

Water and Agriculture in a Changing Africa: What Might be Done?

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23 May 2013

Most farms in SSA are small, local, organic



Photo: M. Burke (Niger)

Tuesday, May 28, 2013

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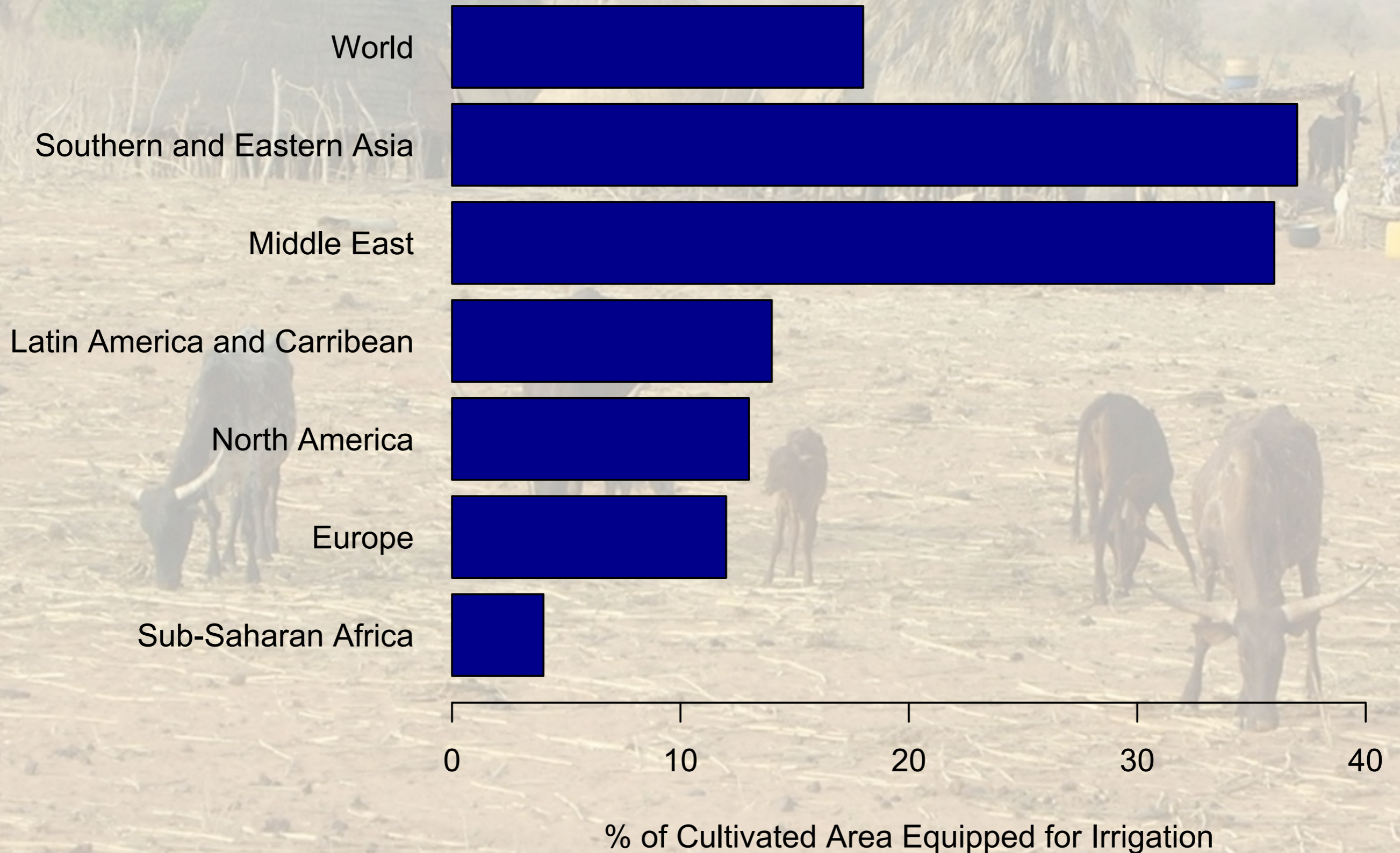
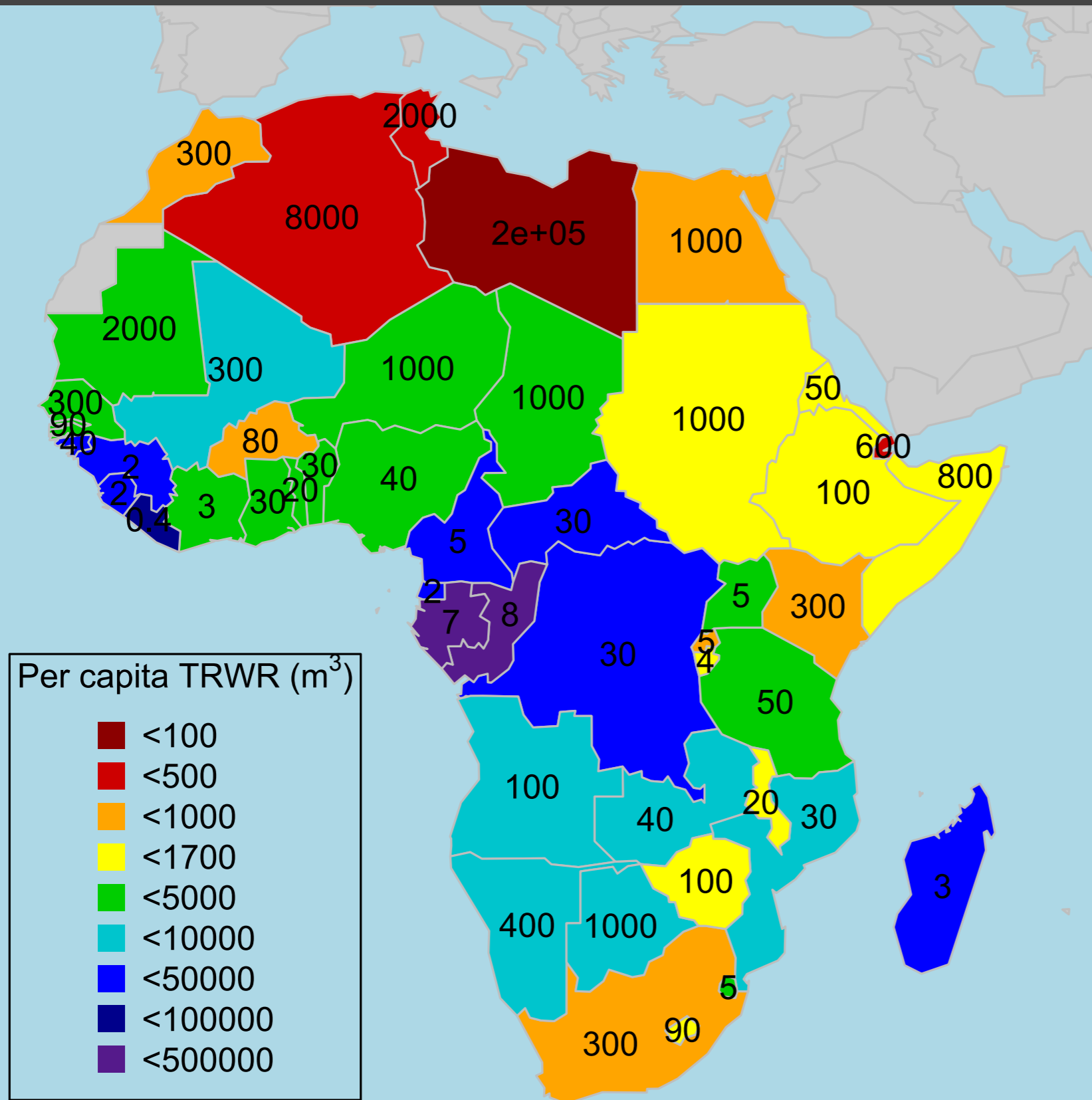


