

# Global Information on Germplasm Accessions - GIGA

**An information system that will offer facilitated access to PGR  
- in support of its conservation and sustainable use**

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# GIGA Partners

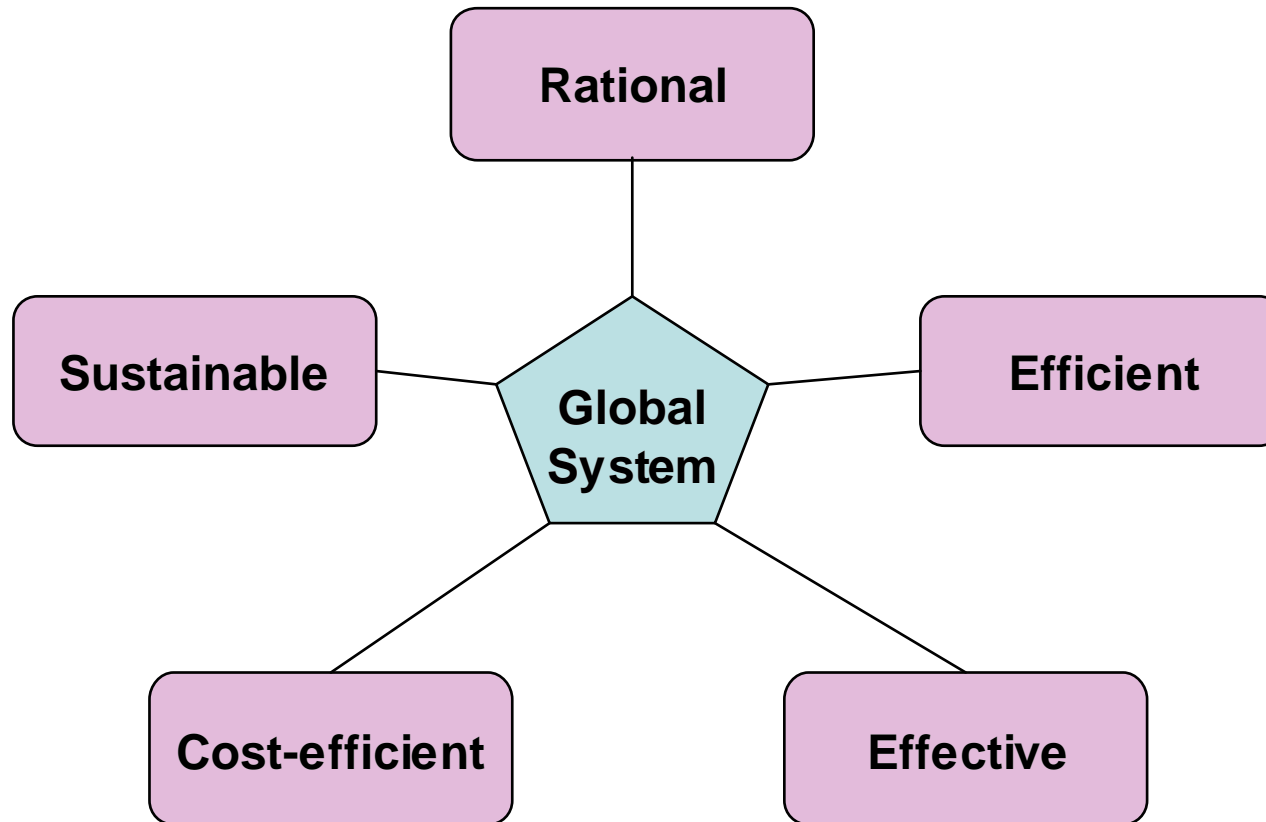
- ❑ International Treaty on PGRFA
- ❑ Global Crop Diversity Trust
- ❑ Bioversity International
- ❑ SGRP/SINGER – data network
  - ❑ GPG2 – Geo-Ref, ordering, crop regs. etc
  - ❑ GCP – Ontology etc
- ❑ ECPGR/EURISCO – data network
- ❑ USDA-ARS / GRIN – data network

# GIGA Aims

Contribute to the global system:

