

Development Reality & Areas for
Enhancing Urban Resilience
at the Federation & Municipal Level

Workshop
Priority Areas for Urban Resilience

21 October 2025





MedCities

Increasing multi-level resilience in the city of Saida

Part of MedCities – Barcelona City Council
workplan 2025: RESILIENCE



UN HABITAT
FOR A BETTER URBAN FUTURE



MedCités
MedCities

What is MedCities?

Cities map



Project background: a long-term collaboration with Saida

- The origin: a project in which together with BCN City Council we accompanied Saida in the participatory development of a **Sustainable Urban Development Strategy (2014)** that is still in force today and guides the identification of strategic activities in the city
- This provided the **strategic framework** for the support through small projects on various topics, from youth training for new job itineraries to the development of a tourism promotion strategy and development of the Saida "brand" and, recently, the diagnosis of green and blue infrastructure in the city in order to adapt to climate change.
- This new collaboration regarding the topic of **resilience** will allow for defining an **action plan** that will pave the way to ensure a long-term collaboration.
- MedCities network ensures working peer to peer with other municipalities in the Mediterranean in order to tackle local and regional challenges

Project framework

- Activity of the 2025 workplan Medcities – Barcelona City Council: RESILIENCE – Urban resilience in the Mediterranean
- Objectives:
 - Increase multilevel resilience of the city of Saida
 - Promote the cooperation between Saida, Barcelona City Council and UN Habitat



MedCities

Thank you!

Merci !

شُكْرًا

Gràcies!

Gracias!

contact@medcities.org

www.medcities.org

Urban Resilience Workshop

(Saida-Bcn)

21th october of 2025
Eduard Carrasco
Urban Resilience Focal Point





1. Context of the project
2. Barcelona Experience
3. Saida's resilience pathway

Índex



Context of the project





Barcelona experience

“Urban resilience is the measurable ability of any urban system, with its inhabitants, to maintain continuity through all shocks and stresses, while positively adapting and transforming toward sustainability.”

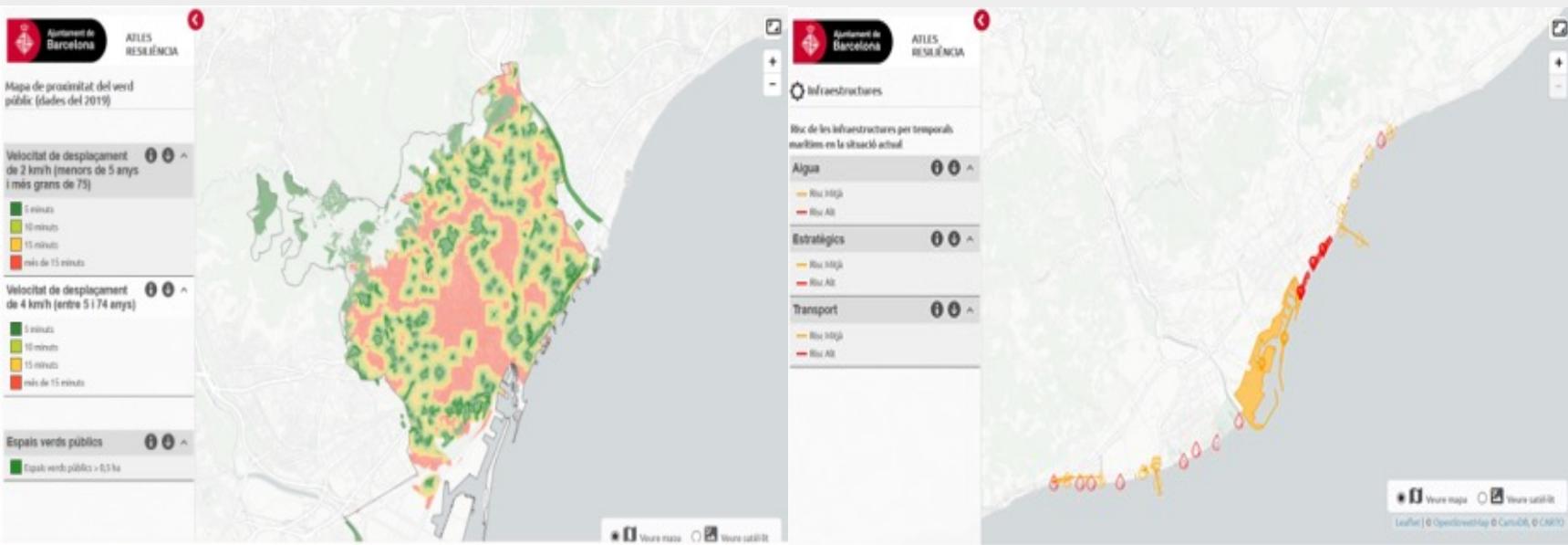
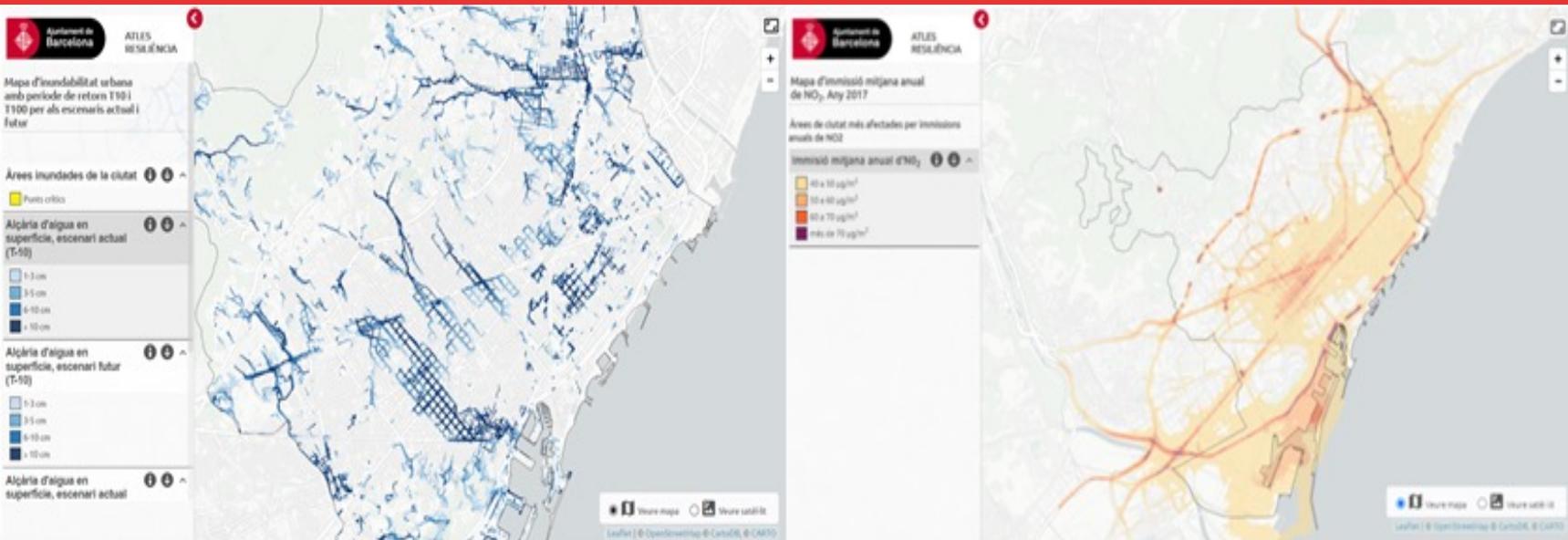


FOUR DIMENSION ANALISYS

- 1 . Governance**
- 2. Infraestructures**
- 3. Population**
- 4. Environmental and Natural Systems**



Barcelona experience



DATA COLLECTION

Indicators
Infrastructures
Maps
Risks
Vulnerabilities
Strenghts

...



