

جمعية الهلال الأحمر الفلسطيني PALESTINE RED CRESCENT SOCIETY

Vulnerability &

nt

A Participatory Action Research Study of the Vulnerabilities and Capacities of the Palestinian Society in Disaster Preparednes



December 2005

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Thanks to the technical support of [insert name(s)] and to the financial contribution of [insert name(s)] who made the design and printing of this publication possible.

Special thanks to [insert name(s)] for their technical and financial support in carrying out this study.

All drawings are by Palestinian children randomly selected from Palestinian committees, schools and clubs within local communities throughout the West Bank and Gaza.

The views expressed in this publication are those of the author (Palestine Red Crescent Society) and do not necessarily reflect the policies or views of the respective groups mentioned above.



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Disaster response has been one of the main concerns of the Palestine Red Crescent Society (PRCS) since its establishment in the Occupied Palestinian Territories (OPT) in late 1968. The Society, despite its modest capabilities at the time, was driven by its realization that the Palestinian people have gone through the disasters of displacement and occupation in 1948 and 1967, and that these conditions, and the subsequent aftermath which persists to the present time, would have to be dealt with in an effective manner. It quickly became evident that the PRCS would be required to play an important role in Disaster Management.

The response of the PRCS was to establish a Disaster Management Unit, and integrate the department in a manner that would support and complement its health and social mission, and thereby become an essential component within the PRCS programs. One of the goals of the PRCS, in the field of disaster response readiness, was to consolidate and strengthen PRCS branches, both at home and abroad, and to increase their competence and readiness in fast intervention cases. In order to accomplish this, it was essential to be able to determine the resources and capabilities, existing within the PRCS, the local communities, as well as other government and non-governmental institutions, and to develop these in order to efficiently provide relief and housing, if and when this need arose, for the population.

In accordance with this vision, the Palestine Red Crescent Society adopted recommendations with regard to Disaster Management, at both the 8<sup>th</sup> General Assembly held in Gaza in 2000, and the 9<sup>th</sup> General Assembly in Ramallah in 2005. The aim of these recommendations was to expand and improve humanitarian services offered to the Palestinian population.

The Disaster Management Unit established, in collaboration with other concerned PRCS departments, a fast-intervention medical unit and has provided training to local community members on how to deal with the consequences of disaster. It has also established national volunteer teams and worked to improve the capabilities of PRCS staff, training them in the field of fast intervention during catastrophes and in times of emergency.

These humanitarian workers played a crucial and effective role during the al Aqsa Intifada, which began in September 2000. Aggression against Palestinians, destruction of Palestinian infrastructures, blockades and territory dismemberment, and construction of the racial Separation Wall and the subsequent humanitarian disasters, resulted in severe suffering to tens of thousands of Palestinians.

In addition, the PRCS provided humanitarian disaster response services to affected populations in a number of African, Asian and European countries. Such efforts were greatly appreciated by the local populations and reflected the international dimension of PRCS's intervention capabilities.

In order to enhance the mission of the PRCS with respect to disaster preparedness, the Society has prepared the present study in order to determine the social groups that would be most affected in the event of a natural and/or man-made disaster, the needs of the population and the resources required to respond to those needs. Efficient implementation of a national plan to manage existing and potential disasters requires a clear definition of the roles and competencies of each of the players working within a framework of cooperation. This document is an outcome of the dedicated efforts exerted by a team specialized in disaster response, and the effective collaboration of a number of concerned government and community institutions.

In conclusion, I wish to thank the VCA Study Team for their efforts in making this study a successful one. I am also grateful for the International Federation of Red Cross and Red Crescent Societies for their support. My special thanks go to the Palestinian children who participated in this study through their paintings, and I wish them a better future.

## Chapter One

## Introduction

PRCS staff members, representing various areas of specialization, programs and branches in the West Bank and the Gaza Strip, participated in the second **Vulnerability and Capacity Assessment** study conducted by the PRCS, subsequent to the initial one which was written in 2000. The objective of this study was to evaluate PRCS's capabilities and capacities in preparing for, and intervening, in the event of a disaster and to compare these findings with the expectations of local communities regarding these capabilities. The local communities were integrated into the process of identifying needs and provided insight into their perception of the role of the PRCS in disaster response and intervention as well as provision of relief services to affected categories. It also provided the opportunity for the various groups to offer suggestions to improve effectiveness in disaster response and intervention.

To achieve this goal, the study sample was deliberately selected from 48 residential communities (cities, villages and camps in the West Bank and the Gaza Strip) representative of Palestinian society. Within this framework, 71 individual interviews were conducted with PRCS staff and 23 non-governmental institutions, Ministries within the Palestinian National Authority (PNA) and a number of international organizations. In addition, 40 workshops were held in the West Bank and Gaza. These were attended by 793 individuals representing various social groups, including housewives, students, doctors, workers, technicians, teachers, the elderly, disabled individuals, farmers, and the unemployed.

Eighteen workshops were also held for 427 children of both genders. The children were asked to express their perceptions of disasters through drawings, and afterwards they were asked questions about what they had drawn. This was followed by a discussion by the group and recommendations were elicited.

In addition, 6 specialized workshops were conducted with the participation of 96 PRCS employees from various branches, centers, and programs across the West Bank and Gaza. PRCS volunteers also participated in these workshops.

There were a total of 1316 participants, 1137 (86%) of whom filled out the questionnaire, thereby participating fully in the study. These are the results found in this document.

Data analysis of the study sample indicates that those surveyed gave importance to damage resulting from unemployment and the Separation Wall, as well as road accidents and drinking water shortages. Political conflict was also given a level of importance, and it was noted that this affected all social groups.

Participants also considered damages caused by pollution, and some of the examples cited were food poisoning, landfills, open sewerage etc. Heavy rainfall and floods were also considered as potential disasters, and 72.4% of West Bank participants noted that these might occur suddenly.

With regard to social groups that are most affected by expected disasters and crises, 91% of study participants considered they themselves would be affected. 81% considered that the elderly would be particularly affected, while 80% considered that women were also vulnerable. 63% of the study sample felt that youth, in general, would be potentially affected, while 53% thought that handicapped individuals were likely to suffer from disasters. 44% considered that workers would also be affected. Finally, study participants came to the conclusion that earthquakes, political unrest and the Separation Wall were the most potentially damaging disasters.

As for regions susceptible of suffering the most from disasters, in general participants considered that camps, highly-populated areas, old towns, marshes, areas located in proximity to the Separation Wall, boarder communities and remote villages were the most vulnerable to suffer the impact of catastrophes.

While the marshes area, the Dead Sea and surroundings were the most likely to bear the heaviest damages in case of an earthquake, political conflict risks would mostly affected the regions of Nablus, Hebron, Jerusalem, and border areas (including Beit Hanoun, Mawassi, Rafah and Dahabsha\*).

\*Prior to the Israeli pullout from Gaza

Participants also considered that Jenin, Tulkarem and Qalqilia suffered the most from the effects of the Separation Wall, in addition to the Old Town of Hebron, which totally lacks organized services.

As for diseases, they would mostly affect highly populated areas and regions used as sewerage basins, especially Beit Lahia and Mawassi.

Unemployment generally affects all regions, and it was noted that refugees would particularly suffer the impact of unemployment.

With regard to the effects and consequences of disasters, participants gave priority to seven major occurrences (material losses, environmental pollution, infrastructure damage and collapse, human loss, worsening health conditions, deterioration of education, and psychological disorders and subsequent problems).

When considering the effects of earthquakes, participants identified the following as a consequence of such an occurrence: weakened and destroyed houses, sewerage leaks, contaminated drinking water, power shortages, collapse of phone lines, chaos, fear, difficulty of movement between residential communities, disruption/lack of adequate education and medical services, widespread disease, and family dismemberment.

When questioned on available capacities and existing resources, the study results showed that school playgrounds and classes, community clinics, hospitals, city halls, clubs, public squares, places of worship, transportation and water tanks were identified as physical resources and that people resources included various specialists, volunteers, kindergartens and associations. All represent social resources, and have the capacity of playing specific roles before, during and after a disaster occurs, within a coordinated and integrated framework.

## THE ROLE OF THE PALESTINE RED CRESCENT SOCIETY

Study participants indicated their perception of the role of the PRCS in disaster management before, during and after the event. The results were as follows:

#### **Before the event:**

• Thorough preparedness and a national plan that focuses on raising awareness of potential disasters and the means to prevent them

- Training staff and increasing their level of interventionreadiness - including psychological specialists
- Coordinating with other institutions, both governmental and community-based
- Providing medication, water, well-supplied warehouses, communication and shelters.

#### **During the event:**

- Thorough quick assessment and intervention
- Good organization
- Collaboration and coordination with other institutions and volunteers
- Operation of field hospitals
- Documentation of damages
- Blood transfusion services
- Psychological, financial and in-kind support
- Response managed and coordinated through a central Operations Center, with coordination from regional Centers

#### After the event:

- Damage evaluation
- Rehabilitation of sta
- Maintenance of equipments and tools
- Provision of medication in the event of shortages
- Supply shelter to affected populations
- Tracing missing persons
- Provision of psychosocial support services.

#### During all three of these aforementioned stages, PRCS should play a pivotal role in the coordination of regional, national and international institutions and groups.

To maximize its effectiveness, all PRCS departments should work within a totally integrated framework, with well-defined roles and tasks, in order to achieve optimal use of its resources, as well as those within the local communities. Utilizing this integrated approach, the PRCS will be able to reduce the effects of disasters, rebuild what has been destroyed, and decrease subsequent damages that occurred following the event.

With respect to PRCS projects and programs, participants felt it essential to create an on-going Disaster-Management Training Unit, and to establish a National Team to discuss strengths and weaknesses and look for ways to reduce the impact of disasters. Participants also suggested the creating entertainment villages for children, establishing blood banks in the branches and building hospitals specialized in rare diseases. Other recommendations were working to include information on earthquakes in the school curriculum, activating the food security committee, participating in efforts to find solutions to landfill problems, creating a special communications network and building secondary warehouses in different regions, especially in remote areas.

Finally, it should be noted that the study benefited from a large number of references, studies and scientific research regarding the health, environmental, educational and other conditions of the Palestinian population. These constituted the study's theoretical basis and reference framework.



## Al-Bireh, Palestine Social Workers Participating in the Study as Community Focus Group Facilitators

Social Worker	Location	Social Worker	Location
1. Joumana Mraaba	Qalqilia, West Bank	21. Adibeh Abou Swayrih	Nussayrat, Gaza Strip
2. Amir Daoud	Qalqilia, West Bank	22. Samah Abou Nasr	Jabalia, Gaza Strip
3. Arij Hijazi	Qalqilia, West Bank	23. Rami Abou Salim	Deir El Balah, Gaza Strip
4. Aazza Tamimi	Nablus, West Bank	24. Sohad Al Absi	Jabalia, Gaza Strip
5. Ayman Moammar	Nablus, West Bank	25. Haya Abou Ras	Gaza, Gaza Strip
6. Hatem Al Barghouti	Ramallah, West Bank	26. Bushra Massoud	Jabalia, Gaza Strip
7. Iman Ashour	Ramallah, West Bank	27. Mohammad Abou Maryam	Gaza, Gaza Strip
8. Abdel Ghafer Salawda	Ramallah, West Bank	28. Rawa Al Gharbawi	Gaza, Gaza Strip
9. Nida Hreich	Ramallah, West Bank	29. Mohammad Abou Moammar	Gaza, Gaza Strip
10. Rabab Al Ajouzi	Jericho, West Bank	30. Amal Thabet	Al Maghazi Camp, Gaza Strip
11. Hania Obaid	Jericho, West Bank	31. Randa Abou Swayrih	Nussayrat, Gaza Strip
12. Samar Al Nammoura	Bani Naim, West Bank	32. Khaldia Al Aakkad	Khan Younis, Gaza Strip
13. Najwa Al Jaabari	Hebron, West Bank	33. Mona Abou Marwa	Rafah, Gaza Strip
14. Mousa Abou Al Jarayesh	Hebron, West Bank	34. Fatima Abou Mrahil	Al Breij Camp, Gaza Strip
15. Nadia Owayni	Bethlehem, West Bank	35. Ibtissam Al Bakri	Rafah, Gaza Strip
16. Nohad Hanash	Bethlehem, West Bank	36. Iman Abou Amra	Deir El Balah, Gaza Strip
17. Mohammad Hawwash	Jerusalem, West Bank	37. Enaam Abou Amra	Deir El Balah, Gaza Strip
18. Ahmad Mahmoud Azara	Rafah, Gaza Strip	38. Ossama Al Kahlout	Gaza, Gaza Strip
19. Abdel Kader Abou Jlaydan	Rafah, Gaza Strip	39. Ola Al Gharbawi	Gaza, Gaza Strip
20. Hisham Abou Rabih	Deir El Balah, Gaza Strip		

#### Methodology

This chapter depicts the study's main goal and objectives, its relevance, the society and study sample as well as the tools used, methods and stages. It also outlines the objectives and responsibilities of study's Task Group and the means they used to gather data from each of the concerned groups. It describes the mechanisms used to form the focus groups and special workshops for PRCS staff, institutions, and children. Furthermore, it illustrates the method and mechanism used for analyzing the gathered data. At the end of this chapter, we describe the major obstacles and impediments faced by the study.

#### **Purpose of the Study:**

This purpose of this study is to evaluate PRCS's capacities and its ability to prepare for, and intervene, in the field of disaster response, and to compare its findings with the expectations of local communities in regard to capabilities and suggestions. It also examines the role played by PRCS in disaster response, intervention, damage evaluation and the provision of relief to affected individuals.

#### **Objective of the Study:**

- 1. To gather information, opinions and recommendations from a representative cross-section of the Palestinian population, regarding disasters and available capacities and resources in the event of a disaster. Individuals participating in the study should include the general public, government institutions and PRCS employees.
- 2. To explain and clearly define the role and responsibilities of the PRCS within a national framework, both in terms of prevention and mitigation, as well as disaster response.

#### **Relevance of the Study:**

In the year 2000, the PRCS conducted its first VCA Study, in cooperation with ICRC, aimed at determining PRCS's roles and capabilities in responding to crises and disasters that might occur in Palestine and at identifying affected groups. This study has resulted, inter alia, in the creation of a specialized Disaster Response Unit within PRCS, and in the acquisition and storage of stocks of relief materials, medicines, equipment, etc. Considering the ongoing political situation and the natural physical conditions in the region, PRCS deemed it essential to conduct a second study to identify the dimension of the problem, determine any new needs that might have been generated, and evaluate PRCS's existing capability in facing the effects of disasters. This study is relevant because:

- 1. The study's outcome and recommendations constitute the main basis for decisions regarding planning, preparation, readiness and intervention processes in times of disasters and crises.
- 2. This is one of the very few studies conducted in Palestinian society and is national society driven.
- 3. Disseminating the results of this study contributes to increasing awareness and perhaps also the realization within the community, its institutions and the PRCS, of the important role that each of the partners will have to play to successfully manage a disaster.

#### **Study Society:**

Communities in the West Bank and the Gaza Strip were targeted for this study. The study sought to identify the expectations of various individuals and groups and their opinions in relation to disasters and the resulting damage. Also studied was the perception of the population and concerned groups of the role of the PRCS and other institutions in the event of a disaster and its aftermath.

#### **Study Sample:**

- The selection and make-up of the study sample has been deliberate, and geographically includes representation from all major West Bank and Gaza locations. Both territories have therefore been divided into three regions (Northern, Southern and Central regions), each of which included three villages, three cities, and one camp on the local community level.
- Consideration was given to ensure that the sample would represent regions that are more prone to disasters than others, especially those that are close to the Separation Wall and to settlement pockets.
- 3. With regard to the selection of children, one village, one city and one camp were chosen from each region (Northern, Southern and Central) from the West Bank and the Gaza Strip. Workshops were evenly distributed between the West Bank and Gaza.

from each West Bank and Gaza Strip region (Northern, Southern and Central). The PRCS study sample was deliberately chosen to reflect the diversity of the Society's specializations, technical and scientific skills, and decision-makers.

#### **Research Tools:**

Various tools have been used to study and to acquire information:

**1.** Literature and Webpage review: In view of obtaining secondary information, previous studies that have discussed the issue of disasters in Palestine and the related risks, such as books, newspapers, reports, and the Internet have been reviewed. These were studied in order to find references and data to support the study, use them as sources for building the study objective, and to acquire knowledge regarding the subject matter.

The information was used for the following purposes:

- To develop the research methodology
- To develop data analysis methods
- Geography and maps
- To obtain data regarding infrastructure, water, pollution, risks, political situation, etc.

2. Questionnaire: A questionnaire was designed to elicit opinions from the local community regarding likelihood of



4. The study sample from PRCS, included one workshop

expected hazards to occur in Palestine in relation to property, the economy, agriculture, infrastructures etc. The questionnaire included the risk of 23 disasters, which had been identified by the Task Team. The participants were asked to indicate the likelihood of these disasters on a six-level scale based on the Likert principle. The scale was given six degradations as follows:

- 1. Cannot predict
- 2. Unlikely
- 3. Likely
- 4. More likely
- 5. Most likely
- 6. Sudden/unpredictable

#### Process:

- 1. Distribute the questionnaire to the study sample
- 2. Instruct participants to mark an X under the perceived likelihood for each of the 23 probable disasters
- 3. Provide assistance to illiterates within the study sample, and provide clarifications for participants if/when needed

**3. Open Questions:** This survey contains open questions designed for use in the local community focus groups, PRCS workshops and with the children's groups. These 8 open questions (see Appendix 4), were formulated in order to obtain the largest possible amount of information and data from the study sample. It also provides the opportunity to expresses opinions and make recommendations regarding preparedness and readiness in the event of expected disasters.

The survey used in the individual interviews with PRCS and other institution staff, include 9 open questions (Appendix 5), which focus on PRCS's role in prevention, capabilities, policies, capacities, and human resources. Also there are specific questions on the role of various PRCS departments in the field of disaster response.

The survey that was formulated for institution employees contains 8 questions. (Appendix 6).

#### **Study Method:**

The objectives of the study were derived from present conditions under which the Palestinian people are now living, in order to identify the needs of the local society and its institutions in case of disasters or crisis. These include political conflict, social, economic, health, educational, and psychological changes affecting Palestinians. In addition, this study strives to identify PRCS's capacities and capabilities in dealing with disasters and intervention. In order to attain this information, qualitative and quantitative research means were used, including focus groups, individual interviews and children's drawings, obtained over a certain number of phases.

#### Study Implementation Phases:

- 1. Form a Steering Committee, Task Group, and a team of field researchers to work on the study.
- 2. Define the goals of the study and its importance.
- 3. Collect secondary data through scientific research, prior studies, periodicals and bulletins.
- 4. Define the study sample.
- 5. Form focus groups representative of the study society.
- 6. Coordinate with governmental and non-governmental institutions, as well as with cultural and educational organizations to schedule meetings with focus groups and individual interviews.
- 7. Hold workshops with focus groups.

#### **The Steering Committee:**

The Steering Committee was comprised of individuals from various PRCS departments. These included:

- Mental Health / Psychosocial Department.
- EMS Department.
- Rehabilitation and Capacity Building Department.
- Primary Health Care Department.

