



FreeWalk - Develop economic sound free walk farming systems elevating animal welfare, health and manure quality, while being appreciated by society

Aim of this project is to further develop free walk cattle farming systems, which improve animal welfare and soil structure, utilize waste products and have public support. As innovative housing systems, the compost bedded pack barn and the so called cow garden are applied with a completely free walking and lying area and are compared with cubicle barns for reference. The bedded pack barn uses organic waste materials as bedding, cultivated daily to improve the composting process. It is preferably combined with grazing during the summer season. It has the potential to elevate the welfare and longevity of animals and improve soil quality. Enthusiastic farmers' groups and NGO's are promoting the system, however, it has not yet been scientifically evaluated and questions are raised by local authorities and processors about effect on environment and product quality. The highly innovative cow garden has an artificial floor of several layers and is self-cleaning while separating manure and urine. Our approach will deliver an integrated assessment of case farms in 7 countries, using experimental and modelling methods to evaluate systems performance. Housing as part of intensive and extensive farming will be examined in a holistic context, encompassing the whole farm: bedding, artificial floor, animal welfare, health, manure, soil, C P and N-balances, and product quality. Greater insight in the composting process plays a crucial role in the success of the system. Societal appreciation of housing, farming system and products is assessed. Higher capital efficiency is studied by keeping other species and horticulture on the compost bedding during the grazing season. To integrate the results of the various research activities, a systems analysis and economic evaluation will be performed. The project consortium includes 8 leading research institutes plus stakeholders from North to South Europe, providing a wide coverage of environments and farming systems. Also one research institute from Israel and one from USA with experience in this area are involved.

This project targets the ERA-NET SUSAN call priorities "productivity, resilience and competitiveness, and improvement of on-farm practices enhancing consumer acceptability and societal appreciation associated with animal welfare, product quality and biodiversity".

Knowledge institutes and universities: University of Ljubljana, Slovenia (project leader); Wageningen University and Research; University of Kassel, Germany; Università degli Studi di Firenze, Italy; Technical University of Munich, Germany; Norwegian Institute of Bioeconomy Research; Swedish University of Agricultural Sciences; National Agricultural and Food Centre, Slovakia; Höhere Bundeslehr- und Forschungsanstalt für Landwirtschaft Raumberg-Gumpenstein, Austria; University of Kentucky, USA, Agricultural Research Organization ARO Israël

Firms: Farmer Coöperative I Tesori della Terra, Cervasca, Italy; Integraal Duurzame Vrijloopstallen (IDV-Advies Netherlands) in coöperation with Netwerk Vrijloopstallen; Cow Garden - De Weidevloer/ ID Agro Netherlands / BeTeBe GmbH Germany; De High Welfare Floor/ Consortium Jacob Noord and JOZ Netherlands