Evidences

Study #2710

Contributing Projects:

- P1584 - IRRI Contribution to RICE Flagship Project 1
- P1581 - IRRI contribution to RICE Flagship Project 3

Part I: Public communications

Type: OICR: Outcome Impact Case Report

Status: On-going

Year: 2019

Title: Implementation of satellite-based rice monitoring system in Philippines and the states of Andhra Pradesh and Tamil Nadu of India (updated evidences)

Short outcome/impact statement:
Use of crop monitoring systems based on a combination of satellite remote sensing, geographic information systems, crop growth simulation modeling, and on-the-ground information to provide governments up-to-date information on 'the state of the rice crop' (acreage, yield and production forecast, storm damage) . The use of such systems to support crop insurance programs is being tested in the states of Andhra Pradesh and Tamil Nadu, India.

Outcome story for communications use:
The Philippine Rice Information System (PRISM, https://prism.philrice.gov.ph/), a satellite-based rice monitoring system that provides seasonal estimates of rice area and yield, and assessment of crop loss in the event of flood or drought, concluded its R&D phase in 2018 and was completely handed over to the Philippine Department of Agriculture through the Philippine Rice Research Institute (PhilRice) who now fully operates PRISM. This is an example of collaboration between IRRI and government agencies towards the realization of the shared goal of creating and translating sound science into useful, practical innovations. PRISM is based on the projects RIICE (www.riice.org) and RSSP (another Philippine DA-funded project). This initiative is serving as a model for other countries in Asia, specifically Cambodia and Vietnam, where discussions on institutionalization of the technology are on-going. Using PRISM and RIICE technologies, there is increased awareness of NARES partners on potential technology contribution to support 'Pradhan Mantri Fasal Bima Yojana' crop insurance program in Andhra Pradesh, India. Increased capacity of NARES partners in operating satellite based rice monitoring system for decision making and crop insurance program as demonstrated in Tamil Nadu India and Philippines (advanced and mature progress), Vietnam, and Thailand (medium progress), and Andhra Pradesh and Odisha, India (early progress).

Official document from Andhra Pradesh, India, State Level Coordination Committee on Crop Insurance (SLCCI) in 2018 had mentioned IRRI Satellite based rice monitoring system to be used to support the 'Pradhan Mantri Fasal Bima Yojana' (PMFBY) crop insurance program for paddy. SLCCI is a legal entity in a given state in India responsible for elaborating and implementing crop insurance schemes in that state. IRRI's key partner in Tamil Nadu, Tamil Nadu Agricultural University, registered as member of the State Level Coordination Committee on Crop Insurance in Tamil Nadu. This allow for continued contribution of satellite-based rice monitoring technology in the 'Pradhan Mantri Fasal Bima Yojana' crop insurance program in the state.

Links to any communications materials relating to this outcome:

- https://tinyurl.com/ycaey9rn
- https://prism.philrice.gov.ph/
- https://tinyurl.com/yxc3es2e
- https://tinyurl.com/y8prytbr
- http://news.irri.org/2017/02/satellite-based-monitoring-system-to.html
- https://tinyurl.com/y5zj856c
- http://icrier.org/pdf/Working_Paper_352.pdf

Part II: CGIAR system level reporting

Link to Common Results Reporting Indicator of Policies : Yes

Policies contribution:

- 211 - Contribution to the Rice Industry Roadmap Plan 2030 in the Philippines

Stage of maturity of change reported: Stage 2

Links to the Strategic Results Framework:
Sub-IDOs:

- Improved access to financial and other services
- Conducive agricultural policy environment

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

SRF 2022/2030 targets:

- # of more people, of which 50% are women, meeting minimum dietary energy requirements
- # of people, of which 50% are women, assisted to exit poverty

Comment: No comments

Geographic scope:

- Multi-national

Country(ies):

- India
- Philippines

Comments: Adoption is best documented in the Philippines

Key Contributors:

Contributing CRPs/Platforms:

- Rice - Rice

Contributing Flagships:

- F1: Accelerating impact and equity

Contributing Regional programs: <Not Defined>

Contributing external partners:

- DA - Department of Agriculture (Philippines)

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

Satellite-based monitoring system

Innovations:

- 648 - Satellite-based rice monitoring system in India and the Philippines

Elaboration of Outcome/Impact Statement:

The Philippine Rice Information System (PRISM, https://prism.philrice.gov.ph/), a satellite-based rice monitoring system that provides seasonal estimates of rice area and yield, and assessment of crop loss in the event of flood or drought, concluded its R&D phase in 2018 and was completely handed over to the Philippine Department of Agriculture through the Philippine Rice Research Institute (PhilRice) who now fully operates PRISM. This is an example of collaboration between IRRI and government agencies towards the realization of the shared goal of creating and translating sound science into useful, practical innovations. PRISM is based on the projects RIICE (www.riice.org) and RSSP (another Philippine DA-funded project). This initiative is serving as a model for other countries in Asia, specifically Cambodia and Vietnam, where discussions on institutionalization of the technology are on-going. Using PRISM and RIICE technologies, there is increased awareness of NARES partners on potential technology contribution to support 'Pradhan Mantri Fasal Bima Yojana' crop insurance program in Andhra Pradesh, India. Increased capacity of NARES partners in operating satellite based rice monitoring system for decision making and crop insurance program as demonstrated in Tamil Nadu India and Philippines (advanced and mature progress), Vietnam, and Thailand (medium progress), and Andhra Pradesh and Odisha, India (early progress).

References cited:
https://www.fastcompany.com/40456381/how-satellite-data-is-helping-drought-stricken-indian-farmers-collect-insurance-payouts http://icrier.org/pdf/Working_Paper_352.pdf https://www.thehindu.com/news/national/tamil-nadu/most-tn-farmers-received-insurance-claims-under-centres-scheme-study/article23409354.ece

Quantification: <Not Defined>

Gender, Youth, Capacity Development and Climate Change:
Gender relevance: 0 - Not Targeted
Youth relevance: 0 - Not Targeted
CapDev relevance: 1 - Significant
Main achievements with specific **CapDev** relevance: Training of partner institutes (http://ilocos.da.gov.ph/index.php/17-featured-articles/2897-da-empowers-project-implementers-data-collectors-on-prism)
Climate Change relevance: 1 - Significant
Describe main achievements with specific **Climate Change** relevance: Crop insurance against weather-induced damage and disasters

Other cross-cutting dimensions: No

Other cross-cutting dimensions description: <Not Defined>

Outcome Impact Case Report link: Study #2710

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