

SASPARM 2.0

TASK E

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

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QUESTIONNAIRE ⁽¹⁾

| A. RISK ASSESSMENT AND EMERGENCY PREPAREDNESS | | |
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| 1. GENERAL ISSUES | | |
| ISSUE | ANSWER | Organizations |
| a. Do we conduct <i>earthquake risk assessment</i> at central or local level? | At central level: No At local level: Yes, and it's limited to few cities and it's done by using Macro-seismic assessment levels (not at micro-seismic) and all of these assessments have been done by Academia (Urban Planning and Disaster Risk Reduction Center, UPDRRC at Najah National University) . | UPDRRC UNDP EQA CDD HCCD NADRM PRCS |
| b. For what purposes are the results of earthquake risk assessment(s) used? | Few earthquake risk assessment (ERA), studies have been done for academic and UN organizations purposes. For limited cases, studies are done for governmental Organizations EQA during the Environment Impact assessment studies request the owner of the project to include earthquake risks and to avoid areas that can be active in earthquakes | UPDRRC UNDP EQA HCCD NADRM PRCS |
| 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? | Yes in academic and related research organizations and few cases in UN organizations. The existing ERA information is available for the public through academia resources, like the websites, published research papers, Master's thesis, etc , | UPDRRC UNDP EQA EAJC HCCD NADRM |

⁽¹⁾ Based on the **Self-Assessment Guiding Tool** annexed to the *G20/OECD Methodological Framework on Disaster Risk Assessment and Risk Financing (2012)*.

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| 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? | At the national level: Coordination mechanism is being drafted and it is not operationalized yet. Some of the scientific reports done by Scientific centers like UPDRRC are communicated to related Palestinian orgs at local and national levels Whereas, some study reports are communicated externally through UNDP and other UN Organizations... | UPDRRC UNDP EQA HCCD PRCS NADRM |
| 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? | Till now most of the limited RA has been done by UPDRRC and UN orgs. It is proposed to be part of coordination and command in the Prime Minister's office within the proposed initiative to establish the National Center for Disaster Risk Reduction. | UPDRRC UNDP NADRM |
| f. Who are the <i>key stakeholders</i> in disaster risk assessment and how are they involved in the process? | Local government authorities, line ministries, academia, private sector. Those are involved through coordination done by UPDRRC and other partners like the Higher Council For Civil Defense and UN organizations. | Most of the National Team/ Stakeholders. |
| 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? | None, Till now at Academia level. | Most of the National Team/ Stakeholders. |
| h. Are <i>earthquake risk assessments</i> conducted by governmental bodies or contracted to external third parties? | It is done through a third party either local like UPDRRC or international like UN or World Bank given there is no capacity in the governmental institutions to carry out the assessment. | UPDRRC UNDP NADRM Most of the National Team/ Stakeholders. |
| 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? | - Usually donor funded activities and in some caes using local reources Niether long term nor on a recurring basis | UPDRRC UNDP NADRM HCCD PRCS |

| 2. RISK ANALYSIS | | |
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| ISSUE | ANSWER | Organizations |
| a. What is the process for collecting, storing and updating the data on <i>earthquakes</i> that are used in disaster risk assessment? | There is no operating Palestinian seismic network (it is in the building stage) thus no earthquake digital data is available. However, national seismic networks in Jordan (JSN) and in Israel (ISN) have been operating for about two decades. The seismic data they acquired covers Palestine and could potentially be used for any quantitative seismic assessment in Palestine. Access to that data requires negotiation and then reprocessing to suit the requirements a quantitative seismic assessment for Palestine. Since 2015, a joint research seismic network (DeadSeaNet) monitors seismicity in the Dead Sea Valley. Palestine is a partner of DeadSeaNet and has full access to the joint data base. DeadSeaNet is in the process of designing a map of active faults for the Jericho Basin. | UPDRRC NADRM |
| 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 an earthquake of a given magnitude at a given location in each year? | Assessing the frequency and severity of earthquake requires complete seismic catalog for recent and historical seismicity. Palestine does not have any of these catalogs. Raw seismic and historical data for the region could potentially be obtained from Israel and Jordan but catalogs need to be quality controlled, merged, declustered and reprocessed. | UPDRRC NADRM |
| 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 analyzing a scenario characterized by at least two hazards, natural or man-made, in combination or sequence) | No | UPDRRC UNDP NADRM HCCD PRCS |
| d. If yes, how do we quantify the expected consequences in terms of casualties and | -- | |

