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Asia Water Forum 2022

8–11 August 2022 • Online

Focus Area: Climate change and water-related risks

Session Title: BAGUIO CITY SMART FLOOD WARNING, INFORMATION AND MITIGATION SYSTEM

Schedule: [Date | Time]

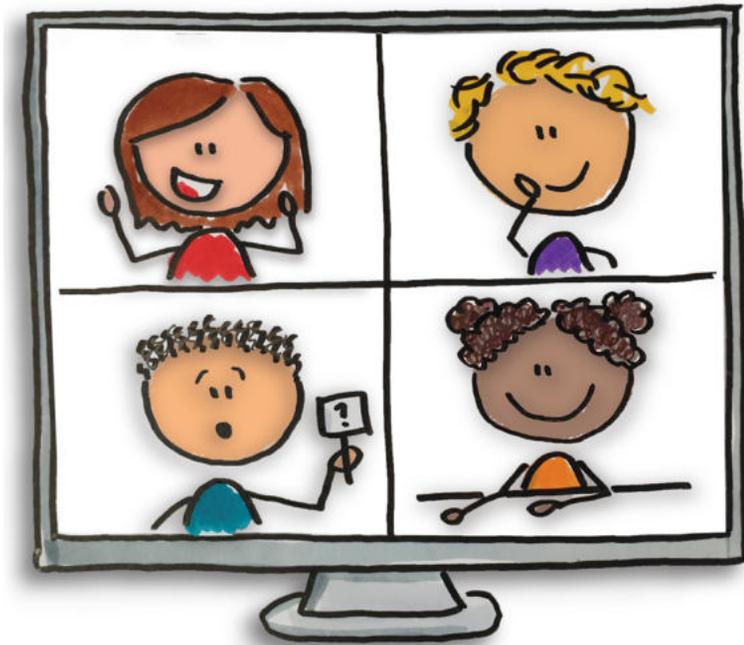


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Agenda

- Baguio City: challenges and opportunities
- Baguio vision for a resilient, people-centric and smart city
- Overview, current findings and outputs of the Baguio FEWS project
- FEWS Design
- Key focus on Institutional Capacities
- Key focus on Gender and Inclusion
- Next steps





Baguio City Challenges and Opportunities

CHALLENGES

IDENTIFIED BY THE CITY IN A SWOT ANALYSIS

- Congestion in city
- Settlements in inhabitable areas (waterway easements, hazard prone, RRW, watershed)
- Lack of surface run-off water management
- City having the highest rainfall occurrences in the country (Flood hazard)
- Limited space for expansion of drainage canals
- Recurring landslide caused by flooding
- Accelerated soil erosion due to occurrence of typhoons
- Water quality issues
- Damage of infrastructure due to heavy rainfall
- Limited and depleting source of water supply
- Presence of landslide and flood susceptible areas
- Low awareness of the public on Disaster Preparedness
- Uncontrolled urban migration

ADDITIONAL CHALLENGES

- Limited space for terrain-based stormwater management
- Lack of drainage infrastructure data
- Climate change