#### Tasks of the Steering Committee:

- 1. To report on the study methodology and supervise the information gathering process.
- 2. To supervise and accompany Task Group members and provide them support and facilitate their work for the duration of the study
- 3. To review the study's preliminary report and submit suggestions that may enhance the objectives of the study.
- 4. To supervise the dissemination of the study and its recommendations and maximize its distribution on the largest possible scale, be it local, regional or international.

#### The Task Group:

The Task Group was appointed by the President of the PRCS. It consists of eight members from each of the following PRCS departments.

- Disaster Response Unit.
- Rehabilitation and Capacity Building.
- Youth and Volunteers.
- Primary Health Care.
- EMS.

#### Tasks of the Task Group:

- 1. To set the goal and objectives of the study.
- 2. To determine the methodology in implementing the study and gathering information.
- 3. To develop a questionnaire for the focus groups and individual interviews as well as designing forms for gathering data from the study sample
- 4. To determine the study sample and ensure it reflects Palestinian society
- 5. To submit reports that analyze the gathered data to the Steering Committee.
- 6. To select, train and follow up on the work of the team of field researchers gathering information from the study sample
- 7. To coordinating with field researchers, and facilitate the data-gathering process
- 8. To organize field visits to workshops set up by the team of field researchers and evaluate their work.
- 9. To select candidates for individual interviews among PRCS, governmental and non-governmental institution staff.

#### **Field Researchers:**

Attention was given to the formation of the field research team to ensure that all Palestinian regions from the West Bank and the Gaza Strip were represented. The team consisted of 38 researchers distributed throughout the study sample, each according to the district where he/she works:

- Mental Health.
- Primary Health Care.
- Rehabilitation and Capacity Building.
- Youth and Volunteers.

#### Tasks of the Field Research Team:

- 1. To Contact and coordinate with individuals and governmental and community organizations for scheduling of workshops.
- 2. To transcribe data collected in the workshop as well as recommendations onto the special data forms and forward these to the Task Group.
- 3. To collect and transcribe study society data onto the special forms and forwarding them to the Task Group.

#### **Data Gathering Methods:**

To gather the required data from the study sample, four major methods were adopted:

- 1. Individual interviews.
- 2. Focus groups.
- 3. Study of Palestine's health, education, social and economic conditions.
- 4. Expression through drawing.

#### **1. Individual Interviews**

The Task Group held individual interviews with decisionmakers and/or with individuals possessing the technical and professional experience within PRCS, or within governmental and community institutions and/or organizations. Interviews were conducted with 35 PRCS staff members from the West Bank and Gaza working in various and diverse departments and fields of action. Their opinions were gathered in regard to expected disasters and to PRCS role and capabilities in disaster response and intervention.

## PRCS was represented by employees/staff from the following departments:

- Mental Health.
- Health Care.
- Rehabilitation and Capacity Building.
- Disaster Response Unit.
- Youth and Volunteers.
- Medical Officers Institute.
- EMS.
- Administration

#### Governmental and Community Institutions Employees

Thirty-six (36) governmental and community institutions employees, representing local community institutions in various fields, from the West Bank and the Gaza Strip were interviewed, and asked their opinions regarding any disasters expected in Palestine. They were also asked their views on the role of the PRCS and its capabilities in the field of disaster response and risk management in Palestine. In addition, they were asked to submit suggestions and recommendations. There were 23 institutions/organization and ministries included in the study, namely:

Ministries		Institutions/Organizations		
Ministry of Agriculture	Ministry of Environment	ICRC	Civil Defense	
Ministry of Purveyance	Ministry of Finance	"Médecins Du Monde", France	Academy of Technological Sciences	
Ministry of Local Government	Ministry of Youth and Sports	Hydrologene	UNRWA	
Ministry of Social Affairs	Ministry of Health	Save the Children	Geology and Seismology Center	
Ministry of Information	Ministry of Public Works/ Bakdar	IFRCS	Defense For Children International	
		UNDP	UNICEF	
		Water Authority		

For further detailed information regarding the institutions whose staff has been interviewed in the West Bank and Gaza, please refer to Appendix 3.



The study sample was intentionally chosen from various PRCS locations and from various institutions/organizations operating in the West Bank and the Gaza Strip. The following methods were used:

1. Contacting and coordinating with concerned individuals and setting a convenient time for the interview.

2. The interviews were conducted by two Task Group members, one asking the questions and the other recording and transcribing the gathered data from the respondents onto a special form designed for that purpose by the Task Group.

#### 2. Focus groups:

Three types of focus groups were formed and participated in the workshops:

- Institutions and individuals in the local communities
- Children.
- PRCS employees







In the local communities, a total of 40 workshops were held in selected Palestinian cities, villages, and camps, 19 in the Gaza Strip and 21 in the West Bank. The workshops participants totaled 793 individuals, 378 from the West Bank and 415 in Gaza. The aim of these workshops was to gather information and record data regarding the opinions, in local Palestinian society, of readiness in the field of disaster response. Discussions also focused on the readiness and capability of the PRCS in reducing the effects of disasters. In addition, the participants sought to identify the type of services to be provided by PRCS according to its capabilities and level of preparedness for planning and countering the effects of possible disasters. The study sample was intentionally selected to include individuals from different backgrounds and various specializations and fields of expertise, so that the discussions would yield maximum output.

## I. Workshops in the Local Communities included:

- University Students
- Doctors and Engineers
- Workers
- Unemployed
- Technicians
- Teachers
- Elderly people
- Handicapped
- Farmers



#### Fig 8 — Number of Participants in the Local Communities according to Location and Gender



#### Fig 9 – Number of Workshops for Children



#### Process Used for Conducting Focus Groups Representing the Local Society:

- 1. Preparing a letter to be addressed to institutions and individuals explaining the purpose of the study.
- 2. Contacting and coordinating with town councils, local committees, and concerned individuals via fax, phone or by personal meetings
- 3. Selecting an appropriate venue for the sessions
- 4. Setting up the meeting room and placing participants in a circular seating arrangement
- 5. Describing to the participants the purpose of the study, its relevance as well as the importance of their participation
- 6. Asking open questions and encouraging discussion
- Two social workers acted as facilitators in the workshops, one conducting the interviews and the second taking notes on the flip chart
- 8. Entering the data onto the study's special forms, which had been previously designed by the Task Group.

#### II. Children's Workshops:

In order to obtain comprehensive information and data, children were categorized as a separate group within local communities. It was deemed important to obtain their views and recommendations regarding any disasters they believed might occur in Palestine, as well as their opinions of the PRCS and how the latter may reduce the impact of such disasters, so as their suggestions may be taken into consideration for planning and interventions. Eighteen workshops were held with children in the selected cities, towns and camps, 9 in the West Bank and 9 in Gaza. The children were between the ages of 9 and 18. A total of 427 children of both genders participated in the workshops, 216 from the West bank and 210 from Gaza.



## Process Used for Conducting Workshops with Children:

- 1. Contacting and coordinating with local committees, schools and clubs regarding the selection of children.
- 2. Obtaining approval from children's parents.
- 3. Selecting an appropriate venue for the sessions
- 4. Facilitating two simultaneous workshops, one for children aged 9–13 and the second for children aged 14–18
- 5. Setting up the meeting room and placing participants in a circular seating arrangement
- 6. Asking questions and encouraging discussion and exchange of opinions
- 7. Two social workers facilitated the workshop, one conducted the interviews and
  - the second registered the information on the flip chart
- 8. Entering the data onto the study's special forms, which had been previously designed by
  - the Task Group

#### III. PRCS Workshops:

Considering the importance of PRCS's provision of humanitarian, social, rehabilitation, rescue, primary health care and mental care services to the Palestinians in the OPT, as well as in the Diaspora, by professional and technically skilled employees, the study team deemed it essential to conduct workshops with the PRCS staff. The aim of these workshops was to collect information and data from the PRCS's staff on their opinions and expectations in the event of a disaster in Palestine, and to gain an understanding of their perspective of the role of the PRCS in preparedness and intervention. In addition, workshops were designed to gather suggestions for PRCS programs that might enhance the provision of services to affected populations and reduce the impact and effects of such disasters on the Palestinian society, both as a National Society and as field actors. Six workshops were conducted, 3 in the West Bank and 3 in Gaza. There were a total of 96 PRCS participants, from both genders, with 58 participants from the West Bank and 38 from Gaza and including employees with various specializations and skills. These included:

- 1. Social Workers
- 2. Administrative sta
- 3. Technical sta
- 4. Physical therapy and rehabilitation specialists
- 5. EMS officers
- 6. Volunteers

- 7. Doctors and nurses
- 8. Heads of centers and members of Administrative Boards

## Process Used for Conducting Workshops within the PRCS:

- 1. Contacting PRCS branches and centers outlining the objectives and relevance of the study.
- 2. Contacting and coordinating with the heads of various branches and centers for the selection of participants.
- 3. Selecting an appropriate venue. Setting up the meeting room and placing participants in a circular seating arrangement
- 4. Explaining the goal and objective of the study, its relevance and the importance of each member's participation.
- 5. Two social workers facilitated the workshop, one conducted the interviews and

the second, registered the information on a flip chart

6. Entering the data onto the study's special forms, which previously designed by

the Task Group



#### **IV. Expression through Drawing:**

It is widely accepted that drawing, for children, allows an expression of ideas, and is often used to identify their thoughts, more accurately than using language alone. For this reason, this medium was used to examine what children would express their expectations of what would occur in the event of a disaster in Palestine. Children were asked to draw what they perceived as risks and crises, and upon completion, were asked to explain their drawing to the facilitator.

## Process Used for Conducting Drawing Workshops within Children:

- 1. Preparing the venue
- 1. Preparing materials
- 2. Distributing paper and colored pencils to children
- 3. Guaranteeing objectivity and transparency without any external influences or without intervening in the orientation of children's drawings
- 4. Upon completion of drawings, conducting individual interviews with each of the children to gather information about what they had drawn
- 5. Documenting the ideas expressed by children

#### **Process for Data Analysis:**

Data was analyzed using the following methodology:

- 1. Designing special tables to record gathered data
- 2. Grouping similar responses within the table
- 3. Comparing responses
- 4. Work out ratios and percentages of responses gathered from interviewees and from focus group participants.
- 5. Comparing children's responses with those gathered from other social groups as well as those collected from PRCS participants.
- 6. Comparing the results of individual interviews conducted with PRCS staff and with workers from other governmental and non-governmental institutions.
- 7. Drawing conclusions and making final recommendations.

#### Difficulties faced by the research team:

- 1. The repeated postponing of the workshop confused participants.
- 2. Bad weather and incessant rain sometimes led to diminished participation.
- 3. Long distances and trouble with transportation made it difficult to reach locations where meetings were scheduled to take place.
- 4. Numerous Israeli roadblocks made it difficult for study team members to reach locations in Gaza.
- 5. In some of the workshops held close to Israeli army surveillance towers, participants and audiences felt unsafe, especially in Gaza.
- 6. Differences in educational and cultural levels among group members required exceptional efforts in order to manage and collect discussion results.



## <u>Chapt</u>er two

# Study of health, economic, education & $\epsilon$

This chapter contains important reference data that was used in preparation for this study. Prior to beginning their work in the field, the VCA team examined many studies and scientific data compiled by national & international organizations and other official entities, on the Palestinian condition. These included data and statistics relating to various demographic and health factors, as well as the impact of the Separation Wall. The literature examined also dealt with the economic situation, including work sectors, the damage sustained by infrastructures, and also the impact of the continued political conflict on the Palestinian economy. Additionally this chapter outlines the most important data related to the environment and water, as well as the dangers of waste, water shortages and earthquakes on the environment.

Also included in this chapter is significant data related to the educational process and to the impact of closures, curfews and the Separation Wall on the quality of education.

In collaboration with the International Federation of Red Cross and Red Crescent Societies, PRCS conducted the first VCA study in 2000. One of the objectives of that study was to determine PRCS's responsibilities and capabilities in responding to disasters in Palestine over the next ten years. In addition, the study was used to define Palestine's marginalized regions. The outcome of that study, led to the implementation of the following:

- The creation of the Disaster Management and Preparedness Unit which, among other responsibilities, set up warehouses and stored therein medicines, supplies and foodstuffs. Also additional stores were constructed where the need was identified.
- EMS training sessions were organized

Soon after the study was competed, AI Aqsa Intifada broke out and is still raging. Despite the continuing political conflict, PRCS has implemented, with the help of international and national organizations and agencies, some of the recommendations set forth in the 2000 Vulnerability and Capacity Assessment Study.

The incessant conflict and resulting large number of victims, destruction, increase in the number of roadblocks and closures, and the construction of the Separation Wall, have all led to increased needs in the local communities. Subsequently, in order to effectively respond and provide humanitarian assistance to the population, the PRCS has had to increase its capacity and capabilities. Many factors play into the decision of how to best capitalize on existing resources and where to focus on developing and/or increasing services. A concrete example is the fact that some regions are more at risk than others, and therefore require more services. To best analyze the current reality of its population, the PRCS and IFRC acknowledged the need for a second VCA Study. The purpose of this second study was to evaluate the extent of the problem and determine the new needs arising from the current situation; to define regions that are more at risk; to estimate PRCS's capacities in facing potential disasters and risks; and to evaluate the required services and the importance of providing them to the population.

To achieve the objectives set forth in this second VCA Study, workshops were organized throughout the West Bank and the Gaza Strip in collaboration with local communities and PRCS branches. In addition, interviews were conducted with decision-makers within PRCS and other government and non-governmental institutions. These workshops and interviews were used to reach specific recommendations and clarify ideas regarding the programs and services needed to alleviate the Palestinian people's plight under continuously deteriorating conditions. Also it was important to identify new conditions in the community in order that

these be made known to the PRCS and other entities, whether governmental or local, in order for them to be able to respond effectively.

Al Agsa Intifada, and the ensuing measures taken by the Occupation to counter the uprising, have had many negative impacts on the daily life of Palestinians. These impacts have substantially increased since July 2002, with the start of construction of the Separation Wall, the length of which is expected to reach 670 km upon completion. As of February 2005, 209 km had already been completed – and has lead to the retention of 10.1% of West Bank lands between the Wall and the Green Line. It should be noted that 49,400 Palestinians will be forced to live within the said retained area. The construction of the Separation Wall and the continuing conflict situation in the region will have increased negative impacts on health, the economy, education and the environment. The lack of access to the area due to closures, curfews and the Separation Wall, results in the population unable to reach medical facilities, and medical teams unable to reach their patients. In addition, this situation limits the free movement of goods and persons, which is vital to the flailing Palestinian economy. Increased poverty and the destruction of infrastructures by Israeli forces are generating negative impacts on the environment as well. These effects and impacts have confirmed the need for immediate assistance and interventions for the benefit of the Palestinian people.

In November 2004, the UN and another international humanitarian organization estimated they needed more than 300 million US dollars in order to be able to continue providing humanitarian services to the Palestinians. These groups described the increased difficulty they were facing as a result of the restrictions imposed on movements and closures, including the Separation Wall.

#### I. Demographic Data

In September 2004, the Palestinian population was estimated at approximately 3.699 million, 2.336 million residing in the West Bank and 1.363 million in the Gaza Strip. The demographic distribution of the population is as follows: 56.4% in urban areas, 28.5% in rural areas, and 15.1% in refugee camps. The majority of the population is under the age of 15 (45.9% of the population), while infants below the age of 5 account for 17.6%. People aged 65 and above represent only 3.1% of the population.

Demographic density in the Gaza Strip is one of the highest in the whole world, with 3829 people per km<sup>2</sup>, as of the second quarter of 2004. The reason for this high density is that the Gaza Strip is a small-enclosed area (approx. 362 km<sup>2</sup>) with a

large number of inhabitants. Population density in the West Bank is 426 per  $\text{km}^2$ . The cumulative population density in Palestine is 632 per  $\text{km}^2$ .

#### II. Health Care

There have been a number of new challenges in health since the outbreak of Al Aqsa Intifada in 2000. The construction of the Separation Wall has had a direct negative impact on Palestinian health. Delays and/or the inability of accessing health facilities are a regular occurrence. Accessibility and other problems resulting from the shortages of high-quality health services, have led to the deterioration of public health conditions in Palestine.

Due to deteriorating political and economic conditions in Palestine, and to the difficult access to health facilities as a result of closures, curfews and the Separation Wall, the Palestinians' health condition has worsened. In 2003, the ten main causes for fatality were: cardiovascular diseases (20.1%), strokes (11.1%), neonatal conditions (9.7%), malignant tumors (9%), accidents (8.8%), senility (5.7%), high blood pressure (4.9%), pneumonia and other respiratory diseases (4.8%), diabetes (4.1%) and renal failure (3.4%). These diseases account for 81.6% of total deaths occurring in Palestine. The main cause of mortality reason among teenagers and adults between 20 and 59 years old in 2003 was accidents (25.1%), with 23.5% of these resulting from firearms and Israeli missiles. The main cause for male and female mortality follows the national trend to a certain limit. Refer to Figure 12.

There are 619 primary health care centers in the OPT (103 in Gaza and 516 in the West Bank), and PRCS operates 30 of these centers. In 2003, the average number of patients treated in each center reached 5628. The survey on insurance coverage, which included 6600 families, indicated that 76.2% of Palestinians have some kind of insurance coverage (66.1% in the West Bank and 93.8% in Gaza).

#### Motherhood and Gynecology:

The number of deaths during child-rearing years is an important indicator of women's health conditions. Below is a comparative table of motherhood-related mortality in Palestine, in neighboring countries and in the US in 2000.

The main reasons for motherhood-related mortality in Palestine, as defined by the Ministry of Health in 2000, include hemorrhage, unsafe abortion complications and pregnancy-related high blood pressure and labor. In addition, as a result of the current situation with frequent closures and curfews, many pregnant women have been forced to give birth in unsafe



#### Table 1 - Comparative table of motherhoodrelated mortality rates in 2000

Country	Motherhood-related mortality in 2000 (per 100,000 persons/year)		
Palestine	100		
Israel	17		
Jordan	41		
Lebanon	150		
Egypt	84		
Syria	160		
United States	17		

conditions at Israeli checkpoints or at home, thus leading to complications and in some instances, death. Home-birth rates have reached 4.1%, while 2.3% of births took place in various other locations (not medical institutions or homes), with 0.1% occurring at Israeli checkpoints. It should be noted that the total number of births that occurred at Israeli checkpoints, between April 2002 and June 2003, reached 52 cases. Only a few such births have been taken into consideration within the scope of the current survey conducted by the Maram Institute.

95% of Palestinian women have declared having undergone at least one medical check-up after having given birth, while 81.3% have declared having undergone all four prescribed visits. However, only 23.4% of mothers with less than 4-months old infants have declared receiving post-natal care and only 13.1% have undergone the first doctor's visit recommended within 72 hours after giving birth.

The main reasons for fatalities among Palestinian women are heart disease, (19.2%), strokes (13.2%), pre- and neonatal conditions (10%), malignant tumors (9.7%) and senility (6.5%).

#### **Children and Infant Health**

The main five reasons for infant deaths in 2003 were premature and underweight birth (41.1%), pneumonia and other respiratory affections (13.1%), contagious diseases (6.6%) and Infant Sudden-Death Syndrome (5.8%). See Fig. 13

Diarrhea cases, affecting children below the age of five, represented 14% and 42.5% of these were treated using oral rehydration salts. The study also found that 21.5% of women gave their children fewer liquids when they suffered from diarrhea.

