



Agroforestry: Benefits, costs and options for political support in Rhineland-Palatinate, Germany

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Background

According to the German Insurance Association (GDV¹), the **centennial flood event** in Germany and its neighbouring countries in 2021 has so far left a total of more than 8 billion euros in damage (€2 billion of this in the Ahr Valley alone). This means that the devastation caused within one single day exceeds the damage caused by the floods in the area under the influence of the Elbe and Danube rivers in 2002.

Agroforestry as a solution & current framework conditions

If one assumes – generously calculated – an investment requirement for agroforestry (AF) systems of €8,000 per hectare (ha) of net woodland area (or €800 per ha if only 10% agroforestry on and arable field), then 1-10 million hectares of agroforestry systems (depending on planting density) could have been financed with the damage amount of this single day alone. With around 16 million hectares of agricultural land in Germany, that would mean more or less comprehensive agroforestry in Germany, depending on the proportion of trees and shrubs. Under this premise, the restructuring of the landscape not only improves flood protection, but also improves numerous other landscape functions. The promotion of agroforestry is therefore an economically long-term highly sensible approach.

The Common Agricultural Policy in the EU

In the following, suggestions are formulated that relate to practical land management and are not covered by the existing legislation. Practical references are made that relate to real agroforestry systems and newly developed farming concepts as multi-use concepts or multi-profit strategies:

1. Implementation of the 'EG WRRL' in the riparian strips with agroforestry ('WERTvoll')
2. Cultivation of different agroforestry cultures on one area, e.g. fodder hedges, standard tree traditional orchards, energy wood and high valuable timber wood ('MUNTER', 'EvA')
3. Installation of agroforestry cultures on narrow parcels of land, e.g. in valleys in the upland mountain ranges of Germany 'Mittelgebirge' ('MUNTER')

¹ <https://www.gdv.de/de/medien/aktuell/nordrhein-westfalen-und-rheinland-pfalz-mit-hoechsten-unwetter-schaeden-84702>

Legal basis and suggestion to change

Bundesrecht GAPDZV 24. January 2022 BGB (national state law of Germany)

The concept of an agroforestry culture (type) in the draft bill (01.10.2021) § 4 Agricultural area and Annexes 1 and 5:

3 § 4,2 GAPDZV: An agroforestry system on arable land, in a permanent crop or on permanent grassland exists if the area with the primary aim of raw material extraction or food production according to a positive assessment by the competent state authority or by an institution recognised by the state, is assessed as valid woody plants (that are not listed in Annex 1) Specifically: 1. In at least two strips covering no more than 35 percent of the respective agricultural area, or 2. Scattered over the area in a number of at least 50 and at most 200 such woody plants/ha.

Practical problems: With a distance of 20 m (metre) and two strips, the plot width must be at least 69 m. References: some valleys are too narrow, mixed cultivation systems are excluded, only one strip on the water body also on both water body edge strips (different parcels/plots) are not an agroforestry system but rather coppice in short-rotation coppice. Proposal: Abolition of the minimum distances between the strips, approval of a pure percentage coverage of up to 50% of the respective agricultural area, no limitation on the number of woody plants, minimum distance to the upper edge of the embankment of a water body 1m.

Annex 1 The following woody plants are prohibited in agroforestry systems: Scientific name *Latin* (German name): *Acer negundo* (Eschen-Ahorn), *Buddleja davidii* (Schmetterlingsstrauch), *Fraxinus pennsylvanica* (Rot-Esche), *Prunus serotina* (Späte Traubenkirsche), *Rhus hirta* (Essigbaum), *Rosa rugosa* (Kartoffel-Rose), *Symphoricarpos albus* (Gewöhnliche Schneebeere).

CAP strategy plan, CCI 2023DE06AFSP001, page 296 ff., there is a subsidy of €60/ha for wooded area.

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3. In § 20.1.3 GAP Direct Payments Act

3.1. If an agroforestry management method is retained on arable land or permanent grassland, the area of the wooded strips on an eligible area of arable land or permanent grassland that meets the requirements under numbers 3.2. and 3.3 can receive subsidies.

3.2. The wooded strips must meet the following requirements:

3.2.1. The proportion of wooded areas in eligible arable land or permanent grassland is between 2 and 35 percent.

Suggestion: up to 50% (e.g. modern extensive forests for animal welfare (shading)).

3.2.2. The strips of trees must be covered with trees as far as possible.

Suggestion: Cultivated areas such as stock-pile areas for agricultural wood can be uncovered (10 - 40 m).

3.2.3. The minimum number of strips of wood is two. (Intervention SMEKUL and advice from WERTvoll was unsuccessful, however a revision is planned in the federal state of Saxony)

Suggestion: The minimum number of wood strips is one. Various agroforestry cultures can be combined in the area: then up to 50% of the area is planted with trees and shrubs.

3.2.4. The width of the individual strips of wood is between 3 and 15 meters.

Suggestion: reduce to 1 to 20 m (fodder hedges, EG-WFD)

3.2.5. The greatest distance between two strips of wood and between a strip of wood and the edge of the area is 100 meters. Suggestion: delete

3.2.6. The smallest distance between two strips of wood and between a strip of wood and the edge of the area is 20 meters. Proposal: Abolition of the minimum distances between the strips

3.3. Irrespective of nature conservation regulations, timber harvesting measures in the application year are only permitted in the months of January, February and December. **Proposal: no change**

Important for watercourses according to the GAP strategy plan: **If a strip of woodland is planted alongside or near a watercourse, the distance to the edge of the area specified there may be less (intervention SMEKUL & advice WERTvoll)**

Promising policy schemes solutions for Rhineland-Palatinate

1. State level (national and federal state):

- Agroforestry support as 2nd pillar environmental scheme
- Agroforestry support within agricultural investment subsidies (income diversification)
- Financial support for planning & concepts (for farmers and/or municipalities) – including additional funding from the federal state (not the national Germany level)
- Integration of agroforestry as a measure in the 'Aktion blau plus' programme
- Uptake of agroforestry as a possible compensation measure within the state compensation regulations

2. Political framework conditions / regulations:

- Extension of the regulations for the recognition of agroforestry in the context of the area application at federal and national state level

3. Municipal level:

- prioritised acquisition of wood chips from agroforestry for local district heating system



For more information about 'Agroforestry: Benefits, costs and options for political support in Rhineland-Palatinate' and the AGROMIX project, please contact

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AGROMIX brings together farmers, researchers and policymakers to explore agroecological solutions for more resilient land use in Europe, developing tools to implement these practices.

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