

COMMUNITY-BASED DISASTER RISK REDUCTION COMMUNITY RISK ASSESSMENT MANUALS AND HANDBOOKS

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OVERVIEW of 16 MANUALS AND HANDBOOKS

(1) ACTIONAID

PVA Participatory Vulnerability Analysis

Methods & Tools

Disaster Risk Assessments methods suggested for use include PVA Participatory Vulnerability Analysis: Focus groups. Historical profiles, Vulnerability map, seasonal calendar. Livelihood analysis, problem trees, concept mapping?, Coping matrix, venns, scenarios, timelines

General Assessment methods include:

Participatory Rural Appraisal (PRA); Vulnerability analysis; Stakeholder analysis; Situation analysis; Multi-level approach; 'PVA information needs analysis'; Analysis of community action; Drawing action from analysis

Sources:

(1) Action Aid Participatory Vulnerability Analysis (PVA) Case Studies. Johannesburg: Action Aid.

<http://www.actionaid.org/wps/content/documents/PVA%20case%20studies%20Final.pdf>

Keywords: community mapping, community risk management, hazards, India, B'desh

(2) Ethlet Chiwaka and Roger Yates (2005) Participatory Vulnerability Analysis: A step-by-step guideline for field staff. London / Johannesburg: ActionAid International. (35p.)

www.proventionconsortium.org.

(2) ADPC

CBDRM Community based disaster Risk Management

<http://www.adpc.net/v2007/Programs/CBDRM/Default.asp>

Methods & Tools

Disaster Risk Assessment methods include: Hazard and resource mapping; Timeline; Gender analysis Gender Needs Activity Profiles; Vulnerability assessment; Seasonal calendar; Hazard & Resources Map; Ranking (Matrix)(Proportional piling); Transect walk; Historical transect; Focus group interviews; Venn diagrams; Resource mobilization matrix

Source

CBDRM Field Practitioners' Handbook. Abarquez, Imelda; and Zubair Murshed (2004) Field Practitioners' Handbook. Pathumthani, Thailand: ADPC (Asian Disaster Preparedness Center) (163p.) <http://www.adpc.net/pdr-sea/publications/12Handbk.pdf>

(3) CARE USA

HLSA – Household Livelihood Security Assessment

Methods & Tools

General assessment methods included in the HLSA include:

Livelihood analysis; Analysis of livelihood security; Opportunity analysis; Rights and responsibilities analysis; Gender analysis; Stakeholder analysis; Institutional analysis

Participatory tools used in the HLSA include:

Risk mapping; Venn Diagrams; Diagnosis decision tree; Transect walk; Seasonal calendar; Timeline; Problem tree; Wealth ranking;

Technical tools included in the HLSA are:

Surveys; Flow diagrams; Ranking/scoring; Semi structured Interviews

Sources:

(1) Timothy Frankenberger, Kristina Luther, James Becht, M. Katherine McCoston (2002) Household Livelihood Security Assessments: A Toolkit for Practitioners. Atlanta GA: CARE USA. (92p.) www.kcenter.com/phls/HLSA%20Toolkit_Final.PDF

(2) CARE Honduras

Programa Integral de Capacitación en Gestión de Riesgos y Respuesta a Emergencias Versión de Plataforma Semi-presencial por Internet.

CARE Honduras en asocio con la Universidad Tecnológica de Centroamérica (UNITEC) y la Comisión Permanente de Contingencias (COPECO) lanzaron la versión de plataforma semi-presencial por internet del Programa Integral de Capacitación en Gestión de Riesgos y Respuesta a Emergencias

http://www.cami.care.org/gestion_riesgo.htm

(4) Centre for Disaster Preparedness and Citizens' Disaster Response Centre

Disaster Risk Assessment

Methods & Tools

Disaster Risk Assessment Methods mentioned are:

Hazard Vulnerability and Capacity Assessment (HVCA)

Damage, Needs and Capacity Assessment (DNCA)

Capacity and Vulnerability Assessment (CVA)

