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Asia Water Forum 2022

8–11 August 2022 • Online

Focus Area: 3

Session Title: Productive Water in Agriculture and the economy

Schedule: 9th August : 11:00 – 12.30pm



Modernising irrigated agriculture to protect and restore aquatic biodiversity and ecosystem services.

ADB

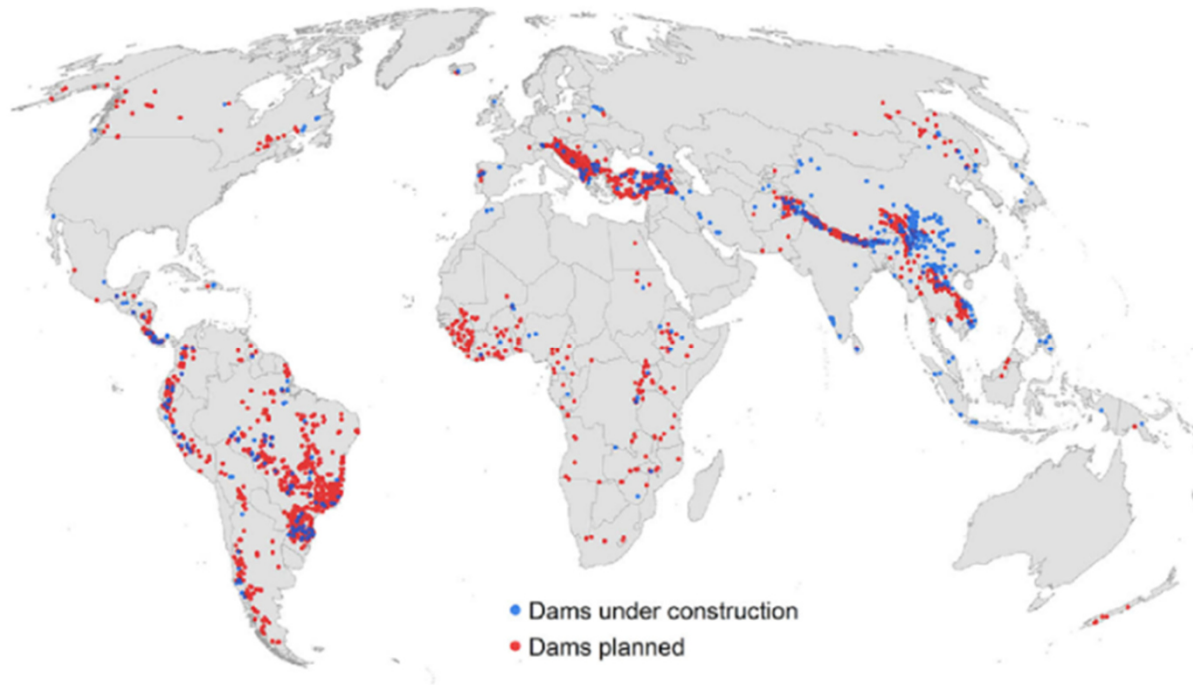


