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NATIONAL DISASTER IN NIGERIA 2018: *LOOKING INTO FLOOD SCENERIOS; VULNERABILITY AND IMPACT*

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OUTLINE

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Introduction

- Flood has become a reoccurring natural disaster in large parts of Nigeria within the last decade, and has been declared a natural disaster.
- Flooding is a threat to the survival of a locality as it affect lives, public infrastructure and socio-economic activities.
- In 2012, Nigeria witnessed an unprecedented flood that affected about 33 States with varying degrees of intensities and effects (NCRS 2012 flood report).
- Flood impact assessment is essential for risk management, vulnerability and early warning to support decision making.



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Statement of the problem

- NIHSA had in its 2018 annual flood outlook predicted that 380 local government areas in 35 states would experience flooding. (NAN, July 2018. www.vanguardngr.com/2018/07/shift in rainfall pattern)
- *“Unless adequate provision is made to accommodate the amount of water that is running on the surface, definitely the likelihood of flood is going to be very high, especially in areas that are adjoining the riverine location”. prof. Mashi, DG NIMET*



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Scope of the study

- The study focuses on areas inundated by flood on 4th and 16th September 2018.
- The study also aims to assess the vulnerability and impact of the flood



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Methodology

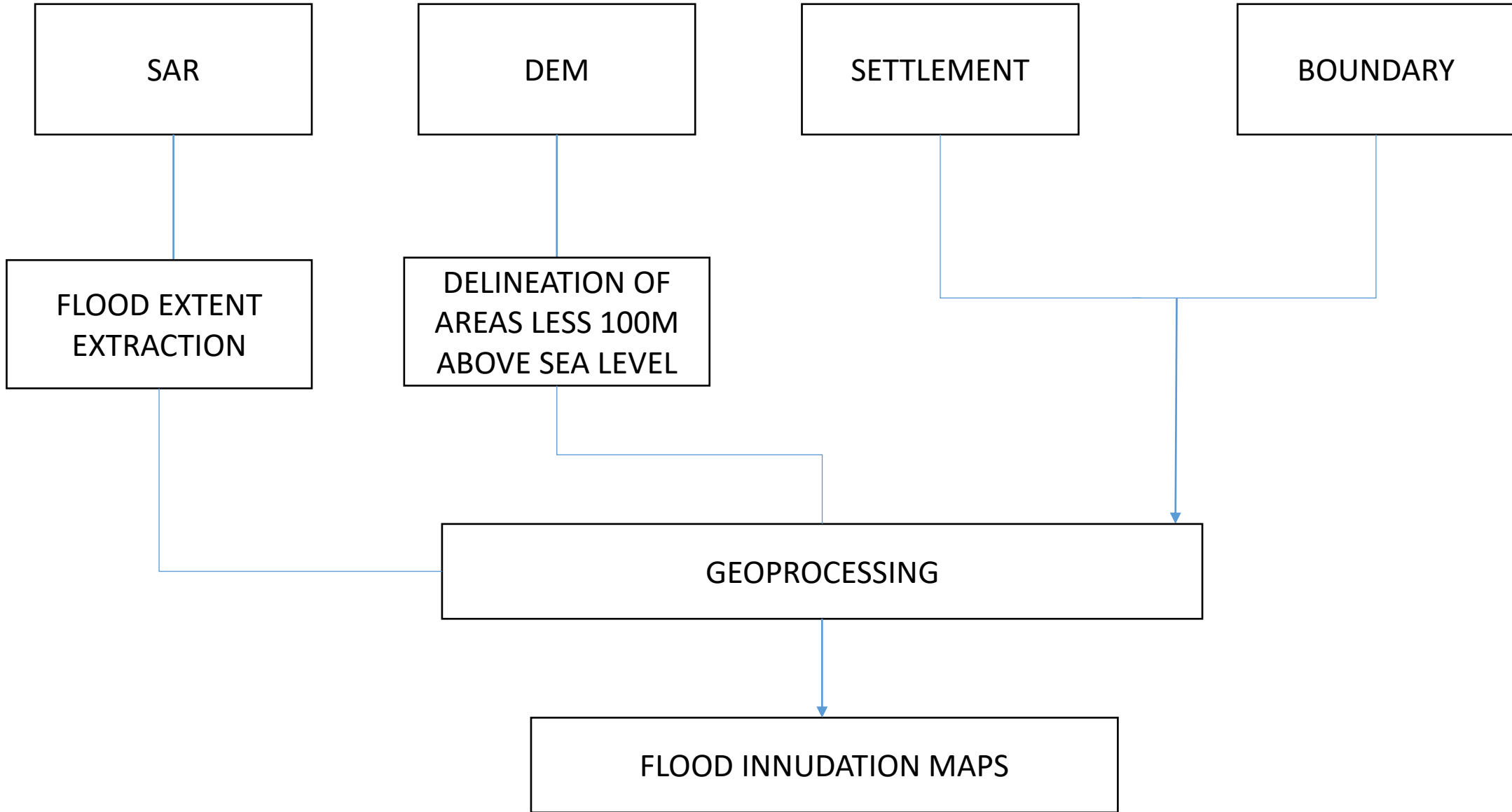
The study made use of the following data:

