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Financing Sustainable Agricultural and Rural Development in LAC: Role of National Public Development Banks

AFD's experience in promoting "green"
finance in the agricultural sector



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1. The specific role of PDBs to finance sustainable food systems



- **Major challenges for rural development**

- High poverty and vulnerability rates in rural areas;
- Serious and urgent current environmental crisis, the agri-food sector being the main factor of negative impacts (30% GHG emission, 75% of biodiversity loss, 75% of land water use, 40% of the world's land is degraded, mainly by agricultural practices);
- The situation is also strongly impacted by a structural increase in energy prices and the multiplication of economic and geopolitical shocks => resilient models are essential;
- When reports are accumulating that public funding for the climate transition does not exceed 3% for this sector (IFAD 2020, GFA 2022);



- **PDBs with a large agri-food portfolio are well-positioned to:**

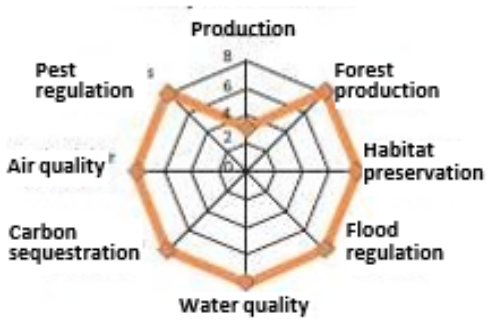
- Intervene in a counter-cyclical and structural way in a sector where the financial market is very often incomplete (low financial inclusion rate) and provide access to financial services as a powerful means of investment and resilience;
- Leverage their global network of clients (2/3 of formal financing in the sector) and can mobilise capital to enable businesses to transition to more sustainable business models;
- Deploy a range of intervention tools (Wholesale, PGF, IRS, TAF, LT resources, etc.)
- Harness incentives, test and implement new financial products (green/SDG bonds) and regulatory measures (for future binding regulations), with a high level of accountability and impact measurement;



2. What about agroecological practices for underlying investments?

- Sciences show that solutions with multiple co-benefits exist for ag sector (IPCC, IPBES, FAO, CGIAR, etc.) and we need financing agroecological transition => new meaning of agriculture performance

