students, citizens, governmental and non governmental institutions, local stake holders, and the private sectors.
Further important project results can be directly derived from the exchange visits of the young researcher, the technician and the project coordinator made to Italian partners. Thanks to the training on the use of equipment bought with project funds (seismograph and small shaking table prototype) the young researcher and the technician are now training other students in NNU. Also the interaction with the project coordinator was very fruitful. During this visit, the project team worked together for the preparation of the proposal related to a new Master programme at NNU in "Disaster Risk Management". In addition, ideas for new proposals and applications to European Calls were discussed.

In the following pages, the ToCs of the training courses organised within SASPARM framework are given.

> Course Modules for young researchers and students

Module 1: Fundamentals of seismic vulnerability and seismic risk

Lecturers
Dr. Jalal Al-Dabbeek, Dr. Barbara Borzi, Dr. Paola Ceresa

Day 1:
09:30 - 10:30: Concepts of vulnerability
10:30 - 11:30: Mathematical definitions of vulnerability and risk

11:30 - 14:30: Application 1, Application 2, Application 3, Application 4, and Application 5

Module 2: Fundamentals of structural dynamics

Lecturer
Dr. Alessandro Dazio

Day 1:
09:00 - 10:30: Introduction. SDoF systems: Equation of motion and modelling
10:30 - 11:00: Coffee break
11:00 - 12:30: Free vibrations
12:30 - 14:30: Lunch break

14:30 - 16:00: Assignment 1
16:00 - 16:30: Coffee break
16:30 - 18:00: Assignment 1

Day 2:
09:00 - 10:30: Harmonic excitation
10:30 - 11:00: Coffee break
11:00 - 12:30: Transfer functions
12:30 - 14:30: Lunch break

14:30 - 16:00: Forced vibrations
16:00 - 16:30: Coffee break
16:30 - 18:00: Forced vibrations

Day 3:
09:00 - 10:30: Seismic excitation (Part 1)
10:30 - 11:00: Coffee break
11:00 - 12:30: Seismic excitation (Part 2)
12:30 - 14:30: Lunch break

14:30 - 16:00: Assignment 2
16:00 - 16:30: Coffee break
16:30 - 18:00: Assignment 2

Day 4:
09:00 - 10:30: MDoF systems: Equation of motion
10:30 - 11:00: Coffee break
11:00 - 12:30: Free vibrations
12:30 - 14:30: Lunch break

14:30 - 16:00: Damping
16:00 - 16:30: Coffee break
16:30 - 18:00: Forced vibrations

Day 5:
09:00 - 10:30: Seismic excitation (Part 1)
10:30 - 11:00: Coffee break
11:00 - 12:30: Seismic excitation (Part 2)
12:30 - 14:30: Lunch break

14:30 - 16:00: Assignment 3
16:00 - 16:30: Coffee break
16:30 - 18:00: Assignment 3

Module 3: Ground response analyses and near-surface site characterization

Lecturers
Prof. Carlo G. Lai and Dr. Maria-Daphne Mangriotis

Day 1
09:00 - 10:30: Fundamentals of wave propagation (Part 1)
10:30 - 11:00: Coffee break
11:00 - 12:30: Fundamentals of wave propagation (Part 2)
12:30 - 14:30: Lunch break

14:30 - 16:00: Ground response analyses (Part 1)
16:00 - 16:30: Coffee break
16:30 - 18:30: Case study and exercising

Day 2
09:00 - 10:30: Ground response analyses (Part 2)
10:30 - 11:00: Coffee break
11:00 - 12:30: Near-surface site characterization using seismic methods (invasive techniques)
12:30 - 14:30: Lunch break

14:30 - 16:00: Near-surface site characterization using seismic methods (non-invasive techniques)
16:00 - 16:30: Coffee break
16:30 - 18:30: Review of Fourier analysis and discrete inverse theory

Day 3
09:00 - 10:30: Seismic prospecting using active SASW/MASW techniques (Part 1)
10:30 - 11:00: Coffee break
11:00 - 12:30: Seismic prospecting using active SASW/MASW techniques (Part 2)

12:30 - 14:30: Lunch break

14:30 - 15:30: Seismic prospecting using passive MASW, ReMi and H/V techniques
15:30 - 16:45: Case study using real and synthetic geophysical seismic data

