

# JANMIEKESHOEVE: AN ORGANIC DAIRY FARM IN TRANSITION TO A BIODIVERSE AGROFORESTRY SYSTEM

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## Abstract

The Janmiekeshoeve is an organic dairy farm in Noord-Brabant (The Netherlands). The long-term aim of the farm is a sustainable farm, where modern economic challenges are faced from a nature-based ideology. Agroforestry seems to have the key to our wishes. The farm has just started the transition towards this goal. The design process is in full swing and many ideas have and we have many ideas and possibilities in how to actually design the land. But whether we should go for fruit trees, or nut trees, and what crops to combine them with. This is where we would really appreciate some ideas from you. In order to not only have a long term income but also a short term income, as we have to live from the land, we feel that a good agroforestry design can combine biodiversity, soil restoration, cattle grazing, short term income of short rotation crops and long term income of fruits, nut and timber. However, the exact crops and combinations, we are working on. That is where we would appreciate all suggestions from other participants.

**Keywords:** cattle; trees; biodiversity; transition; suggestions

## Introduction

Janmiekeshoeve is an organic dairy farm in Noord-Brabant, The Netherlands, currently 45 ha on dry sandy slightly loamy soils. We come from a long line of farmers who have been working on the land for at least three centuries, turning age-old barren moorlands into fertile farmlands (Figure 1). Our long-term aim is to have a sustainable farm, where modern economic challenges are faced from a nature-based ideology thus creating a healthy and future-proof business.



Figure 1: Barren moorlands in the early 20th century.

Because of certain developments around us we are at this point in time given the opportunity to acquire an additional plot of 17 acres bordering on our present farmlands. This provided a

natural opportunity to think about the desired transition to a sustainable and future-proof business (Figure 2). Thus we are now in the process of designing plans on this transition and how to incorporate these new lands into our farm and ideology. This new business will preferably, ultimately be run by the younger generation of the family, the family that has been farming here already since 1781.

The field concerned was originally developed by my own grandfather, which adds a sentimental motivation to all other reasons for wanting to buy this piece of land.



Figure 2: Location of future agroforestry.

### Materials and methods

First and foremost we are an organic production farm. From an ecology point of view we also want to positively contribute to nature and the environment, whereas at the same time we need our farm to provide us with a stable income.

Implementing restoration agriculture will allow us to participate in an already existing government program of creating extensive natural ‘corridors’ allowing wildlife to roam freely across large areas formerly subdivided into fenced-off fields (Natuurnetwerk Brabant (NNB)). In our case, the to-be-developed agroforestry fields will eventually connect the long stretches of forest West of our farm to those on the North. As a bonus our participation in the above-mentioned larger program will make us candidate for financial aid from the government, compensating for part of the investment costs of the whole project.

To fulfill the requirements of NNB we could, of course, simply plant these fields with thousands of trees and create a new belt of biodiverse forest in between the already existing ones. In due time then we could harvest the trees for their timber. This would serve our ecological ideology, but not our need to also now live from the proceeds of our land.

This is why we are attracted the idea of agroforestry. This type of farming will allow us to enhance the development of more nature and biodiversity on the new fields by growing (multipurpose) trees, while at the same time and on these same fields allowing us to grow crops and graze cattle (Figure 3). So through agroforestry we combine the necessary shorter-term harvest and income with a more natural and sustainable aspect. In devising our agroforestry plans (Figure 3) for these new fields we have support from a number of consultants:

- Adviesbureau 5voor1, a financial consultancy bureau on sustainable issues,
- Land&Co, marketing consultancy specialized in advising organic farmers in transition.
- Bosgroep Zuid Nederland, a cooperation of private forest owners, who not only partake and advise in the planning process, but also offer support in several aspects of the actual implementation of the plans.



Figure 3: Cattle on the move (left) and making new plans (right).

### Discussion

At the convention, the provisional design for our farm will be presented. This design will be a spatial design, but without the exact species. It will have the outlines of a new way of farming. By presenting our plans, we hope to receive comments, suggestions and hopefully answers to some of our questions, from people already more experienced in agroforestry. Moreover, it would be very helpful if people come up with specific problems we have to be aware of in these kind of processes. We are farmers producing food and we want to combine this in the best possible and ecological way with trees on the farm. Some questions we have; what type of trees would be best to grow on our dry, sandy, slightly loamy soils? We are thinking of fruit-trees and berry-bushes or nuts like chestnuts and walnut as main crops.

- What types or cultivars would be preferable and why? In terms of starting to produce and long term production. Could we in some way anticipate climate changes in these plans? Would certain types of trees e.g. prosper better than others in our changing weather conditions?
- What are other farmers' experiences with manual versus machine harvesting of nuts?
- What are other farmers' experiences in grazing cattle combined with rows of nut trees?

### Conclusion

Janmiekes farm is a family farm, an organic cattle farm, with the long term goal to be a sustainable farm, where modern economic challenges are faced from a nature-based ideology. Agroforestry seems to be able to offer this: a stable and short-term income from the cattle and additional crops and a long term income from tree produce and additional a growing biodiversity on the farm. At the moment the design process is in full swing and advice, specifically on suitable species for this farm, is very welcome.