

# GAEC LES ROCS

## 2020 - 2050

### IDENTITY CARD

#### GEOGRAPHICAL LOCATION

Pouzauges, Vendée (85)

#### TARGET ADAPTATION ISSUE(S)

- Drought
- Very high temperatures

#### HABITAT(S) CONCERNED

Agricultural ecosystems

#### TYPE(S) OF NBAS

Sustainable management of ecosystems : enhance the inclusion of trees and biodiversity in agricultural and forestry areas.

#### PROJECT LEADER(S) AND ASSOCIATED PARTNER(S)

- **GAEC Les Rocs**
- CPIE Sèvre Bocage environmental initiatives centre
- Pays de Pouzauges local authority grouping
- Nantes University Institute of Technology (IUT) for ecological monitoring
- Nature 2050 Programme – CDC Biodiversité

Setting up sapling protection  
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#### FUNDERS AND BUDGET

- CDC Biodiversité Nature 2050 Programme : 6432€
  - Pays de la Loire Region
  - Loire-Brittany Water Agency
- Plus the cost of sustaining and monitoring the project until 2050, to be covered by GAEC Les Rocs and CDC Biodiversité.



Visit to the farm during the « Companies and Biodiversity » event, 24<sup>th</sup> November 2022  
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## PROJECT OBJECTIVES

- **For adapting to climate change :** conserve the quantity and quality of the water downstream of catchment areas and consolidate the resistance of forest habitats to the effects of climate change.
- **For biodiversity :** conserve the biological richness of the soil and reduce the pressure of forestry on the soil.
- **For the local area :** enhance the bocage landscape, integrate the project in the Territory Committed to Nature (TEN) process and strengthen the resistance of the grazing systems.

### REGULATORY CONTEXT OF THE PROJECT

- Territorial forestry charter (CFT)
- Type-2 Natural Area of Ecological, Faunal and Floristic Interest (ZNIEFF)
- Territorial Climate Air Energy Plan (PCAET)
- Territory Committed to Nature (TEN)

## CONTEXT AND ISSUES

The Pays de Pouzauges local authority grouping is located in the Haut-Bocage in the eastern Vendée and consists of 10 communes with a total population of 23 000. In 2019 it was recognised as a « Territory Committed to Nature » (TEN) by all the members of the Regional Biodiversity Collective including the Pays de Loire Region. One of the key actions of the TEN process is the sustainable management of agricultural and forest areas, for example through the implementation of innovative agroecology operations. The sustainable management plans for the bocage raised farmers' awareness of the roles of the bocage landscape and good management practices.

In the framework of the Nature 2050 programme, GAEC Les Rocs is involved in the Pouzauges Bocage project, which is divided into four main operations: GAEC Les Rocs, GAEC La Niro (cattle farming), a demonstration of natural regeneration on a 1.25-hectare plot at Les Echardières and the transition from dying chestnut trees to a diverse high forest at La Fromentière.

The farmers of the GAEC Les Rocs have been committed for several decades to adapting their practices to emerging environmental and societal issues in order to improve their autonomy and resistance to climate risks. The organic farm extends over 182 ha and combines dairy cattle, fodder crops (maize, dredge corn, alfalfa, clover) and field-grown vegetables.

Trees in all forms (hedges, intra-field agroforestry) are a central element in their strategy for maintaining the long-term performance of the farming system. The first hedges were planted in the mid-1990s, resulting now in a hedge density of 160 linear meters per hectare. In addition, since 2017, rows of trees have been planted between plots in pasture areas. The project thus reflects the historical continuity of the actions undertaken throughout the Pays de Pouzauges.



## ACTIONS IMPLEMENTED

Begun in 2020, the works consisted in :

- Planting 333 trees of various species (Holm Oak, Sweet Chestnut, Wild Cherry, Almond, Walnut, Field Maple, Hornbeam, Service Tree, Chequer Tree, Alder, etc.) in 1188 ml of rows between plots and reinforcing existing rows. The trees are planted at 8-metre intervals with the rows 30 metres apart in order to leave room for agricultural machines to pass between them. The planting operation extended over a total surface area of 18 ha.
- Protecting the saplings from wild animals (chestnut wood stakes) and drought (mulching with shredded wood).

## GOVERNANCE ADOPTED

In the framework of the Territory Committed to Nature (TEN) initiative, GAEC Les Rocs receives the support of several partners: the Pays de Pouzauges local authority grouping provides financial and technical support for carrying out the agroforestry developments and monitoring the ecological indicators of the Nature 2050 programme with the help of trainees from the Nantes IUT. The CPIE Sèvre and Bocage environmental initiatives centre, a stakeholder in the TEN initiative, advises the GAEC on the selection of tree species and the configuration of the tree-planting operations.

Other national partners such as the French Agroforestry Association are authorised to provide the project leaders with highly useful information on choosing tree species, carrying out the works and fund seeking.

## SCHEDULE

|                                  | PROJECT LIFESPAN               |  |  |
|----------------------------------|--------------------------------|--|--|
|                                  | 2020                           | 2021   | 2021 - 2050  |
| <b>Works</b>                     | 1 <sup>st</sup> planting phase | 2 <sup>nd</sup> planting phase   |  |
| <b>Life of the project</b>       |                                | GAEC Les Rocs winner of the General Agricultural Competition for Agroecological Practices in the « Agroforestry » category |  |
| <b>Monitoring and assessment</b> |                                |  | Monitoring the indicators of the Nature 2050 programme |



Planting of trees between plots  
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# BENEFITS AND CONTRIBUTIONS OF THE PROJECT



## BENEFITS REGARDING TARGETED ADAPTATION ISSUES

- Increasing the resistance of the farming system to climate hazards : protecting the fields and cattle from increasingly and intense frequent droughts and very high temperatures.
- Improving grazing quality by means of shady areas and thus the health of the herd.



