Views from the Frontline
Country Report for Lebanon

April 2009

Written by: Sanaa Maalouf
Reviewed by: Maya Assaf
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FOREWORD

The aim of Hyogo Framework for Action (HFA) is to have substantial reduction in disaster losses by 2015. To achieve this outcome, the impact of the HFA should be assessed directly from the communities where vulnerable people are living. Strong accountability is needed for the effective implementation of the HFA in order to measure progress towards objectives.

The ‘Views from the Frontline’ project supports the implementation of the HFA through providing common bases for the assessment and measurement of the progress at the local level. The results of the project provide baseline data by which future progress can be periodically assessed. The role of World Vision Lebanon was crucial in this assessment process. Information gathered from the different areas in Lebanon was collected and analyzed at the local and national level to identify good practice, critical success factors and key constraints towards progress. This assessment provides a strong base for public policy work and facilitates dialogue between civil society and public authorities. This dialogue can encourage agreement on policy positions and build broad-based advocacy coalitions and alliances that will enable local voices to be clearly heard within national, regional and international decision-making processes. Local communities and civil society organizations can use the information present in this report to develop ways forward to address the main challenges identified.

This report first includes starts with a brief introduction of Disaster Risk Reduction (DRR) in Lebanon. It also includes the analysis of the data collected through the implementation of the ‘Views from the Frontline’ project, which is based on the priorities of the HFA. The results of every priority are followed by the recommendations of the five Lebanese communities assessed during the research process.

This report also provides baseline data about DRR in Lebanon regarding the progress done towards achieving the priorities of the HFA. The uniqueness of this assessment is that it conveys the local opinions from vulnerable Lebanese communities and provides suggestions to the global network on policies that would help strengthen community-based disaster risk reduction against the HFA.
ACKNOWLEDGEMENTS

This report is first dedicated to the families and community members in the areas where Views from the Frontline was implemented and where World Vision Lebanon (WVL) is currently operational namely the areas of Marjeyoun, Bekaa, Bsharre, Akkar and Beirut suburbs.

We would like to thank our WVL area program staff, namely community mobilizers from the aforementioned areas for facilitating the logistics for the data collection process as well as providing the human resources and locations required for the project implementation. We would also like to thank our colleagues from the Global Network, namely Marcus Oxley, Terry Gibson, and Janine Schall-Emden, who provided us with resources and technical support to make this project possible.

A special thanks to Participating Organizations (POs) and community members who showed strong willingness to participate in the data collection process; their contribution was essential for the implementation and success of this project.

The “Views from the Frontline” project team is also grateful to every person who accepted to participate in the project through responding to the questionnaires and sharing his/her opinion with the team on Disaster Risk Reduction (DRR) in Lebanon.

Last but not least, WVL would like to give a very special thank you to WV Switzerland who has co-funded the project for most part, namely Anna Schelnberger, the Programme Officer overlooking this project in Switzerland. Their support was indispensable for the successful implementation of this project.

The “Views from the Frontline” project team
LIST OF ACRONYMS

**WVL**: World Vision Lebanon

**ADP**: Area Development program

**HEA**: Humanitarian and Emergency Affairs

**PO**: Participating Organization

**CSO**: Civil Society Organization

**DRR or Disaster Risk Reduction**: Minimizing vulnerabilities and disaster risks throughout a society, to avoid (prevention) or to limit (Mitigation and preparedness) the adverse impacts of hazards, within the broad context of sustainable development.

**GN**: The Global Network of Civil Society Organizations for Disaster Reduction, responsible for the global implementation of the 'Views from the Frontline' project.

**HFA**: The Hyogo Framework for Action - adopted by 168 governments at the World Conference on Disaster Reduction, held in 2005 in Hyogo, Japan, focusing on building the resilience of nations and communities to disasters (http://www.unisdr.org/wcdr/intergover/official-doc/L-docs/Hyogo-framework-for-action-english.pdf)
EXECUTIVE SUMMARY

This present report summarizes the results of the “Views from the Frontline” project, implemented in Lebanon by World Vision. ‘Views from the frontline’ is an action-research project performed by civil society stakeholders and well as government bodies. It aims to measure progress towards the implementation of the HFA at the local level across developing countries and regions using the five priorities of action in the HFA. The project consists of a survey research undertaken by local government officials, civil society organizations and local community representatives to assess their perceptions about the progress done towards the priorities of the Hyogo Framework. The project also consists of a learning element, which was explored through community consultations and feedback with different civil society representatives, including children. The project’s main goal is to support the effective implementation of the HFA in building the resilience of vulnerable people and countries at high risk of disasters.

Throughout its history, the country of Lebanon has faced many natural and man-made disasters that have affected its population, economy and political stability. Lebanon still frequently faces small to mid-scale disasters and bears a high potential for large scale disasters like floods, earthquakes, wild fires, internal conflicts and cross border wars.

Five of the vulnerable areas in Lebanon were chosen for the implementation of the ‘Views from the frontline’ survey. Each of the Bekaa, Akkar, Bsharre, Beirut and Marjeyoun stakeholders (civil society and government representatives) were expected to fill 32 survey questionnaires through face to face interviews, with the aim to have filled a total of 160 questionnaires. Due to unexpected obstacles in some of the field areas assessed, the total number of questionnaires that were filled from all the five areas was 115 questionnaires.