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| economic and financial losses? With what degree of confidence? | | |
| e. What are the main sources of vulnerability? These may be categorized along the following dimensions: (i) physical (ii) human and social (iii) economic and financial (iv) environmental (v) institutional What are the main trends or factors influencing vulnerability? | All Rapid urbanization, local site conditions, and high seismic vulnerability of common buildings and infrastructures. Escalation of conflict and occupation which affects the Palestinian institutions and the public in many aspects like economics, social, health, education, security, etc I Climate change also participate in increasing the vulnerability | UPDRRC EQA CDD HCCD NADRM PRCS MPW MOLG |
| f. What is the process for collecting, storing and updating data on exposures and vulnerabilities to earthquakes? | For example: 1-Data collected by the municipalities and Palestinian Central Bureau for Statistics, research studies and other tools questioners 2- The collected data is stored in the PCBS, Municipalities and scientific centers | MPW MOLG NM RM EAJC |
| 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? | No tracking. There is many DRR interventions implemented by the government. However they are not classified as DRR interventions and they are disclosed to the public.. | UNDP Most of the National Team/ Stakeholders. |
| h. Do we have a complete and updated geocoded inventory of: (i) Public assets exposed to hazards? (ii) Critical infrastructures exposed to hazards? (iii) Infrastructures that reduce exposure and/or vulnerability across the national territory (e.g., early warning systems, lifelines)? (iv) Private assets exposed to hazards? | No No? | Most of the National Team/ Stakeholders. |
| i. Do we have reliable and updated geocoded information on: (i) the type, number and size of business activities exposed to hazards? (ii) the size of population exposed to hazards? | No No | Most of the National Team/ Stakeholders. |
| j. What are the technical tools, procedures and methodologies (if any) that we employ to | No | Most of the National Team/ Stakeholders. |

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| translate expected <i>physical losses</i> into <i>financial terms</i> ? | | Stakeholders. |
| 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)? | NO | MoPAD |
| 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> ? | No | MoPAD |
| m. How are the results of the risk assessment process documented? | The results are documented by the National and UN organizations who either request and/or involved in the assessment process | UNDP UPDRRC HCCD EQA |
| n. How are disaster risk assessment activities reviewed, monitored and validated? | The review and monitoring is not available yet given the limited initiatives connected to this subject | UPDRRC UNDP NADRM |
| 3. RISK COMMUNICATION AND AWARENESS | | |
| ISSUE | ANSWER | Organizations |
| a. Is the outcome of disaster risk assessment communicated to <i>decision-makers</i> in the public and private sectors? In what form? | Yes, through reports, meetings, presentations, media, etc | NADRM UPDRRC HCCD |
| b. Is the outcome of disaster risk assessment communicated to the <i>general public</i> ? In what form? | Yes, through all the available media including UPDRRC web site. | Most of the National Team/ Stakeholders. |
| c. Are hazard and/or risk maps available for the entire territory? To what extent, if any, are they publicly accessible and disseminated? | - yes?? - only Macro-zonation PGA Earthquakes Hazard Map | UPDRRC EAJC |
| 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? | No definite strategy exists for this purpose, However until current stage all is done through initiatives by UPDRRC. It is expected to have new initiatives towards finding this strategy. | Most of the National Team/ Stakeholders. |
| 4. POLICY IMPLICATIONS OF RISK ASSESSMENT OUTCOMES | | |
| ISSUE | ANSWER | Organizations |
| a. How are the results of <i>disaster risk assessments</i> used in decisions concerning | NA | Most of the National Team/ |

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| allocation of resources for: (i) Emergency preparedness? (ii) Disaster prevention and mitigation measures? (iii) Disaster risk financing and risk transfer tools? | | Stakeholders. |
| 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)? | NA | Most of the National Team/ Stakeholders. |
| 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)? | NA | Most of the National Team/ Stakeholders. |
| d. How are emergency management services organized on our territory? | see the DRM report and appendices | Most of the National Team/ Stakeholders. |

