

Reversing Desertification Through Business-driven Landscape Restoration in Spain

Altiplano Estepario, Spain

ALVELAL Association / Aland Foundation
February 2023

Altiplano Estepario landscape context

Almería, Granada and Murcia, Southeast of Spain

1. Description:

- Cold semiarid steppe
- 200.000 inhabitants
- Agriculture, livestock and forestry
- Monoculture of almond trees
- Largest area of rainfed almond trees in the world (100.000ha)
- 50% of the agricultural land is certified as organic



Altiplano Estepario landscape context

Almería, Granada and Murcia, Southeast of Spain

2. Total area - 1 million hectares
3. Key land use-related challenges:
 - Erosion
 - Desertification
 - Loss of soil
 - Loss of biodiversity
 - Depopulation



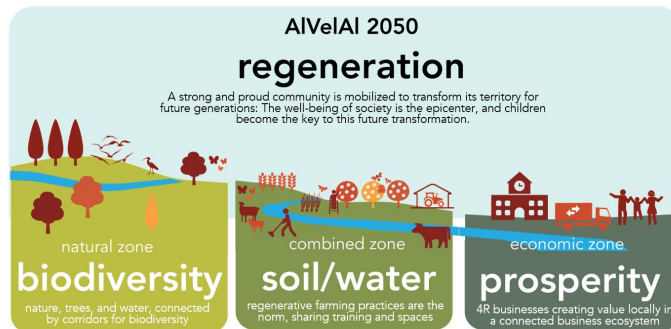
AIVeAI 4Returns Restoration Landscape Project

1. Partners with a collaboration agreement:
 - AIVeAI Association (local farmers and entrepreneurs) is leading the project
 - 4returns businesses: Almendrehesa, Habitat, AIVeAI Foods and others
 - Commonland: international partner
 - Aland Foundation: national partner
 - Municipalities
2. Active since 2015
3. Started working together to unite under the same dream of creating a prosperous landscape where future generations can live in dignity



Our vision and transformation strategy

1. The 20-year vision for the Altiplano that resulted from the coiniciation workshop, using the "U Theory". Along the "U", the future is emerging; it is about creating a regenerative landscape, with agroecology as a form of life, connecting economy and ecology. And just as important: confidence and well-being, both socially and economically. Serving as a lighthouse for dryland restoration in the Mediterranean basin, landscape vision a reality.
2. Collective leadership training and facilitation is a very useful tool, already implemented in AlveIAI, for the resolution of internal and external conflicts and tensions with the different partners.
3. The first high-level, long-term vision for the Altiplano was created in 2014. Since then, it has been enriched with the experience of working on the landscape. An area of inspiration exists where a strong and proud community is mobilised to transform its territory for future generations. For example, a participatory process amongst AlveIAI's members in the last months of 2021 was held, and led to the following vision 2050 per zone aims beyond the initial 20-year planning period:



4 Returns Framework for Landscape Restoration

Process 5 Elements

Our landscape restoration process consists of 5 phases.



Impact 4 Returns

Our landscape restoration framework delivers 4 types of returns to the landscape and its stakeholders.



Return of Inspiration

Opening people's eyes to the possibility of a better future



Social Returns

Creating jobs, businesses, networks, and social prosperity



Natural Returns

Restoring the health, resilience and prosperity of landscapes



Financial Returns

Realising long-term, sustainable, and local income

Landscapes 3 Zones

For successful landscape restoration we distinguish, restore and connect 3 types of zones.

Natural Zone



Regenerating a landscape's ecological foundation by restoring and protection of biodiversity within natural ecosystems such as wetlands, grasslands and forests

Combined Zone



Combining food, fibre and biodiversity productivity through regenerative agriculture, agroforestry and soil restoration.

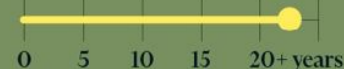
Economic Zone



Delivering sustainable economic productivity with dedicated areas for activities that create value, typically concentrated in urban areas, infrastructure and processing.

Time 20+ years

Successful systematic landscape restoration takes one generation, or 20 years.



A minimum of 20 years, or one generation, is needed to successfully implement large-scale integrated landscape management.

