**Delivery FAIR Impact in agricultural and Food Security**

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**Abstract**:

In recent years research and development organizations aligned with donors and own frameworks for accountability. Such frameworks embedded indicators to ensure measurement of impacts. However the availability of impact information on different repositories was not informed by FAIR principles. Learning from available information is becoming more and more difficult and knowledge of existing data is in the hands of few individuals in each Organization. Machine learning and artificial intelligence initiatives are trying to achieve such gaps and limitations. The International Center for Agricultural Research in the Dry Areas (ICARDA) worked in the past years to interoperate internally available resources under the umbrella of the BIGDATA and ICT effort defined in its strategy 2017-2026. As main pillar the process involved the analysis of existing metadata elements both as direct and indirect sources. The identified schemas and lists allowed the team to design internal interoperable protocols to share information among different departments and units. However the process to ensure findability and accessibility of historical information is difficult to achieve when resources are committed to deliver new products instead of curating and add value to existing data. Nevertheless ICARDA is committed to ensure that historical information in its mandated regions and agro-ecological zones is re-used to ensure better modeling, projecting and targeting of interventions related to agriculture and food security. One immediate solution is to rely on Geo-informatics science and MEL system which may able to gather and process historical data to inform decision makers on where investments should be pursued. Dynamic sets of variables to move beyond basic productivity indicators include those in the areas of socio-economics and environment. Alignment with the SDG process and defined indicators will ensure the delivery of FAIR impacts.