

Making informed decisions for effective DRM programmes and actions

Dr. Carlos Villacis – GRIP Coordinator

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Overview



- Applications of RA for effective DRM
- Next steps

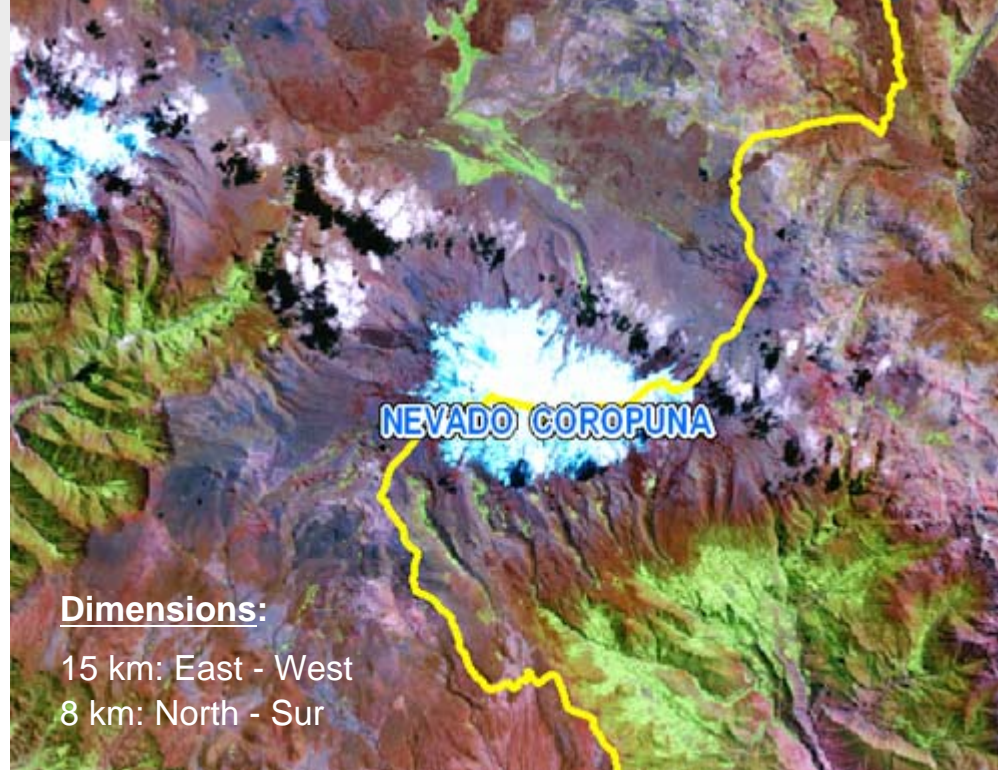
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Applications of Disaster Risk Assessment

- Climate change adaptation
- Urban development planning
- Support to humanitarian activities
- New policy for High-Risk Countries

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Climate change adaptation Arequipa-Peru

