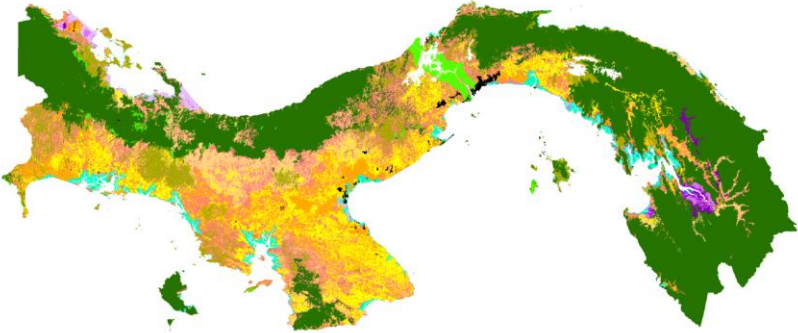




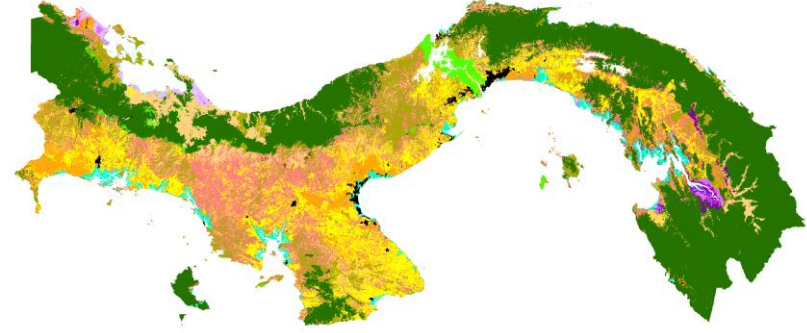
REDD+ PROGRAM IN PANAMÁ

DEVELOPMENT AT A CROSSROAD

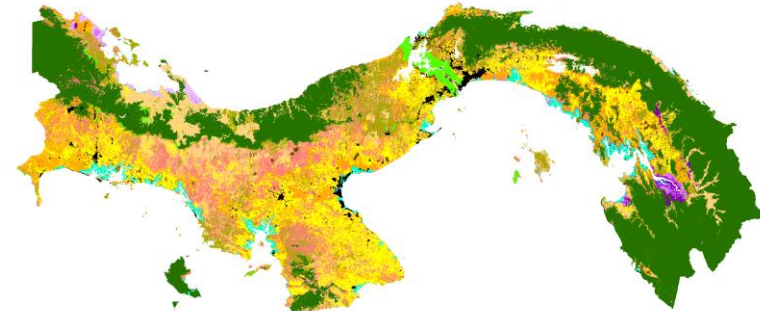
PANAMA FOREST COVER



1992- 49%



