



Federal Ministry
of Food
and Agriculture

CALL „NIPS“ „Innovative Sustainable Production Systems“

AfriNUtriForest: Agroforestry reinvented: agroecological, nutrition-sensitive intensification of vegetable production under fruit trees in Western and Eastern Africa

country/countries	Senegal, Kenya, Germany
funding agency	Federal Ministry of Food and Agriculture - BMEL
project management	Federal Office for Agriculture and Food – BLE
project coordinator	Centre for Rural Development (SLE) at Humboldt-Universität zu Berlin – Dr Silke Stöber
project partner(s)	Pwani University, Kilifi, Kenya – Dr Rose Kigathi Plant Village, Eldoret, Kenya – Dr John Chelal Institut Sénégalais de Recherches Agricoles (ISRA), Dakar, Senegal – Papa Madiama Diop Eclosio, Thiès, Senegal – Dr. Fatou Diouf Diakhaté Association pour la Promotion de l’Agroforesterie et de la Foresterie (APAF), M’bour, Senegal – Fatimata Diop
project budget	1,015,108.64 €

project duration	1 April 2024 - 31 March 2027
key words	Arbo-market gardens, Agroecology, Agrobiodiversity, agroecopreneurship, farmer field schools, food and nutrition security, South-South exchange
background	<p>Agroecological intensification through agroforestry systems (i.e. species-rich combinations of trees and crops on a single unit of land) is a powerful strategy for simultaneously addressing several of the global challenges we face today. These challenges – also referred to as the trilemma of land use – include 1. climate change, 2. biodiversity loss and 3. the continuing problems of malnutrition and undernourishment, particularly in sub-Saharan Africa with its growing population. Current horticultural production systems are often dominated by monocropping of fruits and vegetables, high demand for manual labour and extensive use of costly external inputs such as mineral fertilisers and pesticides, which can have negative health and environmental impacts.</p>
objective	The project aims to develop, test and promote innovative sustainable agroforestry systems (arbo-market gardens) for fruit and vegetable production using participatory and transdisciplinary approaches in Senegal and Kenya.
short description	<p>Arbo-market gardens will produce healthy and nutritious fruits and vegetables in an agro-ecological and socially acceptable way to diversify the diets of local populations, transform horticulture into a resilient food system and improve the livelihoods of local communities. Agro-ecological intensification in arbo-market gardens in a “reinvented way” particularly seeks solutions that are low-cost and environment-friendly, enhance agro-biodiversity and offer labour-saving technologies. It also promotes farm management and agro-entrepreneurship models that are attractive to rural youth.</p> <p>In five work packages (WP) the project addresses the monitoring of sustainability challenges along selected value chains (WP1); performs scientist-led on-farm research of innovative agroecological practices (WP2) and farmer-led research through farmer field schools (WP3) in diversified arbo-market gardens with solar-powered and digital technologies to increase productivity while reducing manual labour, production costs and use of agrochemicals. Co-learning and training on agroecological practices and innovations and South-South exchange will be disseminated through WP4, while the project coordination and cooperation is performed in WP5.</p>