

Double-row strip cropping: This system reduces the plant spacing of maize rows to open up space for legumes to grow. Maize is usually intercropped with a legume (i.e., groundnuts/soya beans/cowpeas/beans). Maize is planted into riplines opened in double rows (50cm inter-row x 25cm in-row) and a gap of 130cm is left in-between the maize double rows where legumes will be planted [groundnut (35cm inter-row x 30cm in-row); soya beans (35cm inter-row x 5cm in-row)]

Four-row strip cropping: Similar to double row strip cropping above, four rows of maize alternate with four rows of a legume. However, the inter-row spacing of maize is reduced from the usual 90 cm to 45 cm. This narrowing and reduction in size increases growing space for four rows of legumes. Maize is planted into lines spaced at 45 cm interrow with 4 row strips of maize alternating with another 4 rows strip of soya beans/groundnuts also spaced at 45 cm between rows.







## INNOVATION TYPOLOGY



THIS INNOVATION IS CHARACTERIZED AS

### **Technological Innovation**

Innovations of technical/material nature, including varieties/breeds; crop and livestock management practices; machines; processing technologies; big data and information systems.



THE NATURE OF THIS INNOVATION IS

#### **Incremental Innovation**

Innovations that already exist and undergo constant, steady progress and improvement.



# THIS INNOVATION IS EXPECTED TO CONTRIBUTE TO THE FOLLOWING IMPACTS

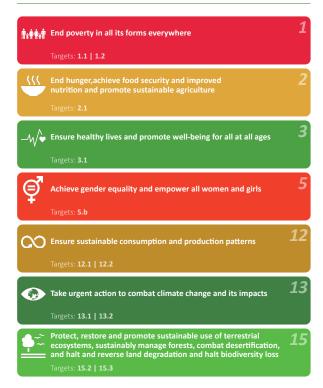


### CGIAR IMPACT AREAS AND COLLECTIVE GLOBAL TARGETS



Learn more: https://www.cgiar.org/how-we-work/strategy

### SDGs and SDG Targets



Learn more: https://sdgs.un.org/goals



# **CGIAR INITIATIVES, PARTNERS AND GEOSCOPE**

CGIAR LEAD & CONTRIBUTING INITIATIVE

Ukama Ustawi: Diversification for resilient agribusiness ecosystems in East and Southern Africa (ESA)

CGIAR CONTRIBUTING INITIATIVE(S)

Excellence in Agronomy for Sustainable Intensification and Climate Change Adaptation (EiA)

Sustainable Intensification of Mixed Farming Systems (SI-MFS)

THIS INNOVATION IS DEVELOPED,
TESTED AND/OR SCALED FOR/IN THE FOLLOWING COUNTRIES



# Type of partners / Partnerships

National Government

Local Government
Other Public Sector
International NGO
Regional NGO
Public-Private Partnership
Academic, Training and Research



# **CURRENT INNOVATION READINESS**

PROVEN INNOVATION

The innovation is validated for its ability to achieve a specific impac under uncontrolled conditions

#### JNCONTROLLED TESTING

The innovation is being tested for it: ability to achieve a specific impact under uncontrolled conditions

**PROTOTYPE** 

6

4

3

2

The innovation is validated for its ability to achieve a specific impact under semi-controlled conditions

**SEMI-CONTROLLED TESTING** 

The innovation is being tested for its ability to achieve a specific impact under semi-controlled conditions

**MODEL/EARLY PROTOTYPE** 

The innovation is validated for its ability to achieve a specific impact under fully-controlled conditions

**CONTROLLED TESTING** 

The innovation is being tested for its ability to achieve a specific impact under fully-controlled conditions

PROOF OF CONCEPT

The innovation's key concepts have been validated for their ability to achieve a specific impact

FORMULATION

The innovation's key concepts are being formulated or designed

**BASIC RESEARCH** 

The innovation's basic principles are being researched for their ability

The innovation is at idea stage

#### **INNOVATION READINESS JUSTIFICATION**

Maize-legume Intercropping is already being practiced by many smallholders in southern Africa and has been the focus of a large body of research. There is sufficient evidence that intercropping adds value and can be scaled widely.

**EVIDENCE SUPPORTING THE INNOVATION READINESS LEVEL** 

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# **ACKNOWLEDGEMENTS**

We would like to thank all Funders who support this innovation through their contributions to the **CGIAR Trust Fund** (https://www.cgiar.org/funders/).



# **MORE INFORMATION**

WEBSITES AND DOCUMENTATION

- https://www.cgiar.org/research/publication/sustainableintensification-practices-for-smallholder-farmers-in-zambiaa-farmers-manual/
- <a href="https://repository.cimmyt.org/xmlui/handle/10883/21741">https://repository.cimmyt.org/xmlui/handle/10883/21741</a>

CONTACT PERSON

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PLEASE REFER TO THIS INNOVATION PROFILE AS

Thierfelder C., 2022. Strip Inter cropping: Double row and Four-row system. Innovation Packages and Scaling Readiness (IPSR) Innovation Profile. CGIAR, October 2022. https://hdl.handle.net/10568/125516