Fish are important for livelihoods in South East Asia





Global trends in dams planned for construction



Source: vox.com





Lower Mekong Region

Irrigation barriers are also significant and impact fish productivity



Road crossings



Block banks



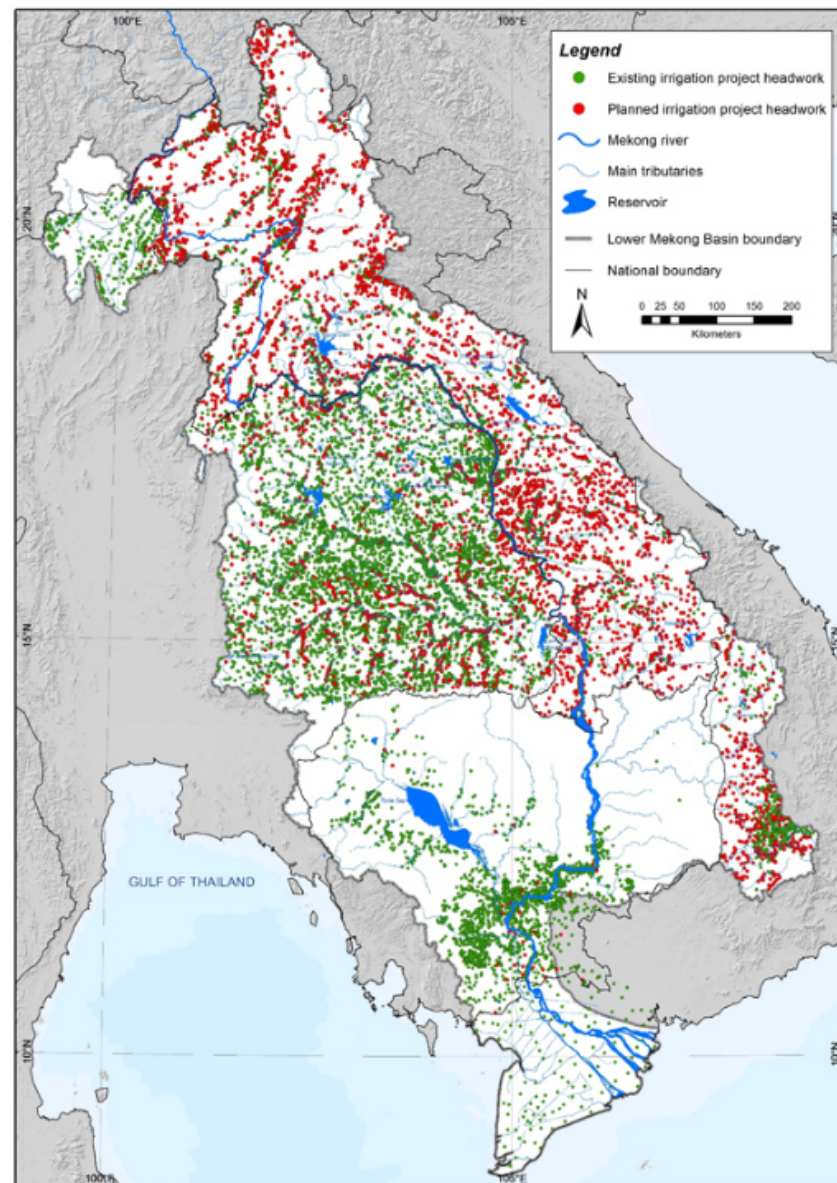
Culverts



Bridges

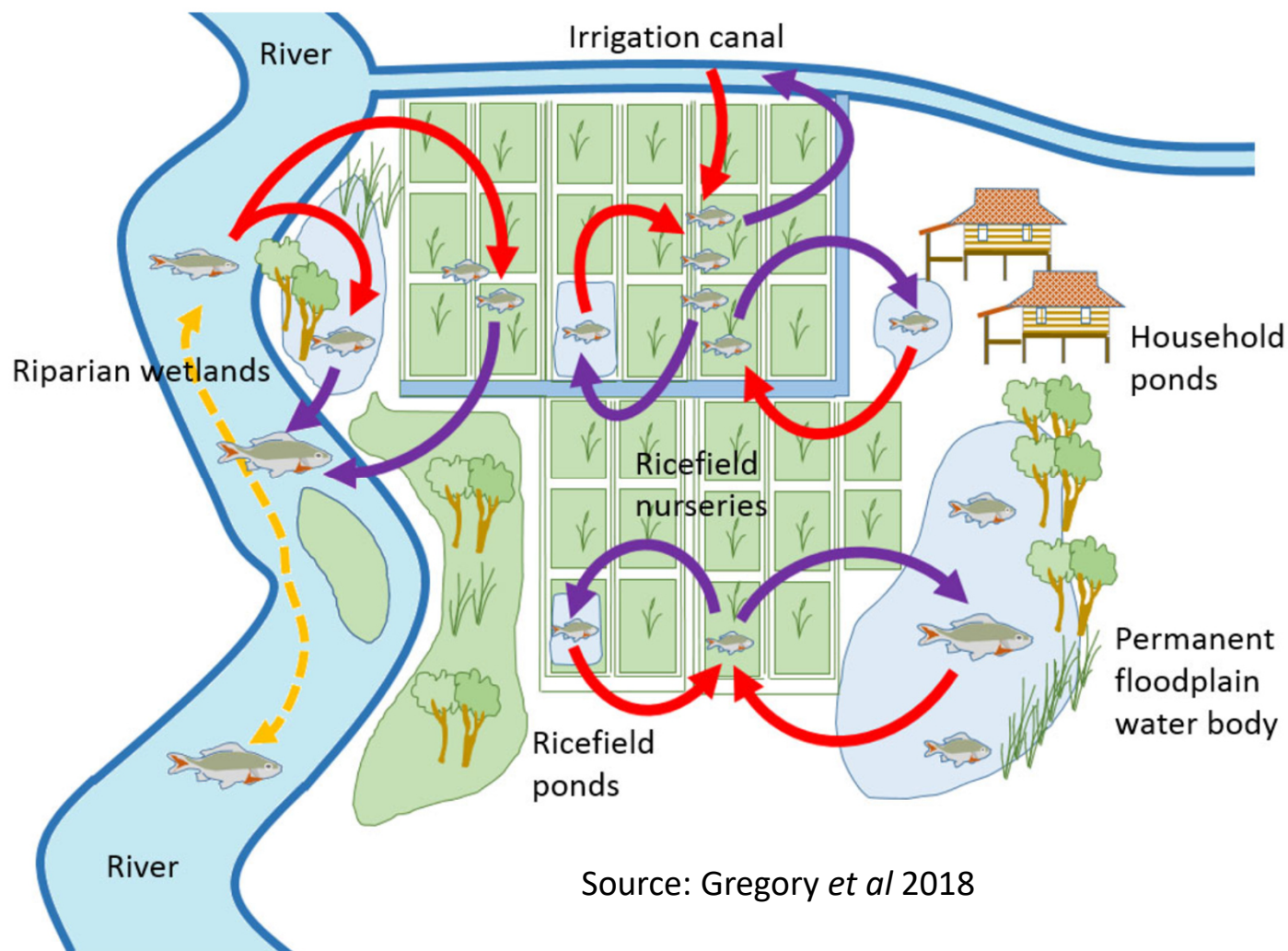


