



# WATER GOVERNANCE REFORM IN THE CONTEXT OF INEQUALITY

SECURING RIGHTS or LEGITIMISING  
DISPOSSESSION?

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## Nicaragua:

- 15 departments + 2 autonomous regions
- 153 districts
- 21 watersheds (recently reorganised into 6 watersheds)
- ~540 catchments



## National Water Authority (ANA) established in 2010

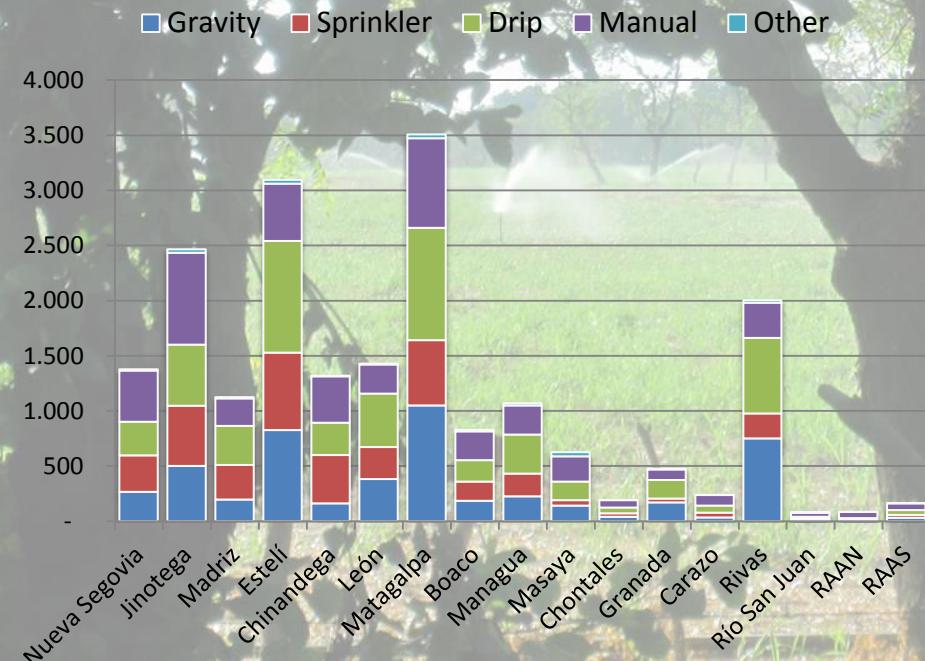
- Managua + 2 departmental delegations
- Watershed organisations
- 0 agreements with districts



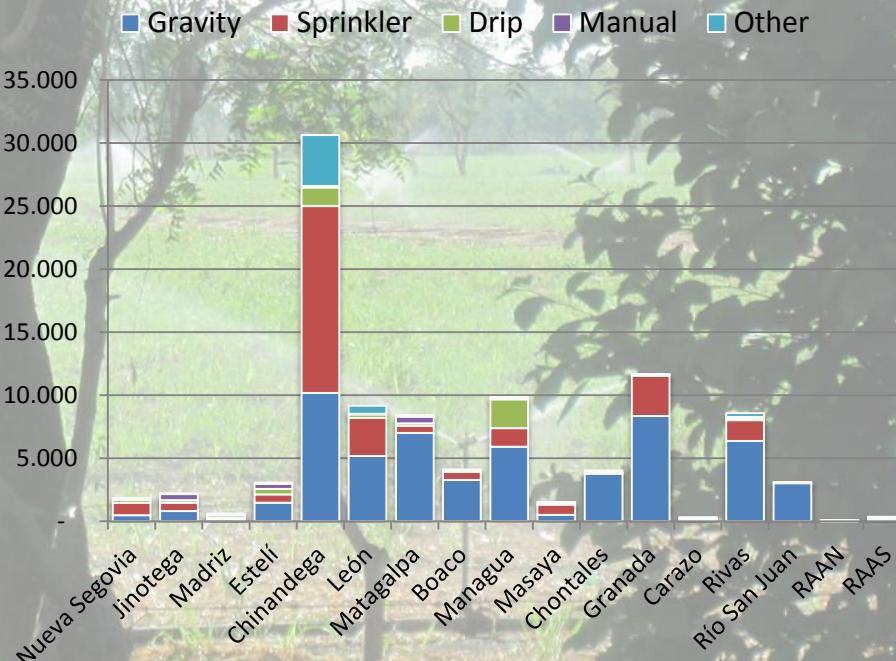
# Legal & administrative water governance reform in Nicaragua (2007 →): Irrigation water rights