## BENEFITS FOR BIODIVERSITY

- Creating refuges for beneficial organisms and birds : enabling the return of field birds and small raptors and enhancing the habitat network by means of new ecological corridors.
- Fertilising the soil.
- Diversifying the tree species by selecting those most resistant to droughts.

## OTHER BENEFITS



- Protection of agricultural plots from desiccating winds.
- Creation of carbon sinks and therefore mitigation of climate change.
- Restoration of the bocage landscape to improve the well-being of inhabitants and the attractiveness of the local area for tourism.
- Development of tree production on the farm, enabling the associates to save money on firewood and animal bedding while diversifying their sources of income. For example, the shredded wood produced is used in the collective boilers of the Pays de Pouzauges local authority grouping.
- Integration of the GAEC in a territorial ecosystem restoration process led by the local authority.

## MONITORING INDICATORS

### Adaptation to climate changes

- Evolution / maturity of the ecosystem : measurements to assess the health of the soil and the natural abundance rate of Nitrogen 15 in the leaves
- Pluviometry monitoring
- Other weather monitoring (extreme climatic events and participative monitoring of temperatures)

### Biodiversity

- Insect
- Soil invertebrate monitoring
- Potential Biodiversity Index
- Botanical surveys of grassland

### Other

- Influence of the project
- Jobs created
- Photographic monitoring



# LEVERS FOR SUCCESS

## TECHNICAL ASPECTS AND PROJECT DESIGN

- **Configure the rows in function of needs** : the trees were planted at regular intervals, 8 metres between each tree and 40 metres between each row to facilitate access for machines.
- **Plant to adapt** : the configuration of the rows is optimised in function of the sun path so as to maximise the shade cast on the pastures in summer.
- **Make use of volunteer helpers** : GAEC Les Rocs organised participative worksites for planting the saplings.

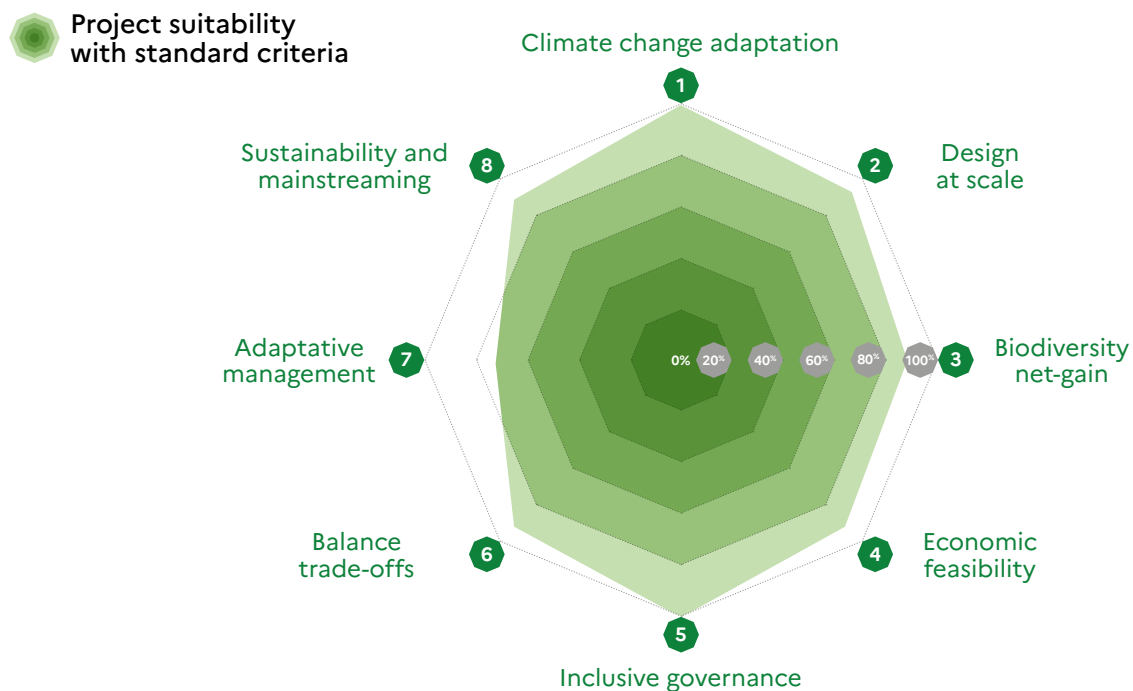
## STAKEHOLDER COMMITMENT

- Planting between fields involves accepting to reduce the productive surface area and therefore planning with the GAEC associates how to maintain the economic equilibrium of the farm.
- The local authority undertook the creation of an educational trail around the agroforestry plots to raise the awareness of walkers and school groups about the benefits of agroecological practices and to show the diversity of species.

## MONITORING AND REPLICABILITY OF THE ACTION

- The GAEC Les Rocs associates are now training other farmers in the agroforestry unit of the CIVAM agricultural initiative centre.

# ANALYSIS ACCORDING TO THE IUCN'S GLOBAL STANDARD FOR NATURE-BASED SOLUTIONS



## FOR FURTHER INFORMATION

- Webpage (in French) of [the Nature 2050 programme](#)

## CONTACT DETAILS OF THE PROJECT LEADER

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## DATE

March 2023  
January 2024

## DATE AND FACT FILE EDITOR

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**CDC** BIODIVERSITÉ

