

Feedback on FANFAR system and floods during 2019 from Nigeria/River Niger Basin.

Nigeria hydrological Services Agency (NIHSA)

By

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Flood events during 2019

Summary of all events

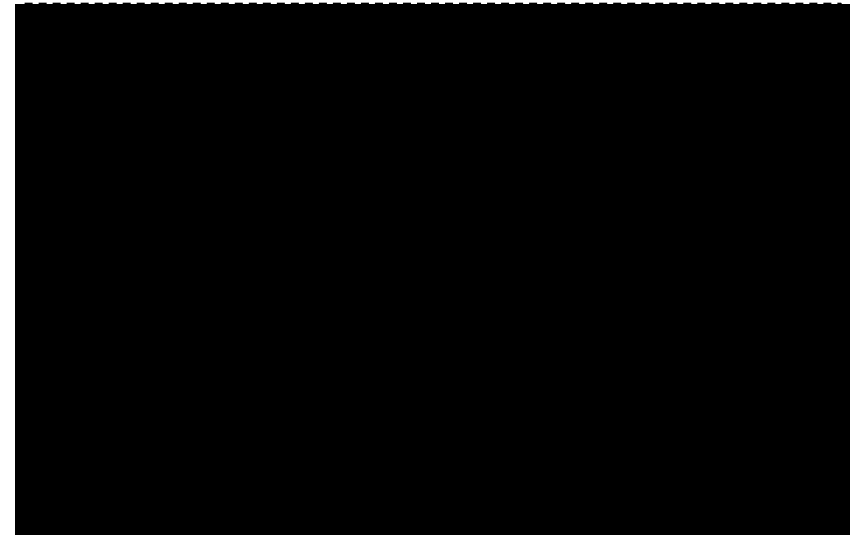
Number of floods	838 communities
Casualties	152 life lost and 1,210 people injured
People affected	2,321,592
Damage cost	Over N200.00 Million

Worst event

Where	Abuja, Lokoja, Makurdi, Yobe, Adamawa, Borno, Lagos and Anambra.
When	Flash flood Between September and October,2019
Casualties & damage	Number of lives lost, people affected and damage costs – As above

Second worst event

Where	River Benue @ Makurdi, Delta State, River Ogun@Abeokuta town, Niger State, Anambra, Taraba,Rivers, Edo sates
When	Between July and September 2019
Casualties & damage	

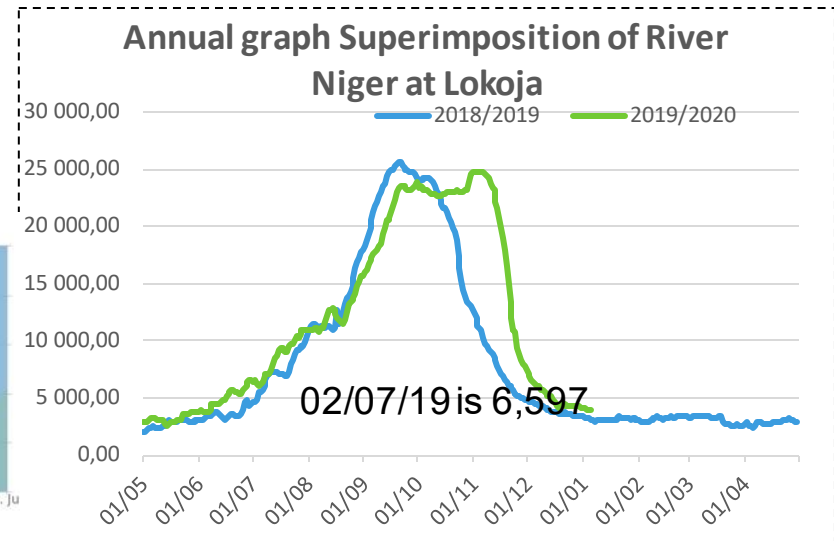
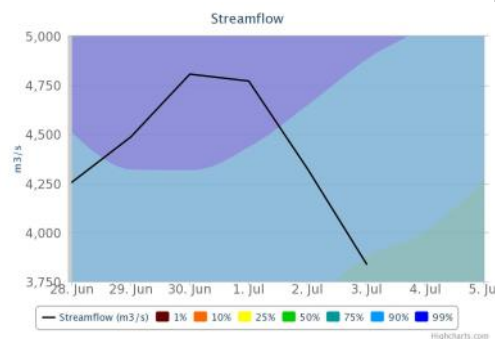
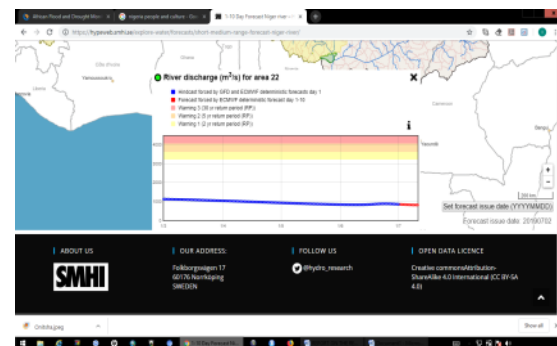


