Guidance Note on Health Disaster Risk Management with Indigenous Peoples
Guidance Note
on Health Disaster Risk Management
with Indigenous Peoples
April 2019
## CONTENTS

<table>
<thead>
<tr>
<th>Chapter</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preface</td>
<td>V</td>
</tr>
<tr>
<td>Foreword</td>
<td>VI</td>
</tr>
<tr>
<td>Acknowledgments</td>
<td>VII</td>
</tr>
<tr>
<td>I. About this Guidance Note</td>
<td>1</td>
</tr>
<tr>
<td>II. Background Information</td>
<td>2</td>
</tr>
<tr>
<td>III. Principles</td>
<td>5</td>
</tr>
<tr>
<td>IV. Effective Engagement with Indigenous Peoples</td>
<td>6</td>
</tr>
<tr>
<td>Know the Context</td>
<td>6</td>
</tr>
<tr>
<td>Meet, Listen, and Understand</td>
<td>7</td>
</tr>
<tr>
<td>Map the Actors</td>
<td>8</td>
</tr>
<tr>
<td>Approach Key Community Leaders and Decision Makers</td>
<td>8</td>
</tr>
<tr>
<td>Planning through Partnerships</td>
<td>9</td>
</tr>
<tr>
<td>V. Key Considerations for Engaging with Indigenous Peoples in the Planning and Implementation of Disaster Risk Reduction</td>
<td>10</td>
</tr>
<tr>
<td>References</td>
<td>13</td>
</tr>
<tr>
<td>Suggested Reading</td>
<td>14</td>
</tr>
</tbody>
</table>
Preface

The Pan American Health Organization (PAHO) has had a long and storied history in emergency preparedness and response, dating back to the 1970s. Our work in this field continues to provide an important cross-cutting platform as well as a unique opportunity to engage with a wide range of populations and health programs across our 52 member countries and territories in Latin America and the Caribbean. Indigenous peoples are among the population groups we serve.

The number of indigenous peoples in the Region is approximately 42 million; nearly eight percent of the total population. This population makes up nearly 17% of total persons living in extreme poverty, leaving them increasingly vulnerable to the public health impacts of emergencies and disasters.

Through the recent Policy on Ethnicity and Health and the Plan of Action for Disaster Risk Reduction 2016-2021, PAHO has sought to strengthen health outcomes for indigenous peoples and protect them from health emergencies.

This Guidance Note is an important step toward broadening the Organization’s focus and improving the way health and emergency management practitioners engage with indigenous peoples.

We acknowledge that gaining, retaining, and integrating indigenous knowledge and wisdom is critical to the countries’ efforts in this regard. For centuries, indigenous peoples have used their knowledge to prepare for, cope with, and survive emergencies and disasters. Yet often disaster risk managers, who are, by and large, non-indigenous, have not taken this knowledge into account. Striking a better balance between scientific and technology-based methods of managing risks and the wisdom and local knowledge of indigenous peoples will help strengthen their disaster health outcomes.

PAHO is committed to continuing its work to improve the wellbeing of indigenous peoples, offering opportunities to develop their own strategies as well as to exercise their right to participate in the development of national and international policies that reflect both indigenous and non-indigenous perspectives.

Dr. Carissa F. Etienne,  
Director of the Pan American Health Organization
Foreword

Historically, indigenous peoples have been part of great world changes. We have witnessed the many turns of events that civilization has undergone as well as varied models of development and growth. We also have been impacted by great tragedies that have occurred, where humanity has been devastated and overcome by natural, biological, and social phenomena. Unfortunately, indigenous peoples often have borne a disproportionate burden.

As a people, we also have been resilient, so much so, that we have been able to adapt to, confront, and overcome the conditions and challenges that new realities have presented. Today, indigenous peoples can be proud of our identity; of the defense of our lands and territories; the conservation of natural resources and biodiversity; the promotion of food sustainability; and the preservation of traditional knowledge. As stewards of natural resources and the environment, we are motivated to continue to work with States, United Nations agencies, civil society organizations, and private individuals to create strategic alliances to face the challenges this globalized world presents.

In this respect, the Guidance Note on Health Disaster Risk Management with Indigenous Populations, presented by the Pan American Health Organization/ World Health Organization (PAHO/ WHO), is very relevant. It is an important step to improving health interventions in emergencies and disasters that can affect or alter our lives. However, this does not imply that our work is finished. To the contrary, we have before us not only the challenge but also the opportunity to strengthen this work, establishing new methods and areas of collaboration to deal with the problems that affect both indigenous peoples and society in general.