General Assessment methods include:

Class analysis; Livelihood analysis; Social and institutional network analysis;

The participatory tools include:

Focus group interviews; Direct observation; Hazard mapping; Seasonal calendar;

Timeline; Historical profiling; Problem tree; Transect walk

Technical tools include:

Water testing tools; Health, sanitation and nutrition data gathering tools; Key informant interviews

Source

Annelies Heijmans and Lorna Victoria (2001) Citizenry-Based & Development-Oriented Disaster Response. Centre for Disaster Preparedness and Citizens' Disaster Response Centre. (171p.) www.proventionconsortium.org

(5) CEPREDENAC

Local Risk Management

Disaster Risk and Prevention Management Project 1999 – 2004 (Centro Humboldt, Nicaragua) El Centro Humboldt; (with some mapping)

Source:

Lavell, Allan with Elizabeth Mansilla and David Smith (2003) Local Risk Management: Ideas and Notions relating to Concept and Practice. Guatemala: CEPREDENAC Centro de Coordinación para la Prevención de los Desastres Naturales en América Central, CEPREDENAC – PNUD; and: Geneva: UNDP, Regional Programme for Risk Management in Central America. (62p.)
<http://www.crid.or.cr/digitalizacion/pdf/eng/doc15784/doc15784-contenido.pdf>

(6) Danish Red Cross

Preparing for Disaster. A Community Based Approach

Risk mapping Resource Mapping Community mitigation measures.

Methods & Tools

Disaster Risk Assessment Methods:

Vulnerability Capacity Assessment (VCA)

General Assessment methods include:

Participatory Rural Appraisal (PRA); Hazard Analysis; Vulnerability Analysis

The participatory tools include:

Community Mapping; Hazard and Resource Mapping

Technical tools include:

GIS Mapping

Source:

Falk, Knud (ed.) (2005) Preparing for Disaster – A Community-Based Approach. Copenhagen: Danish Red Cross (2nd ed.) (36p.) Manila: Philippine National Red Cross
http://www.proventionconsortium.org/themes/default/pdfs/CRA/CBDP_Philippines_Booklet.pdf

(7) GeoHazards International

Hazard Analysis; Comprehensive Needs Assessment; Social and Institutional Network Analysis

Methods & Tools

The participatory tools include:

Stakeholder Meetings and Focus Group Interviews; Concerns and Goals Matrix; Ranking

Technical tools include:

Secondary Data (Data Collection Review); Key Informant Interviews; Surveys; Direct Observations; Annual Risk Reduction Report

Source:

Marla A. Petal (2005)

Central Asia Earthquake Safety Initiative, Urban Risk Reduction Framework
GeoHazards International (23p.)

http://www.proventionconsortium.org/themes/default/pdfs/CRA/GHI_URRF_Oct05.doc

(8) GTZ

CBDRM Community Based Disaster Risk Management

Methods & Tools

Timelines; Actor mapping; Problem trees ranking; Venns; vulnerability & capacity analysis; SSI; Participatory observation Social / Well-being Ranking

Sources:

(1) Bollin, Christina (2003) Community-Based Disaster Risk Management Approach. Experience gained in Central America. Eschborn: GTZ , Division 4200 Governance and Democracy. (63p.) <http://www.gtz.de/de/dokumente/en-community-based-drm.pdf>

(2) Kohler, Alois; Sebastian Jülich; and Lena Bloemertz (2004) Risk Analysis – a Basis for Disaster Risk Management. Guidelines. Eschborn: GTZ , Section 42, Governance and Democracy (76p.) <http://www.gtz.de/de/dokumente/en-riskanalysis-chs1-6.pdf>
<http://www.gtz.de/de/dokumente/en-riskanalysis-chs7-9.pdf>

(3) Hahn, H. (2003) Indicators and Other Instruments for Local Risk Management for Communities and Local Governments. *Local Risk Management for Communities and Local Governments.* German Technical Cooperation Agency, GTZ, for IADB. Indicators to assess vulnerabilities: Physical/ demographic Social Economic Environment.