In 2004, the infant mortality rate – which is considered an important overall population health indicator – was 26% live births in Palestine, compared to 5.3% in Israel. However, determining the infant mortality rate is becoming increasingly difficult due to the increase in the number of home births, as a result of the inability to reach medical facilities.

In 2003, accidents have been the main reason of mortalities among children aged 1 to 4 (23.6%) and among those aged 5 to 19 (51.6%).

#### Nutrition

The rate of moderate and severe anemia cases in Palestine is estimated at 10.8%, 50% of which are moderate cases. The rate of anemic pregnant women stands at 74.2%, while it is 33.2% among fertile women (15 to 49).

sfuture. In a 2002, a survey conducted by the Palestinian Central Bureau of Statistics, showed that 63.4% of Palestinian families have difficulty obtaining food due to closures and Israeli aggressions.



Despite the fact that 95% of infants are breastfed, children suffer from other nutritional problems as they grow older. Among children aged 12 to 59 months, 22% suffer from low Vitamin A levels that do not exceed 200  $\mu$ g/l (the recommended levels for children aged 1 to 3 years is 300  $\mu$ g/l). A discrepancy has been noted in Vitamin A deficiency levels recorded in Gaza (18.9%) and the West Bank (26.5%). According to the standards set by the World Health Organization, the Vitamin A deficiency status in Palestine represents a public health issue that requires immediate action. The decrease in adequate quantities of Vitamin A and the increase in the number of convulsion cases are the two main factors leading to Vitamin A deficiency cases among Palestinian children.

23% of Palestinian children aged between 12 and 59 months suffer from anemia (17.4% in the West Bank and 31.2% in the Gaza Strip). Among children suffering from Vitamin A deficiency, 33.9% also suffer from anemia, indicating that Vitamin-A-deficient children are more vulnerable to anemia than children who do not suffer from this deficiency.

#### **Psychological Health**

A comparison between the mental health status of Palestinians before and during the Intifada shows a great decrease. The most common cases having undergone significant changes during this period are emotional problems, psychosomatic cases, war-related psychological problems, behavioral problems and psychological illnesses. Table 2 underlines changes in these conditions prior to and during the Intifada. The most substantial difference was recorded in emotion-related cases (a 43% change), which include all types of fear, apprehension, grief for the loss of relatives, nightmares, irritation and anxiety. The psychosomatic problem situation has recorded the second highest change rate (16%). It includes involuntary urinary and fecal incontinence, and hypochondriac symptoms.

Children have shown an increased level of psychological trauma

and stress as a result of the continued violence and the current political situation. Under the current situation, nearly half of the children studied (48%) have expressed personal experiences where they have been subjected to conflict-generated violence or have witnessed violent actions perpetrated against members of their own family. Children living in areas where intense military actions have taken place, suffer from very high levels of post-traumatic stress-related afflictions.

#### Impact on Health Resulting from Closures, Curfews and the Separation Wall:

As a result of the number of closures and the construction of the Separation Wall, access to health facilities has become increasingly difficult for Palestinians. A survey regarding accessibility to health services, conducted in the fourth quarter of 2004, showed that 53.6% of Palestinian families have stated that military checkpoints have hampered their families' access to health services. 52.5% considered that this inaccessibility was due to Israeli closures, while 44.2% evoked the increase in medical treatment costs and 10.7% blamed the construction of the Separation Wall. Upon completion of the first phase of the Wall's construction's (July 2003), 26 health clinics became isolated, 18 of which were government clinics (69.2%). When the second and third construction phases are completed, 71 primary health care clinics will be isolated. Vulnerable groups will also suffer major negative effects resulting from their lack of access to clinics. It is estimated that 10,000 chronic patients and 117,600 pregnant women (including 17640 difficult pregnancies) are experiencing difficult access to basic health services. Moreover, 133,000 children below the age of 5 may not obtain, in time or at all, all the necessary vaccinations. Upon completion of the Separation Wall, 39,800 chronic patients and 17,640 disabled individuals will no longer be able to access specialized health care and rehabilitation facilities.

In addition to the above, the quality of health care will also be affected. More Palestinians will be compelled to depend on the assistance of nurses and health workers instead of benefiting from the services of trained physicians. Only 48% of Palestinian doctors live in the villages were their clinics are located, compared to 84% of health-care workers. As a result of the increasingly difficult access, doctors will be present in their clinics only two-thirds of their regular office hours.

Quick and efficient response to emergency medical cases was also affected due to the inability to reach the patients. Between September 2000 and January 2005, 1609 ambulances were prevented from reaching emergency case victims and Palestinians with special health-care needs.

Table 2 - Changes in psychological health prior to and during the Intifada.						
	Prior to the I	Prior to the Intifada		During the li	During the Intifada	
Most common cases	West Bank	Gaza Strip	Total	West Bank	Gaza Strip	Total
Emotional	30%	32%	31%	75%	74%	74%
Behavioral	28%	27%	28%	34%	37%	35%
Psychosomatic	3%	6%	4%	17%	25%	20%
War-related	1%	0.3%	1%	16%	4%	11%
Psychological afflictions	8%	10%	9%	15%	21%	17%

## The Effects of Violence on the Health Situation:

Since the outbreak of AI Aqsa Intifada in September 2000 and until February 2005, violent events taking place in the region have caused the death of 3585 Palestinians and 958 Israelis. An additional 28,465 Palestinians were injured. From September 2000 to January 2005, 335 aggressions on ambulances were recorded, resulting in the damage of emergency vehicles. 28 of those aggressions resulted in the total destruction of the vehicles. During those attacks, 203 PRCS staff members were wounded and 12 were killed (including 3 emergency response team members, 2 staff members, and 7 volunteers).

#### **III. The Economic Situation in Palestine**

The Palestinian economy stabilized in 2003, after a 25% regression during the two previous years. This led to a 1% GDP increase. The main reason behind this stability was the decreased number of curfews and the drop in violence. However, this situation was not maintained. After the creation of 104,000 jobs and a 21% increase in employment rates recorded in 2003, 22,000 jobs were lost in Palestine during the first guarter of 2004, including 20,000 jobs lost in the Gaza Strip. During the third guarter of 2004, the number of unemployed Palestinians reached 299,000, among which 226,000 are job-seekers (i.e. 26.8% of the total workforce, compared to 10% during the third quarter of 2000, prior to Al Aqsa Intifada). According to World Bank estimates, in 2003, 47% of Palestinian households (1.7 million people) were living below the official poverty line set at US \$ 2.1 per day and per person. The study found that, except for those considered "well-off" (approximately 10% of the population), that all Palestinian social groups had suffered a deterioration of their financial situation. Between July and September 2004, Palestinian unemployment rates reached 32.6%, with a 28.7% rate recorded in the West Bank and 41.3% recorded in Gaza. A report issued by the Palestinian Central Bureau of Statistics, following a survey conducted during the last guarter of 2004, indicated that nearly half of Palestinian households had lost more than 50% of their usual income and that approximately 16.1% had endured extremely difficult conditions.

As for Palestinian wage earners, salaries decreased in comparison with levels during the years preceding the Intifada. The average monthly income in Palestine dropped from 2500 new shekels before the Intifada to 1500 shekels during the fourth quarter of 2004. In the West Bank, this average dropped from 3000 to 1600 shekels, while it decreased from 1700 to 1000 shekels in the Gaza Strip. It should be noted that the poverty line is set at 1800-shekel income for a household of two adults and four children.

Due to Israeli forces' actions during the first 15 months of the Intifada, damages to infrastructures and institutions reached approx. US \$ Mio 305, and losses in Palestinian income levels, as a result of restrictions imposed on the free movement of individuals and merchandise, were evaluated at US 24 billion.



The deterioration of the Palestinian economy can also be illustrated by comparing the current economic situation to the situation during the years preceding the Intifada. The real per capita GDP decreased by 35% in comparison to its levels during the years preceding the Intifada (Before September 2000), and 37% of young Palestinians were unemployed at the end of 2003, compared to 14% on the eve of the Intifada. Fig. 14 shows the clear drop in GDP between 1998 (prior to the Intifada) and 2003.

#### Labor Sectors:

The Palestinian labor force is distributed as follows: service sector (34.8%); trade, restaurant and hotel sector (20.6%); agriculture, fishery and forest sector (14.4%); mining and manufacturing sector (12.7%); building sector (12.3%); and transport, storage and communication sector (5.2%).

#### **Damages to Infrastructure:**

The private sector suffered the most severe damages as a result of Israeli actions between March and May 2002. Repair costs were estimated at a global US\$ 100 million (US \$ 50 million representing costs for repairing damages to buildings, equipment and resources). Severe damages were also caused to roads (US \$ 70 million), private dwellings (US \$ 63 million) and ancient archeological sites (US \$ 52 million). In addition, the value of direct damages caused to the water and sewerage infrastructure, as a result of Israeli military actions between March and May 2002, reached a total of US \$ 7 million. According to the Ministry of Agriculture estimates, the total value of damages and losses affecting the agricultural sector reached US \$ 1,130,897,555, for the period from 28 September 2000 to 30 October 2004. Also, the construction of the Separation Wall affects agricultural lands, infrastructures, and water resources and will have a huge negative impact on agricultural production, especially in the cities of Jenin and Tulkarem, which represent 20% of the total agricultural production.

#### Impact of Closures, Curfews and the Separation Wall on the Economy:

As a result of closures and curfews imposed on Palestinians, it has become very difficult for Palestinians to undertake domestic and foreign commercial activities. The total number of curfew hours, imposed between June 2002 and January 2005, reached 26,195 hours (i.e. 1091 days).

In the probable event that the construction of the Separation Wall continues according to plans set forth by the Israeli government, 10.1% of West Bank lands will be trapped between the Wall and the Green Line, along with the 49,400 Palestinians who live in those areas. Furthermore, more than 500,000 Palestinians live within a land strip that is located less than 1 km away from the Separation Wall. This will not only separate Palestinians from their agricultural lands, irrigation networks and water resources, but will also separate them from their work, schools, and heath facilities located in the West Bank.



#### **IV. The Environmental Situation**

Palestine's environment is currently threatened by a number of risks resulting from high population density, water resource and land scarcity, fast demographic growth, the long-term refugee status, climate changes, desertification and land deterioration.

#### Water Resources, Supply and Treatment:

The majority of Palestinian water resources come from underground aguifers, sources and rainwater collection. In the West Bank, there are 40 municipal water wells supplying 30 million cubic meters of water per year. In order to meet water needs, Palestinians need additional resources such as springs, agricultural wells, as well as water supplied from the Israeli water company Mikorot. On average, springs produce around 60 million cubic meters per year, while rainwater collection plants gather a total of 6.6 million cubic meters per year. Palestine is not currently permitted to exploit its share in the waters from the Jordan River. In addition, Israel is exploiting 85% of underground water located in the West Bank and Gaza to supply 40% of Israel's water needs. In 2000, total annual water reserves (for domestic, agricultural and industrial uses) reached 146 million cubic meters for Gaza and 135 million cubic meters for the West Bank (i.e. a total of 281 million cubic meters per year), while Israel's total water resources reached 2166 million cubic meters per year. Table 3 depicts future water demand estimates required for municipal needs only (households and industries) in Palestine.

#### **Water Consumption**

The average daily water consumption per capita is estimated at approx. 70 liters in the West Bank and 75 liters in the Gaza

Table 3: Annual water demand estimates in millions of cubic meters				
2005 2010				
West Bank	159	187		
Gaza Strip 96 115				
Total for Palestine255302				

Strip. However, there are Palestinian regions that are only getting 10 liters per capita/per day. Israel consumes 350 liters per day for each individual (i.e. 5 times more). Minimum water consumption, as recommended by the World Health Organization, is set at 100 liters per day. In the West Bank, 88% of city residents and 55% of town and village residents benefit from water distribution networks. In Gaza, 90% of the population receives the service through home-connected municipal distribution networks, while many use individual rooftop water tanks with capacities ranging between 1 and 2 cubic meters. It should be noted that service levels are low in small villages and refugee camps. Palestinian water only receives chlorine-treatment used to sterilize local wells. However, this treatment is not done on a regular basis and do not always reach the required acceptable levels, whether because of the bad condition of chlorine-treatment machines or because of the bad working conditions of pumps. Treatment levels may drop to as low as 28% of the acceptable level at a number of wells in the Gaza Strip during summertime. Approx. 90 % of the West Bank gets good guality water, compared to only 28% in the Gaza Strip.

#### **Wastewater and Pollution:**

In Palestine, the total volume of generated wastewater is approx. 72 million cubic meters. Some agricultural lands are irrigated using untreated wastewater. In the Gaza Strip, sewerage is disposed of directly over land. Treated wastewater may represent a tremendous source of irrigation water but there are currently no adequate systems used to collect and treat sewerage water to take advantage of this resource (except for one operational treatment plant in Al Bireh). Not only does this problem lead to the loss of a major water resource, because of the water scarcity in the region, it also causes great risks to the environment and to human health.

Underground water contamination in the West Bank is mainly due to agricultural practices related to the use of fertilizers, insecticides and herbicides. It is also the result of an inadequate wastewater disposal system.

#### **Overconsumption and Water Deficiency**

In the Gaza Strip, in addition to contamination caused by agriculture and by the inadequate disposal of wastewater, the major environmental issue is related to the coastal aquifer system, which is considered the major source of water in Gaza. There's a 31-million-cubic-meter deficit between the water reaching the coastal aquifers and the quantities pumped out of the said aguifers. This is leading to diminishing underground water levels and to regressing available guantities of fresh underground water. This phenomenon is causing an increase in seawater access levels to these aquifers, thus increasing the salt levels therein. Currently, fresh water represents only 10% of the volume of the coastal aquifers. This deficit worsened when Israel halted the Gaza valley source from Hebron, which contributed to increasing fresh water levels in coastal aguifers. These wells can produce 55 million cubic meters of fresh water per year, but are subjected to excessive pumping at the rate of 110 million cubic meters per year. In average, Gaza Strip settlements consume 4 times the guantities of water consumed by Palestinians, and this gigantic demand is met by increasing the level of pumping from coastal underground aguifers. However, if this situation continues, coastal aquifers will not be able to resist the infiltration of seawater and within a period of twenty to thirty years, the water from these aguifers will no longer be suitable for human consumption or irrigation.

In addition to the increased salt levels in coastal aquifers, excessive pumping of underground water leads to drainedout springs and shallow wells in Palestine (This has actually occurred in Bardala and Jenin), and results in an increase in pumping costs, due to low water levels. Demand for water in Palestine will continue to increase as a result of the demographic and economic growth. As underground aquifers are overexploited, the only solution to meet this increasing demand is to redistribute fresh water sources between Israel and Palestine. In the event that this redistribution is affected, both Israel and Palestine will suffer from a water resource deficit. A solution can be found by using new methods such as seawater desalination or recycling wastewater for agricultural purposes.

## Management of Solid Waste and Related Problems in Palestine:

Local authorities (local municipalities in large towns and cities and local councils in small villages) are responsible for the management of the majority of solid waste. It should be noted that the major part of such waste is generated by households (45 to 50%), followed by commercial and institutional facilities (20 to 25%) and then by construction and industrial sectors (20 to 25%). Approximately 95% of Gaza Strip residents and 67% of West Bank residents benefit from a special solid waste collection system in non-conflict circumstances. Three garbage dumps are located in the Gaza Strip, but the West Bank lacks acceptable waste disposal sites. Although it has between 80 and 100 disposal sites, such sites lack essential infrastructures and adequate procedures.

The majority of operational problems arise from the inability to access garbage disposal sites because of closures, curfews and roadblocks. This situation has forced Palestinians to set up emergency dumps inside urban areas, which resulted in negative environmental and health impacts. There was also a tremendous increase in the volume of waste resulting from the destruction of buildings and infrastructures by the Israeli government. Throughout Palestine, open air incineration is used as a means to treat waste, thus creating an enormous environmental and health problem, namely due to the presence of large quantities of harmful waste and industrial plastics (PVC).

#### **Environmental Damages:**

The Israeli forces continue to extirpate trees and destroy agricultural lands. These actions worsened with the construction of the Separation Wall. In order to complete its construction, Israel expropriated a total of 270,558 acres of land, mainly located in the Tulkarem District. It should be noted that 214,456 of those are agricultural lands and the main source of income for the residents of the region. Israeli forces have also confiscated 49 wells from the beginning of the construction process until February 2004 (31 of those wells are located in the District of Qalqilia). In 2003 alone, occupation forces bulldozers destroyed no less than 3570 acres of land. Since the start of Al Aqsa Intifada, and until 30 April 2004, occupation forces had bulldozed a total of 22,892 acres of farmland in the District of Gaza (i.e. 14.6% of total agricultural land in the Gaza Strip).

During the first phase of the construction of the Separation Wall, 35 water reservoirs were isolated in Northern regions and 35 km of water installations were destroyed. Most water-rich aquifers in the East and North are located within areas trapped between the Wall and the Green Line, and will prevent Palestinians from accessing their legitimate underground water supplies in that region. In addition, the Eastern part of the Wall, located within the Jordan Valley, will prevent Palestinians from implementing their right to pump 200 million cubic meters of water from the River Jordan. Furthermore, 1248 water reservoirs and 882,554 water distribution lines have been destroyed.

#### **Earthquake Risks:**

The two major earthquakes that have occurred in Turkey in

August and November 1999 are a source of anxiety in Palestine, as well as in other countries in the region. Two fault lines affect the country, the first of which affects the regions surrounding the Dead Sea, Jericho, Nablus and Northern Palestine, and the second line affects Hebron, the Negev Desert and the South.

In a study conducted by the Geology and Seismic Engineering Center — Al Najah University in Nablus, it was predicted that, in the event of an earthquake in the OPT, 20% of all buildings would be totally destroyed, and 25% would be partially destroyed. The main impacts of such an incident would cripple the economy and negatively affect economic growth for a period ranging from five to ten years. Urban areas are more at risk than villages and camps, due to the continued construction of high-rise buildings, which represent a greater risk of destruction and a larger number of victims. Regions that are most vulnerable to such risks are Nablus, Jericho, Gaza and Jerusalem. The probability of an earthquake is greater in the South than in the North due to geographical considerations. Therefore, approximately one million people run the risk of sustaining direct or indirect earthquake-related damages.

The likelihood of a sudden earthquake is creating concern with regard to possibility of human and material losses due to the lack of preparedness in case of such an event. The number of multi-storey buildings and high-rise towers is steadily increasing and the need for proper construction standards has become critical. The correlation is quite clear between the fact that earthquakes are unpredictable and the fact that they hit without prior notice. It should be noted that the last two earthquakes in Palestine occurred in February and July 2004.

The most important challenge when developing a Palestinian work strategy (regardless of the current political climate) is to examine the various players and determine efficient management and coordination. There exists, at present, lack of inter-agency coordination, competition, role redundancy, conflicts between personalities and authorities, in addition to the lack of skills for plan implementation. These need to be resolved.

In addition, the country's weak infrastructures, especially affecting power grids, roads, communications and water, will undoubtedly play a role in hampering all planning and development efforts and will undermine relief efforts.

#### V. Educational/Pedagogic Situation

Providing proper education for their children is a major concern for Palestinians, and families exert tremendous efforts in order to provide good education for their families. Unfortunately the educational sector has also suffered the negative impact of the Al Aqsa Intifada, especially due to closures and the Separation Wall.