Dams





Rice-Fish Systems

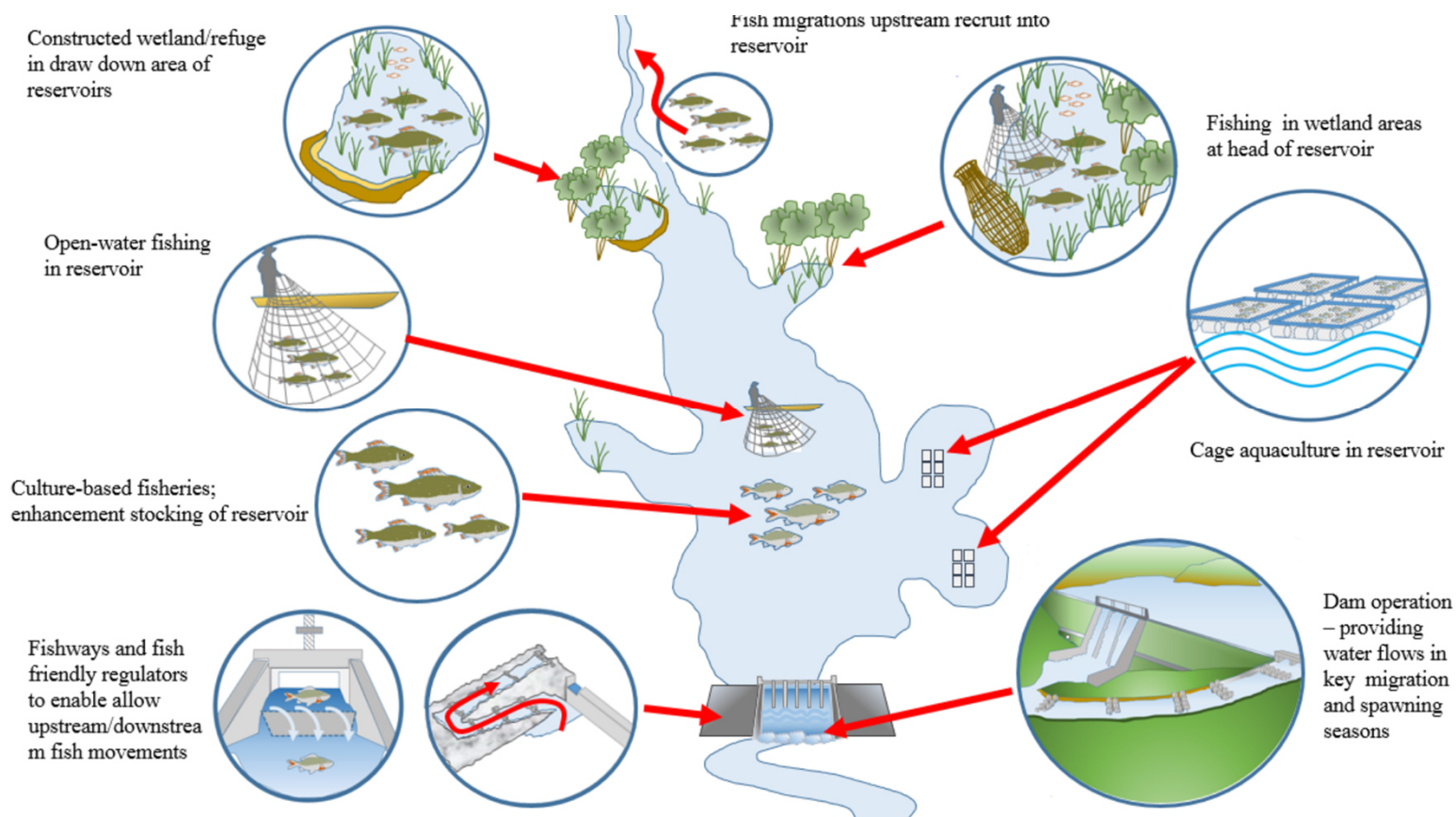


Source: Gregory *et al* 2018





It is possible for biodiverse modified landscapes

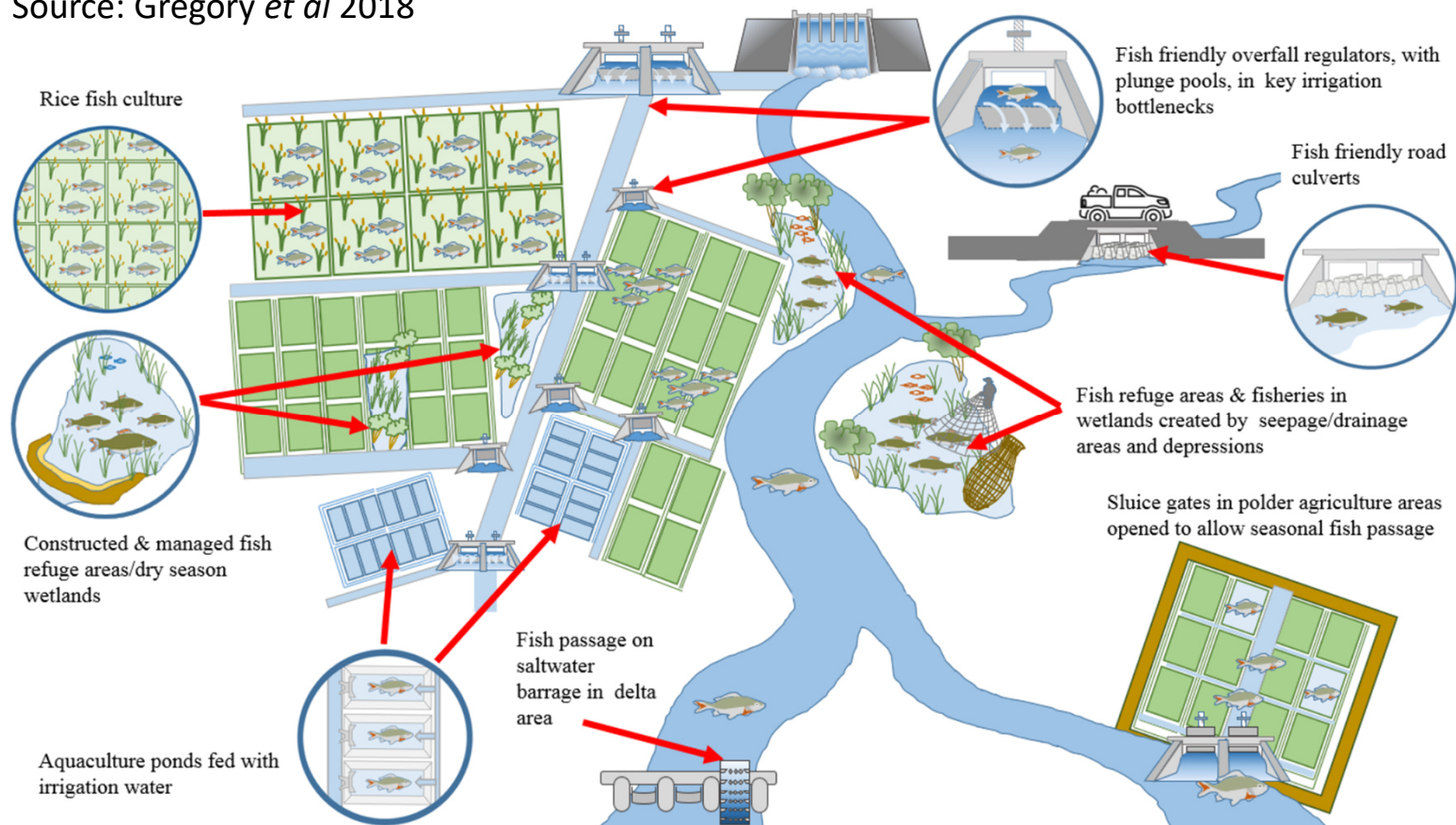


Source: Gregory *et al* 2018



But need to integrate technical solutions for win-win outcomes

Source: Gregory *et al* 2018





Case Study: Fish Ladders: World Bank projects – Southern Laos



