



Funded by
the European Union



Participatory Vulnerability Assessment Process

Strengthening Urban Climate Governance Project
(SUCCESS)



This presentation

1. SUCCESS Project Framework
2. Vulnerability Assessment Process
3. Vulnerability Assessment Methodologies



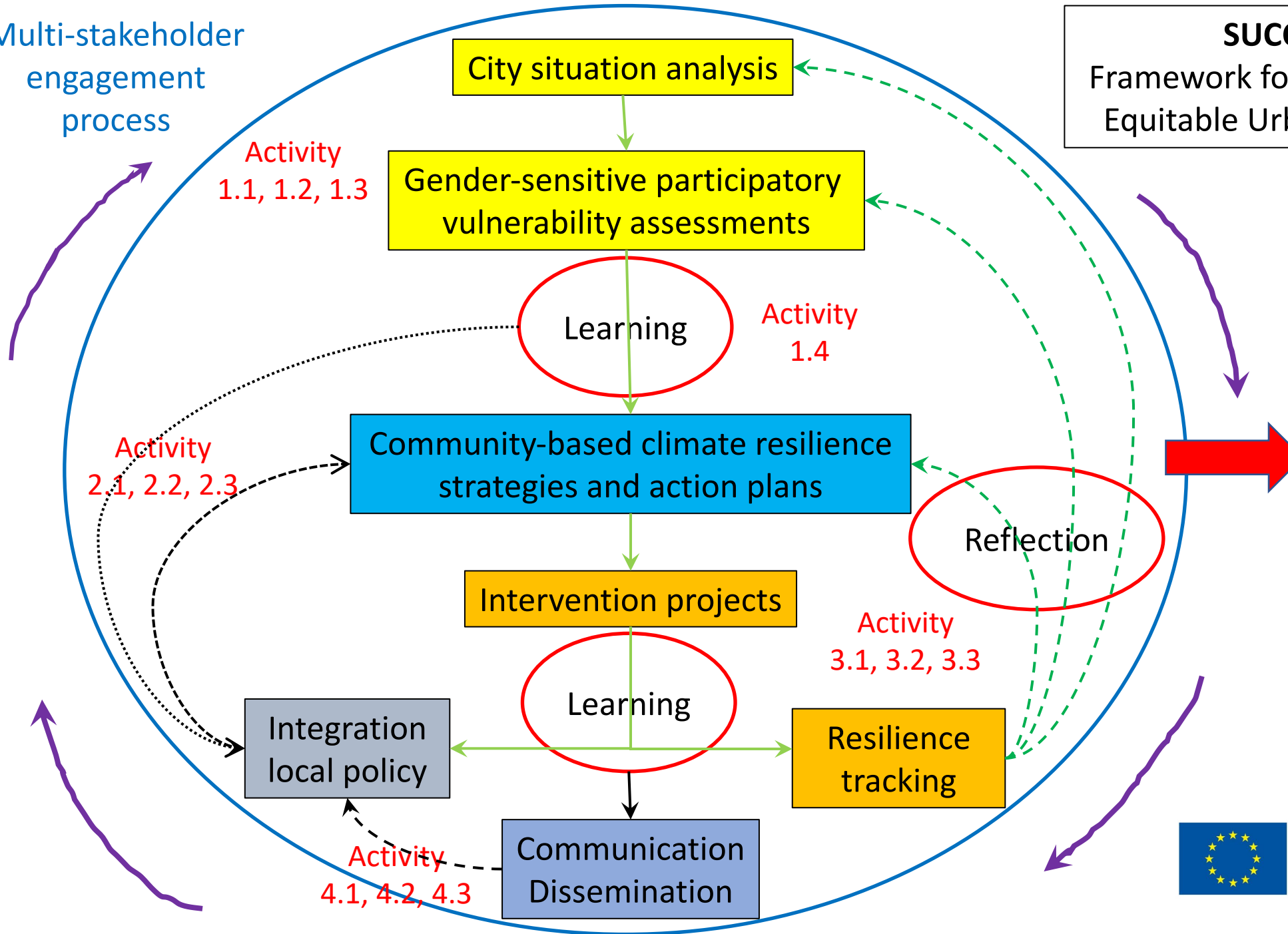
Funded by
the European Union



Multi-stakeholder
engagement
process

SUCCESS PROJECT
Framework for Building Inclusive and
Equitable Urban Climate Resilience

- Outcomes
- Increasing climate adaptive capacity of local communities
 - Achieving inclusive and equitable urban development, climate actions and disaster preparedness



Funded by
the European Union



SUCCESS Vulnerability Assessment Process

Select location

Situation Analysis

Social / people

Urban systems and infrastructure

Existing social conditions

Existing conditions

Shocks and crises

Weaknesses and failures

Climate impacts

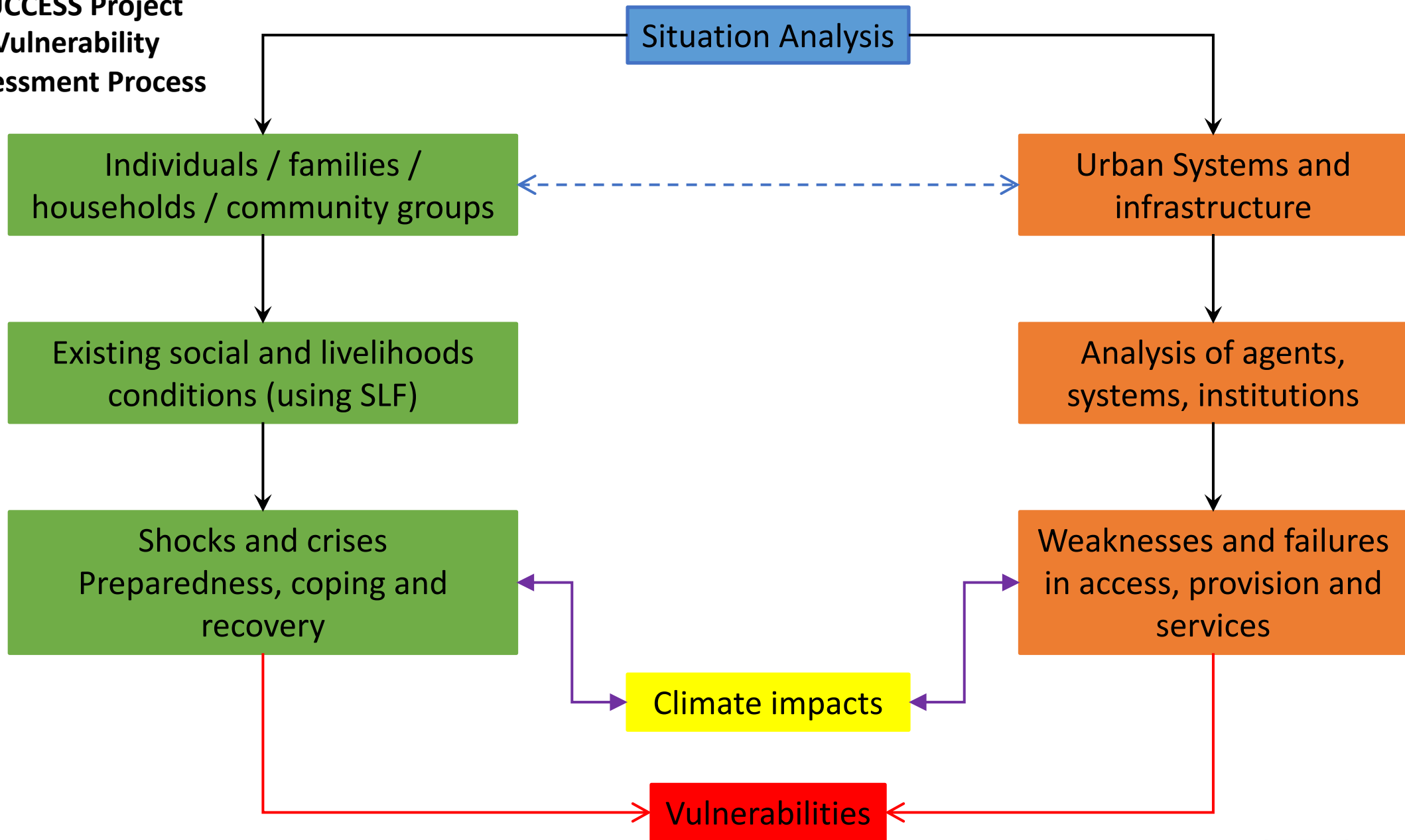
Urban climate vulnerabilities



Funded by
the European Union



**SUCCESS Project
Vulnerability
Assessment Process**



Funded by
the European Union



Select location

- Sub-district boundary
- Municipality boundary
- Community level – which communities, how many communities

