# **ISSCA**

# Scalable Technology and Innovations



#### Name of Solution:

Transplanted Pigeonpea along with Climate-Resilient Technology for Sustainable Pigeonpea Production

# **Submitter: (ICRISAT)**

#### **Solution Overview**

What is it, and what problem does it solve? Brief 2–3 sentence description.

The seedling transplanting method is emerging as a climate-resilient technology (CRT) and has substantial potential to increase pigeonpea productivity. The transplanting method of pigeonpea enables farmers to grow the crop in protrays in advance and help in the timely sowing of pigeonpea by utilizing the available resources, especially catching the benefit of first rainwater.

# **Key Features & Benefits:**

Main components and why it is useful? Bullet points summarizing methods, tools, and value added.

The promising medium-duration cultivars allow smallholder farmers to plant kharif pigeonpea and enable them to take the second crop in the rabi season. Efficient landform management practices, such as planting on ridges & furrows and broad bed furrows, will be crucial CRT for realizing pigeonpea potential yield.

#### Where It Works and Where It Can Work

Existing and potential target regions, agroecologies, or farming systems. Include examples if available.

- The transplanted pigeonpea technology is suitable particularly in the regions affected due to erratic rainfall pattern and inappropriate agronomic management practices.
- The transplanted pigeonpea technology would be effective in harnessing the potentiality of rainfed pigeonpea at landscape level in Karnataka, Telangana, Maharashtra, Odisha, Chhattisgarh, Jharkhand and Bihar, where pigeonpea is primarily grown as rainfed crop.
- Along with landform management viz., broad bed furrows and raised bed, the transplanted pigeonpea technology could also be practiced in the regions with varying annual rainfall

## **Evidence & Impact**

What results has it shown? Stats, pilot outcomes, or testimonials.

- The transplanted pigeonpea technology improved the productivity by 20-30% and resource use efficiency up to 30% in the States like Karnataka, Telangana and Odisha.
- In high rainfall receiving states like Odisha, the transplanted pigeonpea along with landform management resulted in 50-60% increase in productivity.

## Scalability & Adoption Support

Why it can be scaled and what's needed to adopt it? Low-cost, adaptable, partner-ready, etc.

- The transplanted pigeonpea technology could be scaled out in the pigeonpea growing states by designing exclusive schemes/programs for its adoption.
- Capacity building cum awareness creation is very much needed to understand this innovative technology and its advantages in climate change scenarios.
- The policy support for incentivization of transplanted pigeonpea cultivation is important.

#### **Partners & Contact Info**

Who's involved and how to connect? List of key contact and partners + email / phone.

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