Case Study: Fish Ladders ADB Before / After (Northern Laos)



Initial design completed without consultation, no knowledge of fish and using a design which had no basis

IT WOULD NOT HAVE WORKED!

Consulted with locals regarding fish, performed an options analysis, consulted on budgets and feasibility

NEW DESIGN WORKS!

Example: Initial Planning with ADB

Greater Mekong Sub-region East West Economic Corridor Agricultural Infrastructure Sector Project
(GMS-EWEC-AISP, or AISP)

Sub-Component being led by Prof Martin Mallen-Cooper



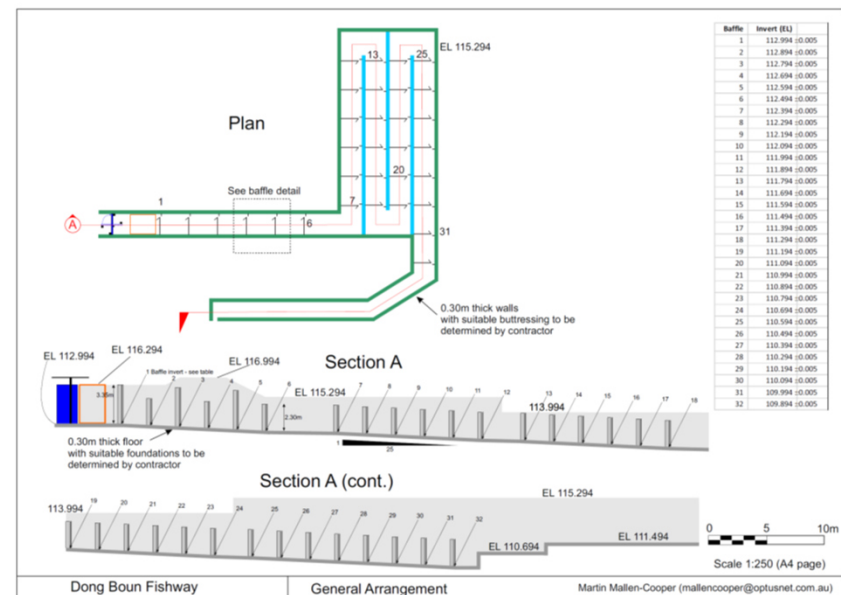
Dong Mon



Dong Boun



Dong Savang Thong (2020)



⋈ We are now starting to see improved fisheries at many of these sites





Thank you