## The Palestinian National Authority's Efforts to Improve Education Levels:

Since the establishment of the Palestinian National Authority in 1994, the educational sector has witnessed enormous growth. The Authority has been eager to increase the number of schools and teachers in order to reduce illiteracy rates. Between 1994 and 2004, the number of enrolled students increased by 68.6%, while the number of schools rose by 45.8%. The number of teachers has increased by a staggering 94.9%.

## Literacy Rates and the Number of Enrolled Students:

In 2003, the literacy rate was close to 91.9% (96.3% for males and 87.4% for females). The majority of literate people have completed their primary education (33.6%) although only 7.1% have attained university graduate or higher levels. Table 4 summarizes the number of students enrolled in public, private and UNRWA schools, in addition to community college and university students.

Table 4 – Number of students enrolled in academic years 1996-1997, 2000-2001 and 2003-2004.					
1996-1997 2000-2001 2003-2004					
Public schools	481678	615558	706187		
Private schools	43624	59163	59672		
UNRWA schools 187518 232407 251584					
Community colleges 4599 4964 5892					
Universities 46176 75579 98439					

## Impacts of Closures, Curfews and the Separation Wall on Education:

As is the case with all other sectors, education has suffered the negative impacts resulting from Al Aqsa Intifada and the subsequent actions of the occupation. Prior to the Intifada, enrollment rates in First to Tenth grade classes were among the highest in the region. However, these rates have steadily decreased each year since the outbreak of the Intifada until they reached \_\_\_\_????\_\_\_\_, in academic year 2003–2004.

# Table 5 – Impact of the Intifada on the educational sector in Palestine between 28 September 2000 and 21 November 2004

	Martyrs	Detained	Injured
Teachers	31	176	54
School students	546	669	3471
University students	198	720	1245
Staff members	7	29	13
Total	782	1594	4783

Between the start of the Intifada and November 21st 2004, 1125 schools were closed due to curfews and closures, with dozens of them permanently shut down. In addition, 295 schools were destroyed by rockets and tanks and three schools were converted into military outposts. In Jenin, Tulkarem, Qalgilia, Jerusalem and Bethlehem, 53 schools hosting 15740 students were impacted by the Separation Wall, which prevented teachers from reaching their jobs, forcing the authorities to transfer them to other regions. Also, students are finding it increasingly difficult to reach their schools and universities. The Intifada has also had a direct impact on the safety of teachers. students and staff members alike. Please refer to Table 5. Many regions located to the West of the Wall were affected in that they were cut off from the West Bank located to the East of the Wall; 14 towns currently lack primary schools for boys and girls. 17 towns do not have secondary schools for boys and 6 towns do not have secondary schools for girls.

The ratio of lost school days due to curfews and closures reached 3.3% in the 2002-2003 school year (mostly in Nablus which reached 6.6%, followed by Hebron with 5.9%). This ratio dropped to 0.4% in the 2003-2004 school year, despite the fact that it increased in Rafah where it went from 1.8% in 2002-2003 to 3.2% in 2003-2004. In order to minimize the impact of closures on education, the Ministry of Education redistributed 15000 of its 27000 teachers in order to shorten distances between the teacher's residence and his/her work place. However, this has compelled a number of teachers to teach outside the scope of their specializations, thus affecting the quality of education in the region.

#### **Quality of Education:**

Despite difficulties arising from the current situation, the guality of education was maintained throughout the Intifada. [this says the opposite of the last sentence off the **previous paragraph1** The number of teachers was increased in order to cope with the increasing number of students. Hence, the student/teacher ratios remained stable throughout the last five years, except in the case of secondary schools in Gaza where the ratio increased. In addition, new classrooms are being built to host the ever-increasing number of students and to maintain the student/classroom ratio. In Gaza, these ratios are much higher than those of the West Bank. In contrast with primary education, the quality of higher education is regressing. The number of teachers who were hired did not increase proportionally with the increasing number of students enrolled in higher education institutions. The ratio of full-time teachers to the total number of teachers dropped from 82% in academic year 1996-1997 to 64% in 200-2001, while the student/full-time teacher ratio increased from 26 to 41%. More part-time and temporary teachers were appointed to compensate for this increase, but this did not prevent the student/teacher ratio from increasing from 22 to 26%.

Chapter Three

Study Results

This chapter discusses, in detail, the results of the study, which include the proportional distribution of polled individuals, according to changing parameters such as the type of danger and disaster, and the probability of its occurrence according to the study sample. It also contains an analysis of the results of individual interview regarding the most affected categories and regions, as well as the impact of each type of disaster on local communities, categories, regions and various fields of life.

This chapter also analyzes the results of the focus group with regard to the most affected categories and regions, as well as the effects of disasters on society. In addition, also examined is the perception of the focus groups of the impact left by potential disasters on infrastructures.

Furthermore, this chapter discusses capabilities and resources available in the communities to deal with disasters, as seen and expected by the study sample. Chapter Two also discusses the role of the PRCS, before, during and after the occurrence of disasters, as seen by PRCS employees as well as by the staff of governmental and non-governmental institutions.

Finally, it includes the results of the study on the role of the PRCS on national, regional and international levels. Suggestions for new projects and programs recommended by the study sample for PRCS to better develop its disaster management processes are also discussed at length.

#### I. The Ten Most Likely Disasters According to the Study Sample:



The chart indicates that 31.0% of those surveyed have declared the likelihood of a sudden seism or earthquake, against 20.3% of polls that stated that they are cannot predict the occurrence of this danger. Nevertheless, 19.8% of the polls show that a seism or an earthquake was likely while 9.1% considered that it was more likely.



This chart shows that 24.8% of polls consider that a sudden locust invasion was likely, compared to 17.1% who stated that it was an unpredictable risk. 25.3% considered this to be a likely risk while 12.8% considered it unlikely.



This chart indicates that the majority of polls (38.3%) consider floods and heavy rains as a likely risk, while 25% considered that this could represent a sudden risk. A non-negligible proportion (15.9%) said they would not be able to predict when the risk of floods and heavy rains might occur.



This chart indicates that 15.2% of polls considered radiation as a sudden risk, compared to 23.7% who stated their inability to predict such an occurrence. Nevertheless, 15.4% of polls considered this to be a likely risk while 10.9% considered it a more likely risk.



This chart indicates that 24.5% of polls found likely a disaster involving "High-voltage lines" while 7.9% considered this as a more likely risk. 15.0% stated that it could be sudden and 18.3% stated that they would not be able to predict when it would occur. 12.4% considered this to be an unlikely risk.



This chart indicates that more than a third of polls expected heavy snowing and snowstorms likely, while 15.0% considered that such disasters could happen suddenly. Nonetheless, 13.5% of polls could not predict when the risk of snow and snowstorms could occur and 24.0% stated that they were unlikely.



This chart indicates that less than a third of polls expected epidemics as a likely risk while 20.8% considered them as more likely. 13.6% stated that such risks could occur unexpectedly and 12.4% stated their inability to predict the occurrence thereof.



This chart indicates that 30.5% of polls considered the risk of traffic accidents and collisions as likely while 21.7% found them to be more likely. 16.5% stated that they might be most likely and 13.5% said they could very well be sudden. 6.3% of polls could not predict the risk of car accidents and collisions and 4.5% found that they were likely.



This chart indicates that 23.9% of polls likely expected risks involving landslides and mudslides, while 9.8% evoked these risks as more likely. 5.3% of polls considered them as most likely and 12.7% found that they could occur unexpectedly. Nonetheless, 22.6 could not predict when they would occur, while 18.8% stated that they were unlikely



This chart indicates that more than a third of polls considered that professional accidents and technological incidents were likely, while 13.3% found them to be more likely. 8.1% of polls stated that they were most likely and 12.1% found that they could occur unexpectedly. However, 14.2% of polls were unable to predict professional accidents and technological incidents and 9.3% saw that their occurrence was unlikely.



This chart indicates that 17.2% of polls expected the risk of political conflicts likely, while 26.6% found it to be a most likely. 9.2% considered that they could occur unexpectedly but 7.5% could not predict when they might occur. Furthermore, 4.7% did not find them likely.



This chart indicates that 29.5% of polls expected water shortage risks likely, while 22.2% expressed their conviction that they were more likely and 20.8% found them most likely. 10.5% said they could occur unexpectedly but 5.4% of polls said they could not be predicted. Finally, 6.2% found them to be likely.



This chart indicates that 25.7% of polls expected the occurrence of the open sewer risk likely, while 22.1% expressed their conviction that they were more likely and 19.8% found them most likely. 8.4% said they could occur unexpectedly but 8.8% of polls said they could not be predicted. Finally, 8.1% found them to be likely.



This chart indicates that 27.9% of polls expected garbagedump-related risks likely, while 26.2% stated that they were more likely and 17.9% found them most likely. 3.7% said they could occur unexpectedly but 8.4% of polls said they could not be predicted. Finally, 7.6% found them to be likely.



This chart indicates that 25.2% of polls expected water and sea pollution risks likely, while 25.5% expressed their conviction that they were more likely and 19.3% found them most likely. 6.2% said they could occur unexpectedly but 8.6% of polls said water and sea pollution risks could not be predicted. Finally, 5.5% found them to be likely.



This chart indicates that 34.9% of polls expected food poisoning risks likely, while 18.7% expressed their conviction that they were more likely and 13.5% found them most likely. 10.2% said they could occur unexpectedly but 9.3% of polls said they could not be predicted. Finally, 6.4% found them to be likely.



This chart indicates that more than half the polls considered Separation Wall-related risks as most likely. 17.8% found them more likely and 9.3% expected them to occur likely. 6.9% stated that such risks could occur unexpectedly but 5.4% were unable to predict their occurrence. Finally, 3.4% found them likely.



This chart indicates that circa 59.9% expected unemployment risks more likely, while 19.8% considered them most likely and 8.3% found them likely. 2.5% stated that they could occur unexpectedly and another 2.5% said they were unpredictable. 2.1% found such risks likely.
## II. Analysis of Individual Interview Results Regarding the Most Affected Categories and Regions, and their Impact on Society

The study sample defined the category that would be affected by potential disasters and crises according to the type and intensity of the concerned disaster. With people being the first and foremost victim of disasters, the study results have shown that those questioned viewed the category that would be most affected by disasters are children (91%), followed by the elderly (81%), then women (80%), youth (63%), the handicapped (53%) and finally workers (44%). The study sample specified one category that would suffer the most from a given potential disaster but the disasters that would affect such categories the most are earthquakes, political conflicts and the Separation Wall:

## 1. Earthquakes:

Study results indicated that the risk of earthquakes has a great impact on Palestinian individuals. The most affected are those who neither have substantial means, nor the awareness regarding ways to act or the capacity to bear adversity, as well as people residing in areas with weakly structured buildings in densely populated areas, and residents of old towns and poor neighborhoods in villages, cities and camps. Most affected groups would be the physically and mentally disabled, children, the elderly, farmers, pregnant women, youth and women who are unassisted heads of families. Therefore, the study sample believes that these categories need more assistance and intervention than others who reside in wellstructured, non-crowded buildings, located away from danger zones. The study sample added that the PRCS needs to provide for the most vulnerable groups, and set up programs and projects targeting these them in order to prepare them to face the risk of an earthquake.

## 2. Political conflict:

The surveyed sample from ministries, governmental and nongovernmental institutions and PRCS staff members in the West Bank and the Gaza Strip, agreed that political conflict affects Palestinian individuals, including women, children, farmers, the elderly, the chronically sick and the middle and lower classes. Also affected are groups that have no access to health services, pregnant women, youth, schoolchildren, the disabled, and service providers who face and are subject to risks. The study society focuses on political conflict because its damages are numerous, diverse and far-reaching. Therefore, such damages affect the said categories, as a result of closures, incursions, curfews, bombings, etc.

## 3. The Separation Wall

The surveyed sample gave much importance to the Separation Wall, due to its various negative impacts on Palestinian society, which includes children, farmers, schoolchildren, teachers, pregnant women, diabetic patients, heart patients and the elderly. The impact sustained by these categories affects educational, health and psychological aspects. The Separation Wall will lead to the closure of the whole region. This will deprive these categories from the possibility of easily leaving their towns to access education and health services, as many of these regions lack local health centers and schools. This will undoubtedly discourage many students from going to school, especially young women, in view of the many problems and difficulties that they will have to face, in addition to teachers losing their jobs because they do not reside in the same region.

## **Most Affected Areas**

According to PRCS and institution employees, areas most affected are those where the disaster actually takes place, according to its type and intensity. Therefore, the affected community needs to be closely monitored in order to evaluate and determine needs, and then facilitate the process of supplying various services and aid to affected categories and reduce potential damages and losses. The study sample



indicated that the areas that are likely to suffer the most from disaster impacts, whether political, environmental, natural or economic, are: highly populated camps, old towns, lowlands, regions with high-rise buildings, areas in proximity to the Separation Wall, regions located on the borders with Israel, and remote villages.

- In the case of earthquakes, the study sample considered that lowlands, the Dead Sea, flood-prone areas, areas with highrise and big buildings, areas that lack services and that are densely-populated, and rural areas would suffer the most severe impacts because they are closer than other areas to the fault line, lack basic infrastructures, and are far from service sources. Also adequate building standards are not applied in those regions.
- As for flood- and landslide-prone areas, they are the lowlands: Jenin, Tulkarem, Southern Hebron, Qalqiliya, and areas with weak sanitation systems and inadequate infrastructures.
- With regard to political conflicts, the surveyed sample expected the following regions to be among the most affected: Nablus, Hebron and Southern Hebron, the Lowlands, Jerusalem, in addition to areas that lie in the vicinity of the Separation Wall and those that are close to settlements and the Green Line. Also affected are remote areas that lack services and that are the poorest, i.e. densely populated old towns, camps, rural areas as well as places where military presence is heavy. As for the Gaza Strip, the mostly affected area have been identified as follows: southern areas, Khan Younis, Beit Hanoun, Mawassi, Rafah and Dahiniyeh, in addition to remote and unwelcome areas.
- Separation Wall areas have been identified as the residential areas located behind the Wall: Jenin, Tulkarem, Qalqiliya, the Hebron Old Town, and areas deprived of services.
- Desertification and draught have been located in areas lacking infrastructures, as well as the region of Qalqiliya, and the Eastern and Southern regions of the West Bank, and border areas were defined as being the most affected and suffering the worst impact.





- Environmental pollution affects urban and rural areas, Hebron, Tulkarem, and camps in general. In Gaza, the most affected regions would include Beit Lahia, Mawassi, highly industrialized areas, in addition to demarcation line areas.
- The surveyed sample deemed that nuclear reactors and chemical pollution would affect densely populated areas, as well as neighboring Arab and regional areas.
- With regard to diseases and their spread, the study sample deemed that densely-populated areas, sewerage basins, and the Beit Lahia area in the Gaza Strip would be the most severely affected.
- Areas affected by unemployment are Gaza, the West Bank and specifically refugees in both those areas.
- The study group found that the water shortages affect Gaza, areas that are close to the settlements, refugee camps and areas that are deprived of utilities, in addition to villages and agricultural lands.
- With regard to internal violence, the study sample considered that the Gaza Strip, including the camps, Hay Al Teffah and Hay Al Zaytoun were more prone to internal violence than the West Bank.

## III. The Impact of Disasters on Local Communities

The study sample, including staff members of Ministries, as well as of governmental and non-governmental institutions, and PRCS have all agreed that there would be diverse impacts affecting the Palestinian society as a result of potential disasters. Seven were identified:

### 1. Material losses:

The sample surveyed indicated that the impact of potential disasters that could affect the Palestinian society and would result in poverty and a worsening economy. These would affect agricultural, livestock resources and as well as tourism, thus slow down the development process. This would lead to the closure of markets and borders and bringing the production

process to a complete halt. An outcome could include a drop in the production of olives and olive oil. The impact of disasters would also lead to expropriations, land bulldozing, road building and destruction.

## 2. Environmental Pollution:

The study sample considered pollution a risk to the environment. Examples include bulldozing, soil and water contamination, use of Palestinian lands as dumping sites for Israeli settlements' garbage, as well as for their industrial and animal waste. Lack of sewerage networks in villages and an increase in the numbers of rodents and insects as a result of non-collected garbage bins, as well as a generalized lack of hygiene due to water shortages also represent a threat to the environment. The destruction and/or collapse of the infrastructure is probable.

## 3. Infrastructure:

The study results showed that potential disasters that could impact Palestine, such as earthquakes, political conflicts, the nuclear reactor, the Separation Wall, in addition to floods and inundations, would have diverse impacts on the Palestinian society and its institutions. These could include the collapse of infrastructures, the possibility of devastating aftershocks that may cause material and human losses, collective destruction of buildings, collapse of institutions and ministries, destruction of streets etc. Weak institutions and lack of local support, lack of capabilities and expertise, difficult access to affected individuals, and a change in geographical features might follow such disasters.

## 4. Human Losses:

Study results, according to the study sample, indicated that human losses would result from potential natural and manmade disasters. In each case, humans are expected to suffer losses and be directly affected. Impacts might manifest themselves in different forms and include the increase in the number of cases of homeless children, child malnutrition, economic collapse of families, forced displacement and emigration, family dismantlement, lack of means for security forces and the police to implement the law and provide assistance, increasing numbers of victims, handicapped and disfigured persons, difficult and delayed access to hospitals, home births without medical assistance, checkpoint births and neonatal fatalities due to delays and lack of medical assistance, increased poverty and unemployment, resistance fighter killings in residential areas, baffled human rights, increased population density especially in the limited Gaza Strip, poisoning cases etc. Impact is felt on gender, an example being when families are compelled to deprive girls from their right to proper education and work due to imposed political conditions as well as fear, on the part of the family and the girl, for the latter's safety. Also it is difficult for young girls to move to a different region for education or work. Finally, the possibility of internal conflicts may lead to human losses due to political instability.

## 5. Health:

Study results showed that the health aspect is affected by potential disasters both on the private and public levels. This impact affects humans in the following aspects: capabilities and resources, animals, medical staff, in addition to various other impacts such as: the spread of diseases, the lack and scarcity of health service, water pollution, lack of medical supervision, difficult access to the medical staff's workplace, draught, emergence of unfamiliar medical conditions, deterioration of the nutritional system and deterioration of sick people's health. In addition to potential disasters, all agreed that the existence of Israeli settlements on Palestinian soil has a definite impact on Palestinian society. This is due to the fact that Palestinian lands are used to dump factory and animal wastes. This also increases the probability of the spread of diseases within the Palestinian society, such as asthma, cancer, poisoning, etc. Furthermore, these settlements export their produce outside Palestinian territories without proper health inspection by the Israeli Ministry of Health.

## 6. Education:

The educational aspect is considered one of the most important daily necessities for individuals. Therefore, ministries and governmental and non-governmental institutions in the West Bank and the Gaza strip agree that this aspect is subject to impact resulting from potential disasters in Palestinian society, such as: disrupted education, increased absenteeism as a result of the social and economic hardship caused by disasters, difficult access to schools and universities, the probable increase in illiteracy rates, the increase in education costs resulting from the family's deteriorating economic conditions, an increase in the levels of violence and aggressive behavior among children, depriving girls of their right to education out of fear for their safety, and destruction of schools and universities.

