

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

## **Task E**

**Guidelines for risk management policy (including insurance)  
aimed at mitigating the impact of socio-economic losses**



**A. RISK ASSESSMENT AND EMERGENCY PREPAREDNESS**

**1. GENERAL ISSUES**

ISSUE	ANSWER
a. Do we conduct <i>earthquake risk assessment</i> at central or local level?	
b. For what purposes are the results of earthquake risk assessment(s) used?	
c. Are the sources of data and information used in earthquake risk assessment identified and documented? To what extent is any of this information made accessible to the public?	
d. What <i>reporting mechanisms</i> have been established to ensure that the results of the risk assessment are communicated internally and, as appropriate, externally?	
e. What <i>accountability mechanisms</i> are in place to ensure that risk assessments are of the highest possible quality? Is there an authority responsible for overseeing the risk assessment process and its outcomes?	
f. Who are the <i>key stakeholders</i> in disaster risk assessment and how are they involved in the process?	
g. Which governmental authority, if any, has lead responsibility for <i>earthquake risk assessments</i> ? If more than one authority or entity, is responsible for <i>earthquake risk assessment</i> , how is coordination ensured?	
h. Are <i>earthquake risk assessments</i> conducted by governmental bodies or contracted to external third parties?	
i. According to what procedure and how frequently is the <i>budget for earthquake risk assessment activities</i> determined or reviewed? Are resources for disaster risk assessment made available on a long term or recurring basis? How is their adequacy evaluated and by which authority?	
<b>2. RISK ANALYSIS</b>	
ISSUE	ANSWER



<p>a. What is the process for collecting, storing and updating the data on <i>earthquakes</i> that are used in disaster risk assessment?</p>	
<p>b. What tools and procedures do we employ to assess the expected <i>frequency and severity</i> of earthquakes? Can we assess the <i>probability of occurrence</i> of a earthquake of a given magnitude at a given location in each year?</p>	
<p>c. Do we take into account the interactive and cumulative effects of multiple hazards in the disaster scenarios affecting our vital interests? (e.g., by analysing a scenario characterised by at least two hazards, natural or man-made, in combination or sequence)</p>	
<p>d. If yes, how do we quantify the expected consequences in terms of casualties and economic and financial losses? With what degree of confidence?</p>	
<p>e. What are the main <i>sources of vulnerability</i>? These may be categorised along the following dimensions:</p> <ul style="list-style-type: none"> <li>(i) physical</li> <li>(ii) human and social</li> <li>(iii) economic and financial</li> <li>(iv) environmental</li> <li>(v) institutional</li> </ul> <p>What are the <i>main trends or factors</i> influencing vulnerability?</p>	
<p>f. What is the process for collecting, storing and updating data on <i>exposures</i> and <i>vulnerabilities</i> to earthquakes?</p>	
<p>g. Do we keep track of public expenditures on disaster risk reduction investments? How is data collected across government bodies? Is this data disclosed to the public?</p>	
<p>h. Do we have a complete and updated geocoded inventory of:</p> <ul style="list-style-type: none"> <li>(i) public assets exposed to hazards?</li> <li>(ii) critical infrastructures exposed to hazards?</li> <li>(iii) infrastructures that reduce exposure and/or vulnerability across the national territory (e.g., early warning systems, lifelines)?</li> <li>(iv) private assets exposed to hazards?</li> </ul>	
<p>i. Do we have reliable and updated geocoded information on:</p> <ul style="list-style-type: none"> <li>(i) the type, number and size of business activities exposed to hazards?</li> <li>(ii) the size of population exposed to hazards?</li> </ul>	