Module 4: Basic of signal processing, design of a specimens, system acquisition

Lecturer
Dr. Simone Peloso

Day 1:
09:00 - 10:30: Basic of Sensor and Transducers (Part 1)
10:30 - 11:00: Coffee break
11:00 - 12:30: Basic of Sensor and Transducers (Part 2)
12:30 - 14:30: Lunch break

14:30 - 16:00: Description of Actuation Systems (Part 1)
16:00 - 16:30: Coffee break
16:30 - 18:00: Description of Actuation Systems (Part 1)

Day 2:
09:00 - 10:30: Description of Actuation Systems (Part 2)
10:30 - 11:00: Coffee break
11:00 - 12:30: Analysis of Signal (Part 1)
12:30 - 14:30: Lunch break

14:30 - 16:00: Analysis of Signal (Part 2)
16:00 - 16:30: Coffee break
16:30 - 18:00: Analysis of Signal (Part 2)

Day 3:
09:00 - 10:30: Scaling Strategy (Part 1)
10:30 - 11:00: Coffee break
11:00 - 12:30: Scaling Strategy (Part 2)
12:30 - 14:30: Lunch break

14:30 - 16:00: Testing Strategy
16:00 - 16:30: Coffee break
16:30 - 18:00: Testing Strategy

The researchers of NNU with the support of Eucentre and IUSS will train students, also with the support of the new laboratory equipment, to understand the dynamic of structures. A comparison of experimental response of a specimen prepared by NNU personnel will be compared with the analytical responses

computed, for example, with Matlab.

Module 5: Training on the new shaking table for dissemination and educational purposes

Lecturers
Dr. Paola Ceresa, Dr. Simone Peloso

First draft of the table of content for this course
Day 1:
(From 10:00 am - To 1:00 pm [Nablus Time])
- Moving the Compact Seismic Simulator (CSS)
- settings and tuning of the CSS controller
- reproducing sine waves
- reproducing displacement time histories (TH)
- generating new signals (displacement TH)
- sine swap test for frequencies identification

Day 2:
(From 10:00 am - To 1:00 pm [Nablus Time])
- Evaluating Eigen-quantities with
- SAP2000
- Matlab
- Differences between shear-type model and flexibility-type model
- Comparison between experimental and numerical results

Day 3:
(From 10:00 am - To 1:00 pm [Nablus Time])
- Answering questions (if any) about the topics treated during the course

Implemented table of content of this course
The modification of the first draft of the ToC is related to Day 3 since it was replaced by several training meetings carried out during the visit of Dr. Hatim F. H. Alwahsh and Mr. Wala' N. Ajaj in Pavia from September 13 to September 25, 2014. A comprehensive description of the content of the technical visits is given in the report of D4.3.

> Course Modules for Practitioners

Module 1: Fundamentals of seismic analysis and seismic design

Lecturer
Dr. Barbara Borzi

Day 1:
09:00 -10:30: Fundamentals of seismology
10:30 - 11:00: Coffee break
11:00 - 12:30: Seismic hazard in Palestine
12:30 - 14:30: Lunch break

14:30 - 16:00: Single Degree of Freedom System (SDOF)
16:00 - 16:30: Coffee break
16:30 - 19:00: Elastic Response Spectrum – Site effects EC8

Day 2:
09:00 - 10:30: Fundamental of ductility and Inelastic Response Spectra
10:30 - 11:00: Coffee break
11:00 - 12:30: Conceptual seismic design
12:30 - 14:30: Lunch break

14:30 - 16:00: Seismic Analysis
16:00 - 16:30: Coffee break
16:30 - 19:00: Capacity Design of Buildings

Day 3:
09:00 - 10:30: Assignment 1
10:30 - 11:00: Coffee break
11:00 - 13:00: Assignment 2

Module 2: Seismic design according to codes used in Palestine (UBC 97, Jordanian Seismic Building Code)

Lecturer
Dr. Jalal Al-Dabbeek

Day 4:
09:00 - 10:30: Seismic hazard according to code regulations
10:30 - 11:00: Coffee break
11:00 - 12:30: Seismic site effect according to code regulations
12:30 - 14:30: Lunch break

