BIODIVERSITY

Functional biodiversity and stable ecosystems services are essential to sustaining food production and managing the impact of our agro-ecosystems on wildlife habitats and the natural environment. In the EU the shift towards more specialised and high input farming pratices, such as the use of synthetic fertilisers and pesticides, has led to a dramatic decline in biodiversity including the loss and degradation of wildlife habitats[1]. In Western Europe, for example, intensive arable farming and a reduction in mixed livestock and arable farms have led to a uniform landscape poor in diverse flora and biodiversity. Internationally, more than 90% of crop varieties have disappeared from farmers' fields and 75% of the world's food is generated from only 12 plants and 5 animal species[2]. Organic farming, however, can offer solutions to many of the negative effects that agriculture places on biodiversity.

ORGANIC FARMING PROTECTS AND ENHANCES BIODIVERSITY

Higher biodiversity: Depending on altitude, organic farms host 30% more species and 50% more individuals than non-organic farms. Earthworms are more abundant on organic farms and help to maintain soil structure and high organic matter, improving aeration, crop root growth and drainage[3].

Pest control: To support successful and resilient production systems, organic farmers rely on biodiversity to maintain soil fertility and keep pests under control naturally.

More pollination: Organic farms host more honeybees due to the application of diverse crop rotations and intercropping. It is estimated that 1/3 of the human diet comes from insect-pollinated plants, and honeybees provide 80% of that pollination[4].

CAP RURAL DEVELOPMENT MEASURES FOR SUSTAINABLE BIODIVERSITY MANAGEMENT

New rural development measures, in combination with **organic farming** (Article 30), offer targeted solutions for sustainable biodiversity stewardship. Relevant measures[5] include:

Quality schemes for agricultural products and food stuffs (Article 17)

Increase organic market development by building consumer awareness and understanding of the role of organic farming in biodiversity conservation and enhancements as well as support for certification costs.

Agri-environment-climate (Article 29)

Application of advanced farmland biodiversity practices to enhance and maintain agro-biodiversity and genetic resources.

Co-operation (Article 36)

Promotion of collaborative approaches between organic farmers and other rural stakeholders to enhance the management of ecological infrastructure.

European Innovation Partnership (Articles 53, 61-63)

Support for knowledge exchange and collaboration between researchers, the organic sector and relevant stakeholders to stimulate participatory agro-ecological innovation on biodiversity.

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CZECH REPUBLIC: POLICY SUPPORT FOR ORGANIC FARMING

The Czech Republic recorded one of the highest increases in organically managed land (+163%) between 2000 and 2010 from 165,699 hectares to 435,610 hectares, with the number of organic farms increasing (+525%) from 563 to 3,517 holdings. The Czech Rural Development Programme (2007-2013) links organic farming and agri-environmental measures within its organic farming support mechanisms. Organic farming is also prioritised under production and processing investments, young farmers, product development and rural tourism activities. Organic farmers are awarded bonus points as part of a point system selection process. The Czech Organic Action Plan (2011-2015) aims to increase the land area managed organically to 15% (10.5% in 2010)[6] and the share of organic food on the market to 3%, with Czech produced products representing 60% of organic food sales. The Czech Republic has also invested in a national Technology Platform for Organic Agriculture.[7]

THE NETHERLANDS: INVESTING IN ON-FARM BIODIVERSITY

The Flourishing Farm Project is a collective approach to managing nature conservation areas and taking advantage of functional biodiversity funded by the Dutch Rural Development Programme from 2011 to 2014. As part of the project the Louis Bolk Institute, organic dairy farmers and conventional farmer networks have been working with over 550 farmers to promote practices that are beneficial both for farmers and biodiversity, with in-field meetings held during the growing period to exchange information and expertise. Practices include the use of reed and grass cuttings from nature conservation areas for animal bedding and compost, and the development of over 1,000 km of wild flower strips to increase and promote natural enemies that can improve pest control. The project has also encouraged many conventional arable farmers to reduce chemical pesticide use[8].


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