Data	Sources	Resolution
Synthetic Aperture Radar (SAR)	UN-SPIDER	9M
Digital Elevation Model (DEM)	USGS	30M
Nigeria Settlement map	NASRDA	
Nigeria boundary data	OSGOF	Vector



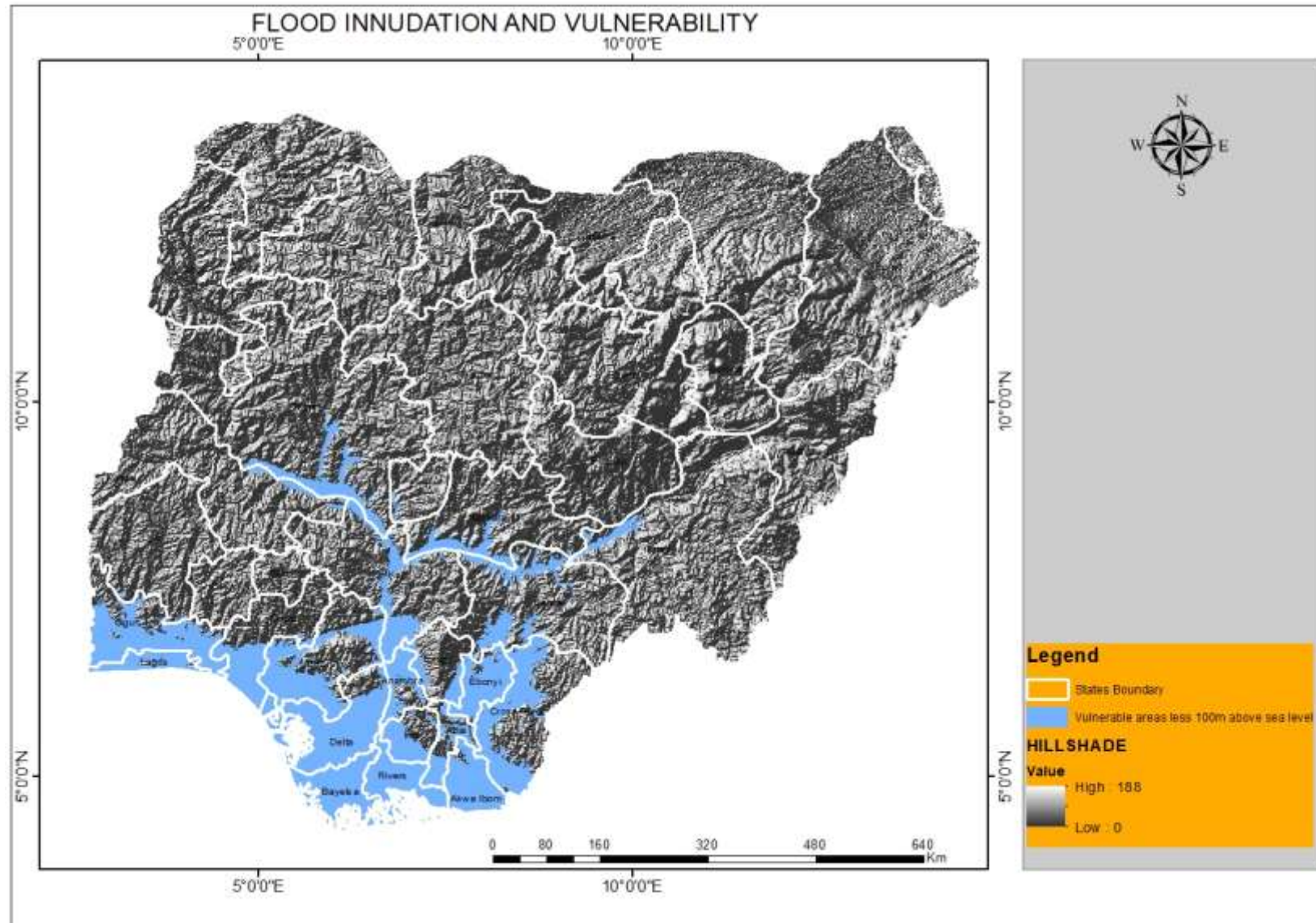
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METHODOLOGY FLOWCHART

