

# WELCOME

*The webinar will start soon.*

Meanwhile, thanks for indicating in the text box your name, organisation and position

**Key products of the Platform**  
**Useful tools, guidance and documentation**  
for practitioners in  
Disaster Risk Reduction (DRR) /  
Climate Change Adaptation (CCA)

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*WEBINAR 17 Dec 2019*

**Key products of the Platform**  
**Useful tools, guidance and documentation for**  
**practitioners in**  
**Disaster Risk Reduction (DRR)/**  
**Climate Change Adaptation (CCA)**





# Structure of the webinar

❖ Introduction

❖ 6 Platform products

> Presentation (10min), followed by Q&A (5 min)

- DRR/CCA mainstreaming guidance
- Where people and their land are safer - Compendium of Good Practices in DRR
- Advocacy packing list: Towards climate and disaster resilient development
- Inclusive DRR Hands-on Tool
- Indicator Tool Box
- Evaluation of cost-benefit analysis tools for DRR

❖ Outlook Platform events 2020



# Introduction

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## Some starting remarks

- ❖ Please mute your mic during the presentations
- ❖ Questions: 1) using the chat function. 2) orally after the presentations.
- ❖ The webinar presentation will later be on our website [www.drrplatform.org](http://www.drrplatform.org)

# The Swiss NGO DRR Platform



- Network of 17 Swiss-based NGOs
- Dedicated to increase resilience of women and men, communities and governments through an integrated approach to Disaster Risk Reduction (DRR) and Climate Change Adaptation (CCA)
- 3 pillars: Capacity building, Technical advice and Advocacy
- Co-funded by SDC



Visit us online at  
[www.drrplatform.org](http://www.drrplatform.org)

# The presenters



**Jana Junghardt**  
Caritas Switzerland



**Manuel Rothe**  
CBM Switzerland



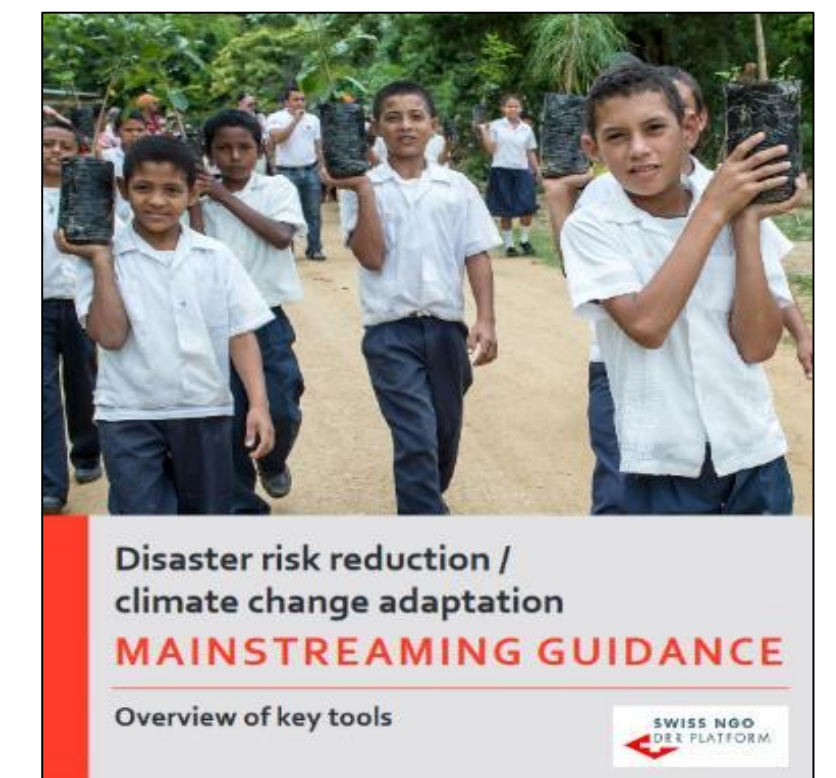
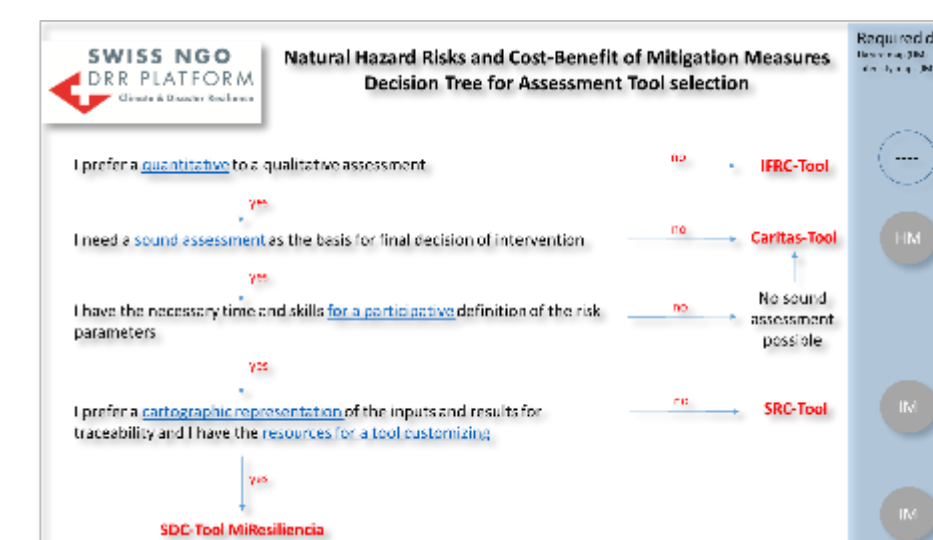
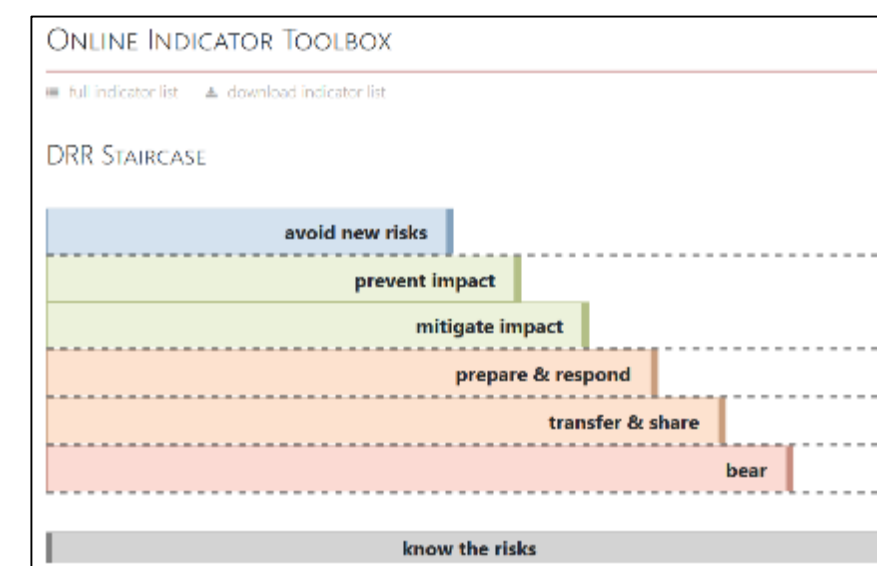
**Anton Jöhr**  
Swiss Red Cross



**Georg Heim**  
Swiss Red Cross



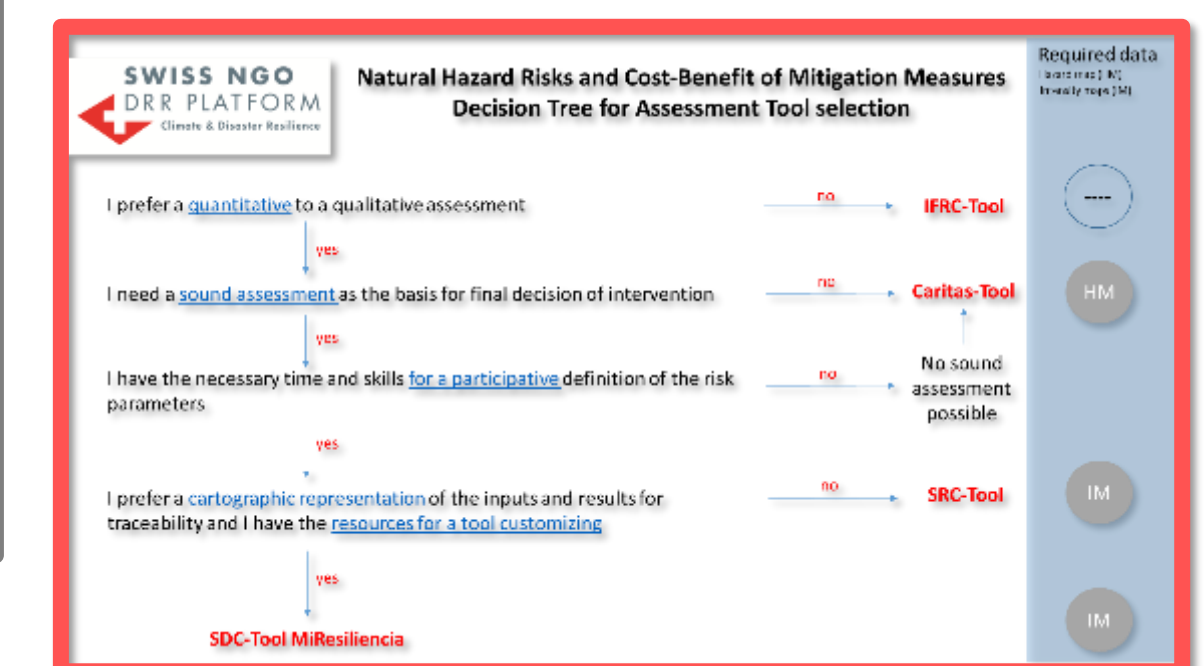
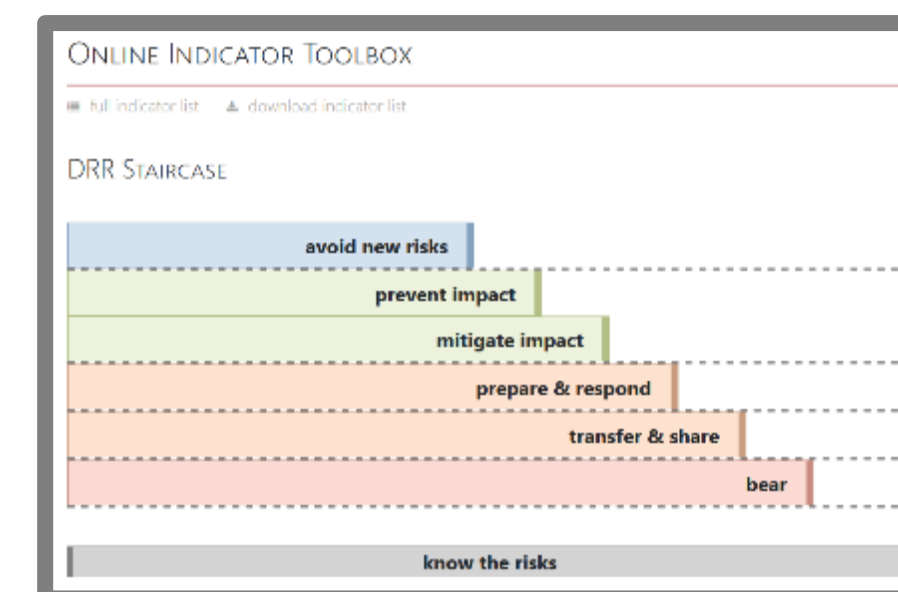
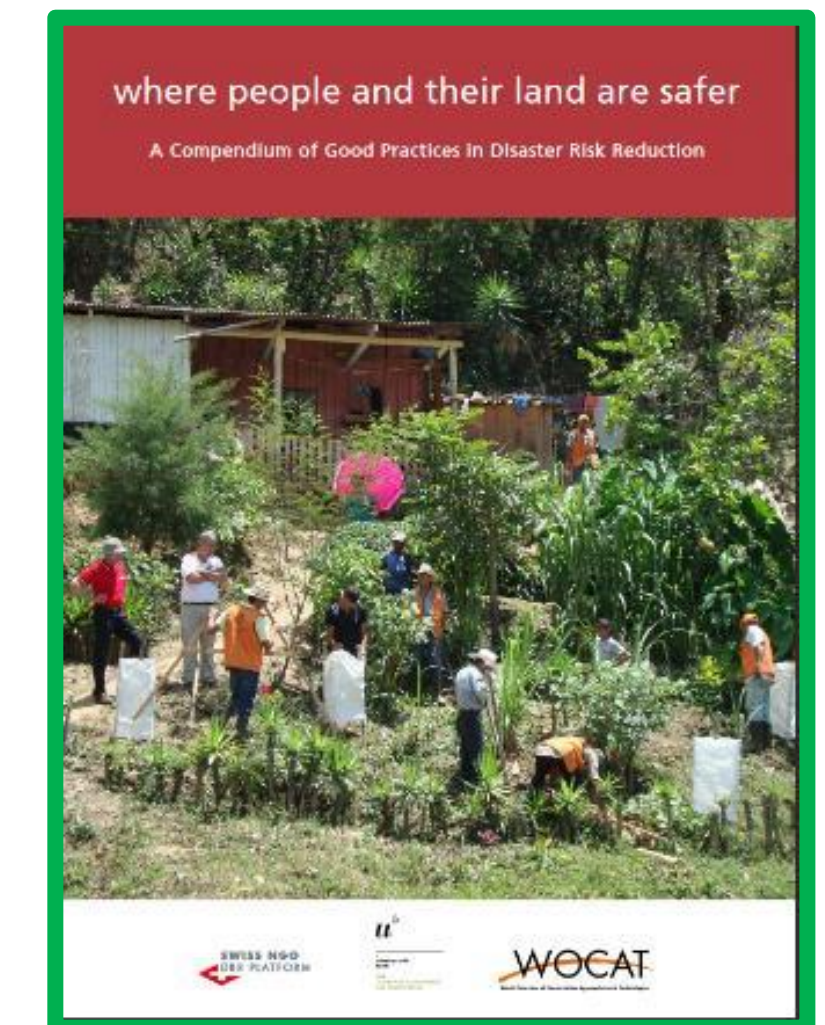
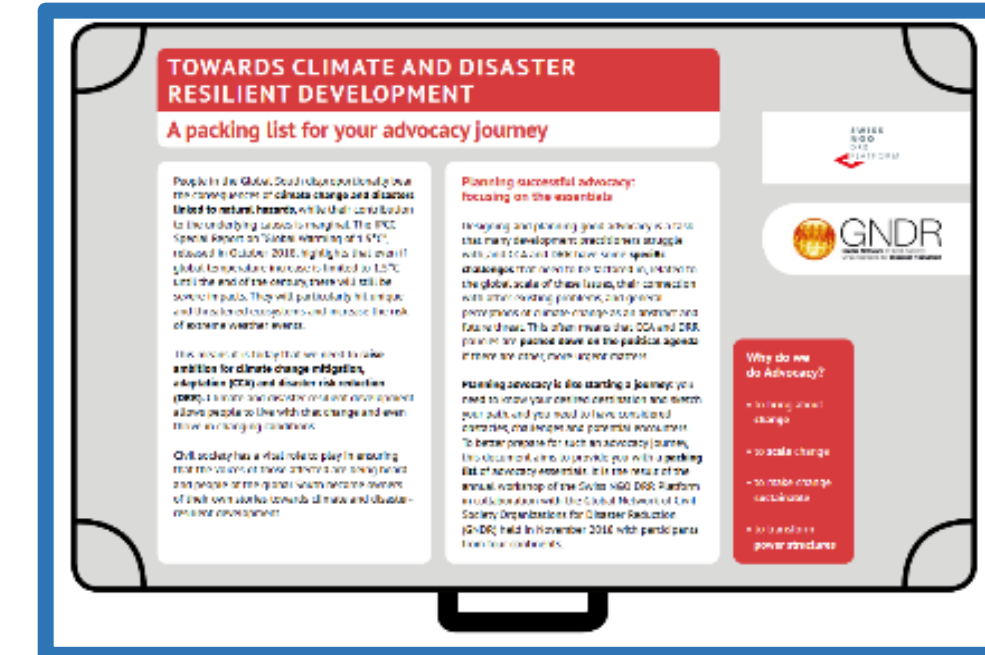
**Eveline Studer**  
Helvetas



# 6 Platform products

- DRR/CCA mainstreaming guidance
- Where people and their land are safer - Compendium of Good Practices in DRR
- Inclusive DRR Hands-on Tool
- Advocacy packing list: Towards climate and disaster resilient development
- Indicator Tool Box
- Evaluation of cost-benefit analysis tools for DRR

All Platform products are accessible here:  
<https://www.drrplatform.org/publications.html>