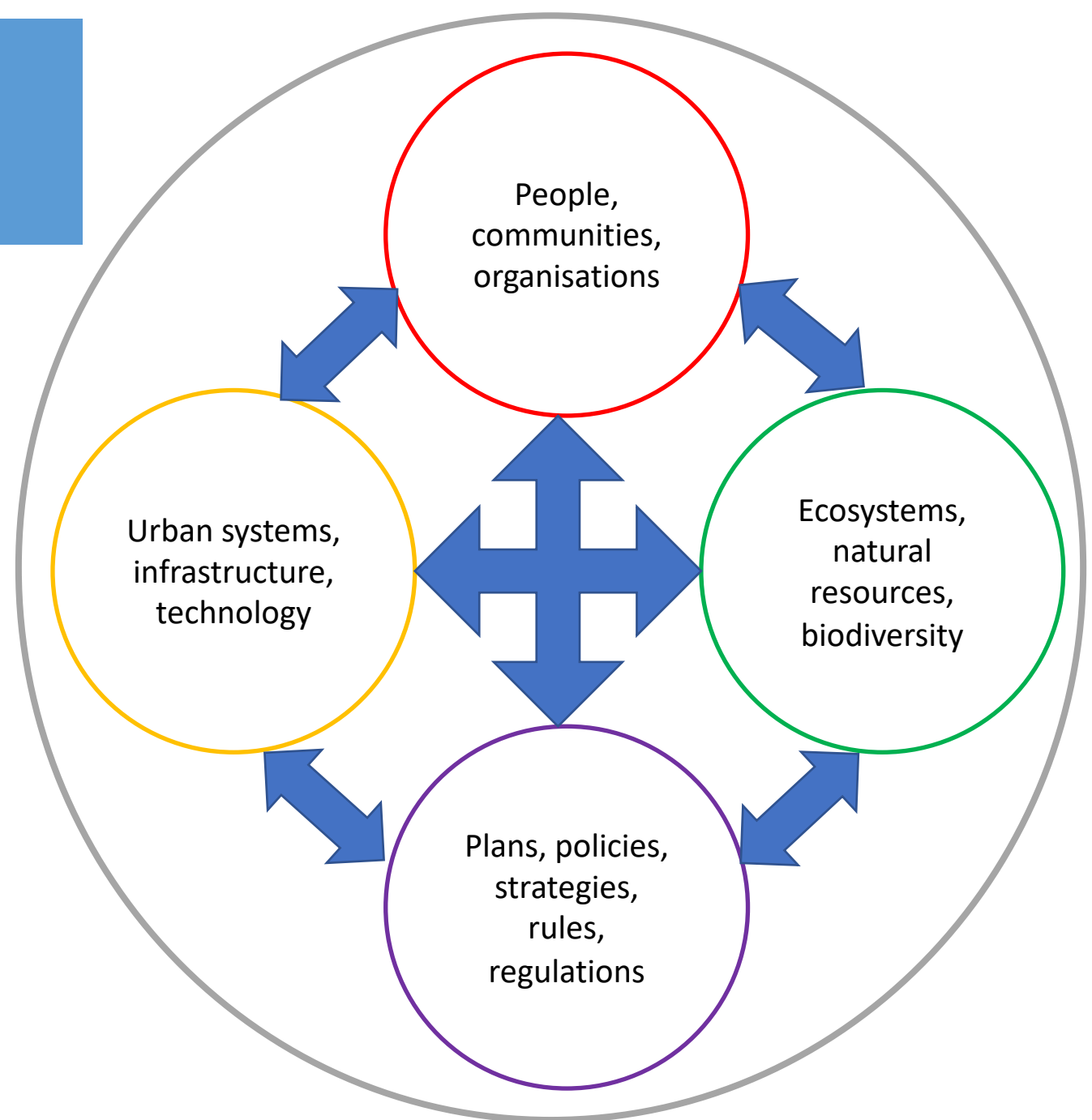


Funded by
the European Union



Situation Analysis

- Scoping
- Big picture
- Understanding physical, social, economic and environmental changes
- Drivers of changes
- Implications of changes



Funded by
the European Union





Funded by
the European Union



Situation Analysis

Past to Present

What has changed? How? What are key drivers?
e.g. land use change, municipality's development plans





Funded by
the European Union



Situation Analysis

Past to Present
What is the current situation?



Situation Analysis

People / social

- Individuals / families / households / community groups (e.g. women, low-income, urban poor, disabled, elderly, marginalised)
- What is the current situation?
- What are important problems?

Urban systems and infrastructure

- Important urban systems and infrastructure (e.g. water, food, electricity, sanitation)
- What is the current situation?
- What are important problems?



Funded by
the European Union



Situation Analysis

People / social

- Individuals / families / households / community groups
- Important problems faced by different individuals, families, households, community groups
- Access to urban systems and infrastructure – understanding inclusiveness, inequalities

Urban systems and infrastructure

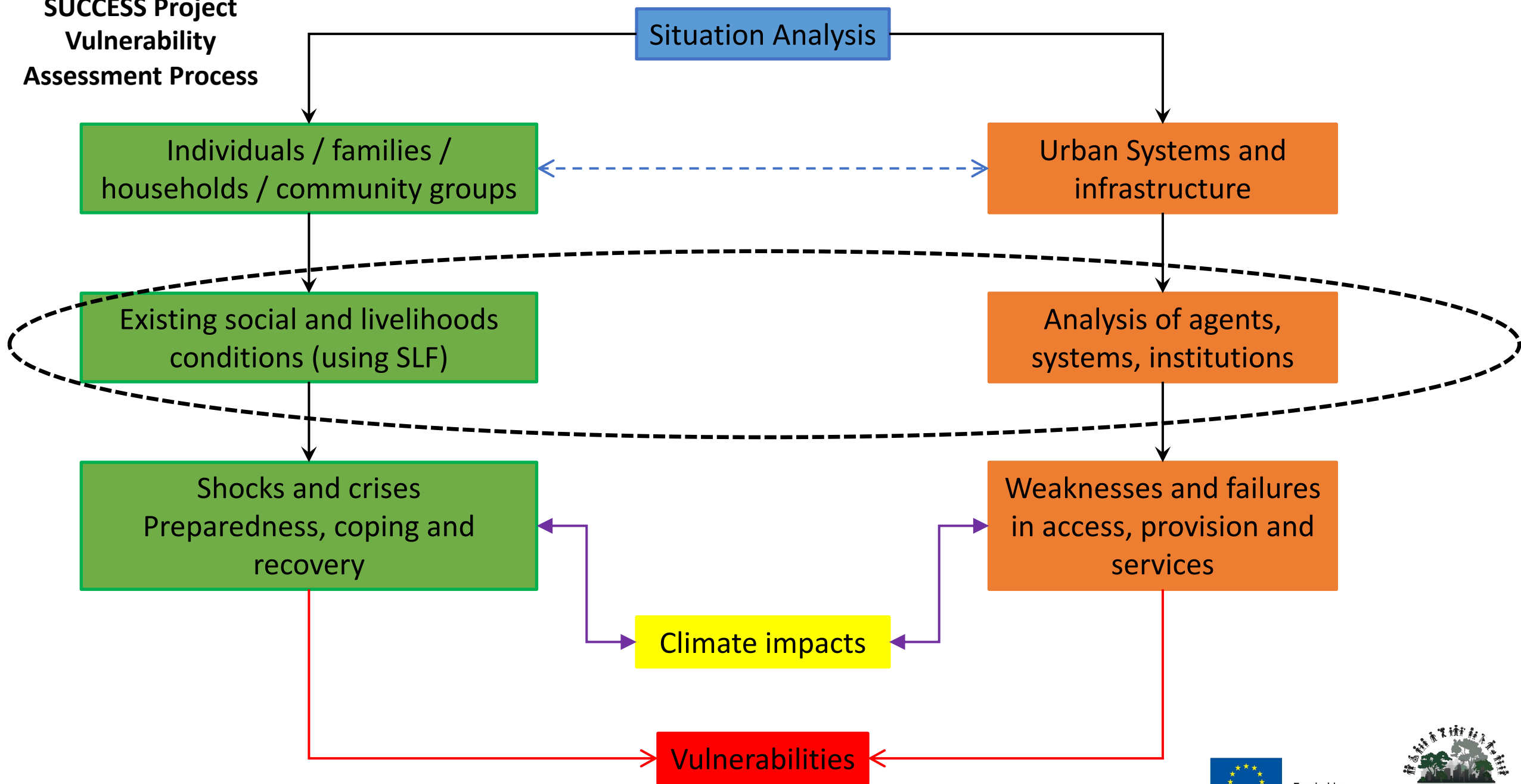
- Important urban systems and infrastructure (e.g. water, food, electricity, sanitation)
- Provision and services provided by different government agencies and departments
- Operation and maintenance
- Policies, plans, rules, practices