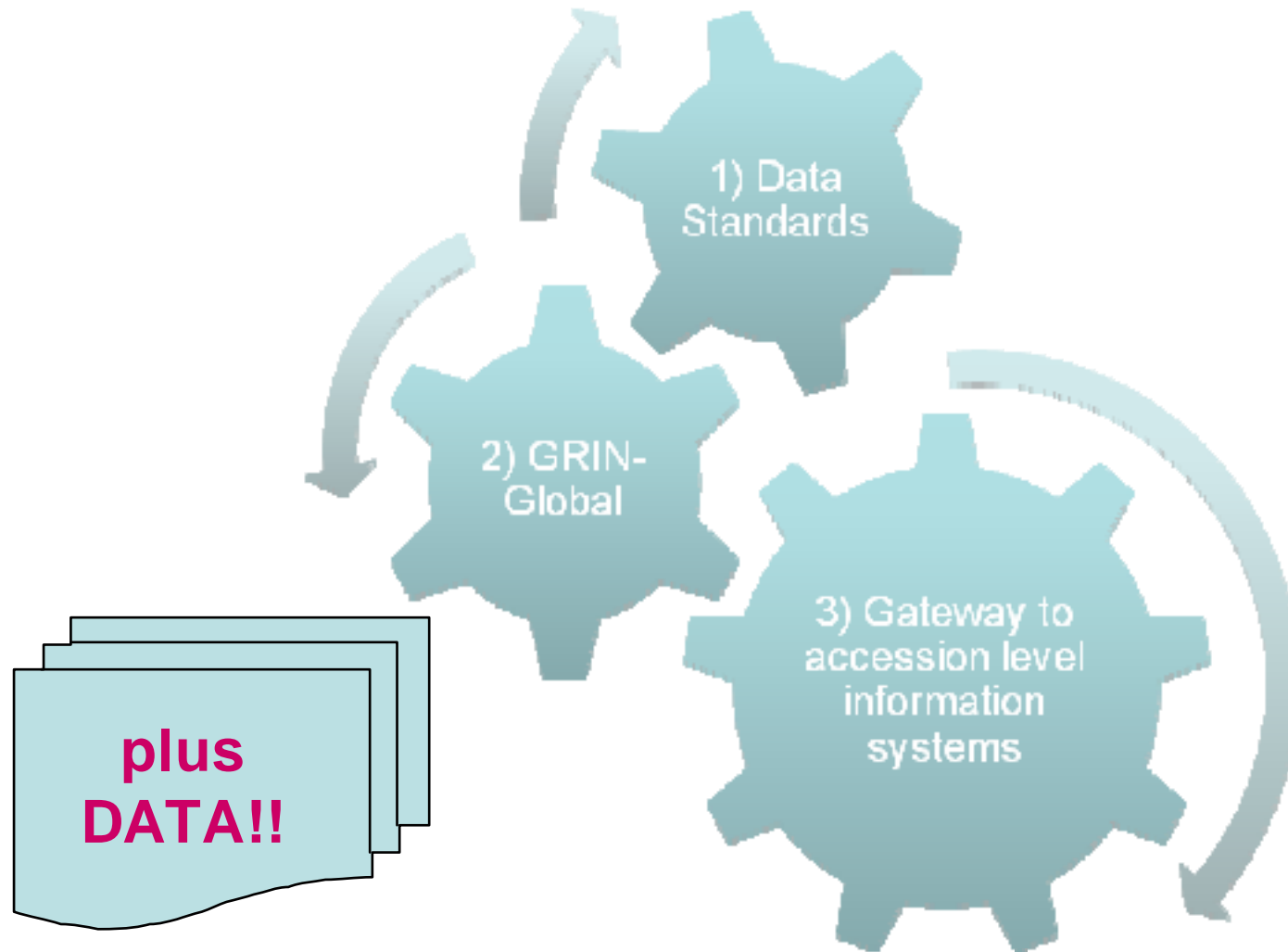
- Support the ITPGRFA, particularly the MLS, by providing:
  - Access to 2M + accessions;
  - Tools to use this information;
  - Facilities to request accessions;
  - SMTA compliance.

# GCDT Vision of a Global System



Based on a slide by Cary Fowler

# GIGA - 3 components



# Data Standards - 1

Initial set of strategic descriptors to facilitate the use of accessions:

- Passport data – essential information
- Characterization & evaluation (C & E) data to assist choice of accessions.
- Employing ‘best practice’.

