

Local Institutions for Collective Management of Ecosystem services

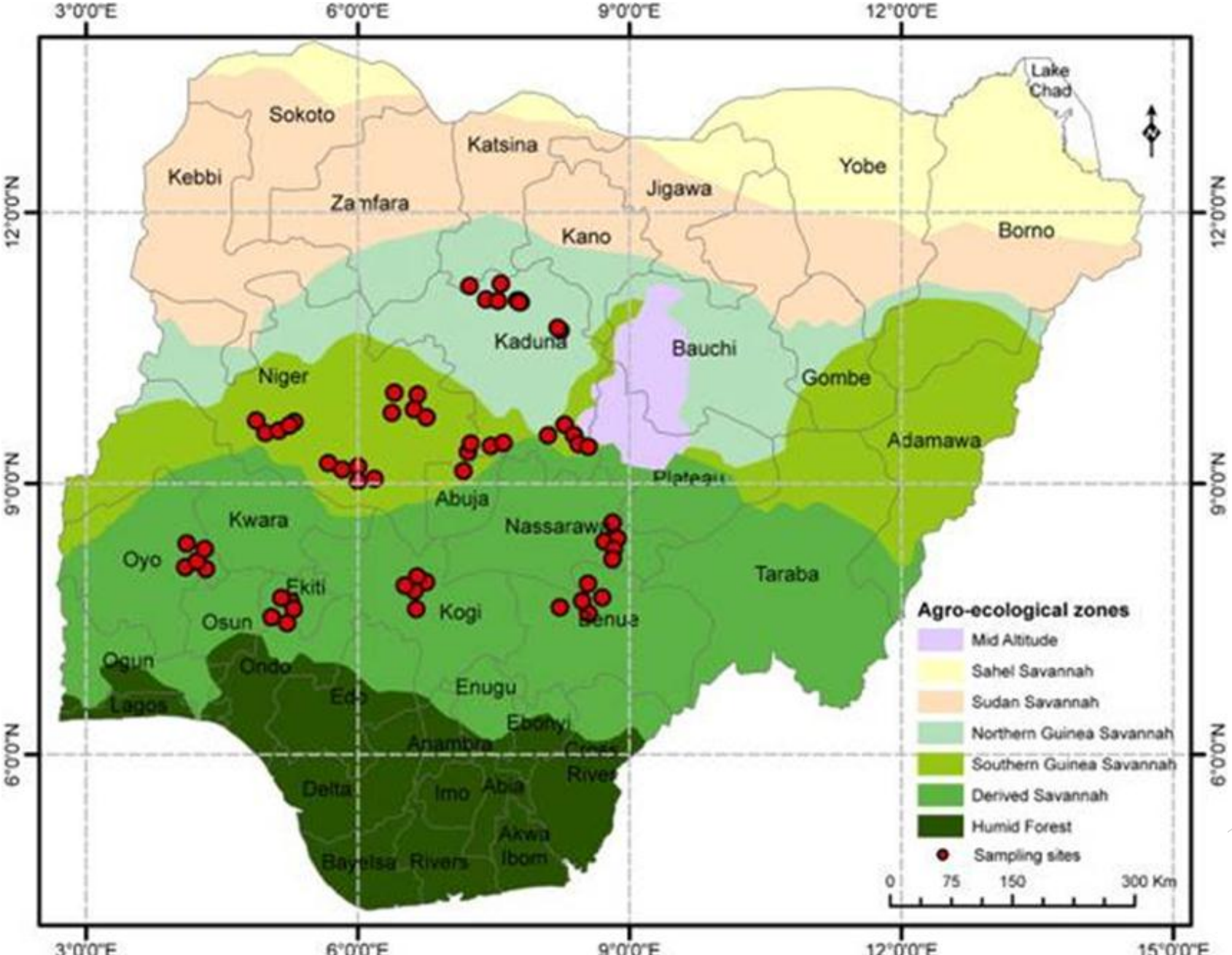
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