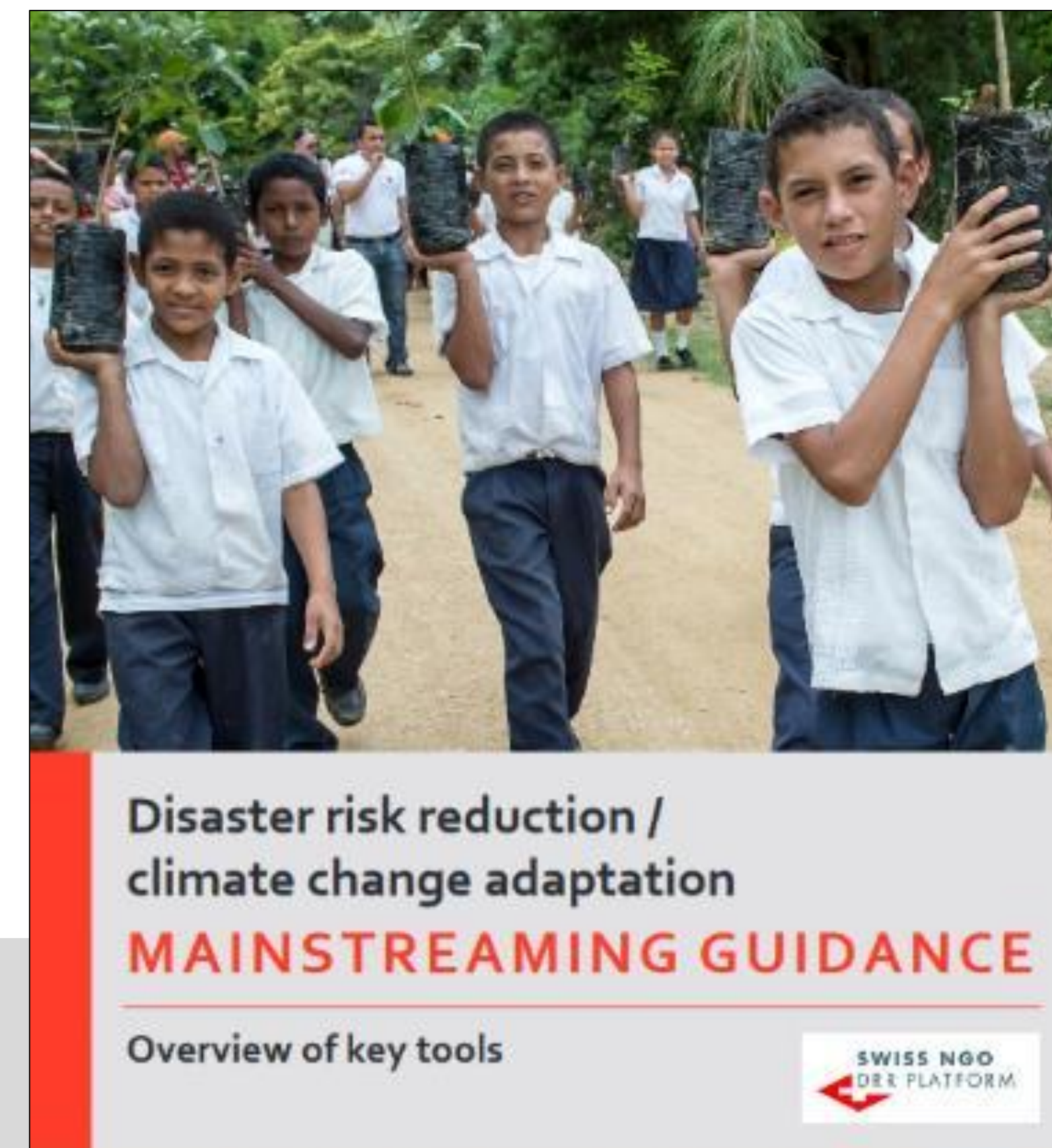
# Products and process

- ❖ Documentation of best practices
- ❖ Guidance
- ❖ Tools
- ✓ Target audience
- ✓ Working groups
- ✓ Feedback by practitioners
- ✓ Events for promotion



# DRR/CCA mainstreaming guidance

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# Objectives and content

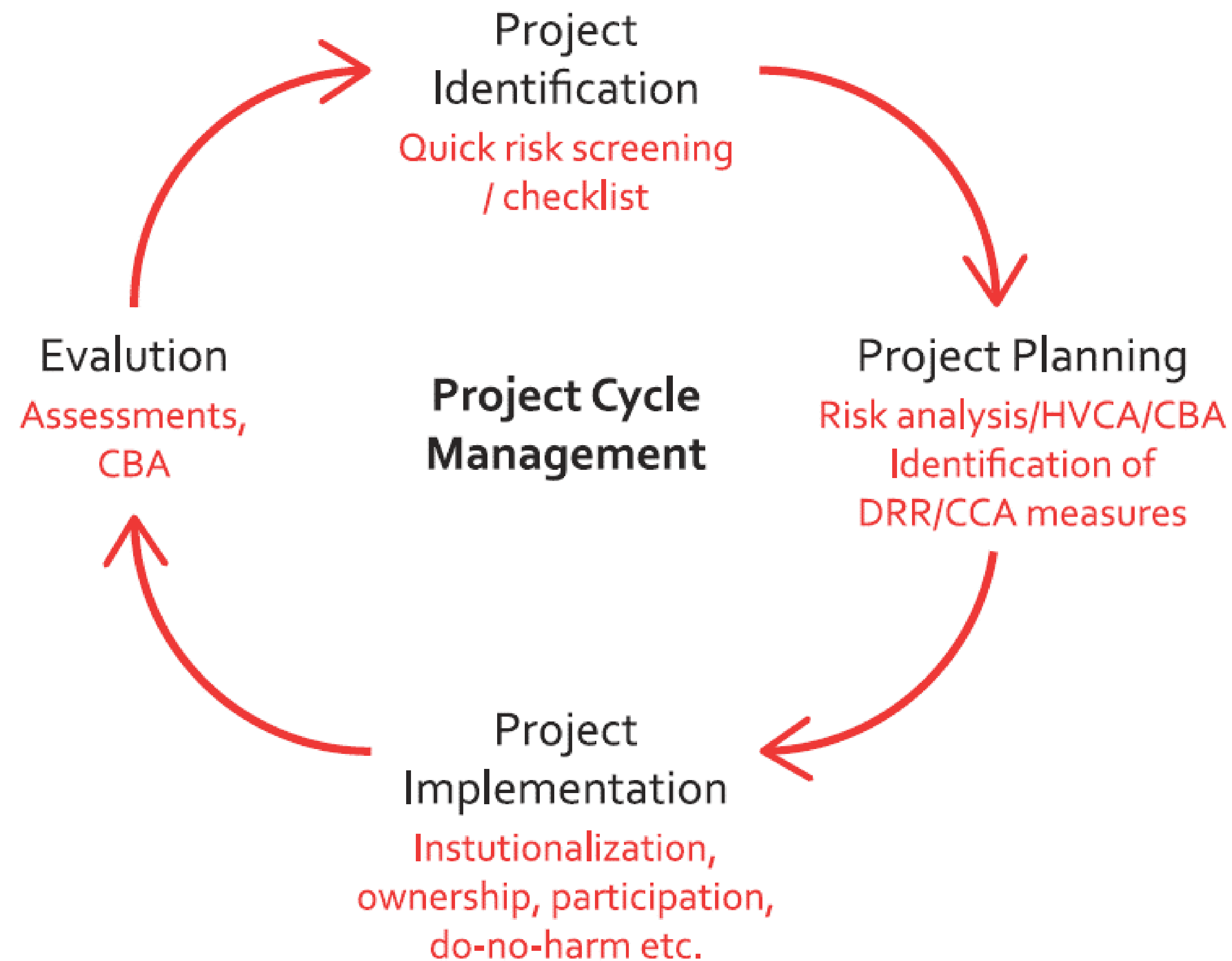
## Mainstreaming DRR/CCA in sectors/contexts &

### Objectives:

- 1) Principles for DRR/CCA mainstreaming
- 2) Support the identification of appropriate tools
- 3) Advantages and challenges of the main tools
- 4) Further tools and web-resources

<b>1. About this guide</b>	<b>4</b>
1.1. Rationale for disaster risk reduction / climate change adaptation mainstreaming and this guide	4
<b>2. General considerations for mainstreaming</b>	<b>5</b>
2.1. Fostering an enabling environment	5
2.2. Added value and limitations of tools	5
<b>3. DRR/CCA mainstreaming in project cycle management</b>	<b>7</b>
3.1. Project stages and relevance of DRR/CCA	7
3.2. Guidance related to project cycle management	7
3.3. Main tools related to project cycle management	9
<b>4. DRR/CCA mainstreaming in different sectors and contexts</b>	<b>10</b>
4.1. Overview of sectors and contexts and relevance of DRR/CCA	10
4.2. Guidance related to sectors and contexts	11
4.3. Main tool inventories	11
<b>5. Descriptions of the main tools</b>	<b>12</b>
5.1. Main tools for DRR/CCA mainstreaming in project cycle management	12
5.2. Compendia of web-based tools	28
<b>ANNEX Excel tool with search filters</b>	<b>32</b>

# DRR/CCA along PCM



# Main tools related to PCM

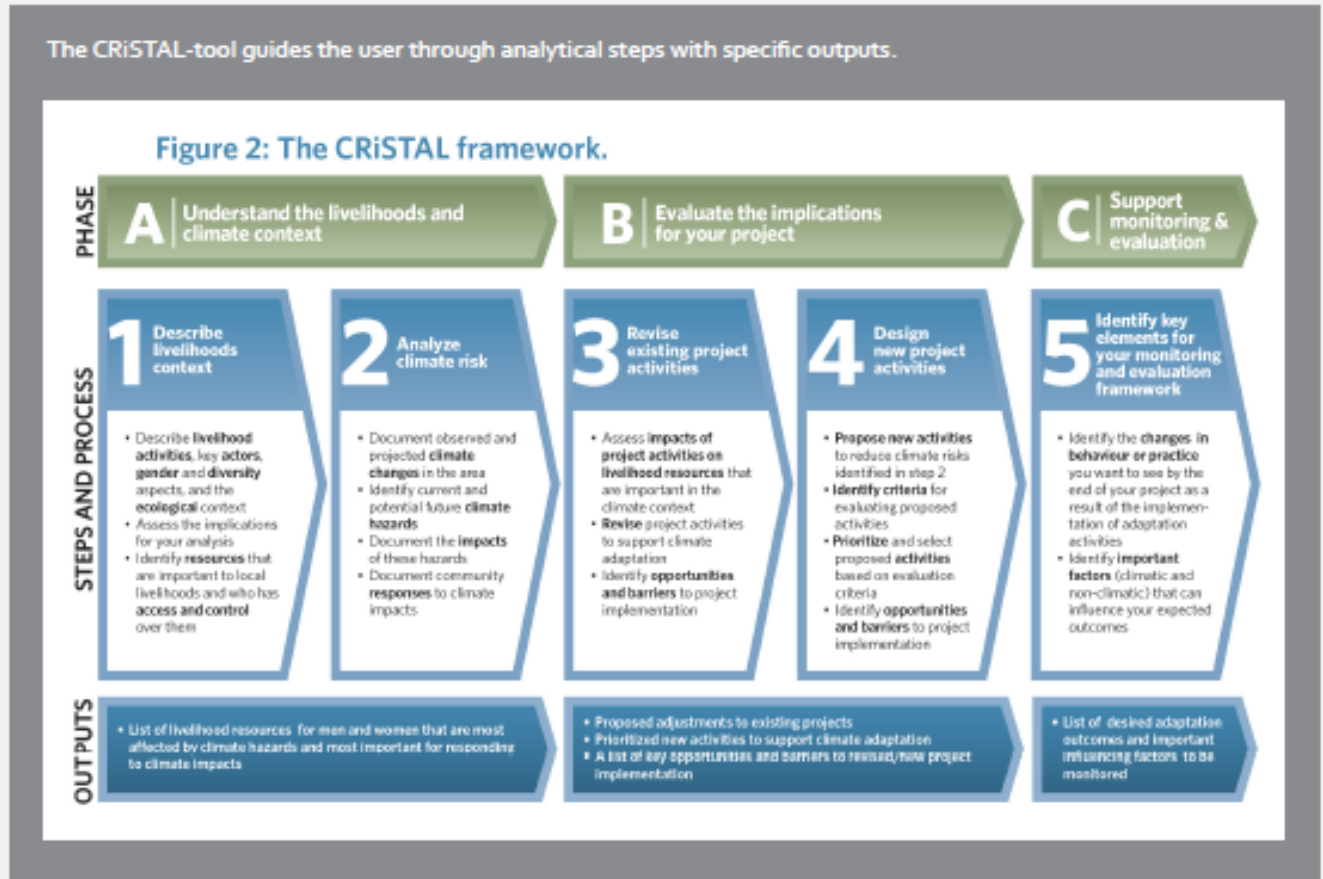
	Name of tool — institution	Application context	Depth	Time requirement	Use by Platform members
1	Climate, Environment and Disaster Risk Reduction Integration Guidance (CEDRIG) Module Light – SDC	Project Management (PM)	Main-streaming	Short	Applied
2	Enhanced Vulnerability and Capacity Assessment (EVCA toolkit) – IFRC	Community-based	Trend to targeted	Time intensive	Co-developed
3	Participatory Assessment of Climate and Disaster Risks (PACDR) Bread for all, HEKS, Brot für die Welt	Community-based	Trend to targeted	Time intensive	Co-developed
4	Community-based Risk Screening Tool – Adaptation and Livelihoods (CRiSTAL) – Helvetas, IISD, SEI, IUCN	Community-based	Trend to targeted	Time intensive	Co-developed
5	DRR Toolkit – World Vision Asia Pacific	Community-based/PM	Trend to targeted	Time intensive	Applied
6	CEDRIG (Modules Operational & Strategic) – SDC	Project Management	Trend to targeted	Rather time intensive	Applied/ known
7	Climate change and Environmental Degradation Risk and adaptation Assessment (CEDRA) – Tearfund	Community-based	Trend to targeted	Time intensive	Applied/ known
8	A guide to mainstreaming DRR and CCA – IFRC	Community-based/PM	Main-streaming	Rather short	Applied/ known
9	Mainstreaming DRR - a tool for development organisations – Tearfund	Project Management/ institutional focus	Main-streaming	Rather short	Known

## 4. COMMUNITY-BASED RISK SCREENING TOOL – ADAPTATION AND LIVELIHOODS (CRISTAL)

Author: Helvetas, IISD, SEI, IUCN – 2007 to 2015

Purpose: Project planning tool to design activities that support climate adaptation at the community level.

### a) Structure and content



## 2 pager summary

- Structure & content
- Advantages & limitations
- Download link

### b) Advantages and limitations

#### ADVANTAGES

- Allows an in-depth participatory assessment and planning process
- Three thematically adjusted versions: food security, forests, and parks
- First developed in 2007, since then adjusted and updated in over 30 countries, based on a broad community of users and experts
- Desktop version allows collection of results in electronic version
- Recognised tool by IPCC, part of other toolkits from CARE, Provia, World Bank, etc.
- Manual in English, French, Spanish

#### LIMITATIONS

- Time intensive application; requires typically a two- or three-day workshop
- Requires a good facilitator with experience in the tool (no self-study application)
- Focus on CCA (more than DRR), specific for community-based planning
- Tool application leads to rather important DRR/CCA measures or even stand-alone DRR/CCA components so is not appropriate where financial or human resources for DRR/CCA mainstreaming are low

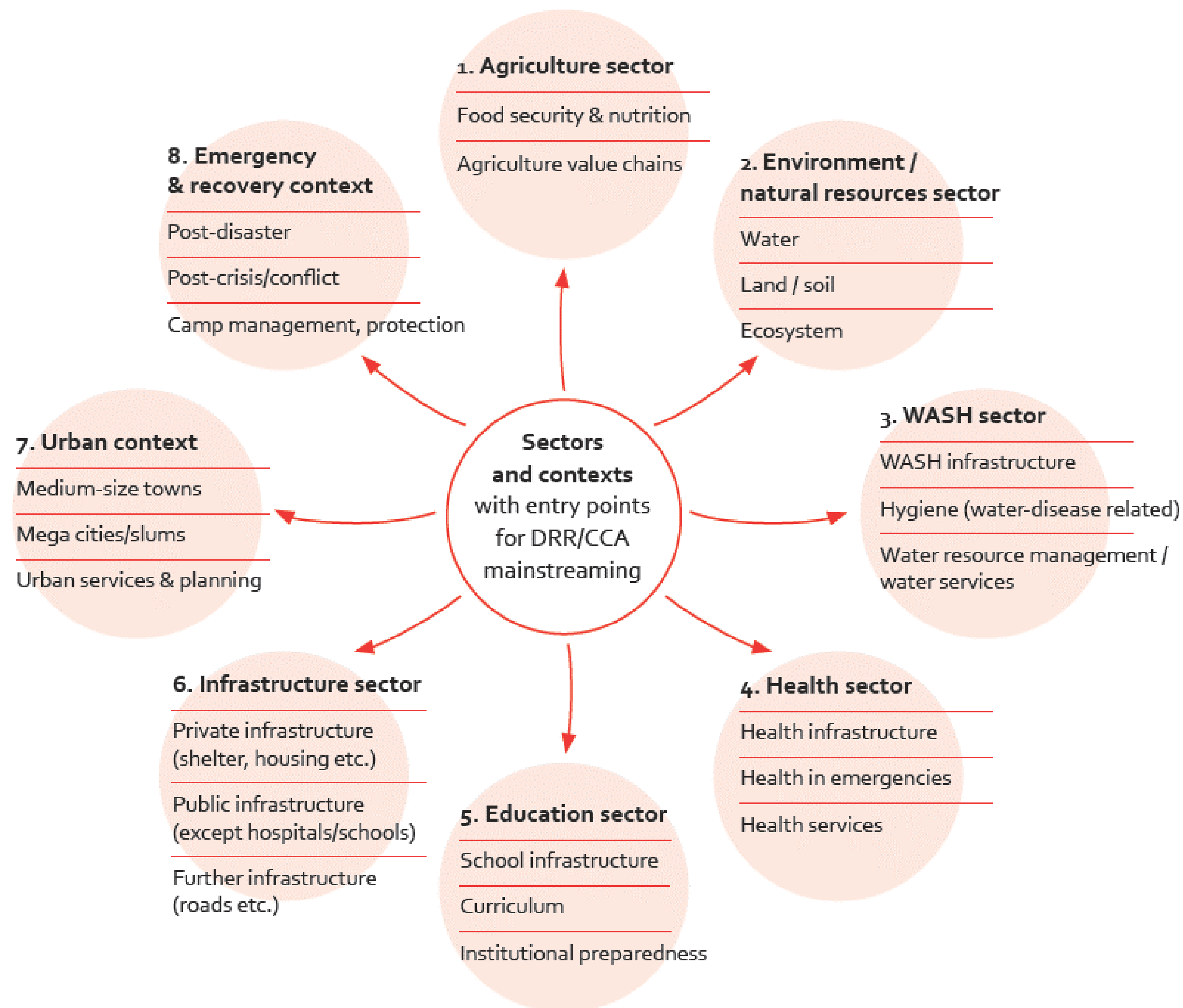
#### GENERAL COMMENTS REGARDING SECTORS AND PCM STAGES

- The tool refers mainly to the implementation stage – during a community-based planning process – based on the assumption that DRR/climate change is project-relevant. The earlier the tool is introduced, the better for planning. It requires a good understanding of community dynamics, e.g. key informants and leader for ownership, support and implementation.
- The structure of CRiSTAL was the basis for developing other tools such as CEDRIG (SDC) and PACDR (BfA/HEKS/BfdW).