Accuracy of FANFAR forecasts & alerts

How well did FANFAR forecast floods / streamflow peaks during 2019?

1. The FANFAR need to be improved for better accuracy as compared with other forecasting system such as African Flood and Drought Monitor and EU-Copenicus as regards. (i) **gauge measurements**, (ii) **field observations**, etc.
2. The FANFAR captures the location of of the peak correctly except for the incorrect value of the peak compared to observed value.
3. How well did FANFAR capture **timing** of the peak? Example: 2 days early, or 1week late
4. FANFAR prediction generally is above 30%. On 02/07/19 the discharge was 844m³/S

4,332 m³/S - AFDM

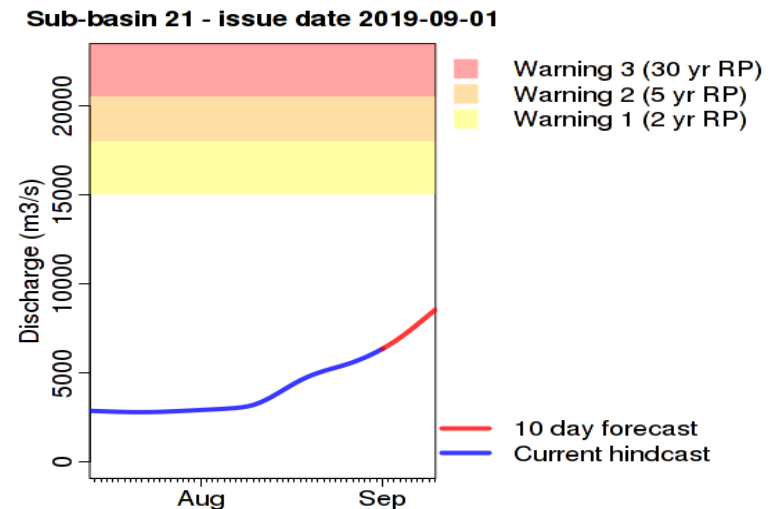
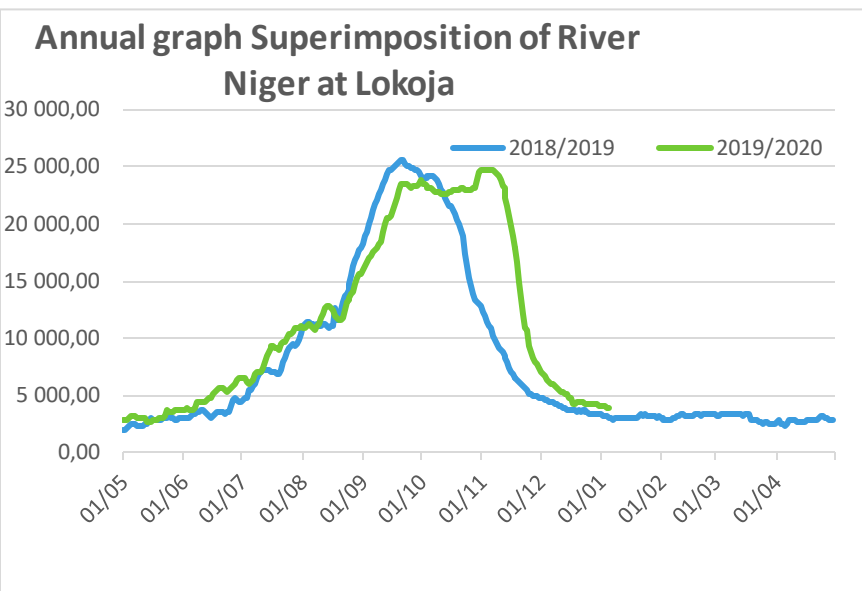


