4.1: Key concepts related to climate change adaptation

This chapter has been designed for facilitators and trainers as well as local government officials and partners completing a SEACAP.
Weather

The state of the atmosphere at a particular place and time

For example:
“Today is a sunny day”
OR
“Yesterday it was partly cloudy and windy”
OR
“Tomorrow it will be raining”
Climate

Climate is the prevailing weather condition or trend for a specific geographical region over a period of about 20 to 30 years.

For example: “In Harare, Zimbabwe observations taken over the past 50 years show that the summer months occur from Sept to March and are hot and wet, whilst the winter months occur from April to August and are cool and dry.”
Climate change is a long-term change in the average weather patterns that have come to define local, regional and global climate.

For example: “In Harare, Zimbabwe we have observed in the last 5 years shifts in the seasonal rainfall patterns to much later in the season.”
Climate change adaptation is the process of adjustment to actual or expected climate change and its effects.

Adaptation actions are undertaken in anticipation of the adverse effects of climate change and aim to prevent or minimize the damage the impacts of climate change can cause and/or take advantage of opportunities that may arise.
A physical process or event (hydro-meteorological or oceanographic variables or phenomena) that can harm human health, livelihoods, or natural resources. A hazard is not simply the potential for adverse effects.

For example, a cyclone is an example of a hydro-meteorological climate hazard. Whilst storm surges are an example of oceanographic climate hazards.
Exposure

The presence of people, livelihoods, species or ecosystems, environmental services and resources, infrastructure, or economic, social, or cultural assets in places that could be adversely affected by a hazard.
Sensitivity/Vulnerability

The degree to which a system, asset, or species may be affected, either adversely or beneficially, when exposed to climate variability or change or geophysical hazards.
Risk

The potential for consequences where something of human value (including humans themselves) is at stake and where the outcome is uncertain.
Impact

The effects of hazards on human or natural assets and systems. These potential effects, which are determined by both exposure and sensitivity, may be beneficial or harmful.
Adaptive capacity

The ability of systems, institutions, humans, and other organisms to adjust to potential damage, to take advantage of opportunities, or to respond to consequences of climate hazards.
Resilience

The capacity of a social-ecological system to cope with a hazardous event or disturbance, responding or reorganizing in ways that maintain its essential function, identity, and structure, while also maintaining the capacity for adaptation, learning, and transformation.
4.1: Key concepts related to climate change adaptation

This chapter is one component of the SEACAP Toolbox for the full Toolbox, please visit: https://comssa.org/

What you learnt in this chapter:
• Key concepts related to climate change adaptation

The next chapter is:
Introduction to the Adaptation Pillar
CoM SSA SEACAP Toolbox

Published by:
The Covenant of Mayors in Sub-Saharan Africa (CoM SSA)
c/o Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ)

Author:
ICLEI Africa

For more information contact: helpdesk@comssa.org
Publication date: November 2020
The full SEACAP Toolbox is found here: https://comssa.org/

© 2020 Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH. All rights reserved. Licensed to the European Union, the German Federal Ministry for Economic Cooperation and Development. The SEACAP Toolbox has been produced with the financial support of the European Union and the German Federal Ministry of Economic Cooperation and Development (BMZ). Its content is the sole responsibility of the authors and does not necessarily reflect the views of the European Union and the German ministry.
CoM SSA programme is jointly implemented by:

AECID, AFD, EF and GIZ are implementing the Covenant of Mayors in Sub-Saharan Africa (CoM SSA) programme in cooperation with other CoM SSA partners, Secretariat and Helpdesk. The content of this presentation do not necessarily reflect the views of the European Union or the other co-funders.
Thank you

Find out more: http://comssa.org
Contact: helpdesk@comssa.org