j. What are the technical tools, procedures and methodologies (if any) that we employ to translate expected <i>physical losses</i> into <i>financial terms</i> ?	
k. Are data generated on the <i>average annual cost</i> (based on historical losses) of disaster risks (for each type of hazard and in aggregate)?	
l. Are data available to quantify the expected economic and financial consequences of a given disaster event suffered? And its impact on <i>public finances</i> ?	
m. How are the results of the risk assessment process documented?	
n. How are disaster risk assessment activities reviewed, monitored and validated?	
<b>3. RISK COMMUNICATION AND AWARENESS</b>	
<b>ISSUE</b>	<b>ANSWER</b>
a. Is the outcome of disaster risk assessment communicated to <i>decision-makers</i> in the public and private sectors? In what form?	
b. Is the outcome of disaster risk assessment communicated to the <i>general public</i> ? In what form?	
c. Are hazard and/or risk maps available for the entire territory? To what extent, if any, are they publicly accessible and disseminated?	
d. What strategy is in place to educate citizens and businesses about the hazards and threats facing our territory and provide guidance on what they can do to prepare for the major risks?	
<b>4. POLICY IMPLICATIONS OF RISK ASSESSMENT OUTCOMES</b>	
<b>ISSUE</b>	<b>ANSWER</b>
a. How are the results of <i>disaster risk assessments</i> used in decisions concerning allocation of resources for: <ul style="list-style-type: none"> <li>(i) Emergency preparedness?</li> <li>(ii) Disaster prevention and mitigation measures?</li> <li>(iii) Disaster risk financing and risk transfer tools?</li> </ul>	
b. To what extent does knowledge about the expected distribution of disaster impacts within the population and economy affect the implementation of measures a.(i) to a.(iii)?	

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c. To what extent does knowledge about the expected distribution of disaster impacts within the population and economy affect the implementation of measures a.(i) to a.(iii)?	
d. How are emergency management services organized on our territory?	
<b>5. POST-DISASTER IMPACT ANALYSIS AND QUANTIFICATION</b>	
<b>ISSUE</b>	<b>ANSWER</b>
a. Do we conduct <i>post-disaster impact assessments</i> ? Do we compile post-disaster evaluation reports according to a consistent methodology? Are such reports publicly disseminated?	
b. Who is responsible for collecting, storing and updating data on <i>disaster losses and fatalities, injuries and displaced persons</i> ? What process is followed?	
c. Are data readily available to quantify public expenditure (from either central, regional and local governments) disbursed to pay for <i>earthquake losses</i> in the past year? And over the past ten and fifteen years - both on a yearly and aggregate basis?	
d. Is there a breakdown available of such public expenditure by type of disaster losses paid for (e.g., damages to public buildings and infrastructures, damages to private assets, essential goods, business interruption losses, etc.)?	
e. Are data available to quantify the financial value of <i>disaster losses</i> sustained during the past year? And over the past ten and fifteen years - both on a yearly and aggregate basis?	
f. Are there data available to assess <i>disaster losses</i> with a breakdown by major segment of the economy, namely: <ul style="list-style-type: none"> <li>(i) governments (central, regional and local)</li> <li>(ii) households</li> <li>(iii) the corporate sector</li> <li>(iv) the financial sector?</li> </ul>	
g. What procedures are in place to incorporate the outcome of <i>post-disaster impact assessments</i> in future potential <i>disaster risk assessments</i> ?	



<b>B. RISK FINANCING</b>	
<b>1. FINANCIAL EXPOSURE AND CAPACITY</b>	
<b>ISSUE</b>	<b>ANSWER</b>
a. Based on the risk assessment, to what extent are: <ul style="list-style-type: none"> <li>(i) national, regional and local authorities</li> <li>(ii) households</li> <li>(iii) the corporate sector</li> <li>(iv) the financial sector</li> </ul> exposed to earthquake risks and related <i>financial losses</i> ?	
b. What are, if any, the main <i>financing gaps</i> in our territory? Who are the most financially vulnerable components of our economy and society? Are there relevant geographic differences?	
c. Has our government conducted a full assessment of its disaster risk exposures and risk-bearing capacity? Has it reported its explicit contingent liabilities linked to disasters and estimated its implicit contingent liabilities?	
<b>2. RISK FINANCING AND TRANSFER</b>	
<b>ISSUE</b>	<b>ANSWER</b>
a. What are the <i>earthquake risk financing and transfer</i> tools currently available in our territory to those stakeholders who are expected to absorb (in full or in part) the <i>financial consequences</i> of earthquakes?	
b. Are there significant differences in the availability of such tools for key categories of stakeholders (e.g., residential property owners, corporations, public sector entities)?	
c. Are earthquake risk financing and risk transfer markets – to the extent that they are operating in our territory – meeting the needs of financially vulnerable populations and segments of the economy?	
d. How is the pricing of such available <i>earthquake risk financing and transfer</i> tools structured? To what extent it is based on risk?	