Natural ecosystems



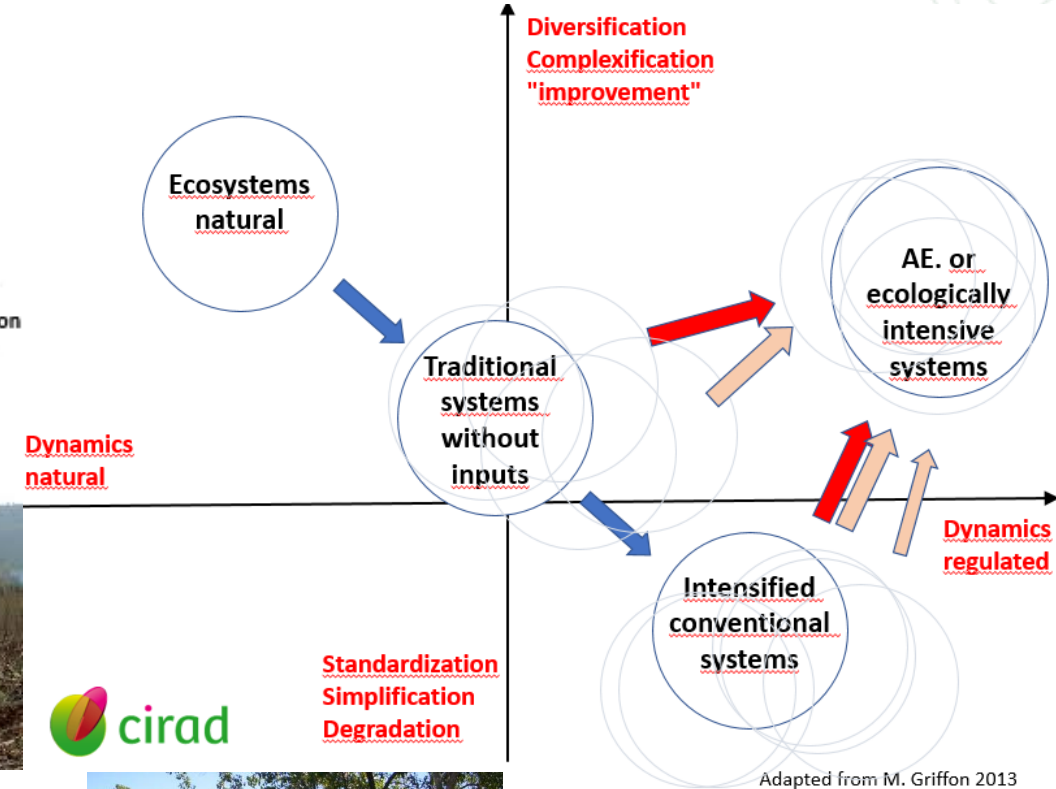
Intensive cereal crop



Crop with restored ecosystemic services



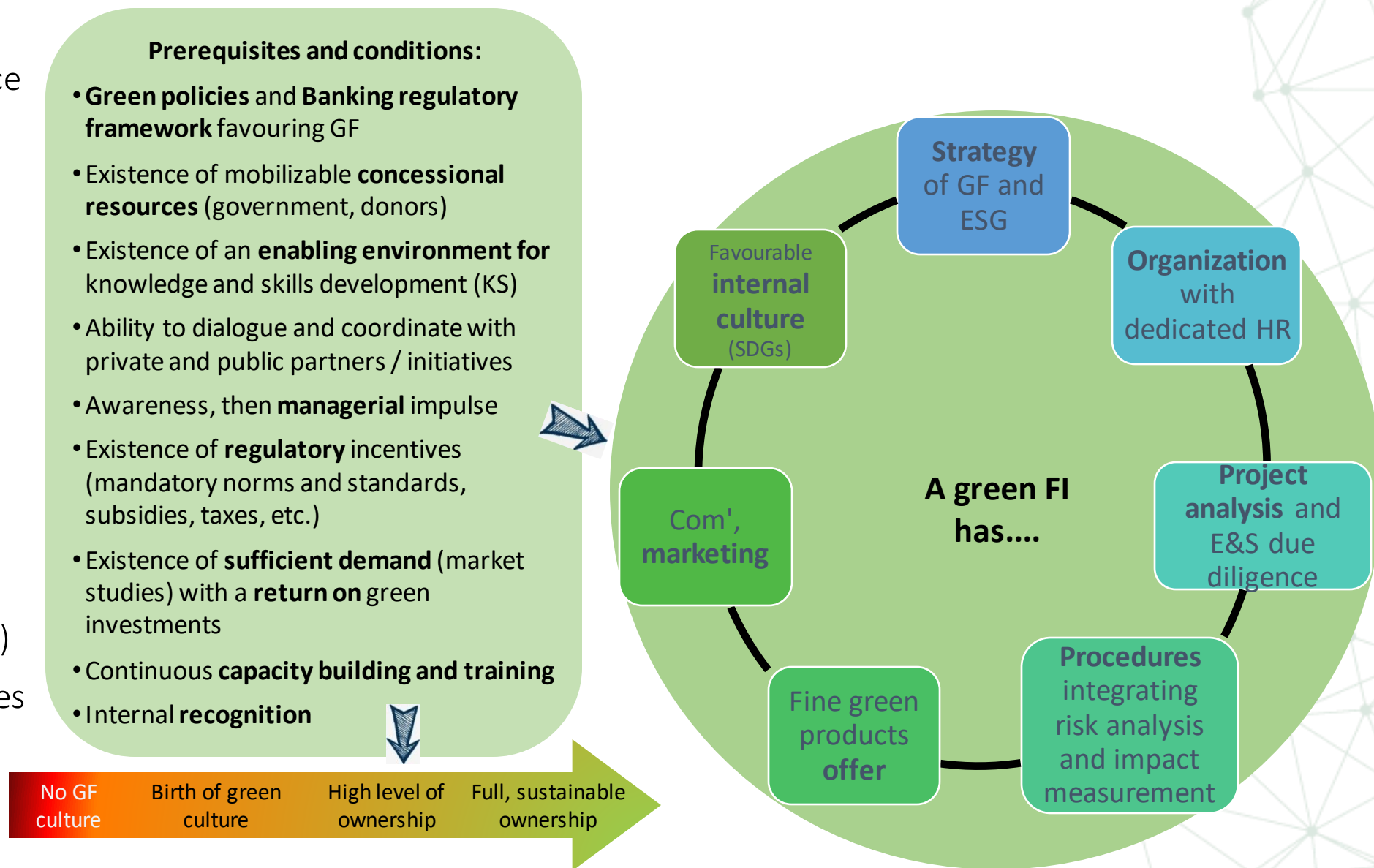
- Main principles:
 - Soil protection
 - Diversity
 - Efficiency
 - Recycling
 - Natural regulations
 - Synergies
 - One Health



