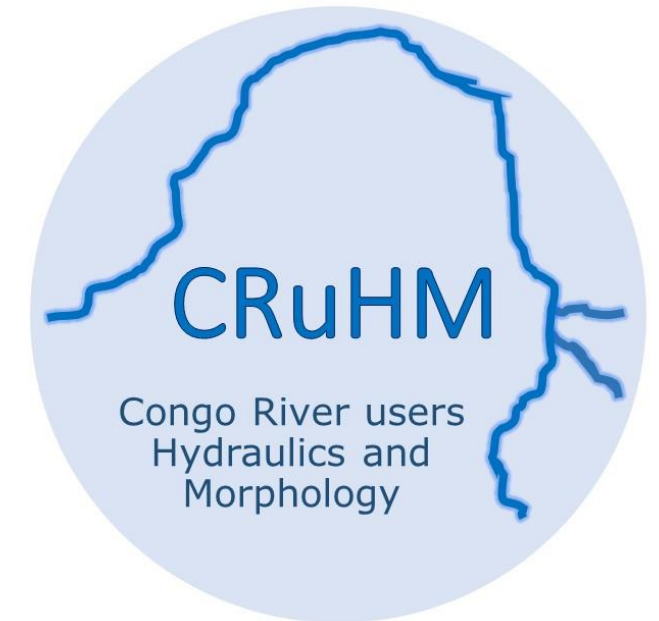


Overview of the CRuHM project

Professor Paul Bates FRS
and the CRuHM project team



CRuHM and the UK Africa Capacity Building programme

- CRuHM is one of 10 large projects funded by the UK government to build African research capacity in:
 - Water and sanitation
 - Renewable energy
 - Soils research
- Led by an African university, with two other African partners
- Supported by one or more UK Universities



The CRuHM project

- Universities of Kinshasa, Dar Es Salaam, Rhodes in Africa, Leeds and Bristol in the UK
1. Fundamental studies of water and sediment dynamics in the Congo basin
 2. Large scale fieldwork and computer modelling
 3. First scientific expeditions along the Congo main stem

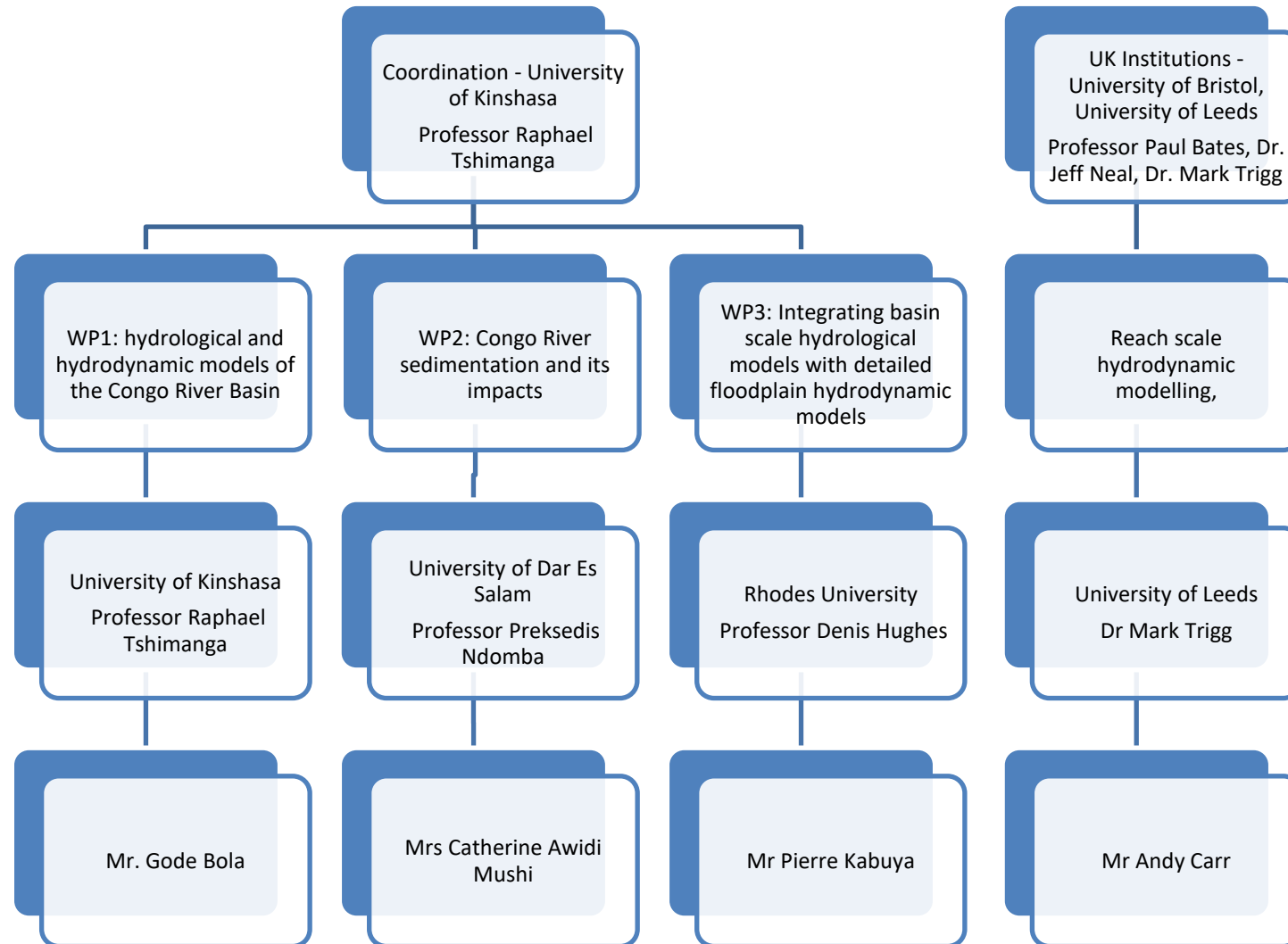


Project structure

Work Packages

Investigators

PhD students



Timeline

July 2016 – Project Kickoff meeting and stakeholder workshop (Kinshasa, DRC)