# GRIN-Global

## a) features



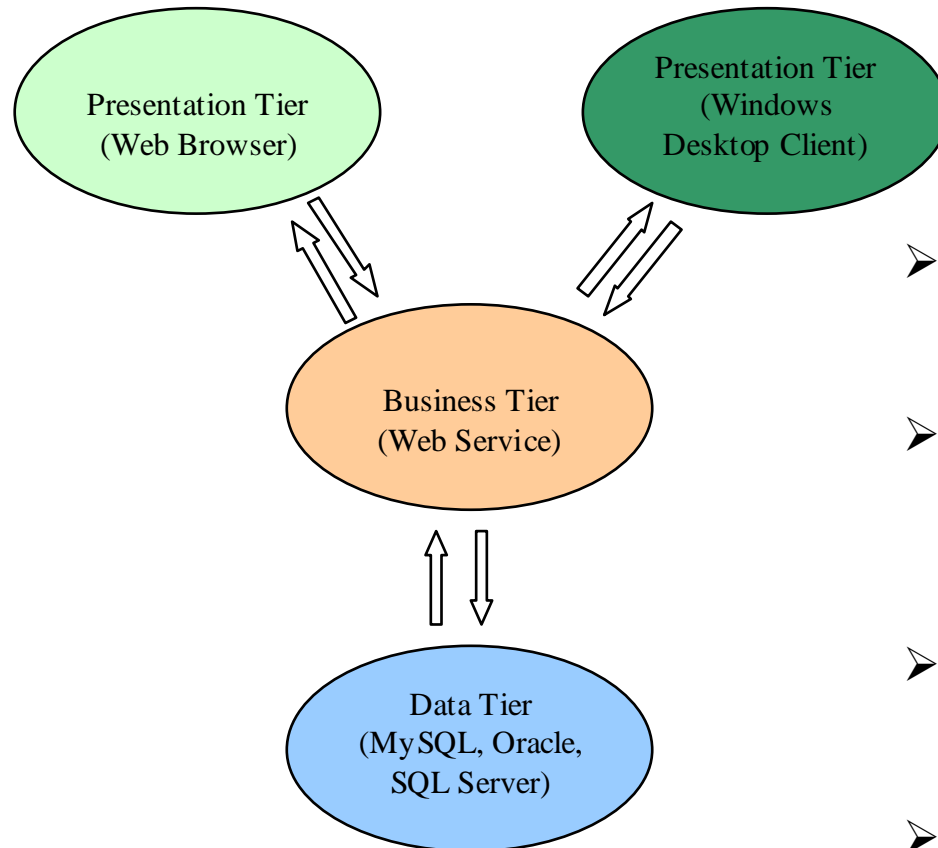
USDA-ARS, GCDT, Bioversity plus...

- Genebank management and client access to many more collections;
- Targeted to all genebanks, particularly those in developing countries;
- Freely available – together with support;
- Potential to provide access to many more accessions in the MLS.

**Important way to get quality information from new sources**

# GRIN-Global

## b) design



**All source code freely available, supports following standards:**

- Microsoft .NET Framework 3.5, supported on Windows XP, Vista, and Server 2003 or Server 2008
- SVN version control system, supported on Windows NT 2000 XP and 2003, Linux, OS X, BSD, AIX, Solaris, HP-UX.
- Visual Studio Express 2008, supported on Windows XP, Vista, and Server 2003 or Server 2008.
- **Data Tier:** MySQL, Oracle Express & Microsoft SQL Server Express.