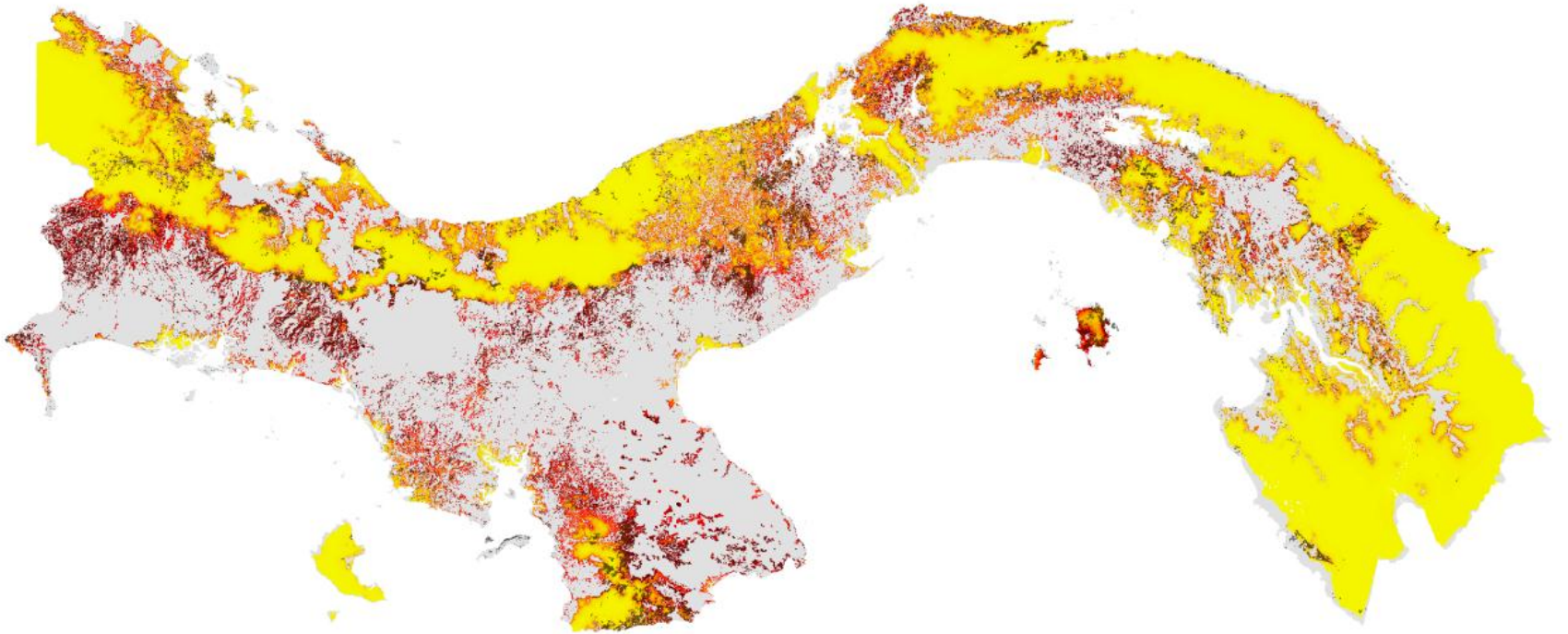
2000-44%



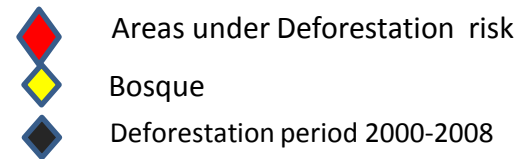
2008- 43%



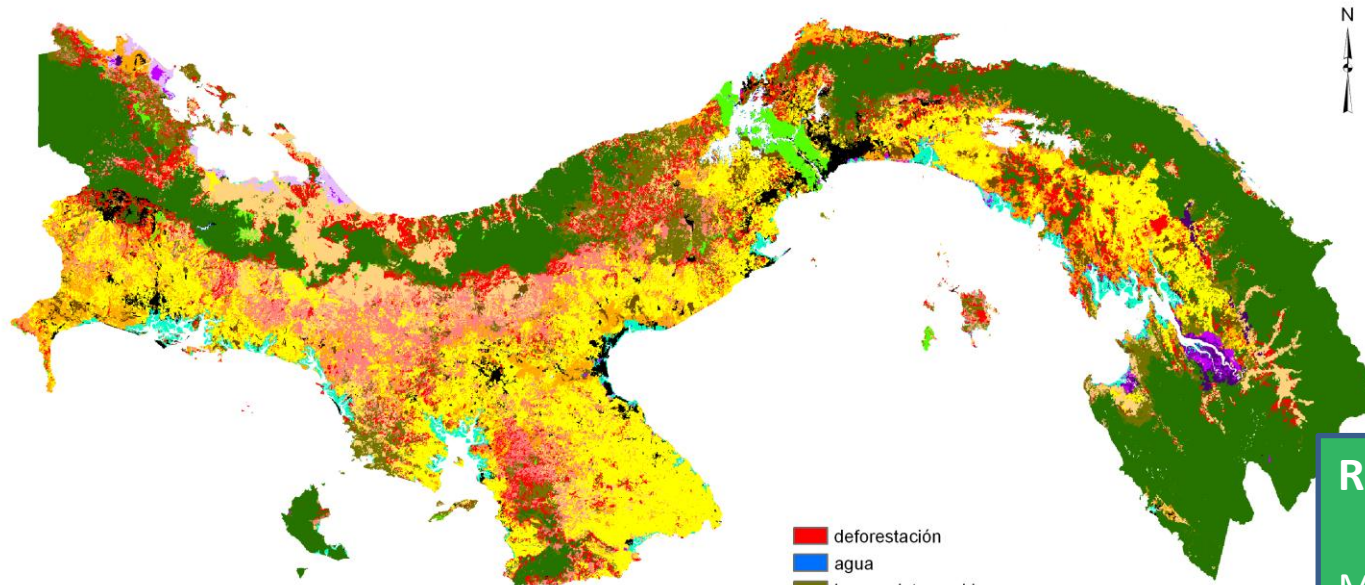
PROBABILITY OF DEFORESTATION - “Inertial” scenario - 2028



