

WE NEED MORE HELP!

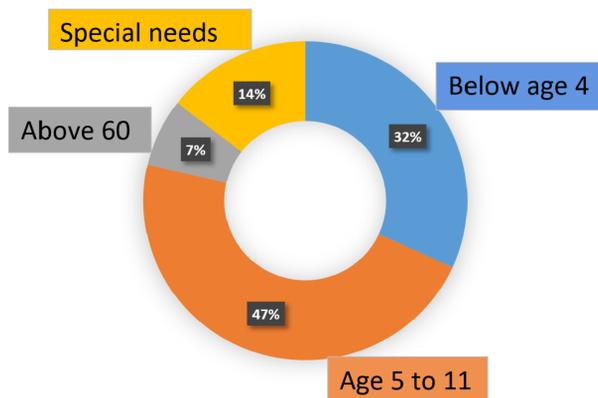
A camp wise vulnerability analysis of Rohingya refugees living in Bangladesh

Introduction

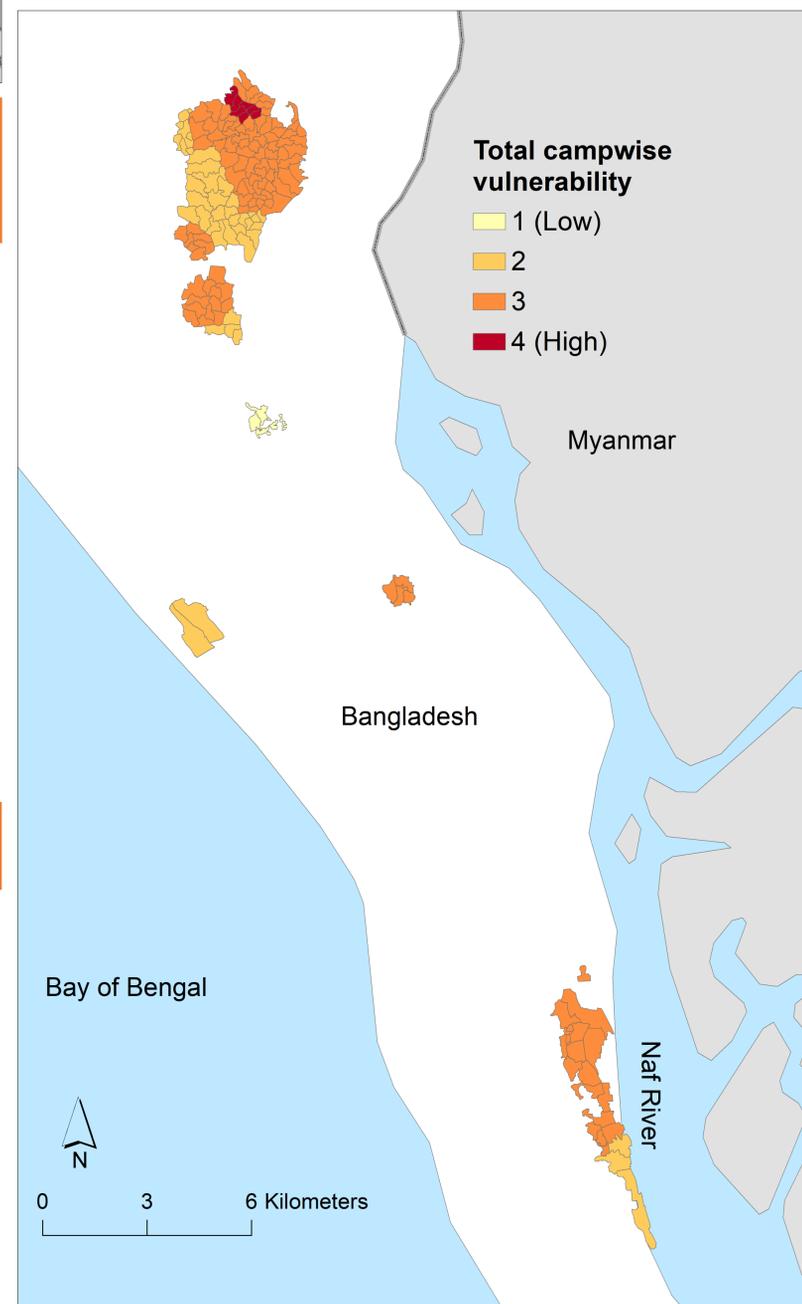
Since the onset of Rohingya crisis on 25th August 2017, over 600,000 Rohingya refugees have fled Myanmar and have sought refuge in Bangladesh's Cox Bazar, making it one of the fastest growing host destination in the world. The result of this has been an immense strain on resources and a struggle to provide services to refugees without compromising the needs of half a million Bangladeshis who already live in the Cox's Bazar area. Keeping this in mind, International NGO's and humanitarian organizations have conducted assessments to identify protection needs in order to improve their strategies to better provide services. Some of the needs identified are access to clean drinking water, cooking fuel, decongestion & relocation, access to food, sanitation, health, education services, among others. This project aims to understand the extent to which populations living in different camps in the Cox's Bazar area are vulnerable based on their access to sanitation, health and education services in and around the camps and their socio-demographic factors such as age, gender and special needs. Understanding which areas are most vulnerable based on access to protection services and socio-demographic variables would help INGO's and humanitarian organizations prioritize services based on their vulnerability.