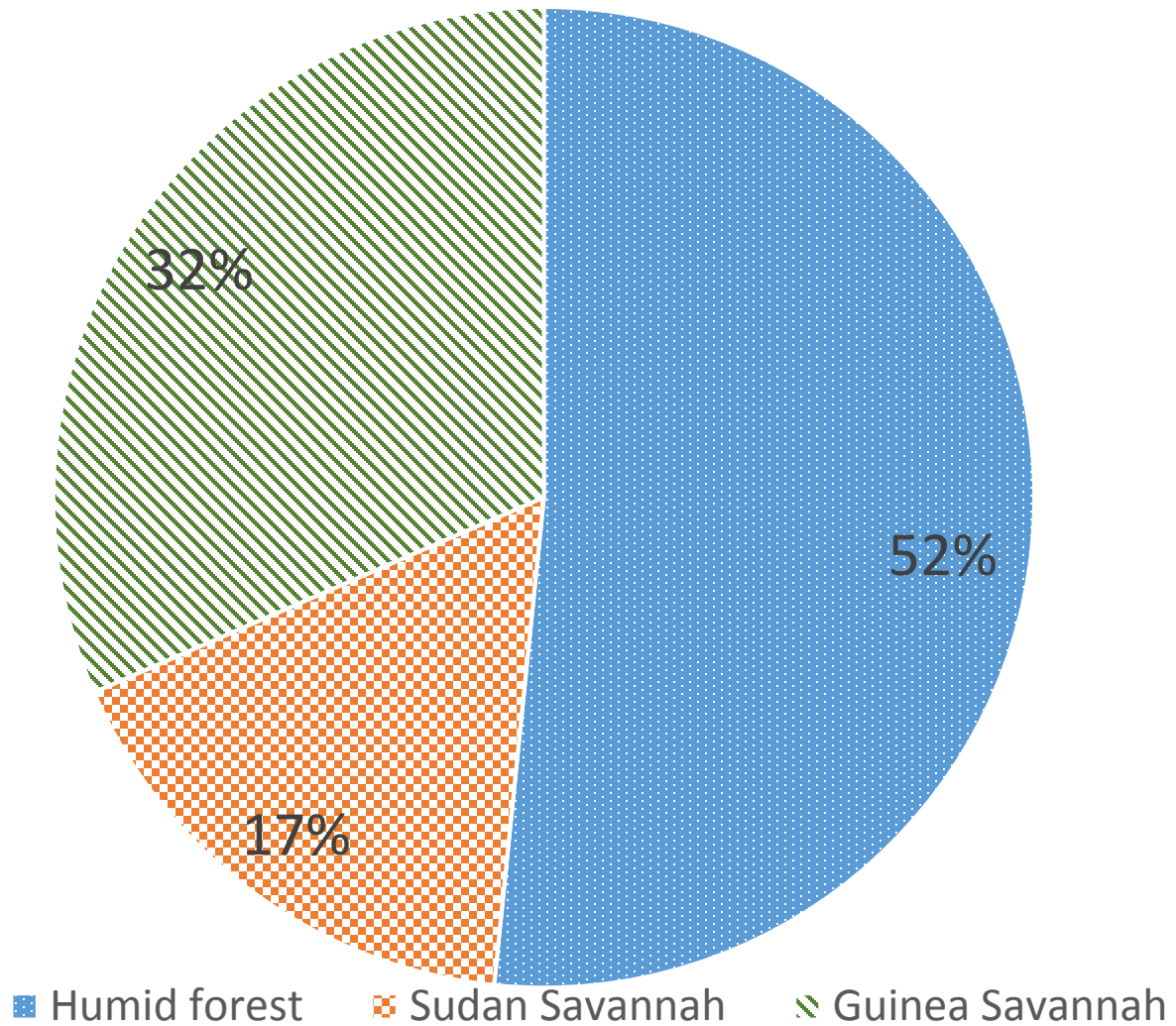
Importance of local institutions in sustainable natural resource management