### c) Download and further information

Different versions of the manual, brochure, etc. <https://www.iisd.org/cristaltool/download.aspx#crystal-version-5>

# DRR/CCA in sectors and contexts



# Compendia of tools

Name of compendium - institution	Filter options	Number of tools	Type of references
Inventory of tools & methodologies to support ecosystem-based adaptation (IIED, IUCN, UNEP-WCMC)	Sectors/contexts PCM stages	222	Tools
Knowledge learning website (weADAPT)	Sectors/contexts PCM stages	Hundreds	All
Tools and Methods (UNFCCC)	Sectors/contexts PCM stages	311	Tools/ frameworks
World Overview of Conservation Approaches and Technologies (WOCAT) (CDE)	Soft/hard measures Environmental contexts	Approx. 1,800 practices	Instruction notes/ fact sheets

# Excell annex with all tools

	A	C	D	E	F	G	H	I	J	K	
1	No.	Filter options for research									
2		Title	Institution	Year	Language	Sector	Context	Rate	User profile	key words	Web-link
3		Language									
4				(if	E: english	Agriculture	default: none	1= great /	Default: any		
5					Sp: spanish	environment	options:	2= recommended	Fw: field		
6					F: french	WASH	urban	3=interesting	PM: project		
7					Ge: German	health	emergency /		HO: strategic		
8					various	infrastructure					
9						education					
13											
14	1	Implementing nature-based flood protection: Principles and implementation guidance	WB	2017	E	Environment		1	Fw, PM, HO	nature-	<a href="#">d/en/73942150942</a>
15	2	Protected Areas as Tools for Disaster Risk Reduction. A handbook for practitioners.	IUCN	2015	E	Environment		1	PM, HO	areas,	<a href="#">areas-tools-disast</a>
16	3	based adaptation responses in the Greater Mekong Sub-Region	W/WF	2013	E	Environment		2	PM, HO	based	<a href="#">utions/ecosystem</a>
17	4	A Landscape Approach for Disaster Risk Reduction in 7 steps	Wetlands	2017	E	Environment		3	Fw, PM	approach;	<a href="#">andscape-approac</a>
18	5	Natural and Nature-based Flood Management: A Green Guide (Flood Green Guide)	W/WF	2017	E	Environment		1	Fw, PM	flood	<a href="#">http://envirodm.org</a>
19	6	Europe - Capturing the multiple benefits of nature-based solutions	EU	2014	It	Environment		1	PM, HQ	flood	<a href="#">ation-detail/-/publi</a>
20	7	Assessments to Inform Ecosystem-based Adaptation	UNEP WCMC	2015	E	Environment		3	Fw, PM	and impact	<a href="#">undp.org/sites/def</a>
21	8	Where people and their land are safer - A Compendium of Good Practices in DRR	CDE/WOCAT	2017	E	Environment, agriculture		2			<a href="#">https://www.wocat</a>
22	9	WOCAT data base	CDE/WOCAT		varia	Environment, agriculture		2			<a href="#">https://qcat.wocat</a>
23	10	Climate-Smart Agriculture (CSA) Sourcebook	FAO	2017	Ar, Ch	Agriculture		2	LA	climate	<a href="#">agriculture-source</a>
24	11	Guideline - Assessing Climate Risks and Vulnerabilities in Market Systems	Helvetas	2017	E, F, SP	Agriculture		1	Fw, PM,	vulnerability	<a href="#">https://www.helvet</a>
25	12	Guidance Notes.	WB	2010	E	Agriculture		2	Fw, PM	agriculture,	<a href="#">https://www.prever</a>
26	13	PEDRR Virtual Library	PEDRR		E	Environment		3			<a href="#">readings/pedrr-virt</a>
27	14	PreventionWeb Knowledge Base - Environment & Ecosystems	UNISDR		E	Environment		3			<a href="#">ons/list/#hits=208:s</a>
28	15	Integrated Drought Management (online platform)	WMO, GWP		E	environment, agriculture		2			<a href="#">https://www.wmo.int/dro</a>
29	16	Integrated Flood Management (online platform)	WMO, GWP		E	environment, agriculture		?			<a href="#">cation/</a>
30	17	Nature-based Solutions to Climate Change Adaptation in Urban Areas: Linkages between Science, Policy and Practice	Kabisch et al (eds.)	2017	E	Environment	urban	4/5			<a href="#">https://link.springer</a>
31	18	Ecosystem-Based Disaster Risk Reduction and Adaptation in Practice	Herzog et al (eds.)	2016	E	Environment		4/5			<a href="#">7/978-3-319-5605</a>
32	19	The role of ecosystem management in disaster risk reduction	Herzog et al, Sudmeier-	2013	E	Environment		4/5			<a href="#">https://www.cbd.int/</a>
33	20	Synthesis Report on Experiences with Ecosystem-Based Approaches to Climate Change Adaptation and Disaster Risk Reduction. CBD Technical Series No. 85.	CBD	2016	E	Environment		4/5			<a href="#">d-ts-85-en.pdf</a>
34	21	Convenient solutions to an inconvenient truth: Ecosystem-based approaches to climate change	World Bank	2010	E	Environment		4/5			<a href="#">https://www.worldbank</a>
35	22	Helping nature help us: Transforming disaster risk reduction through ecosystem management	IUCN	2016	E	Environment		4/5			<a href="#">andle/10986/2686</a>
36	23	Ecosystems protecting infrastructure and communities: lessons learned and guidelines for implementation	IUCN	2017	E	Environment		4/5			<a href="#">https://portals.iucn</a>
37	24	Environmental Guidance Note for Disaster Risk Reduction: Healthy Ecosystems for Human Security and Climate Change Adaptation	IUCN, UNCC, UNDP, WCS,	2013	E	Environment		4/5			<a href="#">y/files/documents/</a>
38	25	Natural Solutions: Protected areas helping people cope with climate change	IUCN, UNCC, UNDP, WCS,	2010	E	Environment		4/5			<a href="#">https://portals.iucn</a>
39	26	Wadi Partners: Food Security and Disaster Resilience through Sustainable Drylands Management in North Darfur, Sudan	UNEP	2016	E	Agriculture		4/5		conflict	<a href="#">86</a>
40	27	Mountain partners: Applying ecosystem-based disaster risk reduction (ECO-DRR) for sustainable and resilient development planning in the Koh-e Baba mountains, Afghanistan	UNEP	2016	E	Environment		4/5		conflict	<a href="#">s/Eco-DRR/Afghanistan</a>
41	28	Coastal partners: Applying ecosystem-based disaster risk reduction through a ridge-to-reef approach in Port Salut, Haiti	UNEP	2016	E	Environment		4/5			<a href="#">https://postconflict</a>
42	29	Safe havens : protected areas for disaster risk reduction and climate change adaptation	IUCN	2014	E	Environment		4/5			<a href="#">s/Haiti/Haiti_Eco_</a>
		Environmental management - Guidelines for establishing good practices for combating land									<a href="#">https://portals.iucn</a>
											<a href="#">87</a>
											<a href="#">https://www.wocat</a>
											<a href="#">/new-iso-standard</a>
		Readme	structure	SectorsContext	PCM-ToolCompendia						

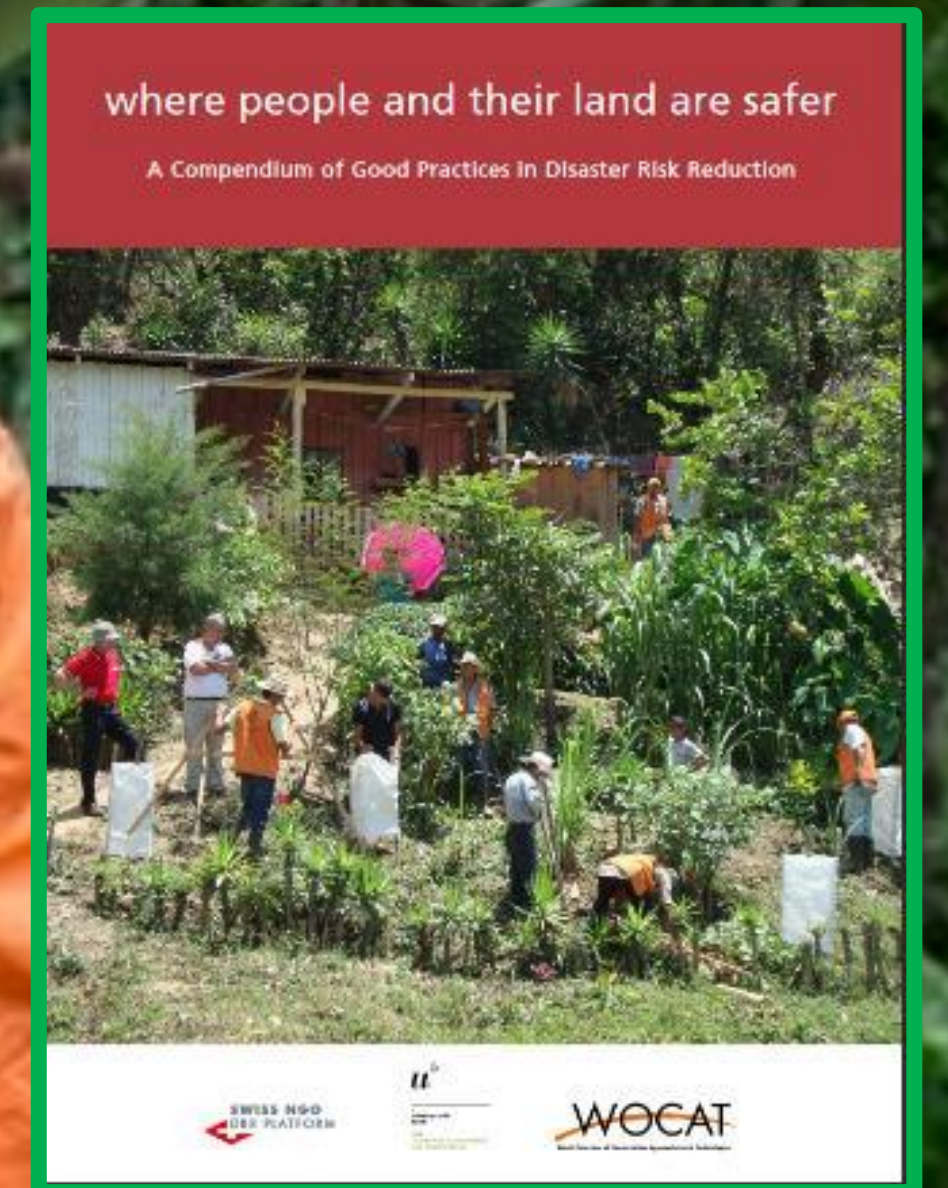
- **Readme:** instruction note
- **Structure:** Mind map overview of the entry points to select tools: PCM stages or sectors/contexts.
- **SectorsContexts:** An overview of tools which are specific for sectors or contexts, including applicable search filter.
- **PCM-ToolCompendia:** An overview of tools which are specific for PCM stages and tool compendia for in-depth analysis.

**Questions?**



# Where people and their land are safer - A Compendium of Good Practices in DRR

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# Objective and partnership

## Objectives:

- 1) Document links between sustainable land management and DRR/CCA
- 2) Contribute to knowledge base on nature-based solutions
- 3) Foster regional exchange of knowledge



Swiss NGO DRR Platform

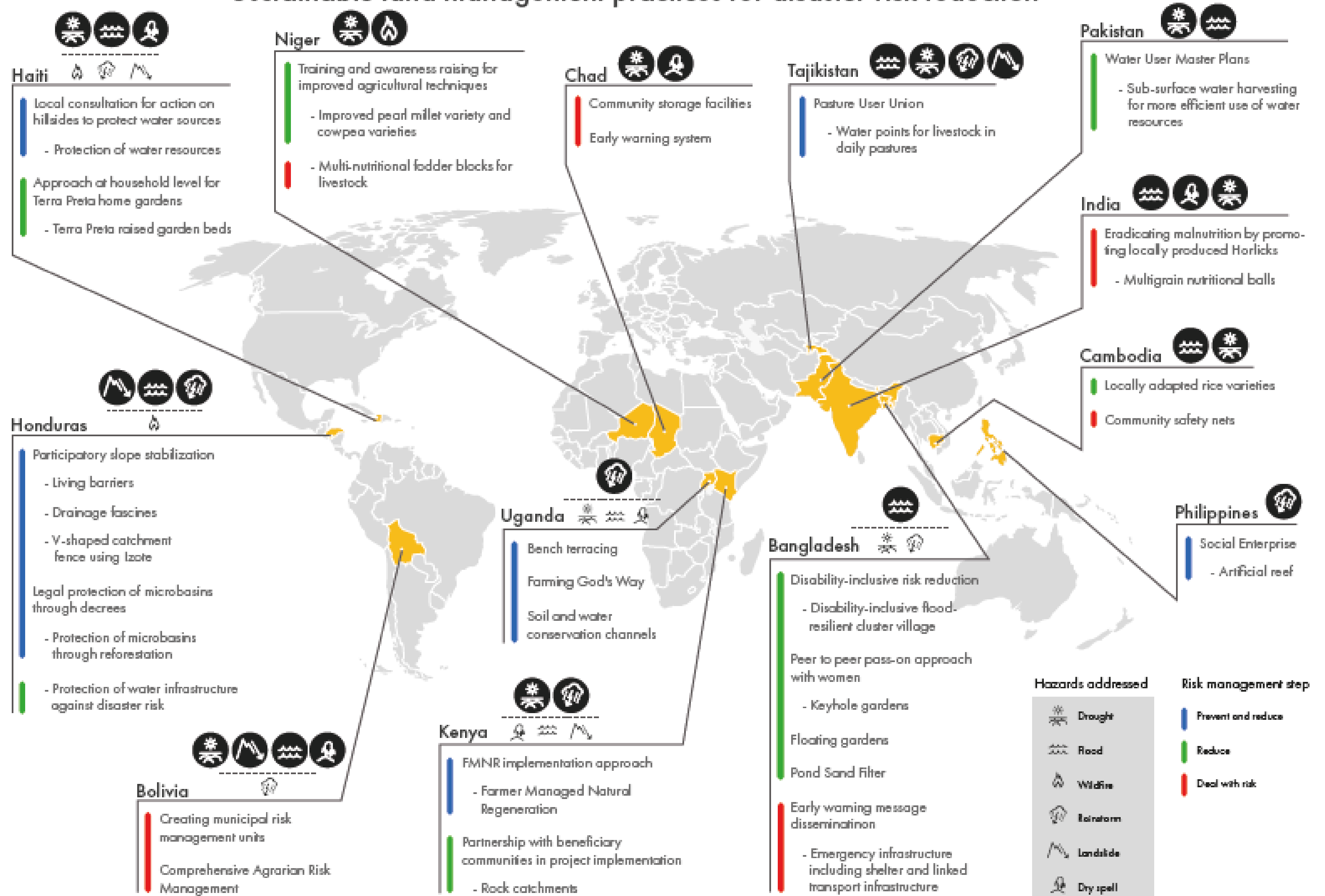


WOCAT Secretariat



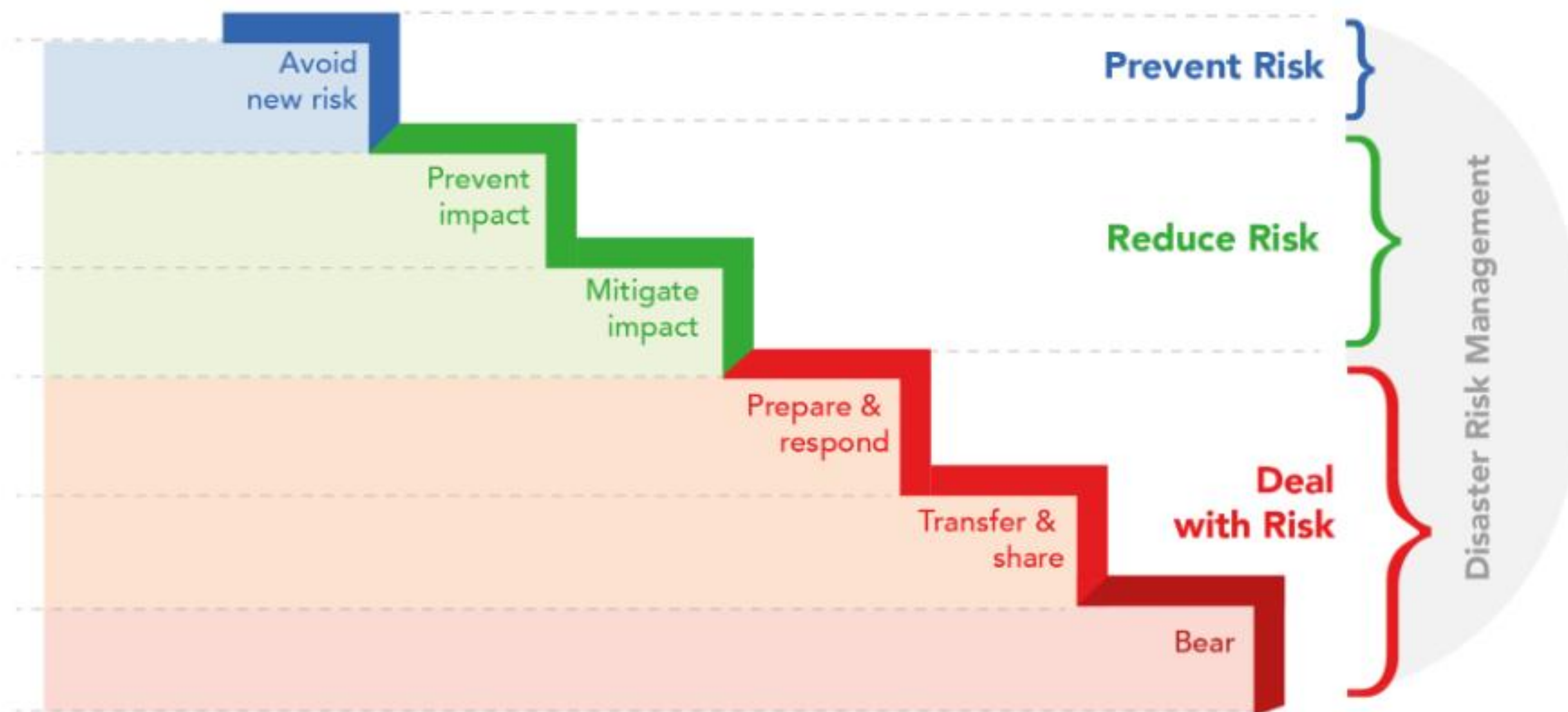
# Content

## Sustainable land management practices for disaster risk reduction



# Logic

Step 4.



A large herd of sheep and goats is moving along a dusty path in a hilly, arid landscape. The animals are densely packed, filling the path and the surrounding area. The sheep have various wool colors, including white, brown, and black. Some goats are also visible, some with long, curved horns. The background shows a dry, hilly terrain with sparse vegetation. The lighting suggests it's a bright, sunny day, with long shadows cast on the ground.

