Evidences

Study #4016

Contributing Projects:

• P1329 - Crop modeling to simulate the implications of climate change and technological options in WHEAT AFS

• P1223 - Delivering Genetic Gains in Wheat (DGGW)

• P1356 - 'HeDWIC' initiative to address wheat production in LDCs under global warming during the next 3 decades

Part I: Public communications

Type: Ex-ante, baseline and/or foresight study

Status: Completed

Year: 2020

Title: Review of model-based approaches for crop breeding activities under changing climate

Commissioning Study: WHEAT, RICE, MAIZE, CCAFS, Big Data Platform

Part II: CGIAR system level reporting

Links to the Strategic Results Framework:

Sub-IDOs:

• Adoption of CGIAR materials with enhanced genetic gains

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

SRF 2022/2030 targets:

• # of more farm households have adopted improved varieties, breeds or trees

Description of activity / study: Review addresses the question: 'To what extent can breeding gains be achieved under a changing climate, at a pace sufficient to usefully contribute to climate adaptation, mitigation and food security?' As CGIAR breeding programs are undergoing a major modernization process, crop modelers will need

to be part of crop improvement teams, with a common understanding of breeding pipelines and model capabilities/limitations, common data standards and protocols, to ensure they follow and deliver according to clearly defined breeding products. This will enable more rapid and better-targeted crop modeling activities, thus directly contributing to accelerated and more impactful breeding efforts.

Geographic scope:

Global

Comments: <Not Defined>

Links to MELIA publications:

<Not Defined>