Accuracy of FANFAR forecasts & alerts

5. How well did the forecasted **severity level** (yellow/orange/red) correspond with the actual severity observed in the field? Did it vary in any way? Example: FANFAR typically showed higher severity than real impacts on the ground, except for the most severe events where it was about the same. **FANFAR typically showed a low severity of events than the impacts on the ground.**
6. Were there any **false alerts**? E.g. Yes on 2019-09-01 in Niamey FANFAR had severity level 2, but nothing was observed on the ground

01/09/2019 – 16,056m³/S

01/09/2019 – 5000m³/S



How we used the FANFAR system in 2019



Forecasting system used:	<input checked="" type="checkbox"/> FANFAR	<input type="checkbox"/> OTHER	<input type="checkbox"/> NONE
How often:	<input checked="" type="checkbox"/> < 1 PER WEEK	<input type="checkbox"/> 1-7 TIMES PER WEEK	<input type="checkbox"/> EVERY DAY
At what time:	<input checked="" type="checkbox"/> BEFORE FLOOD	<input type="checkbox"/> DURING FLOOD	<input type="checkbox"/> AFTER FLOOD
What component(s):	<input checked="" type="checkbox"/> VISUALISATION PORTAL	<input type="checkbox"/> HYDROLOGY-TEP	<input type="checkbox"/> KNOWLEDGE BASE

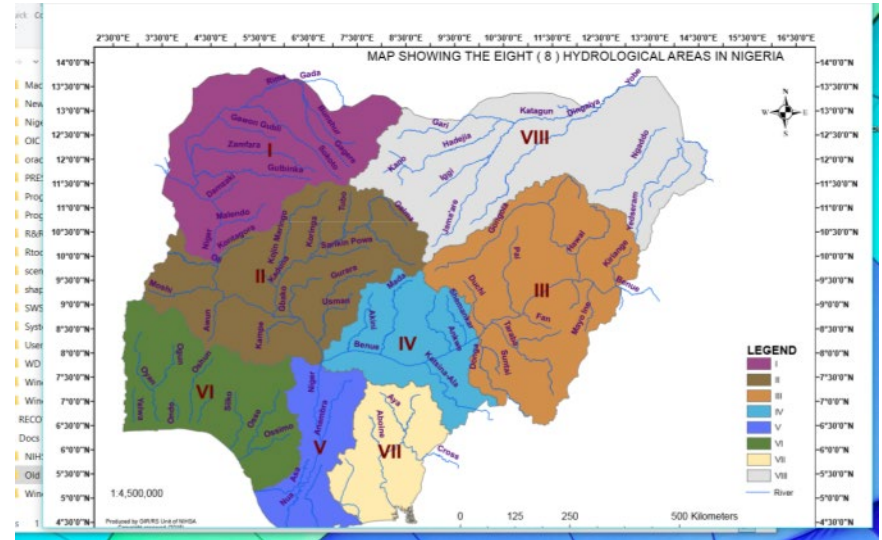
1. **What is your general experience from using FANFAR?** The Fanfar portal is very useful. The forecast data from Fanfar portal differs greatly from the observed data from all the stations.
2. **What is the most useful feature of FANFAR?** Operational flood forecasting and Alert system.
3. **What is the most important feature to improve?** Accuracy of the forecast need to be improved upon
4. **Did you use FANFAR flood risk information in material sent to your stakeholders? What information? How did you distribute it (bulletin, e-mail, whatsapp, sms, etc.)? Please give example (e.g. image/screenshot).** Fanfar flood risk information is being used among others to send information to Stakeholders in form of Bulletin and e-mail.



Additional feedback

Nigeria – Floods Hit Lagos, Situation Worsens in Niger and Adamawa States

27 October, 2019 by [FloodList News](#) in [Africa](#), [News](#)





www.fanfar.eu

