AGFORWARD (Grant Agreement N° 613520) is co-funded by the European Commission, Directorate General for Research & Innovation, within the 7th Framework Programme of RTD. 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.
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
Sainsbury’s is a major food retailer in the UK. Sainsbury’s first developed its Woodland brand for its free range and “SO organic” eggs in 2004, with 1 pence per dozen eggs sold donated to the Woodland Trust. This followed farmer John Widdowson’s observations on how his hens preferred the shade and protection of trees (British Hen Welfare Trust, 2012). Sainsbury’s expanded the scheme to include meat birds in 2009, with 2 pence from every chicken sold donated to the Woodland Trust. All the free-range “woodland range” and organic farms must be:
- planted with trees which cover at least 20% of the range area where the birds are free to roam outdoors
- planted with a mixture of fast growing and slower native trees which are indigenous to the local area
- have trees planted close to the house to encourage the hens outside to range
- RSPCA Freedom Food standard approved

Fig 1. Artificial shelter is often provided for the free-range hens
3. Participants

The meeting was attended by 10 stakeholders, two staff from the Organic Research Centre (ORC) and two from the Woodland Trust. Participants included the Agriculture Manager for Sainsbury’s, and representatives from RSPCA (Royal Society for the Prevention of Cruelty to Animals), Freedom Foods, and Assurewel. Nine of the participants were egg producers from England.
4. **Workshop structure**

1.30 Arrival and lunch

2.00 Introduction (including aims of workshop by the Agriculture Manager from Sainsbury’s), brief overview of agroforestry in poultry systems and the AGFORWARD project with a 4-page hand-out (Anja Vieweger).

2.20 Discussion of the main points in the questionnaire, the most important challenges the participants encounter and what possible solutions there are available/needed (Anja Vieweger and Hamish Thomson).

2.50 Summarize the key points and hand out forms for participants who would be interested to collaborate in research projects.

3.00 Farm walk: a practical session telling the story behind the new and existing planting at the farm; design, species, establishment, maintenance programme, lessons learnt but including details on planting tips, the right way to put on a guard, and the right time to take it off, weeding, and thinning.

3.50 Refreshments and workshop close

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5. **Issues and challenges raised**

Participants were sent questionnaire 1 to complete before the workshop and bring along with them. As none had brought the filled-in questionnaire with them, the main benefits and challenges of integrating trees and chickens were discussed within the group and further analysed and discussed during the following farm walk.

Hamish Thomson led the group out into the range for a discussion on best practice for planting and managing trees and the sward underneath. The main points that came up in the discussion are listed below.
The main challenges proposed were:

- **Fruit trees in a woodland chicken system**: according to farmers’ experience may compromise feed intake as birds will choose available fruits/crops over the offered feed. This undoubtedly could have an impact on egg production.
- **Range design**: The main use of trees is to attract birds outside. There is a challenge about how to arrange the trees outside in order to create a favourable/attractive environment for the birds.
- **Choice of suitable species for range cover**: trees, shrubs, bushes etc.
- **Another big issue according to the farmers in woodland chicken systems is the value of the land, and whether woodland systems are the best investment considering the value of the land. They believe that there are much more profitable ways to utilize the land.**
- **Loss of available land for other forms of production in the future**
- **A farmer mentioned that he noticed a drop of 2% in his production and he attributes that to the introduction of trees in his system.**
- **There were questions about tube height and tube type for better protection of the trees. According to Hamish, there are several combinations and the best selection depends on what are the major challenges that the trees face (i.e. weather condition, rabbits etc.).**
- **The area of 1 m² around the newly planted tree should be kept free of grasses and other plant cover for the first five years during the establishment of the tree, as competition can be huge. The recommendation is to spray down this area regularly – this could be one of the major challenges for organic systems (labour intensive weeding, expensive mulch or plastic – birds eat plastic foil, woodchip? etc.).**

The main benefits proposed were:

- **Trees provide shelter and shade for chickens. Major animal welfare benefits.**
- **One farmer mentioned that his hens are much healthier and more active since he has established trees in the range areas.**
- **Woodland egg production is favoured by consumers.**
- **Populations of insects in the grasses can attract the birds and provide additional feed.**

Suggested solutions to the challenges:

- **Establishment of higher grasses and legumes outside the shed can create an attractive environment for birds to use the range.**
- **Directly outside the henhouse, a woodchip strip can be useful for the birds to walk on and avoid areas of bare soil, soil compaction, erosion etc.**
- **One option of utilising wood and trees from chicken ranges would be woodchip production, for energy supply, mulch in front of the henhouses etc.**
- **One option to face the challenge of multipurpose use of the range is the combination of poultry with cattle. One farmer has set up the trees in triangles, which he can fence-in during the periods where he grazes cattle.**
- **Silvoarable research could provide information on better land use.**
- **The distance from the henhouse to the trees is usually about 10 m, but that might be too far for the birds. Corridors with higher grasses, rapeseed, mustards etc. will help them overcome the distance easily.**

6. **Identifying those producers willing to participate in the research**

The selection and establishment of suitable swards and grass-herb-mixes were mentioned again as research need. Particularly techniques for reseeding bare areas, but also the suitable species selection (and potential medicinal qualities) of cover plants were mentioned.

In this workshop, the participants were not willing to complete a second questionnaire focused on the key research challenges or their involvement in further research. A better approach will be to
email the group via the Agricultural Manager at Sainsbury’s, asking for those interested in being involved further to get in touch, or to approach certain individuals directly.

7. References

8. 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