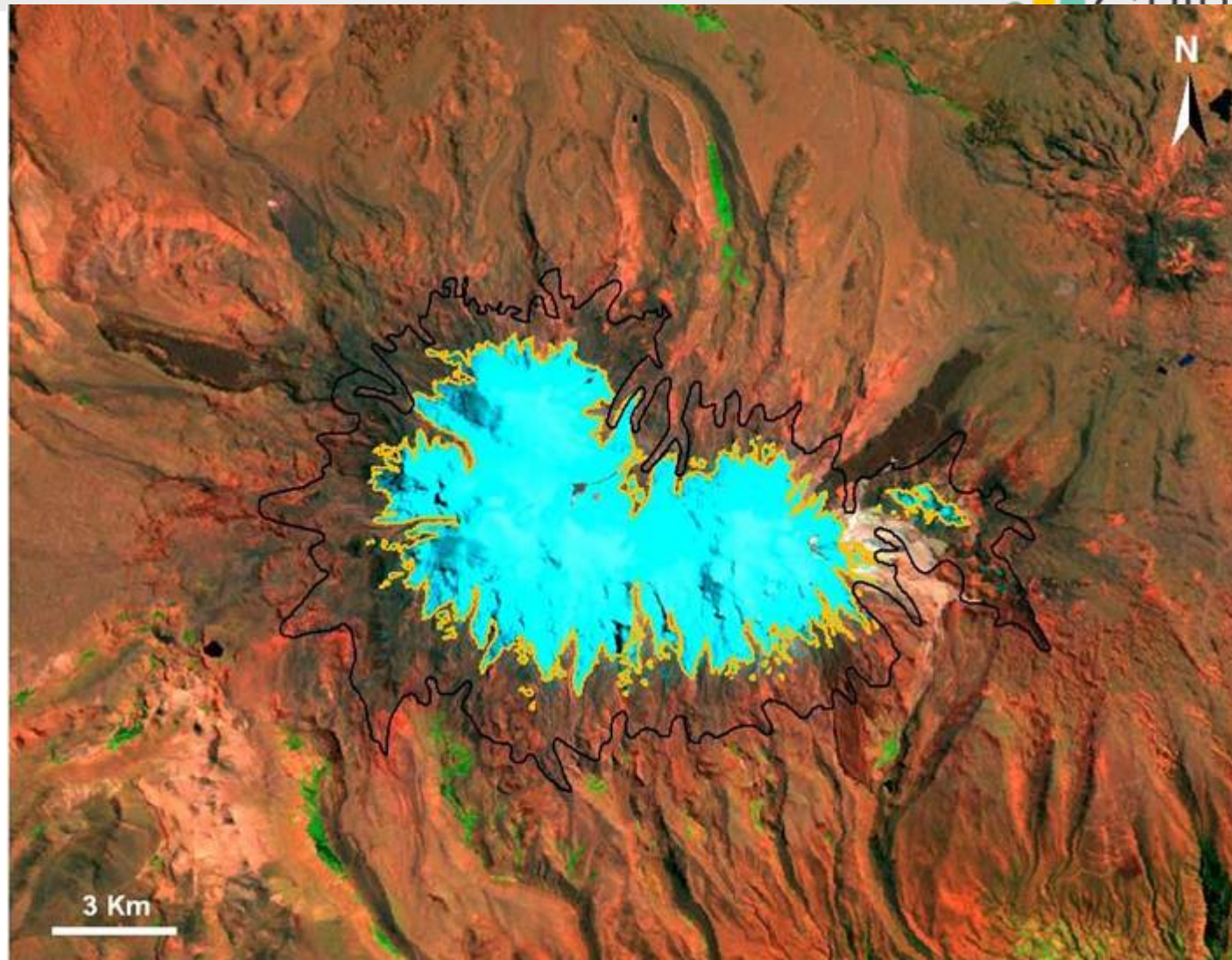


gtz



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Nevado
Coropuna
glacier
coverage
for 1955
(outline in
black) and
2003 (in
orange
outer
boundary).



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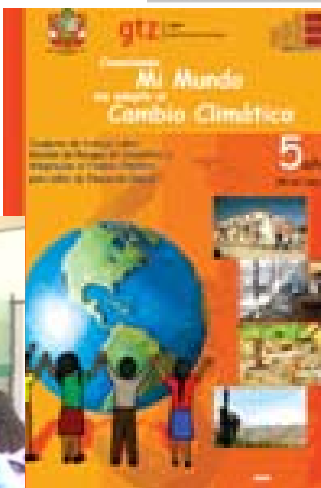
Tangible results



Incorporation of adaptation in development plans



Guidelines for CC adaptation in agricultural production



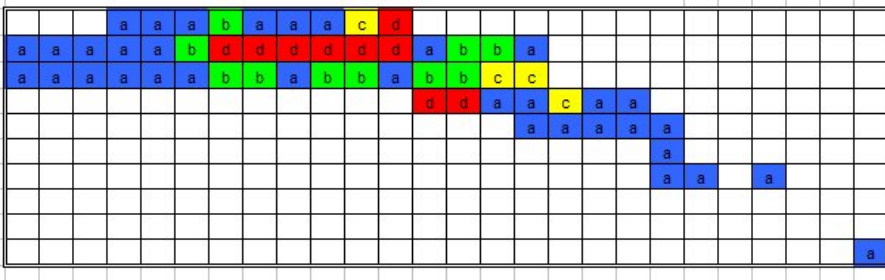
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Incorporation of DRM in development planning

Antofagasta, Chile

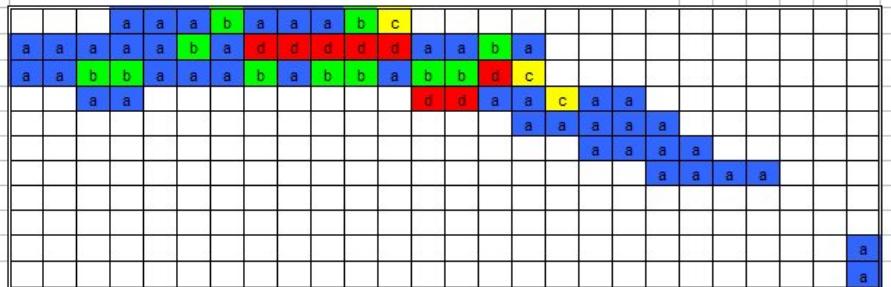


Map Using Automatic Range (Cell characters show ColorID)