## 7. Psychological Impact:

The surveyed sample deemed that the psychological aspect played an essential role in the lives of people, and is affected by various potential catastrophes. Such an impact may take several shapes including: increased violence, increased crime rates, family dismemberment, decreased work and production levels, spread of social diseases, instability and weakness, a generalized feeling of living in a large prison due to repeated closures and the Separation Wall, lack of psychological and social support, behavioral misconduct, fear, increased pathologies, increased irritability, lack of job security and total collapse of Palestinian security, in addition to a deviant curve towards violence and aggressiveness on the part of children.

## Analysis of focus group results regarding the most affected categories and regions and their impact on society:

## **Affected Social Groups:**

The views of participants in the study sample varied in regard to impact of disasters on social categories. The category that would be most affected by disasters were children (91%), followed by the elderly (81%), then women (80%), youth (63%), the handicapped (53%) and finally workers (44%).



## Affected regions:

According to workshop participants, the regions that are the most severely affected by disasters would be the camps (59%), followed by villages (41%), then border regions (39%) and finally, densely-populated areas (31%).



Study Sample	Categories affected by disasters and crises	Regions affected by disasters and crises
PRCS	<ul> <li>Children, women, the elderly, youth, men, farmers.</li> <li>The disabled, the sick.</li> <li>Prisoners and detainees.</li> <li>Inhabitants of high-rise building</li> <li>Intervention team members and their families.</li> <li>Uneducated categories.</li> </ul>	<ul> <li>Old towns.</li> <li>Border regions close to settlements.</li> <li>Agricultural lands.</li> <li>Regions with weak infrastructures.</li> <li>Lowlands, coastal areas and Northern regions.</li> <li>Remote areas</li> <li>Areas close to the Separation Wall</li> <li>Areas with high-rise buildings</li> <li>Densely populated areas and camps.</li> </ul>
Local society	<ul> <li>Children, women, youth, men, the elderly.</li> <li>Workers and farmers.</li> <li>Individuals with special-needs the elderly and the sick.</li> <li>Poor people, housewives and detainees.</li> <li>Students.</li> <li>Service providers.</li> </ul>	<ul> <li>Densely populated areas and camps.</li> <li>Lowlands and coastal regions.</li> <li>Border regions located near settlements and remote villages.</li> <li>Areas located within the Separation Wall.</li> <li>Nablus and Jericho.</li> <li>Sandy areas and agricultural lands.</li> </ul>
Children	<ul> <li>Children, the elderly, women, youth.</li> <li>The disabled and the sick.</li> <li>Students.</li> <li>The poor, workers and detainees.</li> <li>Wage earners.</li> <li>Pregnant women.</li> <li>Refugees, Bedouins and landowners.</li> </ul>	<ul> <li>Lowlands, highlands and coastal areas.</li> <li>Old houses, villages and camps.</li> <li>Areas located to the West of the Wall.</li> <li>The Gaza Strip.</li> <li>Areas located near checkpoints.</li> <li>Areas in proximity to settlements.</li> <li>Areas prone to bombings and gunfire.</li> </ul>

## Table 6 - Affected Social Groups and Regions According to Focus Group Participants.

Study results have shown that individuals who are the most affected by disasters were children (91%), followed by the elderly (81%), then women (80%), youth (63%), the handicapped (53%) and finally workers (44%). [Same as above see Affected Social groups]

Participants believed that the greatest impact on children would be psychological (88%), followed by health aspects (55%), and then handicaps (25%), see Fig 36. As for the elderly, health was the major affected aspect (63%), followed by the psychological impact (48%) and the lack of services and proper treatment (30%), see Fig 37. As for impacts affecting women, they are psychological (75%), family and social problems (45%), then birth and abortion problems (48%), see Fig 38. Youth would be affected psychologically (59%), become deviant (45%), and would suffer from lack of income and unemployment (44%), see Fig 39. Aspects affecting the handicapped would be psychological (66%), lack of services (39%) and health-related issues (33%). Participants also believed that workers would be highly affected by the lack of resources and increased unemployment (84%), followed by psychological aspects (39%) and family problems (36%).

The impact of disasters on individuals:









## **IV. Impact of Disasters on Infrastructures**

Table 7 shows that participants believe that the impacts affecting infrastructures in a disaster-hit area are: wide-scale destruction and damage of houses and buildings, including damages to archeological sites; destruction of sewerage networks and the subsequent increase in diseases and foul odors; and the destruction of power grids, causing fires and neutralizing all appliances, thus leading to food and medication loss as well as the interruption of internal and external communication. A disaster would also lead to water shortages, pollution, and the destruction of water distribution networks, thus paving the way for diseases and draught. Participants also believe that a disaster would cause the destruction of communication networks, thus leading to disruption of phone services and discontinuous social relations. Even if some lines remain operational, they would soon be overloaded. A disaster would also destroy roads, hence hampering circulation and traffic, increasing the number of closures, roadblocks, and accidents. Schools would also be severely affected due to destruction or shutdowns, thus hampering the education process, increasing the difficulty of access for teachers and encouraging children to drop out, thus increasing the load to be borne by the Ministry of Education. In addition to impact on institutions, hospitals, bridges, public places, factories and health centers.

## V. Capabilities and Community Resource Available for Facing Disasters

Study sample focus groups unanimously considered that capabilities and local resources available in local communities must be used and coordinated according to each type of assistance, including housing; storage of general and medical materials; setting up field hospitals; provision of health services, awareness-raising and guidance services; fund raising; setting up operating theaters; in addition to participation in distribution and transport processes; and the provision of job opportunities to affected groups.

## **VI. PRCS's Role in Disaster Management**

### **Prior to the Disaster**

Study results indicated that the PRCS must be ready to provide many basic and essential materials prior to the occurrence of the disaster. These include the preparation of an emergency plan that comprises training individuals in dealing with disasters that might occur in Palestine; writing and printing brochures regarding these; prepare infrastructures to withstand the disaster by providing them with all needed equipment and

# Table 7 - Impacts of potential disasters on infrastructures according to focus group participants (PRCS, the local community and children)

Infrastructure	PRCS	Local Community	Children
Houses	<ol> <li>Destruction.</li> <li>Damage.</li> <li>Weakened infrastructure.</li> </ol>	<ol> <li>Destruction, especially old high-roofed houses.</li> <li>Damage.</li> <li>Unfit houses are more prone to impacts.</li> <li>Impacts on archeological and historical sites.</li> </ol>	<ol> <li>Destruction and demolition of houses.</li> <li>Broken windows.</li> <li>Burning houses.</li> <li>Flawed structure in new and old buildings.</li> </ol>
Sewerage	<ol> <li>Pollution and diseases.</li> <li>Discontinued service.</li> <li>Leaks.</li> </ol>	<ol> <li>Environmental contamination of produce and water.</li> <li>Spread of diseases such as cholera and cancer.</li> <li>Population movement hampered</li> <li>Destruction of sewerage networks.</li> <li>Leaks onto neighboring residential areas.</li> <li>Drowning children.</li> <li>Spread of rodents.</li> </ol>	<ol> <li>Diseases, especially hepatitis.</li> <li>Crop destruction.</li> <li>Foul odors.</li> <li>Environmental pollution.</li> </ol>
Power grid	<ol> <li>Power cuts.</li> <li>Fires.</li> <li>Power line destruction.</li> <li>Power grid unfit to face disasters.</li> <li>Lack of maintenance.</li> </ol>	<ol> <li>Power cuts.</li> <li>Shutting down of all medical equipment and electrical appliances.</li> <li>Chaos.</li> <li>High-voltage incidents and fires.</li> <li>No heating.</li> <li>Hampering of daily life.</li> <li>No water pumping.</li> <li>Food loss.</li> <li>Grid destruction.</li> <li>Explosions in power plants.</li> </ol>	<ol> <li>Power cuts.</li> <li>Fires.</li> <li>Electrical explosions.</li> <li>Discontinued operation of equipment and appliances.</li> <li>Communication cuts.</li> </ol>
Water network	<ol> <li>Water shortage due to lack of reservoirs.</li> <li>Flailing water lines.</li> <li>Water contamination by sewerage.</li> </ol>	<ol> <li>Water shortages and cuts.</li> <li>Water contamination.</li> <li>Bursting reservoirs.</li> <li>Drought and desertification.</li> <li>Network breakdown.</li> <li>Settlements' control over water.</li> <li>Lack of water reserves.</li> <li>Human and animal deaths.</li> <li>Contamination by wastewater.</li> <li>Death of plants and crops.</li> </ol>	<ol> <li>Water shortage.</li> <li>Water cuts.</li> <li>Water pollution.</li> <li>Damaged network.</li> <li>Aridity risk.</li> <li>Damaged crops.</li> <li>Bursting reservoirs.</li> <li>Floods.</li> </ol>

Phone network	<ol> <li>Grid destruction.</li> <li>Halted connection with the outside world.</li> </ol>	<ol> <li>Disrupted service.</li> <li>No means to ask for outside help.</li> <li>Increasing disaster impacts and coordination difficulties.</li> <li>Destruction of the communication network.</li> <li>Difficulty in obtaining news on developments.</li> <li>Information not reaching all areas.</li> <li>Hampered movements.</li> </ol>	<ol> <li>Service cuts.</li> <li>Wire severance.</li> <li>Inability to ask for help.</li> <li>Lack of communication.</li> <li>Inability to establish contact with the event.</li> <li>Hampered public life.</li> </ol>
Streets	<ol> <li>Destruction of public roads.</li> <li>Difficulty of movement between cities and villages.</li> <li>Destruction of historical sites.</li> </ol>	<ol> <li>Hampered traffic.</li> <li>Region isolation.</li> <li>Street destruction and damage.</li> <li>Road accidents, injuries and deaths.</li> <li>Public service hampering.</li> <li>Slow ambulance service.</li> <li>Traffic jams.</li> <li>Less transport means.</li> <li>Difficult transportation of patients.</li> <li>Hampered rescue missions.</li> </ol>	<ol> <li>Street destruction.</li> <li>Hampered movements.</li> <li>Hampered services.</li> <li>Inability to conduct fast interventions during the incident.</li> <li>Street flooding.</li> <li>Causing deaths.</li> </ol>
Schools	<ol> <li>School destruction.</li> <li>Schools are not qualified to face disasters.</li> </ol>	<ol> <li>Destruction of school buildings.</li> <li>School shutdowns</li> <li>Difficulty of access to schools.</li> <li>School building damages.</li> <li>Lack of school services.</li> <li>No emergency exits.</li> <li>Hampered education.</li> <li>Overcrowded classrooms.</li> <li>Increased load on the Ministry of Education.</li> <li>Dropouts and increases in levels of ignorance.</li> </ol>	<ol> <li>School closures.</li> <li>School destruction.</li> <li>Damages.</li> <li>School invasion.</li> </ol>
Other: – Institutions – Hospitals – Gas stations – Bridges – Kinder–gartens – Public places.	<ol> <li>Affected health care services.</li> <li>Environmental pollution.</li> <li>Increased demand over services.</li> <li>Increased levels of contamination and radiation.</li> </ol>	<ol> <li>Increased mortality and injury rates.</li> <li>Material losses.</li> <li>Service cuts.</li> <li>Fires and explosions.</li> <li>Worker absence.</li> <li>Collapse of bridges.</li> </ol>	<ol> <li>Lack of medication.</li> <li>Food shortages.</li> <li>Deaths.</li> <li>Diseases and epidemics.</li> <li>Drought.</li> <li>Hampered access to service.</li> <li>Environmental pollution.</li> </ol>

Table 8 - Local Capabilities and Resources Available for Facing Disasters				
Capacities and Resources	Study sample			1. Providing awareness-raising and guidance services to social categories.
Schools	<ol> <li>Using playgrounds and classrooms for shelter.</li> <li>Providing relief, health and psychological services through schools.</li> <li>Creating storage spaces for medication, foodstuffs, emergency centers, field hospitals, and health clinics.</li> </ol>		Clubs	<ol> <li>Contributing to the provision of job opportunities.</li> <li>Setting up emergency operating theaters.</li> <li>Sheltering victims.</li> <li>Centers for providing medical services and vaccination.</li> </ol>
Health clinics	<ol> <li>Providing medication and first aid.</li> <li>Doctor and psychosocial support team assistance.</li> <li>Consultations.</li> </ol>			<ol> <li>6. Entertainment activity centers.</li> <li>7. Stores.</li> <li>8. Distribution centers.</li> <li>9. Provision of psychological support services.</li> </ol>
	<ol> <li>4. Injury reception.</li> <li>5. Following up on chronic disease.</li> <li>6. Sheltering victims.</li> <li>7. Emergency center.</li> </ol>			<ol> <li>Used for evacuation cases.</li> <li>Field hospital venues.</li> <li>Shelter for victims.</li> </ol>
Hospitals	<ol> <li>Doctors, nurses and trained staff members.</li> <li>Blood transfusion services.</li> <li>Medical equipment.</li> <li>Distribution of medical teams onto regions.</li> <li>Injury reception.</li> <li>Conducting surgeries.</li> <li>Epidemic treatment.</li> </ol>		Public squares	<ol> <li>4. Tent setup camps.</li> <li>5. Entertainment activity venues.</li> <li>6. Cemeteries.</li> <li>7. Car parks.</li> <li>8. Equipment gathering grounds.</li> <li>9. Emergency action venues.</li> <li>10. Fund collection venues.</li> <li>11. Work launch points.</li> <li>12. Provision of guidance and</li> </ol>
Municipalities	<ol> <li>Providing assistance and construction to affected populations.</li> <li>Contributing to reducing unemployment.</li> <li>Rehabilitation and maintenance of infrastructures including streets, water networks, power grids, and sewerage.</li> <li>Providing awareness-raising and education services.</li> <li>Contributing to pest control.</li> <li>Sheltering victims.</li> <li>Facilitating the work of relief teams during disasters.</li> </ol>		Worship venues	<ol> <li>awareness-raising services.</li> <li>Aid distribution.</li> <li>Awareness-raising and collective education.</li> <li>Shelter for victims.</li> <li>Medical centers.</li> <li>Warning centers.</li> <li>Stores.</li> <li>Fund collection.</li> <li>Emergency services.</li> <li>Communication centers.</li> <li>Psychological support services.</li> </ol>

Water reservoirs	<ol> <li>Water storage.</li> <li>Fire fighting.</li> <li>Agriculture and cleaning.</li> </ol>		<ol> <li>Assisting in rescue and evacuation efforts.</li> <li>Helping the post-disaster rehabilitation process.</li> </ol>
Vehicles	Vehicles1. Transportation of food and medication.Volunt2. Transportation of medical supplies.3. Transportation of victims.Volunt4. Transportation of equipment, water and fuel.5. Transportation of casualties.6. Distribution of needs.		<ol> <li>Raising funds.</li> <li>Organizing entertainment days for children.</li> <li>Distributing aid.</li> <li>Providing guidance.</li> <li>Providing first aid.</li> <li>Donating blood.</li> <li>Spreading order.</li> <li>Setting up camps.</li> </ol>
Specialists	<ul> <li>1. Spreading awareness.</li> <li>2. Providing training in all field</li> <li>3. Exchanging experiences.</li> <li>4. Coordinating and providing assistance.</li> <li>5. Participating in rescue efforts.</li> <li>6. Planning.</li> <li>7. Providing medical services.</li> <li>8. Supervising.</li> <li>9. Participating in maintenance processes.</li> <li>10. Distributing medication.</li> <li>11. Providing psychological support.</li> <li>12. Contributing to the collection of</li> </ul>	Local housing compounds	<ol> <li>Collecting donations through social solidarity.</li> <li>Contributing to raising awareness regarding disasters and their inherent risks.</li> <li>Constituting community councils.</li> <li>Participating in sheltering victims.</li> <li>Participating in financial support efforts.</li> <li>Volunteering for work.</li> <li>Donating blood.</li> <li>Providing transport assistance.</li> <li>Contributing to food support, transportation, communication, and psychological support efforts.</li> </ol>
Professionals	<ol> <li>statistics and data.</li> <li>Useful experience.</li> <li>Contribution to the construction, rehabilitation and maintenance process.</li> <li>Provision of guidance services.</li> <li>Camp organization.</li> <li>Contacting volunteers.</li> <li>Raising funds.</li> <li>Distributing medications.</li> <li>Providing treatment.</li> <li>Being present on site.</li> </ol>	Kindergartens	<ol> <li>Storage for supplies.</li> <li>Surrogate families for children.</li> <li>Lodging children.</li> <li>Contributing to the provision of counseling and guidance.</li> <li>Stores.</li> <li>Medical clinics.</li> <li>Entertainment activities.</li> <li>Contributing to the provision of psychological support for children.</li> <li>Emergency center.</li> <li>Child education.</li> </ol>

	1. Contributing to awareness and education.
	2. Lodging victims.
	3. Special projects for ladies.
	<ol> <li>Contributing to the employment process.</li> </ol>
	<ol> <li>Contributing to studies aimed at determining needs.</li> </ol>
	6. Coordinating with foreign and domestic institutions for fund-raising purposes.
Associations	7. Contributing to the provision of financial support.
	8. Medical centers.
	9. Volunteering.
	10.Stores.
	11.Distributing relief aid.
	12.Providing free services.
	13.Contributing to psychological support efforts.
	14.Emergency centers.
	15.Lodging the disabled.

materials, training staff members and increasing their numbers in various specializations especially in earthquake response. Furthermore, the PRCS should provide proper equipment for operating theaters, field hospitals and ambulances. PRCS should also hold maneuvers and practical trainings prior to the disaster, and concentrate on the importance of establishing cooperation with Civil Defense Authority services. Moreover, special care should be given to providing psychosocial specialists to deliver proper psychological support. The study society also focused on the creation of a special disaster fund, on increasing health services in remote areas and on providing a special database for society and rescue teams.

## During the Disaster:

As for the requirements expected of PRCS during the disaster, the study results show that PRCS is expected to implement the pre-developed emergency plan, which supposes that PRCS should take command of the relief process. In this regard, it is required to respond swiftly with a quick evaluation of the situation, then to contact victims and concerned institutions, seek the assistance of EMS and volunteer teams, secure the area, set up field hospitals and health units, provide and distribute materials to victims and institutions, in addition to

creating operation rooms to document all information and data. The study sample has also required that PRCS provide blood transfusion and psychological support services, and obtain material and in-kind support.

## After the Disaster:

The study results, as detailed in the table below, indicated that, in the post-disaster phase, PRCS is expected to play a role which includes evaluating and adapting plans; estimating damages; rehabilitating staff members and increasing their numbers; providing proper maintenance to equipment and materials; covering the deficit in medication and supplies; providing services to citizens such as providing shelter for victims, visiting bereaved families and casualties, and providing psychological, guidance and awareness-raising support; in addition to searching for missing individuals. The study results also stressed the importance of continuing to provide mobile clinic services to Palestinians, and of persevering in the collection of financial support and the coordination with regional and international entities in regard to supplies and experiences.

PRCS's Role in Preparedness & Disaster Response

The study sample (including PRCS staff and governmental and non-governmental ministries) unanimously agreed that the PRCS focus on the following six areas in order to achieve optimum readiness to face disasters and crises that might occur in Palestine

## **1. Prevention**

Study results in the field of prevention focused on the elaboration and implementation of awareness-raising, educational, rehabilitation, social, health, environmental, professional and food-related programs in the field of disasters, risks, and firstaid to the benefit of society including school and university students and mother, through collaboration and coordination with the media; in addition to disseminate information and production of an educational CD-ROM designed for children.

