



# Novel Ethnobotanical Intercropping (NEI)

## Description

The Novel Ethnobotanical Intercropping (NEI) technology in the DIVAGRI project is essentially a multiple cropping practice that involves growing two or more crops in the same field. Small-scale farmers in several African countries traditionally used this cropping practice with indigenous (or native) plants, although not always properly managed. One of the primary challenges for rural farmers is to increase their output per unit area soil, in a sustainable manner.

## Benefits of Intercropping

- Nitrogen fixing properties of legumes promotes soil fertility
- Biomass for fodder or fuel is increased
- Reduces weed infestation

## Challenges

- not suited to mechanized farming
- mechanized monocrop produces more

## Country Example: Maize and pigeonpea intercropping in Ghana

### How to do it?

- Plant pigeonpea six months earlier in rows, 5.6 m apart before introducing maize in those alleys
- Provide a 1m × 5.6m intra-row and inter-row spacing, respectively for pigeonpea as picture above (2 plants per hill).
- Maize should be planted in the alley of pigeonpea at 0.4m × 0.75 m (2 plants per hill) during the major and minor cropping seasons.



*Pigeonpea intercropped with maize at vegetative and harvesting stages at CSIR-Crops Research Institute, Ghana.*

## Knowledge Sharing Centres

Below are the contact persons for country specific questions. Please refer to them or the Coordinator from Hochschule Wismar, for details about the technologies that have been piloted or project research, training, and dissemination activities that are being planned in your region or country. The project runs until May 2025, with Knowledge Sharing Centres established to continue the work beyond that date. More details available on the website <https://www.divagri.org>

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This fact sheet serves as a general overview of the above bio-based technology (BBT). It is one of seven BBT factsheets. It describes one prototype of this technology that was developed prior to 2023. Adaptations of it have been made for the various country and local contexts. Please contact the country Knowledge Sharing Centre for more details. The EU-funded DIVAGRI project (2021-2025), 'Revenue diversification pathways in Africa through bio-based and circular agricultural innovations' seeks to provide African subsistence and smallholder farmers with tools to sustainably improve farm productivity, profitability and resilience through improved management of farming resources, output diversification and creation of high-value circular bioproducts. For more, visit [divagri.org](https://www.divagri.org)



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