The probability of deforestation increases in the red color areas.



Panamá: Forest Cover 2028-BAU Scenario



- deforestación
- agua
- bosque intervenido
- bosque inundable mixto
- bosque maduro
- bosque secundario maduro
- mangle
- otros usos
- plantación forestal
- rastrojo
- uso agropecuario
- uso agropecuario de subsistencia
- vegetación baja inundable
- albinas
- bosque orey homogéneo
- cativo homogéneo
- cativo mixto
- pastos

Risk factors

- Mining
- Hydropowers
- Roads
- Electrical
- Interconnection
- Livestock
- Agriculture (oil palm)
- Tourism
- Logging

Escenario BAU (2028)



What level of REDD+ payments could we have?

- If we assume a range from 80 – 122 Tn C/Ha
 - Average value 118 TnC/hectarea...
- If we assume a price range of 5-9 US\$ / TnCO₂...
- If we assume that 2/3 of payment will reach people on the ground...

**The result is a payment in the order to 72-130
US\$/Ha/yr**



What sectors could we influence with this level of payments?

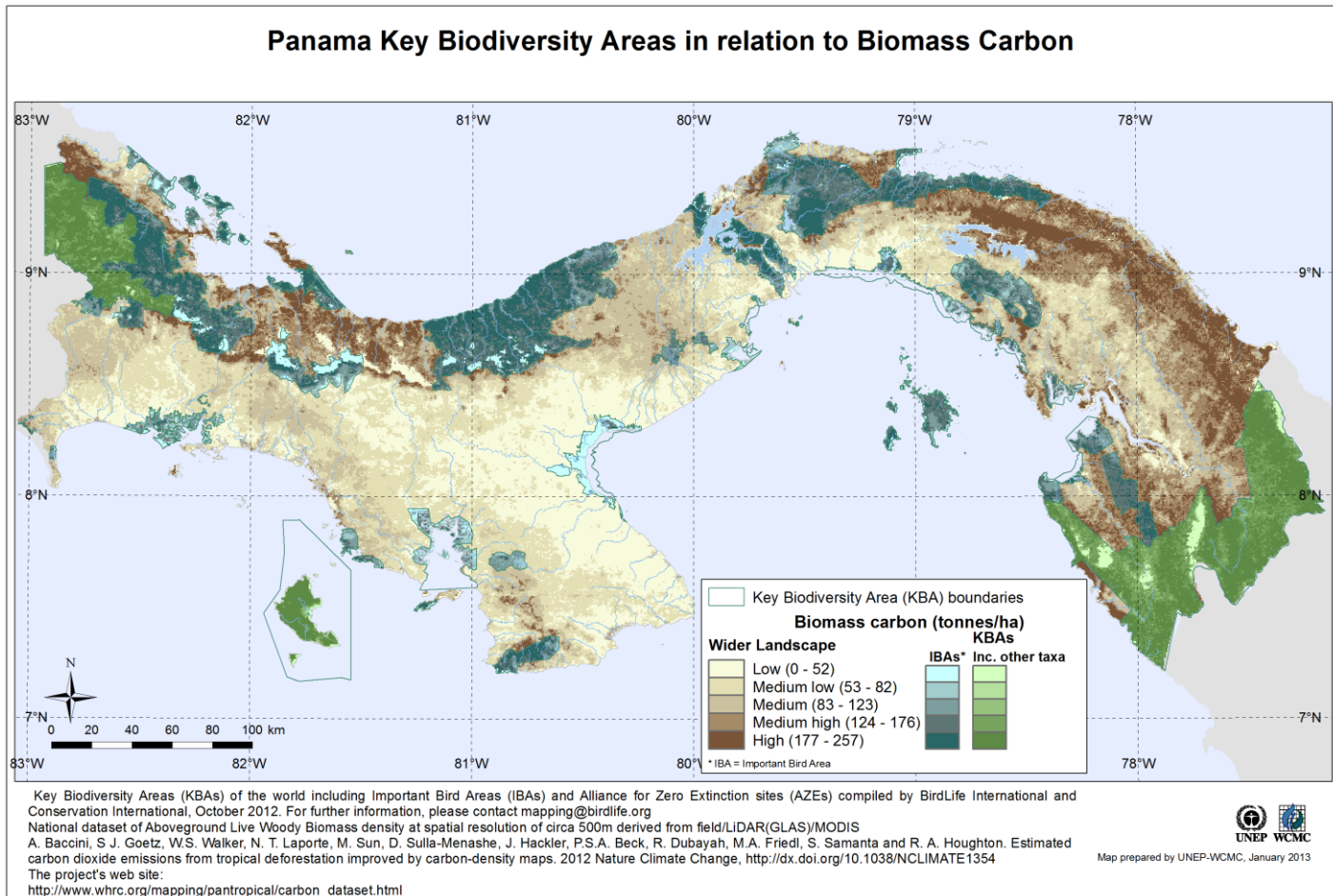
- Subsistence agriculture
- Low productivity livestock
- Not enough to compete with intensive agriculture and intensive livestock.
- Not enough to compete with mining, hydropower, and others similar investments.



