# CREATING AGROFORESTRY INNOVATION AND BEST PRACTICE LEAFLETS

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#### Abstract

A key output of the EU FP7 project AGFORWARD was a series of 46 agroforestry innovation and 10 agroforestry best practice leaflets for European farmers and other stakeholders. This paper describes the process of over 80 people working together to create the leaflets and the overall result.

**Keywords:** promotion; innovation; dissemination; communication; internet

#### Introduction

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As indicated in the abstract, a major output of the EU FP7 project AGFORWARD was a series of 46 agroforestry innovation and 10 agroforestry best practice leaflets. This paper briefly describes the process of creating the innovation leaflets, the best practice leaflets, and an accompanying folder, together with the initial dissemination of the leaflets in hard copy and on the internet.

## Creation of the innovation leaflets

The original format of the innovation leaflets was discussed at the Third General Assembly meeting of the AGFORWARD project in Montpellier in 26-27 May 2016. One of the original proposals was a series of case study stories, but eventually the consensus of the participants was that a two-sided leaflet format was the most useful way of describing the wide range of agroforestry innovations tested across 40 stakeholder groups. After the meeting, it was decided to pilot the format using the results from the Italian asparagus and olive system, but it proved to professional

logistically all of the design work needed to be undertaken at the AGROOF offices in Anduze, France. Eventually in March 2017, the first leaflet was produced through an intensive iterative "try-it and see" process when Cranfield staff visited the AGROOF offices.

Each subsequent leaflet followed the same format of the pilot leaflet. The top of the front page included a number for reference, the title "Agroforestry Innovation", the AGFORWARD logo, a large landscape format photo, the main and secondary titles, and the www.agforward.eu web-address. The remainder of front page was then split into a left-hand column occupying a third of the page and a right-hand column comprising two-thirds. The title of least one column (on 38 of the 46 leaflets) was phrased in the form of a question and there was always at least one additional colourful image. The second side of the leaflet also followed a third and two-thirds of a page column split. The left hand column included a section entitled "Advantages", an image,

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and the author contact details. The second column provided detailed information about the innovation and always concluded with sources of further information. Eventually by November 2017, 46 agroforestry innovation leaflets were produced describing 15 innovations related to agroforestry of high nature and cultural value, 11 related to agroforestry with high value tree systems, 12 related to agroforestry for arable farmers, and 8 related to agroforestry for livestock farmers (Table 1). The leaflets encompassed 13 countries including Spain (12 leaflets), the UK (7), France (6), Italy and Greece (4), two leaflets each from Germany, Hungary, the Netherlands, Portugal, and Romania, and a single leaflet each from Denmark, Sweden, and Switzerland.

Each of the leaflets was reviewed by at least two participants on the AGFORWARD project for the technical content, and two participants in terms of the English and layout. The initial draft text was created in Microsoft Word, but the final formatting was undertaken by AGROOF using Adobe InDesign. Many of the images used in the design were of high resolution and the process of creating the leaflets necessitated the purchase of additional storage on DropBox file hosting service. The final leaflets were produced in a pdf format with margins suitable for commercial printing, and also as pdfs without margins which could be printed directly from the web. Each of the innovation leaflets is available from the following webpage: http://www.agforward.eu/index.php/en/Innovation-leaflets.html

Table 1: The innovation leaflets co-authored by 83 people covered 46 topics and 13 countries http://www.agforward.eu/index.php/en/Innovation-leaflets.html