Barcelona experience

Community participation



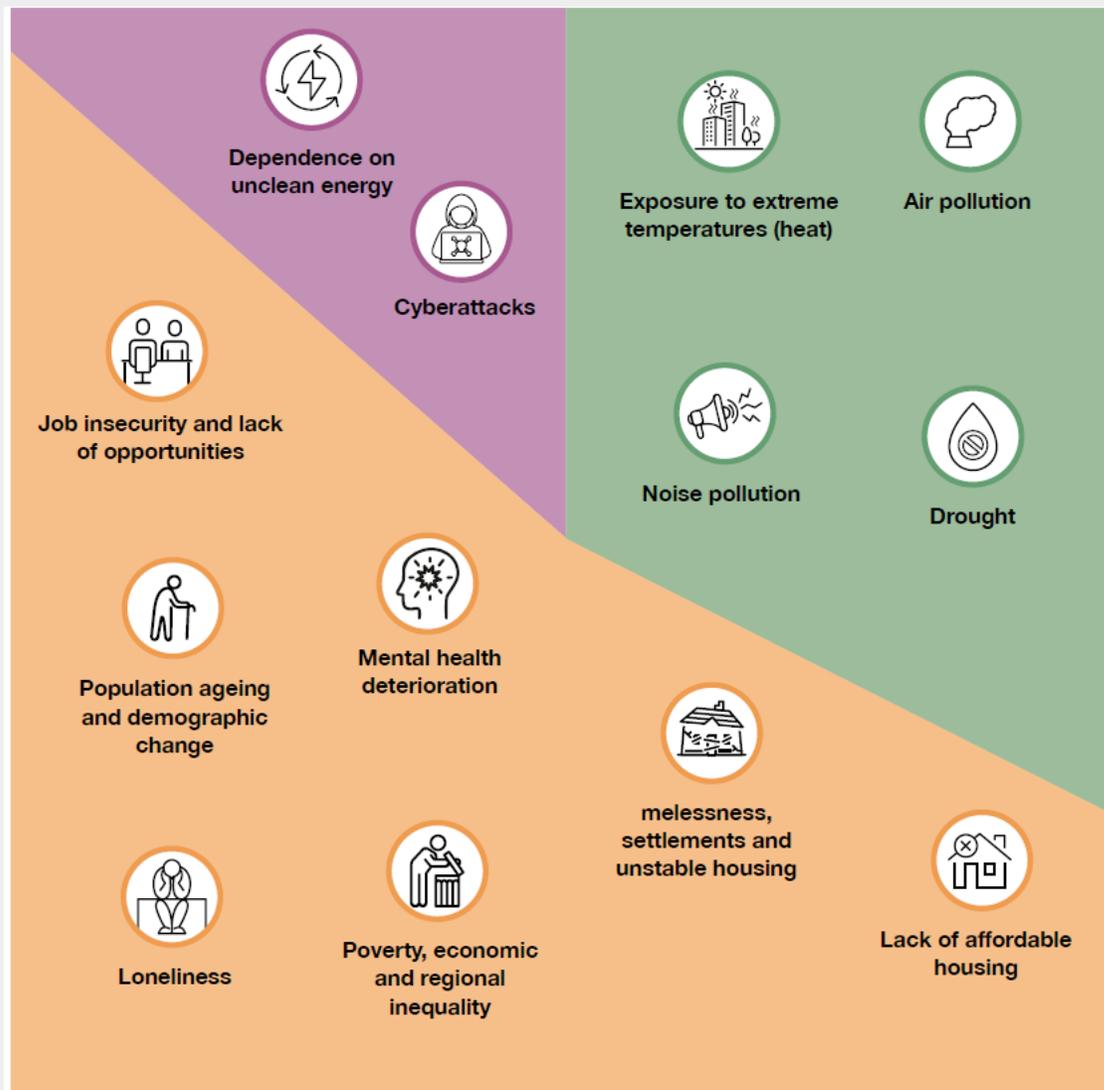
Collaboration between stakeholders





Barcelona experience

PRIORITY RISKS (2022)





Barcelona experience



IMPLEMENT ACTIONS



ASSESSORAMENT
ENERGÈTIC



Saida Resilience Pathway



**Thank you
Shukran**

www.barcelona.cat

Agenda

			
Workshop for Prioritization of Hazards & Identification of Priority Areas			
Location	Municipality of Saida - 2nd Floor - Operations Room of DRM Saida el Zahrani		
Time	Session	Description	Responsibility
10:00 - 10:20	Keynotes	Opening Speeches	MedCités & Barcelona City Council
10:20 - 10:30	Introduction to Urban Resilience <i>Diagnosis Project</i> <i>Definitions of Terms</i>	Presentation (Shocks, Stresses, CRPT, Current Phase...)	Saida Expert Team
10:30 - 12:00	Identification & Prioritization of Risks <i>Shocks & Stresses</i>	Interactive Session of Voting to most relevant shocks Geographical plotting on Maps Thematic Characterization Shocks Identification Card (Prioritization Matrix; Probability)	Saida Expert Team
12:00 - 12:10	Coffee Break		
12:10 - 1:10	Risks Synergies & Clusters	Identifying Synergies Shocks & Stresses (Direct, Indirect, Triggering of, Triggered by)	Saida Expert Team
1:10 - 1:30	Indicators Relation	Identifying the Indicators as indication of stresses	Saida Expert Team
1:30 - 2:20	Lunch Break		
2:20 - 2:30	Introduction to PPIs	Introducing the Importance of Policies and Plans in Gaps Assessment	Saida Expert Team
2:30 - 2:40	PPIs Model: Lebanese Red Cross	Presentation of relevant interventions within Risk Reduction & Urban Resilience	Lebanese Red Cross
2:40 - 3:00	PPIs Projection	Over the span of	Lebanese Red Cross
3:00 - 3:10	Wrap up	Discussions & presentations by groups	Saida Expert Team



اتحاد بلديات
صيда - الزهراني

FEDERATION OF
MUNICIPALITIES
SAIDA-ZAHRANI

WHAT IS URBAN RESILIENCE?

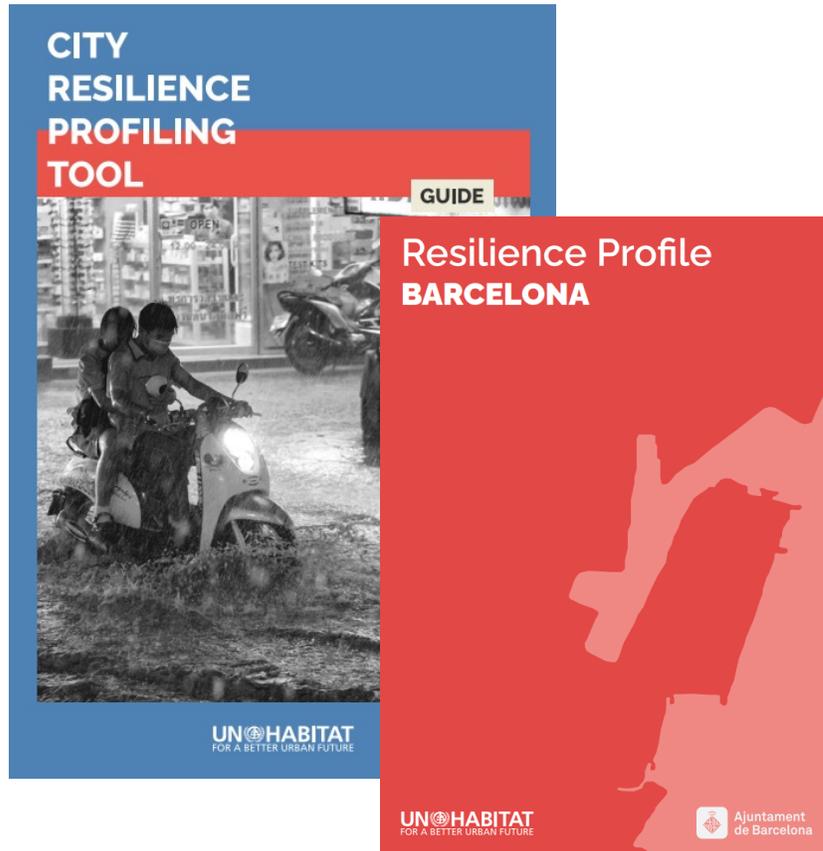
ما هي القدرة الحضرية على الصمود؟

It is the capacity of any urban system, together with its inhabitants, to **maintain continuity** through all **shocks and stresses** (*human & natural*), while **positively adapting** and **transforming** towards **sustainability**.

هي قدرة أي نظام حضري، مع سكانه، على الحفاظ على الاستمرارية في مواجهة جميع الصدمات والضغوط، مع التكيف الإيجابي والتحول نحو الاستدامة.

International Standardization

UN-HABITAT's CRPT



Asunción, Paraguay



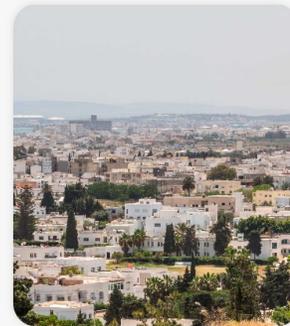
Barcelona, Spain



Dakar, Senegal



Teresina, Brazil



Tunis, Tunisia



Yakutsk, Russia

International Standardization

Sendai Framework



UNDRR MCR Scorecards



SSC Mapping

Shocks

“Sudden-onset events leading, potentially, to adverse impacts unfolded within hours or days in the urban areas.”



الصدّامات

أحداث مفاجئة في المناطق الحضرية قد تؤدي إلى آثار سلبية تتطور وتتكشف خلال ساعات أو أيام.



Shocks



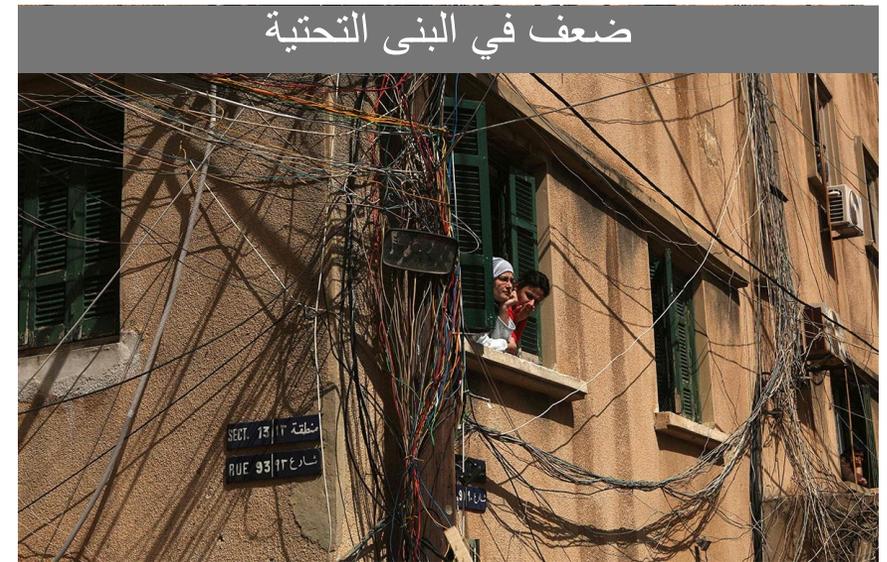
SSC Mapping

Stresses

“Chronic pressures whose cumulative impacts undermine city’s capacity for resilience.”

الضغوطات

عوامل مزمنة تؤدي آثارها التراكمية مع الوقت إلى تقويض قدرة المدن على الصمود، فتضعفها وتجعلها أكثر هشاشة.