The questionnaires, as designed by the Global Network for Disaster Reduction were divided as per the 5 priorities for action from the HFA and some more general cross-cutting issues. The results of the data analysis gathered from the questionnaires are detailed in the graph below:
The above results are represented by a number of 1 to 5. Number 1 represents ‘No, not at all’, number 2 represents ‘to a very limited extent’, number 3 represents ‘some activity but significant scope for improvements’, number 4 represents ‘yes, but with some limitations in capacities and resources’ and number 5 represents ‘yes, with satisfactory, sustainable and effective measures in place’.

As shown from these score values, the progress achieved up to date in implementing these priority actions remains very low in Lebanon. Risk assessment, monitoring and warning received the lowest scores and need immediate action by government and civil society representatives. It is also evident from the results that civil society organizations are scoring higher on almost all the priorities, which highlights the importance of strengthening cooperation between the government and civil society organizations. There are various weaknesses in both the government’s work and the civil society organizations working on DRR. The level of awareness of the community about disasters and disaster reduction is very low due to the absence of awareness campaigns. For example, no information about disasters has been tackled with children in schools. There are many underlying risk factors to disasters that have still not been taken into consideration and there is no action taken to decrease their impact on populations at risk in Lebanon.
Various recommendations were suggested by respondents of the questionnaires and participants in the community consultations, which can be summed up as follows:

1. Develop a national action plan for disaster risk reduction and by setting clear objectives with indicators and a monitoring plan, to ensure proper implementation.
2. Provide financial resources for disaster risk reduction projects and establish an emergency fund for different areas in Lebanon.
3. Provide education and awareness on DRR for all community groups.
4. Conduct risk assessments in consultation with specialists to identify major risks and dangers for each every specific area in Lebanon.
5. Develop a center for guidance and information on disaster risk reduction within municipalities areas all over the country.
6. Incorporate disaster risk reduction in the national school curriculum.
7. Ensure the pre-positioning or storage of a minimum amount of food and medical supplies/equipment that might be needed by affected communities in case of a disaster.
8. Improve partnerships between the civil society and the government through regular coordination meetings and networking coalitions.
9. Ensure proper use of natural resources to decrease environmental degradation and ensure that construction standards are disaster-resilient.
INTRODUCTION

Disaster Risk Reduction is a new concept for both the public and private actors that work in community-based and national-level development in Lebanon. National and local capacities for disaster risk reduction are generally weak and may vary in the different levels. Lebanon doesn’t have a disaster risk management system as outlined in the Hyogo framework for Action and national and municipal strategies and action plans are missing.\(^1\)

This report consists of results of the “Views from the Frontline” project and an analysis of the status of Lebanon in relation to the priorities of the Hyogo Framework for Action.

The first section of the report discusses the Views from the Frontline project, its background and approach.

The second section of the report includes an overview of disaster risk reduction in Lebanon. It includes a short historical section of the most recent disasters in Lebanon and a brief analysis of the main causes and patterns affecting populations at risk in vulnerable communities. A geographical map of Lebanon locates the areas with the highest vulnerability to disasters.

The third section consists of the analysis of the project’s findings according to the five priorities of the Hyogo framework for Action. In this section, the interpretation of the results of each priority, along with recommendations and best practices will be presented. Finally, the section consists of a conclusion of the findings related to each priority for action.

The fourth section of the report, “overall highs and lows”, discusses the differences and similarities between the different respondent groups in relation to the five priorities for action and the crosscutting issues.

The fifth and final section of the report titled “conclusions, recommendations and ways forward” focuses on the strengths and weaknesses of DRR in Lebanon. This section includes the recommendations of all respondents during the interviewing process. The final part of this section will explore potential ways forward to strengthen DRR on the local, national and regional levels.

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\(^1\) Regional DRR Programme Jordan/Syria/Lebanon 2008 - 2010
I. Views from the Frontline: Project Background and Approach

The Global Network of Civil society Organizations was launched in July 2007 after the adoption of the Hyogo Framework in 2005. The goal of the Global Network is to increase the effectiveness of civil society to build the resilience of nations and communities to disasters. It aims to bring the concerns and interests of vulnerable people into the heart of global disaster risk reduction policy and practice.

‘Views from the Frontline’ is an action-research project performed by civil society stakeholders and well as government bodies. It aims to measure progress towards the implementation of the HFA at the local level across developing countries and regions. The project includes both a research and a learning element. The research element focuses on face-to-face interviews or self-evaluations by local government officials, civil society organizations and local community representatives to assess their perceptions about the progress done towards the priorities of the Hyogo Framework. The learning element entails using the research findings to develop agreement on policy positions and recommendations done through community consultations and then sharing these findings through a national workshop.

The project’s main goal is to support the effective implementation of the HFA in building the resilience of vulnerable people and countries at high risk of disasters. Its main objectives are first to provide an independent overview of the progress done at the local level towards the 5 priorities of the HFA and provide baseline data for future evaluation. The projects aims as well at strengthening the public accountability of the implementation of the HFA and improving the civil society’s ability to monitor the progress, share the information, plan policy positions and develop advocacy coalitions in order to have coordinated efforts in implementing the HFA on the ground.

The project has many outcomes at both the national and the regional level. The project can improve the local understanding of the disaster resilience level in participating countries and improve the communication between public, civil society and community stakeholders involved in disaster risk reduction. Moreover, the project can enhance the governmental and civil societies understanding of the progress towards the implementation of the HFA. Finally, the project participants will have increased research, analytical and advocacy capabilities.

