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| From: | Professor Paul Bates |
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Professor Raphael Tshimanga,
Head, Department of Natural Resources Management.
University of Kinshasa,
Democratic Republic of Congo.

## Re. Congo Basin Water Resources Research Center

Dear Raphael,
Many thanks for sharing with me your proposal for a research centre focussed on water resources in the Congo river basin. The Congo is the second largest river basin on the planet, and its water resources are of critical importance to a huge population in DR Congo and the wider central African region. However, until very recently only limited scientific resource was directed at understanding this globally important system. Your leadership has been critical in changing this situation, and the proposal for a dedicated research Center will allow the momentum you have established to be taken to the next level. This proposal therefore has my full and unequivocal support. My qualifications for making this statement are contained in my biography which is appended below.

A Congo Basin Water Resources Research Center will be able to coordinate DR Congo and international efforts to improve water resources, navigation, agriculture, transport and hydro-electric power generation in the region. It will also allow significant progress in forecasting and mapping the impact of damaging pollution, floods and droughts, both now and in the future as a result of climate, land use and socio-economic change. Investment in such a Center would allow DR Congo to become a leader in these fields both for Africa, and globally. It would also be major contribution to addressing the UN's Millennium Development Goals within the central African region.

Your proposal is therefore timely, carefully planned and absolutely necessary. The case for such a Center is compelling and I am delighted to lend it my full support.


Paul Bates

## Professor Paul Bates - short biography

Paul Bates is Professor of Hydrology in the School of Geographical Science at the University of Bristol and its former Head (from 2013-2017). Prior to this (from 2011-2013) he was inaugural Director of the University of Bristol's Cabot Institute. He is a Fellow of the American Geophysical Union, a Royal Society Wolfson Research Merit Award holder and Chairman of the start-up flood analytics company Fathom Global (www.fathom.global) which he co-founded in 2013. In 2012 he won the Lloyd's of London Science of Risk prize in both the Natural Hazards and Climate Change categories, and in 2015 he was a winner of the NERC 50th Anniversary Prize for Economic Impact. He specialises in the science of flooding. He develops new numerical solutions to the Shallow Water equations and combines these with satellite and airborne data to advance our fundamental understanding of flood dynamics and reduce threats to life and economic losses worldwide. In particular, he has led the development of the influential LISFLOOD-FP model which is used by multiple researchers, NGOs, multi-national companies and insurers to map flood hazard and risk. He built the first building resolving hydraulic models of whole cities, and the first two-dimensional hydrodynamics models of the entire planet. Over the last 20 years he has been PI or Co-I on grants with a total value $£ 36 \mathrm{M}$, including from NERC, EPSRC, AHRC, the EU, Leverhulme Trust, the US Army Corps of Engineers and industry. He has published nearly 200 papers in International peer-reviewed journals and has an ISI H-index of 53 (73 on Google Scholar).

For further details please see my web page:
http://www.bristol.ac.uk/geography/people/paul-d-bates/index.html