Adapted from M. Griffon 2013

3. The major challenges

- A very specific sector that is difficult to monitor and finance
- What is the bank's level of maturity?
- What is the political will?
- What public resources to exercise a pro-SDG mandate?
- What is the enabling environment? (including advisory services, R&D, PO's organization, territorial management, water management at basin level, opportunities of new markets)
- No data => no oriented policies
- How to reverse the price signal?



4. Agrobanco's "Green Project"

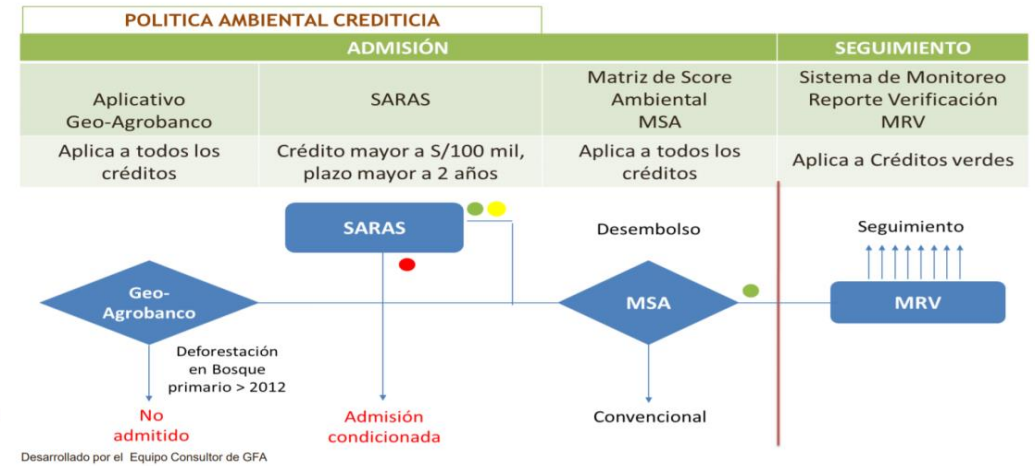


5: Matriz de score ambiental

Categoría	Indicador	Variable	Predio	Estado	Calificación
Agua	Uso eficiente del agua	Secano	Predio	SI/NO	
		Riego localizado (goteo, aspersión)	Predio	SI/NO	
		Riego complementario por inundación	Predio	SI/NO	
		Riego permanente convencional por inundación	Predio	SI/NO	
Suelo	Manejo de suelo en la finca	Cero labranza, más de 30% de suelo cubierto por residuos de cultivos	Predio	SI/NO	
		Labranza convencional (arado, fresa, etc.), menos de 30% de suelo cubierto por residuos de cultivos	Cultivo	SI/NO	
		Cultivo en pendiente > 25% sin terrazas o curvas a nivel	Predio	SI/NO	
		Uso intensivo	Cultivo	SI/NO	
Contaminación	Uso de pesticidas (herbicidas, insecticidas, fungicidas, nematodos) químicos - Riesgo de daños en la salud del agricultor	No usa		SI/NO	
		Uso de productos de baja toxicidad	Cultivo	SI/NO	
		Uso intensivo		SI/NO	
		Uso intensivo		SI/NO	
Biodiversidad	# de especies vegetales en el predio	Zona de bosque dentro de la finca	Predio	SI/NO	
		Cercos vivos entre parcelas o alrededor de la finca	Predio	SI/NO	
		Plantaciones forestales con especies nativas en el predio	Predio	SI/NO	
		Plantaciones forestales con especies exóticas en el predio	Predio	SI/NO	
Climas	Captura de carbono en sistemas agroforestales, plantaciones forestales, presencia de árboles dentro del predio	Numero de árboles por ha por cultivo en asociación	Cultivo	Menos de 10 árboles / ha	
		Numero de árboles por ha por especie	Cultivo	entre 300 y 1000 árboles / ha	
		# de árboles de más de 10 metros / ha - Menos de 10 árboles / ha	Predio	entre 10 y 100 árboles / ha	
		# de árboles de más de 10 metros / ha - Más de 10 árboles / ha	Predio	entre 10 y 100 árboles / ha	
	Emisiones GEI por quemado de biomasa	No realiza	Predio	SI/NO	
		Realiza		SI/NO	
		Emisiones de GEI por uso de fertilizantes sintéticos nitrogenados - Uso de líneas	Cultivo	No usa	
		Emisiones de GEI por uso de fertilizantes sintéticos nitrogenados - Uso de líneas	Cultivo	usa poco	
	Uso intensivo	Uso intensivo		Uso intensivo	
		Uso intensivo		Uso intensivo	



