Recognized the importance of an efficient system for monitoring GPA implementation, in terms of planning, priority-setting and achieving the mobilization of financial resources to support national programmes.
Adopted the revised indicators and reporting format for monitoring the implementation of the *Global Plan of Action* that were presented in the document, *Indicators and reporting format for monitoring the implementation of the Global Plan of Action*.
New GPA Monitoring Approach

Indicators and Reporting Format

- Computer Application
- Implementation Process at country level
New GPA Monitoring Approach
Indicators and Reporting Format

- **Document CGRFA-10/04/Inf.5**

Presently available in:
Arabic, Armenian, Azeri, Chinese, Czech, English, French, Georgian, German, Italian, Lao, Malay, Norwegian, Russian, Spanish, Thai, Turkish and Vietnamese

English version provided to all trainees on CDrom
New GPA Monitoring Approach

Indicators and Reporting Format

83 core + 68 complementary indicators

98 questions in the Reporting Format are linked to the core indicators

48 directed to National Focal Points

50 directed to Stakeholders

+ 20 open-ended questions, not linked to any indicator, inviting general comments for each priority activity area of the *Global Plan of Action*. 
### Area 1 - Surveying and Inventorying Plant Genetic Resources for Food and Agriculture

<table>
<thead>
<tr>
<th>ID</th>
<th>Indicators</th>
<th>Questions</th>
</tr>
</thead>
<tbody>
<tr>
<td>47</td>
<td>Surveys/inventories of plant genetic resources for food and agriculture and associated indigenous knowledge carried out (core) [S]</td>
<td>1, 2, 16</td>
</tr>
<tr>
<td>48</td>
<td>Threatened inter- and intra-specific diversity relevant to food and agriculture identified (core) [S]</td>
<td>1</td>
</tr>
<tr>
<td>49</td>
<td>Assessment of training needs and availability of appropriate courses [S]</td>
<td>1, 4, 282[19]</td>
</tr>
<tr>
<td>50</td>
<td>State of technology to be applied to surveying and inventorying [S]</td>
<td>1</td>
</tr>
<tr>
<td>102</td>
<td><strong>Priority areas for in situ conservation identified (core) [R]</strong></td>
<td>282[19]</td>
</tr>
<tr>
<td>103</td>
<td>Training and capacity building in taxonomy, population biology, ethnobotany, and eco-regional or agro-ecological surveying carried out [R]</td>
<td>282[19]</td>
</tr>
<tr>
<td>104</td>
<td>Surveying/inventorying activities integrated within the national strategy and policy on PGRFA conservation and use [R]</td>
<td>11</td>
</tr>
<tr>
<td>105</td>
<td>Adoption and institutionalization of appropriate methods including documentation of indigenous knowledge for surveying and inventorying intra- and inter-specific diversity in agro-ecological systems [R]</td>
<td>1, 282[19]</td>
</tr>
<tr>
<td>106</td>
<td>Geographical information Systems (GIS) to support genetic resources surveys used [R]</td>
<td>1</td>
</tr>
<tr>
<td>216</td>
<td><strong>Priority areas for surveying and inventorying identified (core) [R]</strong></td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ID</th>
<th>Questions</th>
<th>Indicators</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Enter in the table below any PGRFA survey and inventory conducted by your organization, including references, area(s) covered and its(their) con-</td>
<td>47, 48, 49, 50, 102,</td>
</tr>
</tbody>
</table>
1 Surveying and Inventorying Plant Genetic Resources for Food and Agriculture

Surveying and inventorying of PGRFA are essential prerequisites for monitoring the implementation of various priority activities in the Global Plan of Action. Inventories are necessary not only for assessing the current status, but also for formulating future conservation strategies. Thus, PGRFA surveys and inventories should be as comprehensive as possible, including both common and rare, threatened and endangered species, and ecotypes and populations of the latter.

1.1 Enter in the table below any PGRFA survey and inventory conducted by your organization, including references, area(s) covered and its(their) conservation priority ranking, surveying method(s) used, threatened species, ecotypes/ populations identified, main cause of threat and major findings.

[1; SH]

<table>
<thead>
<tr>
<th>COLUMN DESCRIPTION</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Title of survey/inventory</strong></td>
<td>link:protab</td>
</tr>
<tr>
<td><strong>Name of area surveyed/inventoried</strong></td>
<td>link:arectab</td>
</tr>
<tr>
<td><strong>Reference</strong></td>
<td>link:reflab</td>
</tr>
<tr>
<td><strong>Area priority ranking for in-situ conservation</strong></td>
<td></td>
</tr>
<tr>
<td>• Not set/Unknown</td>
<td>• Low</td>
</tr>
<tr>
<td></td>
<td>• Low-Medium</td>
</tr>
<tr>
<td></td>
<td>• Medium</td>
</tr>
<tr>
<td></td>
<td>• Medium-High</td>
</tr>
<tr>
<td><strong>Survey details</strong></td>
<td></td>
</tr>
<tr>
<td>□ Indigenous knowledge used during the survey</td>
<td></td>
</tr>
<tr>
<td>□ Identification of threatened or endangered species relevant to PGRFA</td>
<td></td>
</tr>
<tr>
<td>□ Assessment of threat to genetic diversity in plants relevant to PGRFA</td>
<td></td>
</tr>
<tr>
<td>□ Data entered into a Geographical Information System (GIS)</td>
<td></td>
</tr>
<tr>
<td><strong>Description of surveying method(s)</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Threatened species/ecotypes/populations</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Proven causes of threat</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Presumed causes of threat</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Description of major findings</strong></td>
<td></td>
</tr>
</tbody>
</table>
1.5 Rate the adequacy of your efforts to survey and inventory PGRFA in the country. [2; NFP]