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There **is** water!



Water scarcity poses problems in some regions

In many areas, real constraint is seasonality

Tremendous groundwater resources

Complicated hydrogeology

FAO and MacDonald (2012)

The small part is a reality

Smallholder land distribution in selected African countries

Country	(a) sample size	(b) Ave. land access per hh	(c) Household per capita land access				
			Ave.	Quartile			
				1	2	3	4
		- ha -	- ha -			- ha -	
Kenya	1416	2.65	0.41	0.08	0.17	0.31	1.10
Ethiopia	2658	1.17	0.24	0.03	0.12	0.22	0.58
Rwanda 1984	2018	1.2	0.28	0.07	0.15	0.26	0.62
Rwanda 1990	1181	0.94	0.17	0.05	0.10	0.16	0.39
Rwanda 2000	1584	0.71	0.16	0.02	0.06	0.13	0.43
Malawi ^a	5657	0.99	0.22	0.08	0.15	0.25	0.60
Zambia	6618	2.76	0.56	0.12	0.26	0.48	1.36
Mozambique	3851	2.1	0.48	0.1	0.23	0.4	1.16

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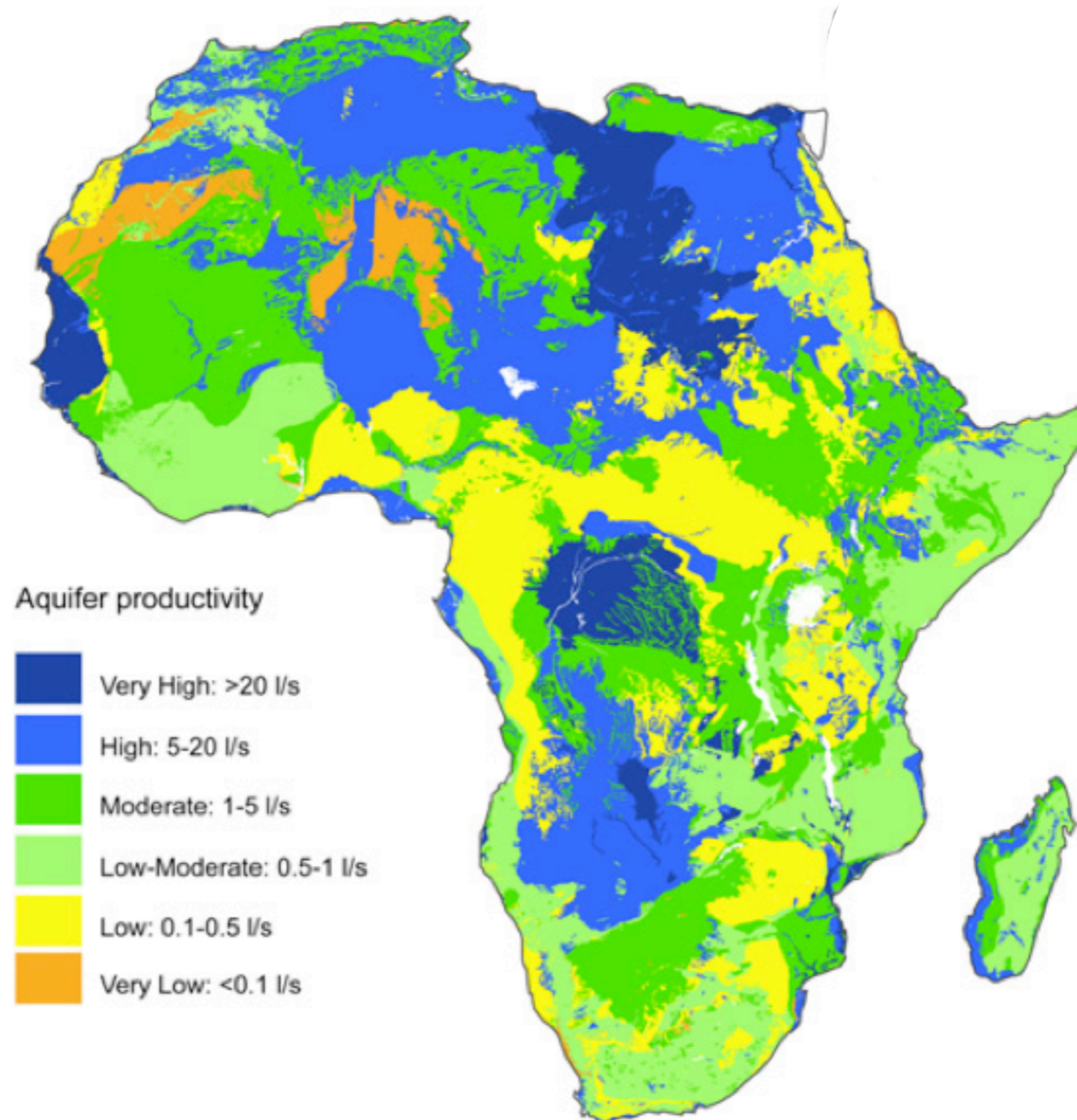
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Does SSA look like more like Asia than Brazil? A bit of both?