## 2. Capabilities and Preparations

With regard to capabilities and preparations, participants noted that raising the working teams' readiness levels and training them to respond to disasters may be achieved through the following: setting up fully-equipped field hospitals complete with emergency rooms and operation theaters; providing medication, relief materials and ambulances in order to be well prepared at the time of occurrence of the disaster. In addition, it would be important to conduct a study that covers all disaster-related risks and enhancing its social and health related services and consolidate its presence in border regions and remote villages.

## 3. Resources

The study sample considered that the resources to be provided by the PRCS include financial disaster-response resources, in addition to all equipment and tools related to relief efforts, training, rescue, first-aid, food, medication, transport and communication, field hospitals, mobile clinics, operation rooms, and database. Also the PRCS must be ready to mobilize all members of the Disaster Response Unit and volunteers.

## 4. Human Resources

Concerning human resources, participants underlined the need for personnel that is fully qualified and well trained to deal with disasters and crises. They need to be able to respond to the event, with experience and technical expertise. Noted was the importance of involving other institutions in the process, including volunteers and all specialized staff members. Participants invited PRCS to focus on the importance of domestic and international coordination, and on setting up organizational procedures in various areas, according to a unified scale and priorities prevalent at the incident and disaster area. They also stressed the importance of cooperation among team members, and a well-defined distribution of the tasks, thus guaranteeing quick responses and assistance.

## 5. Coordination

Participants stressed the importance of setting the framework of coordination and cooperation with local and international institutions, which might help in reaching affected categories and reducing the impact of the catastrophe. In addition, it is important that each individual or institution should know his (its) role and his (its) responsibilities and be able to respond in a complete and precise manner.

## 6. Policies

On this topic, participants focused on the importance of conducting a study concerning local community requirements, consolidating capacities and providing needs through work decentralization, in accordance to comprehensive internal rules and regulations. They also called for involving institutions based within the local community, and exchanging experiences with them. Furthermore, participants deemed it important to focus on the provision of staff for remote areas, marginalized categories and quick response in case of a disaster

## VII. Programs and Services that Need to be Developed by the PRCS

Study results have shown that **PRCS sta** deems that the services that PRCS should provide are developmental services, in addition to focusing on new services in that would benefit the Palestinian society. Staff members stated that PRCS should give particular attention to awareness-raising and education programs regarding disasters and crises and how to deal with them, in addition to training staff members from various fields of specialization and providing psychological support to affected categories. As for new services, they include special attention to remote areas and providing services to their residents, who are considered as marginalized communities. PRCS staff members suggested the creation of a specialized training facility.

As for the local community, some of the developmental services it requested from PRCS include the increase of disaster-related awareness-raising and educational programs and the increase of all health-related services, mobile clinics, more volunteers and the provision of training to medical teams. They also requested an increased level of readiness for disasters and better coordination with local and international institutions. As for new services, they include entertainment centers for children, hospital in areas where none exist, care for environmental disasters and inclusion of earthquakes within the training curriculum for EMS officers. Better attention to the condition of women was also requested.

Also it was deemed important to focus on children in disasterrelated awareness-raising programs; an increased interest in social and health services as well as elderly care; special training for teams and the creation of disaster-response volunteer committees and teams. They also requested more summer camps. New services included new hospitals and entertainment centers for children.

## VIII. PRCS's Role on the National, Regional and International Levels

The study sample unanimously agreed that PRCS has many highly-important roles to play in order to be enable itself to be effective in the event of a disaster:

## National Role

The surveyed sample believes that this aspect requires a major commitment on the part of PRCS to disaster response and readiness. It focused mainly on the Society's buildings and

Study Sample	Services to be Provided by PRCS
PRCS Sta	<ol> <li>Disaster-related educational and awareness-raising campaigns for the community and PRCS employees.</li> <li>Training PRCS staff in first-aid and evacuation skills.</li> <li>Training PRCS teams in dealing with earthquakes, in coordination with Al Najah University Seismology Center in Nablus.</li> <li>Developing means of communication between the local community and PRCS.</li> <li>Providing services in remote areas</li> <li>Decentralized warehouses</li> <li>Specialized training facility.</li> <li>Maintenance technicians.</li> <li>Organized care for needy households.</li> <li>Psychological support for PRCS teams.</li> </ol>
Local community	<ol> <li>Developing community-oriented awareness programs regarding crises and disasters.</li> <li>Adding disasters as a subject in school curricula.</li> <li>Putting media to better use.</li> <li>Intensified emergency care training sessions for all local community members.</li> <li>Rehabilitation and upgrading of medical teams.</li> <li>Opening around-the-clock health service and emergency centers in remote areas.</li> <li>Providing a sufficient supply of medicines and food and supplying water and power during disasters.</li> <li>Increasing and developing PRCS's material and human resources.</li> <li>Providing immediate service by EMS teams.</li> <li>Awareness-raising campaigns on how to deal with the disabled during disasters.</li> <li>Develop emergency plan with other institutions.</li> <li>Contacting international youth centers.</li> <li>Holding PRCS evaluation workshops in order to promote PRCS with local communities.</li> <li>Empowering and educating women so that could provide assistance in crises situations.</li> <li>Dealing with and focusing on natural disasters.</li> <li>Building a hospital serving villages located to the Northeast of Jerusalem.</li> <li>Conducting guidance campaigns on blood donation.</li> <li>Setting up entertainment centers for children.</li> <li>Opening centers for physically challenged individuals in the Northern region of the Gaza Strip. *</li> <li>Organizing free medical days for community members.</li> <li>Establishing a health center in the region of Khazaa, in the Gaza Strip.</li> <li>Focusing on mobile clinics.</li> </ol>
Children	<ol> <li>Guidance, awareness-raising and education campaigns.</li> <li>Providing medication.</li> <li>Collaborating with the media for event coverage.</li> <li>Organizing fist-aid training sessions.</li> <li>Creating volunteer committees and a specialized disaster team.</li> <li>Setting up emergency hospitals.</li> <li>Giving donations and aid to detainees.</li> <li>Establishing a communication network.</li> <li>Taking interest in Primary Health Care.</li> <li>Establishing theaters, and entertainment and cultural centers.</li> <li>Elderly care programs.</li> <li>Providing social services.</li> <li>Organizing summer camps.</li> </ol>

## Table 9 – Services to be provided by PRCS as part of the preparations to face disasters, according to focus groups

capabilities, which need to be safe and ready for emergencies, whether such readiness is focused at the disaster itself or is aimed at facilitating access to PRCS premises. Furthermore, the PRCS will have to provide a safe and healthy environment to affected groups and supply them with medical kits. They also have to work in the field of prevention, and have to raise awareness within local communities, institutions, ministries, gatherings, and schools, in methods of action and potential risk avoidance. It also has to inform the society about the extent of the disaster, providing it with a precise description and offering guidance, relief, safe shelter, food and water tanks. It must draw plans for areas that are subject to earthquake risks in Palestine, thus facilitating assistance efforts and reducing damages. Furthermore, storage facilities for medicines are needed in various governorates and included within the new political divisions of areas and not the old geographic divisions. Planning and implementation of programs and services must reflect the political reality and may force the PRCS to modify these, or the location thereof, in order to fulfill the needs of the population. Following that, it has to work on redistribution of its services, leading the fieldwork and holding negotiations with concerned institutions. In addition, the PRCS must become a member in national governorate committees, and work on promoting civil protection.

### • Regional and International Role

The surveyed sample called upon PRCS to play a regional and international role, as a national humanitarian Society that provides health and social services to the Palestinian people, both in the homeland and abroad. In order to intervene at times of crises and disasters, it must work at the regional and international level in communication and coordination. It has to develop a networking scheme, with the said entities, in order to provide assistance and manage the incident. The PRCS needs to develop regional and international lobbies to obtain a partial lift on Israeli measures, reduce the scope of the disaster, and provide immediate assistance.

With regard to ministries and government and community institutions, the surveyed sample considered that PRCS's role was to participate in the planning process for the management of disasters and crises. Therefore, it is necessary that PRCS becomes one of the strong and effective links in the committee entrusted with the management of disaster response, and should therefore not act alone. PRCS needs to expand its disaster management perspective and organize it in a comprehensive and integrated manner (launch, evaluate the source of danger, affection probability, available sources, determine the danger level and how to withstand it, readiness, plan inspection, field maneuver, learn lessons). These practical disaster response management phases must be followed by PRCS when planning for emergency and disaster management.

Civil Defense must fully participate with PRCS in rescue and evacuation operations. It must set up a prior mechanism regarding how to provide services and assistance. It must bear the burden of training the personnel of various institutions and ministries, but also families, in the art of first-aid and evacuation. PCS needs to be a member of the National Disaster response Committee that was created by the Palestinian Ministry of Interior. In addition to creating voluntary committees in the field of medical commissioning, during and after the disaster, and also creating individual teams at military roadblocks to provide assistance and coordinate efforts with security forces to keep the situation under control during the relief effort. It shall also establish medical centers. During the planning process, it must be taken into consideration that PRCS's role must be integrated in the provision of medical services, which will force it to shift its projects to areas around the Separation Wall.

It is very important that PRCS redistributes such services and provides them to isolated areas. The surveyed sample called upon PRCS to transfer its disaster response management experience to other institutions such as the Ministry of Health, the Palestinian Communications, the Civil Defense, etc, and to communicate with hospitals and emergency centers. It also called upon government and civil institutions and ministries to include PRCS in the health monitoring team in hospitals and special centers, so that it may not be restricted to acting before and during the disaster, but also after. This means that it would shoulder the responsibility for the rehabilitation process regarding the risks caused by the potential disaster or crisis.

Expected Disaster	PRCS's role according to PRCS staff members	PRCS's role according to Institution staff members
1.Unemployment, poverty and famine	<ol> <li>Providing data.</li> <li>Encouraging volunteer work and creating job opportunities.</li> <li>Collecting donations from friendly nations.</li> <li>Providing relief services.</li> <li>Contributing to the creation of a national committee to look into the poverty issue.</li> </ol>	<ol> <li>Contributing to the creation of job opportunities.</li> <li>Raising awareness and education.</li> <li>Contributing to relief supplies.</li> <li>Contributing to coordination with states in order to find jobs for graduates.</li> <li>Giving the problem an international dimension.</li> <li>Contributing to finding a long-term plan.</li> <li>Providing psychological support.</li> <li>Contributing to fund-raising efforts.</li> </ol>
2. Political conflict	<ol> <li>Preparing for disaster response and training qualified teams.</li> <li>Providing medical, social and psychological services.</li> </ol>	<ol> <li>An important integral complementary role in providing medical services and building medical centers.</li> <li>Coordinating with working entities.</li> <li>Contributing to fund-raising efforts.</li> <li>Preparing for disaster response and providing relief services.</li> <li>Publishing and increasing public awareness in disasters and first-aid.</li> <li>Creating well-trained teams to provide assistance at Israeli checkpoints.</li> <li>Providing services to closed regions.</li> <li>Facilitating the passage of service providers.</li> <li>Promoting civil protection.</li> <li>*Enhancing the financial capabilities of service providers.</li> <li>Intervening with children to reduce psychological symptoms.</li> <li>Training and promoting youth leadership.</li> <li>Participating as member in Districts Emergency Committees.</li> <li>Being present on site.</li> <li>Building emergency rooms.</li> </ol>
3. Diseases and epidemics	<ol> <li>Training staff teams capable of dealing with disasters.</li> <li>Contributing to vaccination campaigns.</li> <li>Providing psychological support.</li> <li>Providing awareness-raising and guidance programs.</li> </ol>	<ol> <li>Assisting in the provision of relief supplies.</li> <li>Contributing to fund-raising efforts.</li> <li>Increasing awareness in the fields of epidemics and emergencies.</li> <li>Conducting a survey of the region's needs, in collaboration with concerned institutions to quantify damages.</li> </ol>

## Table 10 – PRCS's Disaster-Response role, according to PRCS and institution staff members

<ol> <li>Drought and water shortages</li> <li>Domestic Strife</li> </ol>	<ol> <li>Providing awareness-raising and guidance services.</li> <li>Conducting a comprehensive study.</li> <li>Providing desalination equipment.</li> <li>Preparing for response.</li> <li>Providing educational and awareness-raising services.</li> </ol>	<ol> <li>Disseminating awareness and culture.</li> <li>Contributing to well-digging.</li> <li>Coordinating with specialized entities.</li> <li>Spreading awareness in water consumption rationalization efforts.</li> <li>Training in water purification and distillation.</li> <li>Spreading awareness and culture.</li> <li>Providing shelter services.</li> </ol>
6. The Separation Wall	<ol> <li>Providing ambulance services.</li> <li>Participating in anti-Wall campaigns.</li> <li>Raising awareness as to the wall's risks.</li> <li>Providing EMS services.</li> <li>Consolidating first-aid spots.</li> <li>Conducting a coordination role with institutions.</li> <li>Participating in sheltering efforts.</li> <li>Building a main warehouse in large Northern districts.</li> </ol>	<ol> <li>Providing treatment programs.</li> <li>Participating in anti-Wall campaigns.</li> <li>Contributing to fund-raising efforts.</li> <li>Contributing to the provision of relief supplies.</li> <li>Providing services to isolated regions.</li> <li>Opening clinics and medical centers inside towns.</li> <li>Requesting international pressure to allow PRCS to reach affected areas.</li> <li>Transferring PRCS's projects to Separation Wall areas.</li> <li>Constituting rescue teams for birth cases, pediatrics, general patients and for the elderly.</li> <li>Conducting a survey study to specify disaster effects and damages as well as peoples' needs.</li> <li>Redistributing PRCS services.</li> </ol>
7. Environmental, chemical and nuclear contamination	<ol> <li>Providing awareness and guidance services.</li> <li>Exposing the issue in international conferences.</li> <li>Providing medical services.</li> <li>Getting reading for response.</li> <li>Activating EMS centers, especially in Hebron.</li> <li>Providing mobile clinics.</li> <li>Providing ambulance services.</li> <li>Providing social services.</li> <li>Providing social awareness services.</li> </ol>	<ol> <li>Coordinating with working entities.</li> <li>Providing relief services.</li> <li>Providing social services.</li> <li>Contributing to international pressures on Israel.</li> <li>Focusing on the human factor.</li> <li>Focusing on equipment.</li> <li>Determining regions that might be affected.</li> <li>Securing affected regions.</li> <li>Providing awareness-raising services concerning the dangers of contamination and the transfer mechanism of chemical materials.</li> <li>Raising workers' awareness in the field of agriculture.</li> <li>Coordinating with international entities.</li> </ol>
8. Psychological problems	<ol> <li>Providing psychosocial support services and preparing programs to face psychosocial afflictions</li> <li>Organizing entertainment activities for children.</li> <li>Providing awareness-raising programs for social categories on psychosocial problems.</li> </ol>	1. Preparing psychological programs.

		1. PRCS should be a strong and effective link for the creation of disaster
		<ol> <li>management body.</li> <li>Providing medical assistance including rescue, ambulance, field hospital</li> </ol>
		equipment, evacuation, and tents on a professional level, both regarding volume and quality.
		3. Creating volunteer committees in the field of medical assistance, both during and after the disaster.
		4. Supporting government institutions and ministries, and coordinating with them to benefit from the various capabilities in order to set up a common working mechanism.
		5. Cordoning affected regions.
	1. Preparing for disaster-	6. PRCS buildings must be secure, equipped and easily accessible.
	response.	7. Providing a safe and healthy living for affected populations.
	<ol> <li>Preparing shelters.</li> <li>Providing rescue, social and</li> </ol>	8. Working on prevention and increasing the awareness of local communities, institutions, ministries, localities and schools.
	health services. 4. Providing awareness —raising	9. Providing relief and humanitarian services as well as shelter, food, and water reservoirs.
	and guidance services. 5. Coordinating with institutions.	10. PRCS should be a member of the National Committee created within the Ministry of Interior.
9. Earthquakes	6. Creating operation rooms.	11. PRCS should play a post-disaster role in rehabilitation, relief and the fight against contagion.
	<ol> <li>Providing evacuation services.</li> <li>Contributing to the formation</li> </ol>	12. Contacting international agencies in case the situation deteriorates and gets out of hand.
	of a national committee. 9. Focusing on visual media to highlight PRCS's services in all fields. 10. Studying and consolidating strong points and deal with	13. Participating in the planning process.
		14. Contributing to the confirmation of building standards and specifications and making sure there are sufficient shelters.
		15. Mapping earthquake-prone areas.
		16. Civil Defense forces should assist PRCS in its work.
	weaknesses.	17. Providing equipment and machinery.
		18. Providing trained staff members.
		19. Earthquake early warning.
		20. Providing the needy with medical packs.
		21. Evaluating damages, needs, and the quick response requirements in order to define roles and find ways to provide services in collaboration with other institutions.
		22. Focusing on university and college students, as well as on volunteers and club members in the field of control, assistance and help.
		23. Building warehouses for medications in various districts according to current political divisions and not according to old geographic divisions, "Distribution and needs management".

## IX. Continued Supply of Specialized Programs and Services

PRCS staff members unanimously stated that all of PRCS's various programs played an important role in providing services and programs to Palestinian Society during disasters, in addition to the EMS Department, some of these roles are:

## Ambulance and Emergency Medical Services Program:

Study results show that this program's role is to set up and equip ambulance centers; create medical centers and field hospitals; equip ambulances; increase the stock of medication and firstaid kits; intensify first-aid sessions in view of training qualified emergency medical teams; determine needs and means to deal with others; coordinate efforts with various PRCS departments; recruit volunteers; consolidate capacities and abilities; set up integrated plans with various PRCS departments; mobilize staff members; conduct a prompt evaluation of injuries; provide unavailable supplies; create a communication network; uphold specialization and professionalism.

## **Disaster Unit Program:**

Planning, organization and coordination; provision of emergency relief materials to affected categories; coordination with local and international institutions regarding same, in addition to the supervision of the operation rooms that are set up, continuous training of PRCS crews, in addition to the provision of all necessary materials and equipment.

## Rehabilitation and Capacity-Building Program:

Setting up specialized rehabilitation programs for people with special needs; providing any required materials and equipment; preparing awareness-raising programs with the local community in regard to workers' rights; supplying immediate assistance to, supervising and following up on the disabled; setting up databases in the regions; conducting national level coordination in the field of psychological support and in the field of training and rehabilitating the injured and the disabled in various field; finding the necessary psychosocial specialists and training the teams in evacuation techniques.

## Social Affairs Program:

The role of this program is to build a database listing all affected individuals in order to provide them with priority relief services, both material and financial. It is also required to look for missing people and take care of marginalized categories including children, orphans and the elderly.

## **Psychological Health Program:**

PRCS workers have focused on the need to prepare psychological awareness programs for implementation before, after and during the disaster, in order to reduce any resulting negative impacts. They also stressed the need to provide psychological support services to both citizens and PRCS workers; conduct field visits to affected individuals; make sure matters are being followed up on with various PRCS departments; classify and evaluate cases; hold debriefing sessions for families; provide material and medical support to affected individuals; coordinate with institutions; develop human resources; refer cases to specialists; provide a well-trained Task Group; conduct various researches; and deal with the victim on location.

## Primary Health Care Program:

To prepare health programs related to motherhood and children; promote prevention services in order to halt the spread of diseases; care for public health; find support services for ambulance and EMS; provide mobile clinics and physicians in various specialization field; conduct vaccination programs; increase home visits; monitor the quality of fresh water and foods; set up a common health plan with the disaster unit; coordinate efforts with other medical centers; provide laboratory materials; uphold specialization and professionalism.

