

## ITALY

# Risk prevention & management

### Location

Montelibretti

### Programming period

2014 – 2020

### Priority

P3 - Food chain & risk Management

### Measure

M05 – Damage/restoration /prevention actions

### Funding (EUR)

Total budget 32 225.53  
RDP contribution 25 780.42  
Private 6 445.11

### Project duration

2017 – 2018

### Project promoter

Società Agricola Terre Sabine

### Contact

[info@terresabine.com](mailto:info@terresabine.com)

### Website

[www.terresabine.com](http://www.terresabine.com)

Setting up an anti-hail system over a newly planted orchard of cherry trees, in order to mitigate the impact of climate change over agricultural production.

## Summary

In recent years, climate change has become a significant factor that impacts on agricultural production. In Italy, climate change manifests itself in rapid seasonal shifts and extreme weather volatility. Often there are brief and violent precipitations accompanied by hail and/or frost. Cherry production is very much affected by hail which can cause damage to the fruit which has a major impact on its quality and can even make it unsuitable for the market.

In response to this challenge, two farmers used RDP support to set up an anti-hail system covering 1 ha over a newly planted orchard of cherry trees.



## Results

The anti-hail system protects the fruit production from extreme weather events.

This investment made it possible to prevent damage to the fruit as well as any fungal and bacterial pathologies that might affect them pre-harvest.

The plantation started being commercially productive in mid 2018. The anti-hail system already protects the first harvests of the cherry orchard thus securing the farm's output and helping it to remain competitive in the market.

## Lessons & Recommendations

- ❑ Particular attention should be given to selecting the right contractor for the construction of the system.
- ❑ It is also necessary to plan for the continuous monitoring of the poles and the nets on a seasonal basis, but also in case of extreme weather events that might cause damage to the system.

## Context

The farm of Roberto and Renato Merzetti, is located in the Lazio region and its total agricultural land is approximately 25.42 Ha. of which the utilised agricultural area is about 19.11 Ha. The latter is mainly covered by tree crops. 6.77 Ha covered by olive trees and the remaining 12.29 Ha by various fruit tree crops (cherry, plum, lotus, fig and peach). The farming is carried out by two owners who have all the necessary agricultural machinery. In order to be able to sell to major customers/retailers, and to the market in general, it is necessary to comply with very high quality standards.

However, in recent years climate change has become a significant factor that impacts on agricultural production. In Italy, climate change manifests itself in rapid seasonal shifts and extreme weather volatility, e.g. quickly changing from droughts to floods as well as brief and violent precipitations often accompanied by hail and/or frost.

Specifically cherry production is very much affected by hail. The damage to the fruit can have a major impact on its quality and can even make it unsuitable for the market. Hail causes bruising and cracking and if the skin is cracked pathogens of fungal and bacterial nature, such as *Monilinia laxa* and *Botrytis cinerea*, can penetrate the fruit.

In order to respond to this challenge, the farmers decided to invest in the construction of an anti-hail system on their cherry tree orchard which was planted in 2014.

## Objectives

Overall, this investment will help prevent damages to their farm, thus consolidating and stabilising the company's profitability. More specific objectives to be achieved include:

- preventing pre-harvest damages on the fruits including any fungal and bacterial pathologies;
- securing high quality production;
- optimising the productive potential of the land by reducing the impact of external events.

On a second level, the project will:

- secure the customer's loyalty; and
- guarantee the profitability of the farm.



## Activities

The project was realised within 12 months. The anti-hail system was constructed covering a surface of 1 ha of cherry orchard. Given the size of the cherry trees when in full production, the poles for the system reinforcements were about five metres high.

## Main results

The anti-hail system will protect the fruit production from extreme weather events, such as late-spring hailstorms that can jeopardise the production as a whole and also the market quality.

This investment made it possible to prevent damage to the fruits any fungal and bacterial pathologies that might affect them pre-harvest.

The plantation started being commercially productive in mid 2018. The anti-hail system is already protecting the first harvests of the cherry orchard. This helped the farm to secure its output and remain competitive in the market.

## Key lessons

Particular attention should be given on selecting the right contractor for the construction of the system.

It is also necessary to plan for the continuous monitoring of the poles and the nets on a seasonal basis, but also in case of extreme weather events that might cause damages to the system.

## Additional sources of information

[www.facebook.com/Terre-Sabine-128106457262455/](https://www.facebook.com/Terre-Sabine-128106457262455/)