- ▶ Community resource management (CRM) considered key to sustainable natural resource management, (NRM) (Ostrom 1981; Western & Wright, 1994)
- ▶ CRM can also increase NRM efficacy and legitimacy (Western and Wright 1994).
- ▶ A study in Uganda observed higher compliance with NRM regulation enacted by local government than those enacted by higher legislative bodies (Nkonya et al 2008).
- ▶ This study was done with an objective of determining Nigerian communities awareness of & perception on ecosystem services (ES) and how communities invest to enhance ES.
- ▶ This paper examines the community byelaws enacted as part of ES investment

Nigeria agroecological zones



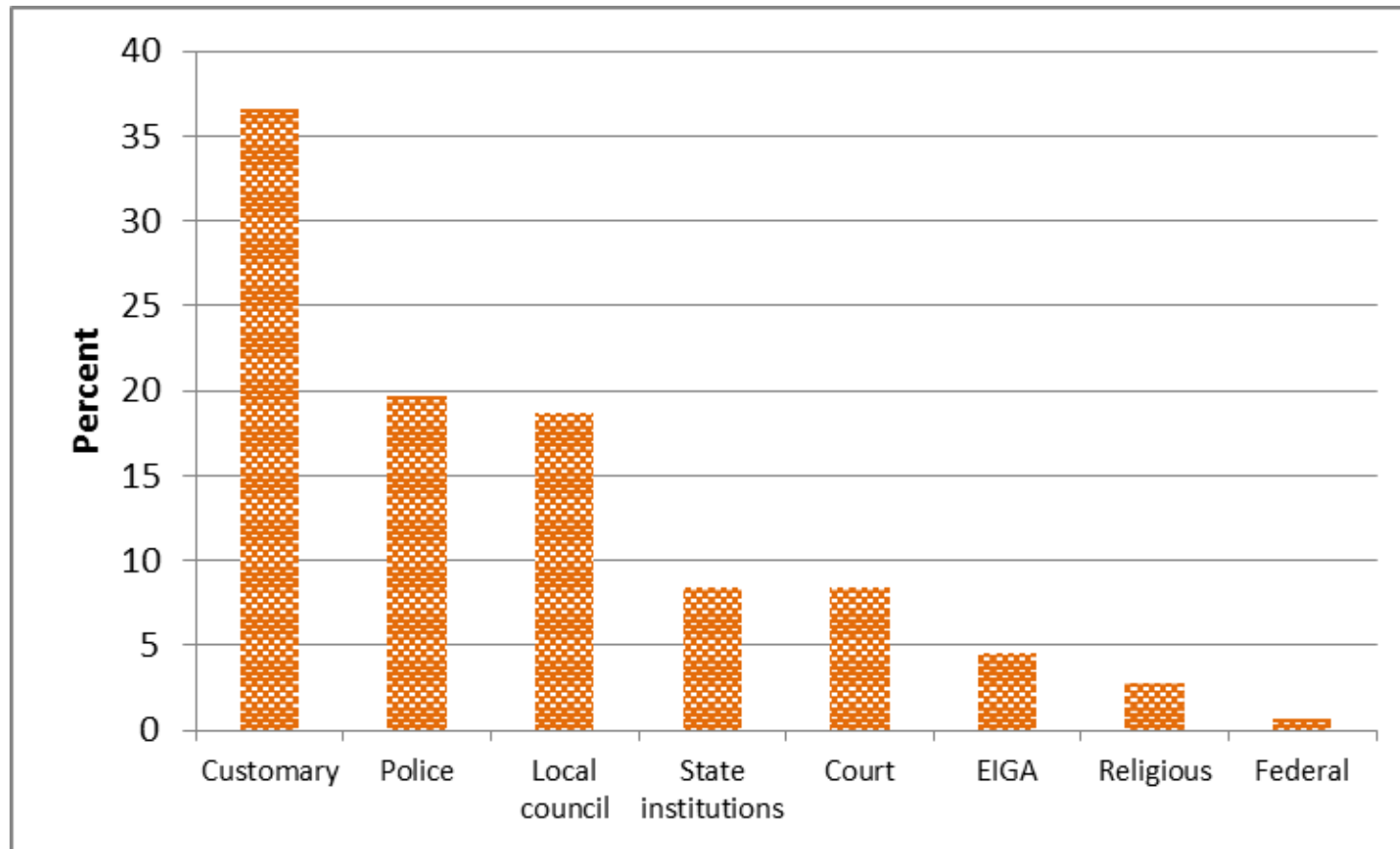
Communities with byelaws



Legislative institutions which enacted the byelaws

Legislative Body Enacting Bylaw	Humid Forest	Guinea Savannah	Sudan Savannah
Local Government	20%	3%	24%
State	19%	21%	8%
Federal Government	7%	15%	8%
Customary Institution	42%	48%	39%
Economic Interest Group	1%	0%	2%
FCA	9%	15%	12%
Others	6%	0%	8%

Institutions used to resolve natural resource conflicts



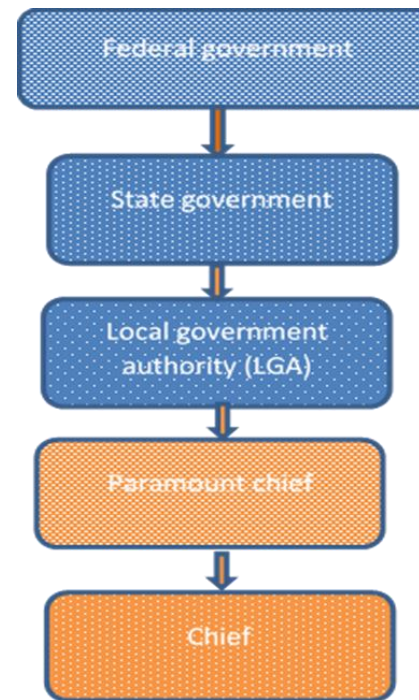
Source: Nkonya 2013

Why customary institutions play leading role in NRM?

High level of decentralization

- ▶ Nigeria ranks third - after South Africa and Uganda - in the administrative decentralization in SSA (Ndegwa and Levy 2005).
- ▶ Customary institutions mandated by constitution to manage natural resources

Nigeria institutional landscape, enshrined in constitution