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II. OVERVIEW OF DISASTERS IN LEBANON

Over the face of history, Lebanon has faced many natural and man-made disasters that have affected its population, economy and political stability. The country frequently faces small to mid-scale disasters and bears a high potential for large-scale disasters. The history of all the disasters that Lebanon has faced in the previous decades is represented in the table below.³

Table 1: History of disasters in Lebanon

<table>
<thead>
<tr>
<th>Name of Disaster</th>
<th>Years</th>
<th>Type of disaster</th>
</tr>
</thead>
<tbody>
<tr>
<td>Internal conflict</td>
<td>1975-1990</td>
<td>Man-made disaster</td>
</tr>
<tr>
<td>Flood</td>
<td>1987</td>
<td>Natural Disaster</td>
</tr>
<tr>
<td>Storm</td>
<td>1992</td>
<td>Natural Disaster</td>
</tr>
<tr>
<td>Storm</td>
<td>2002</td>
<td>Natural Disaster</td>
</tr>
<tr>
<td>Flood</td>
<td>2003</td>
<td>Natural Disaster</td>
</tr>
<tr>
<td>Cross-border war: July 2006</td>
<td>2006</td>
<td>Man-made disaster</td>
</tr>
<tr>
<td>Internal war between the Lebanese army and the salafist group Fatah- al-Islam based in the Nahr el Bared Palestinian camp</td>
<td>2007</td>
<td>Man-made disaster</td>
</tr>
<tr>
<td>Wild Fires</td>
<td>2007</td>
<td>Natural Disaster/ Man-made Disaster</td>
</tr>
</tbody>
</table>

Other than the disasters mentioned above, the Lebanese population is at risk of other hazards as detailed below:

Natural disasters

The major natural disasters that Lebanon might face are earthquakes, floods, droughts, and desertification. Almost the entire territory of Lebanon lies on the belt of the Dead Sea fault system where high levels of seismicity are present. Uncontrolled growth in large cities like Beirut that are prone to earthquakes increases the vulnerability in terms of people and infrastructure exposed. Moreover, seismic-proof construction and building codes are still not enforced, increasing the vulnerability of the country in the face of earthquakes. The probability of floods, droughts and desertification is a concern especially with the present regional conflicts on water. With the increased probability of droughts, there is a higher probability of forest fires which can have adverse effects on agriculture and the economy.⁴

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³ Crisis Prevention and Recovery – United Nations Development Programme
⁴ Regional DRR Programme Jordan/Syria/Lebanon 2008 - 2010
Man Made Disasters

For many decades, Lebanon has been facing many wars and conflicts because of its geopolitical setting on the eastern Mediterranean, its internal pluralism, and the Arab-Israeli conflict, which has a direct impact on its internal politics. Lebanon is still recovering from four conflicts in two decades. The economic and political situation is still unstable and Lebanon is at risk of facing new conflicts and wars with the region at any time.

Another man-made disaster which is likely to take place is wild fires, which destroy livelihoods, contributes to environmental degradation, and even causes the loss of lives in vulnerable communities. The devastating blazes began when farmers started small fires in an attempt to clear dead grasses from their land. According to the Association for Forests, Development and Conservation (AFDC), similar misguided actions have been responsible for 95% of all recent forest fires in Lebanon.5

Map of the vulnerability and risk of disasters in Lebanon

5 Blazing Lebanon - Forest fires threaten Lebanon’s shrinking woodlands
Megan Bainbridge, Special to NOW Lebanon, October 19, 2008
III. SAMPLING METHODOLOGY

The research study was undertaken in five vulnerable areas in Lebanon: Akkar, Bsharre (Northern Lebanon), Beirut suburbs, Bekaa valley (Western Lebanon), and Marjeyoun (Southern Lebanon), distributed in Lebanon’s main governorates (Muhafazas in Arabic) in order to be as representative as possible of the entire Lebanese population. These areas are considered as vulnerable as shown in the map of the “vulnerability and risk of disasters in Lebanon” presented in the previous section. Moreover, those areas were also specifically chosen for the project because World Vision has local offices, where it operates using the "Area Development Program\(^6\)" model. The presence of World Vision in those areas has largely facilitated the initiation of the project because of its knowledge of local communities and the different stakeholders present in the area.

Since the sample expected for this study consisted of a total of 160 questionnaires, each of the five areas was expected to fill 32 questionnaires, 10 of which had to be filled by community representatives, 10 by civil society organizations that are operational in the area, and 12 by local government officials. The 12 representatives of the local government were further divided into 4 different categories of stakeholders including 4 officials in charge of education, 4 officials in charge of urban/agricultural planning, and 4 senior officials. However, due to time limitations and challenges faced on the field, only 115 out of the 160 questionnaires were administered as follows:

Table 2: Number of respondents in the research study

<table>
<thead>
<tr>
<th>Areas</th>
<th>Local Gov. Officials</th>
<th>Civil Society Organizations</th>
<th>Community Representatives</th>
<th>Total No. of Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bsharre</td>
<td>12</td>
<td>7</td>
<td>10</td>
<td>29</td>
</tr>
<tr>
<td>Akkar</td>
<td>12</td>
<td>10</td>
<td>10</td>
<td>32</td>
</tr>
<tr>
<td>Beirut</td>
<td>2</td>
<td>1</td>
<td>3</td>
<td>6</td>
</tr>
<tr>
<td>Marjeyoun</td>
<td>9</td>
<td>2</td>
<td>10</td>
<td>21</td>
</tr>
<tr>
<td>Bekaa</td>
<td>10</td>
<td>9</td>
<td>8</td>
<td>27</td>
</tr>
<tr>
<td>Total</td>
<td>45</td>
<td>29</td>
<td>41</td>
<td>115</td>
</tr>
</tbody>
</table>