Funded by
the European Union



**SUCCESS Project
Vulnerability
Assessment Process**



Funded by
the European Union



Assessments

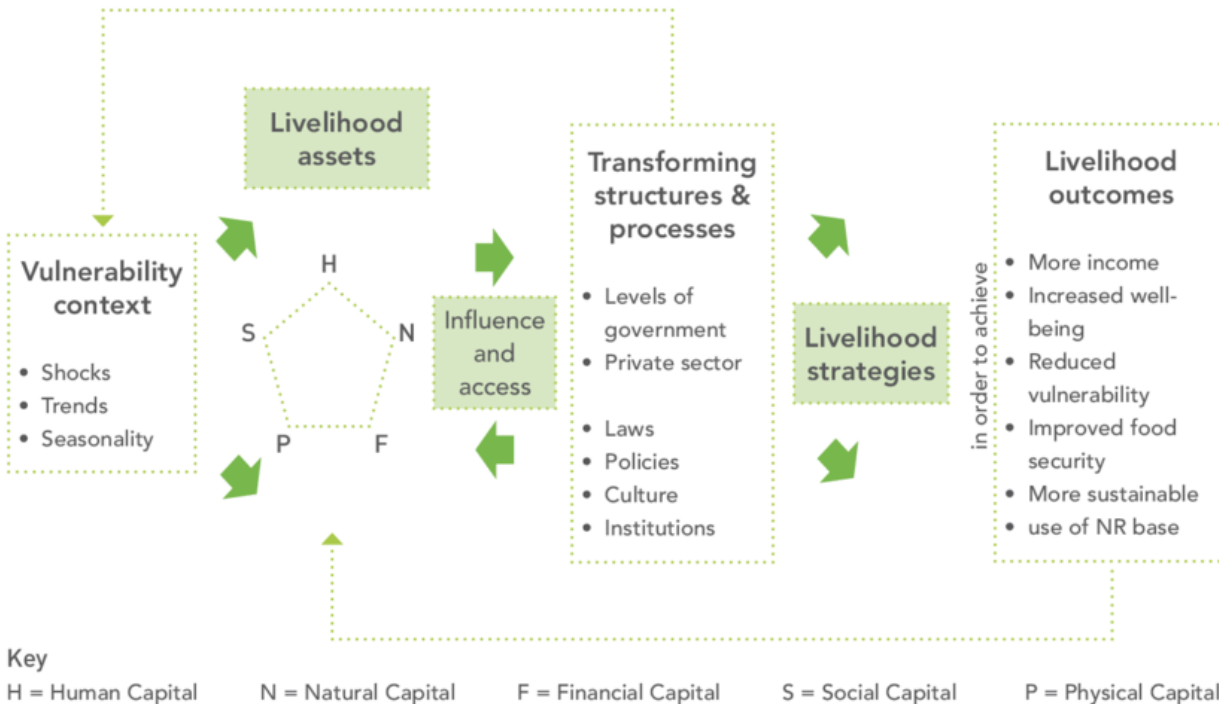


Funded by
the European Union



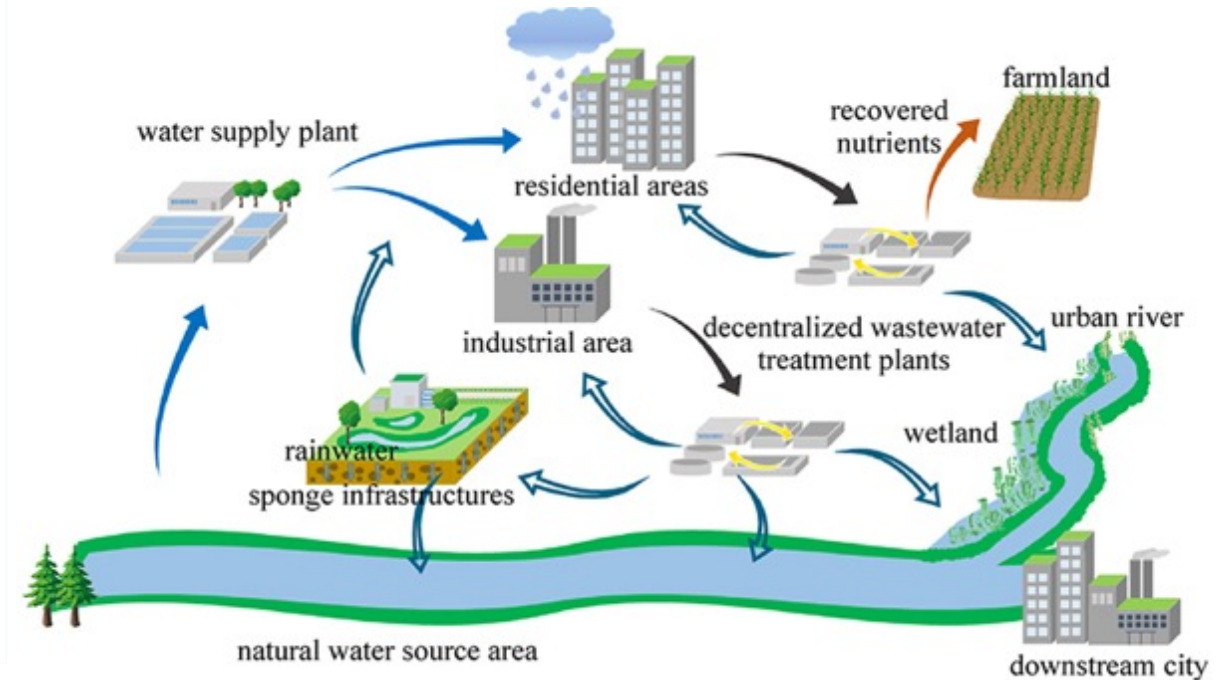
People / social

- Sustainable Livelihoods Approach



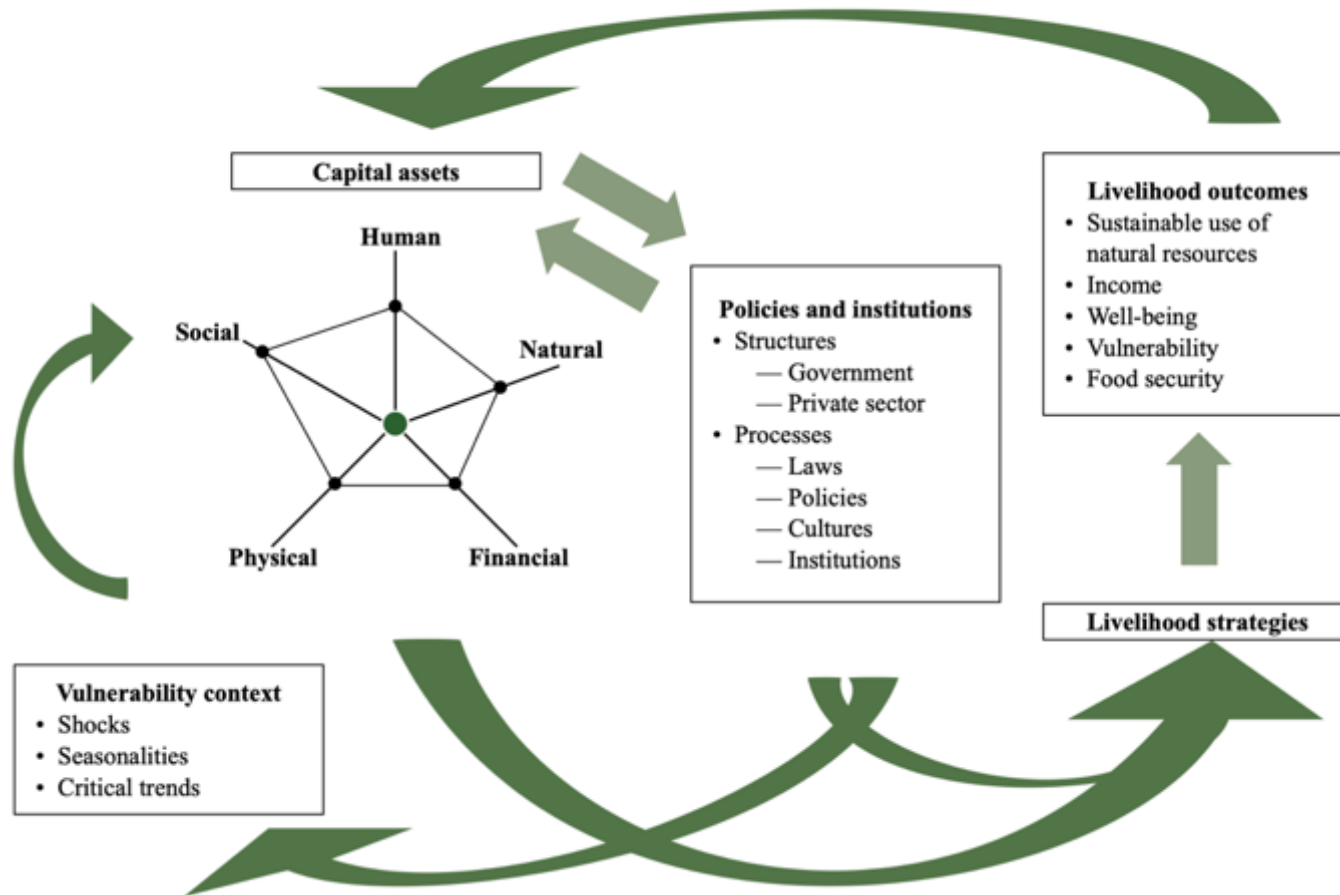
Urban systems and infrastructure

- Water system
- Agents, urban infrastructure, institutions



The Sustainable Livelihoods Approach

Figure: The Sustainable Livelihoods Framework



Capital Assets