14:30 - 16:00: Seismic forces and building codes. Equivalent lateral force method according to code regulations
16:00 - 16:30: Coffee break
16:30 - 18:00: General note about geotechnical and foundation, seismic design considerations

Day 5:

09:00 - 10:30: The influence of architectural and structural configuration on seismic performance of buildings
10:30 - 11:00: Coffee break
11:00 - 12:30: Application on the seismic vulnerability of Palestinian common buildings
12:30 - 14:30: Lunch break

14:30 - 16:00: Assignment 1
16:00 - 16:30: Coffee break
16:30 - 18:00: Assignment 2

Day 6:
09:00 - 10:30: Assignment 3
10:30 - 11:00: Coffee break
11:00 - 12:30: Assignment 4
12:30 - 14:30: Lunch break

14:30 - 16:00: Structural details
16:00 - 16:30: Coffee break
16:30 - 18:00: Special topics on earthquake engineering (seismic retrofit and upgrading fundamentals, etc).

Potential Impact:
1) Potential Impact

SASPARM project had a great impact on local community, well beyond Consortium's expectations. As an index of the success of the project it should be considered that: (i) the number of training courses was increased based on the requirement of Engineers' Association; (ii) the number of visitors of the website (monitored since March 2013) is over 83000; (iii) the number of workshops was equal to 17 (iv) the number of training activities with the new equipment bough with project funds was equal to 6; (v) all local media are interested in the project and has been asking the participation of NNU personnel to TV and radio programs, serving also the purposes to inform citizens; (vi) the Consortium decided to submit a phase 2 project, SASPARM 2.0 in a DG-ECHO 2014 scheme, with the support letters of Nablus Municipality, Engineers Association, Jerusalem Center, National Agency for Disaster Risk Mitigation – Palestine, Secretariat of the International Strategy for Disaster Reduction - Regional office of Arab States. The success of SASPARM was acknowledged also in Europe and a further support letter was written also by GEM (Global Earthquake Model) Foundation. Furthermore, the phase 2 of the project was submitted with the endorsement of the Italian Department of Civil Protection.

With reference to the strategic impacts of the Call (see points a) to e), Section 3.1 of DoW), the actual impacts of the project are here summarised.

Point a: The project goal is the development of NNU as a centre of research excellence. To this purpose: (i) WP2 had created a database for existing research data. This activity was targeted to identify the research capacities that need to be strengthened and to make available through the project website the

PS research data; (ii) WP3 was devoted to training courses and a direct exchange of experts between EUCENTRE and NNU; (iii) WP4 enhanced the NNU experimental capabilities for educational purposes and dissemination of project activities. Through the dissemination of the results and products of SASPARM to potential-users, it is believed that the benefits of this project will help to develop the research capability of Palestine more broadly.
Point b: The improvement of PS capacities in research field was achieved through the networking of PS with EU research centres in view of disseminating scientific information. Furthermore, the European Partners have been using their own contacts with other European and Middle East Institutions to get them aware of the SASPARM project activities. News related to SASPARM were usually published on the web sites of IUSS and EUCENTRE. The latter presents the project to all the delegations that usually on monthly basis come to visit the centre. All the mentioned activities gave already achieved the excellent results of leading the consortium to submit a new proposal in a DG-ECHO 2014 scheme that has been funded and the new project will be running for further 2 years starting from the 1st of January 2015.
Point c: The contributions made by SASPARM to RTD capacity building and management in Palestine are allowing NNU to broaden the scope of its research. The project visibility is proved by the fact that several governmental and non-governmental institutions became active parts in SASPARM activities.
Point d: The program also foresaw to host NNU people in EUCENTRE and IUSS Institutions (according to WP3). The project gave also the opportunities to the Project Coordinator to participate to international activities and events. He was invited to join: NERA Swiss Seismo-School; 2nd Arab Regional Conference, Sharm el Sheikh in Egypt; The European Union and international networks' learning projects, Budapest, Hungary; First Arab Conference for Disaster Risk Reduction, Al Aqaba, Jordan; Guardians of the Valley - Jericho and its two Costs: the River and the Sea, Jericho; The National Spatial Plan, Ramallah; - "ETRERA_2020 Info Day"- NNU; Final Conference: Palestine for European Research Area (PERA), Palestine Technical University Kadoorie; Updating and Institutionalization of Urban Planning Manual (UPM), Al-Bireh City; EU – Palestinian cooperation in research and innovation, Ramallah.
Point e: The project had no reason to discriminate any gender. The Consortium is strongly committed to the policy of equal opportunities between women and men. All employees of the three partners have equal opportunities for employment and career advancement. One effect of SASPARM's contribution to RTD capacity building and management in Palestine is the increased access to research infrastructures and job opportunities for young scientists. By supporting the development of NNU into a research centre of excellence, SASPARM has been improving working conditions and prospects for young researchers and students in order to encourage them to work in Palestine.