\(^6\) An Area Development Program is a community-owned program aiming at meeting the needs and rights of people in a certain geographical area through a variety of projects targeting different sectors; as well as building the community’s individual and institutional potential in order to ensure sustainable development within a lifespan of 12 to 20 years.
IV. ANALYSIS OF DATA

The answers for the questions and the results were presented based on the value of these numbers as follows:

1 = No, not at all
2 = To a very limited extent
3 = Some activity but significant scope for improvements
4 = Yes, but with some limitations in capacities and resources
5 = Yes, with satisfactory, sustainable and effective measures in place

1. Priority for Action 1 – Governance

1.1 Overall Score

<table>
<thead>
<tr>
<th>Governance</th>
<th>Local government</th>
<th>Civil society</th>
<th>Community representatives</th>
<th>Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frameworks and structures</td>
<td>1.71</td>
<td>1.93</td>
<td>1.70</td>
<td>1.78</td>
</tr>
<tr>
<td>Planning</td>
<td>1.57</td>
<td>2.28</td>
<td>1.72</td>
<td>1.86</td>
</tr>
<tr>
<td>Financial Resources</td>
<td>1.62</td>
<td>1.72</td>
<td>1.32</td>
<td>1.56</td>
</tr>
<tr>
<td>Financial Resources (for partnerships)</td>
<td>1.84</td>
<td></td>
<td></td>
<td>1.85</td>
</tr>
<tr>
<td>Human Resources</td>
<td>1.22</td>
<td>2.17</td>
<td>1.43</td>
<td>1.58</td>
</tr>
<tr>
<td>Average</td>
<td>1.59</td>
<td>2.02</td>
<td>1.70</td>
<td>1.72</td>
</tr>
</tbody>
</table>

1.2 ‘Highs and Lows’

The results of the priority for action 1 show that the average of results of all respondent groups to all the sections (1.72) is approximately equal to the average of each group separately except for the civil society group that shows an average of 2.02-which is
higher than the total average of other respondent groups. The considerable difference between the civil society and local government scores shows that civil society organizations are much more active in their communities than the local government. Civil society organizations seem to incorporate DRR more than the local government in their current community-based programs.

1.3 Recommendations and Best Practices

Many respondents recommended establishing a governmental body or a specific Lebanese Ministry for “Disaster Risk Reduction and Mitigation” as a first step to making disaster risk reduction a priority for the government and for local actors at the community level. Others recommended establishing a local body for disaster management at the municipal level in every area with a team of qualified personnel which would be able to prepare for and respond to disasters when needed as well as build local capacities for risk reduction and disaster mitigation. Some also suggested that this body be established close to a health center for accessibility of emergency medication as well as a civil defense center with all the needed equipment and resources. Some respondents also said that some laws should be drafted and enforced to encourage DRR action in Lebanon. Another important recommendation that came out of this section is the need to allocate appropriate financial resources for DRR by the national and local governments. The suggestion was for the government to allocate part of its national budget for DRR at the national level by including it in its Ministry budgets (e.g. Ministry of Health, Ministry of Education) and at the municipal level in order to provide the needed resources for potential programming and capacity building on DRR. The establishment of health centers in the remote rural areas that where there are no close hospitals was stated as a necessity by many participants. Furthermore, discussions from the community consultations yielded similar results and added the importance of developing a plan of action for DRR in Lebanon with realistic objectives and a proper monitoring plan to ensure that the plan is being implemented in a timely manner. For the success of this plan, the government should work with the existing international and local organizations that are operational in the different areas in Lebanon.

1.4 Conclusion

Results have shown that DRR is still not a priority in Lebanon and that a lot of work needs to be done to make it a culture of practice at both the community and decision-making levels. Establishing an organizational entity that can work exclusively on DRR in all areas and providing it with the needed resources is a step that can help build progress towards the Hyogo Framework for Action. Moreover, making use of the present resources from educated individuals to existing organizations can accelerate Lebanon’s progress towards disaster risk reduction,
2. Priority for Action 2 – Risk Assessment, Monitoring and Warning

2.5 Overall Score

<table>
<thead>
<tr>
<th>Risk Assessment, Monitoring and Warning</th>
<th>Local government</th>
<th>Civil society</th>
<th>Community representatives</th>
<th>Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>Disaster risk assessments</td>
<td>1.51</td>
<td>1.89</td>
<td>1.15</td>
<td>1.52</td>
</tr>
<tr>
<td>Early warning systems</td>
<td>1.11</td>
<td>1.65</td>
<td>1.1</td>
<td>1.29</td>
</tr>
<tr>
<td>Risk management systems</td>
<td>1.29</td>
<td>1.78</td>
<td></td>
<td>1.54</td>
</tr>
<tr>
<td><strong>Average</strong></td>
<td><strong>1.30</strong></td>
<td><strong>1.78</strong></td>
<td><strong>1.13</strong></td>
<td><strong>1.45</strong></td>
</tr>
</tbody>
</table>

2.6 ‘Highs and Lows’

The results for the priority for action 2 show that the civil society respondents’ group has the highest scores and average, while the local government and community representatives group have almost similar results. Although this difference is not too significant and the results are still low, this yet shows that civil society organizations have started to integrate DRR in their work.