> Population density

> Demographic pressure

> Insecure settlements

> Access to basic services Decentralization

> Community participation

> Level of poverty > Local re

> Degree of illiteracy > D

> Attitude > Small enterprises > Over

> Accessibility

(9) IFRC International Federation of Red Cross & Red Crescent Societies IFRC, OAS, PAHO, UNICEF, ProVention VCA Vulnerability and Capacity Assessment

Methods & Tools

Participatory tools include:

Focus Group Discussions; Risk Mapping; Seasonal Chart; Transect Walk; Direct Observation; Stakeholder analysis; seasonal calendar; Cause analysis, SWOT Community Mapping; Scoring & ranking of health problems; Food security.

Technical tools include:

Secondary Sources/ Data; Questionnaires; Semi-Structured Interviews; Key informants Interviews.

Sources:

(1) VCA training guide: classroom training and learning-by-doing. Geneva: IFRC. (2008) (116p.)

<http://www.ifrc.org/Docs/pubs/disasters/resources/preparing-disasters/vca/vca-training-guide-en.pdf>

<http://www.preventionweb.net/english/professional/trainings-events/edu-materials/v.php?id=8281>

(2) How to do a VCA: a practical step-by-step guide for Red Cross Red Crescent staff and volunteers. Geneva: IFRC (2007) (94p.)

<http://www.preventionweb.net/english/professional/trainings-events/edu-materials/v.php?id=8277>

(3) Community based Vulnerability and Capacity Assessment (VCA) in Central America

Six manuals (from c. 2006) are collaborative effort between the Organization of American States, the Pan-American Health Organization, UNICEF and IFRC, supported by ProVention, to promote community-based disaster risk reduction activities in: school maintenance, disaster mitigation of rural water supplies and sewerage systems, natural hazards and school shelter, community early warning systems for small valleys, floods awareness practice guides, community dialogue on water and climate.



[Mantenimiento Comunitario de Escuelas](#)
(pdf, 12.5MB)



[Prevención de Desastres en Acueductos Rurales](#)
(pdf, 10.8MB)



[Manejo de Albergues Temporales](#)
(pdf, 8.4MB)



[Alerta Temprana](#)
(pdf, 12MB)



[Inundaciones](#)
(pdf, 6.9MB)



[Diálogo Comunitarios sobre Agua y Clima](#)
(pdf, 11.3MB)

(4) VCA Vulnerability & Capacity Assessment in e.g. Solomon Islands

(10) International Hurricane Research Center Gendered Community Risk Assessment

Methods & Tools

Participatory Rural Appraisal (PRA)

Participatory tools include

Oral histories; Focus group interviews; Photo essays; Risk mapping

Source:

Enarson, E., Meyreles, L., González, M., Hearn Morrow, B., Mullings, A. and Soares, A. (2003) Working with women at risk: practical guidelines for assessing local disaster risk International Hurricane Research Center, Florida International University (104p.)
www.ihrc.fiu.edu/Issr/workingwithwomen.pdf

(11) UNDP ISDR International Strategy for Disaster Risk Reduction (EIRD español)

Educational / School materials

Sources

(1) Estrategia Internacional para la Reducción de Desastres América Latina y el Caribe. Aprendamos a prevenir los desastres! Juego educativo - juego de mesa Riesgolandia
<http://www.eird.org/esp/riesgolandia/riesgolandia-esp.htm>

(2) ISDR International Strategy for Disaster Reduction Latin America and the Caribbean "Let's Learn to Prevent Disasters!" Educational Kit & Riskland Game.
<http://www.eird.org/eng/riesgolandia/riesgolandia-ing.htm>

(3) Disaster Risk Mapping. Building Disaster-Resilient Communities. E.g. Kyrgyzstan.