أداة تشخيص المرونة الحضرية - CRPT

لتحديد أولويات الصدمات و الضغوطات والتحديات ولتخفيف الخسائر نعتمد على قياس تأثير كل منها على:

People

• الأشخاص
فيروس كورونا أثر على 5 مليون شخص ← في حال التخطيط يجب تمكين القدرة الإجتماعية

Assets

• الأبنية والبنية التحتية
فيروس كورونا أثر على البنى التحتية (مستشفيات) ← في حال التخطيط يجب تحصين القطاع الصحي

Processes

• العمليات (الخدمات والأنظمة)
فيروس كورونا أثر على المعاملات ← في حال التخطيط يجب تأمين بدائل إلكترونية للمعاملات

SSC Identification

SUPPORTING ELEMENT

Incident Log

Recording & categorizing data, which helps predict patterns and identify potential shocks & stresses

Incident
July War (حرب تموز)
Assassination of Mahmoud al-Majzoub (اغتيال)
Ain al-Helweh Clashes (اشتباكات مخيم)
Earthquake (زلزال)
Assassination of Kamal Naji (اغتيال)
Flood Event (فيضانات)
Sit-in & Road Closure (اعتصام - إغلاق مدخل صيدا)
Sectarian Clashes in Abra (اشتباكات)
Battle of Abra (معركة عبرا)
Flood Event (فيضانات)
Garbage Crisis (أزمة نفايات)
Ain al-Helweh Clashes (اشتباكات مخيم)

عنصر مساعد

سجل الحوادث

توثيق وتصنيف الحوادث، مما يساهم في تنبؤ الأنماط وتحديد الصدمات والضغوطات المحتملة



Development Reality & Areas for
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Methodology & Framework



Objectives

Overall Objective

Development of an Saida – el Zahrani
Urban Resilience Assessment



Identify Potential risks and hazards across the
federation



Scientifically Inform action planning for city
proofing from Shocks & Stresses



Establish a fed record of interventions and
indicators which can support evidence-based.



Increase preparedness of local communities and
authorities through engagement in development
of diagnosis report

الهدف الرئيسي

إعداد دراسة للمرونة الحضرية في اتحاد بلديات صيدا
- الزهراني

دليل لتحديد المخاطر والتهديدات المحتملة



تحديد مجالات التدخل لتخفيف والحد من الصدمات
والضغوطات بطريقة علمية



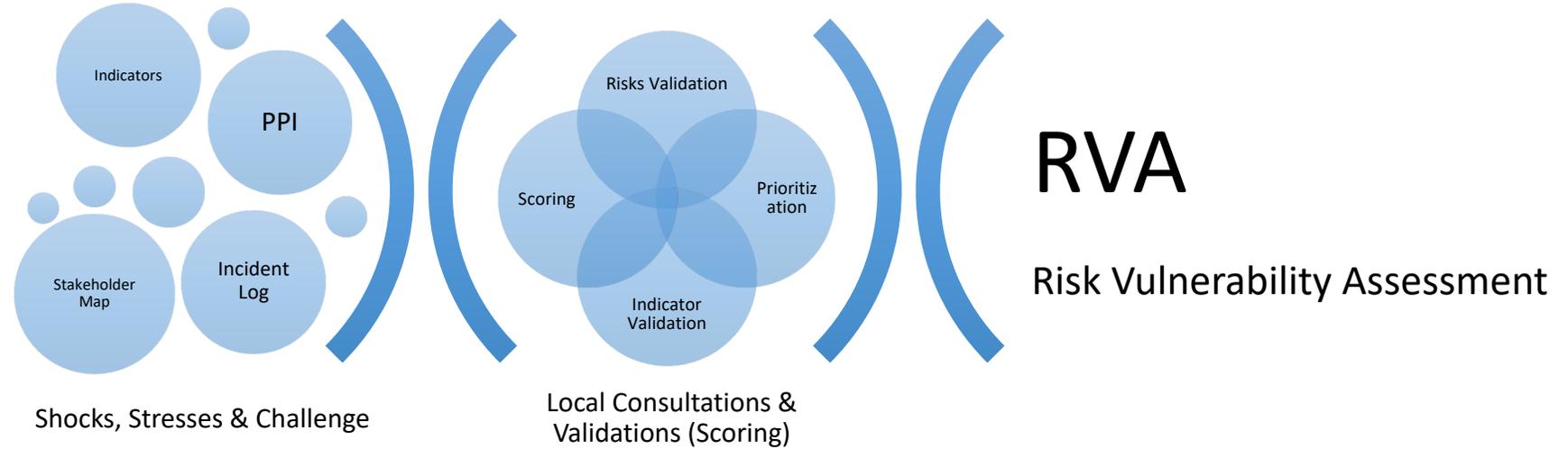
إنشاء منصة إلكترونية تحوي الصدمات ومؤشرات تساهم في
تفعيل القرارات المبنية على الأدلة



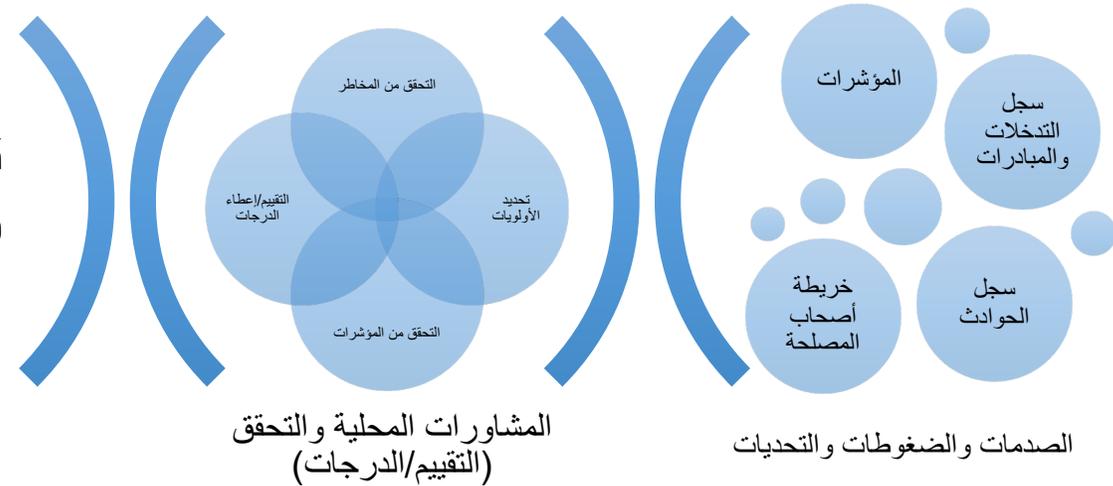
زيادة الجهوزية بين المجتمع المحلي وسلطاته من خلال العملية
التشاركية في تحديد اولويات الدراسة



