

APPENDIX IX: AGRICULTURAL MEASURES IN RELATION TO POINTS 11.5 A) AND B), AND POINT 11.8

Investments and interventions serving the **Environmental Objectives referred to in points 11.5 a) and b) of this Notice:**

- Carbon sequestration and greenhouse gas emission reduction (Category 1)
 - ❖ arable land:
 - establishment of grassland (using a grass seed mixture comprising at least three native grass species and other grassland species) on 5 percent of the holding's arable land
 - following the harvest of summer- and autumn-harvested crops, where the subsequent crop is not an autumn-sown crop, soil cover shall be maintained by means of cover crops or by retaining the stubble in good agricultural condition until the commencement of preparatory operations for the following year's spring crop, but at least until 28 February.
 - cultivation of soil-improving crops (temporary grassland, leguminous forage crops or a mixture thereof) on 20 percent of the holding's arable land
 - mulch-based stubble management – retaining the stubble residues of the harvested preceding crop to ensure at least 35 percent ground cover, while carrying out appropriate stubble management
 - application of reduced tillage or no-till cultivation (minimum tillage or no-till/direct drilling) on at least 50 percent of the holding's arable land (50 percent in the case of minimum tillage and 20 percent in the case of no-till cultivation)
 - establishment of an agroforestry system: planting tree crops in strips on arable land¹
 - ❖ grassland:
 - At least 10 percent but no more than 15 percent of the area shall be left unmown, with the location of the unmown area varying between successive mowing operations.
 - Application of rotational grazing.
 - Tree planting on pasture: 100 trees per hectare (comprising native species).
- Soil protection and reduction of soil erosion (Category 2)
 - ❖ arable land:
 - Subdivision of large fields into smaller units by strip cropping parallel to contour lines, with strip lengths ranging from a minimum of 35 m to a maximum of 120 m.
 - Establishment of erosion control hedgerows or tree belts composed of native species, or brushwood fascines or sediment retention barriers, along watercourses or at locations where rill or gully erosion occurs.
 - For fields directly adjoining the banks of watercourses, canals or standing waters, the establishment and maintenance, along the entire length of the field adjoining the shoreline, of a grass buffer strip at least 12 metres in width (established using native species) or of tree planting, directly adjacent to the shoreline, on which no plant protection products or mineral or organic fertilisers shall be applied.

¹ Its purpose is to cultivate multiple crops simultaneously, taking advantage of the beneficial interactions between them. Woody crops are established in a single-row configuration, with row spacing determined by the working width of the cultivation equipment. The area shall contain at least 150 but no more than 250 trees per hectare.

- Following the harvest of summer- and autumn-harvested crops, where the subsequent crop is not an autumn-sown crop, soil cover shall be maintained by means of cover crops or by retaining the stubble in good agricultural condition until the commencement of preparatory operations for the following year's spring crop, but at least until 28 February.
- Establishment of erosion control vegetation strips (where the area is designated as erosion-prone in the Land Parcel Identification System (MePAR), the strips shall be established along the contour lines):
 - Along field margins (where surface runoff is concentrated), with a minimum width of 9 m
 - within fields, along contour lines or at erosion-prone locations (with a minimum width of 9 m), for example at locations where rill or gully erosion occurs
- ❖ grassland:
 - At least 10 percent but no more than 15 percent of the area shall be left unmown, with the location of the unmown area varying between successive mowing operations.
 - Any mechanical operations on water-saturated soil shall be prohibited.
 - Establishment of hedgerows or shelterbelts using native species along field margins.
- Increasing soil organic matter content (Category 3)
 - ❖ arable land:
 - Application of reduced tillage or no-till cultivation (minimum tillage or no-till/direct drilling) on at least 50 percent of the holding's arable land (50 percent in the case of minimum tillage and 20 percent in the case of no-till cultivation).
 - Mulch-based stubble management – retaining the stubble residues of the harvested preceding crop to ensure at least 35 percent ground cover, while carrying out appropriate stubble management.
 - Following the harvest of summer- and autumn-harvested crops, where the subsequent crop is not an autumn-sown crop, soil cover shall be maintained by means of cover crops or by retaining the stubble in good agricultural condition until the commencement of preparatory operations for the following year's spring crop, but at least until 28 February.
 - Application of manure at least once within a five-year period in compliance with FVM Decree No 59/2008 (IV.29.) of the Ministry of Agriculture and Rural Development, or application of manure, pelleted manure, compost or compost tea (as defined in FVM Decree No 36/2006 of the Ministry of Agriculture and Rural Development), or application of microbiological products that stimulate soil biological activity (including preparations containing free-living nitrogen-fixing bacteria (*Azotobacter*, *Azospirillum* and *Rhizobium* species), preparations containing rhizosphere bacteria, and stubble decomposition preparations).
 - Maintaining, within the cropping pattern, at least 15 percent forage legumes and at least 5 percent green fallow each year, and/or maintaining, within the cropping pattern, at least 20 percent forage legumes and at least 20 percent green fallow.
 - ❖ grassland:
 - At least 10 percent but no more than 15 percent of the area shall be left unmown, with the location of the unmown area varying between successive mowing operations.

