

Increasing Access to Genebank Information

The international Treaty on Plant Genetic Resources for Food and Agriculture (ITPGRFA) calls for the implementation of a Global Information System to facilitate the exchange of information in particular on material conserved in genebanks.

In response, Bioversity International in close collaboration with its partners is developing a global accession level information system ('ALIS'), aimed at playing the role of an information hub to the estimated 1,320 genebanks worldwide.

The ALIS project would have not been possible without the critical contribution of the CGIAR Centres and the SGRP, EURISCO, USDA-GRIN and other partners. Particular thank is given to the Global Crop Diversity Trust for its financial support.



Today there are approximately 1300 genebanks worldwide, holding some 6 million accessions in *ex situ* collections. Many of these plant genetic resources for food and agriculture are insufficiently and/or poorly documented for their optimal conservation, access and use.

Summary information about *ex situ* collections

Region/Institution	No of genebanks	No of accessions	Available through GBIF Portal
Africa	124	353,523	<10,000
Latin America & Caribbean	227	642,405	<10,000
North America	101	762,061	400-500,000
Asia	293	1,533,979	<50,000
Europe	496	1,934,574	>1,000,000
Near East	67	327,963	<10,000
CGIAR	12	689,578	>650,000
Total	1,320	6,244,083	<2,500,000

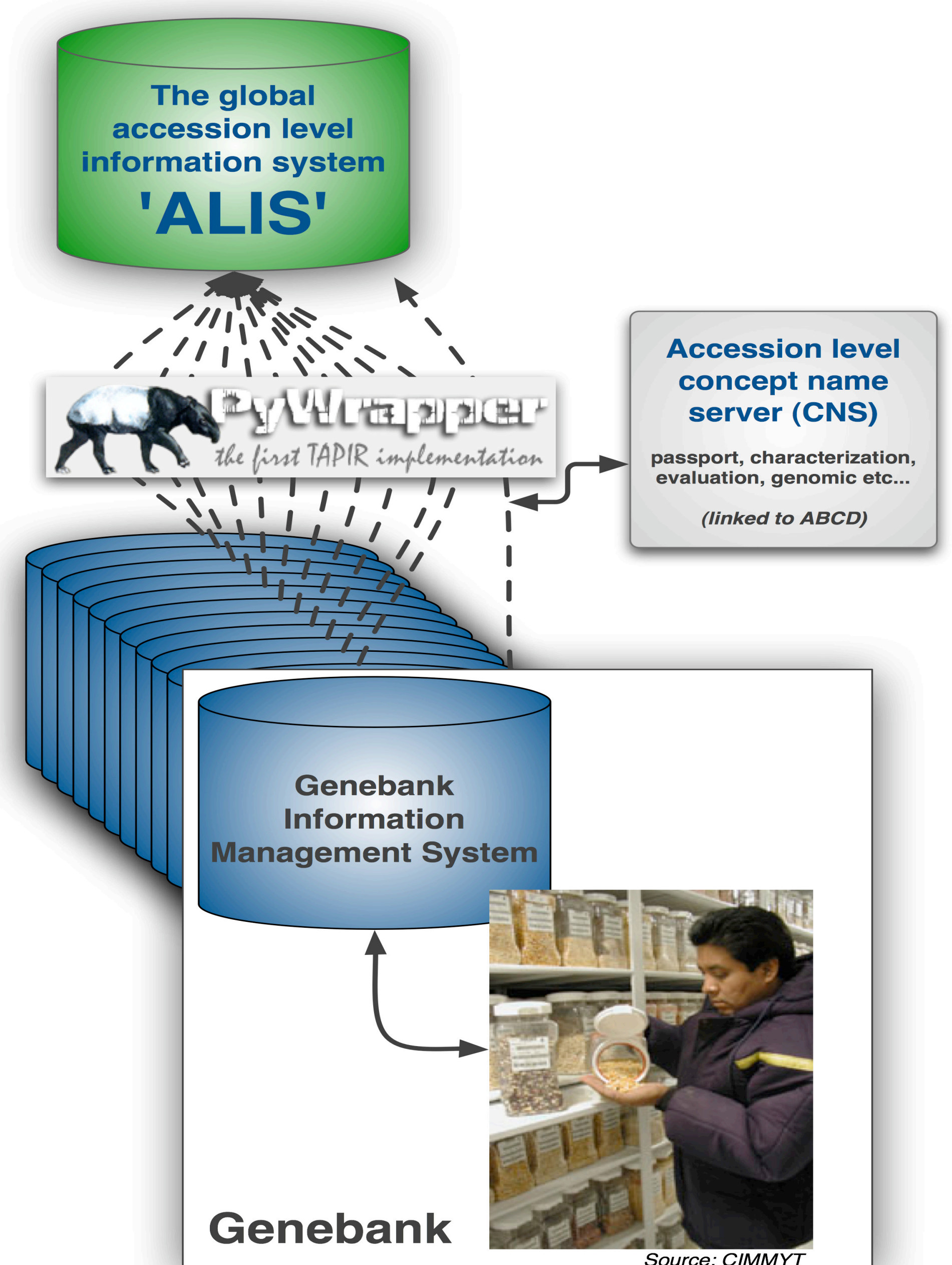
Source: FAO (1998), USDA-GRIN (2007) EURISCO (2007), SINGER (2007)

genebanks. Such a system should enable the identification, location and ordering of valuable germplasm.

Bioversity, through the CGIAR System-wide Genetic Resources Programme (SGRP), has embarked on a major effort to build a global index that will be the portal to the information on the estimated 6 million accessions conserved in genebanks worldwide.

To achieve this, 'ALIS' will build on existing successful information networks, such as the CGIAR System-wide Information Network for Genetic Resources (SINGER) and the European Search catalogue (EURISCO). ALIS has adopted the TDWG Access Protocol for Information Retrieval (TAPIR) and has now initiated the deployment of the PyWrapper v3 service-based interface to genebank databases.

With the entry into force of the ITPGRFA, Contracting Parties have agreed to cooperate to develop and strengthen a global information system aimed at facilitating the exchange of information on germplasm conserved in



Flow of accession-level information from genebanks to 'ALIS'