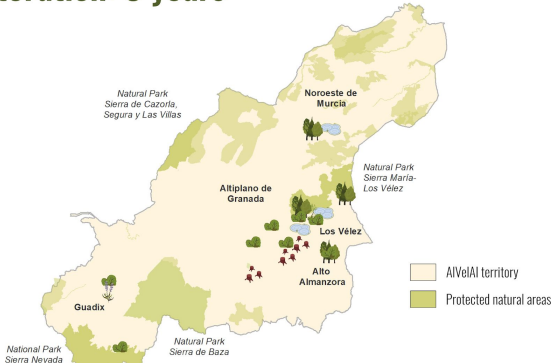
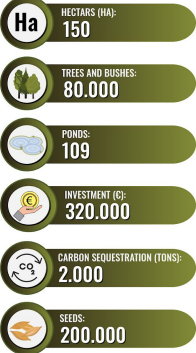


Our 20-year plan for the Altiplano

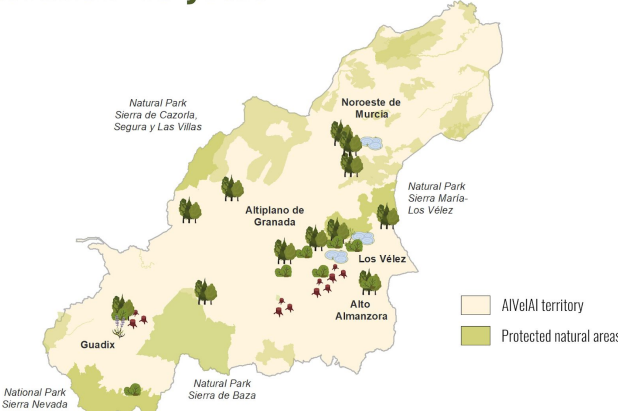
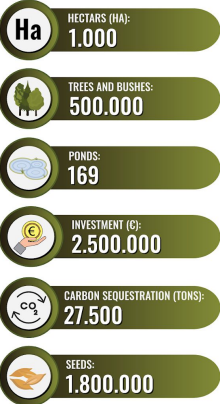
Natural Zone

Connect the Region through 4,000 ha of green corridors

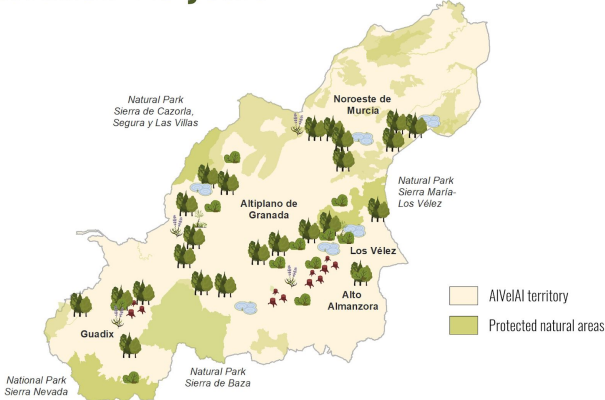
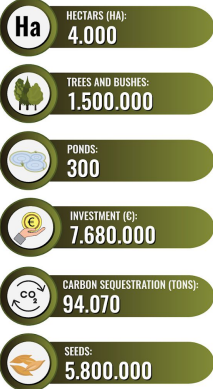
Natural zone restoration: 5 years