Assessment Framework

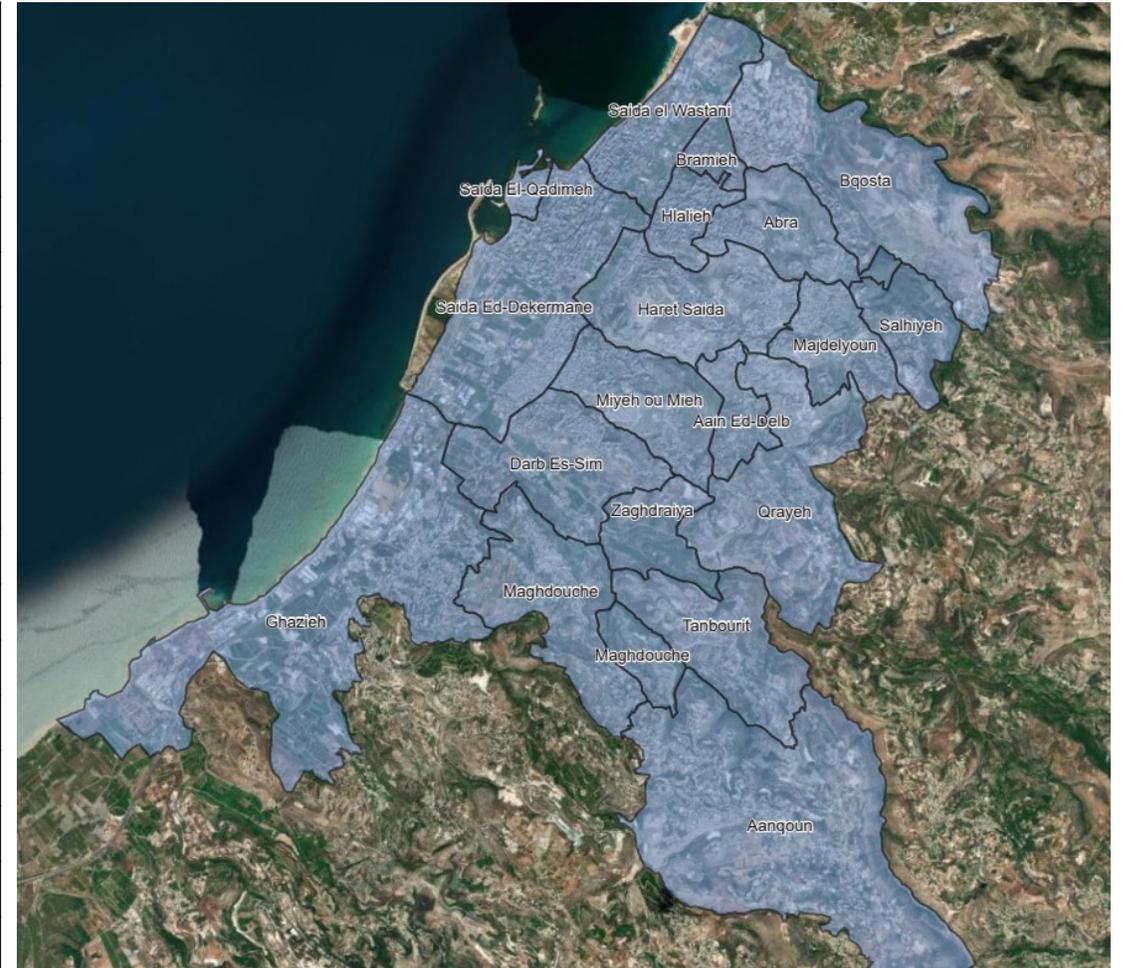


تقييم المخاطر
والقدرة على الصمود



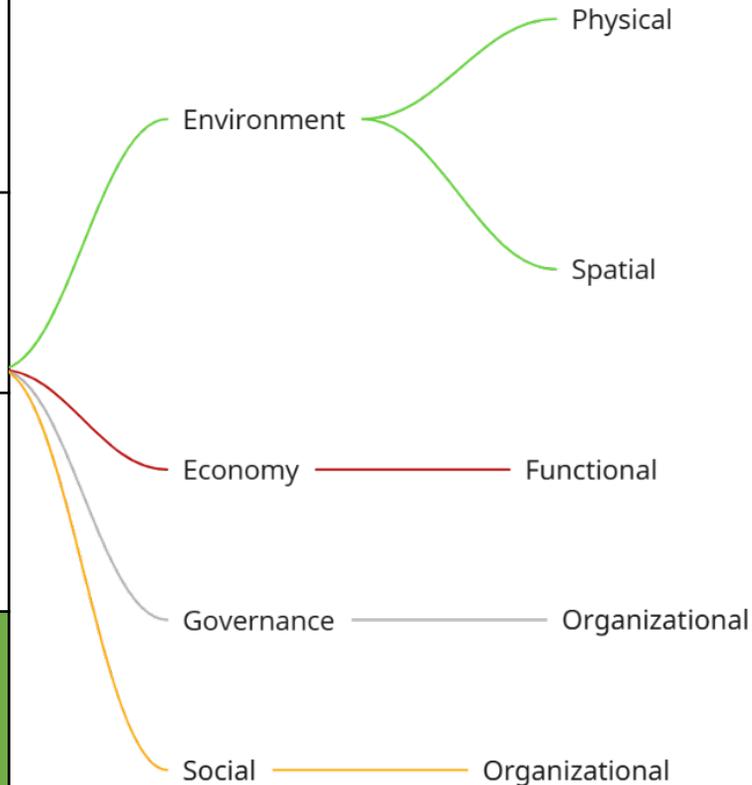
Localization | Geographic Scope

	Municipality
Union of Municipalities of Saida el Zahrani	Saida
	Aabra
	Bqosta
	Hlaliyeh
	Bramiyeh
	Majdelyoun
	Haret Saida
	Darb Es-Sim
	Miyeh w Miyeh
	Anqoun
	Maghdouche
	Ain el Deleb
	Al Qrayeh
	Tanbourit
	Salhiyeh
	Ghazieh



Localization | Thematic Scope

CRPT Core Dimension	Environmental	Social	Economic	Institutional
Physical	Natural resource systems (air, water, waste); climate-adaptive infrastructure	Housing quality, public spaces, service access	Physical market spaces; transport and energy infrastructure	Institutional buildings; emergency facilities
Spatial	Land use regulations; proximity to sensitive ecosystems	Settlement patterns of vulnerable groups; access to health/education	Urban zoning for business hubs; access to workspaces	Administrative zoning; distribution of institutional services
Functional	Continuity of environmental services (waste, water, green systems)	Health care delivery; education system performance	Job creation, supply chain resilience; financial services	Municipal operations; policy implementation; data monitoring systems
Organizational	Environmental policy coordination; environmental governance structures	Community engagement; civil society organizations	Private Public Partnership Activation; Private sector participation in planning; economic risk governance	Governance frameworks; DRM unit; inter-agency coordination



أداة تشخيص المرونة الحضرية - CRPT

المحاور الأربعة للأداة



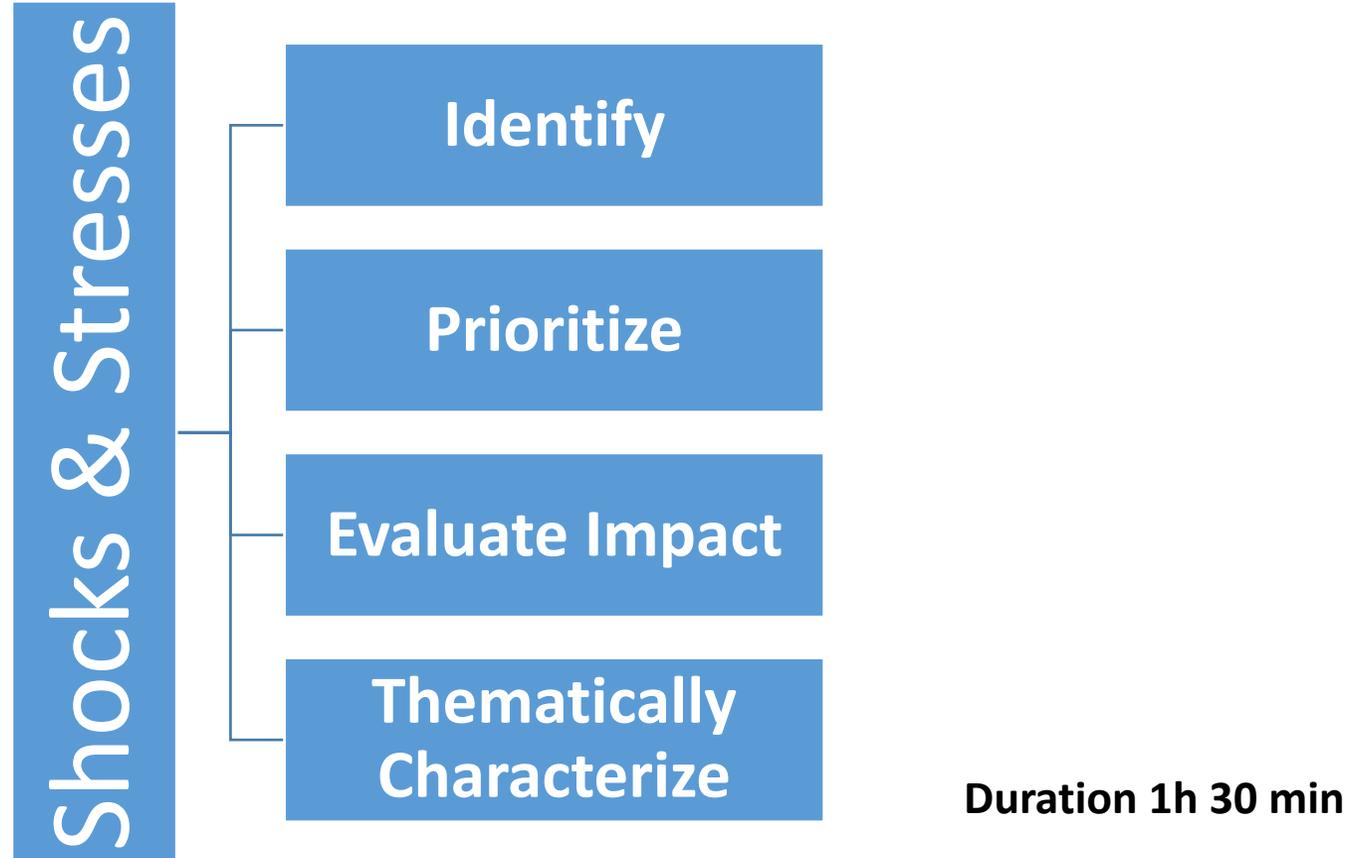
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Session 1

Identification of Shocks & Stresses



Objectives of Session



Shocks Identification (20 mins)

Shocks Scoring Matrix									
Coding	Shock Category	Shock	Driver & Effect	Linked CRPT Dimension(s)	Scale of Impact (1-5)	Severity of Impact (1-5)	Priority Score (1-25)	Priority Coding (↑, ↓)	Why?
Sh-N-1	Natural	Flooding Coastal	Low-lying coastal areas and poor drainage lead to recurrent urban flooding.	Environmental	5	5	25	↔	
Sh-N-2	Natural	Urban Pluvial Flooding	Intense rain and blockage of water drainage causing loss of housing and critical infrastructure	Environmental	3	5	15	↔	
Sh-N-3	Natural	Earthquakes	Located near seismically active fault lines; high risk due to weak buildings.	Environmental	4	4	16	↑	A lot of earthquake are happening
Sh-N-4	Natural	Collapse of Sideways & Routes	Heavy rainfall and unregulated construction on hills increase landslide risks.	Environmental	3	4	12		
Sh-N-5	Natural	Drought	Climate-induced drought threatens water supply and agriculture.	Environmental	4	4	16		
Sh-N-6	Natural	High Sea Tides/Storm Surges	Rising sea levels threaten infrastructure and increase erosion risk.	Environmental	4	4	16		
Sh-B-1	Biological	Epidemics / Pandemic	High density urbanization, poor conditions in camps/informal housing, Lack of preparedness plan in public health amplify risk	Social	5	5	25		
Sh-B-2	Biological	Agricultural Diseases/Water-borne disease outbreaks (E-coli, Chicken Disease..)	Sanitation issues contribute to disease spread via water and food.	Social	4	4	16		

Stresses Identification (20 mins)

Stresses Scoring Matrix									
Coding	Stress Category	Stress	Driver & Effect	Linked CPPT Dimension(s)	Scale of Impact (1-5)	Severity of Impact (1-5)	Priority Score (1-25)	Priority Coding (↑, ↓, ↔)	Why?
St-Eco-1	Economic	High unemployment	Lack of job opportunities, especially among youth, leads to migration or informal work.	Economic	5	5	25	↔	
St-Eco-2	Economic	Poverty	Widespread poverty undermines basic living standards and resilience capacity.	Economic	5	5	25	↔	
St-Eco-3	Economic	Inflation and devaluation of purchasing power	Hyperinflation devalues incomes and disrupts service provision including food, electricity, access to health. etc.	Economic	5	5	25		
St-Eco-4	Economic	Youth underemployment	Skilled youth face limited career prospects, fostering frustration and brain drain.	Economic	4	4	16	↑	Recent report shows high number
St-Eco-5	Economic	Growth of Black & Informal Markets	Large informal labor market limits access to protections and taxes.	Economic	4	4	16		
St-Eco-6	Economic	Slow growth of local economy (industries, port & Trade)	Low competitiveness of industrial & trade sector in the region affect employment and GDP	Economic	4	4	16		
St-Eco-7	Economic	Minimal international investment in industries & services	Low stability, competitiveness, and economic plans keep the area of minimal investment from abroad which can potentially increase local GDP	Economic	4	3	12		
St-Env-1	Environmental	Coastal ecosystem degradation	Construction and pollution threaten the marine environment.	Environmental	4	4	16		
St-Env-2	Environmental	Absence of green/public spaces	Absence of spaces for social cohesion and ecosystems for flora and fauna, heavily affects social and environmental systems in city	Environmental	5	4	20		