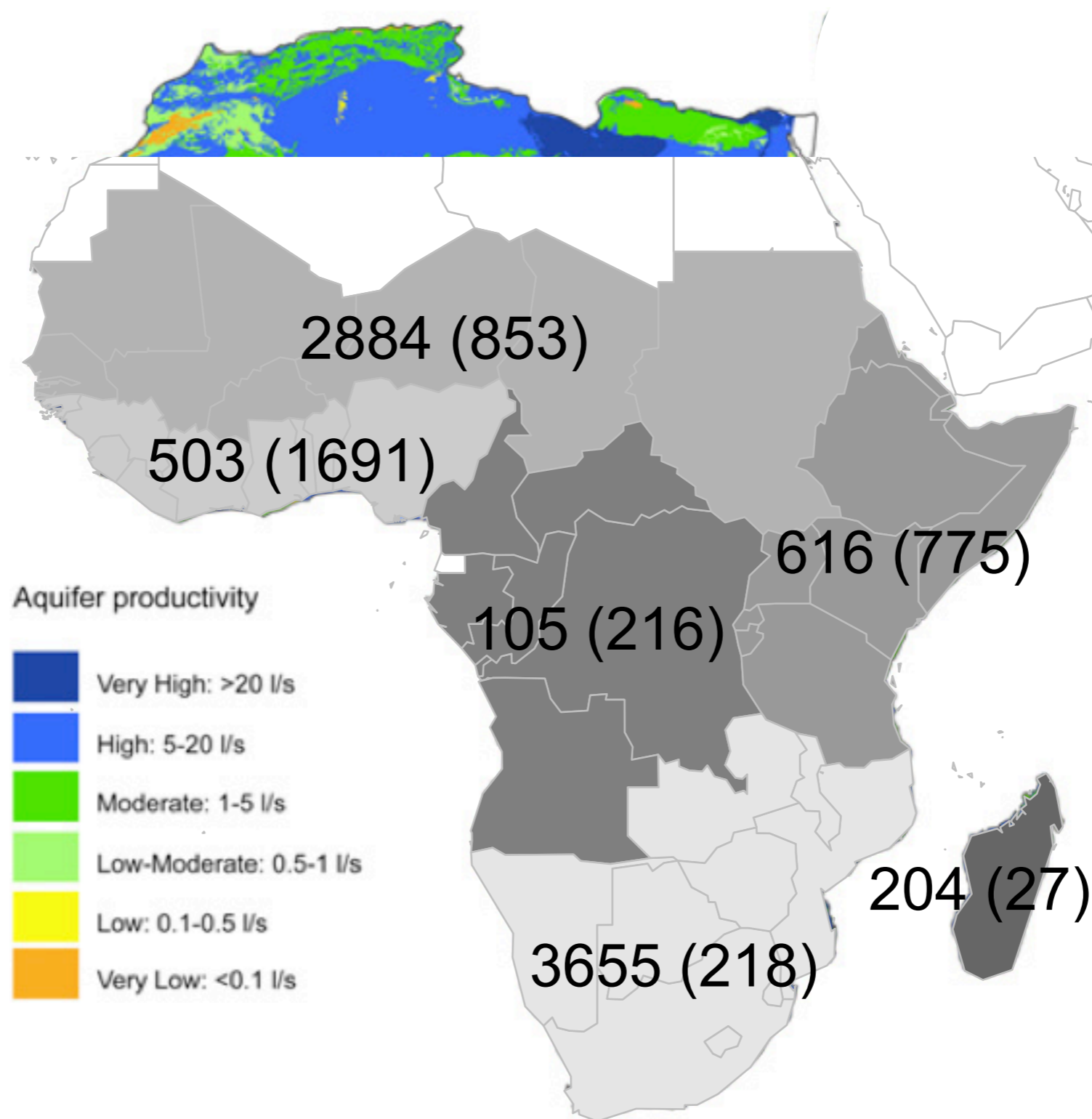
Jayne (2003)