Natural zone restoration: 10 years



Natural zone restoration: 20 years



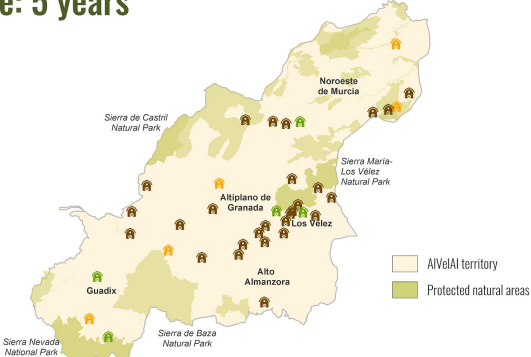
Our 20-year plan for the Altiplano

Combined Zone

800 farmers to transition to regenerative practices influencing 100.000 ha

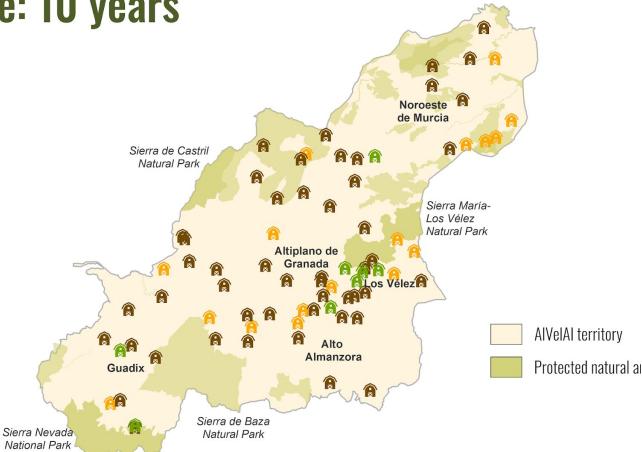
Agricultural zone: 5 years

- HA FULLY REGENERATIVE: 3.000
- HA IMPROVE MANAGEMENT: 3.000
- HA POSITIVELY INFLUENCED: 16.000



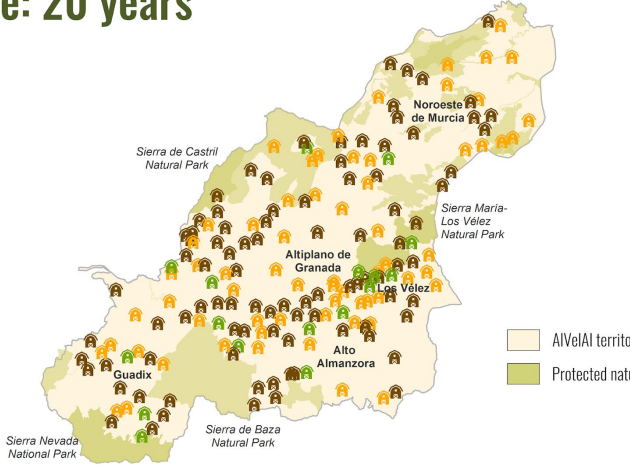
Agricultural zone: 10 years

- HA FULLY REGENERATIVE: 5.000
- HA IMPROVE MANAGEMENT: 10.000
- HA POSITIVELY INFLUENCED: 30.000



Agricultural zone: 20 years

- HA FULLY REGENERATIVE: 10.000
- HA IMPROVE MANAGEMENT: 40.000
- HA POSITIVELY INFLUENCED: 60.000



Our 20-year plan for the Altiplano

Economic zone: 5 years

Economic Zone

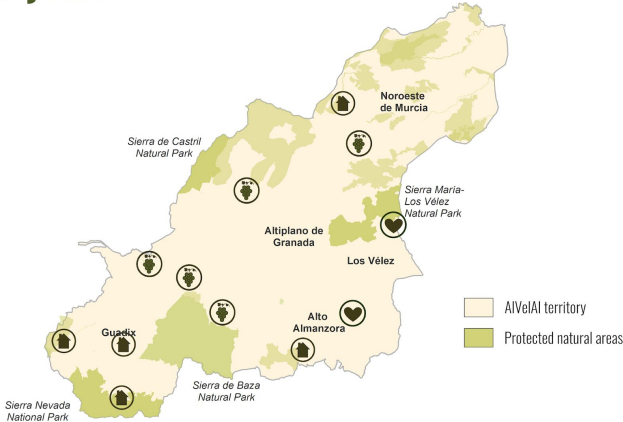
Co-create 30 business cases conducive to landscape restoration

- REGENERATIVE PRODUCTS
- INSPIRATION



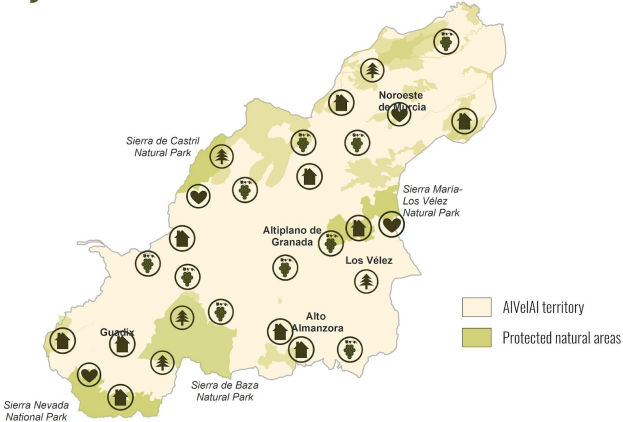
Economic zone: 10 years

- REGENERATIVE PRODUCTS
- INSPIRATION
- TOURISM



Economic zone: 20 years

- REGENERATIVE PRODUCTS
- INSPIRATION
- TOURISM
- RESTORATION



Investment Complementarity





1. In the Altiplano, desertification of farmland is largely a consequence of intensive agricultural practices, so AIVelAI developed the “almendrehesa” system to slow down and reverse desertification (see slide 8).
2. To **incentivize the transition to regenerative practices, business cases have been developed** to find and/or create (premium) markets for these products and **keep added value in the landscape** (see slide 9) by capturing a bigger piece of the value chain.
3. Importantly, these **businesses were developed by AIVelAI and therefore inherently contribute to the broader restoration initiative.**
4. This is a **mutually beneficial relationship**, as the businesses and farmers benefit from services provided by AIVelAI and other partners, including training, R&D, marketing, etc.