2003

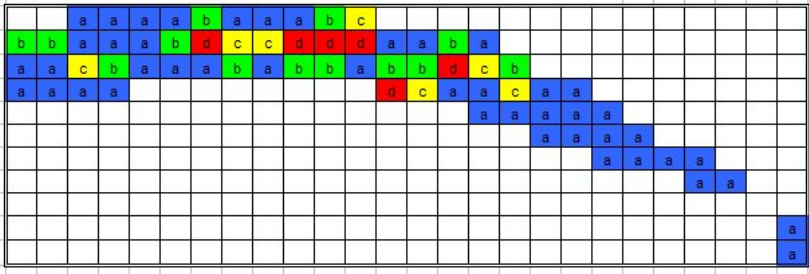
Map Using Automatic Range (Cell characters show ColorID)



2007

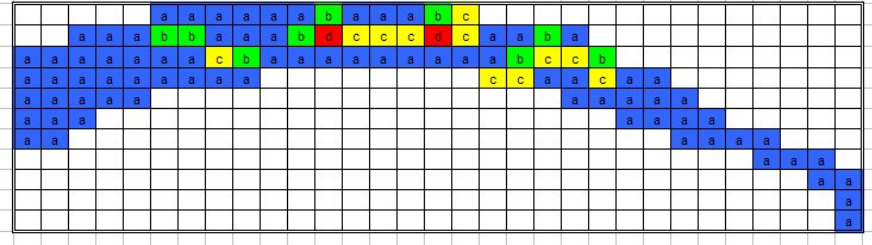
**Estimating
current and future
risk**

Map Using Automatic Range (Cell characters show ColorID)



2012

Map Using Automatic Range (Cell characters show ColorID)



2022

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Engaging all stakeholders in the process



Working session with city planners

Public seminar to discuss the project results



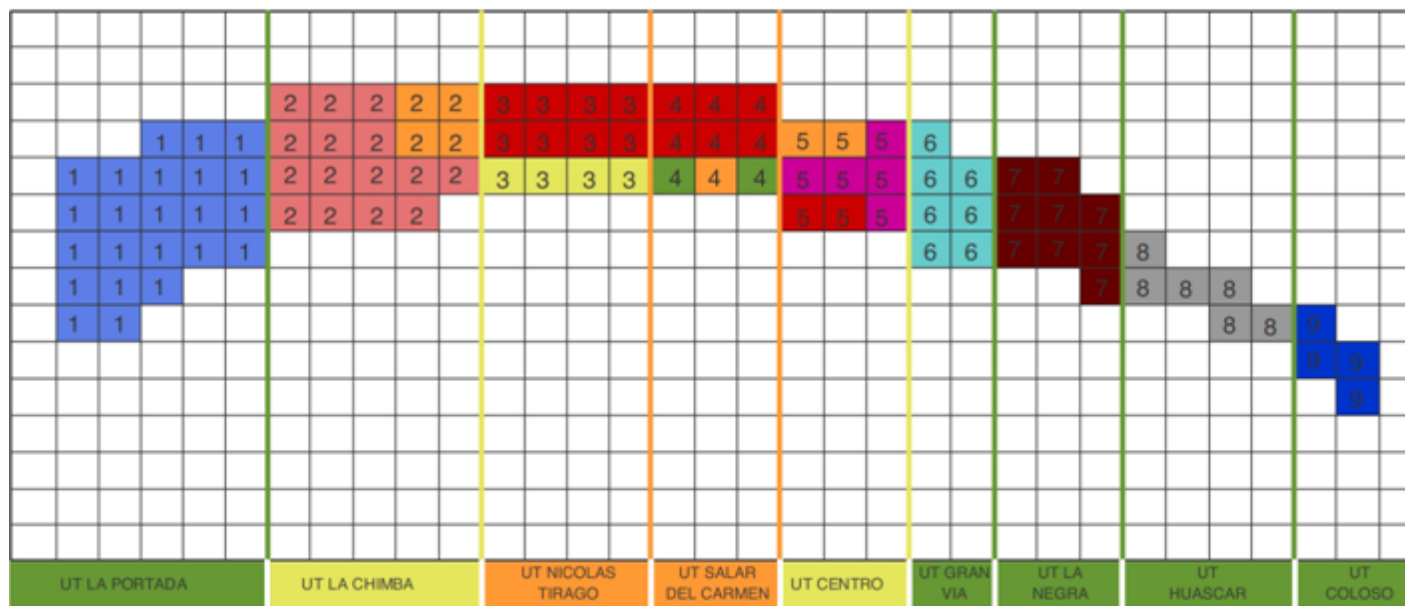
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Planning development