## Publishing and Media Program:

Publishing and media play a major role before, during and after the disaster, especially in the field of preparing special notices; provide valuable information; announce advanced services; and provide efficient media coverage.

## Youth and Volunteers Program:

Training for missions in cases of emergency; enhancing the capabilities of local communities in the face of disasters; providing support to the disaster and EMS unit; coordinating efforts with concerned entities; providing assistance in evacuation efforts; and organizing work and distributing roles and tasks. This requires a restructuring of the volunteer program.

## International Humanitarian Law Unit:

Raising the awareness of PRCS personnel and local community members of International Humanitarian Law, especially in cases of war and emergencies; informing affected people of their rights; disclosing inhumane practices and human rights violations; making good use of International Humanitarian Laws; disseminating information on laws that protect victims; facilitating the movement of PRCS personnel; promoting coordination efforts with the International Red Cross to facilitate prisoner visits during disasters.

## **EMS School:**

Training qualified EMS officers; distributing work on qualified teams capable of prompt intervention; providing educational and guidance materials; developing workers' capabilities in the field of EMS and disaster response; coordinating efforts with the Disaster Unit in order to hold various training sessions; coordinating among concerned ministries and the Civil Defense and training their personnel; training all PRCS staff; upholding specialization and professionalism.

## X. PRCS's Role in Rebuilding the Infrastructure

Study results have shown that **PRCS staff members** consider that, if pre-informed, local communities will be able to play an important role in ensuring social solidarity and guaranteeing social safety during crises. They would also be able to collaborate with rescue crews, provide psychological support to the victims and participate in the rebuilding process. Staff members therefore deem that PRCS should lead coordination efforts with other regional and international institutions; ensure EMS services to victims and provide hospitals with all needed supplies.

**Local communities**, on the other hand, see their role as focused on providing food to citizens, contributing in the provision of medical services, and collecting donations for the most affected. They deem that PRCS's role should include providing medicines and medical teams, setting up around-the-clock operation rooms, distributing foodstuffs, setting up mobile clinics, conducting evacuations, and providing psychological support and care for the handicapped.

As for **children**, they consider that local communities should participate in fund-raising, the provision of medical equipment and materials, taking part in EMS training sessions, and maintaining law and order. They deem that PRCS may hold summer camps for children, distribute medicines, constitute rescue teams, provide victims with care, increase the number of ambulances, etc.

## XI. Programs and Projects Suggested for Implementation by PRCS

Study result show that the programs and projects suggested by the survey study for implementation by PRCS are mainly developmental, in addition to new programs and projects including:

- 1. Creating a continuous disaster-training and -teaching unit.
- 2. Setting up a national team to study and evaluate strengths and weaknesses, in order to reduce the impacts of disasters.
- 3. Setting up entertainment and discharge villages for children.
- 4. Mobilizing volunteers from local communities and preparing them in every city to use them in times of disasters.
- 5. Creating blood bank branches in all national districts.
- 6. Building hospitals specialized in rare diseases.
- 7. Setting up an earthquake curriculum.
- 8. Activating the Palestinian Food Safety Committee.
- 9. Introducing the concept of disaster-training to school curriculum
- 10. Contributing to the creation of solid waste disposal sites.
- 11. Developing nurses' skills.
- 12. Focusing on marginalized categories.

Study Results Regarding Ehildren

## Chapter Four

# Study Results Regarding Children

In view of the importance of children's participation in this study, and although their opinions and expectations have been included in the study's total results, PRCS deems that it is of major importance to stress the specific data regarding children because they are the category that would be affected most by current and potential disasters. This chapter includes disasters that were considered unpredictable by children. Their worries and ideas have been expressed through a number of drawings inserted hereinafter along with the explanations and comments provided by the children themselves.



West Bank		Gaza Strip		
Disaster	Number of drawings	Disaster	Number of drawings	
Floods, rain and storms	42	Political conflict, home destruction, land bulldozing	38	
Political conflict, home destruction, land bulldozing	39	Road accidents	24	
Volcano	27	Floods, heavy rain, storms	20	
The Separation Wall	17	Drawings about PRCS and ambulances	8	
Fire	7	Environmental pollution/Open sewerage	5	
Environmental pollution/Open sewerage	6	The Separation Wall	3	
Earthquake	4	Fire	3	
Electrical short-circuit	2	Checkpoints	2	
Drawings about PRCS and ambulances	2	Electrical short-circuit	2	
Water shortage/Drought	2	Volcano	1	
Nuclear missile	1	Earthquake	1	
Locusts	1	Water shortage/Drought	1	
Economic Problems	1			
Total	155		139	



Drawing by Baha' Mohammad. Age: 10 "Fire in the houses and trees, people dead'

## Drawing by Layan Issa Nazzal. Age: 11 Address: Beit Jala 'Earthquake shatters houses, people, and factories. Deaths and injuries."



rawing by Mirna Abou lahr. ge: 13 The 1948 War. The Israelis ave destroyed homes ave destroyed homes e unjust".



Drawing by Haytham Ramadan. Idge: 13 Adress: Al Dahisha Camy A prison incarcerating "alestinians. We can't see one another":



Drawing by Diana Moallem. Age: 13 "An earthquake destroys everything".



Drawing by Sima Matar. Age: 12 Address: Beit Jala "War between Jews and Arabs. When the Israelis occupied our land, they settled in, killed our people, and destroyed our homes. We will keep on fighting for Palestine until we recover Jerusalem".

Drawing by Ines Bassel Al Dajani. Age: 10 Address: Bethlehem "The tsunami flood that killed many people".



Drawing by Mohammad Salman Ahmad Al Daghamin. Age: 11 "The earthquake destroyed everything, then a plan came and saved everyone".



Study Recommendations

## Chapter Five

# Study Recommendations

his chapter provides a detailed list of recommendations proposed by local communities, children, PRCS staff, and by governmental and non-governmental institution staff. It also contains those made by the study team.

## I. Local Community Recommendations

- 1. Building public and private hospitals in Qalqiliya.
- 2. Providing hospitals and health clinics with medicines, and emergency medical supplies, especially in remote and poor areas.
- 3. Coordinating with concerned entities, especially governmental, in order to build specialized hospitals.
- 4. Training local communities in first-aid, health education and general recommendations regarding disaster-response means and intervention.
- 5. Coordinating with local community institutions and establishing various roles to avoid service provision redundancy.
- 6. Mobilizing a large number of volunteers and train them in disaster-response.
- 7. Increasing the number of medical staff members in hospitals and health clinics specializing in disaster-response.
- 8. Providing school children and university students with theoretical and practical training in evacuation and disaster-response preparation.
- 9. Setting up an emergency plan that includes a situation evaluation and people notification.
- 10.Creating a database.
- 11. Providing shelters for disaster victims.
- 12.TV broadcasting of instructions during disasters, with precise statistics.
- 13. Constituting specialized disaster-response rescue teams, both locally and on the national level.
- 14. Contributing to the provision of water reservoirs and main electrical supplies to towns. Providing network maintenance works.
- 15.Establishing professional and women's associations, as well as motherhood and childhood centers in villages.
- 16.Conducting psychological support workshops for children and raising the awareness of mothers as to "How to care for children in the event of a disaster".
- 17. Building a national disaster-response center.

- 18. Providing local institutions with disaster-prevention materials and means, such as first-aid kits, fire extinguishers, foodstuffs, ambulances, emergency centers, medical equipment and medicines.
- 19.Early preparation of PRCS's capabilities, pre-training of all active crews, including EMS officers, Civil Defense and Police.
- 20.Training midwives, especially in "Azoun El Atmeh", which was blocked by the Separation Wall.
- 21. Maintaining the blood bank and providing sufficient numbers of blood units.
- 22.Disseminating information regarding PRCS services and programs, with special importance given to written leaflets and instructions.
- 23.Exploiting basic natural resources available in local communities in disaster-response efforts.
- 24. Training and constituting teams of psychosocial specialists for psychological discharge processes.
- 25. Working on the implementation of PRCS programs in Jerusalem.
- 26. Providing a impartial demographic distribution of services.

## II. Children's recommendations

- 1. Working on the provision of infrastructure materials
- 2. Organizing educational and awareness-raising sessions regarding disasters.
- 3. Providing fully-equipped mobile clinics and field hospitals.
- 4. Providing ambulances and blood transport vehicles.
- 5. Constituting volunteer committees and a Task Group specializing in disasters.
- 6. Providing medicine storage spaces.
- 7. Providing psychological support to victims.
- 8. Providing power generators, water tanks and fire vehicles.
- 9. Establishing cultural centers.
- 10. Caring for the disabled, the orphans and the elderly.
- 11. Caring for and protecting children.

- III. PRCS Staff Recommendations
- 1. Conducting disaster-response-oriented training sessions.
- 2. Establishing a center for assistance tools, especially in the Southern region of the Gaza Strip.
- 3. Providing disaster-related needs.
- 4. Solving sewerage and infrastructure issues.
- 5. Collaboration between all of PRCS units. Holding meetings and interviews among all PRCS branches.
- 6. Organizing Sporting and entertainment events, as well as summer camps.

## IV. Governmental and Non-Governmental Institutions' Recommendations

- 1. Collaboration between PRCS and the Israeli Magon David Adom (Red Star of David) for disaster response and for repairing damages resulting from nuclear incidents and earthquakes, especially due to the existence of the Separation Wall, which has a negative impact on humanitarian service providers.
- 2. Focusing on regional issues such as poverty.
- 3. Participating in the creation of an emergency work plan and defining the responsibilities of various institutions.
- 4. Involving various institutions in preventive procedures and in preparation, guidance and evacuation efforts.
- 5. Conducting studies to constantly evaluate marginalized categories.
- 6. Enhancing individual and complementary actions.
- 7. Encouraging the Palestinian National Authority to draft a legal text that would protect the PRCS emblem as a National Society.
- 8. Encouraging networking efforts between field-operating institutions and financial support institutions during emergencies.
- 9. Focusing on the Gaza Strip through advance preparations.
- 10.Continuing to provide services.
- 11.Consolidating ties between PRCS in the West Bank and PRCS in the Gaza Strip, and enhancing mutual support.

- 12.Allowing better authorities and responsibilities to field workers.
- 13.\*Training and rehabilitating human resources.
- 14.Conducting classroom interventions and learning how to deal with children.
- 15. Providing young leaders with communication skills and self-improvement skills
- 16.Organizing health information days in marginalized villages.
- 17.Organizing disaster-management programs, especially during emergencies.
- 18. Rehabilitating PRCS buildings to better withstand disasters and risks.
- 19. Providing EMS services.
- 20. Achieving complementary collaboration between the roles played by the Ministry of Health and PRCS while dealing with evacuation cases or while providing treatment to cases in the field or in hospitals.
- 21. Creating a joint committee to draft the protocol regarding actions in case of an earthquake. Such protocol should include three parts: before, during and after. This document must be drafted by experts specialized in natural disasters.
- 22.Developing a communication network that would not be affected by the occurrence of the disaster.
- 23.Collaborating and coordinating with the Ministry of Finance to provide PRCS with financial resources that would enable it to increase its disaster-response readiness, from within the Ministry's budget.
- 24.Including PRCS projects in the budget of the Ministry of Finance.
- 25.Providing awareness-raising programs in the field of public health, environment, wastewater, and water contamination.

## **V. Study Team Recommendations**

- 1. PRCS intervention during crises.
- 2. Focusing on youths.
- 3. Following up on needs in the villages.

- 4. Training a team of workers and volunteers in:
- Disseminating information on PRCS's goals, programs and principles.
- Crisis interventions.
- Advanced first aid.
- 5. Focusing on marginalized and deprived areas.
- 6. Increasing interest in children's educational programs.
- 7. Activating PRCS's role in wide-range awareness raising and education.
- 8. Organizing educational sessions for mothers.
- 9. Establishing and equipping a National Disaster Unit.
- 10.Establishing units equipped with disaster-response equipment.
- 11. Providing shelters in case of a disaster.
- 12. Increasing the number of intervention team members in various regions.
- 13.Broadcasting awareness-raising programs over various media.
- 14. Developing PRCS's branches and centers in the Gaza Strip.
- 15. Providing mobile clinics.
- 16. Training human resources.
- 17. Establishing medical and emergency centers.
- 18. Providing means of communication.
- 19. Caring for children-related issues.
- 20. Contributing in the creation of job opportunities.
- 21.Providing a team of psychosocial specialists as part of the disaster-response team to help local communities, and especially women, children and the elderly.
- 22. Monitoring the effect of the disaster on the local community on the psychological and social levels.
- 23. Adopting work decentralization and attending to secondary branches.
- 24. Enhancing emergency supplies in the regions.
- 25.Enhancing coordination between PRCS's Disaster Unit and institutions and ministries in the region.

## **Impact of the Study on Participants**

This chapter discusses the impact of the study on local communities, children, PRCS staff members, and psychosocial specialists having participated therein.

## I. Impact of the Study on Local Communities

- 1. Introducing PRCS to local communities and disseminating information regarding the Society, its programs, goals and principles, as well as its role in preparing for disaster-response.
- 2. Providing local communities with information regarding the importance of the study for the Palestinian society.
- 3. Giving participants the opportunity to use brainstorming techniques.
- 4. Providing information on PRCS to individuals with no prior knowledge of the Society
- 5. Providing the opportunity for individuals in the communities to offer recommendations to the PRCS

## II. Impact of the Study on Children

- 1. Providing them with information regarding the study's importance to Palestinian Society.
- Giving them the opportunity to release their emotions and express their views and opinions regarding the study subject.
- 3. Giving them the sense that they are playing an important role by participating in giving suggestions to PRCS.
- 4. Providing children who have no knowledge about PRCS with the opportunity to discover the latter.
- 5. Giving them the opportunity to express their opinions through drawing and colors.

### III. Impact of the Study on PRCS Staff

- 1. Enhancing their role and benefiting from their experience in the study subject.
- 2. Consolidating cooperation between various PRCS departments through the participation of all specializations and professions.
- Building trust between staff members and increasing their sense that PRCS is intent on sharing its expertise with the population.

#### IV. Impact of the Study on Social Workers

- 1. Exchanging experiences and information with the study sample.
- 2. Meeting with various social groups.
- 3. Training on various means to manage discussions and transfer data
- Discovering new regions and communities and getting to know the needs of towns, cities and camps, in addition to various cultural levels.
- 5. Feeling the importance of participating in a study aimed at serving the Palestinian people.

# Chapter Six

Appendices

Appendix 1: The VCA Steering Committee				
Steering Committee	Position/Department	Location		
1. Mr. Younis Al Khatib	Committee President	Ramallah		
2. Dr. Wael Qaadan	EMS Dept	Ramallah		
3. Rabah Jabr	Rehabilitation Dept, PRCS	Ramallah		
4. Dr. Fathi Fleifel	Psychological Health Dept	Ramallah		
5. Dr. Hijazi Abou Mizr	EMS Dept	Hebron		
6. Dr. Mohammad Awada	EMS Dept	Nablus		
7. Dr. Anwar Doueikat	Primary Health Care Dept	Ramallah		
8. Dr. Jean Calder	Faculty of rehabilitation and capacity development	Gaza		
9. Dr. Najat Al Astal	Al Amal Hospital	Gaza		
10. Dr. Khalid Jawda	Al Quds Hospital	Gaza		
11. Dr. Amal Jawda	Psychological Health Dept	Gaza		
12. Hossam Abed	Administration — Al Noor City	Gaza		
13. Dr. Mohammad Bardawil	EMS Dept	Gaza		
14. Mr. Magdi Darwich	Supplies and Equipment Dept	Gaza		
15. Abdullatif Abou Saeed	Financial Dept	Gaza		

Appendix 2: Persons Interviewed from PRCS	
West Bank	Gaza Strip
1. Younis Al Khatib, PRCS President	23. Hossam Abed, Al Noor City
2. Sulaiman Al Ahmad, Administration, Ramallah	24. Dr. Jean Calder, Rehabilitation Faculty
3. Rabah Jabr, Rehabilitation Dept, Ramallah	25. Dr. Khalil Abou Foul, Disaster Management Unit
4. Khaldoun Owaiss, Youths and Volunteers Dept, Ramallah	26. Dr. Najat Al Astal, Al Amal Hospital
5. Hassan Bacharat, Disaster Management Unit, Ramallah	27. Azmi Al Astal, Psychological Health Dept
6. Azzam Nemr, EMS Institute, Ramallah	28. Dr. Mohammad Bardawil, EMS Dept
7. Dr. Anwar Doueikat, Primary Health Care Dept, Ramallah	29. Dr. Atif Assouli, Psychological Health Dept
8. Dr. Wael Qaadan, EMS Dept, Ramallah	30. Dr. Jamal Abou El Kheir, Jabalia Branch
9. Dr. Fathi Fleifel, Psychological Health Dept, Ramallah	31. Dr. Samir Qachta, Rafah Branch
10. Ibrahim Al Ghouleh, EMS Dept, Ramallah	32. Mahmoud Abou Sbeitan, EMS Institute
11. Nizar Pharaon, Volunteer, Jerusalem	33. Saeed Sbaih, EMS Dept
12. Yahya Awdeh, Director General, Nablus Branch	34. Mahmoud Kurdi, Youths and Volunteers Dept
13. Dr. Mohammad Awada, EMS Dept, Nablus	35. Omar Al Azayra, Deir El Balah Branch
14. Khalid Baara, Volunteer, Nablus	
15. Saleh Abou Rayhan, Qalqiliya Branch	
16. Ayman Hantach, Rehabilitation Dept, Qalqiliya	
17. Hanan Hanoun, Head of Tulkarem Branch	
18. Haroun Al Joulani, Hebron Branch	
19. Dr. Hijazi Abou Mizr, EMS Dept, Hebron	
20. Khalil Fakhoury, Rehabilitation Dept, Hebron	
21. Monwer Al Ghafyan, Volunteer, Yatta, Hebron	
22. Maher Natour, Rehabilitation Dept, Jericho	
West Bank	Gaza Strip
------------------------------------	---------------------------------
Ministry of Agriculture	Ministry of Agriculture
Ministry of Environment	Environment Authority
Ministry of Social Affairs	Ministry of Social Affairs
Civil Defense	Civil Defense
Ministry of Supplies	Ministry of Supplies
Ministry of Finance	Water Authority
Water Authority	Ministry of Youth and Sports
Ministry of Health	Ministry of Health
Ministry of Information	Ministry of Information
Ministry of Local Governance	Médecins du Monde, France
Geology and Seismology Center	Hydrologists
Hydrologists	UNRWA
UNRWA	Save the Children
ICRC	Ministry of Public Works/Bakdar
Save the Children	Technological Science Academy
Ministry of Public Works/Bakdar	UNDP
Defense For Children International	
IFRCS	
UNICEF	
UNDP	

#### Appendix 3: Persons Interviewed from Ministries and Governmental and Non-Governmental Institutions

#### Appendix 4: Focus Group Questions for Children, Local Communities, and PRCS Staff members

- 1. Sort the disasters stated in the attached "Table", which you believe could threaten your safety, that of others, and that of the entire region (Property, economy, agriculture, infrastructure, etc.)
- 2. In your opinion:
- a. Who are the most vulnerable in the event of disasters?
- b. Which regions are affected the most and need assistance?
- 3. How would such an occurence affect:
- a. The whole community?
- b. Infrastructures?
- 4. In case of a disaster, crisis, or interruption in programs and services:
- a. What must be ready prior to the occurrence of the disaster?
- b. What is required during the course of the disaster?
- c. What is required for reconstruction and rehabilitation after the disaster?
- 5. What is, in your opinion, is the role played by local communities in rebuilding and rehabilitation to return to a normal life?
- 6. What is, in your opinion, the role played by PRCS in rebuilding and rehabilitation to return to a normal life?
- 7. What would you suggest adding to PRCS' existing specialized programs and services to enable them to better serve the Palestinian population?
- 8. What are the local capabilities and resources that are available for disaster response and prevention?