Through this Guidance Note, we acknowledge PAHO/WHO’s important contribution to disaster risk management. We encourage joining forces with additional actors in creating and building a worldwide alliance among indigenous peoples, the health sector, governments, and members of civil society to build a better future for all. Thank you for allowing us to be part of this important project that benefits the indigenous peoples of Latin America and the Caribbean. I thank my indigenous and non-indigenous brothers and sisters for their great work and encouragement. What we envision today as a dream, we hope will soon become a reality. Congratulations and our work begins in earnest.

Jesús Guadalupe Fuentes Blanco
Independent Expert, United Nations Permanent Forum on Indigenous Issues
Acknowledgments

The Pan American Health Organization would like to thank all the individuals and organizations that participated in the development of the Guidance Note on Health Disaster Risk Management with Indigenous People.

The development of this Guidance Note arose from the conclusions and recommendations of the Hemispheric Consultation on Engaging Indigenous People in Disaster Risk Reduction, which took place in Vancouver, Canada in 2014. This publication is the result of a truly participatory process that included contributions from indigenous leaders, health disaster risk managers, anthropologists, public health and communication officials, and others. The publication draws heavily on the experiences of indigenous peoples throughout the Americas, in particular, Canada, Chile, Ecuador, Guatemala, Honduras, Mexico, Peru, and the United States.

The participants at the Consultation on the Integration of Indigenous Knowledge in Disaster Risk Reduction carried out in Mexico City in July 2018, deserve special mention.

We pay a tribute posthumously to the anthropologist Carlos León Núñez for his valuable technical contribution and particularly to his vision, which strengthened the resilience of indigenous peoples in the Americas, as reflected in this publication.

This publication has been made possible thanks to the financial support provided by the Agency for International Development of the United States (USAID).

Authors: Alex Camacho; Sandra Del Pino; Ciro Ugarte; Samantha Gross; Nicole Wynter; Patricia Bittner; John Scott; Alejandro Santander; Josée Roy

Technical contribution: Manuel Albán, Enrique Pérez, Madeleine Redfern, Carlos León Núñez, Roddy Camino, Cecilio Solís, Jesús Guadalupe Fuentes, Pilar Pacheco, Celso Bambarén, Marcia Masaquiza.

Technical Coordination: Alex Camacho Vásconez and Sandra Del Pino

Editorial Coordination: Patricia Bittner and Rosario Muñoz

Design and layout: Eduardo Luján
The region of the Americas is one of the most multi-ethnic and multicultural regions of the world.
I. About this Guidance Note

For centuries, indigenous peoples around the world have used their traditional knowledge to prepare for, cope with and survive disasters. Their methods and practices originated within their communities and have been maintained and passed down over generations. Until recently, policy makers have largely ignored this vast body of knowledge, in favor of ‘Western’ science and technology-based methods of disaster risk reduction and response. Today, however, many of these traditional practices are considered important and necessary contributions to the conservation of biodiversity and environmental sustainability. Yet at the same time, this knowledge is under constant threat of being eroded or lost, making these communities more vulnerable (Scott, et al., 2013).

The region of the Americas—Latin America and the Caribbean—is one of the most multi-ethnic, multicultural regions of the world (OAS, 2011; World Bank, 2010). Although it is often considered a region comprised of middle-income countries, it has one of the highest ratios of income inequality in the world, with pockets of highly vulnerable populations (PAHO, 2013). These sharp differences in socio-economic and health status increase vulnerability to health emergencies, as people living in poverty and without access to health care are notably more exposed to the effects of disasters and are more likely to see their health deteriorate as a result.

Based on the latest censuses available in the Region, in 2010 there were approximately 42 million indigenous peoples in Latin America, representing nearly 8 percent of the total population. They are also among the most marginalized groups in the region (World Bank, 2015). They make up nearly 17% of the total number of people living in extreme poverty, leaving them increasingly vulnerable to the public health impacts of disease outbreaks, emergencies, and disasters (World Bank, 2015; IASG, 2014). Additionally, poor housing, a lack of access to medical care, cultural and language differences, and geographic remoteness contribute to their escalating vulnerability.