2.7 Recommendations and Best Practices

The main recommendations that resulted out of this priority was the necessity of conducting risk assessments at the national and community levels to warn people and raise their awareness on the threats of disasters that they might face. Another recommendation that came out of this priority was developing a communication network to share information on risks with all concerned stakeholders. Another recommendation was to support already established local committees who are already working on risk assessment with the proper financial, human, and infrastructural resources provided by the local government. It is very important as well to train the communities to identify risks and be able to assess their dangers and notify them on who they should inform. Respondents also said that an early warning system should be established locally in every vulnerable community in Lebanon adapted to every local context’s needs and existing resources. People should be trained about warning systems in their area and the government should install early warning mechanisms especially in disaster-vulnerable areas.
2.8 Conclusion

Risk assessment, monitoring and warning is still at its very beginning in Lebanon with an average of 1.45 and total absence of any early warning system. The resources and capacities of the CSOs can be used in activating the work on this priority. Early warning systems should be developed in all areas and especially those that are most vulnerable. Some community attempts of assessing disaster risks have been initiated but such actions should be developed further to a national level.

3. Priority for Action 3 – Knowledge and Education

3.5 Overall Score

<table>
<thead>
<tr>
<th>Knowledge and Education</th>
<th>Local government</th>
<th>Civil society</th>
<th>Community representatives</th>
<th>Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>Information management &amp; exchange</td>
<td>1.79</td>
<td>2.14</td>
<td>1.75</td>
<td>1.90</td>
</tr>
<tr>
<td>Formal education (curriculum)</td>
<td>2.13</td>
<td></td>
<td>1.47</td>
<td>1.80</td>
</tr>
<tr>
<td>Formal education (training of teachers and materials)</td>
<td>1.44</td>
<td>2.06</td>
<td></td>
<td>1.75</td>
</tr>
<tr>
<td>Community training</td>
<td>1.44</td>
<td>1.79</td>
<td>1.52</td>
<td>1.59</td>
</tr>
<tr>
<td>Public awareness</td>
<td>1.81</td>
<td></td>
<td>1.3</td>
<td>1.56</td>
</tr>
<tr>
<td>Average</td>
<td>1.72</td>
<td>2</td>
<td>1.50</td>
<td>1.67</td>
</tr>
</tbody>
</table>

3.6 ‘Highs and Lows’

Judging from the overall scores of the different groups, civil society organizations have been introducing more knowledge about DRR than the other groups although the overall score 2 is still considered a low score in comparison to the scale provided in this research work. It is evident that sections on “Information management & exchange” and the “formal education” received higher scores that those on “community trainings” and “public awareness”. This difference could be due to lack of awareness campaigns and training programs at the national and local level as mostly evident
through scores of community representatives. (1.52 for community training and 1.3 for public awareness)

3.7 Recommendations and Best Practices

Knowledge and education are basic aspects of DRR, and respondents gave considerable importance to raising the awareness level of communities on disasters. They suggested for the government to include disaster risk reduction in education curricula as well as train specialized teams to educate and train communities in different areas on identifying risks and being better able to respond to disasters. Respondents also emphasized the importance of training school teachers about disasters so they would include these topics in their classroom activities. Children should also be trained on assessing risks in their area to help them have better ownership towards informing their communities (parents, teachers or municipalities) about disaster risks and ways to mitigate them. Many respondents suggested developing a national policy for raising awareness and taking action, developing publications and movies, conducting trainings for local communities, and providing funds for capacity building to do so. Moreover, some respondents said that the media can play an important role in spreading awareness especially on television and the internet. One of the suggestions was having the government develop a website that includes all the information regarding disasters and all the prevention and reduction techniques.

3.8 Conclusion

Increasing the knowledge of the community about disasters and incorporating DRR as part of general education and awareness is very important and needs to be tackled urgently since it has an average as low as 1.67. Raising the awareness of the community can be done using different techniques including introduction of DRR in the educational curriculum and in media awareness campaigns using different means (television, the internet). This task will require coordination between government representatives and civil society organizations.

4. Priority for Action 4 – Underlying Risk factors

4.5 Overall Score

<table>
<thead>
<tr>
<th>Underlying Risk factors</th>
<th>Local government</th>
<th>Civil society</th>
<th>Community representatives</th>
<th>Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>Environmental and natural resource management</td>
<td>2.25</td>
<td>2.41</td>
<td>1.79</td>
<td>2.16</td>
</tr>
<tr>
<td>Adaptation to climate change</td>
<td>1.32</td>
<td>2.06</td>
<td>1.64</td>
<td>1.68</td>
</tr>
<tr>
<td></td>
<td>2019</td>
<td>2020</td>
<td>2021</td>
<td></td>
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</tr>
<tr>
<td><strong>Food security</strong></td>
<td>1.35</td>
<td>1.45</td>
<td>1.40</td>
<td></td>
</tr>
<tr>
<td><strong>Social protection</strong></td>
<td>1.41</td>
<td>1.85</td>
<td>1.63</td>
<td></td>
</tr>
<tr>
<td><strong>Economic protection</strong></td>
<td>1.39</td>
<td>1.67</td>
<td>1.54</td>
<td></td>
</tr>
<tr>
<td><strong>Poverty alleviation</strong></td>
<td>1.33</td>
<td>1.5</td>
<td>1.42</td>
<td></td>
</tr>
<tr>
<td><strong>Land use</strong></td>
<td>1.25</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Urban planning</strong></td>
<td>1.62</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Overall planning</strong></td>
<td>2.73</td>
<td>1.77</td>
<td>2.25</td>
<td></td>
</tr>
<tr>
<td><strong>Building codes and standards</strong></td>
<td>2</td>
<td>1.37</td>
<td>1.69</td>
<td></td>
</tr>
<tr>
<td><strong>Building codes and standards (enforcement)</strong></td>
<td>2.66</td>
<td></td>
<td>2.67</td>
<td></td>
</tr>
<tr>
<td><strong>Protection of critical public facilities</strong></td>
<td>1.682</td>
<td>1.58</td>
<td>1.7</td>
<td>1.66</td>
</tr>
<tr>
<td><strong>Public-Private Partnerships</strong></td>
<td>1.52</td>
<td></td>
<td></td>
<td>1.52</td>
</tr>
<tr>
<td><strong>Average</strong></td>
<td>1.73</td>
<td>2.02</td>
<td>1.70</td>
<td></td>
</tr>
</tbody>
</table>