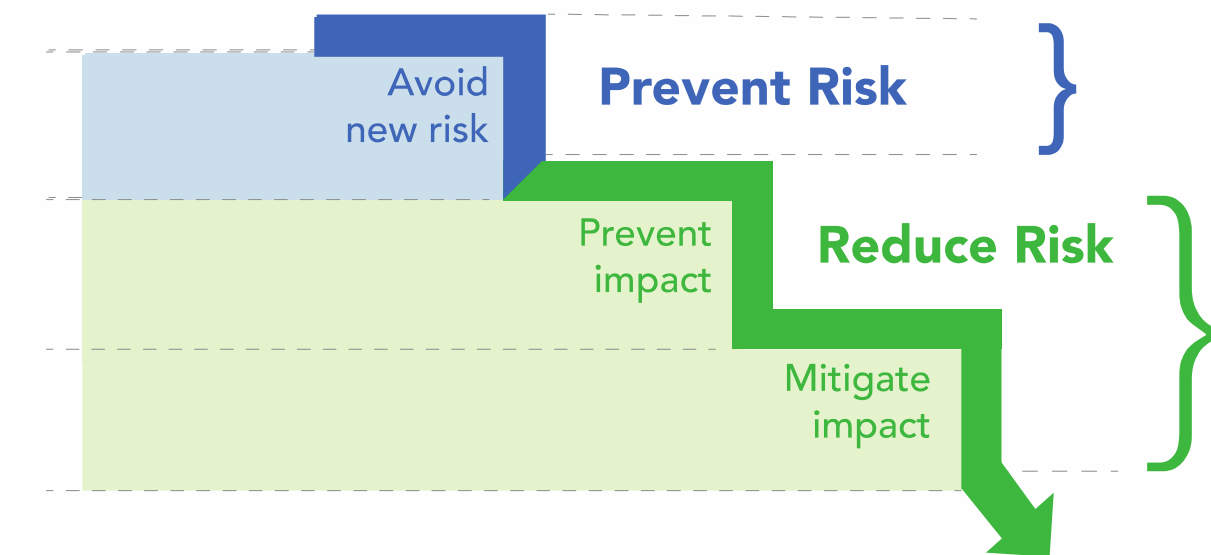
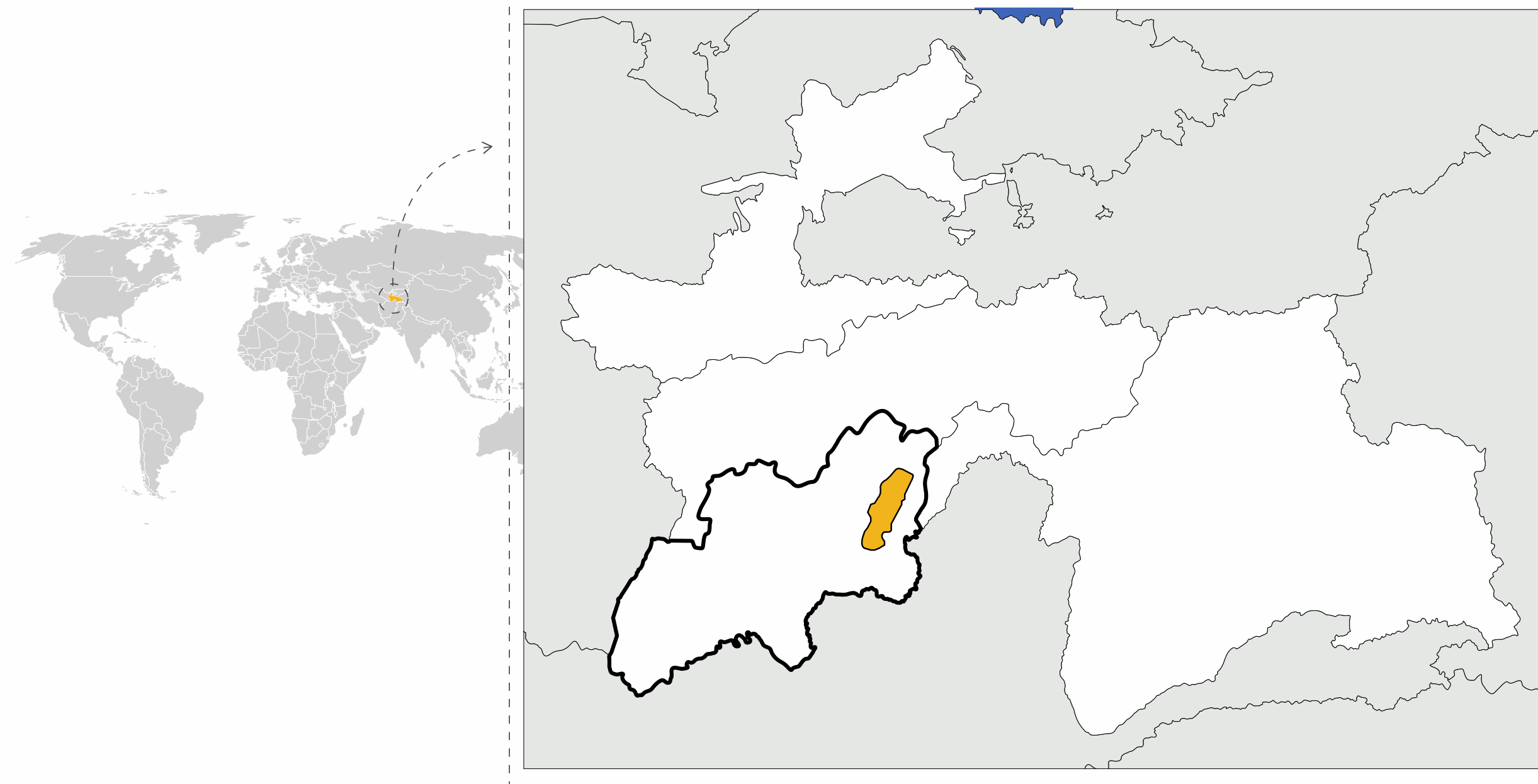
# Tajikistan — Pasture User Unions and Communal Pasture Management

# Tajikistan

Khatlon Region

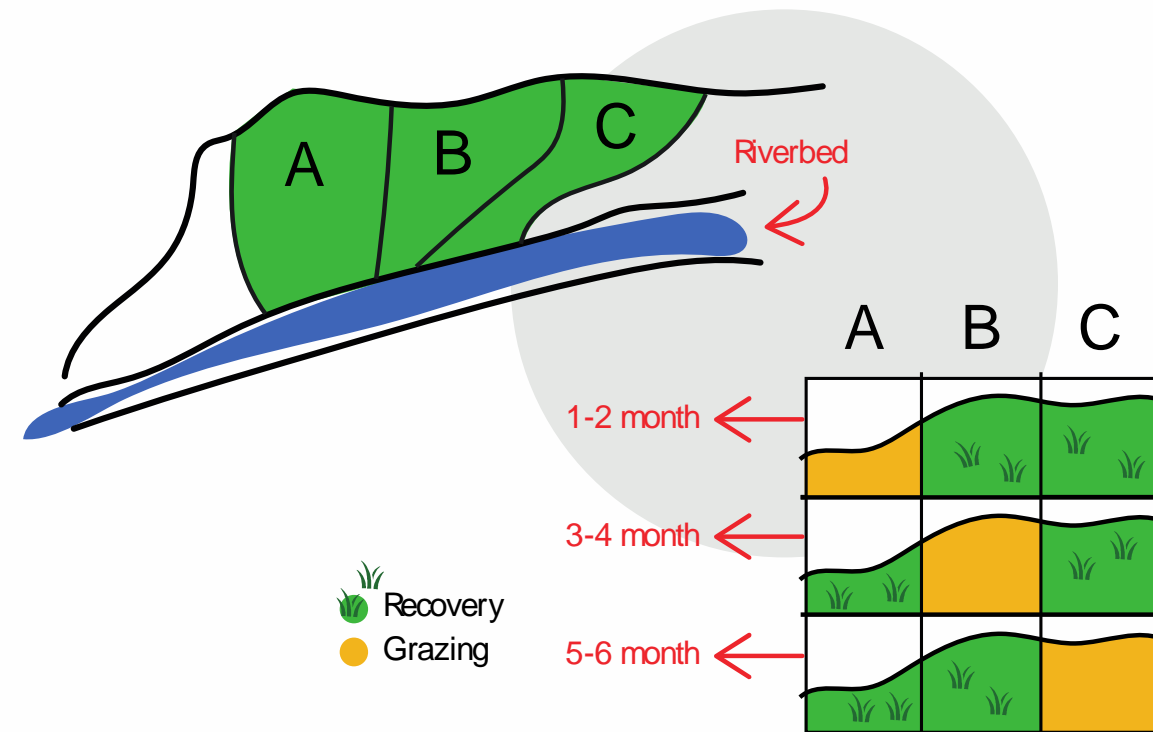
Muminabad District

Semi-arid / sub-humid zones at 1000-2500 m asl, with hilly (16-30%) and steep (31-60%) slopes

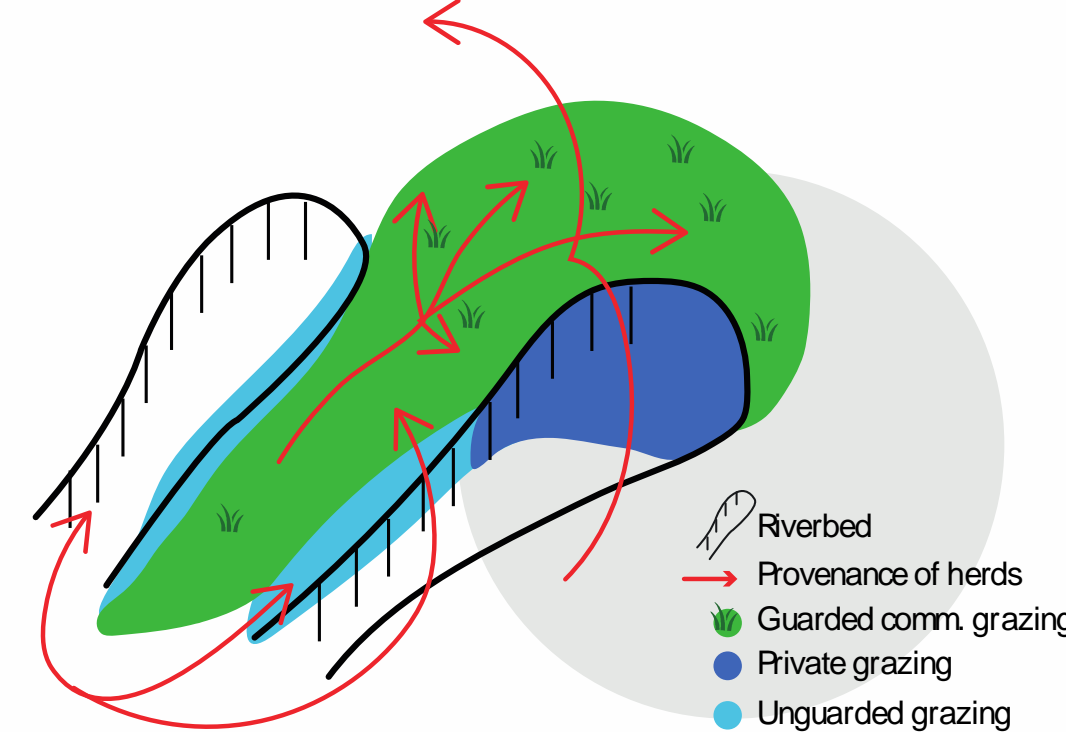


# Technologies

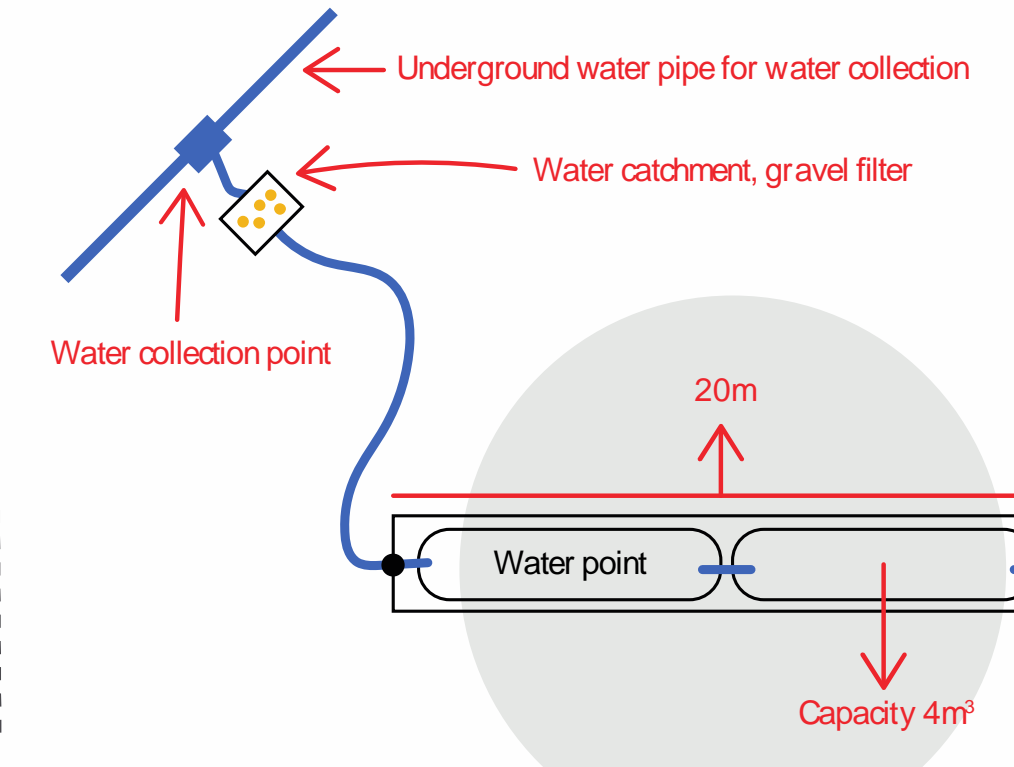
## Rotational grazing



## Communal pasture management



## Water points for livestock

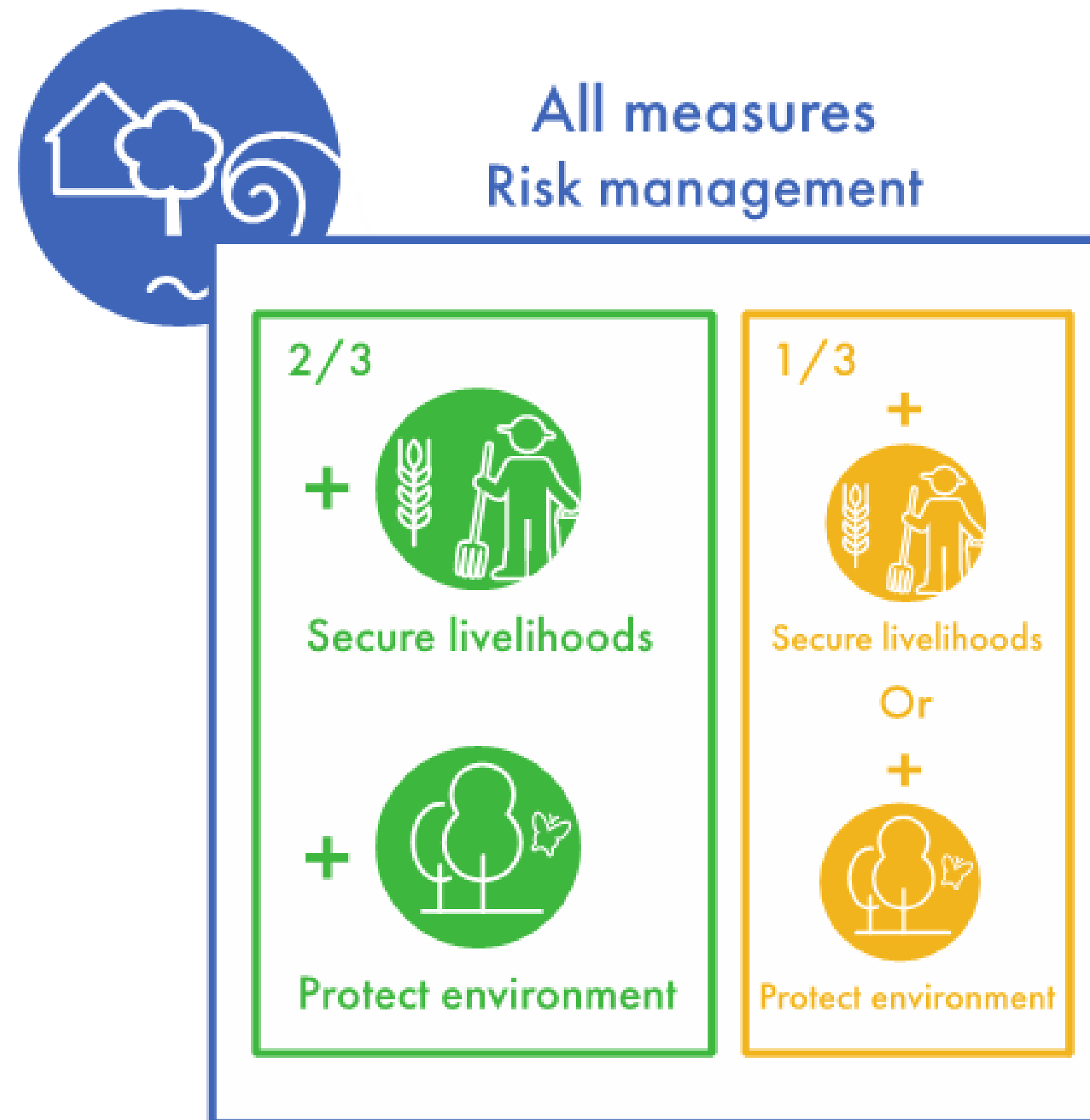


## Success factors:

- low technical knowledge required
- low cost (except water points)
- increased livestock productivity
- strengthened community organization
- multiple benefits



# Findings



**Questions?**



# Towards climate and disaster resilient development

## A packing list for your advocacy journey

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# Objective and partnership

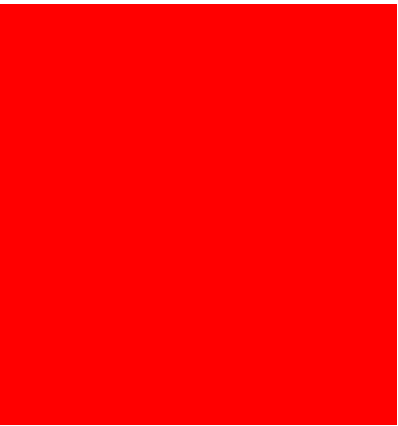
## Objectives:

- 1) Ease the take on advocacy through a simple guide to convince more stakeholders to work on climate advocacy
- 2) Contribute to climate and disaster resilience climbing higher on decision makers' and political agendas

### Why do we do Advocacy?

- to bring about change
- to scale change
- to make change sustainable
- to transform power structures





Why important in the context of CC?