Category	No	Title	Country
Agroforestry	01	Establishing pastures rich in legumes	Spain
of high	02	Triticale in Iberian dehesas	Spain
nature and	03	Fast rotational intensive grazing	Spain
cultural	04	Tree regeneration in grazed wood pastures	Spain
Value	05	Managing shrub encroachment in cork oak montado	Portugal
(Moreno et	06	Modelling livestock carrying capacity in montados	Portugal
al. 2018)	07	Rediscovering valonia oak acorns	Greece
,	08	Shade tolerant legumes	Italy
	09	Multi-functional hedgerows in the bocage systems of France	France
	10	Invisible fencing in wood pastures	UK
	11	Trees and the restoration of waterways in the Spreewald floodplain	Germany
	12	Restoration of abandoned wood pasture	Hungary
	13	Protecting large old trees in wood-pastures	Romania
	14	Grazing and biodiversity in Transylvanian wood-pastures	Romania
	15	Enhancing reindeer husbandry in boreal Sweden	Sweden
Agroforestry	16	Grazing sheep under walnut trees	Spain
for high	17	Protecting trees in chestnut stands grazed with Celtic pigs	Spain
value tree	18	New approaches to producing selected varieties of chestnut	Spain
Systems	19	Wild asparagus in olive orchards	Italy
(Pantera et	20	Olive trees intercropped with chickpeas	Greece
al. 2018)	21	Olive trees intercropped with cereals and legumes	Greece
	22	Orange trees intercropped with legumes	Greece
	23	Apple orchards grazed in France	France
	24	Economic benefits of grazed apple orchards in England	UK
	25	Key challenges of orchard grazing	UK
	26	Farming with pollards	France
Agroforestry	27	Cropping cereals among timber trees	Spain
for arable	28	Productivity and quality of maize under cherry trees	Spain
Farmers	29	Intercropping medicinal plants under cherry timber trees	Spain
(Kanzler et	30	Organic crops in olive orchards	France
al. 2018)	31	Understorey management in alley cropping systems in France	France
	32	Hybrid poplar and oak along drainage ditches	Italy
	33	Walnut and cherry trees with cereals in Greece	Greece
,	34	Agroforestry and decentralised food and energy production	UK
,	35	Trees and crops: making the most of the space	UK
	36	Yield and climate change adaptation using alley cropping	Germany
	37	Agroforestry with standard fruit trees in Switzerland	CH
Agroforestry	38	Weed suppression in alley cropping in Hungary	Hungary
for livestock	39	Commercial apple orchards in poultry free-range areas	NL
farmers	40	Silvopoultry: establishing a sward under the trees	UK
(Hermansen	41	Lactating sows integrated with energy crops	Denmark
et al. 2018)	42	Pigs and poplars	Italy
	43	Mulberry (Morus spp.) for livestock feeding	Spain
	44	Fodder trees for micronutrient supply in grass-based dairy systems	NL
	45	Fodder trees on dairy farms	France
NI – Cwit-and	46	Combining organic livestock and bioenergy production	UK

CH = Switzerland; NL = the Netherlands; UK = United Kingdom

# Creation of the best practice leaflets

Unlike the agroforestry innovation leaflets, the ten best practice leaflets were authored by a single person: Philippe Van Lerberghe of the Institut pour le Développement Forestier in France. In this case, some of the leaflets extended to four rather than two sides. The leaflets are primarily focused on the process of creating an alley cropping system starting with the key objectives, the choice of tree species and planting material, the selection of tree density and planting distances, tree protection, land preparation, mulching, and lastly tree pruning (Table 2). The format of the front page was similar to the innovation leaflets but used an orange, rather than a blue, banner. The last page again provided contact details and a list of references for

further information. There was also a similar process for reviewing the best practice leaflets for their technical content and to minimise English and presentation errors.

Table 2: The agroforestry best practice leaflets comprised 10 titles (Liagre et al. 2018) http://www.agforward.eu/index.php/en/best-practices-leaflets.html

Number	Title		
01	Alley cropping systems: key objectives		
02	Analysing the site and choosing tree species		
03	Choosing quality-planting material		
04	Planning an agroforestry project		
05	Protecting trees against wildlife damage: assessing the options		
06	Preparing the land		
07	Planting the trees		
08	Fitting tree protection to prevent deer damage		
09	Mulching for healthy tree seedling		
10	Shaping the trees		

# Creation of the folder, launch and next steps

In addition to the innovation and best practice leaflets, staff at AGROOF also led on the design of a folder to hold the leaflets (Figure 1). A number of designs were reviewed with the final design including four images on the front page to encompass the wide range of agroforestry systems covered. The inside of the folder comprised two flaps. The left-hand flap provided a description of the AGFORWARD project and outlined the nature of the leaflets. The right-hand flap included a montage of nine agroforestry images which could then be opened to reveal the leaflets. Behind the leaflets was a map showing the location of the 46 innovations and the right-hand panel provided the titles listed in Table 1 and a reference for the folder (Balaguer et al. 2017).

b)

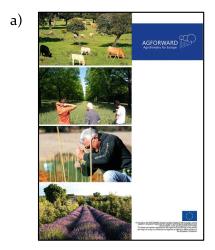




Figure 1: The 46 innovation leaflets and 10 agroforestry best practice leaflets were included in a folder (Balaguer et al. 2017). The images show the a) front and b) back page of the folder.