How decisions will be made on land use?

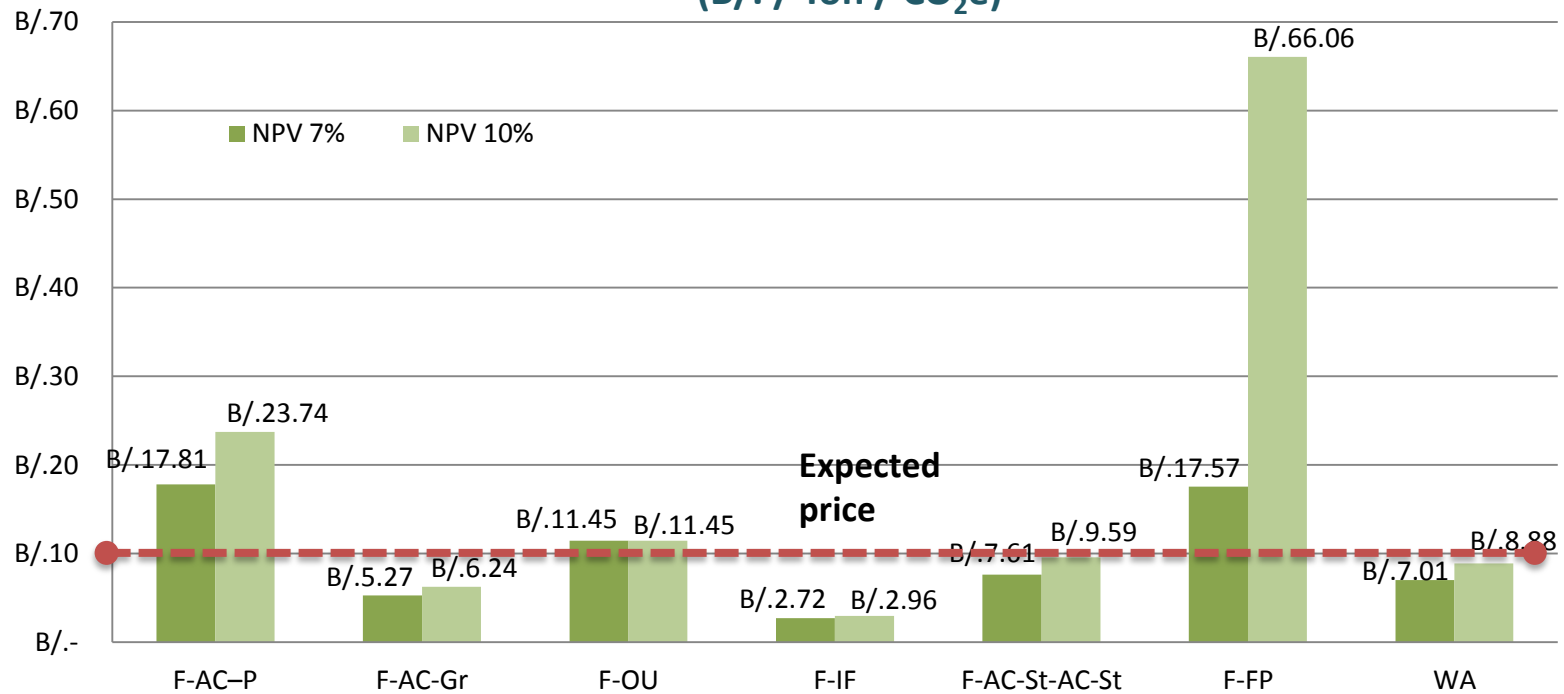
- **The public opinion is divided;**
- **New development models are coming into political discussion.**

