

Work-package 5: Agroforestry for livestock systems

Specific group: Agroforestry for poultry systems in the Netherlands

Date of meeting: 9 July 2014

Date of report: 25 September 2014

Location of meeting: Terschuur, The Netherlands

Author of report: Monique Bestman, Louis Bolk Institute (m.bestman@louisbolk.nl)



Contents

1. Context	2
2. Description of system	2
3. Participants.....	3
4. Issues and challenges raised.....	3
5. Questions for research or knowledge transfer	4
6. Acknowledgements	5



1. Context

The AGFORWARD research project (January 2014 - December 2017), funded by the European Commission, is promoting agroforestry practices in Europe that will advance sustainable rural development. The project has four objectives:

- 1) to understand the context and extent of agroforestry in Europe,
- 2) to identify, develop and field-test innovations (through participatory research) to improve the benefits and viability of agroforestry systems in Europe,
- 3) to evaluate innovative agroforestry designs and practices at a field-, farm- and landscape scale, and
- 4) to promote the wider adoption of appropriate agroforestry systems in Europe through policy development and dissemination.

This report describes one of about 40 initial stakeholder workshops to address objective 2. Further details of the project can be found on the AGFORWARD website: www.agforward.eu

2. Description of system

The farm, where the meeting was held, rear 20,000 slow-growing broilers in a stable with a free-range area in which 550 cherry trees are planted (Figure 1). The trees were planted in 2005 and the chickens have had access since 2010. There is also a campsite (25 places) and a small shop on the farm. In the cherry season the free-range area is covered with nets to prevent wild birds from eating cherries. The cherries are sold from the farm and local shops. The broilers are sold to a slaughterhouse who is selling the meat.



Figure 1. The broilers have access to an area of cherry trees

3. Participants

The initial meeting was attended by six stakeholders (Figure 2). Five persons represented four farms: a free-range farm, an organic laying hen farm, an organic rearing farm, and a free-range broiler farm (Table 1). A sixth person represented 'Adopt a chicken', which is a project in which citizens can adopt an organic laying hen or cockerel and in turn gain 'free' eggs. During a field-visit, the participants received an explanation of the AGFORWARD project. Since they already attended several excursions of farmers network 'Trees for chickens' which had included an introduction about trees in poultry free range areas, we focused on the farmers exchanging experiences and questions about trees in their free range areas.



Figure 2. The stakeholder network meeting was attended by six people working in the Dutch organic or free range poultry sector or for a consumers organization called 'Adopt a chicken'.

Table 1. The businesses represented by the participants at the meeting

-
- 30,000 organic rearing pullets and only a few trees yet
 - 14,000 organic laying hens and tree nursery
 - 25,000 free range laying hens and 60 different fruit/nut trees
 - 20,000 free range broiler chickens and 550 cherry trees, host of the meeting
 - 'Adopt a Chicken' consumer project
-

4. Issues and challenges raised

The group completed Questionnaire 1. It seemed that everyone interpreted the rules of how to fill in the questionnaire in a different way. Therefore the filled in questionnaires were used as a base for the discussion, in order to understand what people meant while they filled it in. During that discussion, the positive and negative aspects of trees in poultry free range areas were written on a flip over. After that, questions for research and knowledge transfer were written down.

Trees in poultry free range areas have (in arbitrary order) a positive influence on:

- Production of additional products, which is nice for consumers
- Biodiversity
- Landscape quality: trees in chicken runs looks nice for tourists and citizens
- Local fruit juice
- Animal welfare. The chickens go out very well and use the free range area very well.
- Animal health. Animals spread more easily over the free range area which means a lower density of disease transmitters per surface area, compared to when they all stay on the same place close to the stable. Moreover, wild water birds, which carry avian influenza viruses, don't like trees and stay away.
- If chickens use a larger area, then the manure is spread over a bigger surface
- Less losses by predation
- Less flooding (water uptake by trees)
- More satisfaction and fun concerning the work
- Additional income (selling products and subsidies)

Trees in poultry free range areas have (in arbitrary order) a negative influence on:

- Fruit trees in a poultry free range area stays on a small scale. Because this is small-scale, costs are relatively high, for example if you want to have make juice of your fruits.
- Organic regulation demands the trees to be of organic origin, which are more expensive, difficult to get (because rare or have to come from another region or they don't see the difference between a wild tree (which they can collect themselves) and an organic tree).
- More labour. Not only the trees, but also in summertime if chickens stay out till very late, as a farmer you have to stay awake for the last control.
- Loss of eggs, because some flocks will lay their eggs in a nice place outside instead of in the nests.
- Labour more complex
- Place for birds of prey to sit and start hunting on chickens
- Loss of income through CAP payments (if too many trees, it is no grassland anymore)
- Bureaucracy. For example you have to ask for a license to cut the trees already before they are being planted. And if you have planted trees some time ago, it is difficult to expand your animal branch, because it is not allowed to build a stable close to a forest. You have to do a big investigation to get to know what is allowed and what isn't.

The people at the meeting said there are more advantages than disadvantages and that the advantages are more important than the disadvantages.

5. Questions for research or knowledge transfer

Looking forward, the group proposed a few potential innovations:

- Choice of tree breeds with respect to vulnerability to diseases.
- Importance of long-lasting regulation. Trees grow slowly. After you have planted them under a certain regulation, it would be desirable if the regulations stay the same.
- Regulation more clear or at least less negative on trees

After more than one hour staying inside discussing and filling in questionnaires the farmers thought it to be time for going outside and have a look at the chickens and the cherries. During the introduction it was told that farmers could become test farm. At that moment none of them reacted,

but we expect that in a later stage we will have farms willing to become test farms. At least one of the 'Trees for chickens' test farms (who was not able to attend the workshop) already showed his interest. In September a meeting is planned to a walnut plantation for poultry farmers. Unfortunately there are no chickens in it (but sheep) and we will discuss whether they are suitable for poultry free range areas.

6. Acknowledgements

The AGFORWARD project (Grant Agreement N° 613520) is co-funded by the European Commission, Directorate General for Research & Innovation, within the 7th Framework Programme of RTD, Theme 2 - Biotechnologies, Agriculture & Food. The views and opinions expressed in this report are purely those of the writers and may not in any circumstances be regarded as stating an official position of the European Commission.