

Catalyzing a strong collaboration network for the Moroccan Genebank



Summary

The Moroccan genebank joined the Biodiversity for Opportunities, Livelihoods and Development (BOLD) project in 2022. At the time, Ali Sahri, manager of the genebank, rated the institution's condition as six out of ten. He explained that the genebank had solid infrastructure and data systems provided by the government, as well as a strong interest in expanding collaboration, advanced training, and access to new ideas in plant conservation, but it lacked the visibility, structured mechanisms and dedicated resources needed to translate this into sustained partnerships with regional and international peers. The BOLD project catalyzed the Moroccan genebank's collaboration with local government and regional partners and opened international dialogues that led to meaningful improvements and high-quality genebank operations. By the end of Phase 1 of BOLD in November 2025, Ali rated the genebank's status as eight out of ten, adding, "We are on the right track to a better future with BOLD. I think I will rate it ten out of ten by the end of Phase 3," highlighting the sustainability and long-term positive outcomes when a genebank builds a strong collaboration network to support its operations.

Background

The Moroccan genebank was established in 2003 by the Institut National de la Recherche Agronomique (INRA) and the local government to promote research and conservation of plant genetic resources. It holds over 76,400 agriculturally important plant samples representing more than 617 species in Morocco.

The government invested in core conservation infrastructure, including cold storage facilities, sample processing rooms, in-house management guidelines, and a functional data management system. While the foundational elements for daily operations were in place, the Moroccan genebank's potential to grow and expand its collaboration network remained limited.

The Solutions

BOLD catalyzed the Moroccan genebank's collaboration on multiple levels: local institutional coordination with government, regional collaboration with ICARDA and Mediterranean partners and global knowledge exchange with leading international genebanks. Each level built on existing strengths while targeting specific gaps in visibility, structure, and access to expertise that had previously limited the genebank's collaboration network.

Local: Government Engagement

The Moroccan government has been involved since the genebank's inception, providing equipment, personnel, and financial support in recognition of the importance of conserving national crop diversity for food security and climate resilience. BOLD built on this strong foundation by improving the quality and transparency of genebank work through clearer standard operating procedures and an upgraded database that could better support data sharing. These efforts made it possible for data to be globally accessible on Genesys (<https://www.genesys-pgr.org/wIEWS/MAR088>). Making Morocco's collection visible in this way helped position the genebank as a more active partner in the global conservation community. The changes in operational reliability, aligned closely with government priorities to reinforce government commitment, and encouraged sustained support from the government and potential integration into the new National Center for Genetic Resources (CNRG).

Regional: ICARDA and Mediterranean Collaboration

Since the Moroccan genebank's establishment, it has collaborated with ICARDA through the Moroccan Collaborative Grant Program (MCGP), a partnership supporting capacity building, database sharing, joint collection missions, and the exchange of genetic materials. Additional regional initiatives, such as the Partnership for Research and Innovation in the Mediterranean Area (PRIMA), have further contributed to joint knowledge development for germplasm characterization, evaluation, and conservation. BOLD reinforced these existing regional partnerships by strengthening operational links with ICARDA, which now manages project resources, logistics, and implementation support for the Moroccan genebank. BOLD transformed existing collaborations into a structured, mutually reinforcing regional network. This enabled more effective capacity building, joint missions, and collaborative problem-solving.

Global: International exchange and knowledge transfer

BOLD's in-person capacity building activities significantly enhanced communication and knowledge transfer between the Moroccan genebank and international partners: including exchange visits to genebanks such as the Leibniz Institute of Plant Genetics and Crop Plant Research (IPK) in Germany, the World Vegetable Center in Taiwan, and Future Seeds at the International Center for Tropical Agriculture (CIAT) in Colombia.

The BOLD Project

BOLD (Biodiversity for Opportunities, Livelihoods and Development) is a 10-year initiative to strengthen global food and nutrition security through the conservation and use of crop diversity. Funded by the Government of Norway since 2021, BOLD supports national genebanks in Africa, Asia and Latin America to better conserve, manage and share their collections with farmers, breeders and others for resilient, productive food systems.



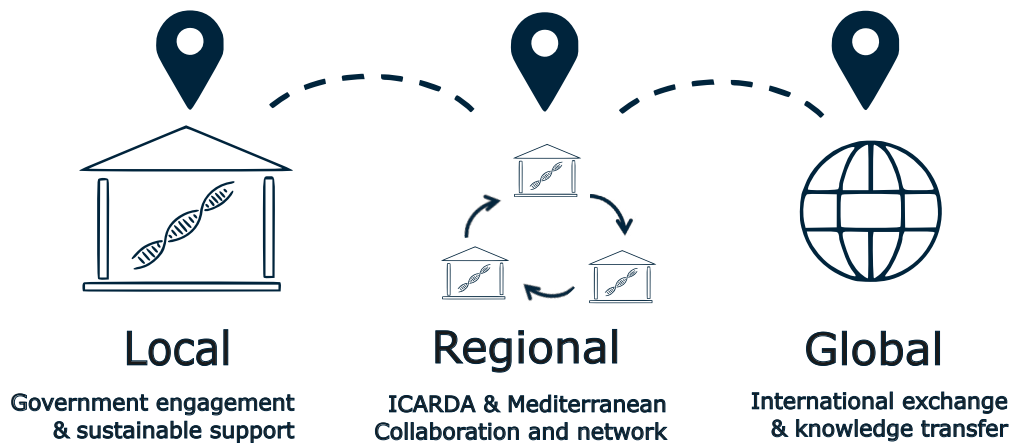


Figure 1. Collaboration framework of the Moroccan genebank on a local, regional, and global scale. Figure credit: Yue Yu

These visits gave Moroccan staff the opportunity to observe genebank models first-hand, encouraged new collaborations, inspired operational improvements, and fostered continued international dialogue and resource sharing beyond BOLD organized activities. Ali highlighted the visit to the World Vegetable Center in Taiwan as particularly impactful. The exchange provided practical insights on regeneration planning and seed conservation techniques, which informed new ideas to refine vegetable accession protocols within the Moroccan genebank. Across all visits, staff returned with concrete ideas for operational improvements and with new professional relationships that extend beyond BOLD activities, opening pathways for future germplasm exchange, joint evaluation and collection, and continued mutual learning.

In summary, these multi-levelled outcomes demonstrated BOLD's role in catalyzing a strong collaboration network for the Moroccan genebank. Operational standardization and data visibility increased its credibility and usefulness to national decision-makers and international users. Regionally, the project opened new channels to increase collaboration connection with ICARDA and regional genebanks, enabling regional resources sharing and collaborative problem-solving. Internationally, BOLD connected the Moroccan genebank with global partners, fostering knowledge sharing and global support network. Together, these BOLD efforts have created a more cohesive collaboration network around the Moroccan genebank and strengthened the foundation for the long-term conservation and use of Morocco's plant genetic resources.

“What I want to say is that the Moroccan genebank has always made the objective listed by our institution. But with the BOLD project, it enabled us to achieve more ambitious goals, and this is very important” – Ali Sahri, manager of the Moroccan genebank



Additional details can be found at <https://bold.croptrust.org/>

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