The back page of the folder answered the question "What is agroforestry?", a range of web-links, and the logos of 28 participants in the project. Over 800 hardcopy packs of the leaflets and the folders were assembled at the Wervel offices in Brussels in November 2017 which required substantial manpower! The completed leaflets and folder were launched at the European Parliament on 29 November 2017. The leaflets are now being translated into a range of languages to maximise their impact and the plan is that copies of the folder will be available at the 2018 European Agroforestry Conference.

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#### References

- Balaguer F, Waldie K, Van Lerberghe P, Liagre F, Girardin N, Pagella T, Burgess PJ (Eds) (2017) Folder for AGFORWARD Agroforestry Innovation and Best practice Leaflets. 8 November 2017. AGFORWARD project. www.agforward.eu (accessed 17/04/2018).
- Hermansen JE, Bestman M, Westaway S, Kongsted AG, Bondesan V, Mosquera-Losada MR, Luske B, Novak S, Smith J (2017) Guidelines for improved agroforestry systems for livestock production. Deliverable 5.15 (5.3) for EU FP7 Research Project: AGFORWARD 613520. (15 January 2018), 23 pp. http://www.agforward.eu/index.php/en/guidelines-for-improved-agroforestry-systems-for-livestock-production.html (accessed 17/04/2018).
- Kanzler M, Tsonkova P, Arenas G, Dalla Valle C, Desclaux D, Ferreiro-Domínguez N, Guérin O, Herzog F, Jäger M, Kiss-Szigeti N, Mantzanas K, Marosvölgyi B, Mézière D, Mirck J, Moreno G, Mosquera-Losada MR, Panozzo A, Paris P, Rigueiro-Rodríguez A, Romero-Franco R, Schettrer P, Smith J, Vityi A, Wartelle R, Westaway S, Wolfe M, Burgess, PJ (2018) Agroforestry for arable farmers: guidelines. Deliverable 4.12 (4.3) for EU FP7 Research Project: AGFORWARD 613520. (17 January 2018), 33 pp. http://www.agforward.eu/index.php/en/agroforestry-for-arable-farmers-guidelines.html (accessed 17/04/2018).
- Liagre F, Van Leberghe P, Balaguer F, Waldie K, Girardin N, Pagella T, Moreno G, Pantera A, Kanzler M, Hermansen J, Burgess PJ (2018) Deliverable 9.30 (9.6) Agroforestry folder for farmers and advisors. AGFORWARD project. 26 January 2018, 45 pp. http://www.agforward.eu/index.php/en/best-practices-leaflets.html (accessed 17/04/2018).
- Moreno G, Amaral Paulo J, Aviron S, Berg S, Burgess PJ, Cáceres Y, Catalán M, Chinery F, Crous-Duran J, Eriksson E, Faias S, Firmino P, Franca A, Giannitsopoulos M, Guéhenneuc T, Hartel T, Hernández-Esteban A, Lind T, Menguy C, Mirck J, Oliveira TS, Palma JHN, Palomo G, Papadopoulos A, Pérez-Casenave C, Pershagen E, Poblaciones MJ, Pulido F, Re GA, Sanna F, Rodrígo S, Santamaría O, Thenail C, Tsonkova P, Valinger E, Varga A, Viaud V (2018) Agroforestry of high nature and cultural value: Guidelines for farmers. Deliverable 2.6 for the EU FP7 Research Project: AGFORWARD 613520. (7 January 2018), 37 pp. http://www.agforward.eu/index.php/en/agroforestry-of-high-nature-and-cultural-value-guidelines-forfarmers.html (accessed 17/04/2018).
- Pantera A, Burgess PJ, Mosquera-Losada MR, Rosati A, Moreno G, McAdam J, Mantzanas K, Corroyer N, Van Lerberghe P, Ferreiro-Domínguez N, López ML, Santiago Freijanes JJ, Rigueiro-Rodriguez A, Fernández-Lorenzo JL, González-Hernández P, Fraga-Gontán P, Martínez-Cabaleiro M, Chinery F, Eriksson G, Pershagen E, Perez-Casenave C, Giannitsopoulos M, Colin J, Balaguer F (2018) Agroforestry for High Value Tree Systems: guidelines for farmers. Deliverable 3.9 (3.3) for EU FP7 Research Project: AGFORWARD 613520. (17 January 2018), 30 pp. http://www.agforward.eu/index.php/en/agroforestry-for-high-value-tree-systems-guidelines-for-farmers.html (accessed 17/04/2018).

Agroforestry innovation leaflets QR code

Agroforestry best practice leaflets QR code