New land-use zoning considering levels of risk

■ CRITICO
 ■ ALTA
 ■ MEDIA
 ■ BAIXA

NIVEL DE RISCO - Antofagasta Chile



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Support to humanitarian activities



International Federation
of Red Cross and Red Crescent Societies

Risk Mapping for Strategic Planning of Shelter Response in Tijuana, Baja California, México.



H. AYUNTAMIENTO
TIJUANA B.C.

AGREEMENT OF COOPERATION
between
UNITED NATIONS HUMAN SETTLEMENTS PROGRAMME

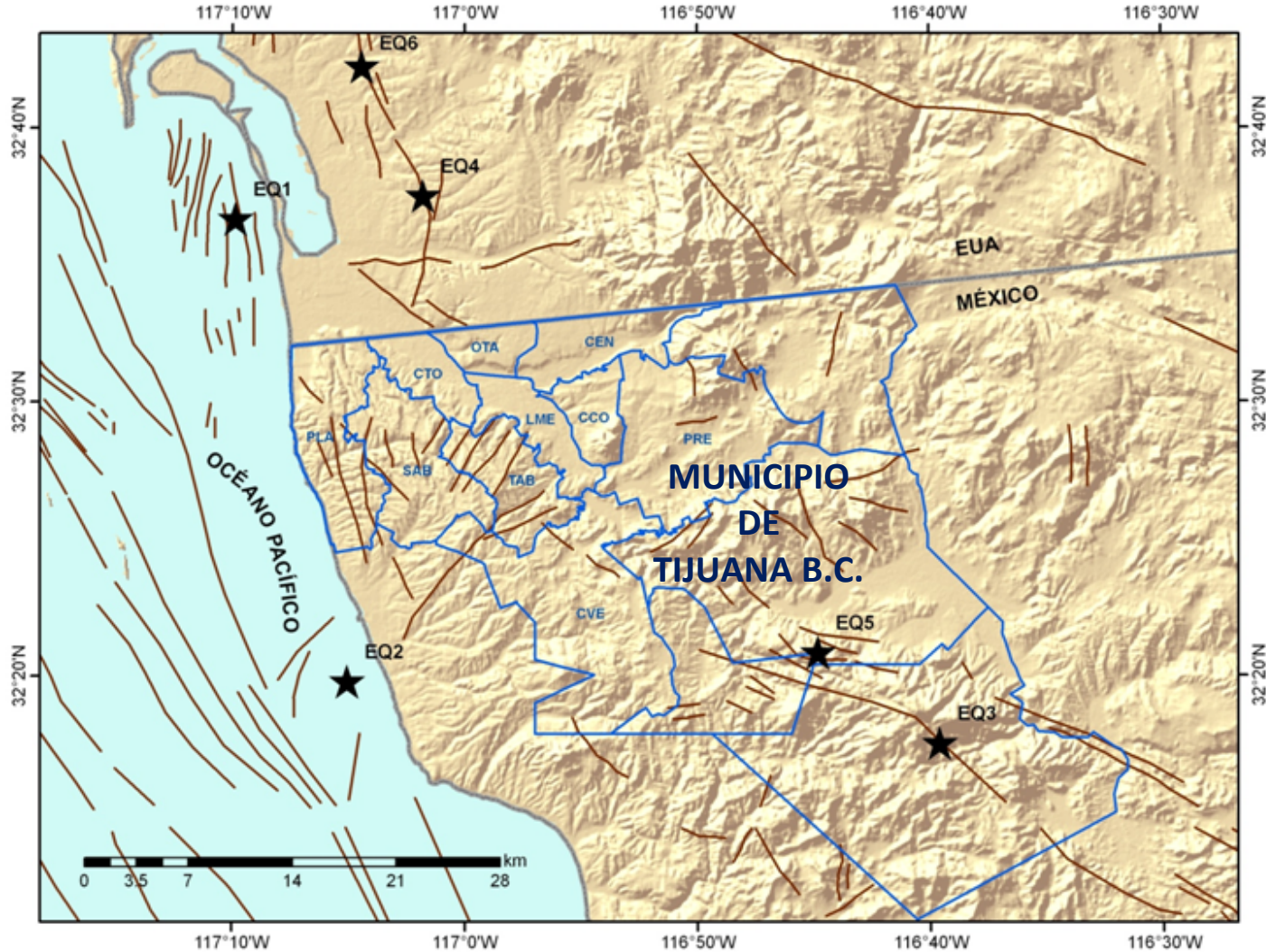
**Antonio Rosquillas and Luis
Moreno**
Municipio de Tijuana



CENTRO DE INVESTIGACIÓN
CIENTÍFICA Y DE EDUCACIÓN
SUPERIOR DE ENSENADA.