- **Human capital** – health, education, knowledge, skills
- **Social capital** – networks, connections, relationships
- **Natural capital** – land, water
- **Physical capital** – infrastructure, house, water supply, sanitation
- **Financial capital** – savings, debt, wages



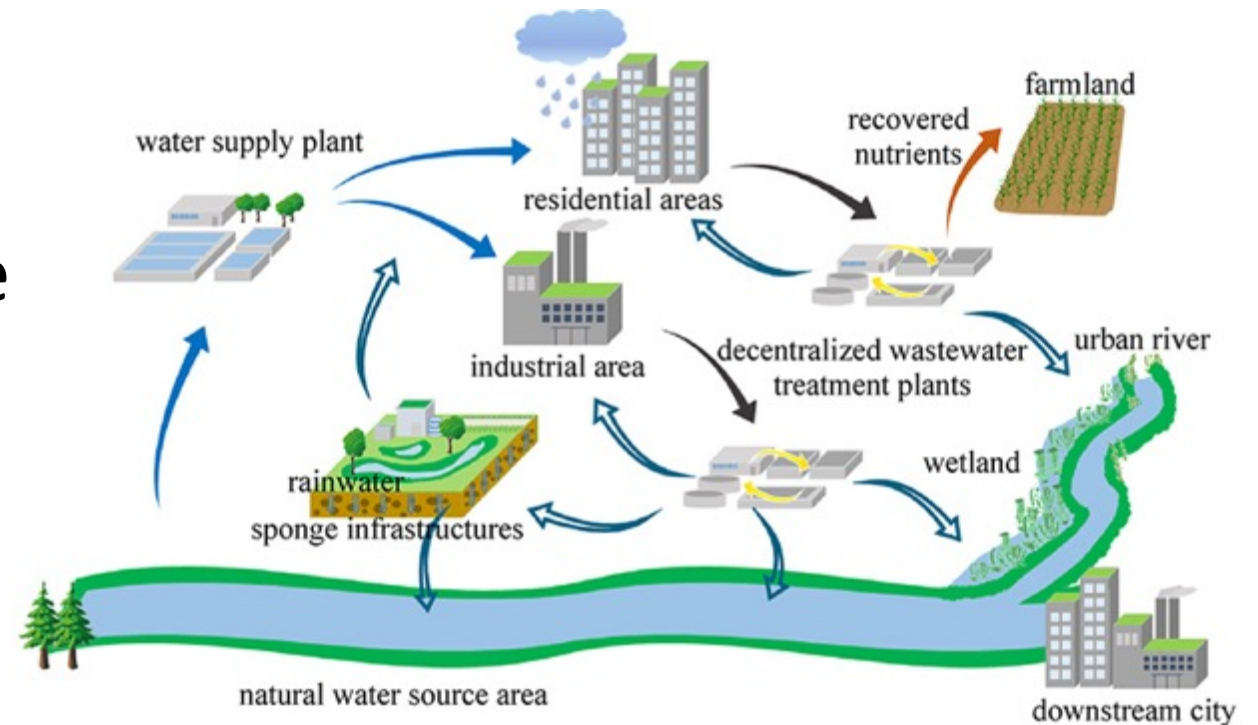
Funded by
the European Union



Urban systems and infrastructure

Urban – Water System (example)

- Agents – water users
- Urban systems and infrastructure
- Ecosystems
- Institutions - policies, plans, strategies, law, regulations, formal and informal practices