The water resources match the social reality



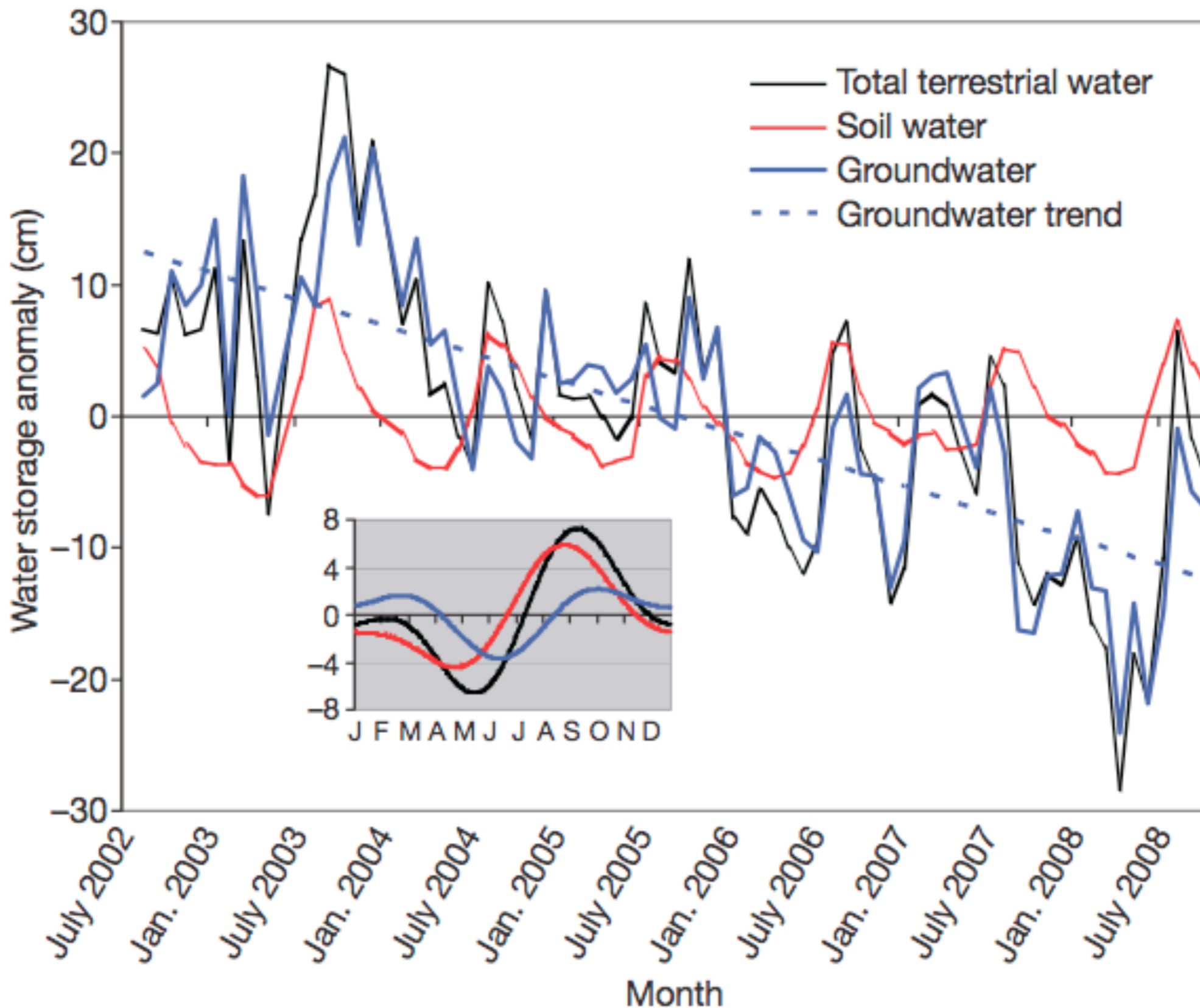
MacDonald (2012) and You (2012)

The water resources match the social reality



MacDonald (2012) and You (2012)

Distributed agricultural water provision is difficult!



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Testing different institutional arrangements