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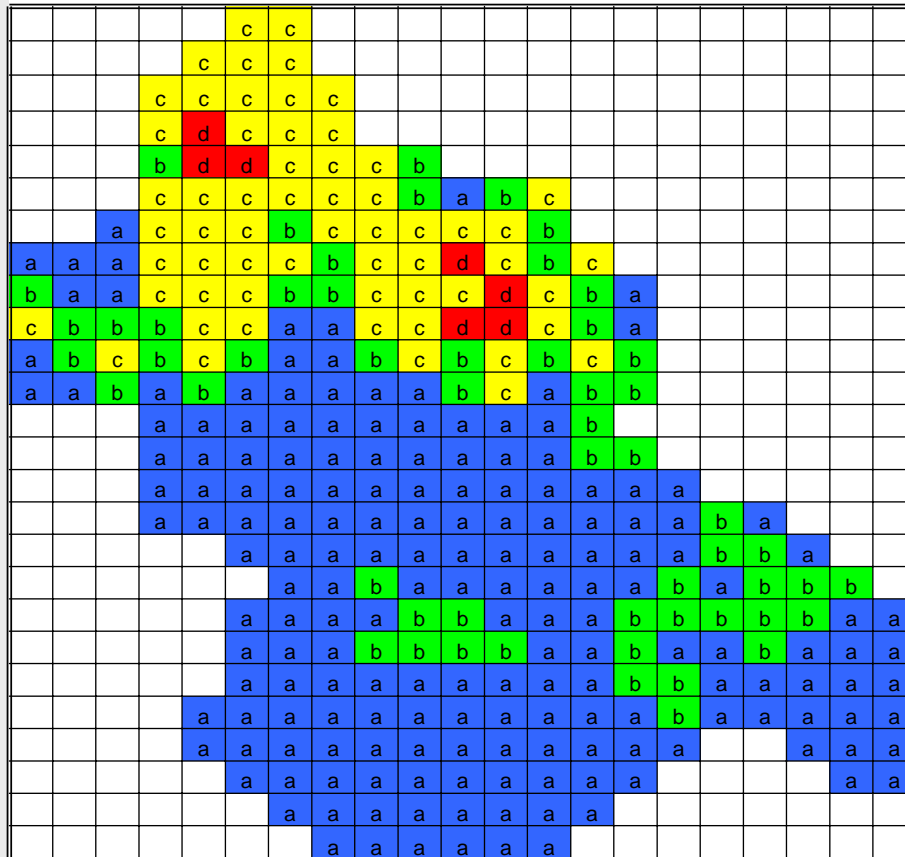
6 possible earthquakes



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Damage Evaluation

Estimated distribution of buildings damage



Color ID	Automatic Range		Manual Range	
	From	To	From	To
a	0	18	0	18
b	18	35	18	35
c	35	53	35	53
d	53	70	53	70