### 4.6 ‘Highs and Lows’

Looking at the averages of each respondent group, we can see that the average of the local government and the community representatives are almost equal for “underlying risk factors” while the civil society organizations’ average is higher, reaching 2.02. This difference is due to the fact that civil society organizations have answered only 3 out of the 13 sections. Environmental and natural resource management, overall planning and construction codes and standards (enforcement) are the only sections that received an average of 2 and above. Looking at the other sections, we can observe that their results are almost similar between the community representatives and the local government.

### 4.7 Recommendations and Best Practices

‘Underlying risk factors’ is considered a major priority for many of the respondents in all three groups. Respondents acknowledge the presence of many attempts from the government and the civil society in doing some developmental projects in the different
areas. These projects contribute to preventing and decreasing the dangers of some minor disasters but respondents illustrate the need for major projects at both the local and national level. Respondents focused on the importance of having environmental policies to protect Lebanon from forest fires, desertification, floods and environmental degradation. The government should establish more civil defense and Red Cross centers with warning systems next to forests to provide immediate assistance to affected populations and areas. All buildings, namely public facilities should be protected from earthquakes by adapting the licenses for construction to the international standards and enforcing these standards. Community members saw that international organizations can play an important role in advocating to the Lebanese government for the enforcement of standards through proper monitoring systems. The government should protect its citizens and support them to face disasters through providing them with security and basic needs. This could be done through ensuring storage of food and medical supplies and through working closely with civil society and private sector.

4.8 Conclusion

The underlying risk factors to disasters have obtained a low score of 1.73, which can have serious implications on the community’s safety in the future, if not properly tackled. The government has a primary role in this priority and various actions can be done in order for the government to play its role successfully. Environmental polices and construction standards should be developed and enforced in order to provide greater security to all members of the community. Coordination and partnerships should be developed between the civil society and the government in order to develop the communities’ capacities to manage the underlying risk factors that already exist or might emerge.

5. Priority for Action 5 – Disaster Preparedness and Response

5.5 Overall Score

<table>
<thead>
<tr>
<th>Disaster Preparedness and Response</th>
<th>Local government</th>
<th>Civil society</th>
<th>Community representatives</th>
<th>Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>Disaster preparedness capacities (future risks)</td>
<td>1.81</td>
<td>2.10</td>
<td>2.49</td>
<td>1.96</td>
</tr>
<tr>
<td>Disaster preparedness and response planning</td>
<td>1.31</td>
<td>2.86</td>
<td>1.24</td>
<td>2.67</td>
</tr>
</tbody>
</table>
Disaster response and recovery | 1.43 | 2.78 | 1.07 | 1.78
Training drills and rehearsals | 1.14 | 1.92 | 1.09 | 1.69
Financial reserves and aid | 1.48 | 2.53 | 2.85 | 2.29
Coordination and information exchange | 2 | 2.96 | 2.07 | 2.35
Average | 1.53 | 2.53 | 1.47 | 2.06

5.6 ‘Highs and Lows’

By looking at the averages of each group of respondents, one can notice that the civil society’s average is higher than that of community representatives and the local government’s average by 1 (2.53 > 1.53 & 1.47). This difference is significant and shows very clearly in all the sections of this priority. The high results of the civil society group in each section contributed in raising the overall average of this priority to 2.06. The higher averages of the civil society group are a positive sign showing that some work is being done on disaster risk reduction especially with regard to disaster preparedness and response. The events of July war 2006 and the other disasters that Lebanon has been facing in the previous years must have contributed greatly to the initiation of the work in DRR in the NGO sector.

5.7 Recommendations and Best Practices

Lebanon is still recovering from the July 2006 war and many attempts in terms of planning for future disasters have been made; yet respondents see that there are various areas for improvement. Civil Defense and Red Cross centers should be provided with the necessary equipment and vehicles and should train their members on using them.

Shelters and safer havens should be made available in all vulnerable areas and evacuation plans should be prepared to ensure people’s safety and well-being in case of disasters. Mobile clinics and hospitals should be established in areas where health care services are scarce. The community, especially youth should be trained on first aid and rescue techniques.

Moreover, special emergency teams dealing with possible disasters in Lebanon should be formed and trained to work on developing disaster management plans to provide immediate assistance in case of disasters. It is important to have more than one team in
order to manage the situation in case of a national disaster or if there are several disasters happening at the same time. The government should maintain regular communications with civil society organizations working before and during a disaster to coordinate the relief response. Civil society organizations should start working on gaining the trust of the community regarding disaster preparedness and response programs. It is very important for organization to be as transparent as possible when dealing with the communities, especially on disaster management programming.

5.8 Conclusion

The disaster preparedness and recovery capacity of Lebanon is still low (average of 2.06) despite the many disasters that Lebanon had been facing over the past years. Some areas in Lebanon lack access to emergency response teams such as the Red Cross and civil defense units that can intervene in case of a disaster. Furthermore, disaster management plans should be developed in order to be directly implemented in case of disasters. Furthermore, communication and coordination is essential between the government and civil society organizations to join efforts in providing the needed supplies and services to the community and avoiding duplication of activities.