As an example, a year-long measles epidemic spread to several South American countries in 2018, almost two years after the Pan American Health Organization (PAHO) had declared the Americas free of measles. The measles outbreak was particularly threatening to indigenous peoples in several countries (PAHO).

Indigenous Peoples are also increasingly more vulnerable to the health impacts of climate change due to their close relationship with nature (PAHO, 2014). Climate change—specifically extreme weather, deforestation, melting of ice caps and rising sea levels, and acidification of the oceans—exacerbates the challenges that indigenous peoples and communities face regarding safe and adequate water and food, livelihoods, and right to health and housing (PAHO, 2014; United Nations Backgrounder, 2008).
Several recent PAHO policies point to the importance of integrating indigenous knowledge and health disaster risk management. PAHO’s Plan of Action for Disaster Risk Reduction 2016-2021 (PAHO, 2016) and its Policy on Ethnicity and Health (PAHO, 2017) urge Member States to consider the connection between the two and to promote an ethnicity approach. Together, these documents provide a unique framework to integrate health disaster risk management with local indigenous knowledge in order to improve the health of indigenous peoples and other ethnic groups in the Americas.

The goal of this Guidance Note is to:

• Support health and emergency management practitioners to improve their work in health disaster risk management among Indigenous Peoples;

• Improve the impact of disaster risk management policies and programs concerning Indigenous Peoples;

• Gain, retain and integrate the local knowledge and wisdom of indigenous peoples in preparing for, responding to and recovering from disaster situations.

The intended audience for this Guidance Note includes health officials (Ministry of Health, Social Security Institutes, etc.) who work in disaster risk management and emergencies in the Region. Others who may benefit from the information in this Guidance Note include, but are not limited to, indigenous community members and leaders engaged in disaster risk management; Non-governmental Organizations (NGO) engaged in health disaster risk management with Indigenous Peoples; primary health workers; community development workers; emergency management practitioners; indigenous organizations and network groups; researchers; and academics.

II. Background Information

It has been widely recognized that indigenous peoples have the right to play a part in the national and regional order without forsaking their languages, cultures, and ambitions; and that they provide an important perspective in contributing to the development and implementation of plans and mechanisms for disaster risk reduction (World Bank, 2015; UNISDR, 2015).

In recent years, a substantial body of research has uncovered what the world can learn from indigenous knowledge and time-tested practices regarding disaster risk reduction. This knowledge has arisen from the close relationship these communities have with the environment, as well as their cultural beliefs and common sense of community (Scott, et al., 2013). Governments, organizations, and experts have begun to identify the increased risk that Indigenous Peoples face and the importance of indigenous knowledge in furthering the goals of achieving health for all and in reducing the impact and risks of disasters in Indigenous Peoples around the world (PAHO, 2014).
In 2014, representatives from 10 countries in the Region met in Vancouver, Canada for the Hemispheric Consultation on Engaging Indigenous Peoples in Disaster Risk Reduction (PAHO, 2014). At this meeting, indigenous delegates discussed experiences and strategies from their own cultural perspectives, focusing on reducing disaster risk and better protecting health during and after disasters. Following are the key generalized messages stemming from the discussion.

- Indigenous knowledge, values and culture are, in themselves, important risk reduction tools and should be incorporated into national and international DRR strategies. Indigenous peoples must have opportunities to develop their own strategies as well as participate in the development of national and international risk reduction policies.

- Indigenous knowledge must be valued and widely disseminated.

- Indigenous peoples should have access to more information about the impact of manmade situations in order to adapt their traditional knowledge, preparedness and response patterns and minimize the risk of a disaster.

- Definitions, concepts and standards related to disaster risk reduction and response must reflect both indigenous and non-indigenous perspectives.

In 2015, the third United Nations Conference on Disaster Risk Reduction developed the Sendai Framework for Disaster Risk Reduction 2015-2030. Among other areas, this global framework advocates for the use of indigenous peoples’ knowledge and practices to complement scientific knowledge in disaster risk assessment. It identifies opportunities for official cooperation with
indigenous peoples, including through the use of traditional knowledge in disaster risk assessment and in the development and implementation of policies. It also gives particular attention to the importance of indigenous knowledge for early warning.

The Pan American Health Organization’s Plan of Action for Disaster Risk Reduction 2016-2021 seeks to strengthen disaster risk reduction in order to prevent death, disease, disability, and the psychosocial impact resulting from emergencies and disasters. The Plan of Action has these cross-cutting approaches: people-centered actions; multi-hazard approach; a gender, equity, ethnicity, human rights, and disability approach; and shared responsibility among national and subnational institutions and authorities, and the public and private sectors. Consult the full document through the link in the References section.