Key questions to address

Step-by-step recommendations

# THE PACKING LIST

Imagine you have a small suitcase. You travel light. What you can take with you is limited. What are the main things to pack to be well prepared for an advocacy journey?

## 1. CLARITY Define strategic and context-specific goals

In many cases climate change and disasters aggravate existing problems, so it is not always clear-cut to what extent the issues you are tackling are caused by them and what role other local factors play. Start with a **thorough analysis** of the problem you want to tackle. Ask yourself:

- Do you understand the reality on the ground and the root causes of the problem? Which role do climate change and disasters play?
- Do you know the scale and spread of the problem?
- Are you able to integrate different and diverse perspectives?

Based on the analysis, **define your goal**. This includes checking if the problem you selected really is the problem, i.e. **the most important problem you want and can address**. You also should look at where policies stand because this defines what you can influence. It might be that you need to advocate to introduce a new law or you need to push for a revision of existing laws. **Start with your goal, not with what you want to do**. Plan enough time to define this objective in a participatory way.

Be clear on the **key players** you want to influence with your advocacy campaign. Who are the key decision makers? How do you need to address them? Can you get direct access to them? What is their agenda and how much does it coincide with yours?

## 2. COLLABORATION Involve allies and opponents

Advocacy is a collaborative effort. Inciting change in power structures needs allies and will meet opposition. It is thus crucial to take your time to identify all potentially involved actors.

- Look at **all possible allies** including those who are out of the range of the «usual suspects». This could be private companies e.g. insurance or renewable energies, religious communities, student groups or farmers associations affected by climate change.
- Have a close look at **opponents**: How strongly are they opposed to your goals? How will they react and how influential are they?
- And don't forget **neutral actors**: Who is neutral and how could they be influenced to support your agenda?

Count in time to **build alliances** and plan your campaign with many different stakeholders. Remember to always be transparent and considerate of different cultures and priorities. Make sure there is a solid buy-in on why working together so that compromises can be reached more easily. Define clear roles and responsibilities.

# The five essentials

**1) CLARITY:** Define strategic and context-specific goals

**2) COLLABORATION:** Involve allies and opponents

**3) EVIDENCE:** Build up credibility

**4) FOCUS:** Define specific action and communication

**5) FLEXIBILITY:** Review, reflect, learn



**Questions?**



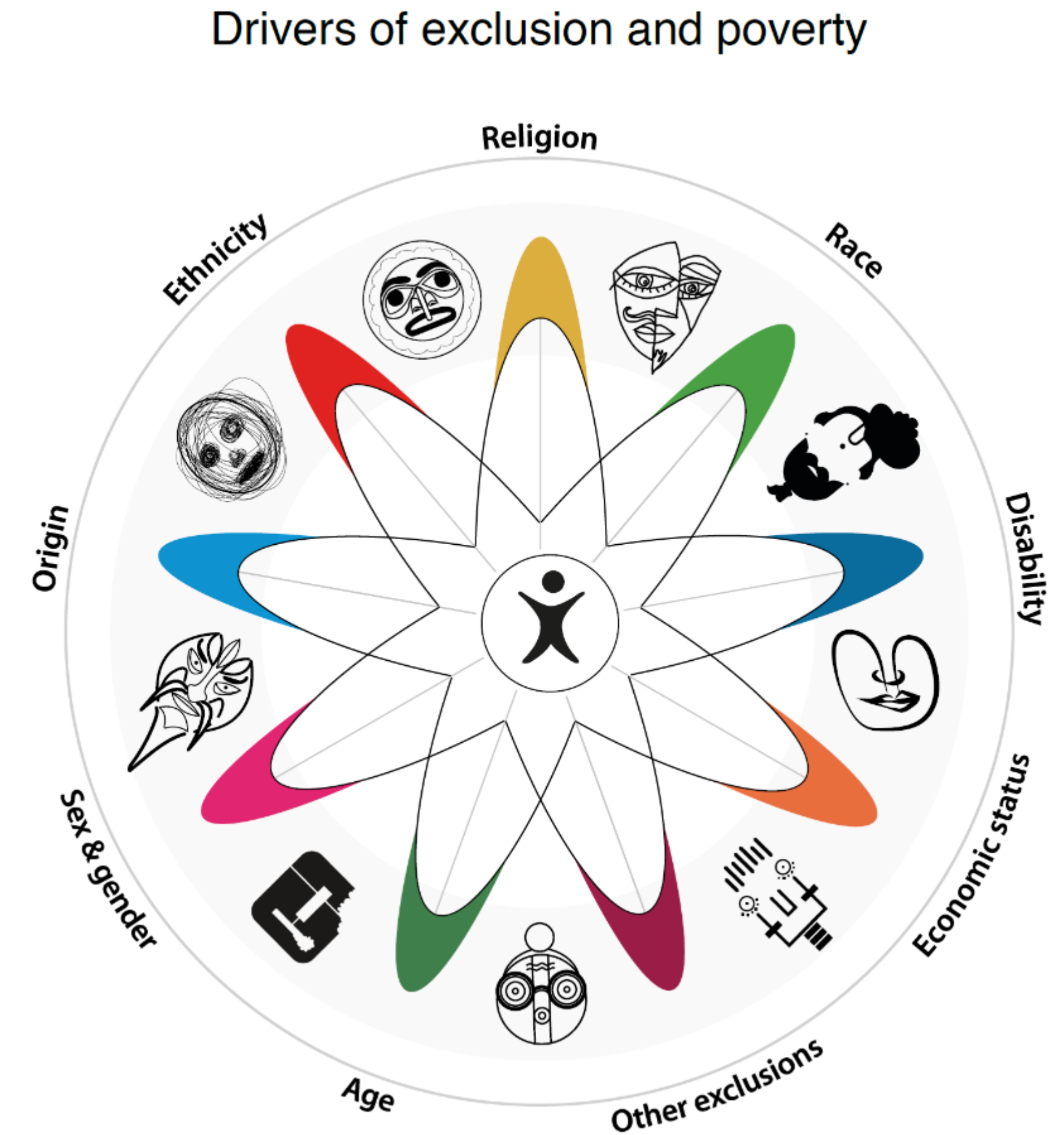
# inclusive Disaster Risk Reduction Hands-on Tool (i-DRR)

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# Background and rational

- Leave no one behind
- Many documents on the "why", few on the "how"
- Easy-to-use tool for field practitioners in DRR



FDFA/SDC (2018) Leave no one behind

# How the tool works

- Downloadable mobile application
- Step-by-step practical guidance (task cards)
- Easy to navigate
- Save and share favorites

The image shows two smartphones displaying the i-DRR mobile application. The phone in the foreground shows a 'Ramp' task card with an illustration of people using a ramp and detailed text instructions. The phone in the background shows a menu screen with options like 'ACCESS', 'ACCESS SYMBOLS', 'ASSESSMENT', 'ASSISTIVE DEVICE', and 'ATTITUDE'.

**i-DRR**

**Hands-on Tool for inclusive Disaster Risk Reduction**

Step-by-step practical guidance on inclusive disaster risk reduction field work

**SWISS NGO DRR PLATFORM**



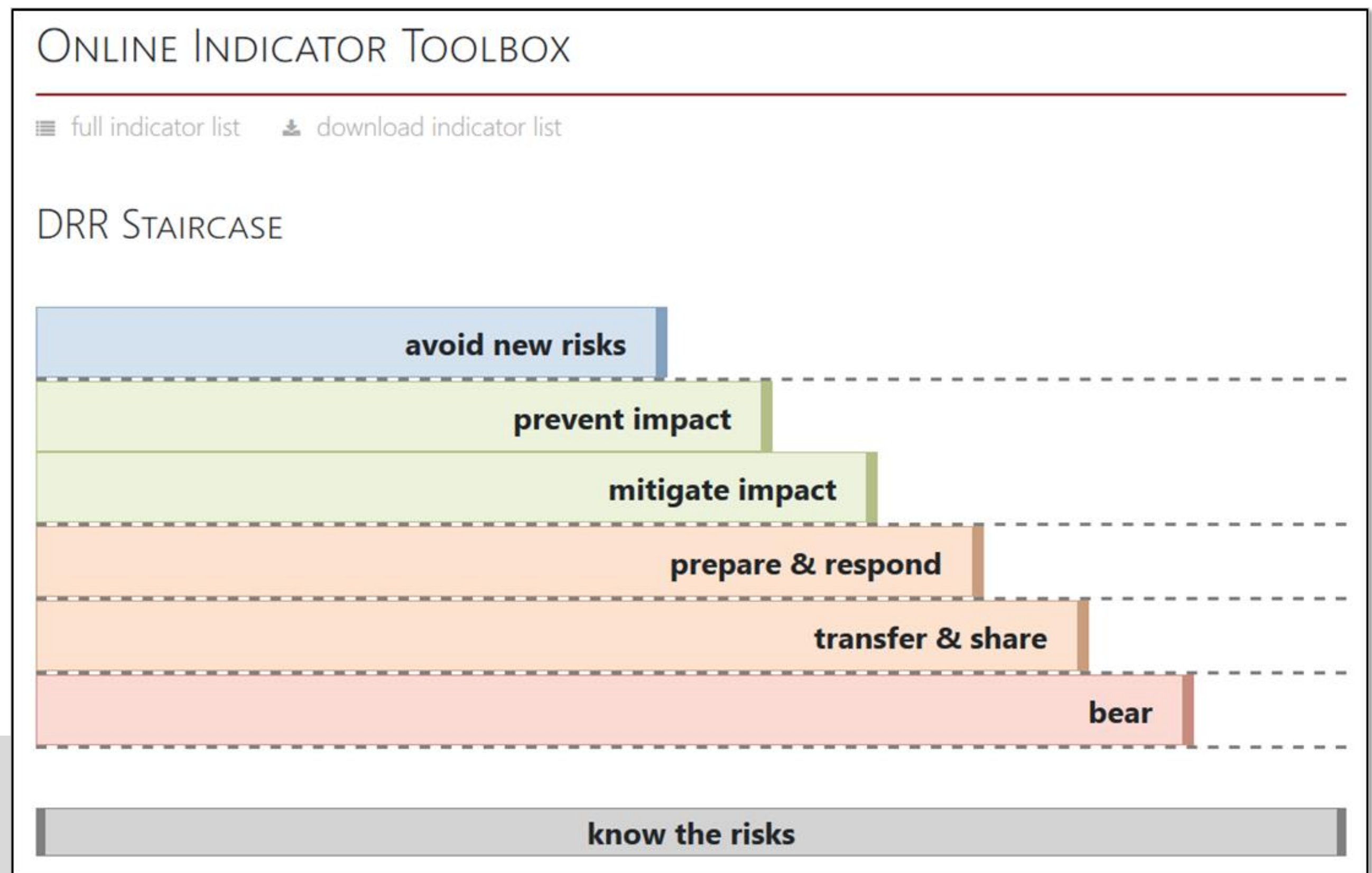
# Status of development and way forward

- Beta version released on 3rd December 2019
- Download it at: [www.drrplatform.org/publications](http://www.drrplatform.org/publications)
- Share your knowledge and experience and/or to become part of the testing team!  
[manuel.rothe@cbmswiss.ch](mailto:manuel.rothe@cbmswiss.ch)

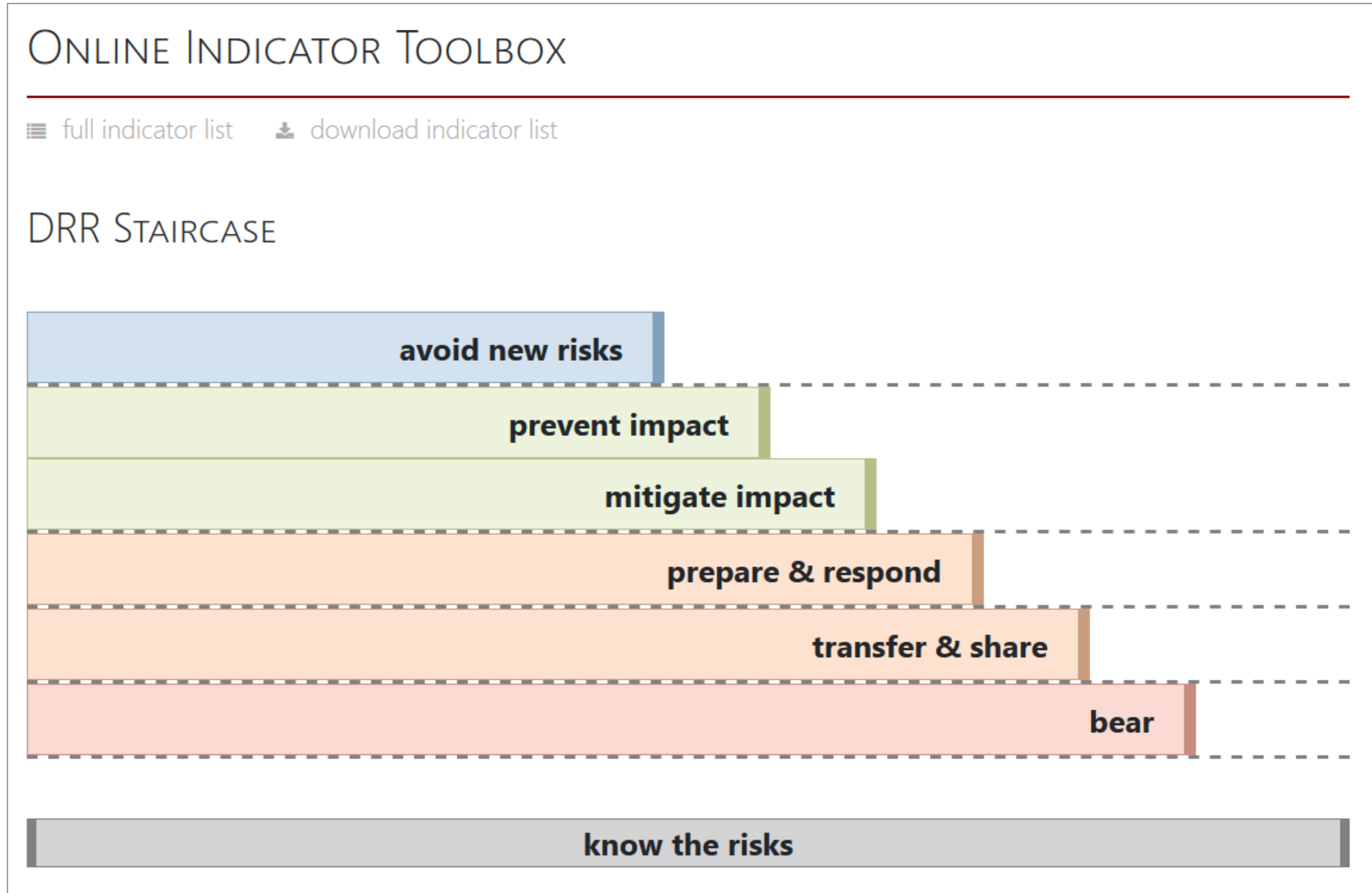
**Questions?**



# Indicator tool box

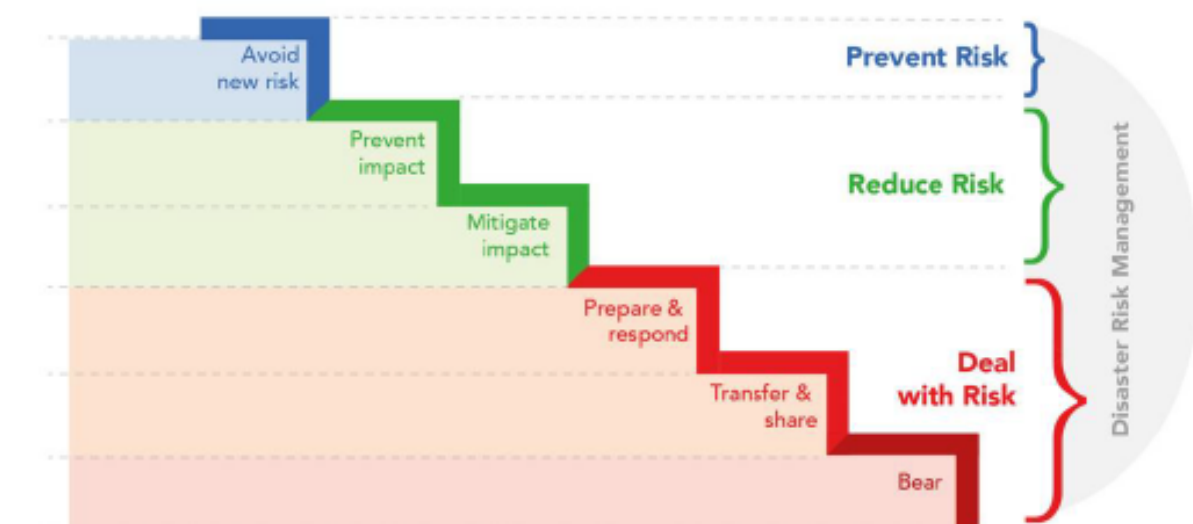


# The tool box: content and objectives

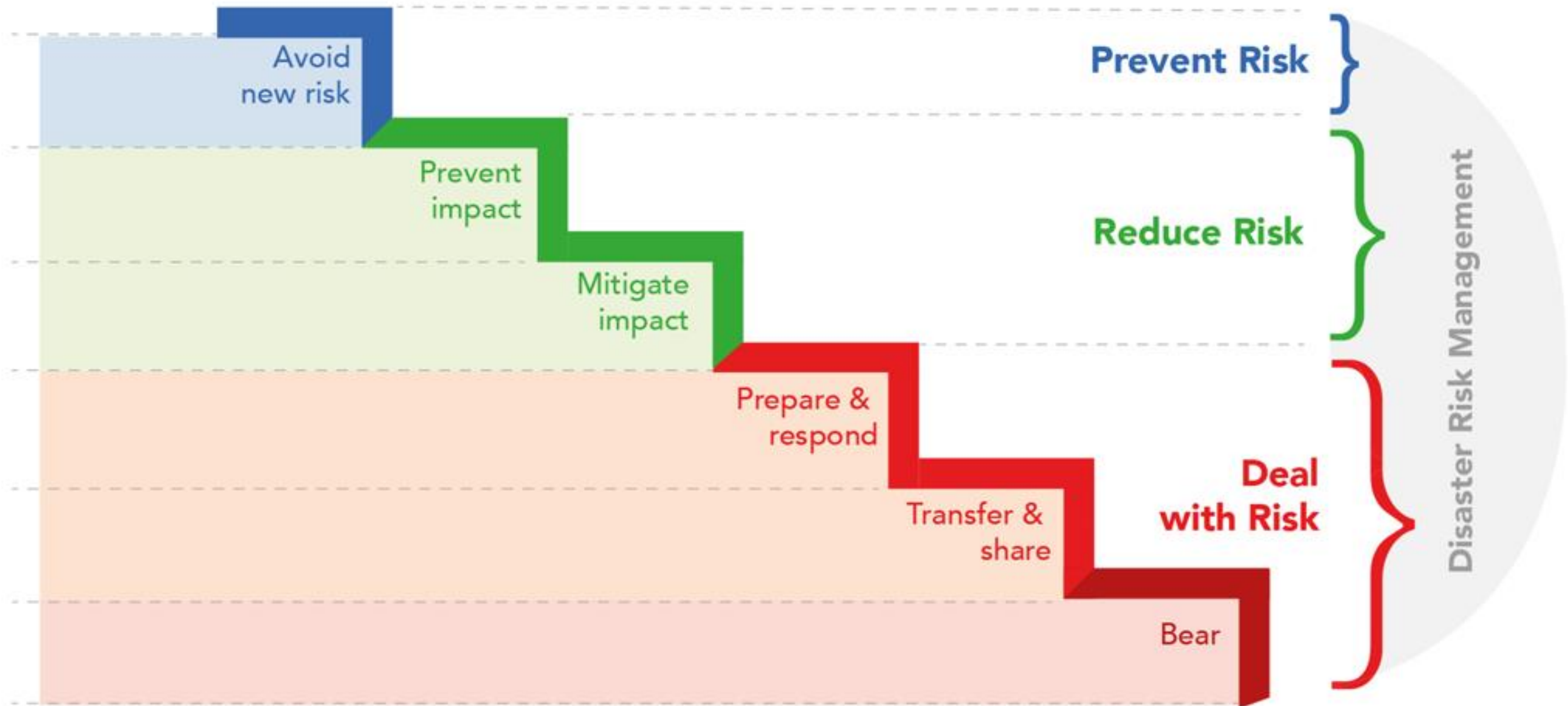


[indicatortoolbox.site44.com](http://indicatortoolbox.site44.com)