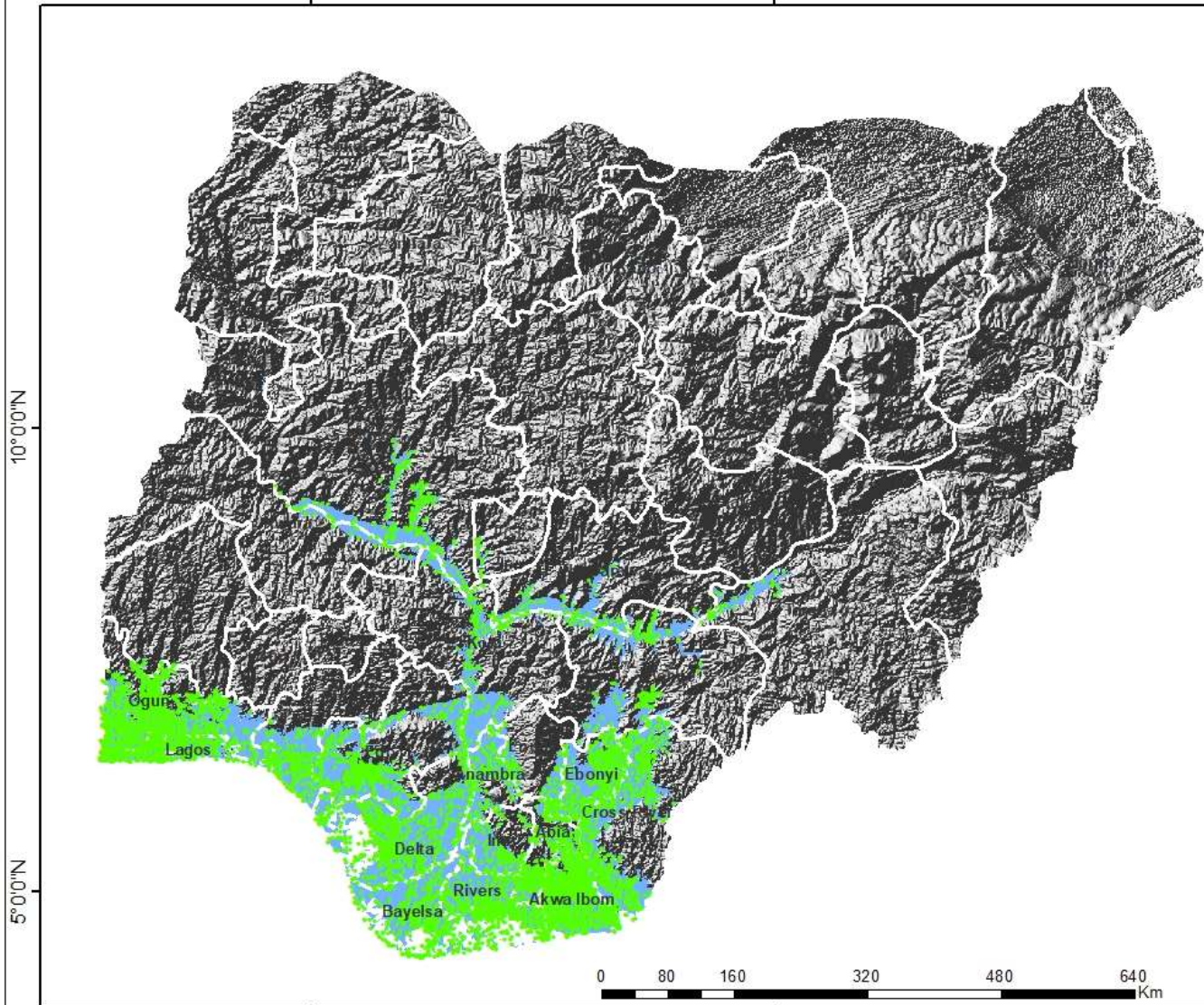
RESULT



FLOOD INNUDATION AND VULNERABILITY

5°0'0"E

10°0'0"E



Legend

- Settlements
- States Boundary
- Vulnerable areas less 100m above sea level

HILL SHADE

Value
High : 188
Low : 0

10°0'0"N

5°0'0"N

10°0'0"N

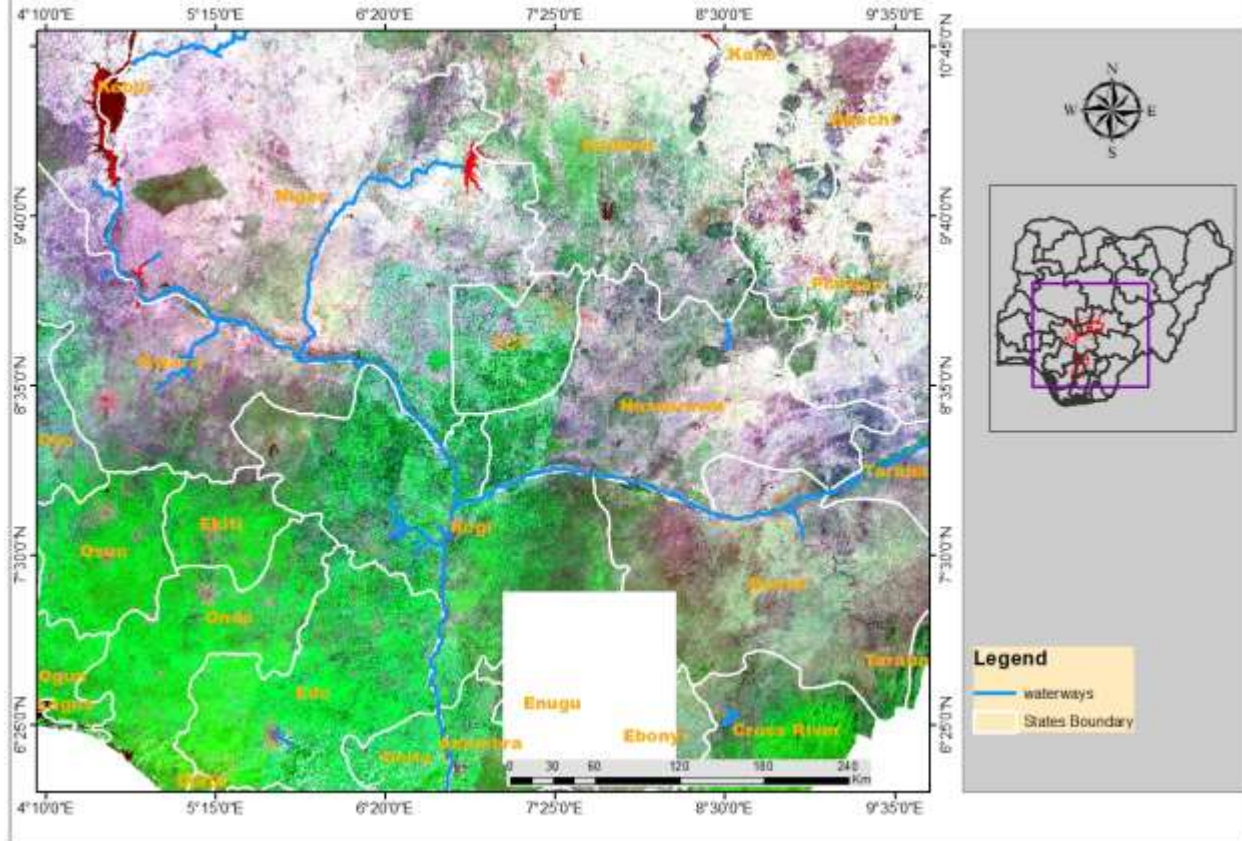
5°0'0"N

5°0'0"E

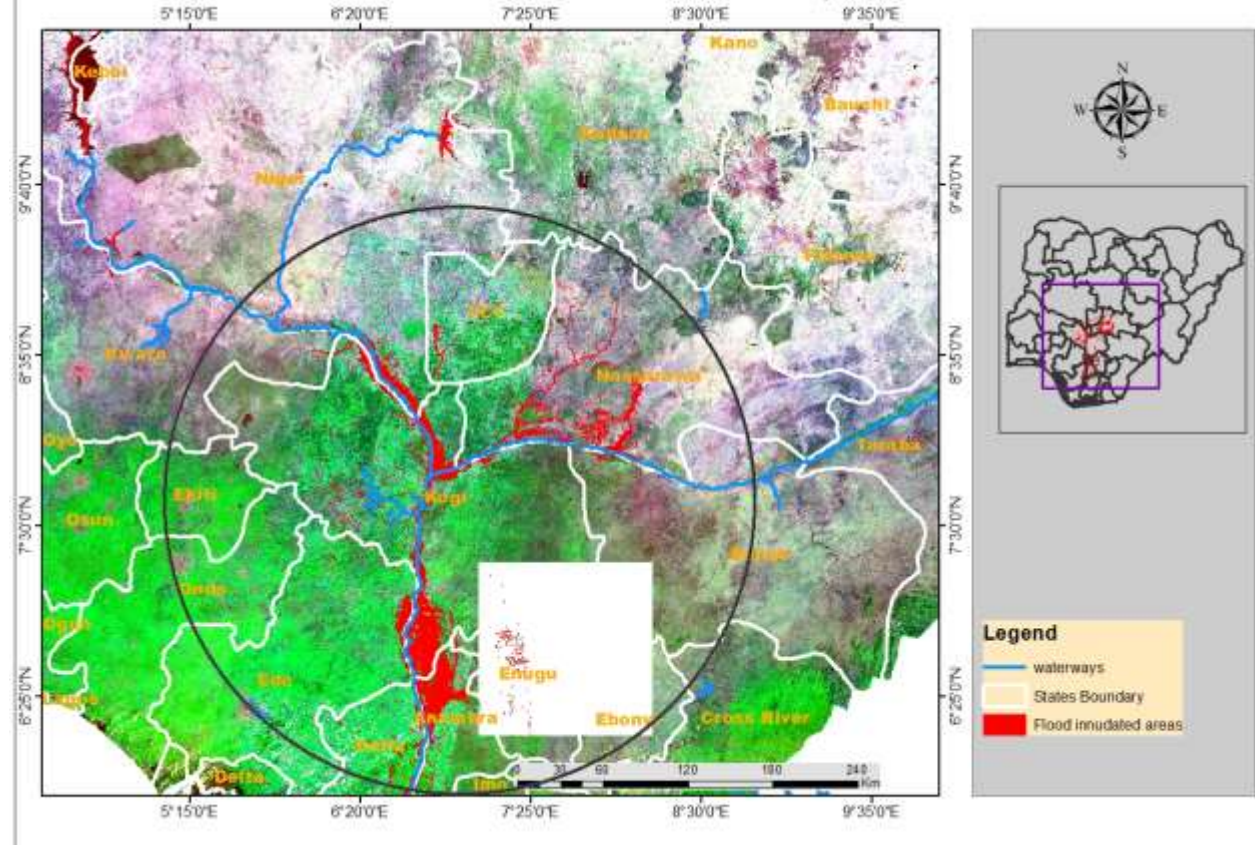