OPPORTUNITIES

IDENTIFIED BY THE CITY

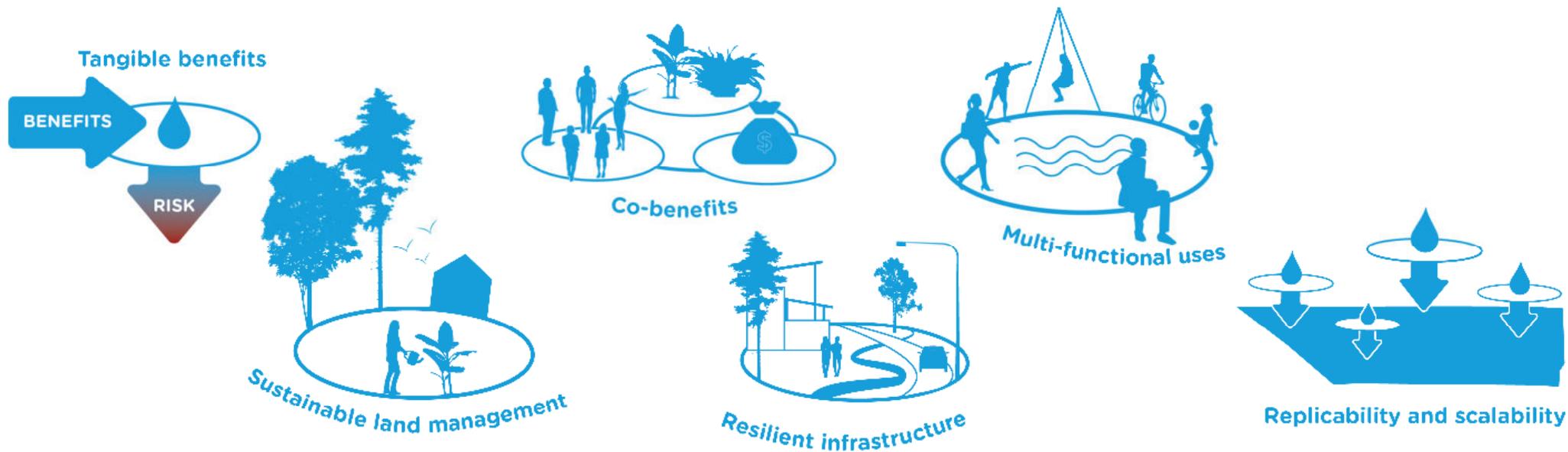
- Rainwater may be stored or recycled for domestic/outdoor use
- Linkages with academic, research institute, business, professional, (resources, assistance, studies)
- Resilient infrastructure
- Adoption of new/best practices and technologies from local and international places

ADDITIONAL OPPORTUNITIES

- Increase tourism
- Enhance local identity
- Create new destinations for residents and visitors
- Local food production
- Comfortable Micro-climate
- Social inclusion
- Improved air quality
- Noise reduction
- Recreational spaces
- Educational spaces
- Increased biodiversity
- Enhancement of feeling of safety
- Multifunctional public spaces
- Physical health improvement
- Improved water quality
- Sustainable soil management