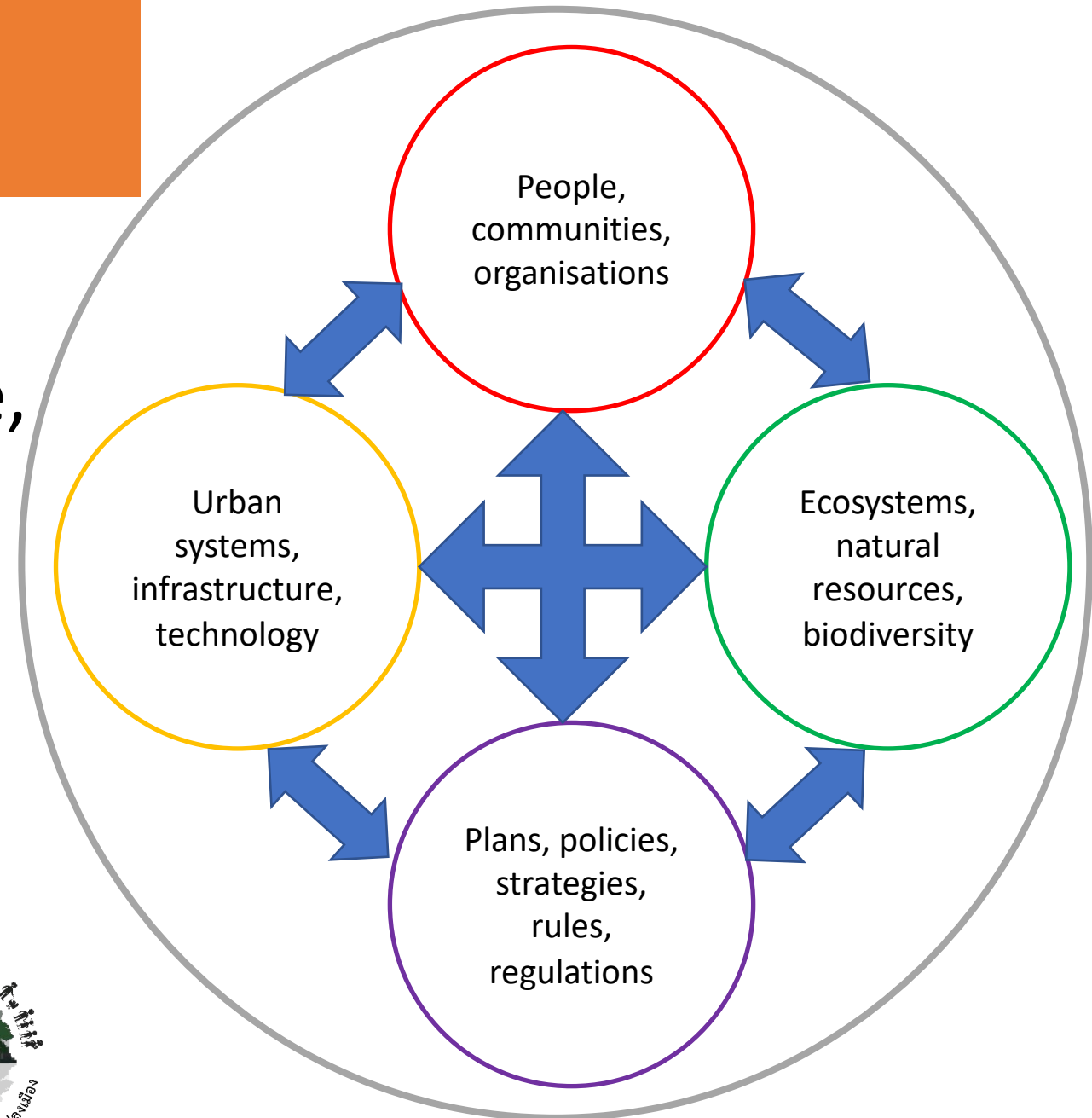


Funded by
the European Union



Urban systems and infrastructure

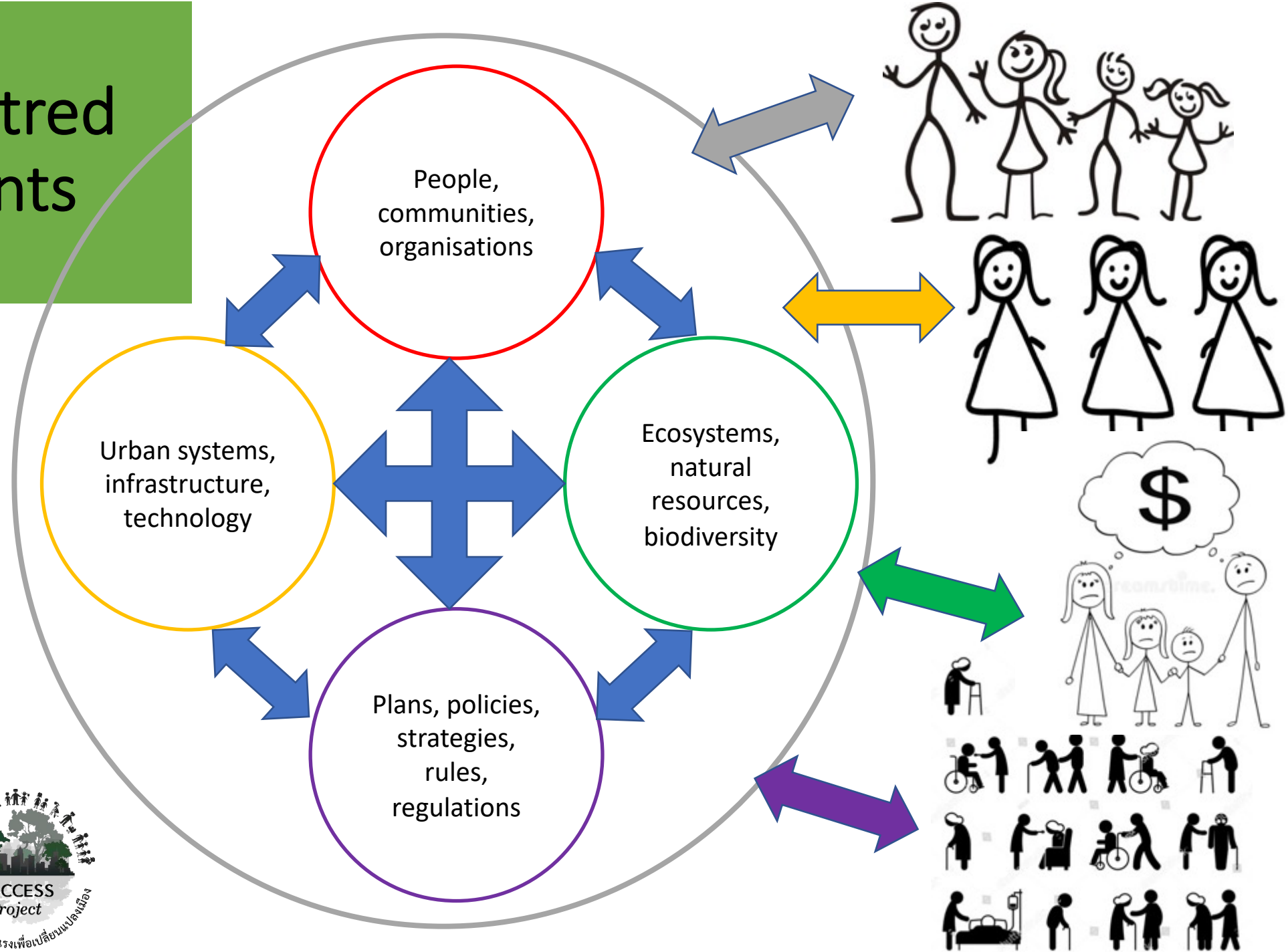
- Agents
- Urban systems, infrastructure, technology
- Ecosystems
- Institutions