# **GRIN-Global**

## **c) the spin!**



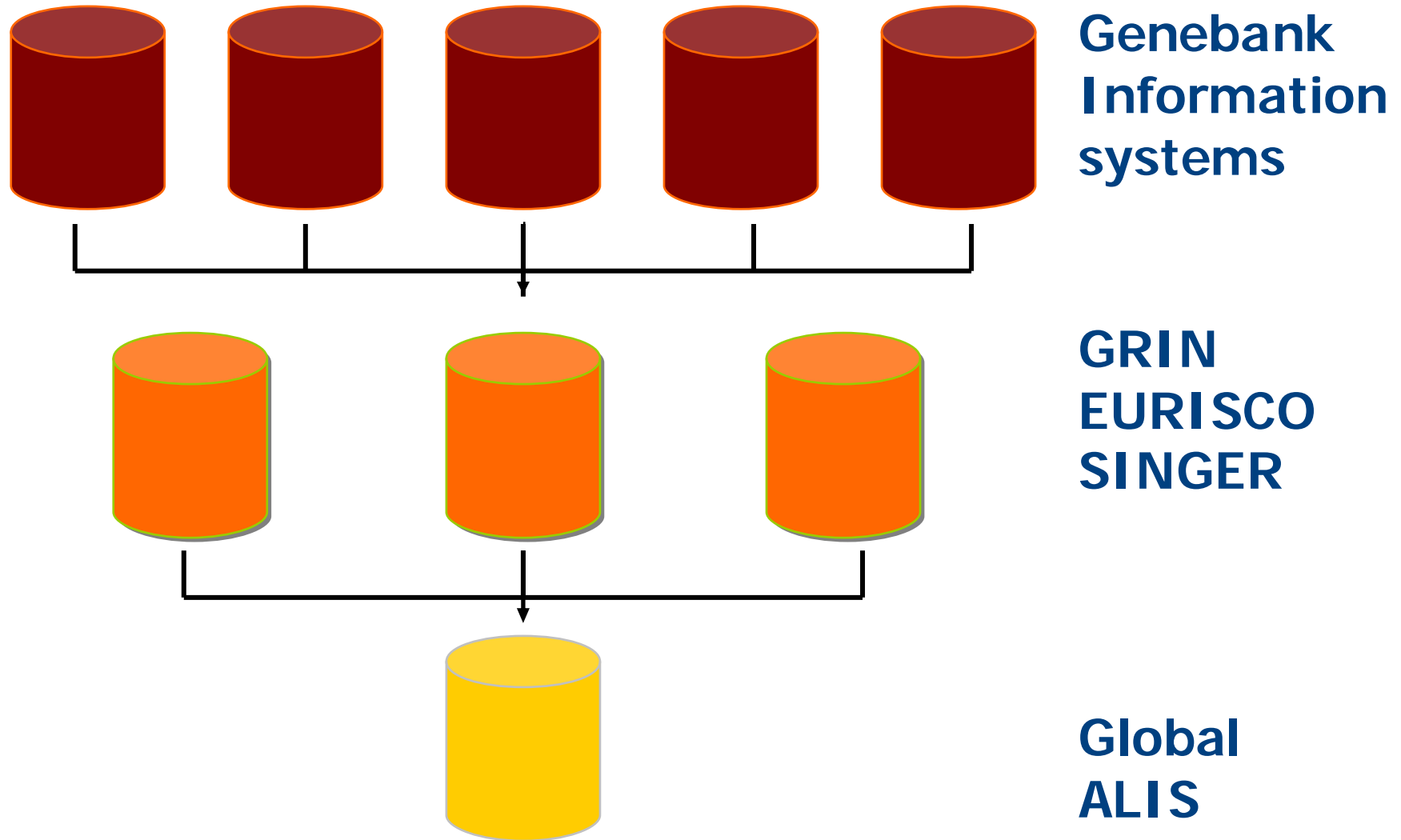
**A new, global way to gather information about accessions in genebanks AND make it available for access and benefit sharing in the multilateral system**

# **ALIS – accession level information system**


Provides:

- a single gateway to access the world's significant collections;
- appropriate information to facilitate utilization and conservation;
- functionality to request accessions from providers in compliance with the MLS and SMTA

# ALIS - Global facilitated access



## Accession level information, incl. mapping and environmental links

Collection Site/Mission					Map								
<b>Site code:</b>	AFG65:168	<b>Country:</b>	Afghanistan	<b>Province:</b>	Baghlan								
<b>Site:</b>	8 km S Pul-Khumri (Pul-i-Khumri) on flood plain; Surghab river-roadside												
<b>Longitude:</b>	68.76000	<b>Latitude:</b>	35.88000	<b>Altitude:</b>	792								
<b>Slope:</b>	Unknown	<b>Aspect:</b>	Unknown										
<b>Soil</b>													
<b>Parent rock</b>	Unknown	<b>Texture</b>	Unknown	<b>Depth</b>	0								
<b>pH</b>	Unknown	<b>Salinity</b>	Unknown										
<b>Site Notes</b>													
ON FLOOD PLAIN OF THE SURGHAB RIVER. GROWING 'WILD' IN VARIED GRASS PASTURE.													
													