Prioritization of Shocks (15 mins)

Choose 10 Shocks & Input into Table

Shocks								
Choose 10 Shocks & Describe in Details its impact								
Coding	Shock	Location/Hotspot	Impact on People (1-5)	Impact on Assets (1-5)	Impact on Processes (1-5)	Scale (Neighborhood/Municipal/Union/National) (1-5)	Recent events (year)	Affected groups (e.g., elderly, PWD, fishermen)
Sh-N-1	Flooding Coastal		4	5	4	1	2023	Low income households; shop owners; commuters

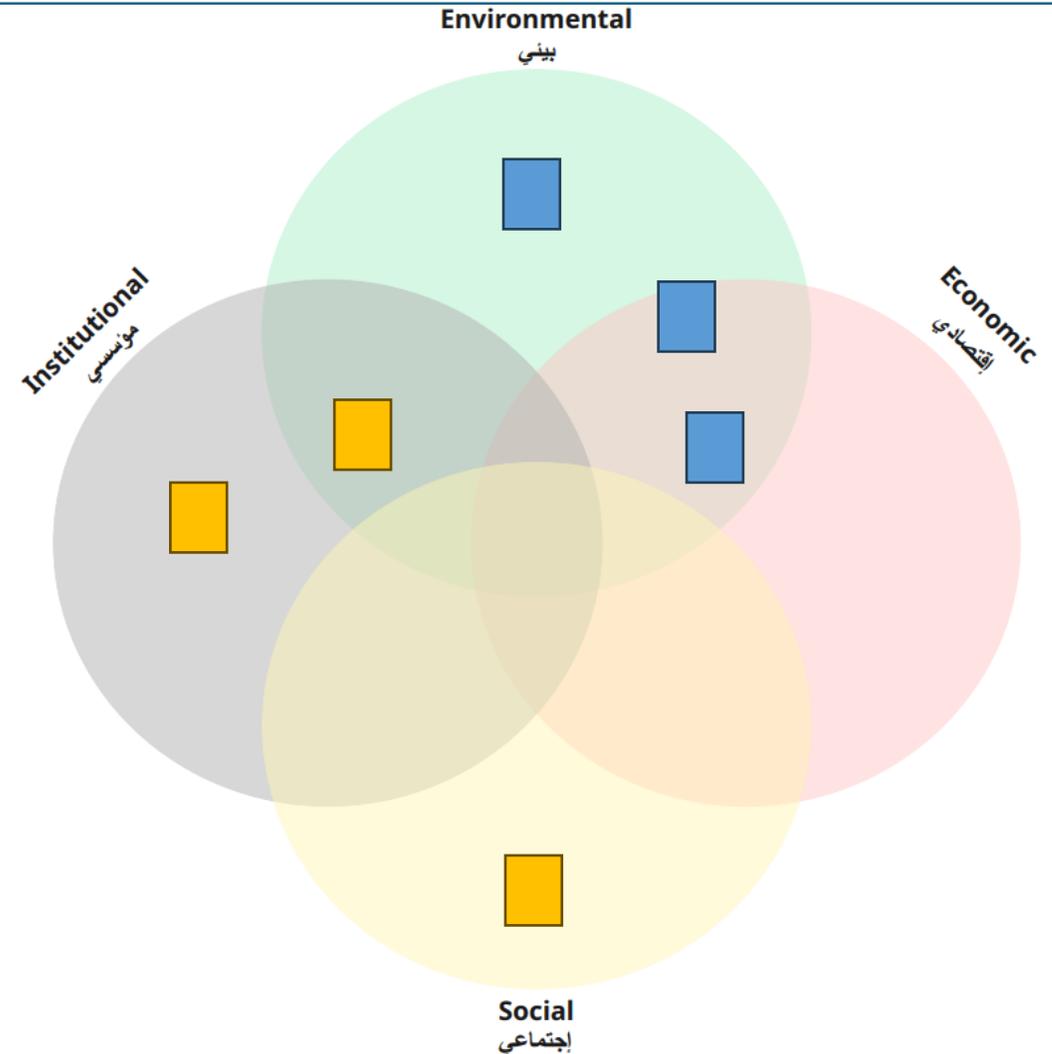
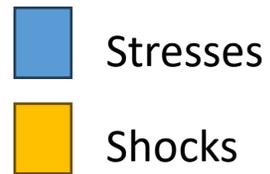
Prioritization of Stresses (15 mins)

Choose 15 Stresses & Input into Table

Stresses							
Choose 10 Stresses & Describe in Details its impact							
Coding	Stress	Location/Hotspot	Impact on People (1-5)	Impact on Assets (1-5)	Impact on Processes (1-5)	Scale (Neighborhood/Municipal/Union/National) (1-5)	Affected groups (e.g., elderly, PWD, fishermen)
St-Eco-1	High unemployment		4	5	4	1	Low income households; shop owners; commuters

Characterization & Plotting of Shocks & Stresses (20 mins)

Of the 10 Shocks & 15 Stresses plot on Diagram



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Session 2

Synergies



Objectives of Session

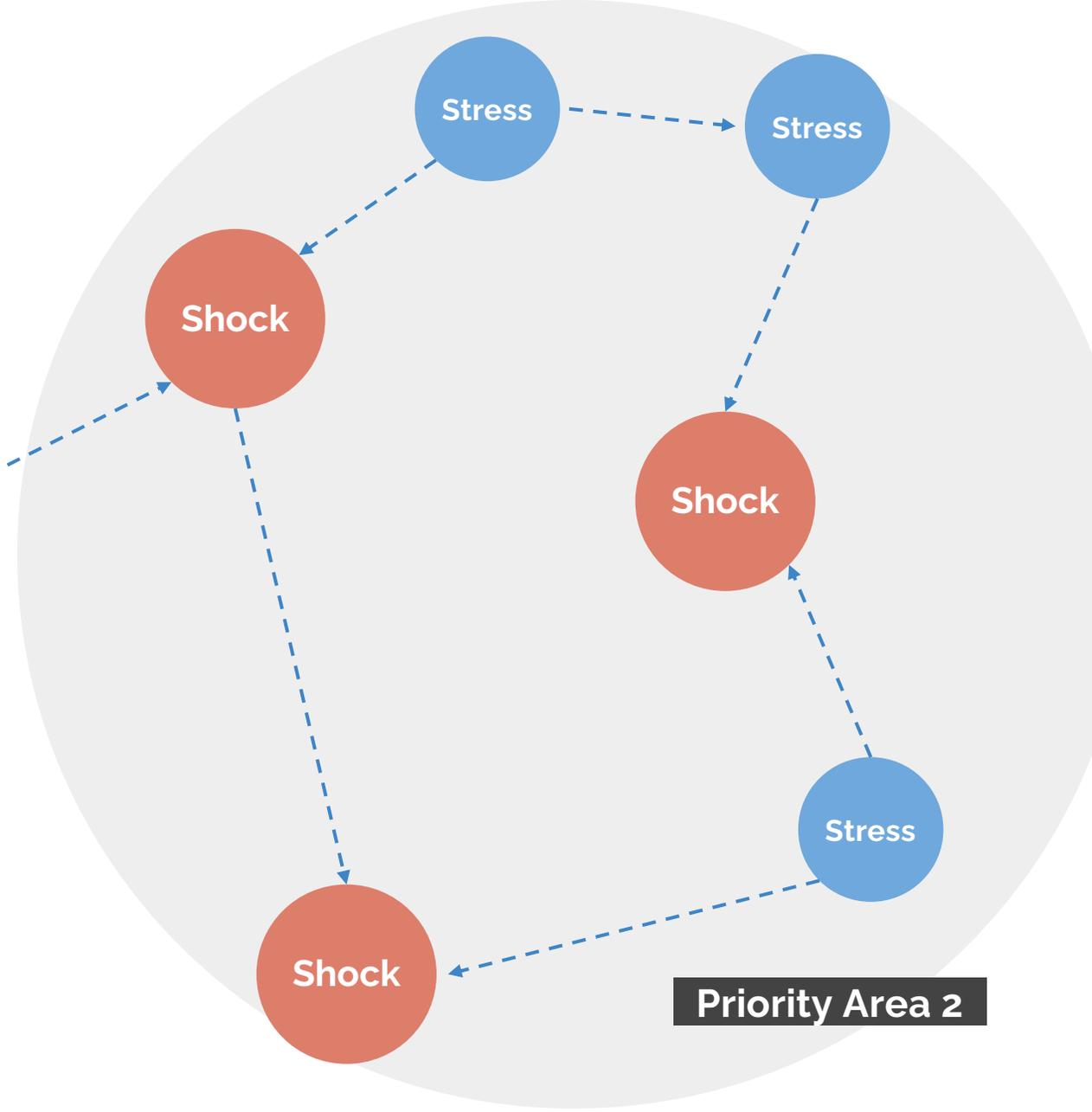
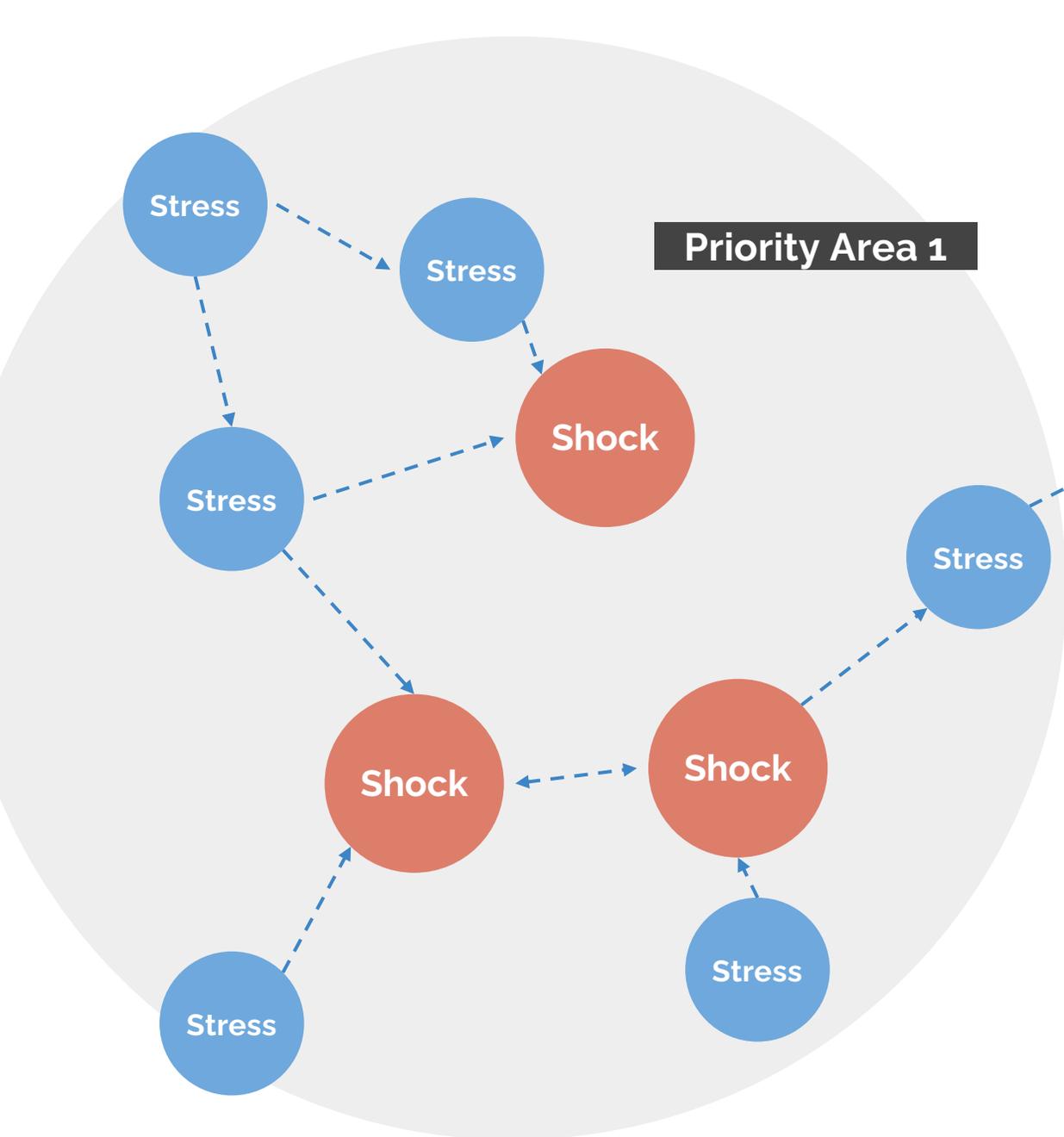
Shocks & Stresses