Carbon and environmental benefits



Costs of REDD+

Opportunity Cost of main trajectories of change in land use in Bocas del Toro
 (B/. / Ton / CO₂e)

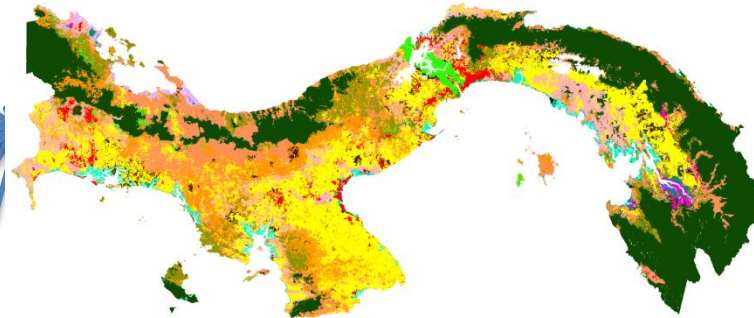
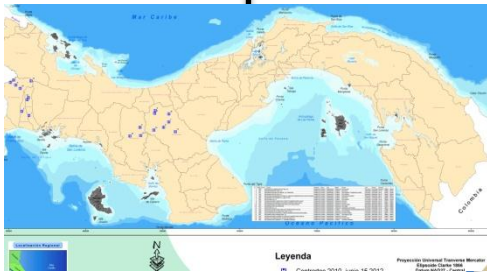
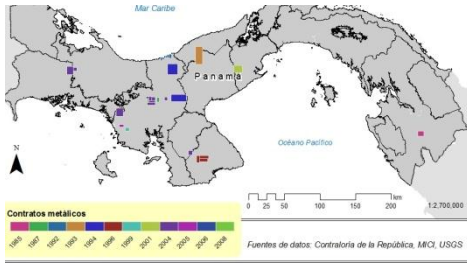


F = Forest
 AC = Annual crops
 P = Plantations
 OU = Other non agricultural uses

IF = Intervened forest
 St = Stove
 FP = Forest plantation
 WA = Weighth average

GR = cattle ranching

A platform to discuss development options



Impacts on the macro economy

Spatially explicit results with associated net present values of options and macro impacts

Usos	Bosque	Pasto	Charral	Caña de	Café	A/H	C/ agua	C a/p	Sarán	PF	Total
Bosque	0.9817										
Pasto		0.9096									
Charral			0.4750								
Caña de azúcar				0.8222							
Café					0.9435						
A/h						1.0000					
C/ agua							1.0000				
C a/p								0.7193			
Sarán									0.6822		
PF										0.9861	



Thank you!

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