One of the main achievements of SASPARM is that several governmental and non-governmental institutions became active part of the project. This important achievement strengths the link between stakeholders and NNU. The training activities (WP3), the dissemination (WP5) and the exploitation (WP6) of project results have prepared target groups (stakeholders, practitioners, constructors, students and citizens) to participate to the phase 2 of the project – SASPARM 2.0 - which will further increase the awareness and the perception of seismic risk and hence it will foster the implementation of mitigation measures.
The project website (www.sasparm.ps/en/) has been continuously updated. Furthermore, it is the intention that information, presentations, dissemination materials, collected databases, training documentation related to SASPARM activities will be lodged here also after the project end. Direct link to the new platform of SASPARM 2.0 will be created and vice-versa.

2) Main Dissemination Activities

Conferences and Workshops (International-National): N° of events – 3:

- Final Conference of SASPARM Project, NNU 17/11/2014
370 participants
- Disaster Risk Reduction in Palestine and SASPARM Project, NNU, 1/10/2013
210 participants
- Launching Seismic Risk Mitigation in Palestine Project (SASPARM Project), 26/02/2013
650 participants

Local and National Workshops: N° of events 14. Workshops were done in Nablus, Ramallah, Jericho, Tulkarem, Albireh, Bethlehem, Hebron, Jerusalem and the total number of participants is 490.

Public Lectures: N° of events 10. Public lectures were done in Nablus (NNU, Schools, Institutions), Bireh, Ramallah, Bethlehem and the total number of participants is over 800.

Training Courses for Practitioners: N° of events 3. The training courses were taken in Nablus, Ramallah and Hebron. The total number of participants was 82.

Training Courses for students and engineers recently graduated: N° of events 3. The training courses were organised in Nablus at NNU. The total number of participants was 257.

Short Training Courses for Practitioner: N° of events 3. The training courses were done in Nablus, Ramallah and Hebron. The total number of participants was 320.

Short Training Courses for Journalists (training workshops) N° of events 2, organised in Nablus and Hebron. The total number of participants was 85.

Visits of students from many schools and universities: N° of events 12. The total number of participants is over 800.

Meetings with local stakeholders: N° of events 25. The following institutions participated to the meetings:

- Minister of Planning - Ramallah
- Minister of Local Government - Ramallah
- Minister of Public works and Housing - Ramallah
- Engineers' Association
- National Agency for Disaster Risk Mitigation
- Civil Defence.

3) Networking

Integration with EU, National and International Programs through the participation of NNU prersonel to the following conferences and workshops:

- NERA Swiss Seismo-School
- 2nd Arab Regional Conference, Sharm el Sheikh in Egypt
- The European Union and international networks' learning projects, Budapest, Hungary
- First Arab Conference for Disaster Risk Reduction, Al Aqaba, Jordan
- Guardians of the Valley - Jericho and its two Costs: the River and the Sea", Jericho
- The National Spatial Plan, Ramallah.

Networking with FP7 and other EC Projects such as:

- "ETRERA_2020 Info Day"- NNU
- Final Conference: Palestine for European Research Area (PERA), Palestine Technical University Kadoorie
- Updating and Institutionalization of Urban Planning Manual (UPM), Al-Bireh City
- EU – Palestinian cooperation in research and innovation, Ramallah.

