**Proposal Topic: Data Based Outlook to Reduce Flood to Property Damage**

**Exploratory Data Analysis: Flood Damage to Property Reduction**

BAT-404 Analytics Techniques and Tools

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**Introduction**

**Problem Statement**

**Significance of the proposed topic**

The key findings of this study will be useful to the following entities and solve related issues in relation to food waste.

**Community.** The zero food waste reduces local pollution because the more emission we produce, the more we generate trash that could lead to health issues for humans.

**Animals.** Instead of dumping the excess foods into landfills which affect our greenhouse, it’s cheaper and safer to feed it to starving animals. Through this, it will reduce dying animals because of hunger.

**Reduce Hunger.** Foods that can still be eaten and not spoiled can be donated. This will support one’s community by providing donated untouched food to those who might not have a steady food supply that would have otherwise gone to waste and landfills.

**Reduce methane that food waste emits.**  Composting practices minimize anaerobic conditions and maximize aerobic conditions will be the most effective at reducing greenhouse gas emissions. Cutting methane emissions is the opportunity that our world has to slow the rate of global warming.

**Fight climate change and pollution.** Zero waste conserves resources and minimizes pollution. It also conserves natural resources and reduces pollution from extraction, manufacturing and disposal.

**Methods**

* Preparedness and response capacity at local communities should equally be promoted through a community-based approach. This includes building community-to-community coordination. For example, if there is heavy rainfall and a flash flood is likely in an upstream community, that community can inform the downstream community and activate an alert system—which should be installed.
* “Green-gray” infrastructure like retention basins, wetlands, vegetation shields, sediment traps, flood walls, diversion channels, retaining walls, and other measures can improve the geo-morphology of the mountain rivers including slope stabilization and overall flash flood risk management.
* Local governments urgently need greater expertise on flood management, both on the technical and non-technical aspects, and in each and every stage of the risk management cycle, which is greatly lacking in the region.

**Expected Output**

**References**

Global Disaster Database

<https://public.emdat.be/data>

<https://ourworldindata.org/natural-disasters>

Flood Control and its Management

<https://www.heraldopenaccess.us/openaccess/flood-control-and-its-management>

<https://blogs.adb.org/blog/how-governments-can-reduce-impacts-of-asia-s-devastating-flash-floods>

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