

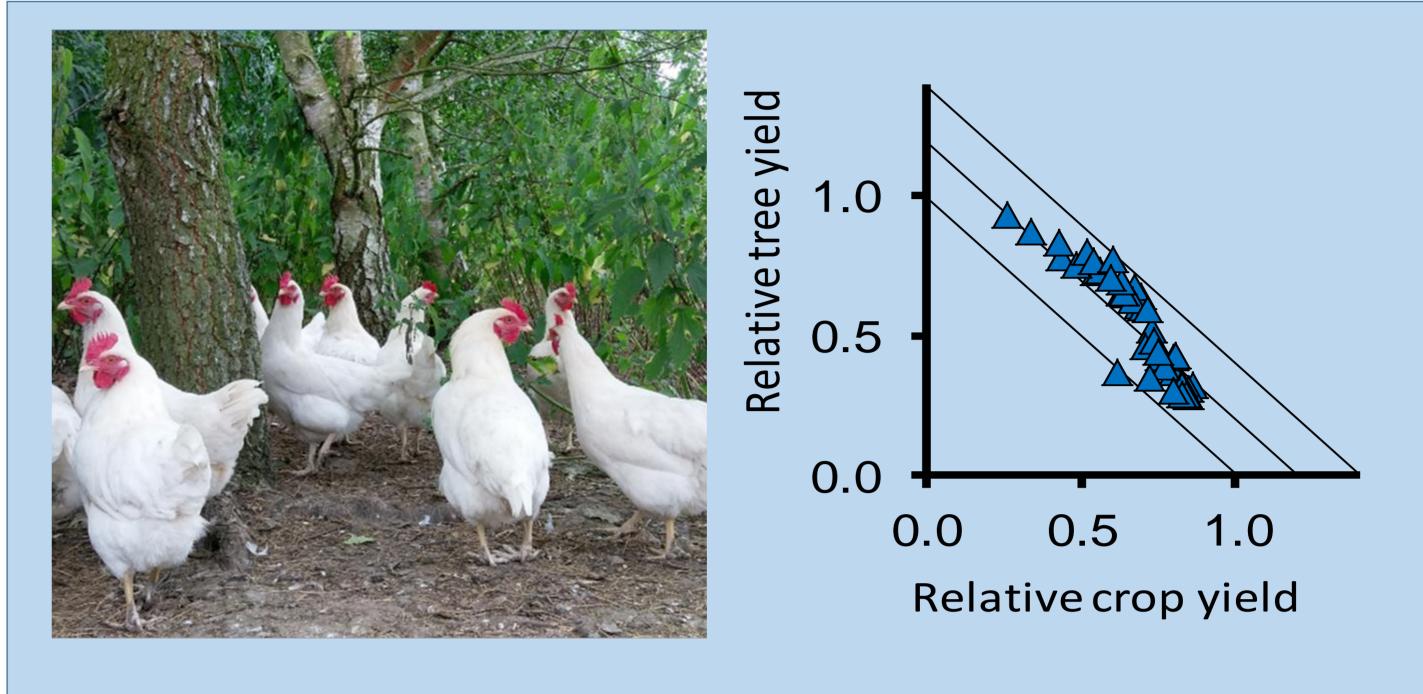
# Improving the financial rationale of agroforestry for farmers

Paul Burgess<sup>1</sup>, Anil Graves<sup>1</sup>, Silvestre García de Jalón<sup>2</sup> and João Palma<sup>3</sup>

Agroforestry can improve animal welfare, increase biomass production, and provide environmental benefits. Hence for a societal perspective, agroforestry is typically more beneficial than separate monoculture forest and agricultural systems (e.g. García de Jalón et al. 2018b). However agroforestry also needs to be financially beneficially for farmers. This poster describes three ways to make agroforestry more attractive from a farm perspective.

## 1. Using trees to support existing enterprises

In the EU "Silvorable Agroforestry for Europe" project in 2005, agroforestry was calculated to be more profitable than **both** forestry and agriculture individually when the land equivalent ratio was maximised and the profitability of both systems is similar (Graves et al. 2007). However, practical experience with the recent EU AGFORWARD project suggests that most farmers tend to **add trees to make the existing enterprise more sustainable** rather than a drive to balance two commercial enterprises. For example the tree may improve hen welfare in a free-range egg system, or reduce soil erosion in arable crop production.



The focus of many farmers practising agroforestry is to improve the sustainability of an existing enterprise (e.g. woodland eggs), rather than achieving an "optimal" balance between the relative yields of the tree and the crops (e.g. Graves et al. 2007)



# 2. Increased availability of tree product prices

It is easy to obtain data on the sale price of agricultural crops and livestock. By contrast, there are few details on fuelwood prices and the interaction between volume and quality on timber prices in many parts of Europe. We need more information on timber and fuelwood prices. The robustness of any financial analysis, even within walnut silvoarable systems, depends on such values.

Commodity	Spot price (May 2019)
European milling wheat	€189/tonne
Fuelwood	?
Walnut timber	Ş

### 3. Simplified regulation and support for agroforestry

Agroforestry often results in increased complexity and management costs (García de Jalón et al. 2018a) which can be ignored in simple financial analyses. Some of the additional management costs comes from the increased complexity in completing paperwork associated with Pillars I and 2 of the EU Common Agricultural Policy. In view of the societal benefits, farmers practising complex systems should not face higher administrative hurdles.

#### References

AGFORWARD (2018) Agroforestry that Will Advance Rural Development <a href="http://www.agforward.eu">http://www.agforward.eu</a>

García de Jalón S et al. (2018a). How is agroforestry perceived in Europe? Agroforestry Systems 92:829–848.

García de Jalón S et al. (2018b). Modelling and valuing the environmental impacts of arable, forestry and agroforestry systems: a case study. Agroforestry Systems 92:1059–1073.

Graves AR et al. (2007). Development and application of bio-economic modelling to compare silvoarable, arable and forestry systems in three European countries. Ecological Engineering 29: 434-449.

#### Acknowledgements

AGFORWARD was funded by the EU through the Seventh Framework Programme (Grant 613520)

<sup>2</sup>Basque Centre for Climate Change (BC3), 48940, Leioa, Basque Country, Spain

<sup>3</sup>Forest Research Centre, Tapada da Ajuda, 1349-017 Lisboa, Portugal