6. Crosscutting Issues

6.5 Overall Score

<table>
<thead>
<tr>
<th>Crosscutting Issues</th>
<th>Local government</th>
<th>Civil society</th>
<th>Community representatives</th>
<th>Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>Community participation and information</td>
<td>2.03</td>
<td>3.64</td>
<td>1.78</td>
<td>2.48</td>
</tr>
<tr>
<td>Actual and fair participation</td>
<td>1.54</td>
<td>2.48</td>
<td>1.39</td>
<td>1.81</td>
</tr>
<tr>
<td>Encouraging Volunteers</td>
<td></td>
<td></td>
<td>1.45</td>
<td>1.45</td>
</tr>
<tr>
<td>Training activities</td>
<td>1.93</td>
<td></td>
<td>2.72</td>
<td>2.33</td>
</tr>
<tr>
<td>Gender</td>
<td>1.42</td>
<td>2.96</td>
<td></td>
<td>2.19</td>
</tr>
<tr>
<td>Gender (resources)</td>
<td>1.8</td>
<td>3.4</td>
<td>2.85</td>
<td>2.68</td>
</tr>
<tr>
<td>Cultural sensitivity (diversity)</td>
<td>1.13</td>
<td>3.51</td>
<td></td>
<td>2.33</td>
</tr>
<tr>
<td>Cultural sensitivity</td>
<td>1.42</td>
<td>3.19</td>
<td></td>
<td>2.31</td>
</tr>
</tbody>
</table>
### 6.6 ‘Highs and Lows’

This priority includes a considerable difference between the average scores of the different respondent groups. The average of the civil society group is double that of the local government and higher than the community representatives group by a whole point. This difference can be explained knowing that NGOs working in Lebanon have been incorporating these cross cutting themes in all the implemented projects because those are acknowledged worldwide. The difference between the results of the local government and the civil society in some sections is very significant. These sections include community participation and information and all the subsections of cultural sensitivity.

### 6.7 Recommendations and Best Practices

Respondents said that allowing the community to participate more in the decision making can yield greater benefits because they know their needs best. Active engagement and participation of the community among vulnerable groups helps in building their resilience against disasters and increase public accountability. Encouraging volunteers to participate in DRR activities is crucial for building their capacities and raising their awareness about disaster-related issues. Community members should feel ownership of every project implemented in the community and should participate in its implementation and its success. Women should be empowered and educated about DRR because their participation in the whole process is very important and raising their awareness is necessary for them to take care of their children in case of a disaster. Moreover, cultural sensitivity is an issue that should be taken into consideration in every project that is to be implemented. Activities and publications should be tailored to every community’s values and beliefs.

### 6.8 Conclusion

Cross cutting issues are very important for the success of any project. Lebanon has received an average of 2.15 in relation to the incorporation of these issues. An improvement in the participation of the community and especially women is a primary task to be done. Moreover, encouraging the participation of volunteers and building their capacities is necessary in responding to disasters. Finally, cultural sensitivity can play a great role in the success of a project if taken into consideration.

<table>
<thead>
<tr>
<th>(traditional knowledge)</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Cultural sensitivity (languages)</td>
<td>1.57</td>
<td>3.16</td>
<td>2.07</td>
<td>2.27</td>
</tr>
<tr>
<td>Average</td>
<td>1.56</td>
<td>3.01</td>
<td>2.04</td>
<td>2.15</td>
</tr>
</tbody>
</table>
V. OVERALL HIGHS AND LOWS FOR LEBANON

The overall score for Lebanon is 1.79 and is the average of all the 5 priorities for action and the cross cutting issues. This average means that DRR is present in Lebanon at a very limited extent. This average is considered not enough to decrease the negative effects of a disaster and eventually doesn’t decrease the economical and human lives losses as could be done. Risk assessment and monitoring acquired the lowest score of 1.45 although risk assessment is one of the most important parts of DRR. Without assessing the risks that are present in the country, the government is unable to warn communities of its dangers, which might therefore lead to a disaster with great impact on vulnerable communities. Working on developing a risk assessment plan in every area is one of the primary steps towards improving disaster management in Lebanon.
Governance (1.72), Knowledge and education (1.67), and underlying risk factors (1.73) received almost similar averages showing a very limited extent of work in these priorities. Governance represents the government’s concern in DRR and its willingness to having disaster risk reduction a priority in its agenda. Whenever this occurs, the government and the civil society will have to work hand in hand in order to raise the awareness and knowledge of the community about DRR and to work on solving and eliminating the underlying risk factors that can aggravate the dangers and the risks of disasters. Empowering the communities and raising their capacity to prevent, face, and recover from disasters is essential for the success of DRR. The communities are the ones that will be directly affected by disasters and if they have the capacity to take immediate actions many losses would be avoided.

Finally, priority for action 5 (disaster preparedness and response) and the cross cutting issues received the highest score among all priorities. However, the scores of 2.06 and 2.15 that represent the presence of action but to a limited extent are still not enough for effective implementation of DRR projects and for having people prepared to face disasters and respond to them directly and recover from them without major human and/or economic losses.

Throughout all the priorities, it is evident that civil society organizations are scoring higher than the government. This shows the importance of using the capacities of the civil society organizations in order to strengthen the government’s action in DRR. Therefore, partnerships at the local level between the civil society and the local government and governmental bodies are the best way to optimize the available resources and capacities to build the resilience of the community.