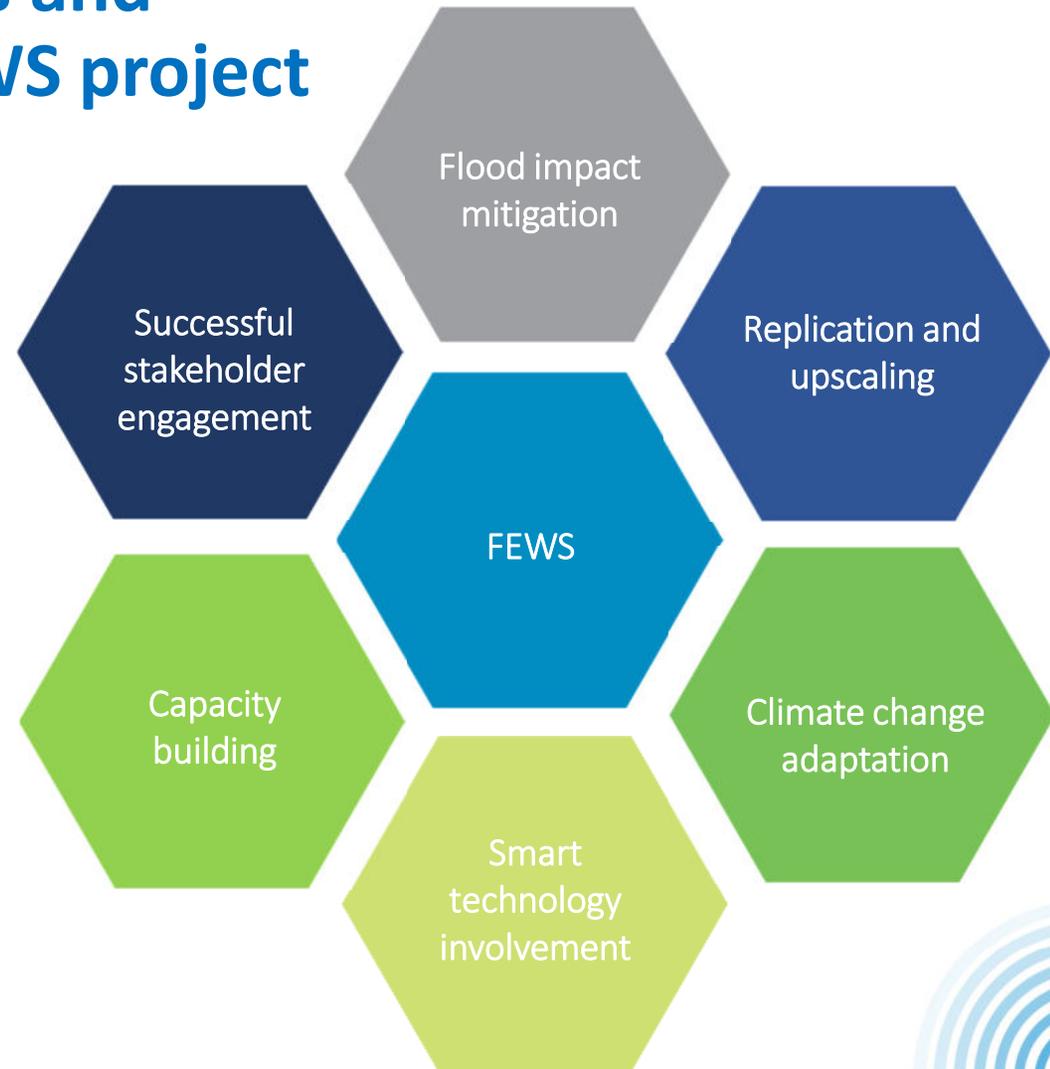


Baguio City – vision for a resilient city



Overview, current findings and outputs of the Baguio FEWS project

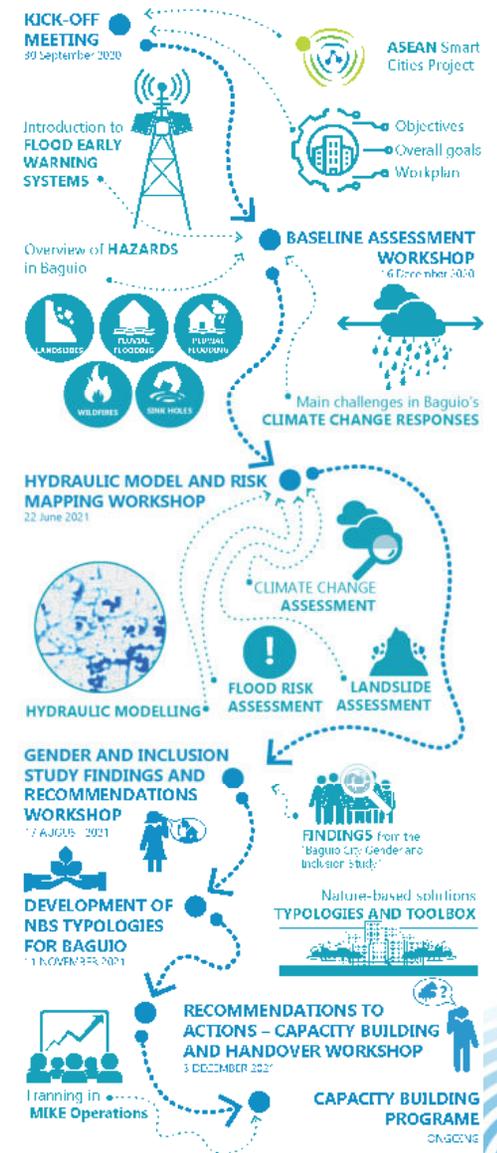
Improving community disaster preparedness, rising awareness and ensuring ownership to enhance urban resilience



