LAND MANAGEMENT, ENVIRONMENT & SOLID-WASTE: INSIDE EDUCATION AND BUSINESS IN CENTRAL ASIA
ERASMUS-EDU-2023-CBHE Project Number: 101129032

MICRO-CREDENTIAL

CLIMATE CHANGE FOR SUSTAINABLE LAND MANAGEMENT IN CENTRAL ASIA

7.- Cities, Air Quality and Human Health

Activity

Identify vulnerable groups and develop a heatwave action plan

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Instructions

For this activity, you will work with a hypothetical city experiencing increasingly frequent and intense heatwaves due to climate change. Your task is to identify the population groups that are most vulnerable to extreme heat and develop a practical heatwave action plan to reduce health risks and improve community resilience.

Begin by thinking about the different groups of people who may be more affected during heatwave events. These may include older adults, infants and young children, people with chronic diseases, outdoor workers, low-income households, people experiencing homelessness, pregnant women, and individuals living in densely populated urban areas with limited access to green spaces.

Next, create a simple map or diagram of the hypothetical city. Indicate where vulnerable populations are located and identify areas that may face higher heat exposure, such as neighborhoods with limited vegetation, high building density, heavy traffic, or insufficient access to cooling facilities.

After identifying vulnerable groups and high-risk areas, consider the potential impacts of heatwaves on health and wellbeing. These may include heat exhaustion, heatstroke, dehydration, worsening of respiratory and cardiovascular diseases, reduced productivity, and increased mortality among sensitive populations.

Then, develop a heatwave action plan for the city. Your plan should include measures to protect vulnerable groups before, during, and after extreme heat events. Examples may include public warning systems, cooling centers, urban greening initiatives, access to drinking water, community outreach programs, and emergency response measures.

At the end of the task, prepare a short written or spoken response explaining your analysis and recommendations. Your work should demonstrate an understanding of how urban environments, climate change, and public health are interconnected.

Student task format:

1. Identify the vulnerable groups in the hypothetical city.
2. Describe the areas most exposed to extreme heat.
3. Explain the potential health impacts of heatwaves.
4. Propose at least five actions to protect vulnerable populations.
5. Prioritize the actions and justify your choices.
6. Briefly explain how your plan could improve urban resilience and public health.