



ASSESSMENT OF FAIR DATA PRINCIPLES ACROSS THE ACIAR RESEARCH PORTFOLIO

Locations Australia

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Summary

FAIR data is Findable, Accessible, Interoperable and Reusable. Recent studies have estimated a huge opportunity cost of not applying FAIR data principles and the positive impact of FAIR on potential economic annual growth. The project helped the Australian Centre for International Agricultural Research (ACIAR) to consider the barriers to using and applying data and the application of FAIR principles in its investment portfolio, and looked at opportunities to address them and ways to improve its grant-making processes. Through an extensive examination of data management and sharing within ACIAR and its investment projects, evidence was gathered on the perception, awareness and implementation of the FAIR data principles. Based on this evidence, CABI provided recommendations on how investment outcomes could benefit from improved data management and how the FAIR data principles could be implemented in ACIAR and across its investments to increase efficiencies and in-country benefits.

The problem

Recent studies have estimated a huge opportunity cost of not applying FAIR data principles. Today, there is a considerable move towards the application of FAIR data principles in agriculture. This move is being driven by many funding entities, including national governments, and is a result of realizing the value of research data and the significant potential arising from its reuse.

For ACIAR, supporting equitable access to useful data is important for both in-country and Australian project participants. There is clear a desire to improve current data management practices and data sharing activities within and between ACIAR's work.

The perspectives regarding research data's scientific, social and economic value, especially for sharing and reuse, can be considered significant drivers for beginning a journey towards FAIR data compliance within ACIAR and its investments.

In order to underpin this perspective and improve investment data management and facilitate data sharing, there is a need for guidance and suitable frameworks, training and other capacity building approaches.

The introduction of FAIR data principles into ACIAR projects will help facilitate access to project data for in-country researchers, resulting in data being shared equitably within, and across, project teams.

What we are doing

The project aimed to provide an evidence-based assessment of FAIR implementation across ACIAR investments including common, regional, technical, cultural and institutional barriers, such as lack of policies in place, and the necessary budget and resources, training, and documented capacity development needs. It would also set out the vision and recommendations for next steps on how to overcome barriers within the scope of ACIAR grant-making practices.

CABI engaged with ACIAR Research Program Managers, country networks and its partners to understand and document data management and sharing challenges across a range of geographies and work portfolios. CABI conducted an extensive review using a range of techniques such as desk research, stakeholder interviews, focus group discussions, ecosystem mapping and systems thinking to identify the application and awareness of FAIR data principles within ACIAR and its projects.

Evidence was gathered from three rich-data projects to better understand how these investments, consciously or unconsciously, follow good data management and data sharing principles; what barriers to data utility exist; and to assess the culture of data sharing within the investments. Based on the findings, early recommendations and potential next steps to strengthen data management and data sharing practices have been provided.

Results so far

The observations made, evidence gathered and multiple drivers from within ACIAR and at national and international levels have led to a comprehensive set of recommendations by CABI which aim to provide a pathway forward for ACIAR to start a journey leading to a FAIR data-compliant approach to its research investments with a stepped approach that is achievable for each investment.

The report identifies the wide-ranging, multisectoral and rapid movement towards FAIR data principles at a global level within the research community and shows how this movement links to key aspects of ACIAR's 10-Year Vision. 'Brown bag sessions' (lunchtime information sessions) were conducted with the ACIAR Research Program Managers to showcase the key findings and propose a way forward for the data management practices for the future investments planned

across different work portfolios.

As an extension, CABI is now supporting and facilitating the development of a FAIR data strategy and implementation plan for a soil and land management programme whereby CABI will recommend ways to successfully manage data strategies.

Donors

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