- For each field, an unmown area with a minimum width of 6 metres shall be established.
- Tree planting on pasture: 100 trees per hectare (comprising native species).
- Establishment of hedgerows or shelterbelts using native species along field margins.
- Improvement of the quantitative and qualitative status of water bodies, with particular emphasis on water retention (Category 4)
 - ❖ arable land:
 - Establishment or development of water management infrastructure serving landscape-scale water retention in low-lying areas suitable for water retention, by ensuring the accumulation and retention of water for the longest possible period and by creating temporary or permanent open water bodies.
 - For fields directly adjoining the banks of watercourses, canals or standing waters, the establishment and maintenance, along the entire length of the field adjoining the shoreline, of a grass buffer strip at least 12 metres in width (established using native species) or of tree planting, directly adjacent to the shoreline, on which no plant protection products or mineral or organic fertilisers shall be applied.
 - Retention of excess water occurring in low-lying areas (i.e. by preventing its drainage) and the rewetting of such areas.
 - Agronomic practices that improve the soil's water infiltration and water retention capacity:
 - subsoiling to an intermediate depth shall be carried out twice during the first five years of the commitment period
 - following the harvest of summer- and autumn-harvested crops, where the subsequent crop is not an autumn-sown crop, soil cover shall be maintained by means of cover crops or by retaining the stubble in good agricultural condition until the commencement of preparatory operations for the following year's spring crop, but at least until 28 February.
 - mulch-based stubble management – retaining the stubble residues of the harvested preceding crop to ensure at least 35 percent ground cover, while carrying out appropriate stubble management
 - application of reduced tillage or no-till cultivation (minimum tillage or no-till/direct drilling) on at least 50 percent of the holding's arable land (50 percent in the case of minimum tillage and 20 percent in the case of no-till cultivation)
 - ❖ grassland:
 - Establishment of temporary wetlands through the retention of excess water occurring in the area and the rewetting of such areas.
 - Tree planting on pasture: 100 trees per hectare (comprising native species).
 - Establishment of hedgerows or shelterbelts using native species along field margins.
- Protection and enhancement of biodiversity and ecosystems (Category 5)
 - ❖ arable land:
 - Increasing crop diversity within the cropping pattern by cultivating insect-pollinated arable crops on at least 20 percent of the arable land (e.g. common vetch (winter or spring varieties), buckwheat, phacelia, crimson clover, mustard,

oil radish, fennel, leguminous crops, etc.; see Annexes 18 and 19 to Call for Proposals VP4-10.1.1-21 for further details).

- Sowing native perennial wildflower seed mixtures, provided that the sowing is carried out on a contiguous area of at least 0.5 hectares and the area is maintained for a minimum of three years through a combination of overseeding and mowing.
- Establishment and maintenance, throughout the commitment period, of pesticide-free field margins serving as small game habitats or pollinator strips, composed of at least three native or flowering herbaceous species, on at least 25 percent of the arable land, with a minimum width of 6 metres and a minimum length of 50 metres. Installation of bird nest boxes and T-shaped perching poles in these areas in accordance with the applicable requirements.
- A total area corresponding to 10 percent of the arable land, achieved through a combination of the following measures:
 - Landscape features protected under GAEC 8 requirements
 - A shelterbelt composed of native tree species, consisting of at least three rows of trees and one row of shrubs
 - Field margins established as pollinator strips or wildlife forage strips (minimum width of 9 metres and a contiguous area of at least 0.5 hectares)
 - Establishment of grass strips or shrub strips (minimum width of 9 metres and a contiguous area of at least 0.5 hectares)
 - for fields directly adjoining the banks of watercourses, canals or standing waters, the establishment and maintenance, along the entire length of the field adjoining the shoreline, of a grass buffer strip at least 12 metres in width (established using native species) or of tree planting, directly adjacent to the shoreline, on which no plant protection products or mineral or organic fertilisers shall be applied.;
 - Creation of a wetland recorded in the Land Parcel Identification System (MePAR) and/or maintenance of the favourable ecological condition of the habitat
 - Fallow land – during the fallow period, soil cover shall be maintained by establishing green fallow or by retaining stubble residues
 - ecological catch crop established without the use of plant protection products

❖ grassland:

- Timing and diversification of grassland mowing (through rotational mowing of sections of the grassland, leaving part of the area unmown on an alternating basis), adapted to the function of the grassland as a pollinator habitat.
- At least 10 percent but no more than 15 percent of the area shall be left unmown, with the location of the unmown area varying between successive mowing operations.
- For each field, an unmown area with a minimum width of 6 metres shall be established.
- Application of rotational grazing.