Irrigation area	< 3 ha	3-20 ha	>20 ha	
Law 620	Authorisation by District	¿?	Concession by ANA	
Regulation – 2007	Authorisation by District	Concession by Watershed Organisation	¿?	
Regulation - 2010		<i>Criterion not used</i>		
Farm size	< 3 ha	< 20 ha	20-70 ha	> 70 ha
Law 620			<i>Criterion not used</i>	
Regulation – 2007	Authorisation by District	¿?	Concession by ANA or Territorial Delegation	
Regulation – 2010			Authorisation by District	Concession by ANA or Watershed Organisation
Market orientation	Produce not intended for industrial market		Produce intended for industrial market	
Law 620			<i>Criterion not used</i>	
Regulation – 2007			<i>Criterion not used</i>	
Regulation – 2010	Depends on farm size		Concession by ANA even if farm size < 70 ha	

# Number of farms by irrigation type, by department

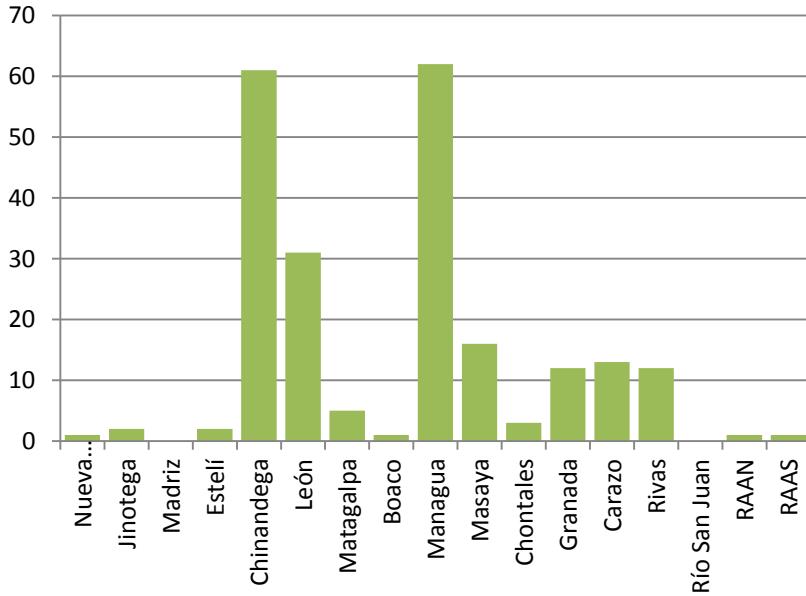


# Area (ha) by irrigation type, by department

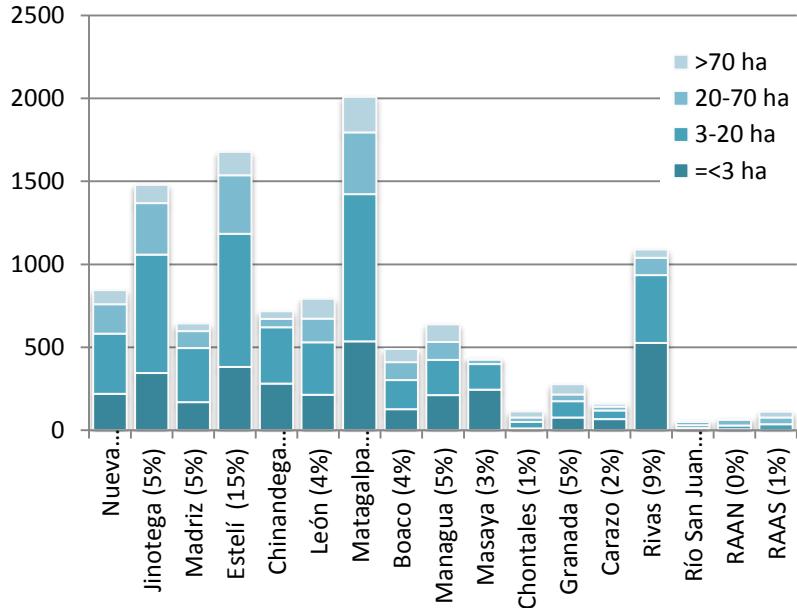


*While .... the geographical distribution concessions does not mirror distribution of farms with irrigation<sup>a</sup>*