⇒ Increase GF bank portfolio from 10 to 25%



Lessons learned:

➤ The financial institution must be **sufficiently robust** (risk management, governance)

➤ Genuine **high-level commitment** with resources made available (HR, logistics, etc.) / resistance to change

- 2016-2018:
50 M€ CL (AFD) + 2,5 M€ TA & 2,5 M€ IG (EU)
- Identifying existing Green portfolio
- Specify the **taxonomy** used, preferably one recognised at international level (EU, CBI, etc.)
- Consider the **feasibility** of expanding it (market, cost and ease of information capture, identification procedures, Incentives, etc.)
- **Real opportunities** on **certified** supply chains, field project **partnerships**, development of existing products (agroforestry)
- Develop an internalised "green" project / strategy
- **Training** programme at all levels
- Identify the **eligibility criteria** for the various financial product and the internal management procedure
- **Sizing the incentives** according to the expected impact
- **Design** green products
- Address the double materiality (key accounting concept of financial information)
 - E&S risk management
 - Impact measurement
- **Reporting**

5. FIRA's "Prosostenible Project"

- 1, Since 2014: 37 M€ x 2 CL (AFD+FIRA) + 4M€ IG & 1 M€ TA (EU) => 100% "green practices"
- SARAS, taxonomy, 55 eligible investment concepts (CIE) and Indirect support to GB emission (taxonomy, parameters)
- IG prioritized on Municipalities classified as highly and very highly marginalized / with presence of indigenous / vulnerable to CC
- Hanging fruits: Renewable Energy (RE), Energy Efficiency (EE), water saving, greenhouses
- 2, Since 2021: 100 M\$ CL + 1 M\$ TA (AFD)=> 50% social, 50% climate adaptation
- Adaptation: Vulnerability atlas and definition of resilient investments, with prioritization according to vulnerability level => Demonstrating a direct link between the identified risks, vulnerabilities and impacts, and the financed activities
- Alignment with TCFD reporting, nature-related risks impacting the financial value (physical risks, transition risks, reputational risks, liability risks)
- Gender plan



FIRA
FIDEICOMISOS INSTITUCIONALES EN RELACION CON LA AGRICULTURA

Principales CIE de solicitudes aprobadas



Indicators	Total	Units	Efficient Water Use	Environmentally Sustainable Agriculture	Renewable Energies	Energy Efficiency
1.a Additional renewable generation capacity installed	1,118.7	MWh/year			1,118.7	-
1.b Additional installed renewable generation capacity	1,666,666.7	MJ/year			1,666,666.7	
2.a Energy savings as a result of energy efficiency measures	6,983,379.9	MJ/year				6,983,379.9
2.b Energy savings as a result of energy efficiency measures	56.3	MWh				56.3
3.a Estimated average annual amount of emissions of GHG avoided, reduced or sequestered per year by the project during its lifetime or during a typical year of operation.	1,142.7	tonCO ₂ e/year			660.9	481.7
3.b Estimated average annual amount of emissions of GHG avoided, reduced or sequestered per year by project	3,321.4	tonCO ₂ e/year		3,321.4		
4.c Reduced water volume	3.7	mill. m ³ /year				
5 Volume of waste reduced or recycled	3,248.9	ton/year				
Area of agricultural, pastoral or forest where sustainable management practices have been introduced.	366.5	Ha	274	92.5		



