

# **Support Action for Strengthening PAlestine capabilities for seismic Risk Mitigation **SASPARM 2.0****

**Deliverable D.H.7:**

**Exploitation Study**



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## 1 INTRODUCTION

Within SASPARM2.0, the task H is about the identification and the organization of publicity and the diffusion of the project activities and results. In the deliverable D.H.7 “Exploitation Study” there is the description of what, how and where the results of the project will be exploited.

## 2 OBJECTIVES

The overall objective is to identify and reach stakeholders, including end-users and the public, in order to raise their awareness regarding the findings of the project and to encourage them to support and adopt the recommendations and the resources that result from the project. More specifically, the sub-objectives were presented in D.H.1 (see link [www.sasparm2.com](http://www.sasparm2.com)).

The objectives of task H and its deliverables are:

- Ensuring feasibility and usability of project results from the end-users perspective;
- Identifying an exploitation strategy to ensure project results sustainability and developing monitoring tools (i.e. Committees at local and national levels), after co-financing period;
- Promoting project results to the wider end-users community (i.e. policy makers, practitioners, (re)insurance companies, etc, outside the project consortium), and create coordination between different sectors and institutions.

## 3 ACTIVITIES, RESULTS AND FINDINGS

The main project activities and results can be summarized as follows:

a. A follow up mechanism was adopted through:

- Coordination with all concerned;
- Coordination and monitoring with the related institutions and participation as members of the National Team for the DRM;
- Networking and knowledge exchange, collaborate with other projects, local activities, international workshops and conferences like:
  - UNISDR initiatives, workshops and discussions  
<http://sasparm2.com/an-najah-participates-in-a-workshop-on-disaster-risk-reduction-in-beirut-20-march-2016/>  
<http://sasparm.ps/en/?page=details&newsID=219&cat=3>
  - UNESCO/ RELEMR meetings and workshops  
<http://www.sasparm2.com/workshop-sasparm2-0-pavia-eucentre/>
  - UNDP: Establishing DRM institutional formwork See DH9
  - Palestinian Engineers Association: workshops and training courses. See DH9



○ Palestinian Medical Relief Society short training courses See DH9

- Spreading project newsletters to find new points of collaboration and cooperation;
- Following up the institutional arrangements for the DRM through developing a DRM center, which has been done through integration and networking with other national projects;
- Ensuring feasibility and usability of project results from the end-users perspective;
- Identifying and developing a strategy to ensure project results sustainability after co-financing period;
- Promoting project results to the wider end-users community (i.e. policy makers, practitioners, Insurance companies, etc. outside the project consortium);
- Publishing scientific and research papers during the project activities, some papers were already published. <http://www.sasparm2.com/publications/>
- Generating systematic feedback to the consortium concerning general evaluation, feasibility, usability, etc. This task consists mainly in finding and supporting the project WBP users (i.e. policy makers and insurance companies, recording potential issues and communicating these problems to the Consortium);
- Promoting the project web portal as a gateway to the WBP to access, analyze, and interact with and within project data and results to the target audience. This task also contributes to the reinforcement of the linkage between citizens, practitioners and GO and NGO institutions guaranteeing the effective transfer of information within the platforms;
- Also, the program tasks will operate within the framework of a Web-Based Platform (WBP) for seismic risk mitigation. The WBP integrates a database (DB) to collect vulnerability data on buildings, self-assessment tools to allow common people and practitioners to understand potentially unsafe situations of their buildings;
- Promoting project results to the wider end-users community (i.e. policy makers, practitioners, (re)insurance companies, etc outside the project consortium by generating systematic feedback to the consortium concerning general evaluation, feasibility, usability.

**b. Production of a comprehensive report on the Evaluation of Earthquake Risk Reduction in Palestine.**

The report presented detailed description and analysis of the Palestinian case considering the major elements in the risk assessment. The seismic behavior of the structural systems of buildings greatly influences seismic losses. For example, studies of earthquakes damages show that some types of construction tend to be more vulnerable than others. The structural and architectural configuration of building is one of the main determinants of its vulnerability. Adding to that, the Seismic Hazard, the Vulnerability level and the capacity of the community including the governmental and non-governmental institutions in terms of preparedness, response and reconstruction.