(12) NOAA

Community Vulnerability Assessment Tool

Methods & Tools

Hazard identification; Hazard analysis; Critical facilities analysis; Societal analysis; Economic analysis; Environmental analysis; Mitigation opportunities analysis

Source:

Charleston SC: NOAA Coastal Services Center. (1999)
CD-ROM and Web Site: www.csc.noaa.gov/products/nchaz/startup.htm

(13) Oxfam Great Britain - Philippines Programme Capacities and Vulnerabilities Assessment CVA matrix

Methods & Tools:

Gender desegregation matrix; Resource mapping; Community mapping; Hazard mapping; Transect walk; Matrix ranking/scoring; Wealth ranking; Venn diagrams; Community visioning; Seasonal calendar; Timeline; Focus group interviews; Role playing; Household interviews

Source:

de Dios, Honorio B. (2002) Participatory Capacities and Vulnerabilities Assessment: Finding the link between disasters and development. Quezon City: Oxfam Great Britain - Philippines Programme (82p.)
http://www.proventionconsortium.org/themes/default/pdfs/CRA/PCVA_2002_meth.pdf

(14) ProVention

Tools for Mainstreaming Disaster Risk Reduction

Measuring Mitigation; Collecting & using Info on Natural Hazards; Economic appraisal; environmental appraisal; Log Frames; M & E; appraisal of Institutions

Vulnerability & Capacity Analysis (VCA) (cf. VA, SIA, HIA, livelihoods analysis)
Sustainable Livelihoods Approaches; 2ry data; sample surveys, Interviews, household Case studies; Environmental Checklists, Timelines, Seasonal calendars, mapping, Ranking methods, Venns, Shocks & Trends Indicators

Risk Assessment - hazard mapping, forecasts, economic appraisal, social appraisal

Well-organised, annotated overview of Community Risk Assessment (CRA) approaches and methods, many of which are highly relevant to PGIS issues, applications and methods. This 'Guide to Handbooks and Guidelines' reviews the products of many agencies and NGOs, including Asian Disaster Preparedness Centre (ADPC); Oxfam, ActionAid; Centre for Disaster Preparedness Philippines, International Hurricane Research Centre, Florida; South Pacific Disaster Reduction Programme of the UN Dept of ESA; and the Philippines National Red Cross Society.

Likewise there is a cross-indexed user-friendly guide to PRA and other survey tools for community spatial information, including hazard mapping; resource mapping; risk mapping; and gendered risk mapping. Keywords: risk, disaster, hazards, vulnerability, livelihoods, participation, planning tools, logframe, EIA, SIA.

(NB of course the term 'mapping' in this context does not always mean just representation of geospatial information)

The website also includes many case studies.

Sources

(1) Benson, Charlotte; and John Twigg with Tiziana Rossetto (2007) Tools for Mainstreaming Disaster Risk Reduction: Guidance Notes for Development Organisations. Geneva: ProVention Consortium (184p.)

<http://www.proventionconsortium.org/?pageid=37&publicationid=132#132>

(2) ProVention (2006?) Community Risk Assessment Methodologies and Case Studies. Compiled by Maya Schaefer. Geneva: ProVention.

<http://www.proventionconsortium.org/?pageid=43> or, go to main website www.proventionconsortium.org

(15) TEARFUND

Participatory Assessment of Disaster Risk (PADR)

Methods & Tools:

Analytical methods

Disaster Risk Assessment Methods are:

Participatory Assessment of Disaster Risk (PADR)

General Assessment methods include:

Hazard Analysis; Participatory Rural Appraisal (PRA); Rapid Rural Appraisal (RRA);

Vulnerability Analysis; Capacity Analysis.

Source:

Paul Venton and Bob Hansford (2006) Reducing risk of disaster in our communities
Teddington, UK: Tearfund (80p.)

<http://tilz.tearfund.org/Publications/ROOTS/Reducing+risk+of+disaster+in+our+communities.htm>

(16) UNDP - DMTP

Vulnerability and Risk Assessment VRA

Part 1: Understanding risk

Nothing is safe Definition of risk Risk assessment and evaluation.