Funded by
the European Union



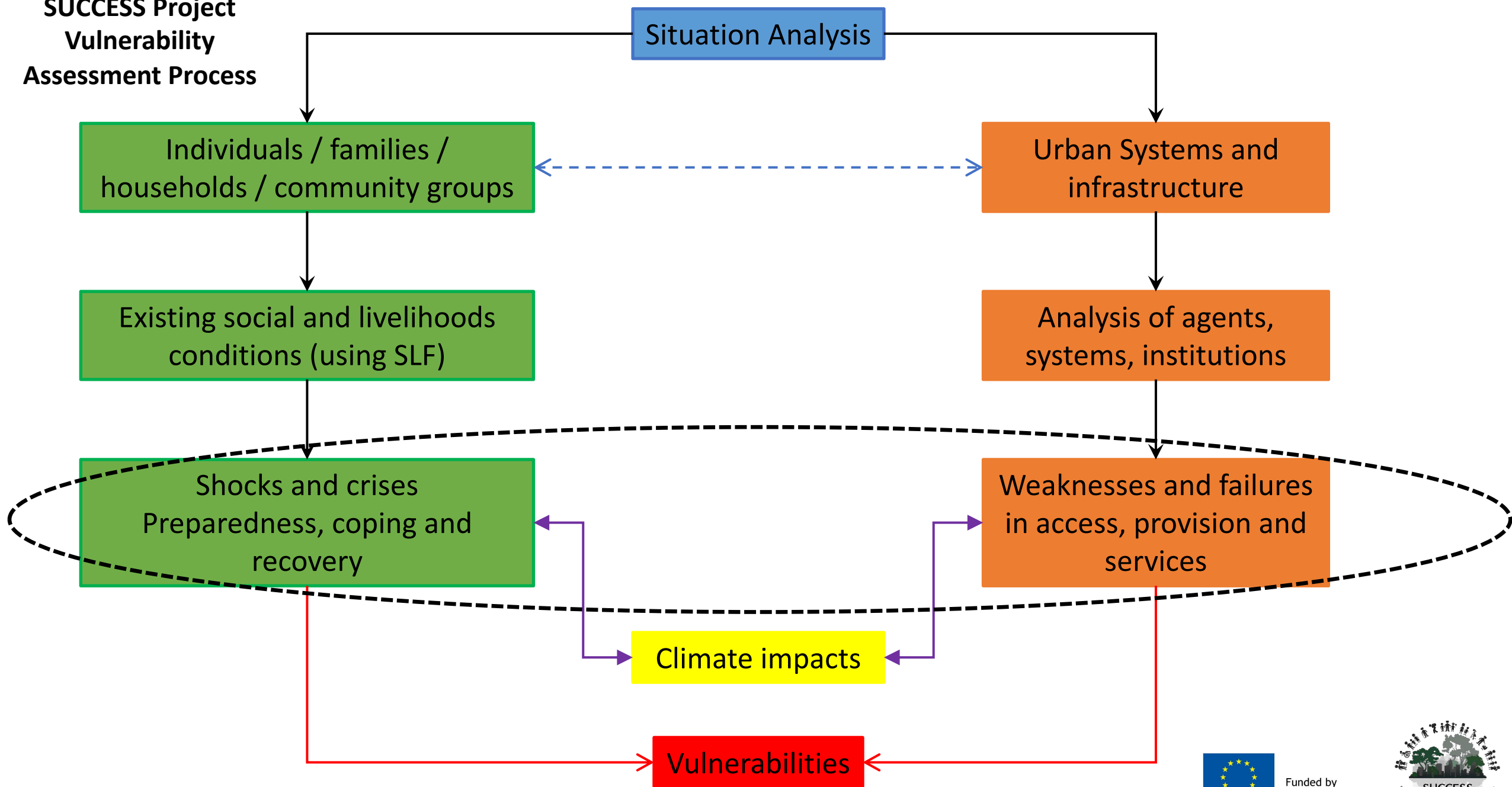
People-centred assessments



Funded by
the European Union



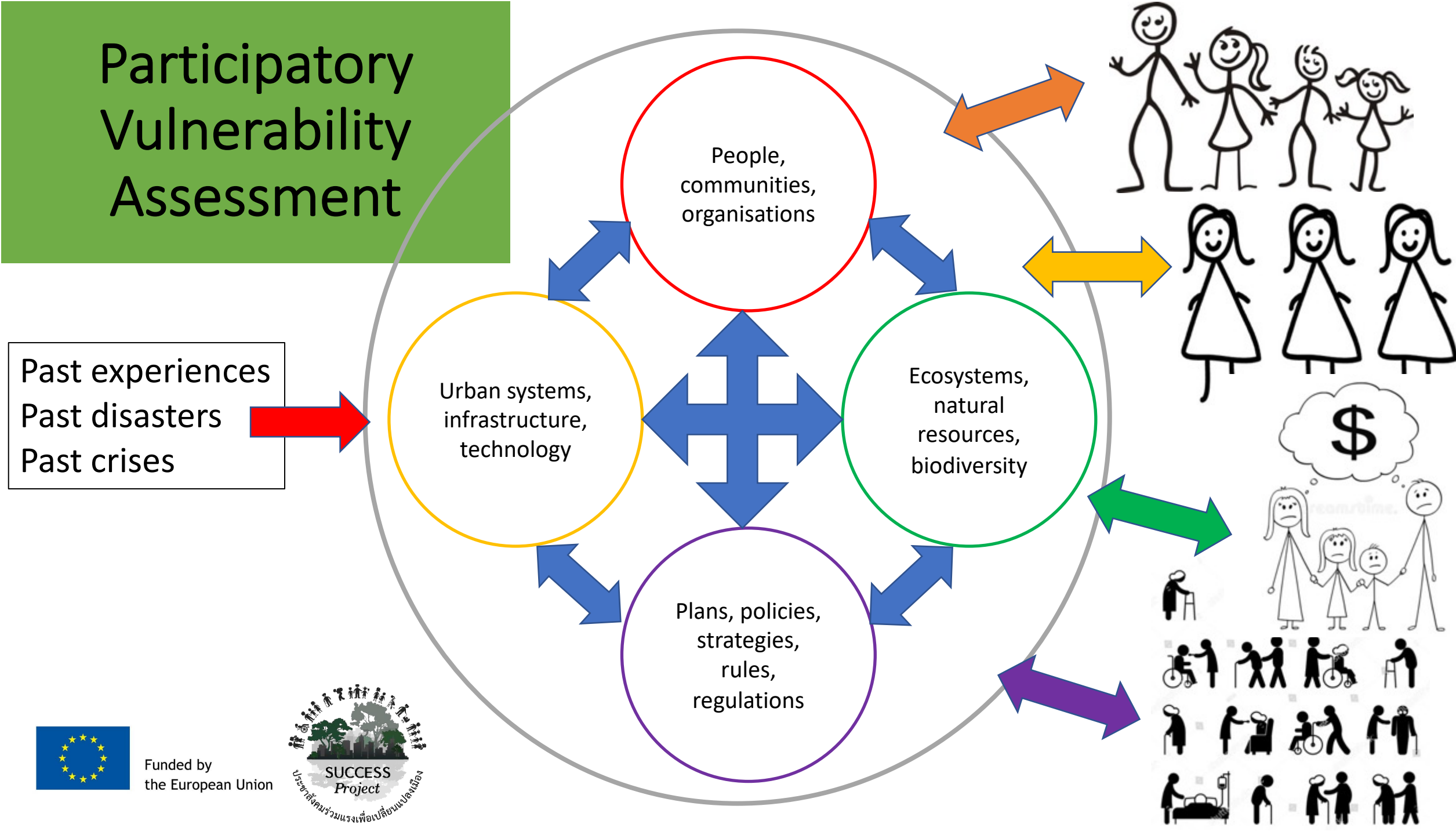
**SUCCESS Project
Vulnerability
Assessment Process**



Funded by
the European Union



Participatory Vulnerability Assessment



Funded by
the European Union



Past experiences

Past disasters / previous crises

People / social

- Choose a past event (e.g. flood disaster in 2010 or Typhoon Pa Buk in 2019)
- What happened?
- Preparedness
- Coping
- Recovery



Funded by
the European Union



Urban systems and infrastructure

- Under the same event (i.e. flood disaster in 2010 or Typhoon Pa Buk in 2019)
- What happened to urban systems and infrastructure?
- Failures?
- Responsibility of government agencies / departments / municipalities

Participatory Vulnerability Assessment

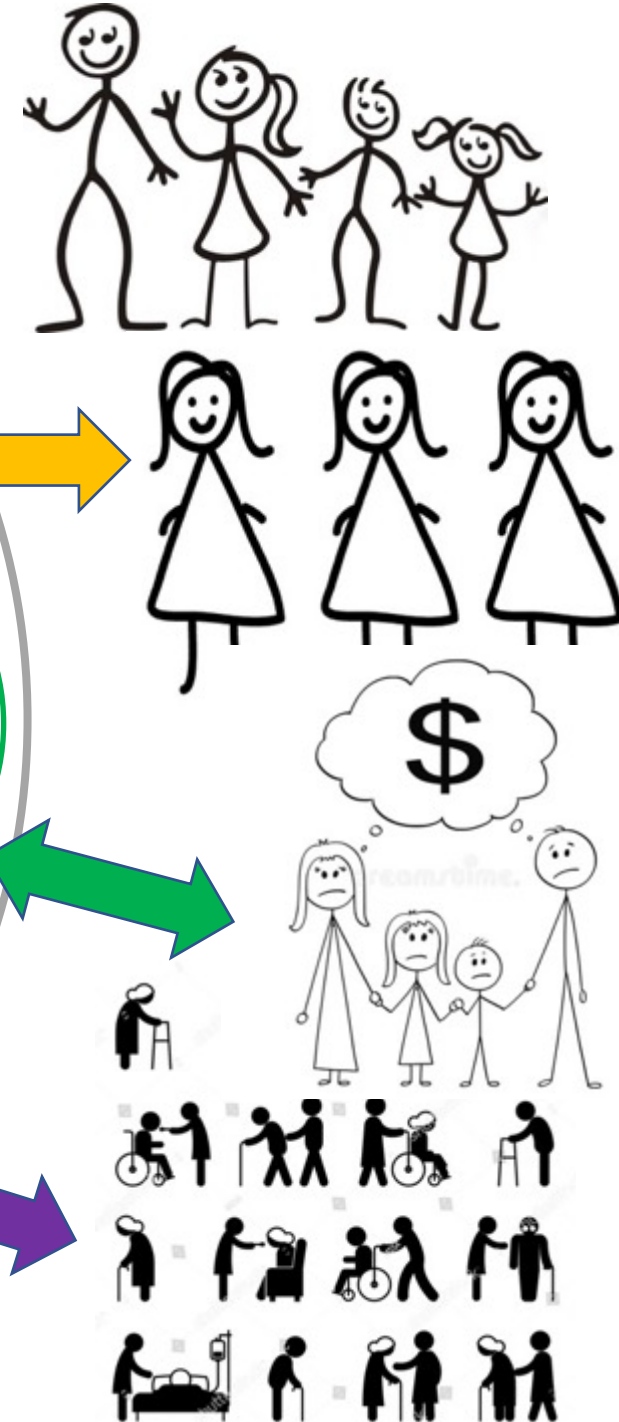
Climate impacts

Urban systems,
infrastructure,
technology

People,
communities,
organisations

Ecosystems,
natural
resources,
biodiversity

Plans, policies,
strategies,
rules,
regulations



Funded by
the European Union



Climate change

- Changes in seasons = dry season or summer is longer and hotter, winter is shorter and warmer, rainy season arrives later and is shorter
- Changes in frequency and intensity of extreme weather
- Changes in patterns, frequency and intensity of storm patterns
- Changes in rain patterns
- Sea level rise
- Changes in average temperature