4) Exploitation of Project Results

The list of the institutions with which the partnership was found includes:

- Ministry of Local Government,
- Ministry of Education,
- Ministry of Public Works and Housing,
- Ministry of Planning,
- Ministry of Media,
- Ministry of Health,
- Ministry of Agriculture,
- Engineers' Association,
- High Council of Civil Defence,
- Civil Defence Directorate,
- National Agency for Disaster Risk Mitigation,
- General Contractors Union,
- Palestinian Red Crescent,
- Palestinian Journalists Association,
- Global Communities (GC),
- Palestinian Central Bureau of Statistics,
- Palestinian Consultants Center,
- Palestine Standards Institution,
- Municipalities of Nablus, Ramallah, Jericho, Al Bireh, Tulkarm, Bethlehem, Beit Jala, Halhul, Hebron,

Dura, Qalqiliya, Abu Dis, Jenin, Qalqilya, Salfeet, Tubas and others.
- Other Ministries, Municipalities and governmental organizations,
- Palestinian Federation of Insurance,
- Several institutions, engineering consultants' offices and companies from private sector.
- Local media such as:
1. Newspapers: Al Quds, Al Ayyam and Al Haya aljadeda.
2. TVs: Palestine TV, Maan TV (Mix), Nablus Tv, Falastine Al TV Al Salam, TV Al Fajr TV, and others.
3. Radios: Palestine voice, An-Najah voice, Ajial, Amwaj, Al-sharq, alam, Alkhaleel, Nablus,Tariq Al mahabe, Palestine Polytechnic voice, Hayat, Siraj, Bethlehem 2000, Mautini, Angam, Raya, etc.

In the framework of SASPARM activities and programs, local partners and cooperating institutions have started taking an effective role beyond the expectations and planned activities according to the project main goals. They voluntarily started taking more responsibilities, making the SASPARM activities more efficient, as well as starting initiatives of their own with the support of SASPARM personnel at NNU. This advanced level of participation is a result of the positive atmosphere that was created by the joint activities during the project lifetime which in turn made partners and cooperating institutions feel ownership of the program. SASPARM Consortium considers this level of participation and involvement as a natural outcome of its approach since community participation is a basis of success in achieving both objectives and long-term goals.

The participation of governmental and non-governmental, local and national organizations in SASPARM activities and programs was manifested in different forms of contributions and initiatives, originating from their belief in the importance of SASPARM mission. This participation is considered important in both its material and morale values. Participation and involvement forms were:

- Cooperation in ensuring the success of activities through efforts to quantitatively and qualitatively widen the groups of participants in workshops, training courses, study days, lectures and seminars
- Voluntary financial contributions towards the support of the costs of some project activities
- Organization of their own activities as a follow-up from the joint activities, receiving support and guidance from the SASPARM Consortium
- Contribution and involvement in media coverage of activities using their relations with local and national media.

In term of exploitation of project results one of the major achievement is the participation of SASPARM Consortium to a call for proposal presented in the DG-ECHO 2014 scheme - Preparedness and Prevention projects in civil protection and marine pollution.
The proposal had the endorsement of the Italian Civil Protection Department and support letters from Nablus Municipality, Engineers Association - Jerusalem Center, National Agency for Disaster Risk Mitigation – Palestine, Secretariat of the International Strategy for Disaster Reduction - Regional office of Arab States, Global Earthquake Model (GEM) Foundation, ImageCat, Inc. – California).
As a consequence of the SASPARM activities, the perception of seismic risk increased enormously in local community and this encouraged the new proposal. Its core is the development of a web portal where different users (students/citizens/practitioners/governmental and nongovernmental stakeholders) will be able to input and manage data regarding buildings, with increasing level of detail, obtaining information

about the related seismic risk. Protocols to acquire data through guided procedures will be also available on the web portal to support a better understanding of each case study. Increasing levels of knowledge will correspond to increasing reliability of the results in terms of seismic risk.
SASPARM 2.0 is a natural follow up of SASPARM and its the main goals are:

- The increase of risk perception by citizens and the development of the citizens' science
- The capacity building of local practitioners and building contractors
- The engagement of local stakeholders and policy makers leading them to establish plans of prevention in the development of urban resilience strategies.

The proposal was selected for funding and the new project started the 1st of January 2015 and it will give the opportunity to the Consortium to work together on seismic risk subject for further 2 years.

List of Websites:

http://www.sasparm.ps/en
http://www.najah.edu/
http://www.eucentre.it
http://www.iusspavia.it

Documentos relacionados

final1-gantt-chart-sasparm.pdf

Última actualización: 16 Junio 2015

Permalink: https://cordis.europa.eu/project/id/295122/reporting/es