How risky is it? The measurement of risk Risk and priorities: comparative risk

Perception of risk Acceptable levels of risks Management of community risk

Risks of natural and technological hazards

PART 2: Assessing risk and vulnerability

Using risk in decision-making How is risk determined Presentation of risk

Hazard evaluation Vulnerability evaluation

CASE STUDY Reducing vulnerability: robust societies

Part 3: Appraising disaster mitigation options

Development projects and disaster risk Cost benefit analysis Alternatives to cost-benefit analysis CASE STUDY.

Conclusion: social and political context

Source:

A.W. Coburn, R.J.S. Spence, and A. Pomonis (1992) *2nd Ed.* Cambridge Architectural Research, Cambridge. UNDP, Disaster Management Training Programme (DMTP). (68p.)

http://www.proventionconsortium.org/themes/default/pdfs/CRA/DMTP1994_meth.pdf

(17) UN - UNDHA & UN ESA

Household Capacity and Vulnerability Assessment (CVA)

Action planning consisting of situation analysis, prioritization, action planning.

Methods & Tools:

Participatory Rural Appraisal (PRA). *participatory tools* used
Timeline; Changing trends matrix; Seasonal calendar; Schedule of daily activities; Food path analysis; Classification of building/structures (scoring); Transect walk; Risk mapping; Scoring table of economic activities, community; Vulnerability/capacity scoring tables; Venn diagrams; Scoring tables of community priorities; Various tables including: Resource table

Source:

Luc Vrolijk (1998) Guidelines for Community Vulnerability Analysis: An Approach for Pacific Island Communities. South Pacific Disaster Reduction Programme (SPDRP), South Pacific Programme Office of the United Nations Department for Humanitarian Affairs and the United Nations Department for Economic and Social Affairs. (97p.)
www.proventionconsortium.org

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(18) Vulnerability Assessment:

Vulnerability Assessment: National Scale: a) Disaster-Risk Index: BCPR-UNDP; b) Hot-Spots Model: World Bank c) Composite Vulnerability Index for Small Island States d) Small Island Developing States: Natural Disaster Vulnerability Indicators e) Social Vulnerability Index for Africa f) Disaster-Risk Indices: IADB-ECLAC-IES

Vulnerability Assessment: Megacity Scale

Vulnerability Assessment: Local Scale a) Vulnerability and Risk at Local Level: GTZ 2002 b) Household Sector Approach: CIMDEN 2001 c) Vulnerability at Community Level using Census Data: Guatemala d) Normalizing Vulnerability and Risk to Compare Communities e) A Holistic Approach for Seismic Risk in Cities: Bogota.

Coping Capacities; Resilience; Vulnerability Perception . . .

Source:

Villagrán de León, Juan Carlos (2006) Vulnerability: A Conceptual and Methodological Review Bonn: UNU Institute for Environment and Human Security (UNU-EHS), SOURCE 'Studies of the University: Research, Counsel, Education', UNU-EHS Publ. No.4/2006. (68p.) <http://www.ehs.unu.edu/file.php?id=191>

Comparative Table of Tools (incomplete)

	Action Aid PVA	APDC DRA	CARE (USA)		
<i>Coping matrix</i>	##				
<i>Focus Groups</i>	##				
<i>: Gender analysis Gender Needs Activity Profiles</i>		##			
<i>Hazard & Resources Map</i>		##			
<i>Insittuitonal analysis, Eg Venn</i>	##				
<i>Livelihood analysis</i>	##				
<i>Matrix Ranking. Proportional Piling,</i>		##			
<i>Opportunity analysis</i>					
<i>PRA</i>	##				
<i>Problem Trees</i>	##				
<i>Decision trees</i>					
<i>Seasonal Calendar</i>	##	##			
<i>Scenarios</i>	##				
<i>Historical Transect Timeline,</i>	##	##			
<i>Situation Aanalysis</i>	##				
<i>Stakeholder analysis</i>	##				
<i>vulnerability assessment</i>	##	##			
<i>Vulnerabnility Map</i>					
<i>Wealth ranking</i>					