Establishment of hedgerows or shelterbelts composed of native species along field margins:

- Ideally, it should be located along permanent landscape features (e.g. roads, ditches, canals or gullies) and oriented perpendicular to the prevailing wind direction

(https://www.met.hu/en/eghajlat/magyarorszag_eghajlata/altalanos_eghajlati_jellemzes/szel/)

- With a minimum width of 15 m and a maximum width of 20 m;
- Composed of native tree and/or shrub species appropriate to the site type
 - Tree species capable of vigorous root suckering shall not be planted in the outer rows.
 - Host plants of agricultural crop pests shall not be planted
- Cross-section:
 - for a seven-row shelterbelt, row spacing of 1.5 m.
 - the three central rows shall consist of the main tree species,
 - flanked by one row of lower-growing secondary tree species on each side,
 - and one row of shrubs at each outer edge.
 - For a five-row shelterbelt (only the prevailing windward side shall include one row of secondary tree species and one row of shrubs).
 - Main tree species: spacing of at least 2 to 4 m (depending on whether the species are slow- or fast-growing).
 - Secondary tree species: spacing of 1 m.
 - Shrubs: spacing of 0.5 m.
 - One to two species shall be used for each of the main tree species, secondary tree species and shrub categories.

Tree planting on pasture: 100 trees per hectare (comprising native species)

- Placement:
 - Evenly distributed across the affected pasture in clusters (taking into account the parts of the pasture that are less favourable for grazing management).
 - On at least 5 percent of the affected pasture area.
 - Minimum area of each group: 500 m² (for pastures of at least 1 ha).
- Cross-section:
 - Within each group, 1 to 2 main tree species and 1 to 2 secondary tree species, with a shrub border along the edges.
 - Main and secondary tree species: density of 2,000 trees/ha.
 - Shrubs: planted along the border in rows/lines at 0.5 m intervals.
- Tree/shrub species:
 - They shall consist of native tree and shrub species appropriate to the site type.
 - For secondary tree species, compatibility with the main tree species and suitability for stem development shall be the primary considerations.
 - For shrub species, preference shall be given to species that provide food.

Active water replenishment investments and interventions related to point 11.8 of this Notice:

- ❖ Mandatory investments and interventions for arable land:
 - a. Active retention of excess water occurring in low-lying areas (i.e. without draining such water), and/or rewetting of these areas. (The client shall submit to the bank a declaration executed in the form of a private document with full probative value confirming the implementation of the measure.)
 - b. Establishment of a wetland recorded in the Land Parcel Identification System (MePAR) and/or maintenance of the ecological status of the habitat.
- ❖ Optional investments and interventions for arable land (at least one investment or intervention shall be selected from the list below):
 - a. Following the harvest of summer- and autumn-harvested crops, where the subsequent crop is not an autumn-sown crop, soil cover shall be maintained by means of cover crops or by retaining the stubble in good agricultural condition until the commencement of preparatory operations for the following year's spring crop, but at least until 28 February.

- b. Establishment of grassland (using a grass seed mixture comprising at least three native grass species and other grassland species) on 5 percent of the holding's arable land
- c. Application of reduced tillage or no-till cultivation (minimum tillage or no-till/direct drilling) on at least 50 percent of the holding's arable land (50 percent in the case of minimum tillage and 20 percent in the case of no-till cultivation).
- d. Subdivision of large fields into smaller units by contour strip cropping, with strips established parallel to the contour lines; the slope length of the strips shall be at least 35 m and no more than 120 m.
- e. Establishment of erosion control hedgerows or tree belts composed of native species, or brushwood fascines or sediment retention barriers, along watercourses or at locations where rill or gully erosion occurs.
- f. For fields directly adjoining the banks of watercourses, canals or standing waters, the establishment and maintenance, along the entire length of the field adjoining the shoreline, of a grass buffer strip at least 12 metres in width (established using native species) or of tree planting, directly adjacent to the shoreline, on which no plant protection products or mineral or organic fertilisers shall be applied.
- g. Establishment of vegetative strips for erosion control (where the area is identified as erosion-prone in the LPIS (MePAR), the strips shall be established along contour lines): along field margins (where runoff is concentrated), with a minimum width of 9 m.
- h. Within fields, along contour lines or at erosion-prone locations (with a minimum width of 9 m), for example at locations where rill or gully erosion occurs
- i. Establishment or development of water management infrastructure serving landscape-scale water retention in low-lying areas suitable for water retention, by ensuring the accumulation and retention of water for the longest possible period and by creating temporary or permanent open water bodies.

❖ Mandatory investments and interventions for grassland:

- a. Any mechanical operations on water-saturated soil shall be prohibited.
- b. Establishment of temporary or permanent wetlands through the active retention of excess water occurring on the area and/or the rewetting of the area. (The client shall submit to the bank a declaration executed in the form of a private document with full probative value confirming the implementation of the measure.)

❖ Optional investments and interventions for grassland:

- a. At least 10 percent but no more than 15 percent of the area shall be left unmown, with the location of the unmown area varying between successive mowing operations.