Feb 2017 – Workshop and PhD training in hydrology modelling (Grahamstown SA)

June 2017 - Workshop and PhD training in hydrodynamic modelling (Bristol, UK)

Summer 2017 – Fieldwork Kinshasa to Mbandaka

March 2018 – Workshop, PhD training in sediments and field visit (Moshi, Tanzania)

Summer 2018 – Fieldwork at Kutu-Moke and Pool Malebo

Summer 2019 – Fieldwork Kisangani to Kinshasa

September 2019 – American Geophysical Union Congo conference (Washington DC, USA)

November 2019 – Workshop and PhD training in hazard analysis, stakeholder meeting (Kigoma Tanzania)

Summer 2020 and 2020 – Fieldwork DRC

July 2020 – Final conference (Kinshasa, DRC and online)

March 2022 – Official project end



A complex project ...

- Large basin
- Complex logistics e.g. boat work – merci à tous à RVF!
- Community buy-in for remote instrumentation
- International border
- Many stakeholders
- Covid



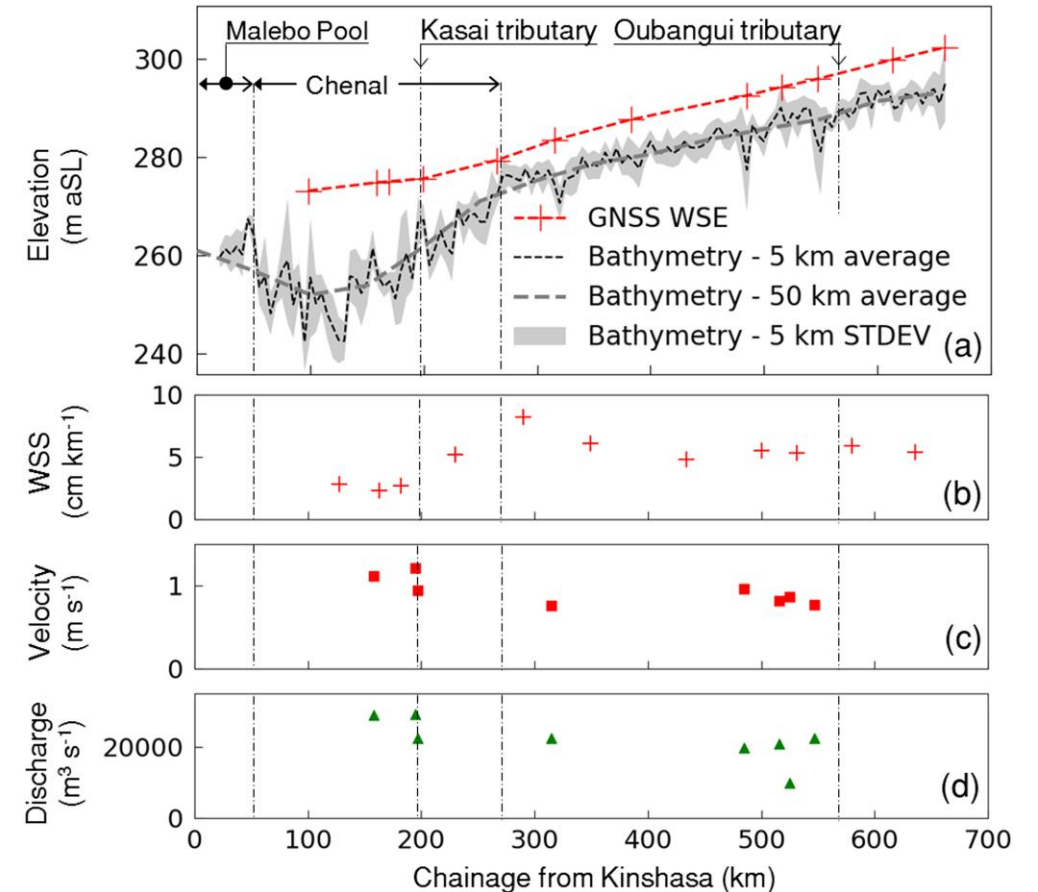
Project success - fieldwork

- First systematic scientific survey of the middle reach from Kisangani to Kinshasa
- Installation of a water and sediment monitoring station on the Kasai River at Kutu-Moke
- Detailed survey of water slopes in Pool Malebo



Project success – modelling

- Improved hydrological models of the Congo basin (Kabuya et al, Journal of Hydrology Regional Studies)
- First assessment of basin-scale soil erosion within the Congo River Basin (Mushi et al., Catena)
- First flood hazard and risk assessment for the Congo (Bola et al., AGU Congo Monograph)
- Greater water surface variability revealed by new Congo River field data (Carr et al., Geophysical Research Letters)
- > 30 other journal publications by the PIs



Outcomes

- PhDs for Pierre and Andy, Catherine and Gode to submit soon
- Unique scientific data
 - Publicly available through the Congo Basin Catchment Information System (<https://cbcis.info>)
- A new centre at University of Kinshasa, CRREBaC, devoted to Congo River Science
- Training for scientists across the basin
- Working closely with end users
- Friendships and collaborations



Thank you