Unused CIE	
Drinking fountains	Soil improvers
Solar water heaters	Environmentally friendly marine engine
Channels construction	Other crops biofuel bioenergy biofuel production
Cladding channels	Water purification plant
Power generation equipment geothermal	Biodiversity protection
Water purification equipment	Pulse irrigation
Macro tunnel	Agroforestry Systems
Biofuel production machinery and equipment	Agrosilvopastoral systems
Silvopastoral systems	Forest nursery



Lessons learned:

- Strong need for technical assistance on the ground to **build the impact project pipeline**
- **Train and raise awareness**
- **Internalisation** in bank's procedures will be a big challenge and will depend on the agility and interoperability of the MRV system



6. For data, a promising tool? => FAO solutions (<https://abc-map.org/>)

On the shoulders of giants

1) Project and farm data

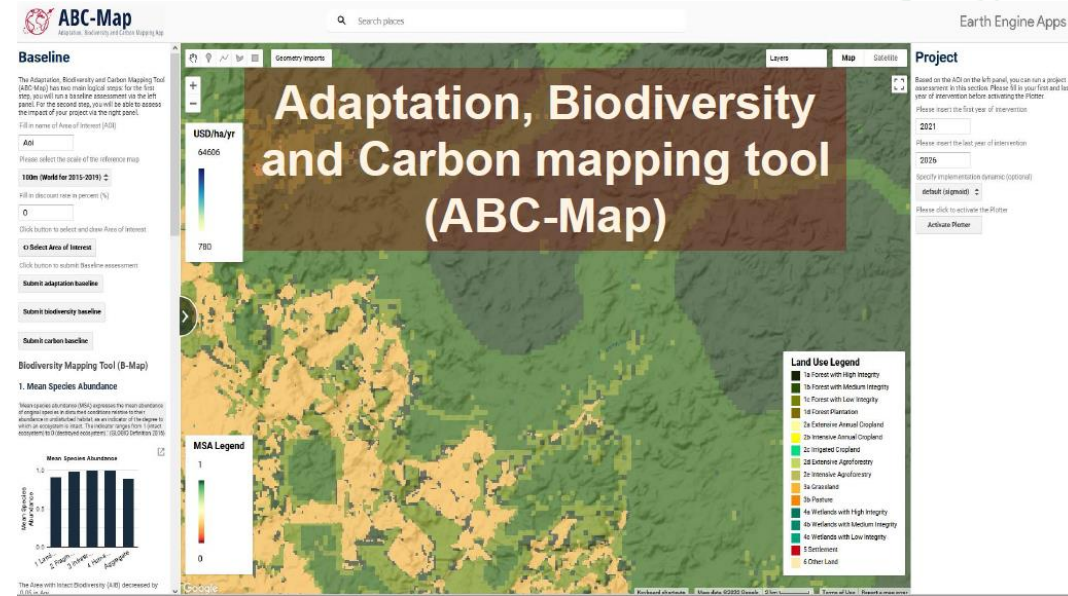
2) Expert data on the state of biodiversity or on climate change

3) Processing of consolidated data with all other socio-economic databases

Tapez une équation ici.

Google Earth Engine

ESVD



Adaptation Mapping Tool

1. Basic assessment

- Climatic profile:
Climograph, Temperature evolution, Precipitation evolution, Extreme temperature events (heat and frost), Extreme precipitation events (dry and extreme precipitation days), etc.

• Geophysical profile:

- Elevation stats, Slope Stats, Water stats, etc.

2. Advanced assessment (tbd)

- Advanced risk assessment based on FAO's climate risk toolbox and the IPCC WGI Interactive Atlas of the Sixth Assessment Report

Biodiversity Mapping Tool

1. Mean Species Abundance

- Simple MSA
- Area with Intact Biodiversity
- Time Series of the MSA

2. Protected areas & KBAs

- Area and Land Use Composition of Protected Areas and KBAs

3. Natural Capital

- Natural Capital via ecosystem service values from ESVD

Carbon Mapping Tool

1. Total carbon stock

- Time series of total carbon stock

2. Social value of carbon

- Time series of the social value of carbon



Thank You



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