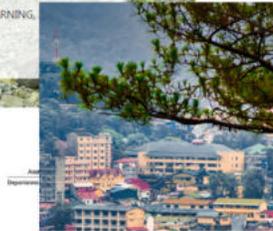
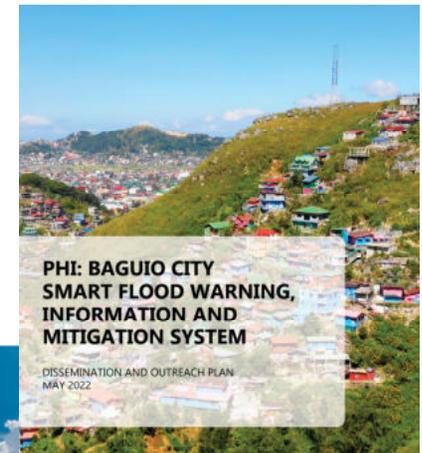
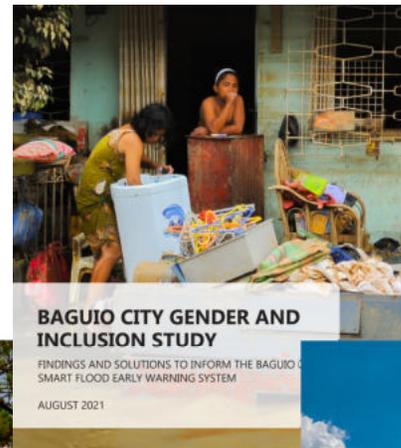
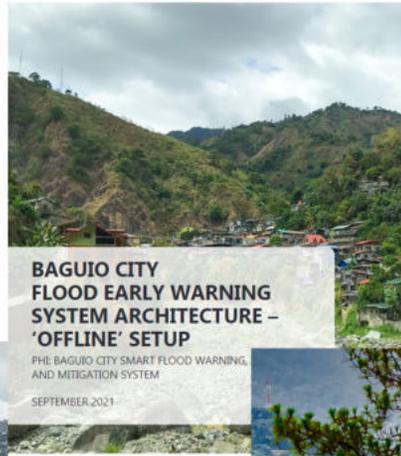
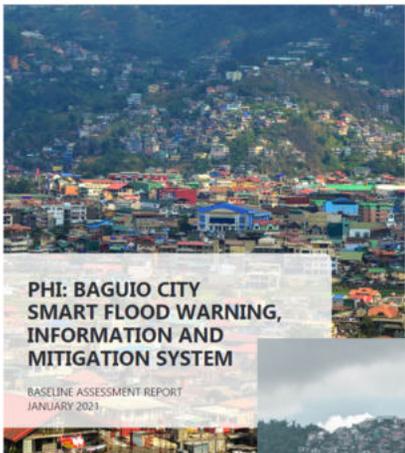
Overview, current findings and outputs of the Baguio FEWS project

EXPECTED OUTPUTS

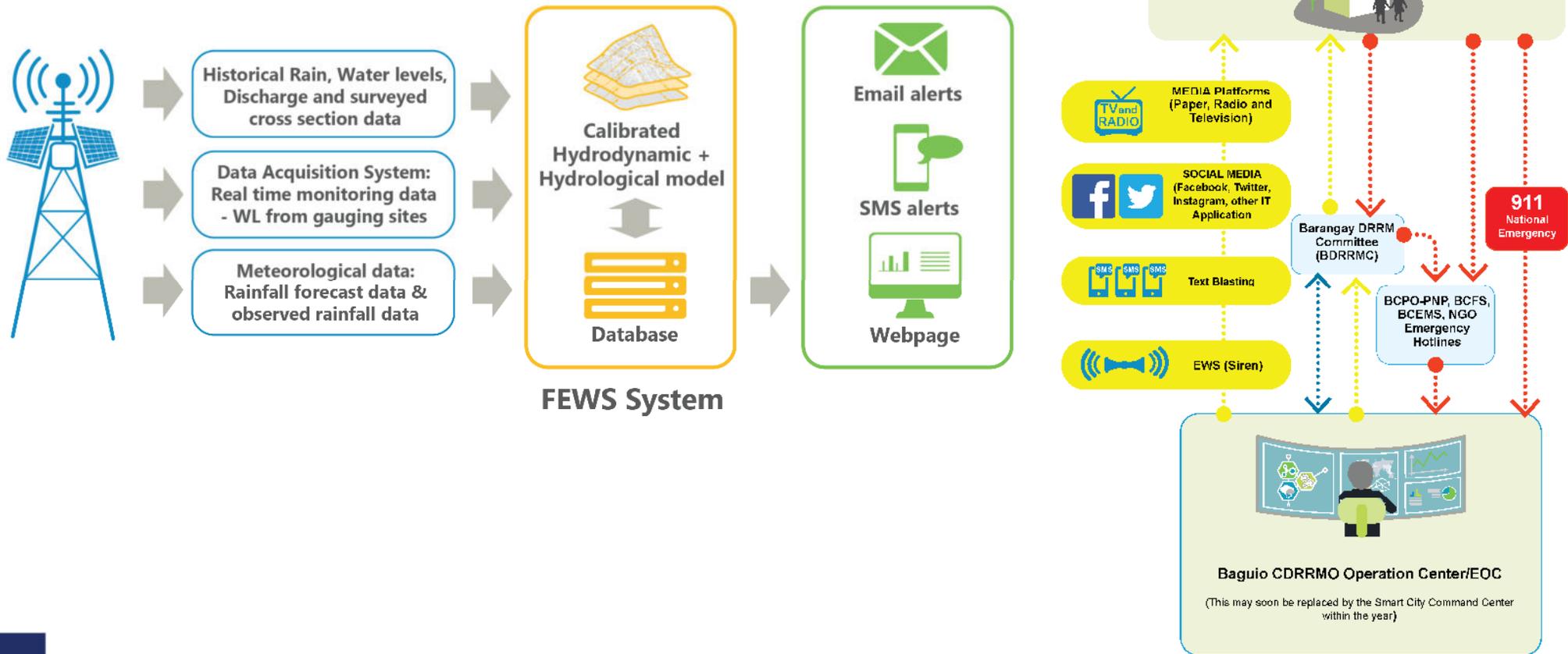
- Establishment and execution of a Smart Flood Early Warning Information System (FEWS)
- Establishment of a real-time data capture system in four river basins in Baguio City
- Preparation of a flood mitigation action plan