La Almendrehesa

Integrated Productive Ecosystem
for Large Scale Restoration Based
on Sustainable Business Cases



ELEMENTS	 ORGANIC, RAINFED ALMOND GROVERS, WITH INTERSPERSED LOCAL TREE SPECIES	 AROMATIC PLANTS	 ENDEMIC SEGUENO LAMBS	 BEES	 POLINIZERS
FUNCTIONS	<ul style="list-style-type: none">- Create habitat for biodiversity	<ul style="list-style-type: none">- Prevent erosion- Promote insect diversity	<ul style="list-style-type: none">- Aerate and fertilize the soil- Mow weeds- Feed on almond husks	<ul style="list-style-type: none">- Promote pollinization and production of high quality organic honey and other bee products	<ul style="list-style-type: none">- Act as bridges between the natural zone and the agromix zone
BUSINESS CASES	<ul style="list-style-type: none">- Almonds and by-products- Biomass- Compost	<ul style="list-style-type: none">- Medicinal plants- Organic essential oils	<ul style="list-style-type: none">- Organic meat- Organic wool- Leather- Milk and dairy products	<ul style="list-style-type: none">- Organic honey- Polen, royal jelly, wax	

Building a landscape investment portfolio

Ménder Moya



ESENCIAS
DEL PAISAJE



HABITAT
Extra virgin olive oil
PROCEDENTE DE AGRICULTURA ECOLÓGICA RESERVENTINA

BODEGAS
Integrasol



Cultivos Ecológicos
Ablanques
Aceite de Oliva
Virgen Extra



lasolana2
aceite de oliva virgen extra



National and international markets (B2B and B2C)

ALVELAL Foods

Esencias del Paisaje
Aromatics

La Almendrehesa
Almonds, pistachios, nuts

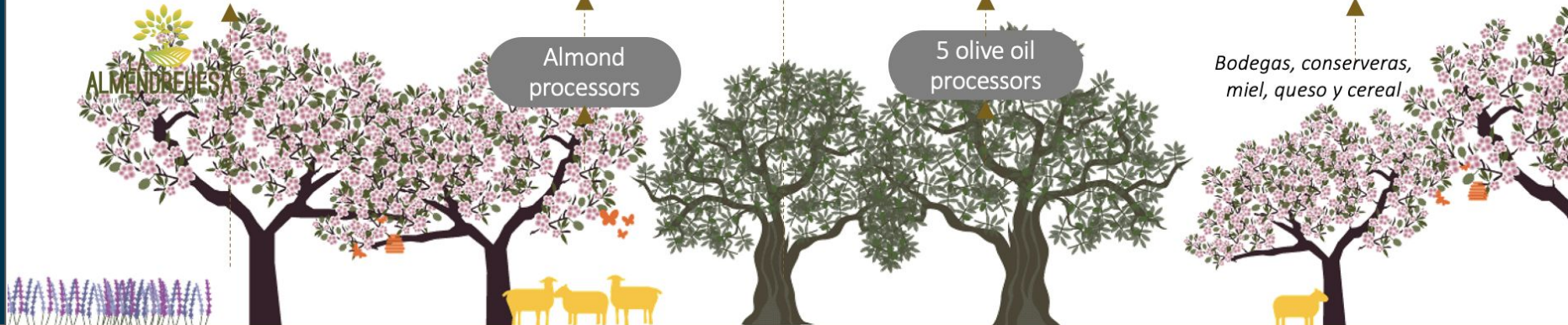
Habitat
Olive oil

Other 4R companies

Almond
processors

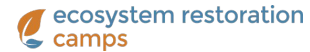
5 olive oil
processors

Bodegas, conserveras,
miel, queso y cereal



Partners and supporters

1. **Aland** Foundation, as national partner, and **AIVelAI** Association, as local landscape partnership, **lead and coordinate (primarily) grant funding** so activities are aligned and complementary and have mobilized nearly EUR 5M to-date.
2. **Business cases**, once developed and operational, **are financed independently** by other funders, impact investors, and financial institutions, primarily equity and debt
3. While **most finance is project specific**, Commonland and other funders provide valuable process funding (flexible and long-term grants)



Inspiration
4 Action



PRESENCING
INSTITUTE



Financing needs

Landscape needs include both grant funding and investment capital, which

Approx. **€52 million over next 10 years:**

- Grant funding predominantly through **Aland Foundation and AIVelAI Association: €36 million**
 - Natural zone restoration
 - Research and development
 - Marketing and communication
 - Capacity building / technical assistance
- Investment predominantly through business cases **Almendrehesa (almonds), AIVelAI Foods (regen products from territory), and Habitat (olive oil): €16 million**
 - Agri-business (production, transformation, distribution)
 - E-commerce to sell products from territory
 - Transition finance for farmers
 - Tourism opportunities



Landscape investment: lessons learned

1. **Flexible (unrestricted) and long-term grant funding (process funding) is critical** to drive landscape restoration
2. Process **funding de-risks investments** by providing low-cost capital to the landscape to activities not expected to generate revenues nor be investable
3. Similarly, grant funding **allows investable businesses and projects to be developed**, which in turn raise private investment
4. Commercialization of regenerative products can **support farmer transitions**
5. Funders and investors can consider how investments might be complemented with grant funding and other forms of support (and vice versa)



For More Information

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