- Areas have not been prioritized for survey and inventories
- Priorities have been established but areas have not been adequately surveyed and inventoried
- Surveys and inventories are planned or ongoing for all priority areas of the country
- Surveys and inventories have taken place for all priority areas of the country

1.6 Indicate the greatest constraints to surveying and inventorying of PGRFA in the country. [16; NFP]

- It is not clear which organization is responsible to conduct surveys and inventories
- National priorities have not been established
- Insufficient financial support
- Insufficient number of staff
- Staff does not have sufficient skills
6.3 Which management practices does your organization apply to reduce genetic changes or loss of genetic integrity? [280; SH]

- Timely viability testing
- Suitable regeneration environment
- Appropriate sampling strategies
- Adequate isolation
- Adequate population size
- Proper handling of regenerated material
- Others (please specify)
For each crop breeding programme carried out by your institution, please list the taxon/crop addressed, the improvement targets in terms of trait(s) or characteristic(s), agroecological zone(s) and/or farming system(s) the improvement applies to, providing an estimate of the importance of the improvement in terms of food security, and detail germplasm source(s), the type of participatory breeding activities conducted, the number of professional staff involved, output(s) achieved so far and year of achievement. [277; SH]

<table>
<thead>
<tr>
<th>COLUMN DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name of programme/project/activity</td>
</tr>
<tr>
<td>Name of taxon</td>
</tr>
<tr>
<td>Name of crop</td>
</tr>
<tr>
<td>Trait(s)/characteristic(s) addressed</td>
</tr>
<tr>
<td>Agroecological zone(s)/Farming system(s) (the improvement applies to)</td>
</tr>
<tr>
<td>Estimated importance of the improvement in terms of food security for the specified agroecological zone/farming system</td>
</tr>
<tr>
<td>• Limited</td>
</tr>
<tr>
<td>• Medium</td>
</tr>
<tr>
<td>• High</td>
</tr>
<tr>
<td>Germplasm source(s)</td>
</tr>
<tr>
<td>□ Local genebank</td>
</tr>
<tr>
<td>□ National genebank</td>
</tr>
<tr>
<td>□ Regional/International network</td>
</tr>
<tr>
<td>□ CGIAR genebank</td>
</tr>
<tr>
<td>□ Public organization from developed country</td>
</tr>
<tr>
<td>□ Public organization from developing country</td>
</tr>
<tr>
<td>□ Private sector</td>
</tr>
<tr>
<td>Participatory breeding involved farmers in:</td>
</tr>
<tr>
<td>□ Setting breeding priorities</td>
</tr>
<tr>
<td>□ Selecting from fixed lines or finished varieties (participatory varietal selection)</td>
</tr>
<tr>
<td>□ Selecting from segregating populations</td>
</tr>
<tr>
<td>□ Making crosses and/or determining parents</td>
</tr>
<tr>
<td>Number of professional staff involved</td>
</tr>
<tr>
<td>Output produced</td>
</tr>
<tr>
<td>Year of output production</td>
</tr>
</tbody>
</table>
## Common Tables

**Organizations table** *(pre-filled with >18,000 records from WIEWS and other established NISMs)*

**Contact persons table** *(pre-filled with >20,000 records from WIEWS and other established NISMs)*

**Projects table**

**Taxon table** *(pre-filled with >75,000 records from USDA-GRIN)*

**Cultivars table**

**References table** *(covering both bibliographical ref. and laws..)*

Etc.
Tools

* Indicators and Reporting Format
* **Computer Application**
* Implementation Process at country level
New GPA Monitoring Approach
Tools developed:

- Computer-based National Info-Sharing System
  (March 2002-May 2009 – 9 major releases)

- 3 versions: NFP; SHs; All (web)

Presently available in:
  Arabic, Armenian, Azeri, Chinese, Czech, English, French, Georgian, German, Italian, Lao, Malay, Norwegian, Russian, Spanish, Thai, Turkish and Vietnamese – Indonesian and Mongolian
New GPA Monitoring Approach
Tools developed:

Computer Application
(tool based on Indicators + Reporting Format)

License free
• Multi-user
• Multi-language
• Flexible
• Applicable under low, medium, high infrastructure scenario
• Tested and debugged (1,000 users).
New GPA Monitoring Approach

Computer Application allows:

- Quality data entry
- Wide scope data coverage
- Easy data import/export
- Easy data analysis
Tools

- Indicators and Reporting Format
- Computer Application

Implementation Process at the country level
Process for the Establishment of the GPA Mechanism and the Preparation of the Country Report on the State of PGRFA
Guidelines for:

- Managing and coordinating a country-driven participatory process, such as facilitating the involvement of stakeholders
  (December 2002)

Presently available in:

English and Spanish provided on CD rom
Tools

Guidelines for:

- Establishing a National Info-Sharing Mechanism on GPA implementation, including a user’s manual for the computer application

Presently available in:

English, French, Russian, Spanish, Thai and Vietnamese. Provided to trainees on CD rom
Guidelines for:

- the Preparation of assessment on the state of PGRFA

Presently available in:

English, French, Spanish, Arabic and Chinese
NISM-GPA web front page