DRR is a process of work that needs working on improving all these priorities and cross cutting issues together. If a country receives high scores on one or two priorities, this is not enough to make sure that the communities can face these disasters and that the losses are minimal. Moreover, working on DRR is not the responsibility of the government alone; it also requires the participation and cooperation of the civil society organizations and the communities. However, it is the government’s responsibility to consider DRR a priority and to initiate the work and cooperation between the civil society and the community.
IV. CONCLUSION, RECOMMENDATIONS, AND WAYS FORWARD

Despite the low results in disaster preparedness and disaster risk reduction in Lebanon and the slow progress towards the implementation of the HFA, there are several strengths that Lebanon can build on in developing disaster risk reduction plans. There are many non-governmental and international organizations that are already working in the different areas in Lebanon and have the capacity to work on disaster risk reduction. The presence of educated and qualified human resources is a valuable asset when provided with the needed training and capacity building on the issue of disaster reduction.

On the other hand, the Lebanese government has still not prioritized the issue of disaster reduction and thus there is no proper follow-up with local governmental bodies on disaster-related issues. In addition, there are currently no attempts to conduct risk assessments by the government or civil society to identify the risks that communities might face in different areas. Lack of funding for DRR projects from the government primarily and from civil society organizations working in Lebanon is a major constraint for any attempts of progress. Also, there are no programs in both private and public schools in Lebanon to raise awareness about disasters and disaster risk reduction. There are no information centers at the municipal level and there are little local government efforts to raise the level of awareness of the community on DRR. Lebanon’s preparedness for future disasters still needs a lot of enhancement and the level of awareness at the community level regarding risks is very low as well. There is also decrease in the motivation of the people (especially youth) to volunteer and participate in community development activities. Local organizations and governmental bodies are not conducting awareness sessions, trainings or lectures about DRR. Moreover, the lack of coordination and communication between the government and civil society also creates a gap in the field of disaster preparedness. Finally, the present management of natural resources is not very effective in preserving the environment.

Few actions were taken in the area of disaster risk reduction in Lebanon. During the July war, coordination between the government and the nongovernmental organizations was very helpful in the recovery process in the post-conflict and recovery period. Some NGOs have started thinking of developing contingency plans for better emergency response in the future. World Vision has helped establish, in one of its most vulnerable area development programs, a local disaster management committee to assess disaster risks, mitigate their effects and danger, and develop community plans to facilitate emergency response in case of a disasters. Some examples of the activities conducted by the committee were: Raising the community’s awareness about earthquakes and fires thought the distribution of brochures and through awareness sessions. Unfortunately, the human and financial resources of this committee are very limited.
At the national level, the government has the responsibility of managing disasters by protecting its citizens from danger, introducing mitigation measures, and preparing communities to face any disaster in the future. For this reason, the government should work on developing a strategy for DRR and incorporate disaster risk reduction in its existing strategies and projects such as the social action plan for alleviating poverty. The government has to make contact with existing nongovernmental organizations and coordinate future steps regarding disaster risk reduction. Supplying financial resources for awareness projects and trainings is necessary as a first step to building the resilience of the people to face disasters in the future. Furthermore, the government should issue laws and regulations about building and construction standards and the utilization and disposal of natural resources and should work on enforcing them through a proper accountability system. The government should also work on incorporating information about disasters and disaster risk reduction in school curricula and make sure all school-age children are exposed to it. Besides, it is crucial to encourage and finance local governmental bodies (municipalities) include disaster risk reduction in their work agendas.

Civil society organizations also have the responsibility of working on disaster risk reduction. They should also include DRR in their agendas and take it into consideration in all programs or activities they implement. They could start by introducing disaster risk reduction in the project cycle management (assessment, design, implementation, monitoring and evaluation, etc…) They should also be prepared to assist people in case of disasters by providing them with their basic needs, based on their own feedback. They should also train their staff on DRR and make sure they are empowering the people they work with who will be responding to disasters.

At the local level, communities can work on developing awareness sessions in their areas through summer camps or in other community meetings and celebrations. In collaboration with the Red Cross, civil defense and the local government, community representatives can conduct trainings on the basic information related to first aid, rescue and fire drills, and humanitarian response. The community can develop an early warning system created by community members themselves.

**Action Plan for DRR in Lebanon (on the basis of priority)**

1. Develop a national action plan for disaster risk reduction and by setting clear objectives with indicators and a monitoring plan, to ensure proper implementation.
2. Provide financial resources for disaster risk reduction projects and establish an emergency fund for different areas in Lebanon
3. Provide education and awareness on DRR for all community groups
4. Conduct risk assessments in consultation with specialists to identify major risks and dangers for each every specific area in Lebanon
5. Develop a center for guidance and information on disaster risk reduction within municipalities areas all over the country,
6. Incorporate disaster risk reduction in the national school curriculum
7. Ensure the pre-positioning or storage of a minimum amount of food and medical supplies/equipment that might be needed by affected communities in case of a disaster.
8. Improve partnerships between the civil society and the government through regular coordination meetings and networking coalitions
9. Ensure proper use of natural resources to decrease environmental degradation and ensure that construction standards are disaster-resilient
BIBLIOGRAPHY

1. Regional DRR Programme Jordan/Syria/Lebanon 2008 – 2010
4. Regional DRR Programme Jordan/Syria/Lebanon 2008 – 2010
5. Blazing Lebanon - Forest fires threaten Lebanon’s shrinking woodlands Megan Bainbridge, Special to NOW Lebanon, October 19, 2008