Synergies
Definition

Identification

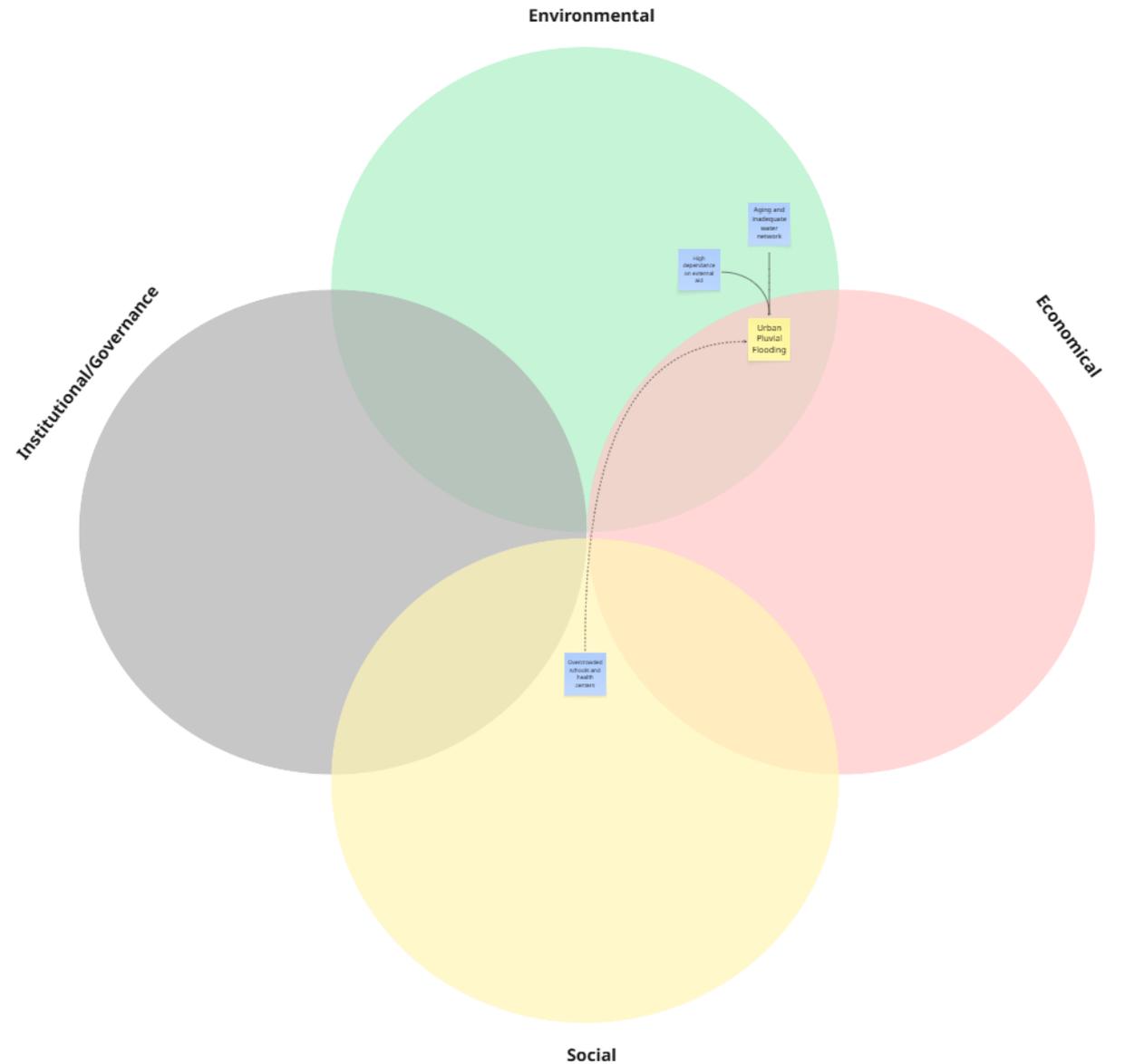
Clustering

Duration 1 hr



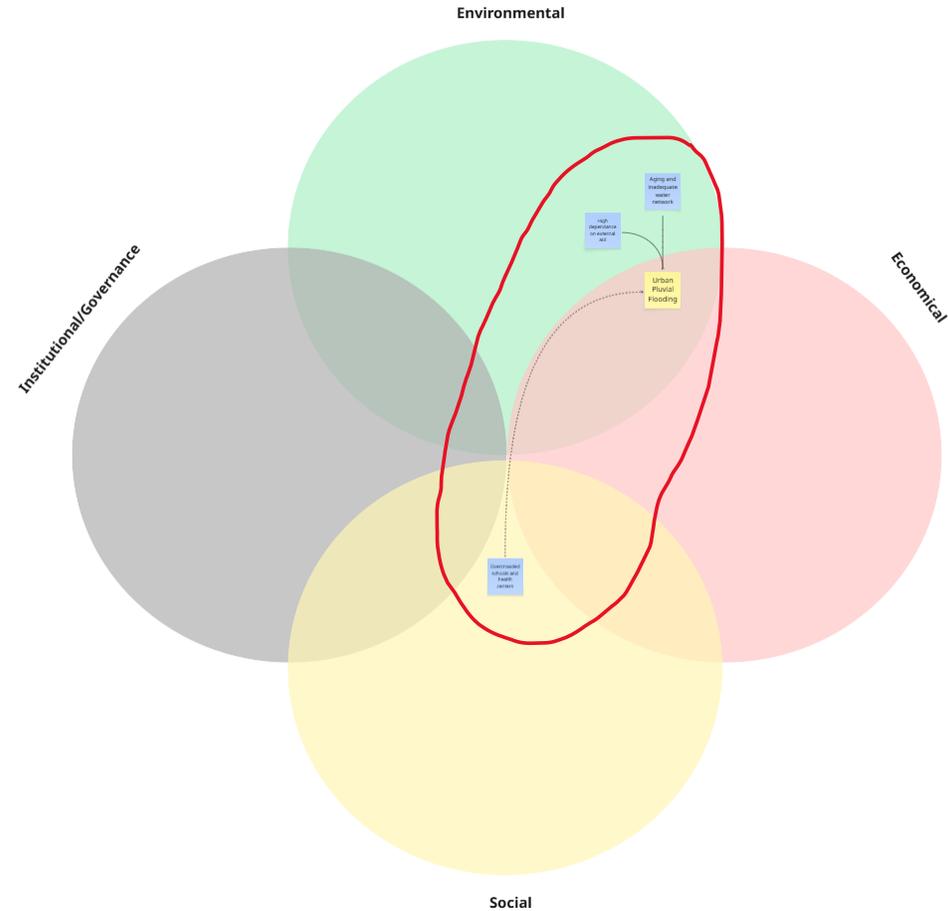
Synergies (40 min)

- Directly →
- Indirectly - - →
- Triggering of →
- Triggered by ←



Clustering (20 min)