Overview, current findings and outputs of the Baguio FEWS project



Baguio FEWS Design





Key focus on Institutional Capacities



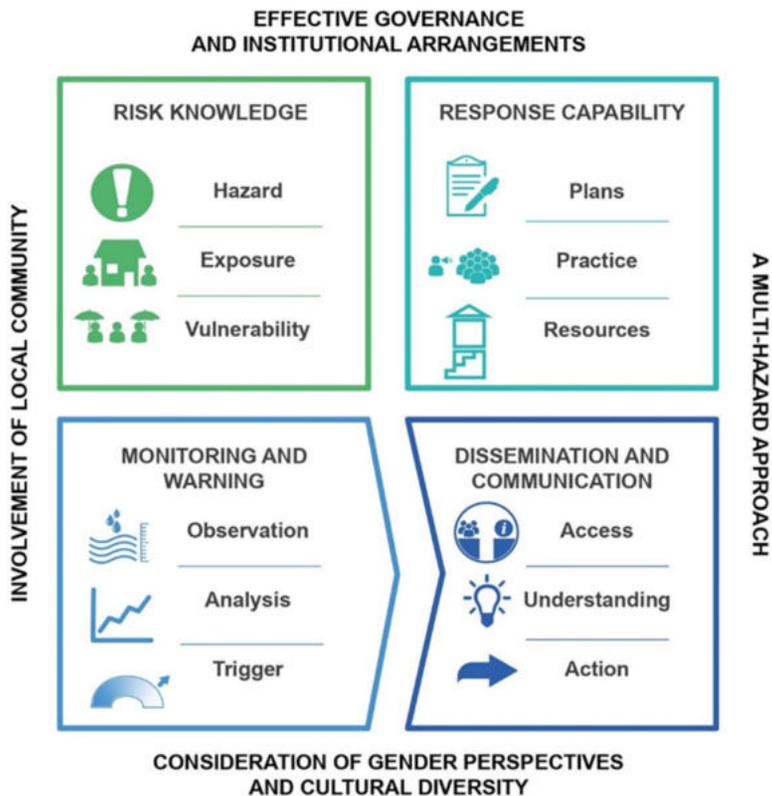
ENHANCED CAPACITY BUILDING AND ON-THE-JOB TRAINING

Main objective:

“Ensuring the long-term sustainability for the established FEWS by **securing the required local capacity** for operating and utilizing the FEWS as an active risk mitigation instrument **beyond the timeframe of the pilot project**”



Key focus on Gender and Inclusion



GENDER TRANSFORMATIVE APPROACH FOR STRENGTHENED DEVELOPMENT, APPLICATION AND REPLICATION OF THE BAGUIO CITY FEWS

Main objective:

- to ensure appropriate, applicable, and timely **early warning reaches the last mile**, including the **most vulnerable**, recognizing that effective FEWS are **people-centric**.
- to **provide** specific, usable, and relevant **actions/guidance on gender transformative approaches** that can be **built into** the design and implementation of the FEWS.





Baguio FEWS Project – next steps

1. Continue working with the design of the FEWS, including testing during the monsoon
2. Undertake post-monsoon evaluation, and draft O&M manual
3. Prepare Standard Operating Procedures
4. Site visits (June and September 2022)
5. Finish Capacity Building Program and outline plan for continued development
6. Focus on on-the-job trainings
7. Project finishes at the end of 2022