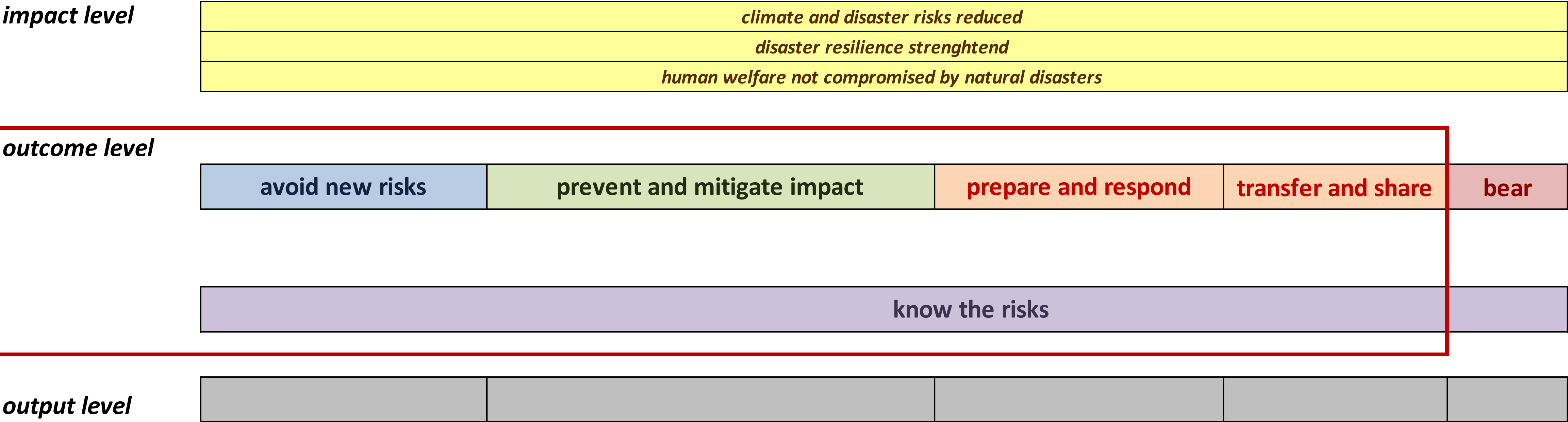
## Swiss NGO DRR Platform DRR and CCA Indicator Toolbox Guidance



# Conceptual basis: the risk staircase



# Structure



# Outcomes

climate and disaster risks reduced
disaster resilience strenghtend
human welfare not compromised by natural disasters

avoid new risks		prevent and mitigate impact					prepare and respond		transfer and share	bear
O1: Decision making is hazard and climate risk-sensitive	O2: Hazard-prone areas are used risk-consciously	O3: Human beings/ settlements, (critical) infrastructures are safe	O4: Livelihoods are protected	O5: Agricultural production is climate-resilient	O6: People/ households are economically flexible and <b>not fully dependent</b> from hazard and climate susceptible activities	O7: Natural resources are sustainably managed	O8: Mechanisms/ strategies are in place to cope adequately with <b>hazardous events</b>	O9: Emergency response is appropriate to events	O10: <b>Risk transfer or</b> share mechanisms are functional and accessible	O11: The residual risk can be better borne
<i>Authorities/communities/ housholds/ private companies take risk-sensitive decision</i>	<i>Authorities/communities/ housholds/ private companies use hazard-prone areas risk-consciously</i>	<i>Authorities/communities/ housholds/ private companies manage to keep human beings, settlements and (critical) infrastructures safe</i>	<i>People/ households are able to protect their livelihoods</i>	<i>Households/ farmers have adopted climate-resilient agricultural practices</i>	<i>People/households have made themselves economically flexible and <b>not fully dependent</b> from hazard susceptible activities</i>	<i>People/ housholds have adopted sustainable resource management practices</i>	<i>Communities/ households/ organisations/ authorities dispose of mechanisms/ strategies to cope adequately with hazards</i>	<i>Communities/ housholds/XXX respond appropriately to events</i>	<i>Communities/ households have access to functional transfer and share mechanisms</i>	<i>Individuals can better bear the residual risk</i>

O12: Capacities of decision makers, authorities, communities, households, XXX are strengthened allowing them to adequately take action to reduce risks/adapt to climate change
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# Indicators

Outcome	Criteria/ Charateristic	Indicator
Human beings, settlements, (critical) infrastructure are safe	Level of risk reduction (persons, settelments, infrastructure, critical infrastructure)	% of ...
Human beings, settlements, (critical) infrastructure are safe		% of ...
Human beings, settlements, (critical) infrastructure are safe		% of ...
Human beings, settlements, (critical) infrastructure are safe	State of application of hazard-resilient design	% of ...
Human beings, settlements, (critical) infrastructure are safe		% of ...
Human beings, settlements, (critical) infrastructure are safe		% of ...
Human beings, settlements, (critical) infrastructure are safe	State of accessabilitiy	% of ...
Human beings, settlements, (critical) infrastructure are safe		% of ...

Code

1

2

3

4

5

6

1. Description
2. Numerator
3. Denominator
4. Target value
5. Disaggregation
6. Means of verification

Indicator	Outcome	Criteria/ Characteristic	Code	Indicator	Description	Numerator	Denominator	Target value	Disaggregation	Method and source	Color	IsStandardIndicator	DataCollectionAndAnalysis
avoid new risks	Decision making is hazard and climate risk-sensitive	State of institutional structures and	0101	% of public budget invested in DRR/CCA	Public money actually spent on DRR/CCA	Amount of public	Total amount of	Country/project	Optional: size of	Official statistics,	#a4d8ef	true	SomeDocument.docx,anotherDocument.p
avoid new risks	Decision making is hazard and climate risk-sensitive	Public: according to state level the project is working	0102	% of the annual public budget set aside for DRR/CCA	Integrated means: sector plan includes hazard/risk assessments,	Amount of public	Total amount of	Country/project	Optional: size of	Official statistics,	#a4d8ef		
avoid new risks	Decision making is hazard and climate risk-sensitive	The integration must be evidence based, i.e. show significant	0103	% of municipalities that base development and investment	Focus is on new investments, can be on any state level or any	Number of sector	Total number of	Country/project	Optional: size of	Sector plans	#a4d8ef		
avoid new risks	Decision making is hazard and climate risk-sensitive	Inclusive/non-discriminatory means: including households of with	0104	% of communities where local government DRR/CCA	Define an adequate period for up-dating according to document.	Number of	Total number of	Country/project	Optional: size of	Official statistics	#a4d8ef		
avoid new risks	Decision making is hazard and climate risk-sensitive	A formal administrative processes where authorities	0105	% of DRR/CCA policies, strategies and plans that are	A formal administrative process is in any enactment, regulation,	Number of formal	Total number of	Country/project	Optional: size of	Survey, observation	#a4d8ef		
avoid new risks	Decision making is hazard and climate risk-sensitive	Investment plan includes hazard/risk assessments, climate	0106	% of new private investments that is based on a risk	Procedure: interaction between government institution and private	Number of new	Total number of	Country/project	Optional: size of	Survey, observation	#a4d8ef		
avoid new risks	Decision making is hazard and climate risk-sensitive	Procedure: interaction between government institution and private	0107	% of procedures private companies made liable for	Procedure: interaction between government institution and private	Number of	Total number of	Country/project	Optional: size of	Survey, observation	#a4d8ef		
avoid new risks	Hazard-prone areas are used risk-consciously	Degree of application of land use	0201	% of building codes or land use regulation that are	Building codes and land use regulations have to be based on hazard	Number of building	Total number of	Country/project	Optional: size of	Official registers	#a4d8ef		
avoid new risks	Hazard-prone areas are used risk-consciously	Building codes and land use regulations have to be based on hazard	0202	% of construction permission considering hazard and	For pasture, forests, water bodies or spring catchment	Number of	Total number of	Country/project	Optional: size of	Official registers	#a4d8ef		
avoid new risks	Hazard-prone areas are used risk-consciously	For pasture, forests, water bodies or spring catchment	0204	% of households living in highly hazard-prone areas that	Highly hazard-prone area as defined in risk assessment	Area (ha) of	Total area (ha) of	Country/project	Optional: size of	Survey	#a4d8ef		
prevent and mitigate impact	Human beings, settlements, (critical) infrastructure are safe	Level of risk reduction (persons,	0301	% of structural protective measures managed and	Managed and maintained: periodically (at least once per season)	Number of	Total amount of	Country/project	Mandatory: gender,	Household survey	#a4d8ef	true	SomeDocument.docx,anotherDocument.p
prevent and mitigate impact	Human beings, settlements, (critical) infrastructure are safe	Application for structural and soil bio-engineering measures;	0302	% of buildings/critical infrastructure in areas prone to	Number of newly	Total number of	Country/project	Optional: size of	Expert assessment	#a4d8ef			
prevent and mitigate impact	Human beings, settlements, (critical) infrastructure are safe	Generic indicator: define risk reduction/adaptation measures	0303	% of persons/households/communities that implement	Target	Total number of	Country/project	Mandatory: gender,	Survey, observation	#a4d8ef			
prevent and mitigate impact	Human beings, settlements, (critical) infrastructure are safe	Hazard-resistant design: increasing the robustness of the	0304	% of new buildings and critical infrastructure constructed	Number of new	Total number of	Country/project	Optional: size of	expert assessment,	#a4d8ef			
prevent and mitigate impact	Human beings, settlements, (critical) infrastructure are safe	Hazard-resistant design: increasing the robustness of the	0305	% of existing buildings and critical infrastructure	Total number of	Total number of	Country/project	Optional: size of	expert assessment,	#a4d8ef			
prevent and mitigate impact	Human beings, settlements, (critical) infrastructure are safe	The indicator measures the extent to which the target households	0306	% of households living in highly hazard-prone areas that	The indicator measures the extent to which the target households	Number of	Total number of	Country/project	Mandatory: gender,	Household survey	#a4d8ef		
prevent and mitigate impact	Human beings, settlements, (critical) infrastructure are safe	Infrastructure: water systems, sanitation facilities, health	0307	% of critical infrastructure remains functional during and	Infrastructure: water systems, sanitation facilities, health	Number of critical	Total number of	Country/project	Optional: size of	Survey, damage	#a4d8ef	true	SomeDocument.docx,anotherDocument.p
prevent and mitigate impact	Human beings, settlements, (critical) infrastructure are safe	Critical access to critical public infrastructures/services	0308	% of community members with access to services, critical	Access to critical public infrastructures/services	Number of	Total number of	Country/project	Mandatory: gender,	Survey	#a4d8ef		
prevent and mitigate impact	Livelihoods are protected	Assets: tools, machinery, livestock	0401	% of households engaged in multiple occupations/with	Proportion	Total sum of asset	Country/project	Household survey	#a4d8ef	true	SomeDocument.docx,anotherDocument.p		
prevent and mitigate impact	Livelihoods are protected	Loss of livestock due to disasters has a major impact on household	0402	% of water and fodder storage facilities protected from	Number of	Total number of	Country/project	Household survey	#a4d8ef				
prevent and mitigate impact	Livelihoods are protected	Reserves are important to minimize the impacts of	0403	% of households storing food, water, fodder/agricultural	Reserves are important to minimize the impacts of	Number of	Total number of	Country/project	Mandatory: gender,	Household survey	#a4d8ef		
prevent and mitigate impact	Livelihoods are protected	Food security has to be defined for project/context	0404	% of food-secure households	Food-security has to be defined for project/context	Number of food-	Total number of	Country/project	Mandatory: gender,	Household survey	#a4d8ef		
prevent and mitigate impact	Livelihoods are protected	Adequate water includes quality and quantity of water for	0405	% of households with year-round access to adequate water	Adequate water includes quality and quantity of water for	Number of	Total number of	Country/project	Mandatory: gender,	Household survey	#a4d8ef		
prevent and mitigate impact	Livelihoods are protected	Assets include housing, productive land, livestock, essential food	0406	% of assets safeguarded per household in case of a	Assets include housing, productive land, livestock, essential food	Number of	Total number of	Country/project	Mandatory: gender,	Household survey	#a4d8ef		
prevent and mitigate impact	Livelihoods are protected	Income includes sales revenue from on- and off-farm products and	0407	% of households who manage to keep the level of	Income includes sales revenue from on- and off-farm products and	Number of	Total number of	Country/project	Mandatory: gender,	Household budget	#a4d8ef		
prevent and mitigate impact	Livelihoods are protected	Food consumption pattern includes meals per day, diet diversity,	0408	% of households who manage to keep the pre-disaster food	Food consumption pattern includes meals per day, diet diversity,	Number of	Total number of	Country/project	Mandatory: gender,	Household survey	#a4d8ef		
prevent and mitigate impact	Agricultural production is climate-resilient	Crops and varieties that are resilient to the changing climate must be	0501	% of households growing crops that are resilient to climate	Crops and varieties that are resilient to the changing climate must be	Number of	Total number of	Country/project	Mandatory: gender,	Household survey	#a4d8ef	true	SomeDocument.docx,anotherDocument.p
prevent and mitigate impact	Agricultural production is climate-resilient	Conservation agriculture practices conserve soil moisture and	0502	% of households using conservation agriculture	Conservation agriculture practices conserve soil moisture and	Number of	Total number of	Country/project	Mandatory: gender,	Household survey	#a4d8ef		
prevent and mitigate impact	Agricultural production is climate-resilient	Agricultural practices: e.g. planting times, new and resilient native	0503	% of agricultural land made more resilient to climate	Agricultural practices: e.g. planting times, new and resilient native	Area (ha) of	Total area of	Country/project	Survey, expert	#a4d8ef			
prevent and mitigate impact	People/households are economically flexible and independent from hazard and climate susceptible activities	Occupations include non-agricultural options. Less climate-	0601	% of households engaged in multiple occupations/with	Occupations include non-agricultural options. Less climate-	Number of	Total number of	Country/project	Mandatory: gender,	Household budget	#a4d8ef	true	SomeDocument.docx,anotherDocument.p
prevent and mitigate impact	Natural resources are sustainably managed	Practices include soil and water conservation, sustainable forestry,	0701	% of households adopting sustainable environmental	Practices include soil and water conservation, sustainable forestry,	Number of	Total number of	Country/project	Mandatory: gender,	Household survey	#a4d8ef	true	SomeDocument.docx,anotherDocument.p
prevent and mitigate impact	Natural resources are sustainably managed	Rehabilitated: e.g. reduced external pressures such	0702	% of ecosystem area rehabilitated, restored or protected	Rehabilitated: e.g. reduced external pressures such	Number of	Total number of	Country/project	Mandatory: gender,	Field visits, survey	#a4d8ef		
prevent and mitigate impact	Natural resources are sustainably managed	Unsuitable: not considering the environmental functions of the	0703	% of households refraining from unsustainable	Unsuitable: not considering the environmental functions of the	Number of	Total number of	Country/project	Mandatory: gender,	Household surveys	#a4d8ef		
prepare and respond	Mechanisms/ strategies in place to cope adequately with hazards	Hazard-prone areas: as per risk assessment, with a history of being	0801	% of communities in hazard-prone areas with a functional	Hazard-prone areas: as per risk assessment, with a history of being	Number of all target	Number of all target	Country/project	Optional: size of	Survey,	#7b7776	true	SomeDocument.docx,anotherDocument.p
prepare and respond	Mechanisms/ strategies in place to cope adequately with hazards	Contingency plans have to include scenario planning, intervention	0802	% of communities/households with appropriate and tested	Contingency plans have to include scenario planning, intervention	Number of	Total number of	Country/project	Mandatory: gender,	Survey,	#7b7776		
prepare and respond	Mechanisms/ strategies in place to cope adequately with hazards	Target actors/stakeholders/institutions may include schools, health	0803	% of target actors/stakeholders/institutions with	Target actors/stakeholders/institutions may include schools, health	Number of target	Total number of	Country/project	Mandatory: gender,	Survey,	#7b7776		
prepare and respond	Mechanisms/ strategies in place to cope adequately with hazards	Adequate where local committee is not the appropriate model.	0804	% of communities in hazard-prone areas linked to a	Adequate where local committee is not the appropriate model.	Number of	Total number of	Country/project	Optional: size of	Survey,	#7b7776		
prepare and respond	Mechanisms/ strategies in place to cope adequately with hazards	EWS is considered effective when 1) the system is in place; 2) the	0805	% of communities in hazard-prone areas with an effective	EWS is considered effective when 1) the system is in place; 2) the	Number of	Number of all target	Country/project	Optional: size of	Survey,	#7b7776		
prepare and respond	Mechanisms/ strategies in place to cope adequately with hazards	Level of satisfaction: 1 not satisfied at all, 2 moderately satisfied, 3	0806	% of people who are satisfied with the established	Level of satisfaction: 1 not satisfied at all, 2 moderately satisfied, 3	Number of surveyed	Total number of	Country/project	Mandatory: gender,	Interviews	#7b7776		
prepare and respond	Mechanisms/ strategies in place to cope adequately with hazards	Disproportionality at risk groups: taking a gender, age, disability	0807	% of volunteer groups active in recovery planning and	Disproportionality at risk groups: taking a gender, age, disability	Number of	Total number of	Country/project	Mandatory: gender,	Survey, observation	#7b7776		
prepare and respond	Mechanisms/ strategies in place to cope adequately with hazards	Response tasks: search and rescue, first aid, managing emergency	0808	% of emergency committee/volunteer group member	Response tasks: search and rescue, first aid, managing emergency	Number of skilled	Total number of	Country/project	Mandatory: gender,	Observation,	#7b7776		
prepare and respond	Emergency response is appropriate to events	Correct reaction must have been verified either by hazardous event	0901	% of households living in a hazard-prone area that correctly	Correct reaction must have been verified either by hazardous event	Number of	Total number of	Country/project	Mandatory: gender,	Survey,	#7b7776	true	SomeDocument.docx,anotherDocument.p
prepare and respond	Emergency response is appropriate to events	Access must be verified either by hazardous event or simulation	0902	% of persons who reach the emergency shelter safely and	Access must be verified either by hazardous event or simulation	Number of persons	Total number of	Country/project	Mandatory: gender,	Evaluation plans	#7b7776		
prepare and respond	Emergency response is appropriate to events	Reception must be verified either by hazardous event or simulation	0903	% of persons who receive early warning messages in a	Reception must be verified either by hazardous event or simulation	Number of persons	Total number of	Country/project	Mandatory: gender,	Survey,	#7b7776		
prepare and respond	Emergency response is appropriate to events	Support/relief according to context, needs, hazard, food, non-food,	0904	% of affected people having access to adequate	Support/relief according to context, needs, hazard, food, non-food,	Number of affected	Total number of	Country/project	Mandatory: gender,	Post-disaster	#7b7776		
prepare and respond	Emergency response is appropriate to events	Hazardous events depends on context, but needs to be pre-defined	0905	% of hazardous events in which the emergency committee	Hazardous events depends on context, but needs to be pre-defined	Number of	Total number of	Country/project	Optional: type of	Post-disaster	#7b7776		
prepare and respond	Emergency response is appropriate to events	Successful deployment means having available correct and relevant	0906	% of municipalities successfully deploying assessment	Successful deployment means having available correct and relevant	Number of target	Total number of	Country/project	Optional: size of	Interviews with key	#7b7776		
prepare and respond	Emergency response is appropriate to events	Formal social protection schemes include social assistance and	0907	% of community emergency committees/groups successfully	Formal social protection schemes include social assistance and	Number of	Total number of	Country/project	Optional: size of	Damage	#7b7776		
share and transfer	Transfer and share mechanisms are functional and accessible	Financial services include common saving and credit schemes,	1001	% of the communities where social protection schemes are	Financial services include common saving and credit schemes,	Communities with	Total communities	Country/project	Optional: size of	Survey, data by	#4c5ba	true	SomeDocument.docx,anotherDocument.p
share and transfer	Transfer and share mechanisms are functional and accessible	Affected by hazardous event	1002	% of the communities where financial services are	Affected by hazardous event	Communities with	Total communities	Country/project	Optional: size of	Survey, data from	#4c5ba		
share and transfer	Transfer and share mechanisms are functional and accessible	Affected by hazardous event	1003	% of affected persons that have access to financial	Affected by hazardous event	Affected persons	Total number of	Country/project	Mandatory: gender,	Household survey	#4c5ba		
know the risks	Capacities of decision makers, authorities, communities, households, XXX are strengthened allowing them to adequately take action to reduce risks/adapt to climate	Hazard risks need to be named from a set of most common local	1201	% of households and/or persons able to correctly name	Hazard risks need to be named from a set of most common local	Number of	Total number of	Country/project	Mandatory: gender,	Survey, observation	#4ba07	true	SomeDocument.docx,anotherDocument.p
know the risks	Capacities of decision makers, authorities, communities, households, XXX are strengthened allowing them to adequately take action to reduce risks/adapt to climate	Number of databases/results of risk assessments/ information	1202	% of databases/results of risk assessments/ information	Number of	Total number of	Country/project	Mandatory: gender,	Survey, observation	#4ba07			
know the risks	Capacities of decision makers, authorities, communities, households, XXX are strengthened allowing them to adequately take action to reduce risks/adapt to climate	Number of staff members of authorities/ public administration	1203	% of staff members of authorities/ public administration	Number of staff	Total number of	Country/project	Mandatory: gender,	Survey, observation	#4ba07			
know the risks	Capacities of decision makers, authorities, communities, households, XXX are strengthened allowing them to adequately take action to reduce risks/adapt to climate	Define degree of involvement (e.g. joint elaboration with experts -	1204	% of households with knowledge about services, critical	Define degree of involvement (e.g. joint elaboration with experts -	Number of	Total number of	Country/project	Mandatory: gender,	Survey, observation	#4ba07		
know the risks	Capacities of decision makers, authorities, communities, households, XXX are strengthened allowing them to adequately take action to reduce risks/adapt to climate	Area covered by total project area	1205	% of persons involved in development and/or regular	Area covered by total project area	Number of persons	Total number of	Country/project	Mandatory: gender,	Survey, observation	#4ba07		
know the risks	Capacities of decision makers, authorities, communities, households, XXX are strengthened allowing them to adequately take action to reduce risks/adapt to climate	Sustainable environmental practices according to project context.	1206	% of project area covered by comprehensive risk	Sustainable environmental practices according to project context.	Area covered by	Total project area	Country/project	Optional: type of	Survey, observation	#4ba07		
know the risks	Capacities of decision makers, authorities, communities, households, XXX are strengthened allowing them to adequately take action to reduce risks/adapt to climate	Hazard risks need to be named from a set of most common local	1207	% of households that are able to describe sustainable	Hazard risks need to be named from a set of most common local	Number of	Total number of	Country/project	Mandatory: gender,	Survey, observation	#4ba07	true	SomeDocument.docx,anotherDocument.p
know the risks	Capacities of decision makers, authorities, communities, households, XXX are strengthened allowing them to adequately take action to reduce risks/adapt to climate	Key individual actions may stem from learning from school level	1208	% of teachers able to correctly name local hazards and	Key individual actions may stem from learning from school level	Number of teachers	Total number of	Country/project	Mandatory: gender,	Survey, observation	#4ba07		
know the risks	Capacities of decision makers, authorities, communities, households, XXX are strengthened allowing them to adequately take action to reduce risks/adapt to climate	Define group of persons	1209	% of (school) children who can correctly identify key	Define group of persons	Number of school	Total number of	Country/project	Mandatory: gender,	Survey, observation	#4ba07		
know the risks	Capacities of decision makers, authorities, communities, households, XXX are strengthened allowing them to adequately take action to reduce risks/adapt to climate	Includes being able to explain what early warning is	1211	% of persons use climate/risk information and trend data	Includes being able to explain what early warning is	Number or persons	Total number of	Country/project	Mandatory: gender,	Survey, observation	#4ba07		
know the risks	Capacities of decision makers, authorities, communities, households, XXX are strengthened allowing them to adequately take action to reduce risks/adapt to climate	Disruption of school attendance understood also as a disruption of	1212	% of population knowing how to react in case of an early	Disruption of school attendance understood also as a disruption of	Number of	Total number of	Country/project	Mandatory: gender,	Household survey	#4ba07		
know the risks	Capacities of decision makers, authorities, communities, households, XXX are strengthened allowing them to adequately take action to reduce risks/adapt to climate		1213	% of persons know safe evacuation routes		Number of school	Total number of	Country/project	Mandatory: gender,	Household survey	#4ba07		