The ISDR’s 6th Regional Platform for Disaster Risk Reduction in the Americas (ISDR, Cartagena, Colombia) took place in 2018. The Cartagena Declaration recognizes the disproportionate impact of disasters on vulnerable groups and the need to apply an equitable, participatory, and inclusive approach to disaster risk reduction (UN Office for Disaster Risk Reduction, 2018). This includes the integration of indigenous knowledge in disaster risk management programs and policies.

A 2018 PAHO-sponsored Indigenous Consultation, held in Mexico, gave regional indigenous leaders and health officials the chance to identify priority needs and areas for development between and within populations. Several working groups were tasked with studying the development of tools to better integrate indigenous, traditional knowledge into disaster risk management in the region (PAHO, 2018).
### III. Principles

In line with PAHO’s Plan of Action for Disaster Risk Reduction and PAHO’s Policy on Ethnicity and Health, it is important to consider and incorporate the following principles (with particular emphasis on the collective rights of property; cultural identity; preservation of knowledge; and prior consultation, as stated below) at every stage of engagement with Indigenous Peoples during the development of disaster risk reduction plans and policies.

| **Gender** | Particular attention is paid to women’s needs and priorities before, during and after a health emergency. Women must not be seen exclusively as victims but also as actors and/or potential leaders in building disaster resilience, especially since many have key roles in the community and are primary caregivers in their household. |
| **Life Course Perspective** | In the life course perspective or approach, the health of individuals and populations is seen as the result of dynamic interaction between exposures and events throughout life. This is conditioned by positive or negative influences that shape individual trajectories and the development of society as a whole. According to this conceptual framework, health is a fundamental dimension of human development (PAHO, Health in the Americas, 2017). |
| **Self-Recognition of Identity** | This principle embodies the right of every individual to his or her identity, as part of a people. It supports exercising the right of self-definition and awareness as belonging to a people, and to the acceptance of this belonging by that people. |
| **Collective Rights** | Indigenous peoples have the right, individually or collectively with other members of their group, to exercise the following specific rights without discrimination: (a) right to property and to the use, conservation, and protection of lands traditionally occupied by them and to natural resources; (b) right to their cultural identity, to keep, maintain, and foster their mode of life and forms of organization, culture, languages, and religious expressions; (c) right to the protection of their knowledge and their cultural and artistic heritage; (d) right to prior consultation with respect to decisions which may affect their rights. |
| **Intercultural Approach** | The approach promotes respect and mutual acceptance between the institutional medical culture and indigenous cultures, with the close collaboration of social stakeholders, health workers, the family, and community leaders. |
| **Disability** | An estimated 15% of the world’s population lives with some form of disability, yet they are among the most vulnerable and neglected in emergency situations. The UN Convention on the Rights of Persons with Disabilities, Article 11 on situations of risk and humanitarian emergencies, calls for taking all necessary measures to ensure the protection and safety of persons with disabilities in situations of risk, including humanitarian emergencies and natural disasters. (WHO, 2014) (UN, 2006). |
| **Free, Prior and Informed Consent** | The right of indigenous peoples to give or withhold free, prior, and informed consent for the use of their lands, resources, traditional knowledge, or intellectual property (FPIC) is an international right of indigenous peoples (UN, 2014). |
IV. Effective Engagement with Indigenous Peoples

When engaging with indigenous peoples to improve disaster risk management within the community, it is important to know the context of the population, establish trust, and foster intersectoral collaboration with stakeholders within and outside of the community. At the same time, it is equally important that definitions, concepts, and standards related to disaster risk reduction and response reflect both indigenous and non-indigenous perspectives. The International Federation of Red Cross and Red Crescent Societies (IFRC) has several publications on Vulnerability and Capacity Assessments (VCA) (IFRC, 2006) at community level. Much of this information is relevant to disaster risk reduction with indigenous communities.¹

Consider the following steps when engaging with indigenous communities:

**Know the Context**

Disaster risk management is unique to each population and community. Therefore, an in-depth understanding of the target population is key to achieving the greatest possible impact. Conduct this process with the participation of the target community.

Who are they?
Identify and understand the demographics of the population, the community’s economic structure, the social and cultural conditions, the beliefs/perceptions regarding hazards in the community, etc.