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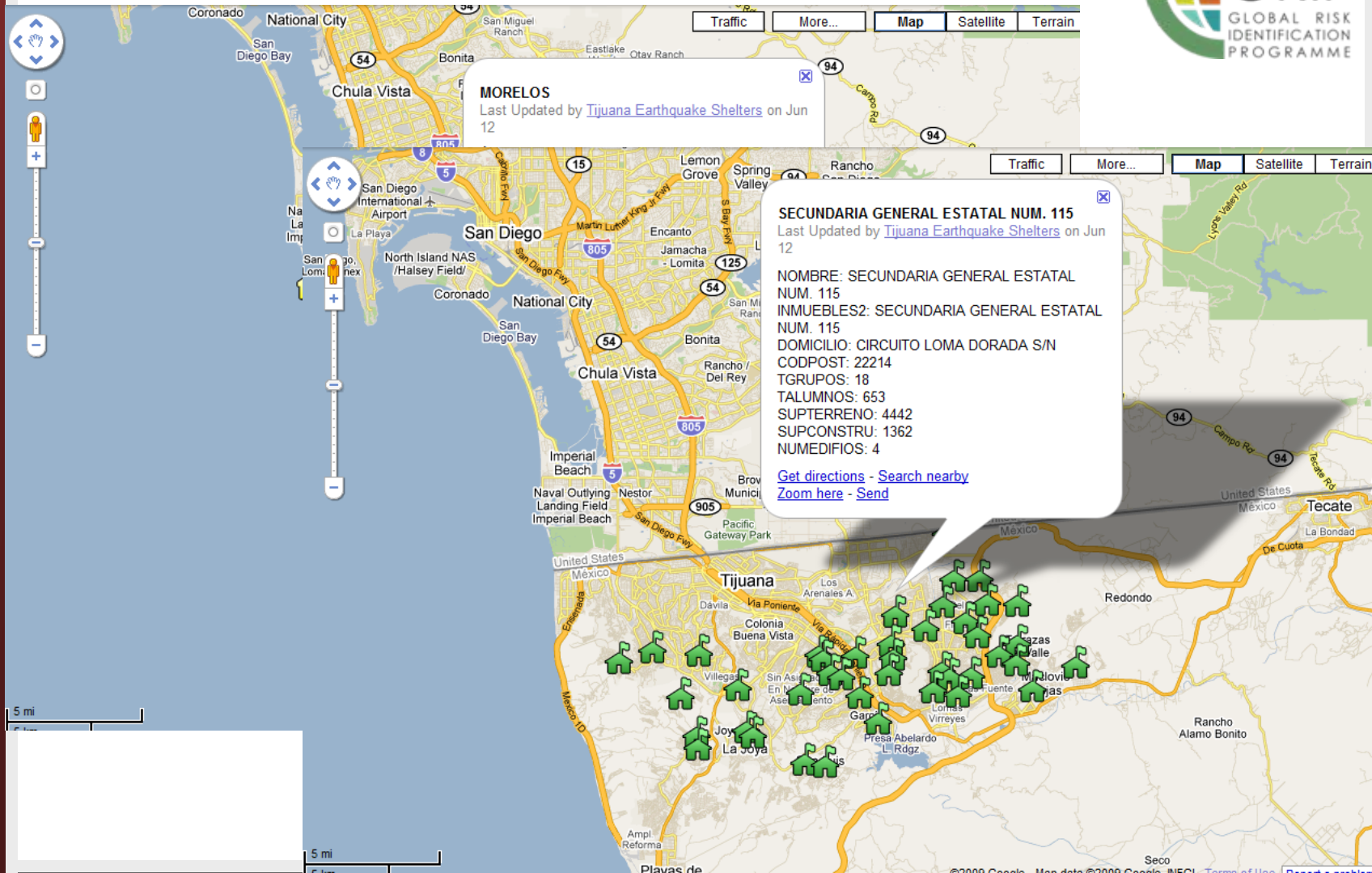
Results

	SAB	CEN	CTO	CCO	CVE	LME	PRE	OTA	PLA	TAB	Total
EQ1	10,000	4,622	8,917	3,282	1,226	5,839	7,276	4,497	6,372	6,246	58,277
EQ2	12,392	4,593	6,853	3,661	3,184	7,012	8,576	3,341	5,335	9,503	64,449
EQ3	3,025	2,792	1,942	2,400	1,360	2,751	8,457	1,266	947	3,648	28,588
EQ4	12,465	10,140	11,085	6,676	1,703	9,942	15,133	7,984	6,019	10,169	91,316
EQ5	4,986	4,504	2,900	4,289	2,581	5,317	16,561	1,993	1,456	6,338	50,925
EQ6	6,411	6,063	5,761	3,581	1,032	4,979	8,437	3,985	3,216	4,979	48,444