<p>e. What efforts, if any, are or have been made by the public sector to facilitate develop <i>risk financing and risk transfer markets</i> (including insurance markets) and promote access to <i>earthquake risk financing and transfer</i> tools for stakeholders who are expected to face a <i>financing gap</i> and thus are likely unable to absorb (in full or in part) the <i>financial consequences</i> of earthquakes?</p>	
<p>f. Have we considered the potential social, economic and <i>financial impacts</i> of the inability of such stakeholders to withstand disaster losses?</p>	
<p>d. Have we assessed the advantages and disadvantages of introducing some degree of <i>compulsion</i> in the use of disaster risk financing or risk transfer tools by law or regulation?</p>	
<p>g. Have we evaluated the costs and benefits of the different <i>risk financing and risk transfer</i> tools available to cover any important <i>financing gaps</i> within our territory and to protect the public budget? What tools were considered? What methodology was employed?</p>	
<p>e. Have we compared the cost of <i>earthquake risk financing and transfer</i> tools with the cost of <i>disaster risk reduction and mitigation</i> measures? Can we provide an example?</p>	
<p>f. Is there a clear understanding of the expected <i>allocation</i> of earthquake costs between the public and the private sectors and within the public sector (e.g., different levels of government)? If so, how has such a policy or allocation been communicated?</p>	
<p><b>3. INSTITUTIONAL ARRANGEMENTS</b></p>	
<p><b>ISSUE</b></p>	<p><b>ANSWER</b></p>
<p>a. Do we have or have we assessed the need for setting up special institutional arrangements (or changing existing arrangements) to facilitate or improve coverage of <i>earthquake risks</i> in our territory? What was the outcome of our evaluation?</p>	
<p>b. What specific role, if any, are <i>financial sector</i> participants expected to play?</p>	



<p>c. Do we regularly assess the financial and operational capacity of <i>financial sector</i> participants to withstand a disaster event and their ability perform the specific tasks assigned within a given institutional arrangement, if any? What are the technical tools and procedures employed to perform such assessment?</p>	
<p><b>4. FISCAL POLICIES (i)</b></p>	
<p><b>ISSUE</b></p>	<p><b>ANSWER</b></p>
<p>d. Are there examples in our territory of fiscal instruments designed to promote the reduction of the vulnerability of the current building stock? For example: tax deductibility of expenses sustained to improve earthquake resilience of buildings; earthquake risk reduction subsidies.</p>	
<p>e. When an earthquake occurs, does the current legal framework allows our government to introduce specific fiscal instruments to reactivate business activities in affected areas? For example: a temporary tax exemption for the business activities located in the disaster areas.</p>	
<p>f. Are the fiscal measures in place to incentivise to charitable contributions to cover earthquake losses in our countries? For example: tax deductibility of charitable contributions.</p>	

**(i) GUIDANCE NOTE ON FISCAL POLICIES**

The objective is to clarify an overview on the current role (if exists) of fiscal instruments in the policies of risk reduction and risk mitigation in Palestine.

Fiscal instruments can be designed to promote specific goals. In other terms, there are cases where taxes and other types of fiscal instruments can usefully complement each other to achieve targets.

The specific area of interest is represented by the instruments functional to the reduction of the existing risk related to the current building stock.

Fiscal instruments comprehend all economic instruments of fiscal nature as well as direct subsidies that provide incentives to shift from some activities or behaviors considered undesirable towards more desirable alternatives.

In the specific case of our research, the main focus is on the existing instruments that aim at influencing taxpayer behavior in order to promote the reduction of the vulnerability of the current building stock.

Fiscal instruments can be divided into two main categories: tax instruments and subsidies.





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- Taxes and charges are levied on particular goods directly or indirectly linked to the activities or behaviors considered undesirable.  
They include taxes, charges and tradable permits.
  - Subsidies are accorded directly or through the tax system to encourage taxpayers to choose the inputs that have favorable properties. In contrast with taxes, they provide incentives by decreasing the price or purchasing costs of a product.

Fiscal instruments of this category can be divided into three types: (a) Direct subsidies, (b) Incentives given in direct taxation (personal income or corporate taxation) in the form of tax credits or allowances, (c) Differentiation of the tax rates in indirect taxation (VAT/ excise duties).