Where are they?
Determine the geographic location of the target population and the existing hazards in the area. It is also important to identify existing relationships that the target population has with surrounding communities.

What do they need?
The needs of a community are often relative and dependent on their belief system. Ask the community to identify their needs from a cultural and multicultural perspective and to specify what can be done to meet mutual goals of reducing their vulnerability and exposure to hazards, while at the same time, building capacity and improving governance to become more resilient.

¹ The VCA collects, analyses and systematizes a community’s vulnerability to hazards in a structured and meaningful way. This information is then used to diagnose the key risks and existing capacities of the community, ultimately leading to activities aimed at reducing their vulnerability to potential disasters and increasing their capacity to reduce the impact. There are two publications are listed in the References section of this Guidance Note.
Meet, Listen, and Understand

Disaster risk management in Indigenous Peoples should be participatory and inclusive.

Meet
Hold meetings with community members to understand their beliefs and perceptions about hazards, vulnerabilities, and the risks they face. Discuss their knowledge, perspectives, and experiences and apply this to the development and implementation of risk management plans and policies.

Delegate
Work with community leadership to identify members who can act as liaisons between the community and outside team(s). Ensure these groups are fully included in the disaster risk management process in order to keep community values at the forefront.

Identify Challenges
Among Indigenous People, perceptions may differ on what constitutes a hazard. It is important to ensure that everyone in the community has access to and understands information that is prepared and distributed. It is important that the information reflects different beliefs and perceptions.

Document
Prepare to document the agreements and differences stemming from the discussions for subsequent reflection and lessons learned. This documentation should be culturally and linguistically appropriate to ensure that all parties understand.
Map the Actors

Identify groups and individuals within a population and define clear roles and responsibilities regarding disaster risk management in the community.

Internal
- Chiefs, elders, various other leaders within the community, community members, community committees, social, political, and academic institutions.

External
- Leaders from and members of surrounding communities, government agencies and officials, health sector leaders, academic institutions, non-governmental organizations, international organizations, experts, etc.

Approach Key Community Leaders and Decision Makers

Identify and collaborate with those who community members look to for knowledge and guidance. These individuals play a key role in developing the community’s trust of outside teams.

Identify
- Identify groups and leaders within the community and the change makers and influencers within those groups. For example, these may include youth group leaders, women’s groups leaders, elders, etc.

Engage
- Hold discussions with leaders to identify community perceptions of hazards and vulnerabilities. From a culturally competent perspective, discuss the most beneficial methods of implementing risk reduction interventions and the expected impact and benefits to the population.

Collaborate
- With the participation of community leaders and members, integrate intercultural perspectives and ideas into planning, developing and implementing disaster risk management policies and programs in the target community.
Planning through Partnerships

Continuous dialogue and advocacy between national and local government officials and other external actors and indigenous peoples is key to managing disaster risk in Indigenous Peoples.

**Partnerships**

Establish intersectoral partnerships and alliances to strengthen coordination and representation for the target population.

**Program Development**

Design context-specific programs using a multicultural perspective:
- Design culturally appropriate educational programs that include simulation exercises to identify differences and promote culturally appropriate responses.
- Incorporate psychological and spiritual needs while maintaining and intercultural perspective.
- Develop disaster response plans and initiatives that include indigenous peoples’ knowledge, with a focus on the unique needs or circumstances of the community.

**Community Engagement**

Integrate perspectives and ideas developed through participatory dialogues to strengthen the community network. Establish committees within the community with clear roles and responsibilities.
V. Key Considerations for Engaging with Indigenous Peoples in the Planning and Implementation of Disaster Risk Reduction

Considerations by Stage of Disaster Risk Management

| Risk Assessment | • Make an inventory of local risks and hazards and conduct a community risk mapping exercise. (Huairou Commission, Groots International, 2016)²  
• Conduct community assessments from a multicultural perspective to understand how they perceive concepts such as hazards and risks.³  
• Ensure that culturally appropriate information on hazards and risks is integrated into the public health situation analysis. |
|----------------|---------------------------------------------------------------------------------------------------------|
| Risk Reduction | • Invest, to the degree possible, in retrofitting critical community infrastructure with culturally appropriate materials and with the community’s approval, support, and participation.  
• Consider the use of renewable energy and other sources and measures for adapting to and mitigating the impact of climate change. |

---

2 Community Hazard Mapping, a publication of Groots International, describes how one small community in Guatemala produced a hazards map following these steps: Assemble the community; community leaders conduct training; an exploratory walk with community stakeholders; evaluation meeting; participatory map drawing exercise. Consult the Reference section of this document.