Vulnerable population breakdown



Total vulnerability based on access to services and socio-economic factors



Spatial Questions

- Where are the Rohingya refugee camps located in the Cox's Bazar area?
- What is the distribution of vulnerable population within these camps (i.e. children, elderly, people with special needs and female headed households)?
- How do these camps compare in terms of their access to functional water, sanitation and hygiene services within these camps?
- What is the distribution of health services around these camps?
- What is the distribution of education services around these camps?
- Which are the most vulnerable camps based on their access to sanitation, health, educational services and their socio-economic status?

Methodology

I calculated vulnerability ranks based on access to services such as Water, Hygiene and Sanitation (WASH) using a composite of access to latrines, washrooms and safe water source per person. Similarly, vulnerability ranks for access to learning centers and health centers were calculated. Ultimately, these were combined with socio-economic factors such as the total number of children below age 11, elderly and people with special needs. These individual vulnerability ranks were then given weights to come up with the final vulnerability score. I gave higher weightage to socio-economic factors its proxy was vulnerable population who made need more assistance. The project made use of tools such as spatial joins, tabular joins, Euclidean distance, zonal statistics as table and field calculator.

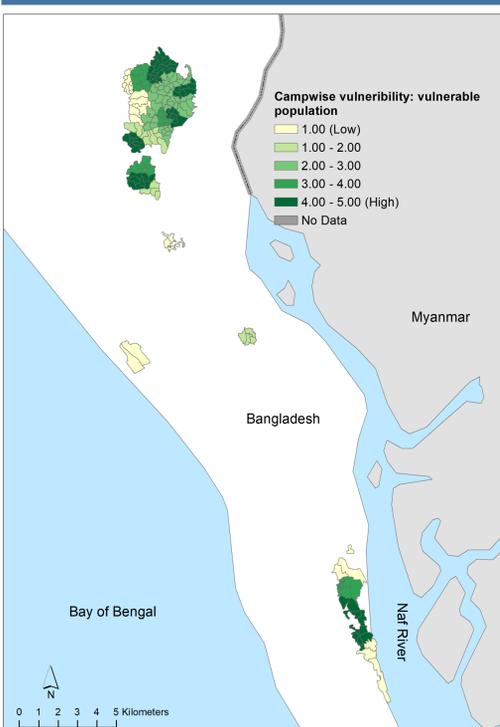
Results

Humanitarian aid agencies could better direct their efforts by:

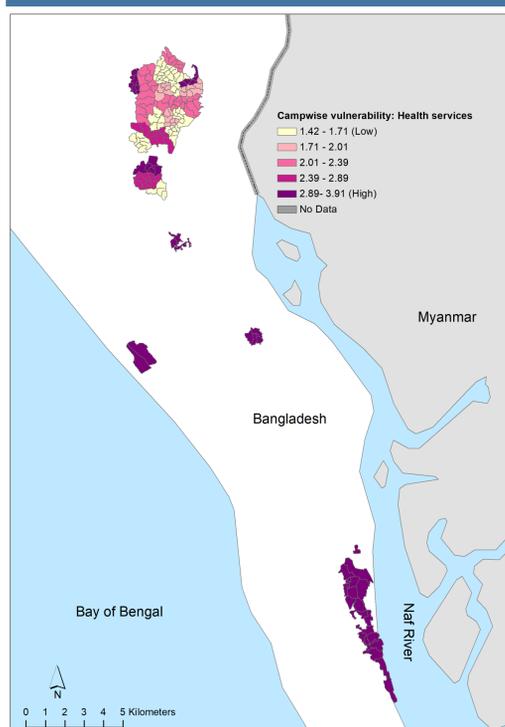
- Improving access to WASH services for camps in the North-East
- Improving access to health centers for camps towards the South
- Improving access to learning centers for camps towards the west and south part
- Keeping in mind that refugees living in the south, north and north-east camps are highly vulnerable and may need more assistance

Cartographer: Gauri Khanduja
 May 6, 2019
 DHP-P207: GIS for International Applications
 Projection: WGS_1984_UTM_Zone_46N
 Data sources: ML Info (accessed from Tufts M:\Country\Bangladesh), Intersector Coordination Group (UNOCHA, Humdata), UNHCR
 Picture source: Flickr
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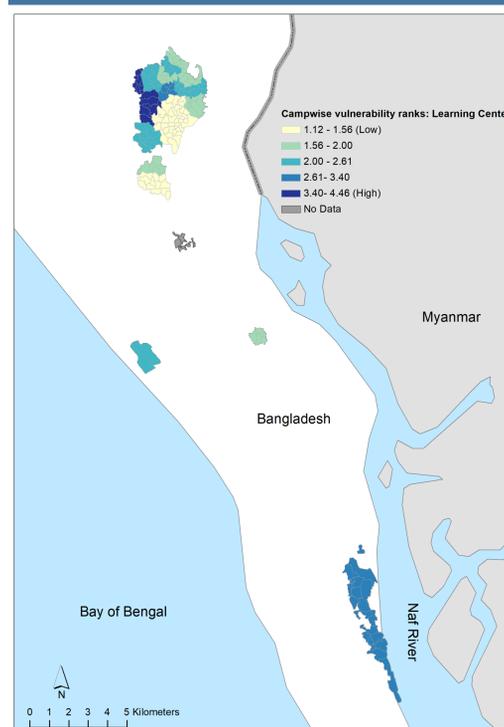
Vulnerability based on socio-economic factors



Vulnerability based on access to health services



Vulnerability based on access to learning centers



Vulnerability based on access to WASH services