# Indicators: maneuvering online

ONLINE INDICATOR TOOLBOX

full indicator list download indicator list

DRR STAIRCASE

avoid new risk

prevent

Outcomes

- Human beings, settlements, (critical) infrastructure are safe
- Livelihoods are protected
- Agricultural production is climate-resilient
- People/households are economically flexible and independent of climate susceptible activities
- Natural resources are sustainably managed

INDICATORS FOR OUTCOME "HUMAN BEINGS, SETTLEMENTS, (CRITICAL) INFRASTRUCTURE ARE SAFE"	
overview	full list
Code	Indicator
0301	% of structural protective measures managed and maintained properly Description: Managed and maintained, periodically (at least once per year) deterioration it has to be defined who is in charge.
0302	% of buildings/critical infrastructure in areas prone to frequent hazards Description: Applicable for structural and soil bio-engineering measures. Implementation of measures needed. Structural measures: dams, embankment retaining walls, reforestation, soil bio-engineering measures. Define hazard-prone areas.
0303	% of persons/households/communities that implement appropriate risk reduction/adaptation measures Description: Generic indicator, define risk reduction/adaptation measures.
0304	% of new buildings and critical infrastructure constructed to withstand hazards or climate variability and maintained properly Description: Hazard-resistant design: increasing the robustness of the structures needed to achieve the desired performance in response to hazards. Construction has to respect the universal design-principles: <a href="http://universaldesign.ie/What-is-Universal-Design/The-7-Principles/">http://universaldesign.ie/What-is-Universal-Design/The-7-Principles/</a> Critical infrastructure: water systems, sanitation facilities, health facilities, schools, etc. Hazards: earthquakes, cyclones, flood, etc.; conditions may also result from climate variability like heat, humidity, wind velocity.
0305	% of existing buildings and critical infrastructure retrofitted to withstand hazards or climate variability and maintained properly Description: Hazard-resistant design: increasing the robustness of the structures needed to achieve the desired performance in response to hazards. Construction has to respect the universal design-principles: <a href="http://universaldesign.ie/What-is-Universal-Design/The-7-Principles/">http://universaldesign.ie/What-is-Universal-Design/The-7-Principles/</a> Critical infrastructure: water systems, sanitation facilities, health facilities, schools, etc. Hazards: earthquakes, cyclones, flood, etc.; conditions may also result from climate variability like heat, humidity, wind velocity.
0306	% of households living in highly hazard-prone areas that have structural protective measures Description: The indicator measures the extent to which the target households are less vulnerable to the identified hazards (such as structural in dwelling's surrounding environment). Hazard-prone as per hazard assessment.
0307	% of critical infrastructure remains functional during hazards or climate variability Description: Critical infrastructure: water systems, sanitation facilities, health facilities, schools, etc. Hazards: earthquakes, cyclones, flood, etc.; conditions may also result from climate variability like heat, humidity, wind velocity.
0308	% of community members with access to services, critical facilities and infrastructure Description: Continued access to critical public infrastructures/ services. Key infrastructures/services may include health centers, schools, water supply, etc.

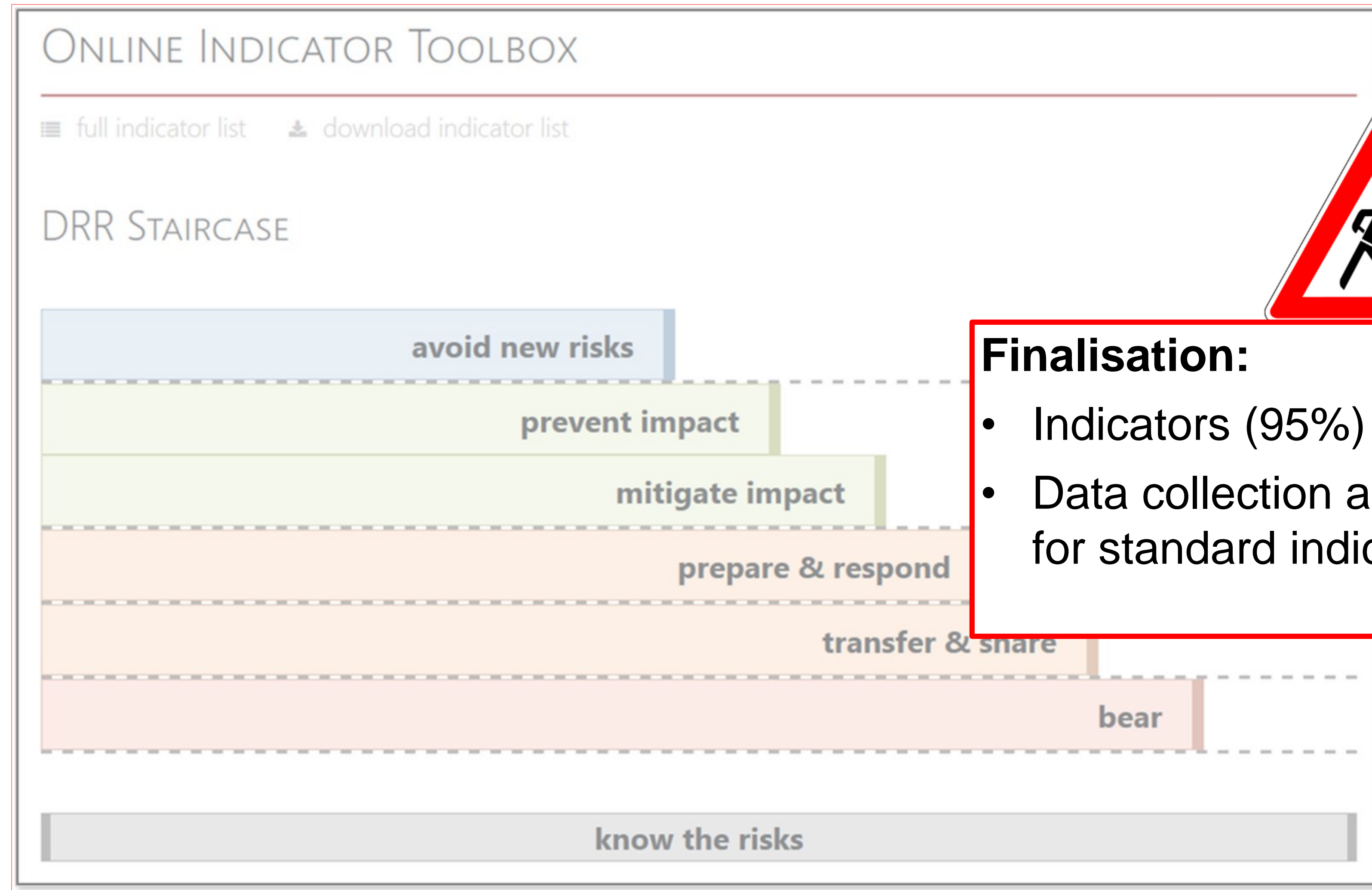
INDICATOR DETAILS	
overview	full list
Outcome	Human beings, settlements, (critical) infrastructure are safe
Criteria/ Characteristic	State of application of hazard-resistant design
Code	0304
Indicator	% of new buildings and critical infrastructure constructed to withstand hazards or climate variability and maintained properly
Description	Hazard-resistant design: increasing the robustness of the structures and establishing warranted redundancies needed to achieve the desired performance in response to hazards. Construction has to respect the universal design-principles: <a href="http://universaldesign.ie/What-is-Universal-Design/The-7-Principles/">http://universaldesign.ie/What-is-Universal-Design/The-7-Principles/</a> Critical infrastructure: water systems, sanitation facilities, health facilities, schools, etc. Hazards: earthquakes, cyclones, flood, etc.; conditions may also result from climate variability like heat, humidity, wind velocity.
Numerator	Number of new buildings/critical infrastructure built hazard-resistently
Denominator	Total number of new buildings/critical infrastructure
Target value	Country/project specific
Disaggregation	Optional: size of community, type of community (rural-urban)
Method and source of verification	expert assessment, random samples, records of acceptance of work

# Standard indicators

INDICATORS FOR OUTCOME "HUMAN BEINGS, SETTLEMENTS, (CRITICAL) INFRASTRUCTURE ARE SAFE"	
<div> <div> <div>overview</div> <div>full list</div> </div> <div>filter...</div> </div>	
Code	Indicator
0301	<p><b>% of structural protective measures managed and maintained properly</b></p> <p>Description: Managed and maintained, periodically (at least once per season) controlled and show no signs of avoidable deterioration. It has to be defined who is in charge.</p>
0302	<p><b>% of buildings/critical infrastructure in areas prone to frequent hazards that are protected by structural measures</b></p> <p>Description: Applicable for structural and soil bio-engineering measures, hazard/risk assessment before and after implementation of measures needed. Structural measures: dams, embankments, riverbank protection, gabions, protection walls, retaining walls, reforestation, soil bio-engineering measures. Define hazard and its frequency.</p>
0303	<p><b>% of persons/households/communities that implement appropriate risk reduction/adaptation measures</b></p> <p>Description: Generic indicator, define risk reduction/adaptation measures according to project focus and context.</p>
0304	<p><b>% of new buildings and critical infrastructure constructed to withstand hazards or climate variability and maintained properly</b></p> <p>Description: Hazard-resistant design: increasing the robustness of the structures and establishing warranted redundancies needed to achieve the desired performance in response to hazards. Construction has to respect the universal design-principles: <a href="http://universaldesign.ie/WhatIs-Universal-Design/The-7-Principles/">http://universaldesign.ie/WhatIs-Universal-Design/The-7-Principles/</a>. Critical infrastructure: water systems, sanitation facilities, health facilities, schools, etc. Hazards: earthquakes, cyclones, flood, etc.; conditions may also result from climate variability like heat, humidity, wind velocity.</p>
0305	<p><b>% of existing buildings and critical infrastructure retrofitted to withstand hazards or climate variability and maintained properly</b></p> <p>Description: Hazard-resistant design: increasing the robustness of the structures and establishing warranted redundancies needed to achieve the desired performance in response to hazards. Construction has to respect the universal design-principles: <a href="http://universaldesign.ie/WhatIs-Universal-Design/The-7-Principles/">http://universaldesign.ie/WhatIs-Universal-Design/The-7-Principles/</a>. Critical infrastructure: water systems, sanitation facilities, health facilities, schools, etc. Hazards: earthquakes, cyclones, flood, etc.; conditions may also result from climate variability like heat, humidity, wind velocity.</p>
0306	<p><b>% of households living in in highly hazard-prone areas that have strengthened their individual dwelling</b></p> <p>Description: The indicator measures the extent to which the target households applied the recommended measures for making their dwelling less vulnerable to the identified hazards (such as structural improvements in its construction or changes in the dwelling's surrounding environment). Hazard-prone as per hazard assessment.</p>
0307	<p><b>% of critical infrastructure remains functional during and after an event</b></p> <p>Description: Critical infrastructure: water systems, sanitation facilities, health facilities, schools, etc.</p>
0308	<p><b>% of community members with access to services, critical facilities and infrastructure</b></p> <p>Description: Continued access to critical public infrastructures/ services protected from the impacts of major identified hazards. Key infrastructures/services may include health centers, schools, water sources, roads, etc.</p>

Indicator 0307	% of structural protective measures maintained properly by the community
Description	<p>The indicator measures if and to what extent the structural protective measure established with the support of the project is maintained. Maintained means periodically (at least once per season) controlled and showing no signs of avoidable deterioration.</p> <p>Usually, in community-based projects, the community is in charge to maintain the measures. If the entry point is the authority and not the community, then the maintenance lies with the authority.</p>
Means of Verification	Survey, observation, expert assessment
Data to be collected	<ol style="list-style-type: none"> <li>Specify against which hazard the measure is protective</li> <li>Specify the type of structural measure: grey – green – hybrid infrastructure</li> <li>Indicate the year of establishment of the measure</li> <li>Estimate the assets at risk by ticking the category: <ul style="list-style-type: none"> <li>Human lives</li> <li>Houses, permanent settlements</li> <li>Livestock, agricultural produce, productive land etc.</li> <li>Community buildings (schools, markets, community halls etc.)</li> <li>Water systems (water for drinking, household, irrigation, <u>waste water</u>)</li> <li>Roads, train lines etc.</li> <li>Energy supply (gas, petrol, electricity)</li> </ul> </li> <li>Asses the level of maintenance by asking following questions: <p>Q1: How many times has the measure been checked in the last 12 months? A1: 0 – 1 – 2</p> <p>Q2: Did the measure show any sign of avoidable deterioration? A2: Yes – no. If A2 is yes, try to specify/ describe</p> <p>Q3: Did a hazardous event(s) happen in the past 12 months? A3: Yes – no.</p> <p>If A3 is yes: continue</p> <p>Q4: Did the measure prove to be effective in protecting people and their assets? A4: yes – no. If A4 is no, try to describe/ document the damage (to the assets/ to the structural measure)</p> <p>Q5: How effective is the measure for a certain scenario [specify small/frequent – extreme/rare event]? Depends on the design event of the measure, material, construction A5: very good – good – regular – bad – very bad</p> <p>Q6: How would you rate the quality of care and maintenance given by the responsible stakeholders? A6: very good – good – regular – bad - very bad</p> </li> </ol>
Calculation of indicator	<p>Numerator: Number of structural measures established with support of the project managed and maintained properly</p> <p>Denominator: Total number of structural measures established with support of the project.</p> <p>Either assess all structural measures (with support of the project) or a statistically representative sample and extrapolate.</p>
Disaggregation	Optional: size of community, type of community (rural-urban)
Comments	Requires expert assessment.
Reference	SRC questionnaire and analysis

# Status of development



## Finalisation:

- Indicators (95%)
- Data collection and analysis package for standard indicators (90%)

**Questions?**



# Evaluation of existing cost-benefit analysis tools

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CBA



Debris Flow event Chosica, Peru

CBA



Do protective measures justify themselves?