Funded by
the European Union



Climate impacts

- Changes in weather patterns (temperature, rainfall, seasonal shifts, extreme weather events) are over long term
- Year to year variations



Funded by
the European Union



Climate impacts

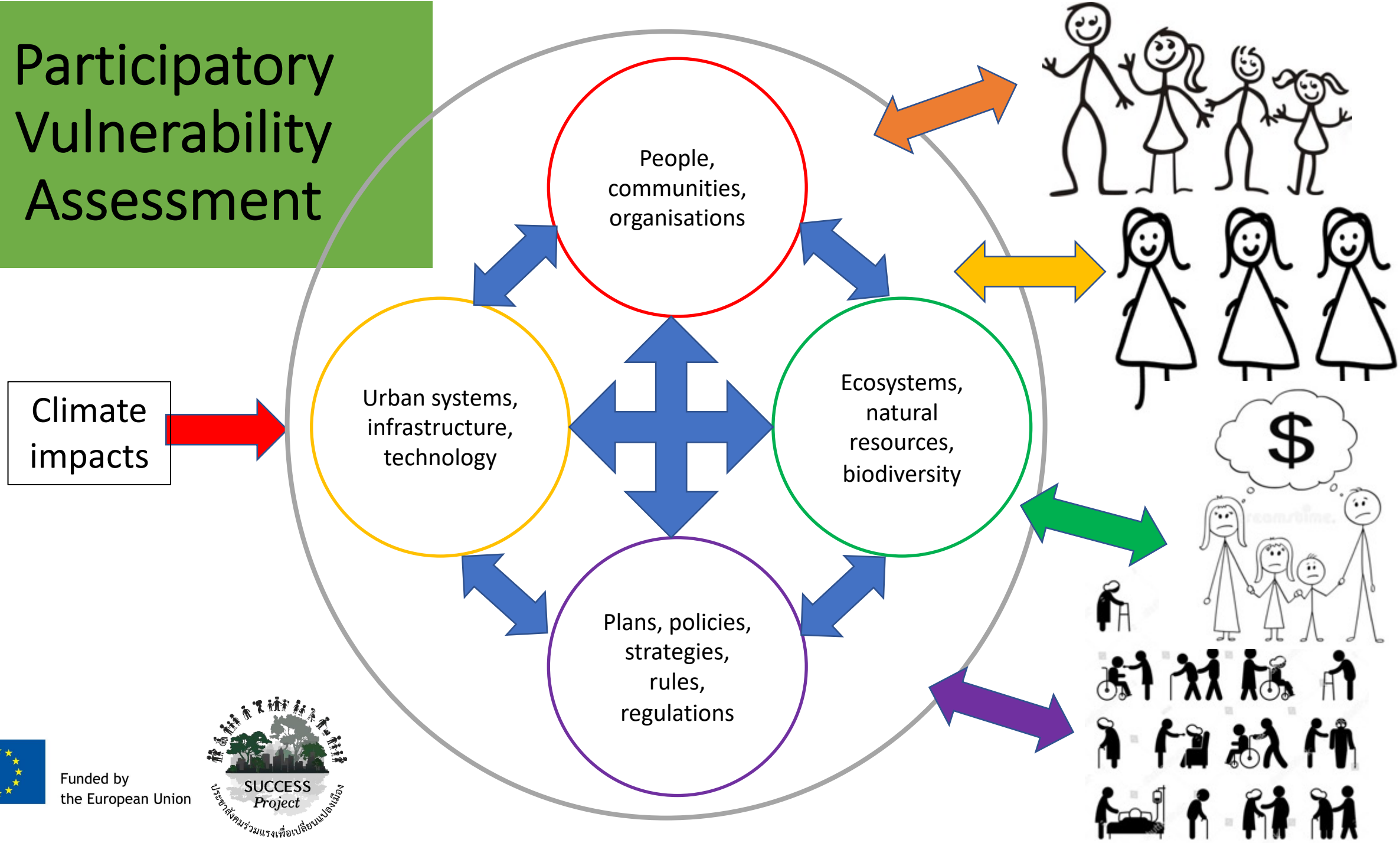
- We are already living with climate change
- The weather becomes more unpredictable – shocks and surprises
- Extreme weather events will occur more often
- Preparation and decisions are more difficult to make
e.g. when to store for water, when to prepare for flood protection and how long for



Funded by
the European Union



Participatory Vulnerability Assessment



Funded by
the European Union



Climate impacts

What will happen if existing problems are worse?
What will happen if disasters / crises occur every year?

People / social

Urban systems and infrastructure



Funded by
the European Union



Climate impacts

People / social

- What will happen if 2010 flood disaster or Typhoon Pa Buk occur again and again?
- What happens if cannot work for 1 week
- What happens if no running water for 1 week
- What happens if flooded for 1 week



Funded by
the European Union



Urban systems and infrastructure

- What level of rainfall before reaching crisis
- What level of prolong period of no rain before reaching crisis
- How many days if urban systems and infrastructure fail or stop working before reaching crisis
- What level of floods is acceptable (depth / duration) before reaching crisis

Vulnerabilities

People / social

- Need to understand why some individuals / families / households / particular community groups (e.g. women) are vulnerable
- Need to understand the differences in terms of uneven impacts and inequalities in accessing urban systems and infrastructure among different people

Urban systems and infrastructure

- Need to understand roles and responsibilities of government agencies and departments, and municipalities in terms of maintenance and operation of urban systems and infrastructure
- Need to understand how urban systems and infrastructure are operated
- Need to understand why there are failures

SUCCESS Vulnerability Assessment Process

Select location

Situation Analysis

Identify individuals / families / households / community groups (e.g. women, low-income, urban poor, marginalised, disabled, elderly)

Identify important urban systems and infrastructure
Identify relevant government agencies, departments, municipality divisions

Design data collection, survey questions, indicators

Design data collection, survey questions, indicators

Data collection and analysis

Data collection and analysis

Understanding vulnerabilities



Funded by
the European Union



Tools and indicators

Tools and indicators for assessments

- Sustainable Livelihoods Framework (SLF)
- Urban Climate Resilience Framework (UCRF)
- UN-ISDR Self-Assessment Tool (LG-SAT)



Funded by
the European Union



Methods for data collection



- Interviews
- Video / photostory
- Case studies = stories
- 1 family = 1 story = 1 case study
- 1 community group (e.g. women / disabled) = 1 story = 1 case study

**SUCCESS Project
Vulnerability
Assessment Process**

Situation Analysis



Funded by
the European Union



Individuals / families /
households / community groups

Urban Systems and
infrastructure

Existing social and livelihoods
conditions (using SLF)

