FarmBioNet

Farmer-focused biodiversity and agricultural knowledge network

Traditional Ecological Knowledge (TEK) and scientific research in biodiversity-friendly farming

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Photo credit: Ben Mehedin

Traditional Ecological Knowledge (TEK) is experience-based, place-specific knowledge passed down through generations and holds practical value for biodiversity and farming. Local farmers of the Csángó community in Ghimeș, Romania can identify up to 309 different plant species and can describe the ecological habitat requirements for these plants.

TEK strengthens landscape management and restoration through the protection of species-rich hay meadows. The biodiversity-friendly farming practices used to protect hay meadows include mosaic landscape management, no added fertiliser, and the strategic use of succession stages (cutting only some areas at a time and allowing the seeds to fall to the ground).

Using hayseed mixtures for fodder and reseeding, and Alnus incana to stabilise stream banks are two examples of closed-loop resource management developed through centuries of observation. Locals identified and recorded Salix daphnoides prior to science, a reminder that farmer knowledge can lead, not just follow research.

TEK is at risk of being lost as communities age and farming practices change.

Practical recommendations

- Value the knowledge of elders; their experience with local soils, plants and seasonal patterns is often more site-specific than any publication.
- Share what you know with younger farmers and family members; practical skills like scything, plant identification techniques and habitat understanding are best learned by doing.
- Engage with multi-actor networks (e.g. FarmBioNet) that connect farmers, researchers and conservationists to develop grounded, practical solutions.
- Explore market opportunities, e.g. traditional hay, biodiversity labels, and Agri-tourism to make knowledge-based farming economically viable.

Further Information on farmbionet.eu

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