Number of persons with shelter needs estimated
for the six earthquake scenarios

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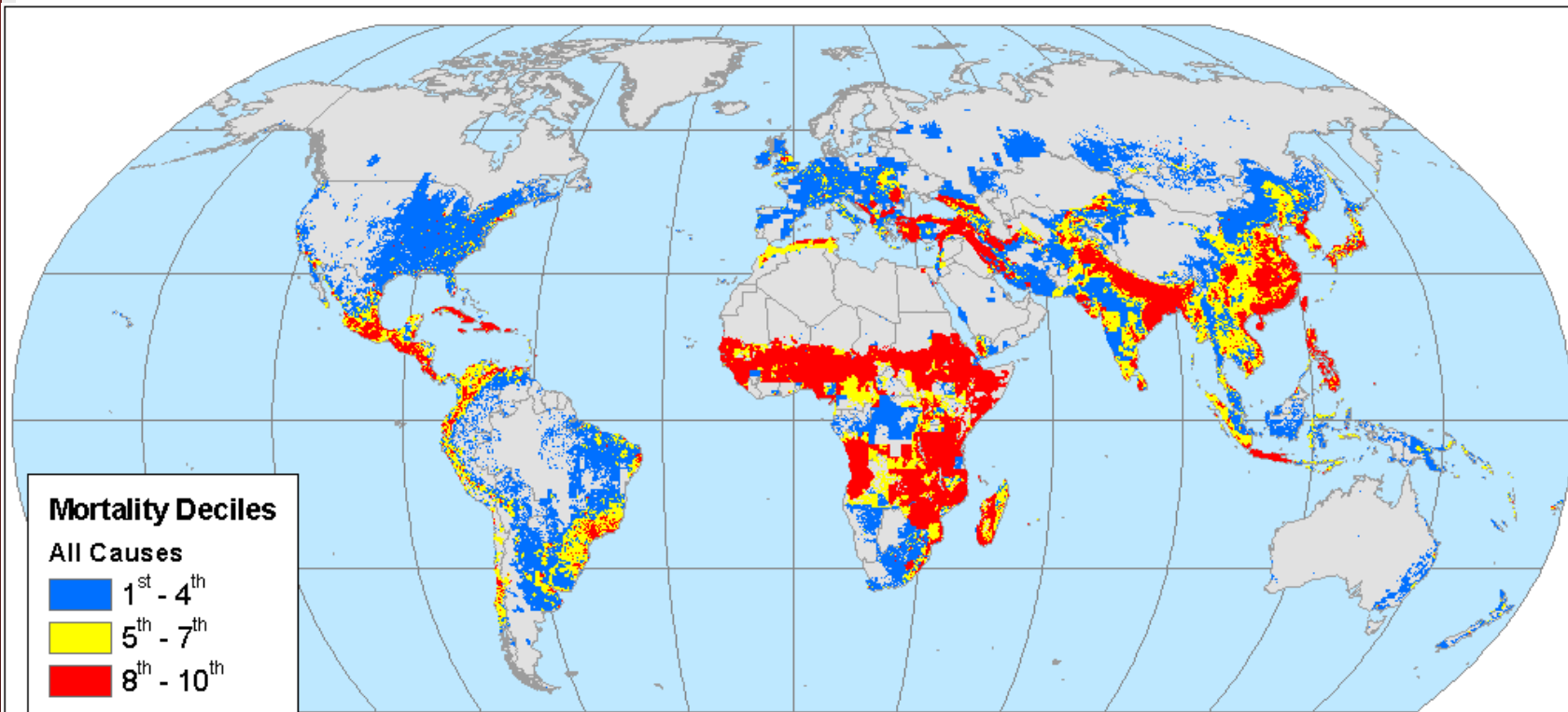
Shelter plan uploaded on Google Map



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Global distribution of mortality risk

1992-2003, \$ 2 billion (out of 2.5 billion) of costs of responding to international emergencies went to just 20 countries (OCHA)