Are combination of Shocks & Stresses that are greatly interconnected



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Session 3

Indicators



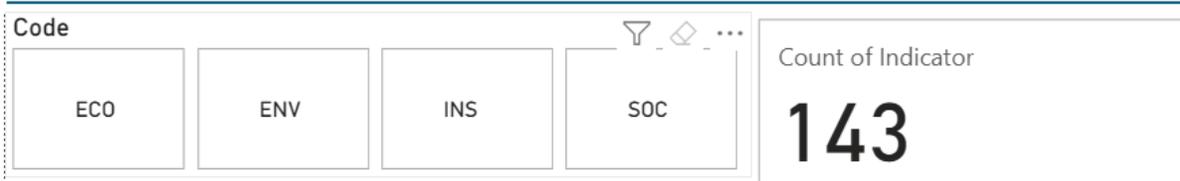
Objectives of Session

Shocks & Stresses

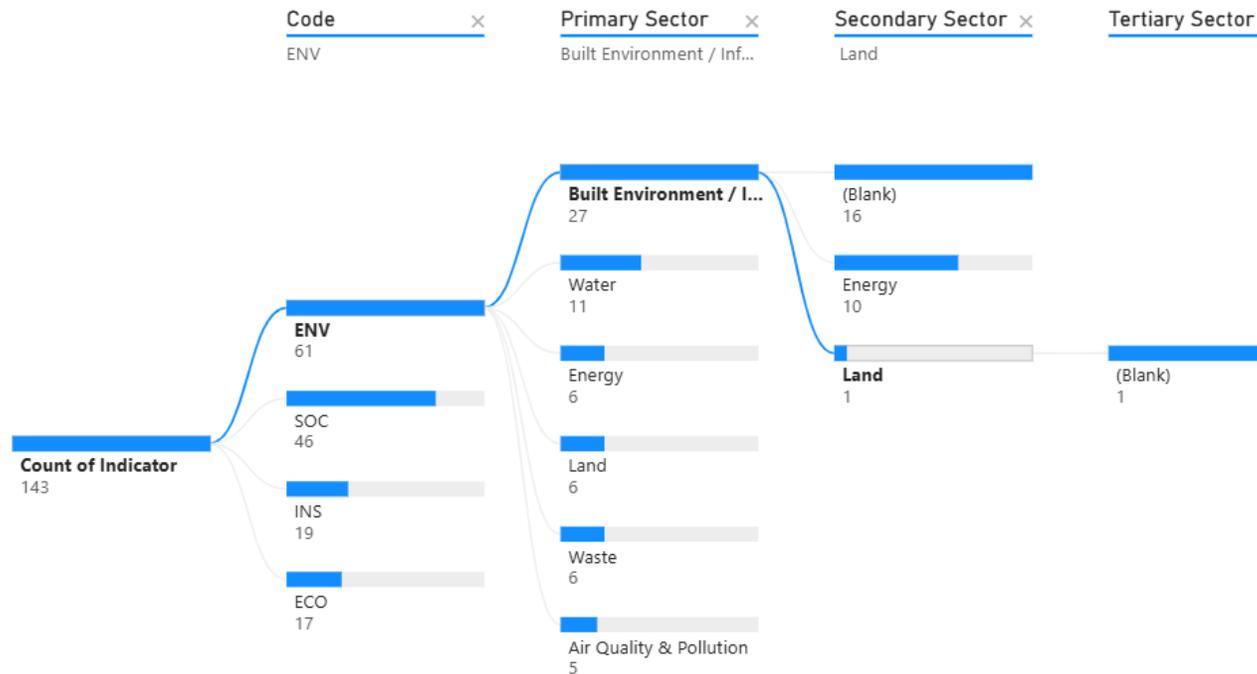
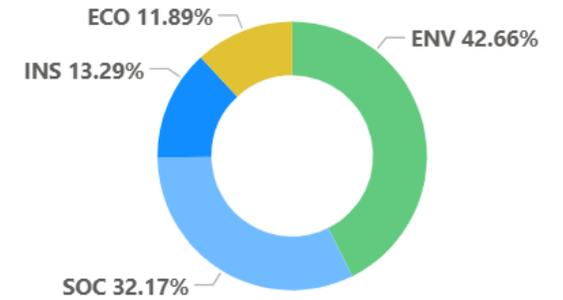
Relation
Identification

Duration 20 min

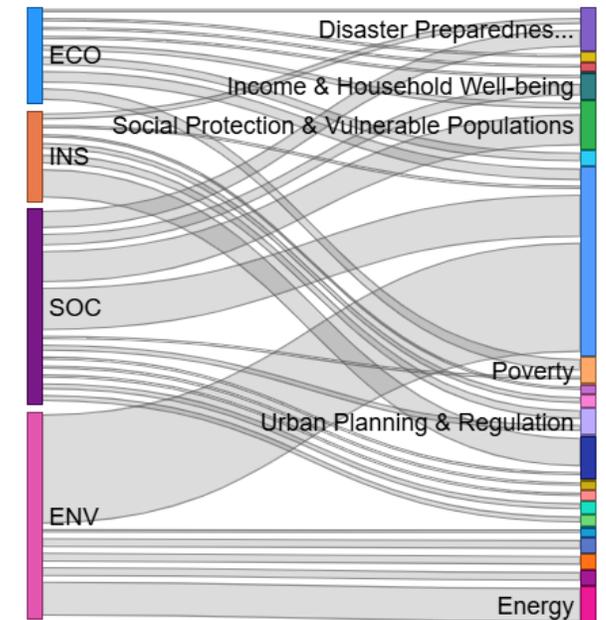
Indicators – Meta Data



Count of Indicator by Code



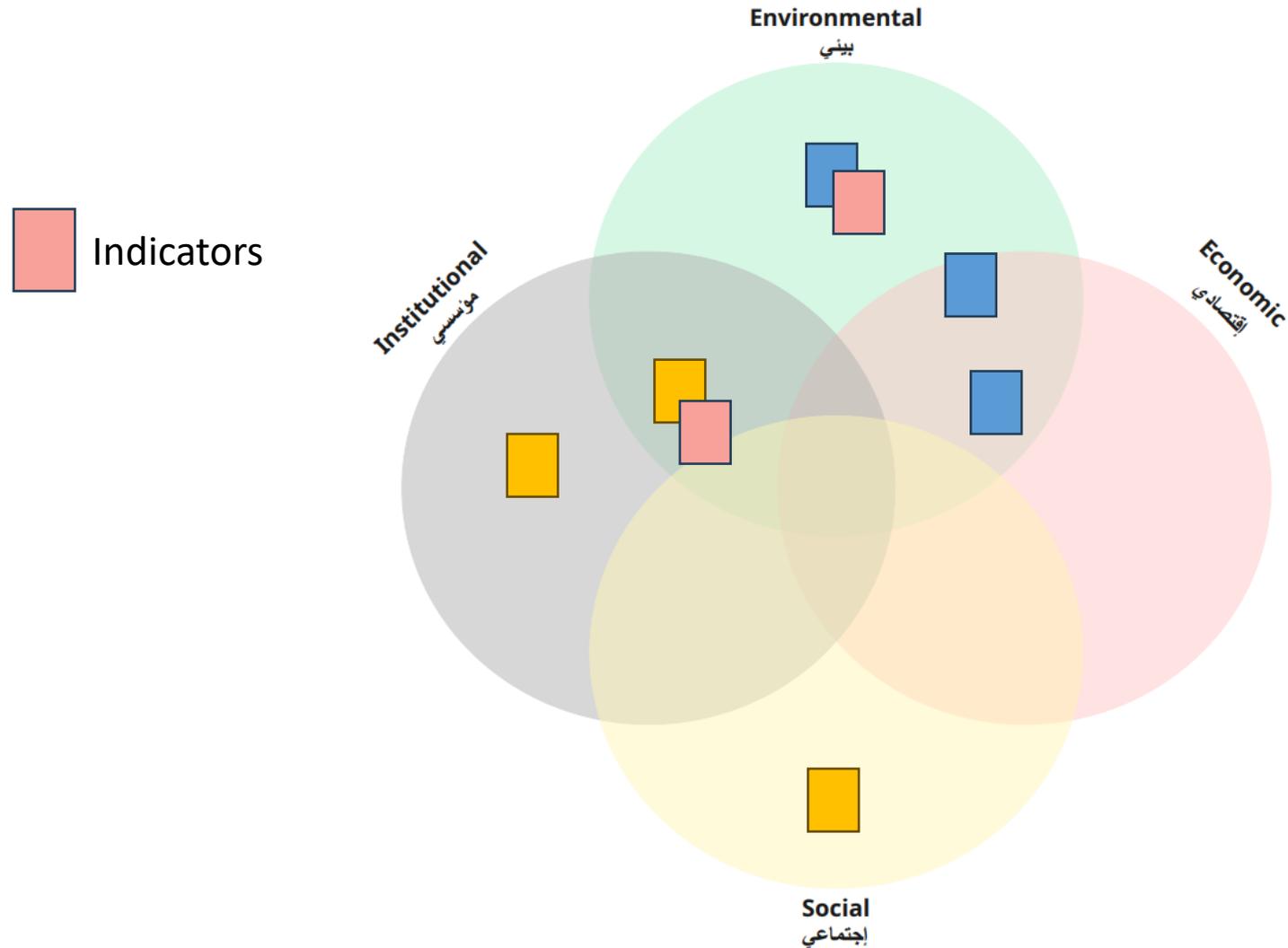
Count of Indicator by Code and Secondary Sector



