

Evidences

Study #441

Contributing Projects:

- P25 - Developing, adapting and targeting portfolios of CSA practices for sustainable intensification of smallholder and vulnerable farming systems in South Asia

Part I: Public communications

Type: OICR: Outcome Impact Case Report

Status: Completed

Year: 2018

Title: Outcome case study of no-burning management solutions for rice crop residues

Short outcome/impact statement:

Using the CCAFS & WHEAT science evidence, Govt of India launched a new scheme to eliminate residue burning in India. The outcome case was reported in 2017 report and also CGIAR system level report as a case study. However, the adoption of happy seeder (no-till) wheat without burning rice residue has been increased significantly covering 0.8 million ha in north-west India

Outcome story for communications use:

The story has already been communicated to CCASF and CGIAR

Links to any communications materials relating to this outcome:

Part II: CGIAR system level reporting

Link to Common Results Reporting Indicator of Policies : Yes

Policies contribution:

- 2 - Informed investments of USD 170 million in India for scaling up the Happy Seeder technology (<https://tinyurl.com/2ge7xn4e>)

Stage of maturity of change reported: Stage 3

Links to the Strategic Results Framework:

Sub-IDOs:

- Enhanced capacity to deal with climatic risks and extremes (Mitigation and adaptation achieved)

Is this OICR linked to some SRF 2022/2030 target?: Yes

SRF 2022/2030 targets:

- Reduce agriculturally related greenhouse gas emissions compared to business-as-usual scenario 2022
- Increase in water and nutrient (inorganic, biological) use efficiency in agro-ecosystems, including through recycling and reuse

Description of activity / study: <Not Defined>

Geographic scope:

- Multi-national

Country(ies):

- India

Comments: <Not Defined>

Key Contributors:

Contributing CRPs/Platforms:

- CCAFS - Climate Change, Agriculture and Food Security
- Wheat - Wheat

Contributing Flagships:

- FP2: Climate-Smart Technologies and Practices

Contributing Regional programs:

- SAs: South Asia

Contributing external partners: <Not Defined>

CGIAR innovation(s) or findings that have resulted in this outcome or impact:

The science based evidence generated by CCAFS on happy seeder and SMS technology led to development of the Policy brief. The policy brief helped Govt of India to make investment decisions to address the residue burning issue

Innovations:

- 16 - Policy augmented scaling model for a fully validated CSAP-the happy seeder technology to curb air pollution and build resilience. (<https://tinyurl.com/2lkmrx8c>)

Elaboration of Outcome/Impact Statement:

The happy seeder technology has been adopted over 0.8 million hectare (wheat) during winter 2018-19

References cited:

<https://indianexpress.com/article/cities/chandigarh/punjab-agriculture-secretary-direct-sowing-in-17-per-cent-of-wheat-area-5503514/>

Quantification: <Not Defined>

Gender, Youth, Capacity Development and Climate Change:

Gender relevance: 2 - Principal

Main achievements with specific **Gender** relevance: Air pollution due to residue burning has negative health impacts. But it affects more to women and children. Adoption of no-burning technologies (Happy seeder) will therefore have impact on gender

Youth relevance: 2 - Principal

Main achievements with specific **Youth** relevance: The service window for machinery (Happy seeder and SMS) provides income and employment opportunities for rural youth.

CapDev relevance: 0 - Not Targeted

Climate Change relevance: 1 - Significant

Describe main achievements with specific **Climate Change** relevance: Crop residue burning not only contributes to air pollution but also to efficiency on external inputs. Conservation agriculture using happy seeder technology contributes to increased productivity, reduce input use, help adapting to climatic risks and mitigation of GHGs. and hence its significantly related to climate change

Other cross-cutting dimensions: Yes

Other cross-cutting dimensions description: Gender and youth for business and employment opportunities through service windows

Outcome Impact Case Report link: [Study #441](#)

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