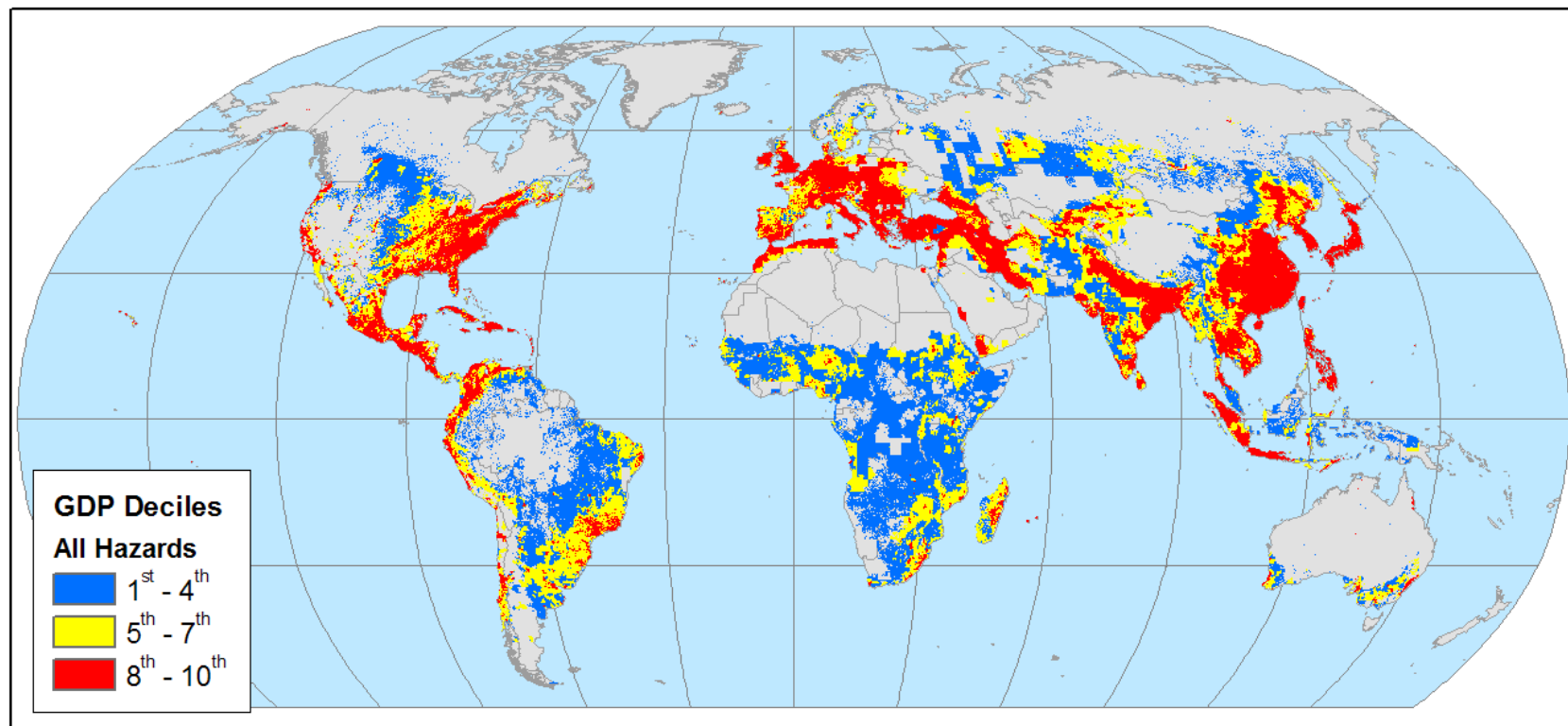


China, India, Bangladesh, Egypt, Mozambique, Turkey, Afghanistan, El Salvador, Kenya, Iran, Pakistan, Indonesia, Peru, Democratic Republic of Congo, Poland, Vietnam, Colombia, Venezuela, Tajikistan, Cambodia

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Global distribution of financial risk

1980-2003, of \$14.4 billion in WB emergency recovery loans, \$12 billion went to just 20 countries (WB)



India, Turkey, Bangladesh, Mexico, Argentina, Brazil, Poland, Colombia, Iran, Honduras, China, Chile, Zimbabwe, Dominican Republic, El Salvador, Algeria, Ecuador, Mozambique, Philippines, and Vietnam

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- **Next steps**

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1- Current situation assessment



- Standard assessment of the current situation in the countries of the region
- Systematic inventory of existing work, capacities, institutional frameworks → Comparable country profiles
- Identify common needs and challenges that can be addressed as regional efforts to maximize impact and promote collaboration

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1- Concrete proposal



- 16 countries of the region
- Coordinated by ECOWAS
- Duration ~ 6 months
- Resulting country profiles accessible online
- Basis for delineation of regional DRR strategy

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2- Regional Disaster Database



- Start National Disaster Observatories in 2-3 pilot countries
- Involve all the countries in the process
 - Capacity development
 - Sharing of experiences
 - Prepare a regional initiative
- Start the development of Regional Disaster Database
 - Support national DRR programs
 - Support regional DRR programs
 - Integrate to global efforts

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2- Concrete Proposal



2-3 pilot countries selected

Coordinated by ECOWAS

Advisory committee formed by other countries

Technical support committee → technical institutions of the region

Capacity Development as a priority

2 years to complete the first phase

Start the regional effort in the 2nd year

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3- Urban risk assessment



- Risk assessment with participation of all sectors
- Revision of contingency plans
- Long-term DRM action plans
- Incorporation of DRM in Urban Planning

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3- Concrete proposal



- 3-5 pilot cities selected
- Coordinated by ECOWAS
- Close collaboration with UN-Habitat
- Advisory committee formed by other countries (local authorities)
- Technical support committee → technical institutions of the region
- Capacity Development as a priority

- 2 years to complete the first phase
- Start the regional effort in the 3rd year

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