Number of concessions (since 2011) for irrigation



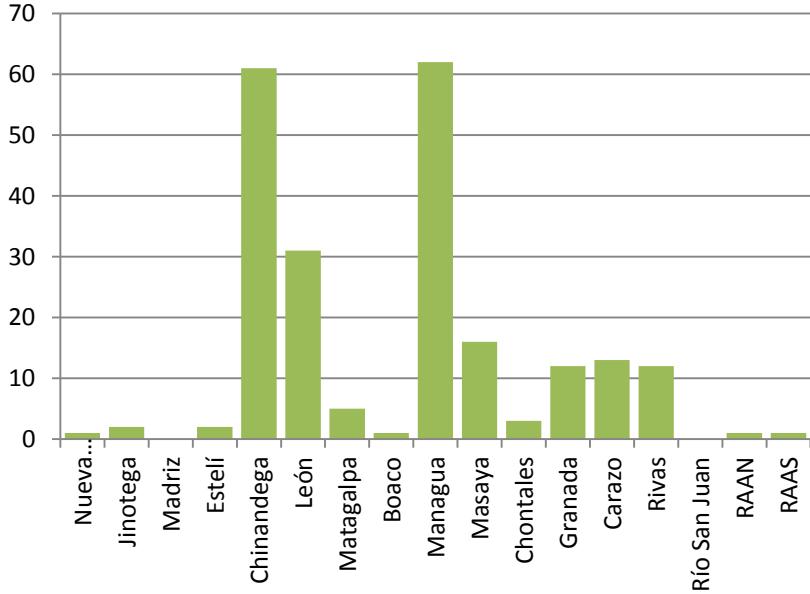
Number of farms (by farm size) with irrigation



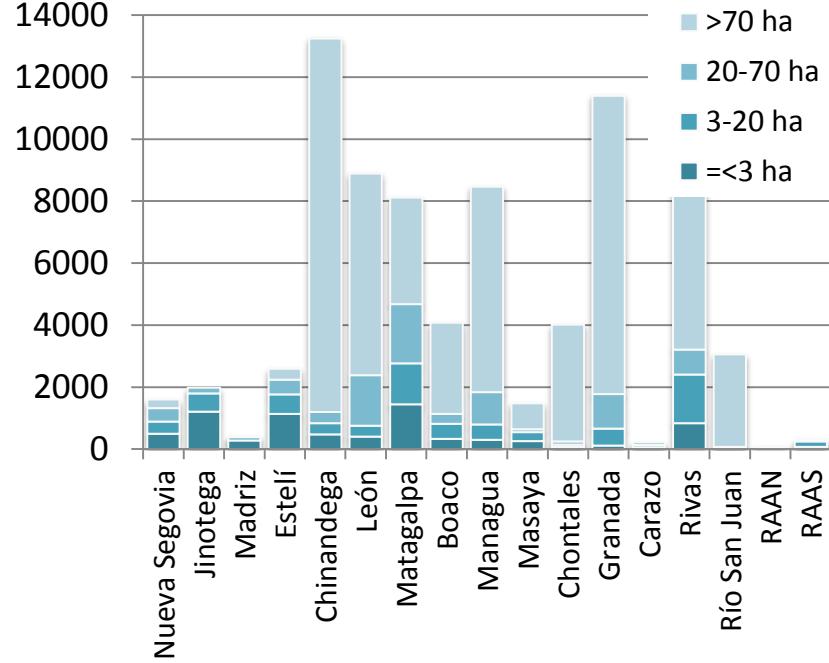
<sup>a</sup> This applies for farms > 70 ha as well as for all farms, Pearson and Spearman's rho

# The .... geographical distribution concessions does mirror the distribution of irrigated area<sup>a</sup>

Number of concessions (since 2011) for irrigation



Irrigated area (ha)



<sup>a</sup> Pearson  $p<0.01$  and Spearman's rho  $p<0.05$ .

# The effects of partially implemented water governance reform: Achieving irrigation water security for all and effective water governance or legitimising dispossession?

Farm size	< 3 ha	< 20 ha	20-70 ha	> 70 ha
Regulation – 2010		Authorisation by District		Concession by ANA or Watershed Organisation
Number of EAs with irrigation	3430	4967	2036	1166
Number of permits		None formalised <i>(due to the absence of agreement with district administration)</i>		108 (max 9%)
Estimated water use (m <sup>3</sup> /year, based on Cenagro 2011 and AQUASTAT)	58.484.280	57.827.835	66.682.532	420.929.112
Volume of water concessioned (m <sup>3</sup> /year)				380.103.620 (90%)



Left in a legal limbo?

Securing formally sanctioned rights  
but blocking law on tariffs

An aerial photograph showing a patchwork of agricultural fields in shades of green and brown, stretching towards distant hills under a clear sky.

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*Water governance reform  
in the context of  
inequality and weak administrative and  
regulatory capacity  
risks  
deepening inequality with respect to  
formally sanctioned irrigation water rights  
and thus economic opportunities more broadly*



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*Thank you for listening!*

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