**c. Preparation of course notes and organization of training courses for students, young engineers and practitioners on seismic retrofitting measures for existing buildings.**



- d.** Preparation of the scientific material needed for the workshops. Several workshops were conducted. Many participants attended including representatives from tens of governmental and non-governmental institutions in addition to the private sector see table.
- e.** Preparation of the material for workshops organized in several Media institutions.
- f.** Preparation of brochures for training courses.
- g.** Participation in several meetings with the decision makers and in order to follow up actions plans, measures taken towards adaptation of the Seismic code for design.
- h.** Conduction of several public awareness campaigns through different media to cover all SASPARM2.0 activities. This has been done through TVs, Radio stations, local newspapers, websites and Facebook groups. <http://www.sasparm2.com/media-and-press/>
- i.** Selection of city of Nablus as one of the 20 cities within the initiative of UNISDR towards making cities resilient. Preparation of an action plan for making cities sustainable and resilient implementing the Sendai Framework for Disaster Risk Reduction 2015-2030 at the local level which is an EU funded project to UNISDR.
- j.** Developing social vulnerability studies for Nablus city, this includes:
- ✓ Preparing the questionnaire,
  - ✓ Conducting data acquisition process by dividing Nablus to 7 zones, distributing 526 questionnaires and collecting the results,
  - ✓ Perform and developing the social vulnerability.
- k.** Identifying the structural typologies of common buildings in Palestine, conducting field investigation, classifying the vulnerability classes of investigated building and developing the fragility curves for each type (<http://www.sasparm2.com/task-b/>)

It is also worth mentioning that the achievements exceeded the plans in terms of training courses, workshops and training workshops, meetings and mini workshops with decision makers, public lectures and other public awareness programs. For more details, see dissemination activities in DH9 report.

A successful exploitation and integration program is the measure of success for the SASPARM2.0 activities. Therefore, the partners pursued the distribution and exploitation of results at all levels. The project had the goal of enabling dissemination and exploitation of databases, results and tools developed by SASPARM2.0.

## 4 IMPROVING AND BUILDING RELATIONS

According to the project work plan and as a result of the variety of activities targeting several parties, the relationships with a high number of governmental and non-governmental institutions and with the



private sector was empowered and strengthened. In addition, new relationships were established with local institutions. During the project activities, there was cooperation and coordination with regional and international organizations like UNISDR, UNDP, OCHA and others.

Primary stakeholders for SASPARM 2.0 project include the following groups:

- **Academic Community:** including An-Najah National University research community (students & staff), as well as other Palestinian universities and their graduates and researchers.
- **Citizens:** including public figures, investors and business persons.
- **Practitioners:** including Engineers, contractors Union and specialists as well as professional associations, locally and regionally. Those are strong lobbying groups, they have great insights into the needs and motivations and ethical problems of different areas.
- **Decision & Policy Makers:** such as government authorities who produce important policy documents and has a strong political and economic incentive.
- **NGOs:** including donating organizations and international bodies which provide funding or capacity building projects in Palestine.

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The institutions with which the partnership was found include:

- Ministry of Local Government,
- Ministry of Education and Higher Education, Department of Buildings,
- Ministry of Public Works and Housing,
- Ministry of Health
- Engineers Association Jerusalem Center,
- Civil Defense Directorate,
- National Agency for Disaster Risk Mitigation,
- Palestinian Contractors Union
- Municipal Development and Lending Fund
- Palestinian Red Crescent society,
- Nablus, Ramallah, Jericho, Tulkarm, Hebron, and Jenin Municipalities
- Environment Quality Authority
- Palestinian Insurance Federation
- UNISDR, Cairo Office
- OCHA, Nablus office
- UNDP/PAPP,
- National Team for Disaster Risk Management- Prime Minister's Office,
- Other ministries and organizations, and several institutions, engineering consultants' offices and companies from private sector.

In relation to project dissemination and exploitation tools and means, the project partners have decided to utilize the SASPARM and SASPARM2.0 project websites, e-mail, internal conferences, journal publications, policy papers, media communication and press releases, workshops, external conference



presentations, social networks, individual stakeholders and ask them to be involved in the project. These specific tools have been selected based on their appropriateness, their effectiveness, and on whether they are targetable and economical.

## 5 RECOMMENDATIONS

Based on the results of studies, field investigation, vulnerability analysis (social and physical) meetings, workshops, conferences, training courses, public awareness campaigns and other activities that were conducted, the needs that came up can be summarized as follows:

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- Paying special concern and attention to community public awareness to school students and integrating the DRM and SRM within the education plan;
- Follow up and monitor the implementation of the Code of Practice, which is similar to UBC 97 for all new building covering public and private, and following the requirements connected to construction sector in Palestine by different institutions. There is the need to control the project activities to fully integrate the code requirements;
- Follow up and promote the vulnerability assessment form through the WBP to be used by engineers, and citizens as highlighted before;
- Integration of retrofitting of the existing buildings, mainly among practitioners and contractors engineers;
- Maintain quality control at the construction stage on all buildings;
- Follow up building license requirements in terms of safe design with all requirements before the buildings get into full operation;
- Continuing with capacity building for practitioner engineers, contractors and all engineers appointed by governmental and non-governmental institutions;
- Capacity building for the decision makers and planners in the governmental and non-governmental institutions operating in the field of DRM;
- Enhancing the voluntary initiatives: Through SASPARM2.0 project, launching the volunteers system and intuitive with 1000 students trained. The social service is part of the students' credit hours which covers 5000 students. Blood donation is one of the services;
- Work on empowering the city of Nablus as one of the 20 cities within the initiative of UNISDR towards making cities resilient. This includes preparation of an action plan for making cities sustainable and resilient implementing the Sendai Framework for Disaster Risk Reduction 2015-2030 at the local level which is an EU funded project to UNISDR;
- The European Commission for International Cooperation and Development considers strengthening disaster risk governance an essential part of sustainable development and a key priority of the Sendai Framework. This EU support will help the vulnerable cities become more resilient to disasters, increase the awareness of local authorities of future risks, and promote engagement of people living in these cities in reducing disaster risk.



## 6 MAIN GOALS OF THE EXPLOITATION PLAN

Considering the comprehensive dissemination and training activities that were performed during the life of SASPARM2.0 and the results and recommendations mentioned above, the exploitation plan was designed in order to include:

- Web Based Platform: Continue promoting;
- The new voluntary system initiative: Enhance and dissemination;
- Networking and coordination between different sectors and institutions;
- Social vulnerability studies and related indicators;
- Integrate and promote the retrofiting of existing buildings among practitioner engineers, contractors and other concerned institutions;
- Releasing and publishing the following scientific material: Brochures, research reports, lectures, and awareness material. They will be mainly specialized in seismic design and retrofiting. Community awareness among school students and others. Other subjects connected to seismic vulnerability of buildings, seismic design and retrofiting of buildings.

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### Target groups

The target groups identified to exploit the results are:

- School and university students;
- Facebook groups;
- Practitioner engineers, young engineers and students of Faculty of Engineering;
- Contractors' Engineers;
- Planners and decision makers;
- Municipalities and all line institutions working on Emergency Response and DRM;
- Private sector;
- School teachers and supervisors;
- Others.

### Exploitation program

The exploitation of project results interacts with the following dissemination activities:

- Training workshops for practitioner engineers and the engineers of the ministries and municipalities on the conceptual design and the minimum seismic design requirements including reinforcement details of structural elements;
- Training workshops for decision makers of governmental and non-governmental institutions. The aim is to promote awareness on disaster risk reduction and to create a common language among these institutions in order to emphasize on the connection and the relation between good governance and capacity building;
- Training workshops for school supervisors on earthquake awareness;



- Meetings with stakeholders from different group partners in order to follow on the progress of activities connected to the DRM, support preparing proposals and plans to get new programs building on what was achieved in SASPARM2.0;
- Follow up the implementation of the protocols signed between the engineers association and the municipalities for monitoring the practitioner engineers (operating in consulting engineering offices and companies) during the implementation of the seismic design code. Monitoring activity follows also the construction phase of the project;
- Building on SASPARM2.0 results and outcomes achieved, pursue other thoughts and initiatives towards sustainable efforts and results. For example:
  - ✓ Promote mid- and long-term networks of collaboration with interested parties;
  - ✓ Promote a collaborative research effort between the partners in order to encourage the application to new research projects in the field of seismic risk mitigation;
  - ✓ Open channels to sustainable efforts towards the adoption of a strategy for retrofitting existing buildings;
  - ✓ Promote the integration between the concept of seismic design and other engineering concepts, like green and safe buildings;
  - ✓ Open opportunities of research in the field of seismic vulnerability of the different building typologies in Palestine;
  - ✓ Open opportunities to launch the Palestinian Code in designing and retrofitting structural and non-structural elements;
  - ✓ Conduct detailed studies in the field of risk assessment and risk management;
  - ✓ Prepare risk maps and perform advanced earthquake scenarios;
  - ✓ Conduct studies in territorial mapping and management.

The project website (<http://www.sasparm2.com>) will be continuously updated and maintained. It will evolve as the project progresses and the information, presentations, dissemination materials, collected databases and training documentation related to the SASPARM2.0 activities will be always lodged here.

In addition to above mentioned exploitation elements, the project results will be fundamental for building competences and facilitating the participation of PS in the EU Framework Program. The project results will enhance EU-regional cooperation and networking.