| 5 .POST-DISASTER IMPACT ANALYSIS AND QUANTIFICATION | | |
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| ISSUE | ANSWER | Organizations |
| 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? | Usually No. In certain occasions, the UN supported conducting Post disaster needs assessment after Gaza War 2006, 2008, 2014, ...as well as after the invasion of Israeli Army to Palestinian cities in West Bank in 2002. This was done adopting the UN methodology for <i>post-disaster damage assessments</i> . <i>Adding to that, the world bank conducted the PDRA after the 2013 snow storm that hit the most cities of the west bank.</i> <i>All above was done in cooperation with concerned Palestinian institutions.</i> | UNDP GSCM CDD HCCD MPW MOLG EQA PRCS |
| 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? | It depends on the disaster type: Usually the Ministry of Public Works and Housing , Ministry of Health, Ministry of Finance, Ministry of Economics, Ministry of Social Affairs , etc. | Most of the National Team/ Stakeholders. |
| c. Are data readily available to quantify public expenditure (from 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? | No/NA | UNDP GSCM HCCD EQA PRCS |
| 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.)? | - very limited - For certain cases by UN, World Bank and other donors. | UNDP GSCM NADRM UPDRRC |
| 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? | NO/NA | Most of the National Team/ Stakeholders. |
| f. Are there data available to assess <i>disaster losses</i> with a breakdown by major segment of the economy, namely: (i) governments (central, regional and local) | NO/NA | Most of the National Team/ Stakeholders. |

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| (ii) households (iii) the corporate sector (iv) the financialsector? | | |
| 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> ? | NO/ NA | Most of the National Team/ Stakeholders. |

| B. RISK FINANCING | | |
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| 1. FINANCIAL EXPOSURE AND CAPACITY | | |
| ISSUE | ANSWER | Organizations |
| a. Based on the risk assessment, to what extent are: (i) national, regional and local authorities (ii) households (iii) the corporate sector (iv) the financial sector exposed to earthquake risks and related <i>financial losses</i> ? | NO/NA | Most of the National Team/ Stakeholders. |
| 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? | N/A | Most of the National Team/ Stakeholders. |
| 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? | NO/NA | Most of the National Team/ Stakeholders. |
| 2. RISK FINANCING AND TRANSFER | | |
| ISSUE | ANSWER | |
| a. What are the <i>earthquake risk financing</i> and <i>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? | NO/NA | Most of the National Team/ Stakeholders. |
| 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)? | NO/NA | Most of the National Team/ Stakeholders. |
| 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? | NO/NA | Most of the National Team/ Stakeholders. |
| d. How is the pricing of such available <i>earthquake risk financing</i> and <i>transfer</i> tools structured? To what extent it is based on risk? | NO/NA | Most of the National Team/ Stakeholders. |
| e. What efforts, if any, are or have been made by the public sector to facilitate develop <i>risk financing</i> and <i>risk transfer markets</i> (including insurance markets) and promote access to <i>earthquake risk financing</i> and <i>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? | NO/NA | Most of the National Team/ Stakeholders. |
| f. Have we considered the potential social, economic | NO/NA | Most of the |

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| and <i>financial impacts</i> of the inability of such stakeholders to withstand disaster losses? | | National Team/ Stakeholders. |
| 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? | NO/NA | Most of the National Team/ Stakeholders. |
| g. Have we evaluated the costs and benefits of the different <i>risk financing</i> and <i>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? | NO/NA | Most of the National Team/ Stakeholders. |
| e. Have we compared the cost of <i>earthquake risk financing</i> and <i>transfer</i> tools with the cost of <i>disaster risk reduction</i> and <i>mitigation</i> measures? Can we provide an example? | NO/NA | Most of the National Team/ Stakeholders. |
| 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? | NO/NA | Most of the National Team/ Stakeholders. |
| 3. INSTITUTIONAL ARRANGEMENTS | | |
| ISSUE | ANSWER | |
| 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? | Assessment done and a proposal to institutionalize DRM is made to replace the existing emergency system, see the appendices. | Most of the National Team/ Stakeholders. |
| b. What specific role, if any, are <i>financial sector</i> participants expected to play? | NO/NA | Most of the National Team/ Stakeholders. |
| 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? | NO/NA | Most of the National Team/ Stakeholders. |
| 4. FISCAL POLICIES (1) | | |
| ISSUE | ANSWER | |
| 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. | NO/NA | Most of the National Team/ Stakeholders. |
| e. When an earthquake occurs, does the current legal framework allow our government to introduce specific | NO/NA | Most of the National Team/ Stakeholders. |

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| fiscal instruments to reactivate business activities in affected areas? For example: a temporary tax exemption for the business activities located in the disaster areas. | | Stakeholders. |
| 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. | NO/NA | Most of the National Team/ Stakeholders. |

Note: for more details about the organizations/stakeholders names and their abbreviations see table no 1.

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

The objective is to clarify an overview of 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.

- 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).