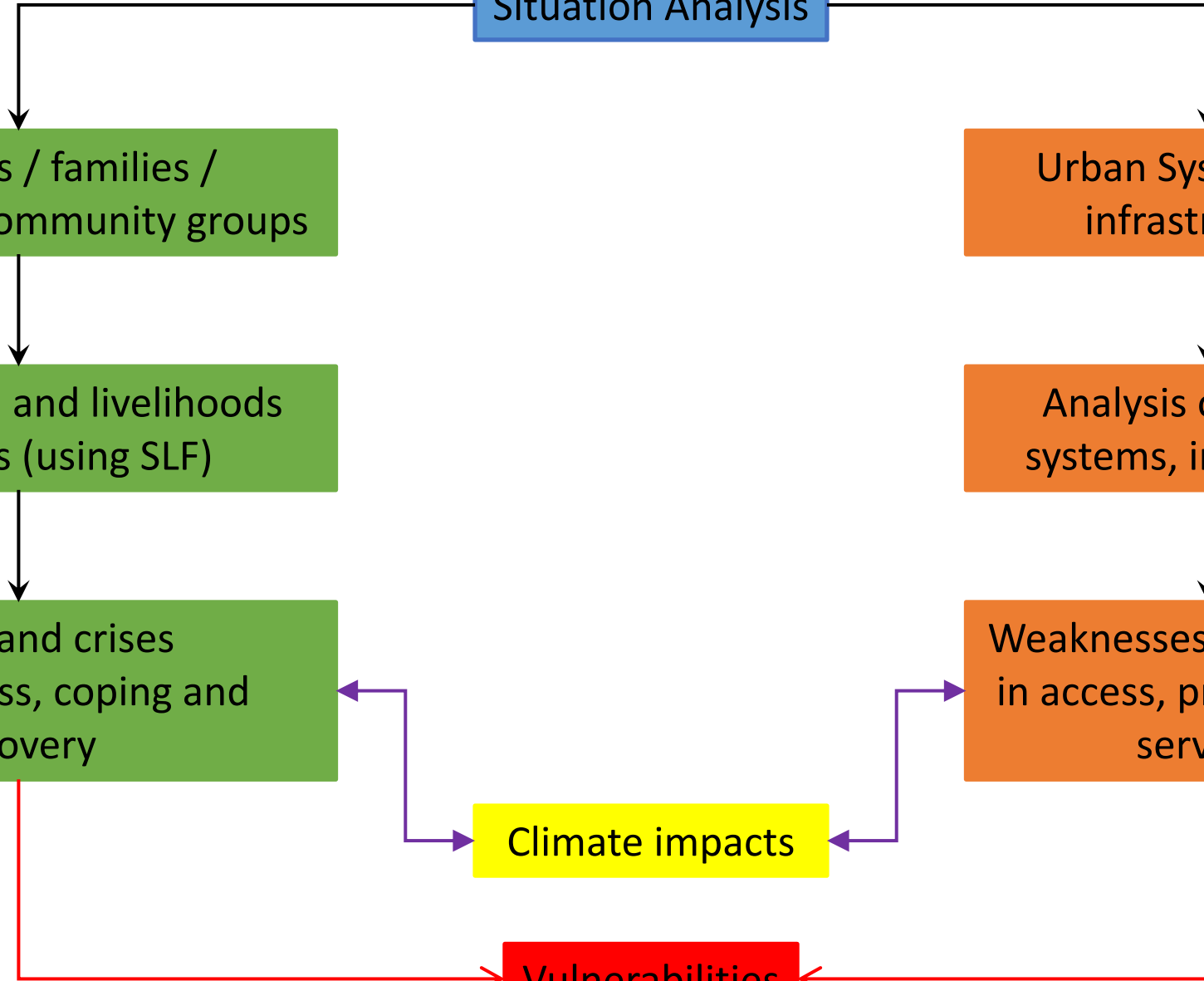
Analysis of agents,
systems, institutions

Shocks and crises
Preparedness, coping and
recovery

Weaknesses and failures
in access, provision and
services

Climate impacts

Vulnerabilities



**SUCCESS Project
Vulnerability
Assessment Process**

Situation Analysis



Funded by
the European Union



Individuals / families /
households / community groups

Urban Systems and
infrastructure

Existing social and livelihoods
conditions (using SLF)

Analysis of agents,
systems, institutions

Shocks and crises
Preparedness, coping and
recovery

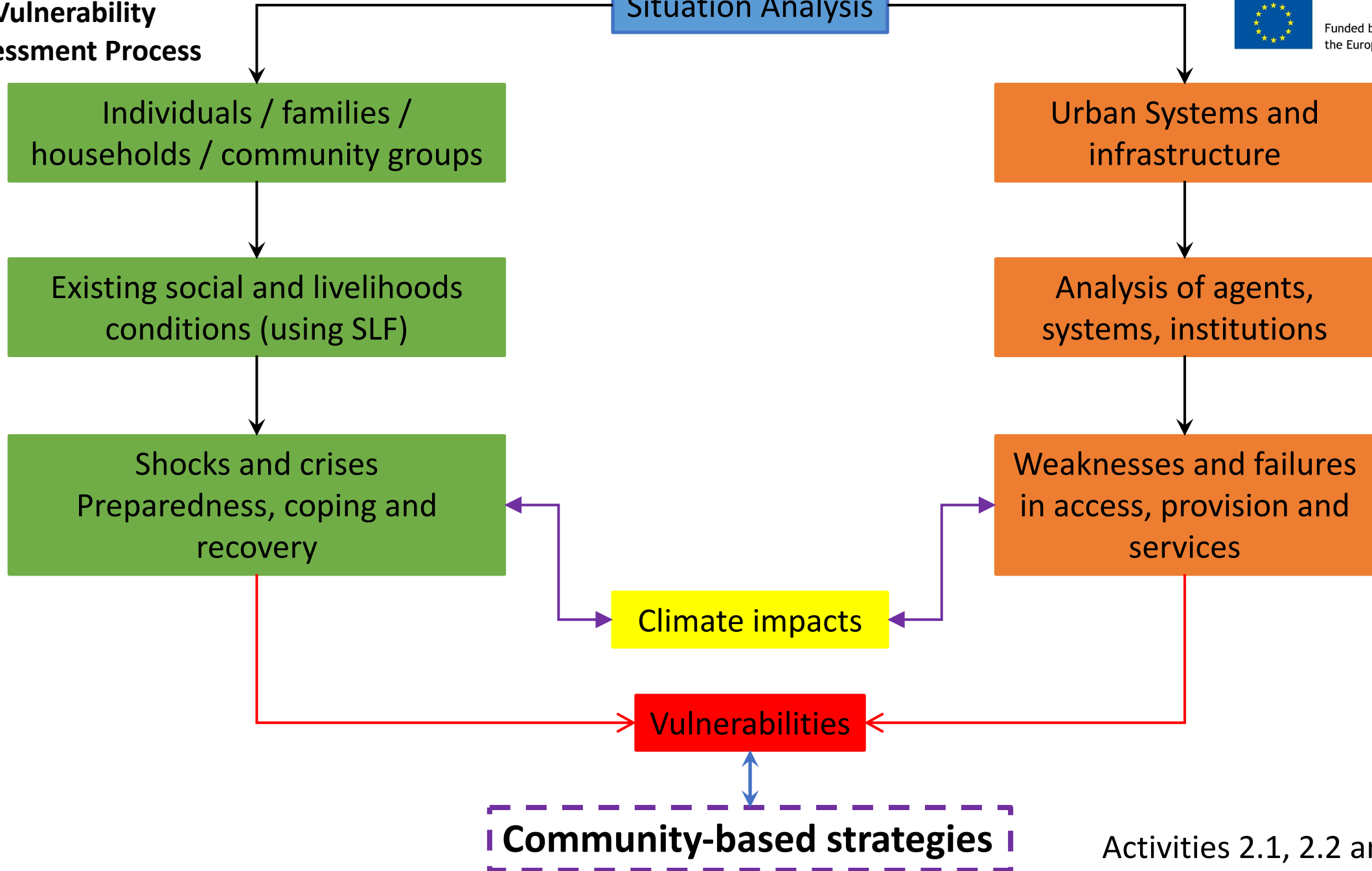
Weaknesses and failures
in access, provision and
services

Climate impacts

Vulnerabilities

Community-based strategies

Activities 2.1, 2.2 and 2.3



SUCCESS Project

For more information

- Please contact - successprojectinfo@gmail.com

For updates and resources, please see

<https://www.facebook.com/UrbanClimateResilienceThailand/>

www.tei.or.th/thaicityclimate/success.html



Funded by
the European Union

