Water & Development
Research Group

NEWSLETTER

14th MAY 2020

WDRG is a multi- and interdisciplinary research group, working rigorously on various aspects of water. The research themes varies from "water for food" to the "role of power and politics in water management". WDRG has a strong modeling knowledge on big data and spatial analysis from local to global scale.

NEW RESEARCHERS

Postdoc | Dr. Miina Porkka

Miina Porkka joins WDRG again after working at the Stockholm Resilience Center. She will work on the SOS.aquaterra project, and continue working partly in the Royal Swedish Academy of Science KVA.

Postdoc | Dr. Juho Haapala

After defending his Doctoral dissertation in 2018, Juho Haapala moved to Nepal to work as a consultant for FCG International. He now returns to WDRG to study water governance in Finland's cross-boundary rivers.

BLOG ENTRIES & OTHER PUBLICATIONS

May:

Dandan Zhao: ***Chinese sustainable water resources – the role of industries.*** (WDRG blog)

Vilma Sandström: ***The world on your plate.*** (WDRG blog)

April:

Marko Kallio & Amy Fallon. ***Are China's dams on the Mekong causing downstream drought? The importance of scientific debate.*** (The Critical Nature: CSDS Policy Analysis Series, Center for Social Development Studies Faculty of Political Science Chulalongkorn University)

Miina Porkka, Heslin, A., Kummu, M. ***We simulated how a modern dust bowl would impact global food supplies and the result is devastating.*** (The Conversation)

Hafsa Munia: ***Lessons learned how to do your PhD!*** (WDRG blog)

Venla Niva: ***Jambo, Hola, Oli otya! – SGT-greetings of 2020*** (WDRG blog)

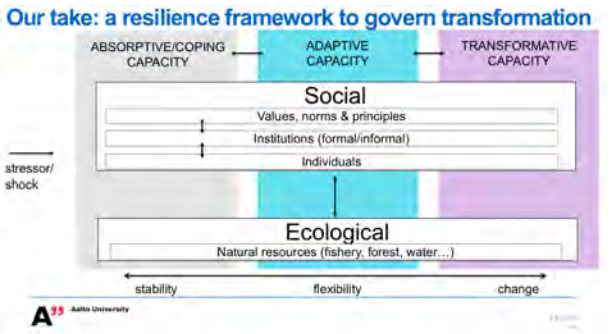
WDRG TRAVELS ONLINE

EGU 2020, Vienna

Due to Covid-19, EGU spring meeting is organized online. WDRG researchers presented their studies in several sessions:

Matti Kummu et al. Climate change risks to push large parts of global food production and population centres to unprecedented conditions.

Amy Fallon & Marko Keskinen. Resilience for whom? Governing social-ecological transformation in Cambodia's Tonle Sap Lake.



Lauri Ahopelto et al. Quantifying the co-occurrence of hydrological, meteorological, and agricultural droughts on a global scale.

Marko Kallio et al. Can an ensemble of downscaled global hydrological model outputs improve the performance and spatially disaggregate the output of a catchment scale model in data scarce contexts?

Alex Horton et al. Flood severity along the Usumacinta River, Mexico: identifying the anthropogenic signature of tropical forest conversion.

Matias Heino et al. The relationship between extreme weather and low crop yields

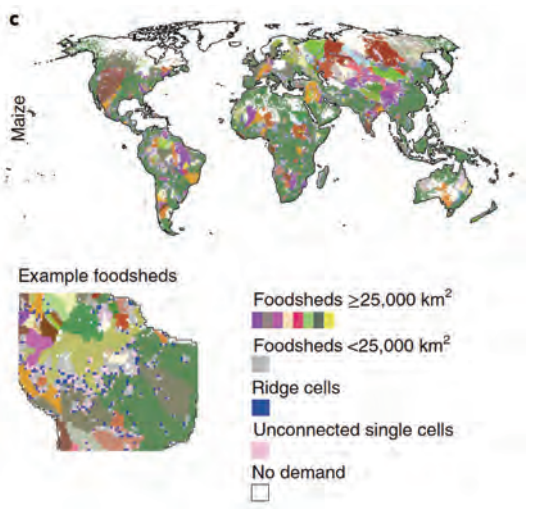
Johannes Piipponen et al. Livestock carrying capacity: assessment of world`s grasslands based on MODIS data products.

WAPPU GREETINGS

Despite Aalto-campus lock-down and WDRG working remotely, Wappu was celebrated online. We wish everyone a happy spring and start of the summer!

LATEST RESEARCH

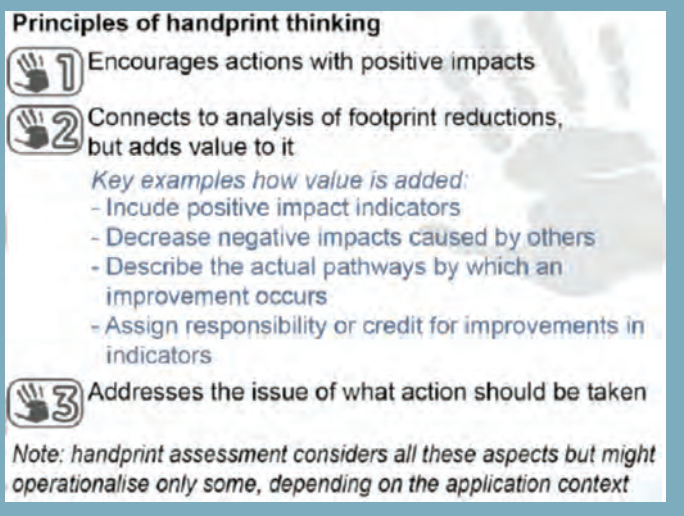
Kinnunen et al. (2020). ***Local food crop production can fulfil demand for less than one-third of the population.*** Nature Food.



Scherer et al. (2020). ***Global priorities of environmental issues to combat food insecurity and biodiversity loss.*** Science of the Total Environment.

Kummu et al. (2020). ***Interplay of trade and food system resilience: Gains on supply diversity over time at the cost of trade independency.*** Global Food Security.

Guillaume et al. (2020). ***Giving legs to handprint thinking: foundations for evaluating the good we do.*** Earth's Future.



Liu, W., Yang, H., Ciais, P., Kummu,M., & Hoekstra, A. Y. (2020). ***China's Food Supply Sources Under Trade Conflict With the United States and Limited Domestic Land and Water Resources.*** Earth's Future.

Heslin et al. (2020). ***Simulating the Cascading Effects of an Extreme Agricultural Production Shock: Global Implications of a Contemporary US Dust Bowl Event.*** Frontiers in Sustainable Food Systems.