X Y													
<b>Environment</b>													
	<b>Jan.</b>	<b>Feb.</b>	<b>Mar.</b>	<b>Apr.</b>	<b>May</b>	<b>Jun.</b>	<b>Jul.</b>	<b>Aug.</b>	<b>Sep.</b>	<b>Oct.</b>	<b>Nov.</b>	<b>Dec.</b>	<b>Year</b>
<b>Rainfall</b>	30.9	45.93	66.44	74.09	28.9	0.53	0	0	0	7.87	21.14	24.81	294.38
<b>Max. Temperature</b>	8.21	10.57	16.24	22.57	29.1	35.18	36.87	35.55	29.82	23.32	15.72	8.98	23.09
<b>Min. Temperature</b>	-2.04	0.69	5.74	10.44	14.32	18.38	20.7	19.11	13.77	8.68	3.02	-0.59	9.33
<b>Potential evapotranspiration</b>	19.7	32.07	64.92	98.28	157.42	202.61	216.56	184.57	131.54	82.15	36.76	19.16	1245.7
<b>Aridity index</b>	1.569	1.432	1.023	0.754	0.184	0.003	0	0	0	0.096	0.575	1.295	0.236
<b>Aridity Class</b>	Semi-arid (0.2 - 0.5)												
<b>FAO Soil Classification</b>	LITHOSOLS												
<b>UNISCO Agroclimatic Zone</b>	Semi-arid, Cool winter, Warm summer												

# **GIGA addresses ITPGRFA**

- **Article 10:** Multilateral system of access and benefit sharing;
- **Article 12:** Facilitated access to PGRFA within the MLS;
- **Article 15:** ex situ collections of CGIAR;
- **Article 16:** International PGR networks.



**We have all the pieces available ... for a global system ...  
... it makes no sense to ignore the opportunity in front of us  
together we can put them all together**

# Support acknowledged

- **SGRP/SINGER**
- **ECGPR/EURISCO**
- **ITPGRFA**
- **GCDT**
- **USDA-ARS/GRIN**
- **Biodiversity Informatics Project Team**
- **GPG2**
- **GCP**
- **CGIAR Centers**
- **NARS**

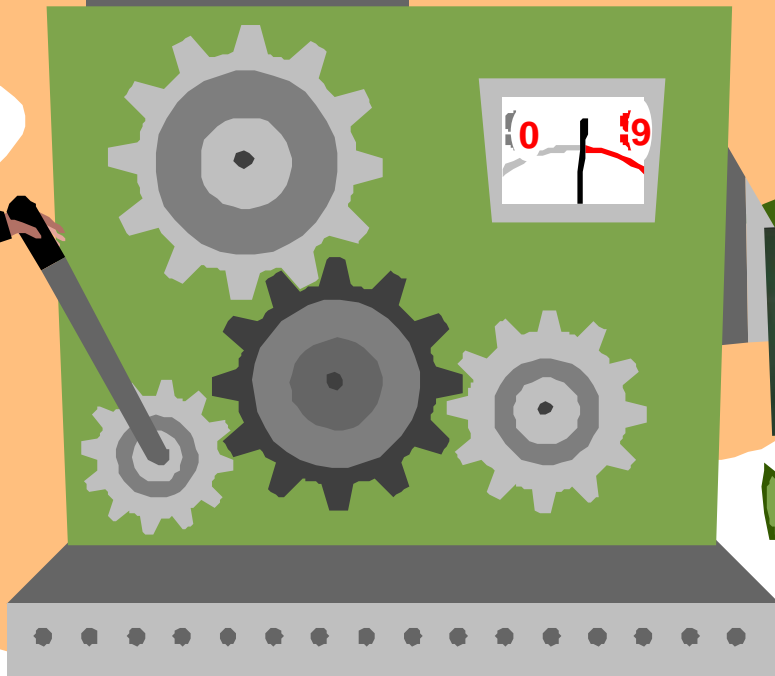




Global ALIS

2+ million accs!

CRM  
HRISCO



Good Stuff !