3 Although it is important to take into account a cultural perspective, it is important to remember that scientific information about hazards, particularly natural hazards, must be taken into account. For example, active volcanoes in Ecuador and Guatemala are natural hazards. The indigenous community’s perception of the risk posed by these hazards should be an important topic of conversation between national authorities and the community.
### Preparedness

- Establish a community task force with clearly designated roles and responsibilities, keeping in mind cultural traditions and perspectives.
- Establish trusted relationships with key community leaders and decision makers prior to interventions.
- Identify established communication channels between leadership, task forces, community, government and the health sector.
- Identify evacuation routes and methods and make sure the community is well aware of them.\(^4\)
- Conduct participatory risk reduction educational sessions in schools and with community groups.
- Establish culturally and linguistically appropriate early warning systems with the participation of communities.
- Develop culturally appropriate protocols and multi hazard emergency response plans that are updated, approved, and tested with simulation exercises.
- Prepare a family/community emergency response plans. Decide on a meeting place outside the home if the family has to quickly evacuate.

### Response

- Communicate with the population through culturally appropriate channels, ensuring that information on the continued risk and response operations is available in all appropriate languages.
- Identify resources:
  - Culturally acceptable transportation methods.
  - Supplies and medications (traditional and non-traditional).
  - Human resources (traditional and non-traditional medical and mental health professionals and community leaders).
- Set in motion culturally appropriate response plans:
  - Incident command with indigenous peoples – community members have knowledge of their roles and responsibilities.
  - Disease prevention interventions (HIV, TB, etc.) – if culturally accepted.

---

\(^4\) The actual evacuation of relatively small indigenous communities is not as complicated a process, as is the case in large municipal environments. Emphasis should be placed on developing family and community plans as mentioned in the section on Preparedness.
| Recovery | • Pay attention to vulnerable Indigenous Peoples to ensure that their needs are prominently noted and provide information to help initiate self-recovery.  
• Ensure that the community has full input into recovery plans to make them culturally appropriate.  
• Maintain and strengthen the community’s social, physical, and economic systems.  
• Monitor and protect the community’s health status, from an intercultural perspective, and maintain local traditions. Pay special attention to emerging health problems in newly vulnerable groups that are related to the emergency (cholera, hepatitis, etc.)  
• To the degree possible, retrofit and/or reconstruct health centers, houses, roads, bridges, etc. with the community. |
References


International Federation of Red Cross and Red Crescent Societies (IFRC, 2006). What is a Vulnerability and Capacity Assessment? [Internet]. Available at: https://bit.ly/2Oc15ng.


Suggested Reading


Organization of American States/Inter-American Commission on Human Rights (OAS/IACHR, 2011). The Situation of People of African Descent in the Americas [Internet]. Available at: https://bit.ly/2TS71a1


United Nations Office for Disaster Risk Reduction (UNISDR, 2008). Indigenous knowledge for disaster risk reduction: Good practices and lessons learned from experiences in the Asia-Pacific region. [Internet]. Available at: https://bit.ly/1oAjNGv


World Bank, Global Facility for Disaster Reduction and Recovery (2017). Guidance Note for Post-Disaster Health Sector Recovery. [Internet]. Available at: https://bit.ly/2THA2Ba

Participants at the Consultation on the Integration of Indigenous Knowledge in Disaster Risk Reduction

Mexico City, Mexico
July 2018
Footnotes

1. Community Hazard Mapping, a publication of Groots International, describes how one small community in Guatemala produced a hazards map following these steps: Assemble the community; community leaders conduct training; an exploratory walk with community stakeholders; evaluation meeting; participatory map drawing exercise. Consult the Reference section of this document.

2. Although it is important to take into account a cultural perspective, it is important to remember that scientific information about hazards, particularly natural hazards, must be taken into account. For example, active volcanoes in Ecuador and Guatemala are natural hazards. The indigenous community's perception of the risk posed by these hazards should be an important topic of conversation between national authorities and the community.

3. The actual evacuation of relatively small indigenous communities is not as complicated a process, as is the case in large municipal environments. Emphasis should be placed on developing family and community plans as mentioned in the section on Preparedness.