GHANA-FLOOD INFORMATION SYSTEM (FIS) TRAINING MATERIAL
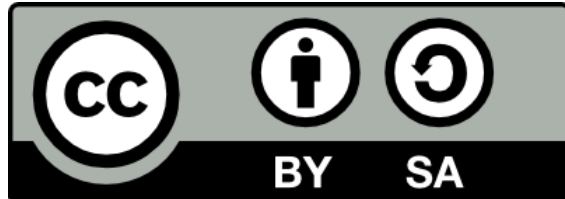
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Training outline:

1. Ghana-FIS Access and its Components

2. FIS Scenarios, Measures and Products

3. FIS Explorative exercise

Ghana-FIS web portal access

https://www.geographie.uni-bonn.de/parades/fis

FIS Components

Flood portal

Data Access

FLOODLABEL

Description of components- https://www.geographie.uni-bonn.de/parades/fis

Flood Portal: Scenarios, Measures and Products

Accra- Odaw FIS

- Rainfall return period T2-T1000
- Scenarios
  - Base case (current)
  - Climate change RCP 4.5 and 8.5

    (ongoing works)
  - Blockage (ongoing works)
- Measures
  - Do nothing
  - Rain water harvesting (RWH)
  - 15m river buffer zone (BZ)
  - 0.5 m depth house protection (HPI)
  - 1.0 m depth house protection (HPII)
  - Dykes (ongoing)

Kumasi- Aboabo FIS

- Rainfall return period T2-T1000
- Scenarios
  - Base case (current)
  - Climate change RCP 4.5 and 8.5

    (ongoing works)
  - Blockage (ongoing works)
- Measures
  - Do nothing
  - Rain water harvesting (RWH) (ongoing)
  - 15m river buffer zone (BZ)
  - 0.5 m depth house protection (HPI)
  - 1.0 m depth house protection (HPII)
  - Channel works (ongoing)

White Volta FIS

- Discharge return period T5-T100
- Scenarios
  - Base case (current)
  - Climate change RCP 4.5 and 8.5

    (ongoing works)
- Measures
  - Do nothing
  - Dam management (ongoing)

FIS Products

- Flood extent-depths
- Flood velocity
- Population affected
- Population endangered zone 1 and 2
- Economic damages to properties
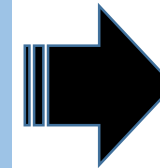
FIS explorative exercise

Step 1- Web portal exploration (10 mins)

- Objective: Familiarization of the use and functionality of the flood portal and data access
- https://www.geographie.uni-bonn.de/parades/fis

Step 2: Scenarios and measures explorative exercise (50 mins)

- Objective: Assess the impact of different scenarios and effect of measures

Scenarios and measures explorative exercise

https://www.geographie.uni-bonn.de/parades/fis

Tasks with guiding questions:

- Choose a case study area- Accra, Kumasi or White Volta

- Compare return periods for
  - ➤ T2 vs T200: Scenarios and Measures (Odaw-Accra and Aboabo-Kumasi)
  - ➤ T5-T100: Scenarios and Measures (White Volta)
  - ➤ Identify inundated areas that are interesting
  - ➤ Observe the changes in flood hazards
  - ➤ Is the area sensitive to different return periods?
  - ➤ Are the flood depths and velocity changing?

- Observe the effect of the two scenarios and/or different measures on the risks
  - ➤ What is happening in this area? Effect to:
    - – People
    - – Damages to properties
    - – Critical Infrastructure (if there are around the area)

  Only for Accra-Odaw and Kumasi Aboabo
  - ➤ Are the measures adequate to reduce hazard?
  - ➤ Is the effect of measures adequate to reduce risk to people and properties?

- *What data and information are useful for you?*

- *How can you use the FIS on flood disaster risk management (FDRM) OR on your works not related to FDRM*

- Would you like to share and do a FIS training with your colleagues?

- Are there any improvements on the FIS that you wish?
  - ➢If yes don't hesitate to get in touch with the institution responsible for the maintenance of the FIS.

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