

# Developing a Public Asset Register



## INTRODUCTION

Urban flooding is a significant issue in Ghana, particularly in the Greater Accra Metropolitan Area (GAMA). Government agencies and municipalities seek to minimize damage from natural disasters, also for their public assets, through a variety of prevention measures. Nevertheless, a residual risk will always remain. Risk transfer within an Integrated Disaster Risk Management (IDRM) is central. For the development of an insurance product for public infrastructure assets various information about them, such as their value as well as their precise locations and previous flood occurrences for the exposure analysis, are required.

Therefore, government authorities in urban areas currently manage public asset registers according to each municipality. These public asset registers are documents that include critical data that relates to infrastructure assets, which may include educational facilities, health facilities, markets, shops, roads, culverts, and lorry parks. In addition, these registers may also include data that relates to moveable assets

such as vehicles, televisions, and laptops. However, these registers in certain institutions in Ghana often lack crucial information. Without this information, it is difficult to develop insurance products and increase risk management capacities.

To this end, in 2018 a Strategic Partnership was established between GIZ and Allianz Reinsurance under the initiative entitled Developing Risk Management Approaches for Climate Risk (SAGABI Project). The overall aim of the project was to prepare the ground for implementing risk transfer solutions within an integrated flood risk management approach for assemblies in GAMA.

Faced with the challenges of incomplete public asset registers, the project - in close collaboration with the assemblies and responsible authorities - collected data on public infrastructure and its values in order to fill these gaps as well as assessed the relevant historic flood loss damages.

On behalf of



## CHALLENGES

**Developing insurance products and determining payouts is very challenging when information on asset values is unavailable.**

District Assemblies face difficulties in the collection of certain asset data such as GPS coordinates or values of assets and inventory due to limited capacity, few trainings, and financial constraints. However, without accurate data on asset values, new and relevant insurance products are difficult to develop, since insurance premiums, as well as payouts, are based on asset values. Thus, reported asset values that are too high would result in unrealistic and potentially unaffordable insurance premiums. Reported asset values that are too low could lead to insurance payouts that are too low to rebuild infrastructure after it had been damaged.

**Municipalities maintain basic public asset registers but often lack the knowledge to collect detailed data.**

Before an organization gathers data for its public asset register, it must build the capability of people who will collect that data. For example, training related to global positioning systems (GPS) is needed to enable users to read accurate location coordinates.

## DEVELOPMENT OF A ROBUST PUBLIC ASSET REGISTER

To be useful, public asset registers must include several critical data points. These include, for instance, land size, number of floors in a building, function of a building, coordination dates, and acquisition/procurement dates. Also information related to who owns and maintains assets is important. Historical risk data, such as a history of flood or fire occurrences in the area surrounding a particular asset, should also be recorded. For insurance purposes specifically, knowing the GPS coordinates of the assets can be useful to plot assets on map or earth which helps to connect hydrological data and meteorological data to assess how exposed an asset is to a certain disaster, likewise the type of building material used for the asset to know how vulnerable an exposed asset is to a disaster. All these determine how affordable or expensive an insurance product can be.

After the information is collected, the district assembly has robust data to help manage assets and disasters effectively.





The following data points should always be included in public asset registers:

- Location Coordinates (UTM), Easting and Northing
- Address of the asset
- Acquisition date
- Asset ID
- Building type.

Eg, Gema lands and bungalows, health facilities, markets and shops, culverts and drains, educational institutions, etc.

- Description of building.

Eg,

Asset ID	Description
GEMALB010	Education Directorate
GEMABUN00	MCEs Bungalow
GEMAMKT002	Dome Market - 1 No. 3 bay Market shed with 72 stall

- Funding Agency (if the building was supported by a different entity than the owner)
- Location or area of the asset.  
Example: Abokobi, Dome Market, Taifa Burkina, Sesemi, Akporman, Pantang, and more.
- Department within the public entity that owns or manages the asset
- Construction material(s) used for building.  
Examples: wood, asphalt, concrete, gravel, etc.
- Land size

- Number of floors
- Value of building itself
- Value of building contents/inventories
- Value of land on which a building sits
- Depreciation amount of the asset
- Contractor's name (if the construction is done by a different entity aside from the company in question).
- Use of building. Eg, residential, commercial, etc.
- If residential, socioeconomic status information of owner/area (low-income, middle-income, high-income)
- A picture of the asset with picture ID
- History of the disaster,

for example:

- Has the asset been flooded before?
- How many times has the asset been flooded in the past?
- Date(s) of flood occurrence(s)
- Description of the nature and severity of the flood
- Cause of flooding
- How long (days) could the building not be used after the flood?
- Description of damage incurred from the flood





### Activity name

Developing a Public Asset Register

### Focus area

Greater Accra Metropolitan Area (GAMA), Ghana

### Local partners

Administration of GA East, GA West and AMA  
GMet—The Ghana Meteorological Agency

### Target group

Public assets under the control of assemblies in GAMA

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Developing Risk Management Approaches for Climate and Health Risks

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### Photo credits

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For more information please refer to the factsheet  
“Developing Disaster Risk Management Approaches for  
Climate Risks in Ghana”.

### Disclaimer

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