#### Appendix 5: Individual Interviews with Focus Group Participants. Questions for Children, Local Communities, and PRCS Staff

- 1. Which disasters can be expected to occur in Palestine?
- 2. What is PRCS's role in the face of such a disaster?
- 3. What would be the impact of such a disaster on local communities?
- 4. Which social groups are more prone to be affected by disasters in Palestine?
- 5. Which regions are more prone to sustain disaster impacts in Palestine?
- 6. PRCS's role in the following proposed areas:
  - Prevention.

- Capacity and preparedness.
- Work methods (Management and organization).
- Policies.
- Coordination with other institutions.
- Capabilities
- Human resources.
- 7. What suggestions, programs and projects can be achieved in each of the following fields?
- 8. What are the needs of each suggestion, program and project in:
  - Human resources.
  - Resources.
  - Materials/Supplies
- 9. What would be PRCS's role in cases of crises, risks, disasters, service or program interruptions, in order to provide assistance and work continuance in the following fields:

(Rehabilitation, social affairs, psychological health, EMS, primary health care, awareness publications and information, the Disaster Management Unit, Youths and Volunteers, the International Humanitarian Law Unit, EMS Institute).

# Appendix 6: Individual interview questions for Institution Staff members

- 1. Which disasters can be expected to hit Palestine?
- 2. What is PRCS's role in the face of such a disaster?
- 3. What would be the impact of such a disaster on local communities?
- 4. Which social groups within the communities are more prone to be affected by disasters in Palestine?
- 5. Which regions are more prone to sustain disaster impacts in Palestine?
- 6. PRCS's role in the following proposed fields:
  - Prevention.
  - Capacities and preparedness.
  - Means for implementation
  - Human resources.
- 7. What suggestions, programs and projects can be achieved in each of the following fields?
- 8. What are the needs of each suggestion, program and project in:
  - Human resources.
  - Resources.
  - Materials/supplies.

Appendix 7: Distribution of Study Sample in Regions and Districts in the West Bank and Gaza Strip			
District	Size of Sample		
Northern West Bank Jenin Tulkarm Nablus Qalqilya Total	22 12 78 35 147		
Central West Bank Ramallah and El Bireh Jericho Jerusalem Total	124 32 32 188		
Southern West Bank Bethlehem Hebron Total	119 86 205		
TOTAL WEST BANK Gaza Strip Northern Gaza Strip	540		
Gaza City Deir El Balah Khan Younes Rafah	117 159 40 108		
TOTAL GAZA STRIP	597		
GRAND TOTAL	1137		

Appendix 8: Distribution of study sample according to place of residence			
Place of Residence	Area		
	West Bank	Gaza Strip	Grand Total
CITY VILLAGE REFUGEE CAMP TOTAL	263 193 84 540	245 239 113 597	508 432 197 1137

	n of study sample according to categories covered by study Area		
Type of Form	West Bank	Gaza Strip	Grand Total
Local Communities	374	384	758
PRCS Cadres	57	41	98
Children	109	172	281
TOTAL	540	597	1137

Appendix 10: Distribution of study sample in areas, governorates and places of residence					
Governorate		Type of Residential Area			
Governorate	City	Village	Refugee Camp	TOTAL	
Northern West Bank Jenin Tulkarm Nablus Qalqilya Total	13 12 44 15 84	8 - 15 20 43	1 - 19 - 20	22 12 78 35 147	
Central West Bank Ramallah and El Bireh Jericho Jerusalem Total	51 14 13 78	38 18 19 75	35 - - 35	124 32 32 188	
Southern West Bank Bethlehem Hebron Total	31 70 101	75 - 75	13 16 29	119 86 205	
TOTAL WEST BANK	263	193	84	540	
Gaza Strip Northern Gaza Strip Gaza City Deir El Balah Khan Younes Rafah	48 67 74 10 46	95 50 30 30 34	30 - 55 - 28	173 117 159 40 108	
TOTAL GAZA STRIP GRAND TOTAL	245 508	239 432	113 197	597 1137	

Appendix 11: Distribution of stud	y sample in areas & governorates and according	to categories covered by study

Governorate	Local Community	PRCS Cadres	Children	TOTAL
Northern West Bank Jenin Tulkarm Nablus Qalqilya Total	21 - 54 35 110	- - 24 - 24	1 12 - - 13	22 12 78 35 147
Central West Bank Ramallah and El Bireh Jericho Jerusalem Total	61 32 32 125	15 - - 15	48 - - 48	124 32 32 188
Southern West Bank Bethlehem Hebron Total	82 57 139	- 18 18	37 11 48	119 86 205
TOTAL WEST BANK	374	57	109	540
Gaza Strip Northern Gaza Strip Gaza City Deir El Balah Khan Younes Rafah	139 43 103 40 59	- 24 17 - -	34 50 39 - 49	173 117 159 40 108
TOTAL GAZA STRIP	384	41	172	597
GRAND TOTAL	758	98	281	1137

Appendix 12: Distribution of study sample based on area, place of residency and categories covered by study				
Place of		Category		
Residency	Local Community	PRCS Cadres	Children	TOTAL
Northern West Bank City Village Refugee Camp Total	48 43 19 110	24	12 1 13	84 43 20 147
Central West Bank City Village Refugee Camp Total	50 59 16 125	15	13 16 19 48	78 75 35 188
Southern West Bank City Village Refugee Camp Total	72 51 16 139	18	11 24 13 48	101 75 29 205
TOTAL WEST BANK Gaza Strip City Village Refugee Camp	374 135 199 50	57 40 1	109 70 39 63	540 245 239 113
TOTAL GAZA STRIP GRAND TOTAL	384 758	41 98	172 281	597 1137

#### Appendix 13: Distribution of the children study sample in the Gaza Strip according to place of residency and sex

Location of Workshop	Males	Females
Jabalya Camp	13	19
Gaza City	31	0
Bedouin Village	16	1
Deir El Balah Camp	13	15
Deir El Balah City	9	11
Al Mighraka	11	12
Abasan	13	7
Khan Younes Western Camp	12	2
Rafah	24	1
TOTAL	142	68
GRAND TOTAL	210	

#### Appendix 14: Distribution of the children study sample in the West Bank according to place of residency and sex

		· · · · · · · · · · · · · · · · · · ·
Location of Workshop	Males	Females
Kalandia Camp	7	10
Ramallah	7	8
Bil'in	6	20
Barta'a	4	4
Tulkarm	10	16
Jenin Camp	17	0
Beit Jala	14	37
Al Samou'u	15	9
Al Dheisheh Camp	18	15
TOTAL	98	119
GRAND TOTAL	217	

Appendix 15: Distribution of the local community study sample in the Gaza Strip according to place of residency and sex			
Location of Workshop	Males	Females	
Al Sifa/Al Attatra	13	11	
Al Sheikh Ajloun	1	22	
Jabalya Camp	0	15	
The Bedouin Village	13	0	
Beit Hanoun	5	23	
Gaza City	5	11	
Jabalya City	12	17	
TOTAL	49	99	
GRAND TOTAL	148		

# Appendix 16: Distribution of the local community study sample in the West Bank according to place of residency and sex

Location of Workshop	Males	Females
Jenin	5	6
Jerusalem	6	8
Barta'a	5	2
Qalqilya	8	7
Al Khadr	8	13
Azoun Atma	12	9
Kharbatha bani Hareth	7	15
Al Amaari Camp	7	9
Ramallah	14	8
Beit Fajjar	14	16
Bethlehem	10	8
Al Aroob Camp	5	11
Yatta	19	3
Hebron	0	25
Bita	4	11
Balata Camp	17	2
Nablus	13	7
Beit Sourik	14	6
Jericho	10	4
Al Oja	11	6
Beit Sahour	7	6
TOTAL	196	182
GRAND TOTAL	378	

#### Appendix 17: Distribution of the PRCS cadre study sample in the Gaza Strip according to Area and sex

Location of Workshop	Males	Females
Gaza	9	3
Deir El Balah	13	3
Al Amal City	6	4
TOTAL	28	10
GRAND TOTAL	38	

#### Appendix 18: Distribution of the PRCS cadre study sample in the West Bank according to Area and sex

Location of Workshop	Males	Females
Ramallah/HQ	7	8
Nablus	11	13
Hebron	9	10
TOTAL	27	31
GRAND TOTAL	58	

Appendix 19: Likert Scale Questionnaire Tool Relating to Hazards in the West Bank:								
	PROBABILITY							
Main Hazards	Cannot predict	Unlikely	Likely	More Likely	Most Likely	Sudden/ Unpredictable	Unclear	TOTAL
Floods/heavy rains	12.2	12.0	39.4	9.3	4.8	21.1	1.2	100
Snow/snow storms	9.8	15.6	49.4	9.3	4.3	9.4	2.2	100
Pandemics	12.2	10.2	32.0	21.7	5.7	12.8	5.4	100
Famine	15.4	25.4	27.4	13.7	5.0	8.0	5.1	100
High voltage power lines	19.8	13.0	26.7	13.0	7.0	14.4	6.1	100
Chemical pollution/pesticides and insecticides	11.7	13.7	31.5	22.4	8.5	7.0	5.2	100
Political Strife	8.3	5.9	19.4	26.1	26.7	9.4	4.2	100
Water Shortages	5.9	6.1	30.2	25.7	17.6	9.1	5.4	100
Open Sewerage	10.4	10.4	27.2	24.6	15.0	6.5	5.9	100
Earthquakes and seismic activities	17.6	5.6	22.4	12.8	5.0	32.2	4.4	100
Non-political violence	15.6	12.4	32.2	14.4	9.1	10.6	5.7	100
Garbage dumps	8.5	9.4	31.1	26.1	15.9	2.2	6.8	100
Nuclear Radiation	27.2	16.7	16.5	10.6	8.9	10.0	10.1	100
Work and technological accidents	15.4	10.4	35.2	13.9	6.9	10.9	7.3	100
Locust	15.9	17.0	25.7	7.0	4.4	23.1	6.9	100
Car accidents/ crashes	6.1	2.6	31.3	21.3	17.0	16.1	5.6	100
Droughts and Desertification	23.0	16.3	29.1	11.7	7.4	5.2	7.3	100
Animal and Plant disease	15.4	10.6	40.9	12.2	5.2	8.0	7.7	100
Water and sea pollution	12.2	7.4	27.8	24.8	14.1	5.4	8.3	100
Rock and Land slides	18.3	14.8	30.6	13.0	4.6	13.0	5.7	100
Food poisoning	10.9	6.3	35.0	18.1	11.9	11.3	6.5	100
Separation Wall	3.1	1.9	5.2	17.8	62.2	4.4	5.4	100
Unemployment	2.2	3.0	10.4	23.7	54.6	3.1	3.1	100

Appendix 19: Likert Scale Questionnaire Tool Relating to Hazards in the Gaza Strip								
	PROBABILITY							
Main Hazards	Cannot Predict	Unlikely	Likely	More Likely	Most Likely	Sudden/ Unpredictable	Unclear	TOTAL
Floods/heavy rains	19.3	11.4	37.4	3.9	2.0	24.8	1.2	100
Snow/snow storms	16.9	31.7	21.3	4.4	2.7	20.1	2.9	100
Pandemics	12.6	8.0	31.0	19.9	8.7	14.4	5.4	100
Famine	15.1	25.0	24.1	11.6	6.2	11.4	6.6	100
High voltage power lines	16.9	11.9	22.4	13.6	8.7	15.4	11.1	100
Chemical pollution/ pesticides and insecticides	8.7	9.2	31.8	22.4	14.9	6.4	6.6	100
Political Strife	6.7	3.7	15.2	27.0	31.7	9.0	6.7	100
Water Shortages	4.9	6.2	28.8	18.9	23.8	11.7	5.7	100
Open Sewerage	7.4	6.0	24.3	19.8	24.1	10.2	8.2	100
Earthquakes and seismic activities	22.8	13.1	17.4	5.7	3.5	29.8	7.7	100
Non-political violence	11.9	5.2	29.0	18.3	17.4	8.5	9.7	100
Garbage dumps	8.4	5.9	25.0	26.3	19.6	5.0	9.8	100
Nuclear Radiation	20.6	15.1	14.4	6.2	12.7	19.9	11.1	100
Work and technological accidents	13.1	8.4	33.5	12.7	9.2	13.2	9.9	100
Locust	18.1	9.0	25.0	8.4	5.2	26.3	8.0	100
Car accidents/ crashes	6.5	6.2	29.8	22.1	16.1	11.1	8.2	100
Droughts and Desertification	18.8	17.1	24.0	10.6	7.5	11.9	10.1	100
Animal and Plant disease	10.7	6.4	33.5	15.6	10.1	15.2	8.5	100
Water and sea pollution	5.4	3.9	22.9	26.1	24.1	7.0	10.6	100
Rock and Land slides	26.5	22.4	17.9	6.9	5.9	12.4	8.0	100
Food poisoning	7.9	6.5	34.8	19.3	15.1	9.2	7.2	100
Separation Wall	7.4	4.9	13.1	17.8	42.5	9.2	5.1	100
Unemployment	2.7	1.3	6.4	16.2	64.7	1.8	6.9	100

### Appendix 19: Likert Scale Questionnaire Tool Relating to Hazards in the Gaza Strip

#### Appendix 21: Data Form for groups (local community, children and PRCS workshops)

Date:	Governorate:
Working Group Members: 1	City/Village/Camp:
2	

Number of participants: Males.....

Females....

#### Questions posed on groups:

1. Class the various disasters in the Table according to their probability:	
1	•
2. a. Which population is the most prone to these disasters?	
1	•
2. b. Which areas are the most vulnerable and in need of services?	
1	
3. a. How can they affect the local community as a whole?	
1. Children	
2. Women	
3. Men	
4. Disables people	
5. The elderly	
6. School students	
7. Workers	
8. The Youth	
9. Other	
b. How can they affect the infrastructure?	
1. Houses	
2. Sewerage	
3. Electricity	
4. Water	
5. Telephones	
6. Roads/Movement	
7. Schools	
8. Other	

3. In case of a disaster/crisis, or the suspension of programs and services: a. What are the main requirements and items that must be ready before the disaster/crisis occurs (preparedness)? 2.... 3..... b. What are the main requirements and items that must be ready while responding to the disaster/crisis? 2.... 1. . . . . . . . . . . 3..... c. What are the main requirements and items needed for the rehabilitation and reconstruction period (following the disaster/ crisis)? 1.... 2.... 3..... 4. What role can the local community play in the field of reconstruction and rehabilitation to bring life back to normal? 2.... 1. . . . . . . . . . . 3.... 5. What role can PRCS play in the field of reconstruction and rehabilitation to bring life back to normal? 3.... 1. . . . . . . . . . . 2.... 6. Which services and specialized/awareness programs can PRCS adapt in any of its fields of action? 3.... 2.... 1. . . . . . . . . . . . 7. Which capacities and local tools are available to respond to disasters and crisis and to prevent them? 1. Schools ..... 3. Hospitals 4. Municipalities ..... 5. Clubs ..... 8. Water reservoirs ..... 9. Cars ..... 10. Experts ..... ..... 12. Volunteers ..... ..... ..... 15. Nursery schools ..... 16. Women/Youth/Charity Associations..... 17. Other ..... Community Recommendations: Team Recommendations:

# Table 22: Class the main dangers listed in the table bellow which might affect your safety as well as the safety of others (property, economy, agriculture, infrastructure, etc)

	Main Hazards	Cannot Predict	Unlikely	Likely	More Likely	Most likely	Sudden/ Unpredictable
1.	Floods/heavy rains						
2.	Snow/snow storms						
3.	Pandemics						
4.	Famine						
5.	High voltage power lines						
б.	Chemical pollution/ pesticides and insecticides						
7.	Political Strife						
8.	Water Shortages						
9.	Open Sewerage						
10.	Earthquakes and seismic activities						
11.	Non-political violence						
12.	Garbage dumps						
13.	Nuclear Radiation						
14.	Work and technological accidents						
15.	Locust						
16.	Car accidents/ crashes						
17.	Droughts and Desertification						
18.	Animal and Plant disease						
19.	Water and sea pollution						
20.	Rock and Land slides						
21.	Food poisoning						
22.	Separation Wall						
23.	Unemployment						
24	Other						

#### Appendix 23: Data Form for individual interviews with PRCS sta

Name: .....

Date and Place of interview: .....

Position: .....

Question 1	Question 2	Question 3	Question 4	Question 5			
Expected Disaster	PRCS role in Disaster Response	Disaster impact on society	Most affected population category	Most affected area			
Question 6: Role of Pale	stine Red Crescent Society						
Prevention: 15	Ability and Preparation: 15	Work Methods (Manag 15	ement and Organization)	Policies			
	Coordination with institutions	Capacities		Human Cadres			
Question 7: Suggestions	s, Projects and Programs						
1	5						
Question 8: Needs							
Project 1	Project 2	Project 3	Project 4	Project 5			
Question 8a:							
Human Resources: 15	Human Resources:	Human Resources: 15	Human Resources:	Human Resources:			
Question 8 b:							
Resources	Resources	Resources	Resources	Resources			
15	15	15	15	15			
Question 8c:	·						
Materials:	Materials:	Materials:	Materials:	Materials:			
15	15	15	15	15			
Question 9: Role of PRCS in disaster response within the various departments							
Rehabilitation: 15	Social Affairs 15	Psychological health 15	EMS 15	РНС 15			
Dissemination & Information 15	Disaster Management Unit	Youth and Volunteers	IHL Unit 15	Paramedics Institute			

#### Appendix 23: Data Form for individual interviews with staff from other institutions

Institution: .....

Date and Place of interview: ....

Position: .....

Question 1	Question 2	Question 3	Question 4	Question 5			
Expected Disaster	PRCS role in Disaster Response	Disaster impact on society	Most affected population category	Most affected area			
Question 6: Role of Pale	stine Red Crescent Society						
Prevention: 15	Ability and Preparation: 15	Capacities 15		Human Resources 15			
	Question 7: Suggestions, Projects and Programs 15						
Question 8: Needs							
Project 1	Project 2	Project 3	Project 4	Project 5			
Question 8a:							
Human Resources: 15	Human Resources: 15	Human Resources: 15	Human Resources: 15	Human Resources: 15			
Question 8 b:							
Resources	Resources	Resources	Resources	Resources			
Question 8c:	Question 8c:						
Materials: 15	Materials: 15	Materials: 15	Materials: 15	Materials: 15			

## Appendix 25: Data Form for participants in the discussion groups

Area:....

Date:....

Group: Local Community - PRCS employees - Children

			-		Sex
Number	Name	Profession	Age	М	F
1.					
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					
13.					
14.					
15.					
16.					
17.					
18.					
19.					
20.					
21.					
22.					
23.					







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