Source: Nkonya 2013

Drivers of enactment of NRM byelaws - IV-Probit

Explanatory Variables	Grazing mngt	Water mngt	Bush burn	Forest mngt	Land mngt	Fishing	Conflict mngt
Distance to town (km)	0.009***	0	-0.011	-0.023	-0.014***	0.699	-0.078***
% of hhd heads in community with:							
▪ No formal education	0.445	1.165	-0.766	-9.066*	-6.575***	220.389	1.790**
• Primary educ	1.842***	0.932	-3.498	1.361	-1.32	11.98	4.041**
• secondary educ	0.754	-3.25	2.182***	-1.974	-18.811***	-514.526	3.333
• Post Sec. educ	0.18	-0.043	0.085	-0.136	-2.020***	-219.81	0.121
Severity of poverty	0.025	-0.008	0.029	0.029***	0.106*	5.671	0.156***
Population density	0.004	0	0.001	-0.001	-0.020**	-0.882	-0.082***
Customary institut.	-0.302	4.236***	2.228	0.382	-0.358	-11.323	-6.778*
Local govt	-4.562**	-2.192	-1.106	1.735	-8.947	-76.338	0.174
Access to ag extension	0.118	0.259	-0.008	0.327***	-0.141		0.901***
# of NGOs supporting NRM	-0.194	-0.419***	-0.424	-0.074	-0.590***		0.14

Conclusions & implications

- ▶ Customary institutions play key role in NRM - need for countries to give them legal mandate on NRM
- ▶ Poor people more likely to collectively manage NRM - low hanging fruits that need to be exploited - especially given that they heavily depend on Natural resources
- ▶ Densely populated communities could lead to weaker collective action in NRM - better resource management required to enhance local institutions.
- ▶ Access to ag extension enhances enactment of NRM byelaws - underscores importance of technical support to communities