10°0'0"E

0 80 160 320 480 640 Km

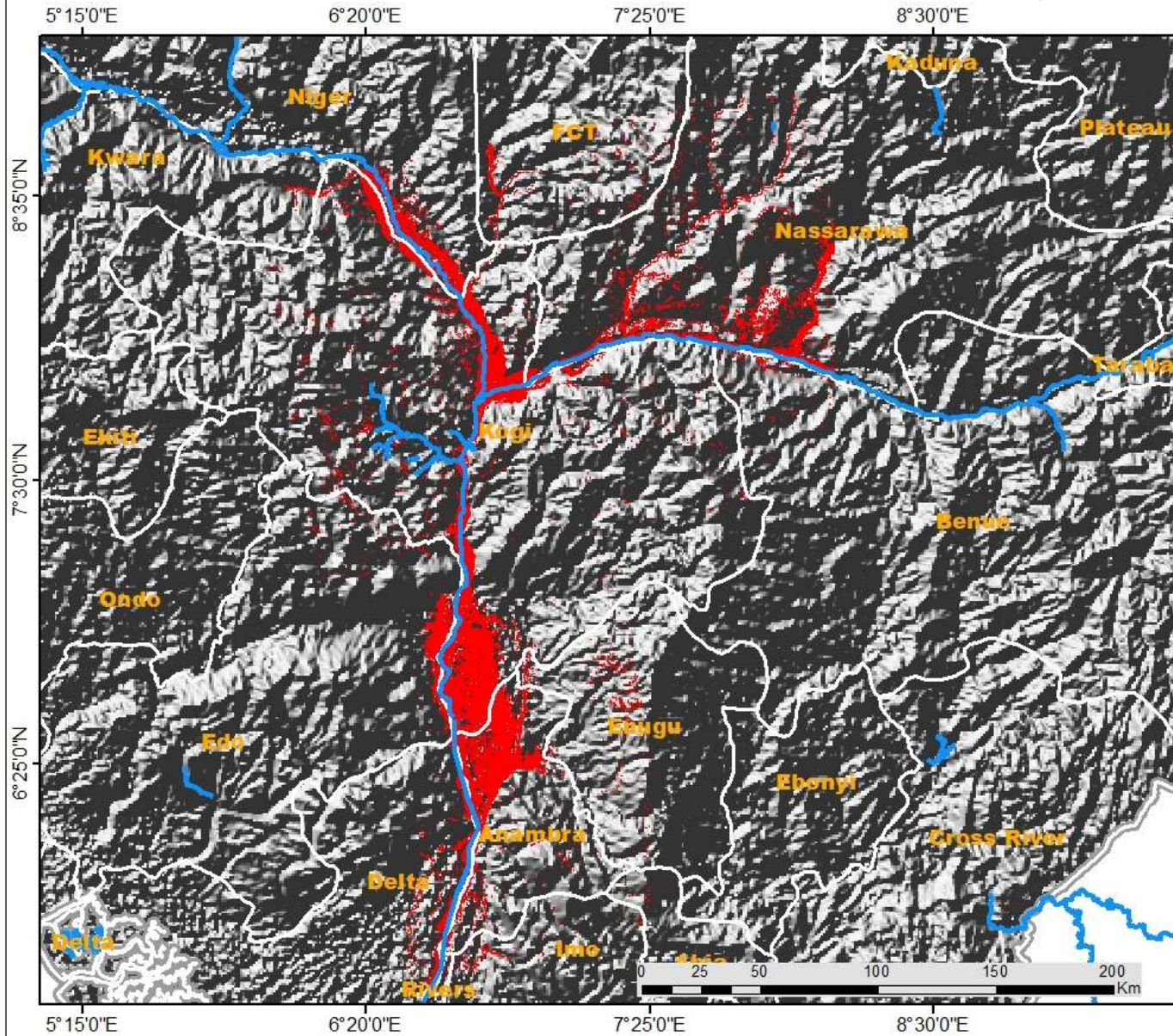
BEFORE THE FLOOD



FLOOD INUNDATED AREAS FOR 4TH AND 16TH SEPTEMBER, 2018



FLOOD INUNDATED AREAS FOR 4TH AND 16TH SEPTEMBER, 2018



Legend

- waterways
- States Boundary
- sept_16_flood_extent
- NGA_adm0

HILLSHADE

Value

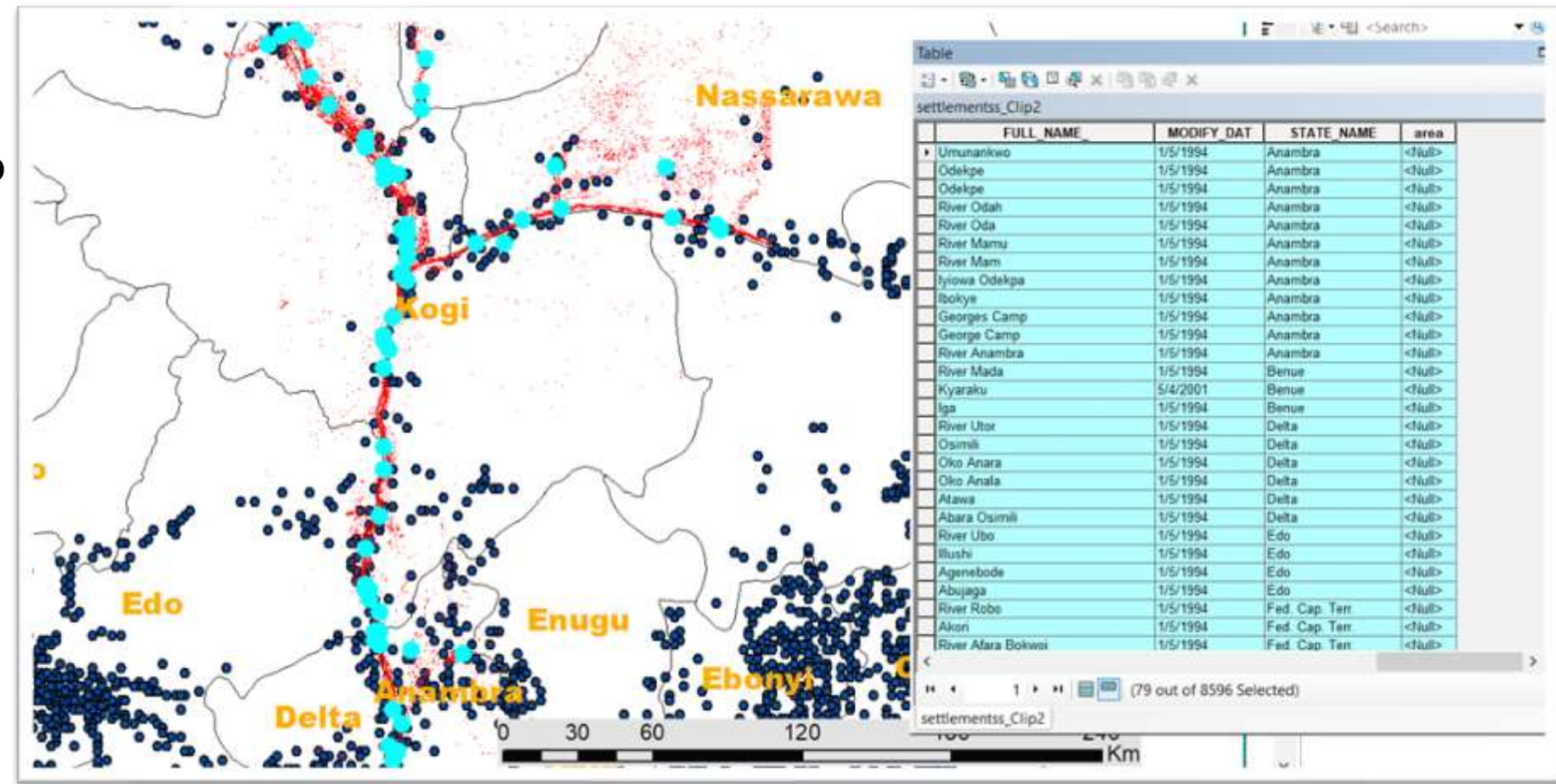
High : 188

Low : 0

According to NIHSA prediction as reported by NAN in July, 2018, the likelihood of flood is going to be very high in areas that adjoining the riverine locations.

NIHSA also noted that flooding will be high in about 78 LGAs.

Result from query by location review that 79 communities or villages mainly along river channel were mostly affected in about 9 states



Aerial photographs of the affected areas



Aerial photographs of the affected areas



Number of vulnerable communities	8591
Total number of communities submerged	79
Extent of the flooded areas	1871.6 sqkm
Total area vulnerable to flood	116302 sqkm

conclusion

- The hazard of flood cannot be stopped completely but can be minimized through preparedness and effective early warning systems
- Flood impact assessment is crucial as it helps government and relevant stakeholders to make contingency plan for the after effect.
- Adequate information is key to effective planning especially those aspect that affects lives and properties of every Nigerian.

Thanks for your attention