Indicators – Sample

Type	Code	Primary Sector	Sector ID	Indicator ID	Indicator	Description	Unit	Benchmark Value	
Economic	ECO	Business & Economic Activity	13	13.1	% of GDP attributed to key sectors	The proportion of total Gross Domestic Product generated by major economic sectors (e.g., agriculture, industry, and services). It indicates the structure of the economy and the relative contribution of each sector to overall economic output.	%	N/A	
				13.2	Distribution of businesses according to employment size categories (ratio of SMEs to Large Businesses)	The share of businesses classified by number of employees—typically micro, small, medium, or large enterprises. The SME-to-large-business ratio highlights the economic base structure and the balance between entrepreneurial and corporate activity. SMEs: 0-249 employees Large: 250 and above	No Unit	95:1	
				14.2	Market Functionality Index	A metric developed to assess how effectively a market system operates in supplying goods and services to consumers. It measures key aspects such as availability of goods, price stability, accessibility, competition, and infrastructure to determine whether markets are capable of meeting household needs—especially during crises or economic shocks.	0-100	0-25: Poor functionality 26-50: Low 51-75: Moderate 76-100: High	
		Income & Household Well-being	15	15.1	% of income spent on energy	The share of household or individual income used to pay for electricity, fuel, gas, and other energy sources. It reflects energy affordability and potential vulnerability to price shocks.	%	<10%	
				15.2	% of household income spent on housing	The portion of total income devoted to rent, mortgage payments, and utilities. It gauges housing affordability and financial stress on households.	%	<30-40%	
		Labor & Employment	16	15.5	Median income level (\$) per capita	The income value at the midpoint of the income distribution—half the population earns more, half earns less. It's a more accurate reflection of typical living standards than the average income.	\$	High Resilience: > \$40,000 Moderate Resilience: \$25,000 - \$40,000 Low Resilience: < \$25,000	
				16.3	Unemployment rate (disaggregated by age & gender)	The share of the labor force without work but actively seeking employment, broken down by demographic categories. It reveals disparities in job opportunities across groups.	%	High Resilience: ≤ 5% Moderate Resilience: 5% - 7% Low Resilience: > 7%	
		Poverty			17.1	% of the population living below the poverty line	The share of individuals whose income or consumption falls below the nationally or internationally defined poverty threshold. It measures income-based poverty and material deprivation.	%	<10%
					17.2	Multi-Dimensional Poverty Index	An index that captures deprivations across health, education, and living standards—beyond income alone. It measures the intensity and breadth of poverty at the household level.	No Unit	0-1 Higher values imply higher poverty
					17.3	SMEB (Survival Minimum Expenditure Basket)	The minimum monthly cost required for a household to meet essential needs such as food, shelter, water, energy, and basic services. It's used to determine the threshold for humanitarian cash or livelihood support.	\$	\$ 426 for a family of five Household income < SMEB → high vulnerability Household income ≥ SMEB → Fragile,

Indicators' Relation Identification (20 min)



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Session 4

Policies, Plans, & Interventions



Objectives of Session

Shocks & Stresses

Definitions & Importance

Model by LRC

Identification of Plans & interventions

Duration 1 hr

PPIs Mapping

- Policies (Laws & Policies)
- Plans (Strategies & Action Plans)
- Initiatives (Programs & Projects)

- السياسات (القوانين والسياسات)
- الخطط (الاستراتيجيات وخطط العمل)
- المبادرات (البرامج والمشاريع)



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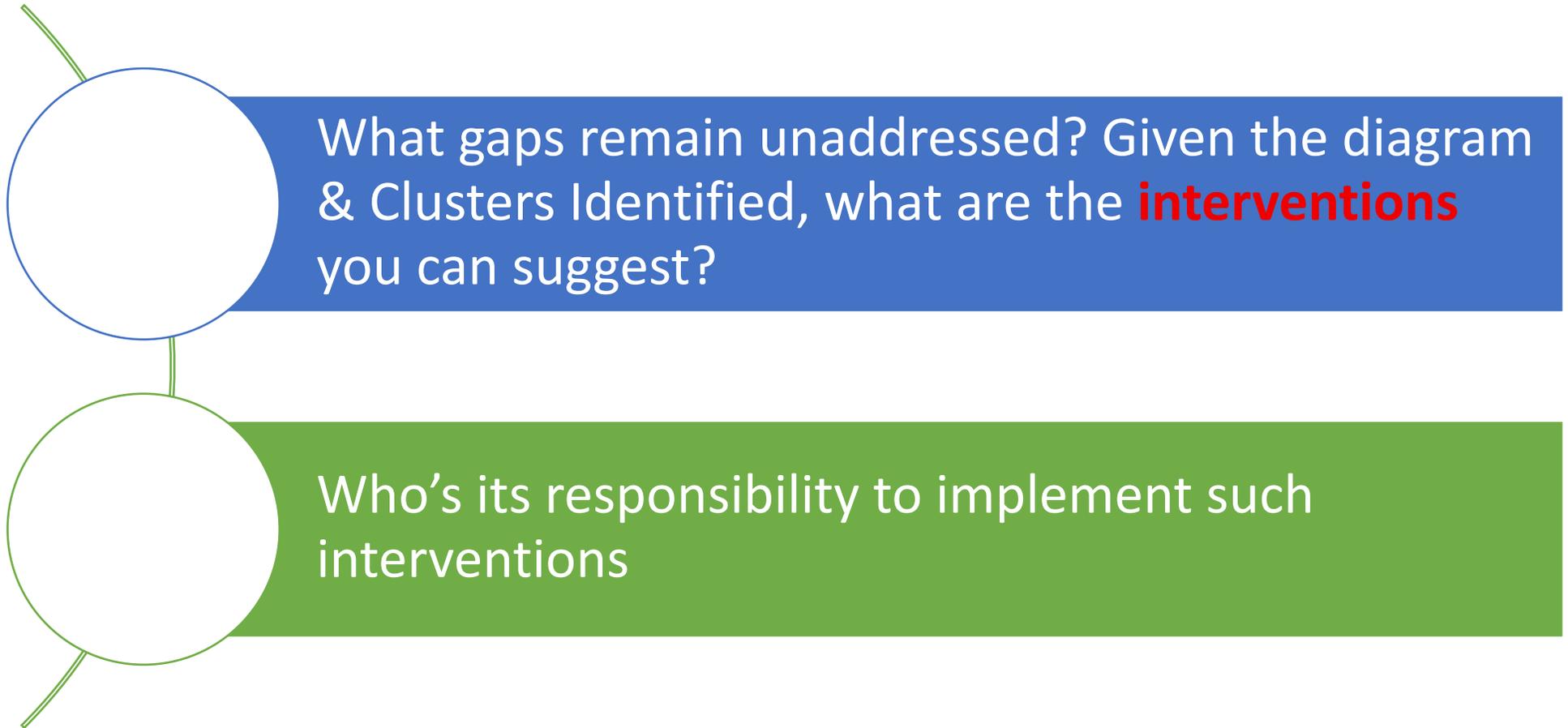


Lebanese Red Cross Disaster Risk Reduction

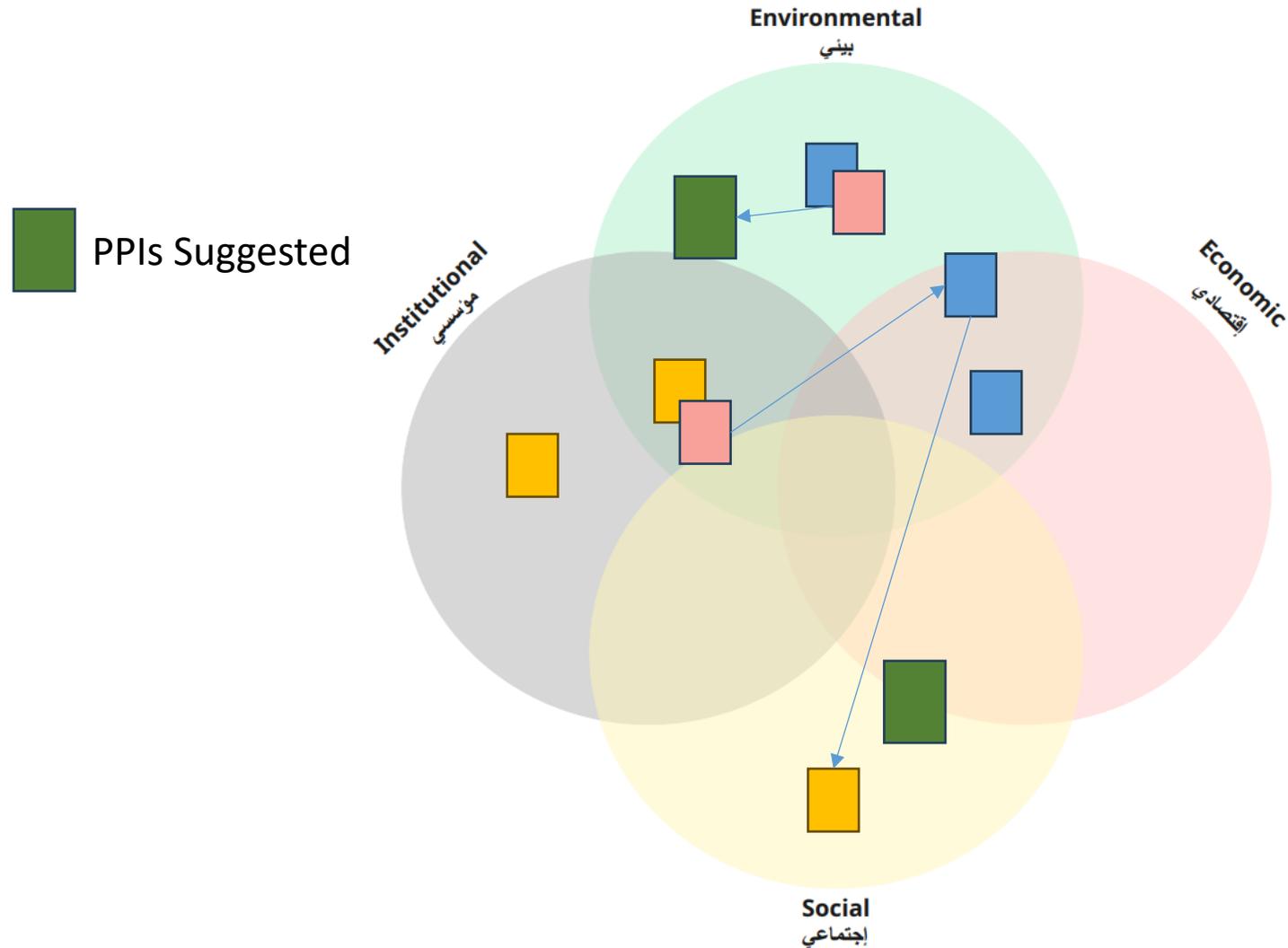


Policies, Plans & Initiatives (PPIs) – Suggestions

Existing Frameworks Supporting Resilience in Saida



Policies & Plans Suggestions (30 mins)



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Saida Urban Resilience Diagnosis
QUESTIONS