# CBA – Risk and Cost-Benefit concept

How to measure benefit (effect) of measure?

Benefit = Difference between Potential damage/a (with/without measure)

Risk

Benefit = Risk with measure – Risk without measure [\$ / year]

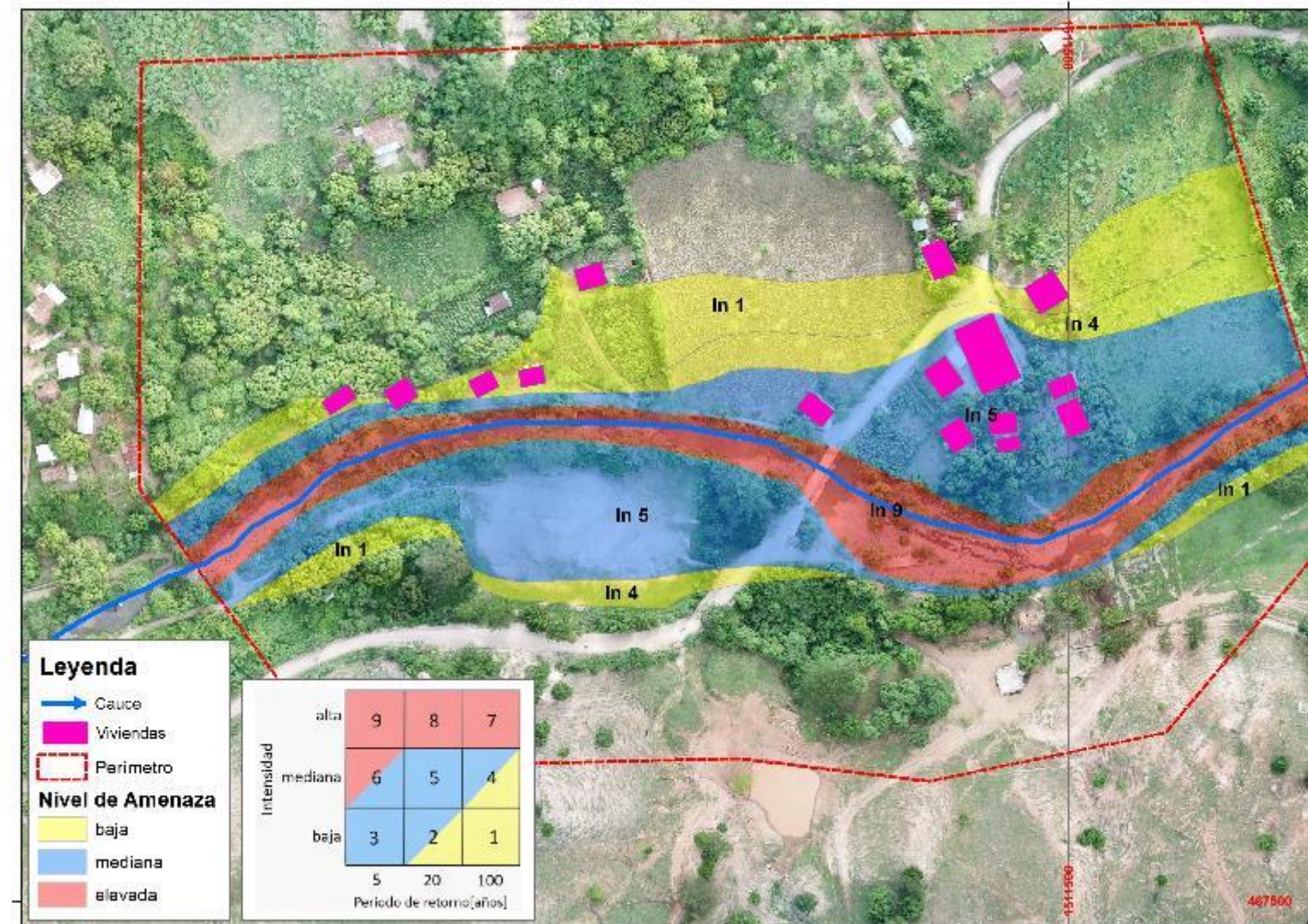
$$\text{Risk} = \frac{\text{Hazard} * \text{Vulnerability}}{\text{Capacity}}$$

$$\text{Cost} - \text{Benefit} = \frac{\text{Risk reduction}}{\text{Costs}}$$



Realize measures  
when benefit > costs

# CBA – Risk and Cost-Benefit concept



$$Risk = \frac{Hazard * Vulnerability}{Capacity}$$

Mitigation measures intend to influence the risk params to reach benefit



## CBA

## Caritas-Tool

- Simplified approach, easy to apply
- Easily comprehensible
- Handbook available in Spanish and English
- Free of charge
- No indirect risks considered
- Low transparency
- Low potential for advocacy
- Low precision due to simplification
- *No calculation tool available*

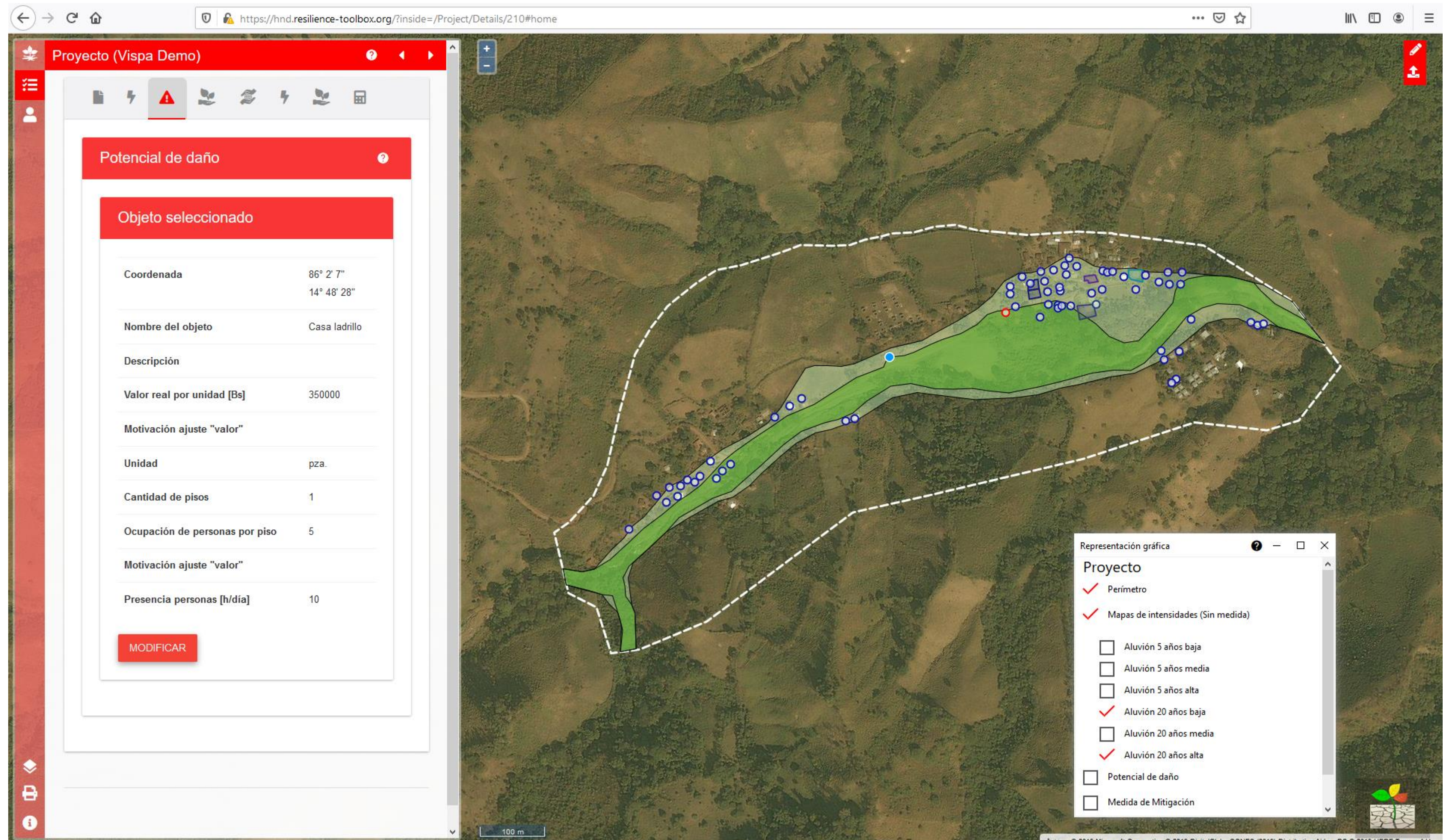




# CBA

# SDC Resilience Toolbox

- Easy handling
- English and spanish
- All params can be modified
- Indirect and direct risks
- GIS-compatible
- Advocacy
- Transparency of work steps and results
- Linkage between authority-community
- 
- Licence costs
- Requires hosting
- Dependency to provider



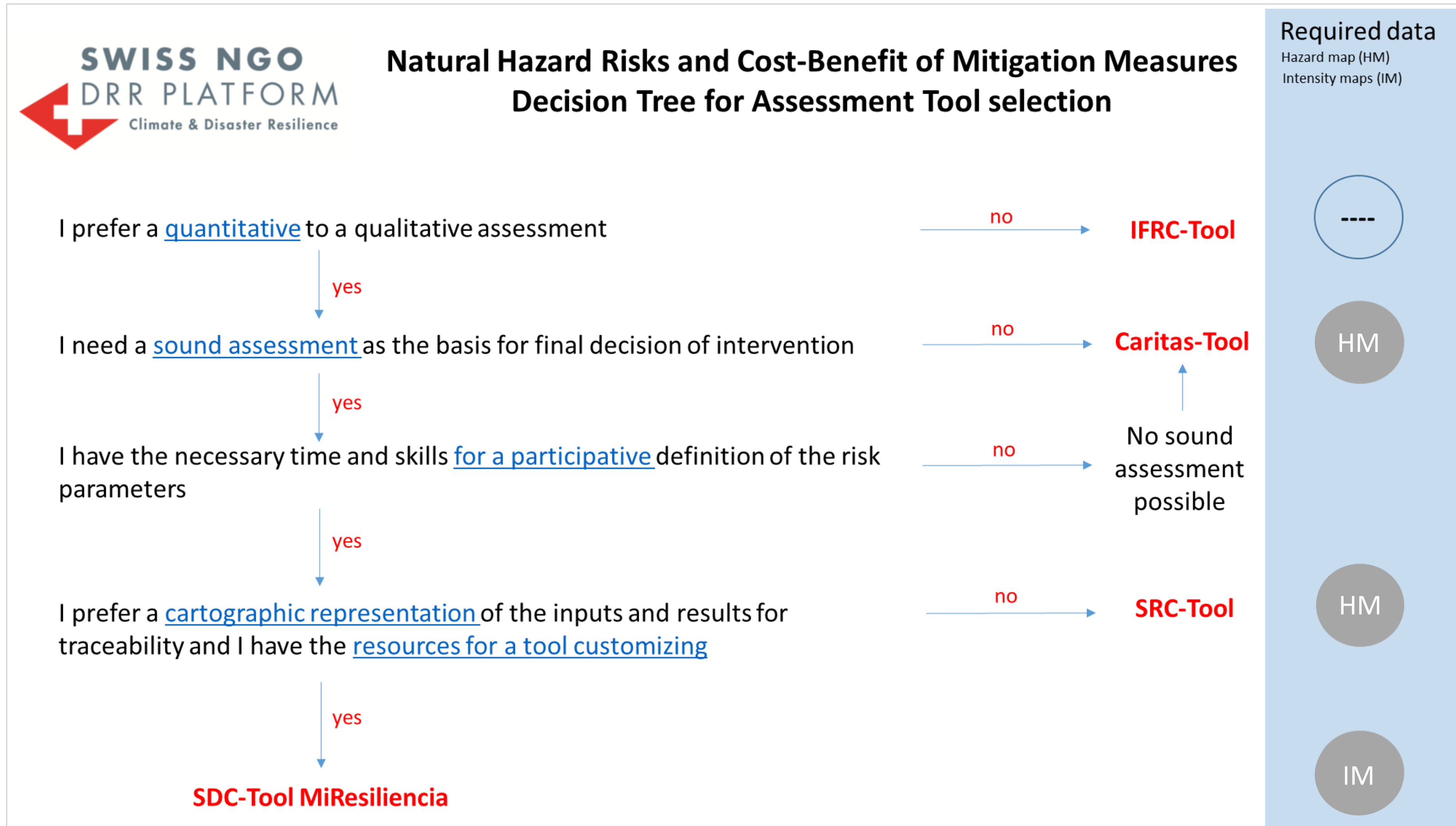
## CBA

- Handbook available in Sp and Eng
- Includes economic and social benefits and costs
- Participative approach
- High acceptance within community
- Low transparency
- Low potential for advocacy for financial authorities
- Low precision due to simplification
- Effect not quantifiable

## IFRC-Tool



# CBA – Overview of existing tools



**Questions?**



# E-learning course

## E-LEARNING COURSE

### Disaster Risk Reduction and Climate Change Adaptation



The Swiss NGO DRR Platform is a network of Swiss NGO's working on disaster risk reduction (DRR) and climate change adaptation (CCA). This e-learning course collects experienced based learning/training material from various years and events. The e-course is available online for free as a self-study tool for practitioners.



#### MODULE 1 | Basic Definitions and Concepts

In this module you will:

- Learn how disasters impact nations, societies, cultures, economies and the environment
- Become familiar with key terms regularly used in DRR and CCA
- Consider the different responses of DRR, CCA and resilience
- Become acquainted with important international frameworks on DRR and CCA

#### MODULE 2 | Conceptual guidance

In this module you will:

- Familiarize yourself with the main approaches for DRR and CCA and their underlying concepts
- Learn about targeted/stand-alone DRR and CCA, integrated DRR and the resilience approach of the Swiss NGO DRR platform
- Get a glimpse at practical examples of the different approaches



#### MODULE 3 | Practical illustrations

In this module you will:

- Review practical examples of targeted and integrated approaches to DRR/CCA and resilience building
- See how the approaches have been implemented in different risk contexts and geographic regions
- Learn about the differences and similarities of the different approaches

#### MODULE 4 | Tools for implementing DRR and CCA

- Become familiar with concept and application of mainstreaming DRR and CCA into project and programme cycles
- Review the enabling factors and frameworks
- Learn about tools and methodologies to integrate DRR and CCA into the project cycle





# Outlook Platform Events

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# Upcoming events

## Effective Advocacy for DRR and CCA

- Webinar, 21.01.2020

## GMO in Agriculture – Risks and Risk Reduction measures

- Learning event, 13.1.2020

## Nexus humanitarian Aid – Development

- Workshop, autumn 2020

## Further events and information

- DRR and CCA Basics [webinar]
- Working at scale through alliances [learning event]
- Urban DRR/CCA [webinar]
- Nexus Humanitarian aid -Development [webinar]

<https://drrplatform.org/event-list.html>



## Invitation to a Learning Event

### Genetically Modified Organisms (GMO) in Agriculture: Facts, risks and risk reduction measures

The Swiss NGO DRR Platform invites for a Learning Event with a focus on Disaster Risk reduction (DRR) to enhance capacities of practitioners with respect to Genetically Modified Organisms (GMOs) in Agriculture through:

- Conceptual introduction on basic mechanisms, facts, regulations, risks and risk reduction measures
- Practical examples from target countries and exercises for the field
- Interactive discussions with experts, exchange of experiences, good practices and options

#### Registration and contact:

Online registration <https://drrplatform.org/event-list.html>

Further information: [Schoenenberger@innovabridge.org](mailto:Schoenenberger@innovabridge.org)



## We value your feedback

- The webinar slides will be made available on our website [www.drrplatform.org](http://www.drrplatform.org)
- Thank you for filling out our feedback form (text box / mail after webinar)

<https://forms.gle/ihEJQrnGAQx1DXDd9>




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