Country Report on the implementation of the International Treaty on Plant Genetic Resources for Food and Agriculture (ITPGRFA)

INDONESIA

13/03/2019
Introduction

1. Pursuant to Article 21 of the Treaty, the Governing Body has adopted a resolution that includes, amongst others, provisions on monitoring and reporting (Resolution 2/2011). Pursuant to this Resolution, each Contracting Party is to submit to the Compliance Committee, through the Secretary, a report on the measures it has taken to implement its obligations under the Treaty in one of the six languages of the United Nations (Section V.1).

2. The first report is to be submitted within three years from the approval of this standard format. The Governing Body approved this standard format at its Fifth Session.

3. This standard format has been developed to facilitate reporting and monitoring of the implementation of the Treaty. The use of this standard format is voluntary. A Contracting Party may use another reporting format if it so wishes.

Article 4: General Obligations

1. Are there any laws, regulations procedures or policies in place in your country that implement the Treaty?

   √ YES

   No

   If your answer is 'yes', please provide details of such laws, regulations, procedures or policies:

   - Law No. 4/2006 on Ratification of ITPGRFA
   - Ministry of Agriculture Regulation No. 15/2009 on Procedure for Drafting Material Transfer Agreement (MTA)
   - Ministry of Agriculture Regulation No. 37/2011 on Conservation and Use of Plant Genetic Resources
   - Ministry of Agriculture Regulation No. 15/2017 on Import and Export of Horticultural Seed

2. Are there any other laws, regulations, procedures or policies in place in your country that apply to plant genetic resources?

   √ YES

   No

   If your answer is 'yes', please provide details of such laws, regulations, procedures or policies:

   - Law No 5/1990 on Conservation on Biological Resources and Its Ecosystem
   - Law No 12/1992 on Plant Cultivation System
   - Law No 5/1994 on UN-Convention on Biological Diversity
   - Law No 29/ 2000 on Plant Variety Protection
   - Law No 21/2004 on Ratification of Cartagena Protocol
   - Law No 13/2010 on Horticulture
   - Law No 11/2013 on Ratification of Nagoya Protocol on Access To Genetic Resources And The Fair And Equitable Sharing of Benefits Arising From Their Utilization To The Convention on Biological Diversity
   - Law No 39/2014 on Estate Crop
3. Is there any law, regulation, procedure or policy in place in your country that needs to be adjusted/harmonized to ensure conformity with the obligations as provided in the Treaty?

☐ YES

No

If your answer is 'yes', please provide details of such adjustments and any plans to make those adjustments:

- Harmonized to bilateral mechanism on ABS for Genetic Resources: Annex I crops will be under MLS system under coordination of Ministry of Agriculture while wild species will be under Nagoya Protocol System under Ministry of Environment and Forestry;
- Harmonized with Plant Variety Protection (Law number 29 Year 2000) Centre for Plant Variety Protection and Agriculture Permits manage improve varieties and registered traditional varieties

Article 5: Conservation, Exploration, Collection, Characterisation, Evaluation and Documentation of Plant Genetic Resources for Food and Agriculture

4. Has an integrated approach to the exploration, conservation and sustainable use of plant genetic resources for food and agriculture (PGRFA) been promoted in your country?

☐ YES

No

5. Have PGRFA been surveyed and inventoried in your country?

☐ YES

No

If your answer is 'yes', please provide details of your findings, specifying species, sub-species and/or varieties, including those that are of potential use:

National Genetic Resources Consortium under the coordination of Ministry of Agriculture collected local specific crop from rural farmyard in all provinces in Indonesia. From this activity, no less than 1,000 local varieties have been newly inventoried and some of them were characterized and evaluated.

During the last two years 700 local varieties has been registered and released nationally (through PPVTPP) and recognized as the local priority commodity and benefit the local community.

National universities collect, such as Gajah Mada University, collect traditional varieties and underutilized crops.
## AIC-UGM GEN BANK COLLECTION

### Major Collection

<table>
<thead>
<tr>
<th>No</th>
<th>Family</th>
<th>Species</th>
<th>Acsession</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Curcubitaceae</td>
<td><em>Cucumis sativus</em></td>
<td>48</td>
</tr>
<tr>
<td>2</td>
<td>Fabaceae</td>
<td><em>Vigna unguiculata</em> subsp. <em>Sesquipedalis</em></td>
<td>95</td>
</tr>
<tr>
<td>3</td>
<td>Solanaceae</td>
<td><em>Solanum lycopersicum</em></td>
<td>25</td>
</tr>
<tr>
<td></td>
<td></td>
<td><em>Solanum melongena</em></td>
<td>74</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td></td>
<td><strong>242</strong></td>
</tr>
</tbody>
</table>

### Minor Collection

<table>
<thead>
<tr>
<th>No</th>
<th>Family</th>
<th>Species</th>
<th>Acsession</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Asparagaceae</td>
<td><em>Asparagus officinalis</em></td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>Apiaceae</td>
<td><em>Trachyspermum roxburghianum</em></td>
<td>2</td>
</tr>
<tr>
<td></td>
<td></td>
<td><em>Petroselinum crispum</em></td>
<td>1</td>
</tr>
<tr>
<td></td>
<td></td>
<td><em>Coriandrum sativum</em> L.</td>
<td>1</td>
</tr>
<tr>
<td>3</td>
<td>Amaranthaceae</td>
<td><em>Amaranthus tricolor</em> L.</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td></td>
<td><em>Amaranthus gangeticus</em></td>
<td>4</td>
</tr>
<tr>
<td>4</td>
<td>Asteraceae</td>
<td><em>Cosmos bipinnatus</em></td>
<td>1</td>
</tr>
<tr>
<td></td>
<td></td>
<td><em>Thitonia diversifolia</em></td>
<td>1</td>
</tr>
<tr>
<td>5</td>
<td>Brassicaceae</td>
<td><em>Brassica oleracea</em></td>
<td>1</td>
</tr>
<tr>
<td></td>
<td></td>
<td><em>Brassica rapa</em></td>
<td>3</td>
</tr>
<tr>
<td>6</td>
<td>Curcubitaceae</td>
<td><em>Cucumis melo</em> L.</td>
<td>29</td>
</tr>
<tr>
<td></td>
<td></td>
<td><em>Curcubita pepo</em></td>
<td>24</td>
</tr>
<tr>
<td></td>
<td></td>
<td><em>Luffa acutangula</em></td>
<td>10</td>
</tr>
<tr>
<td></td>
<td></td>
<td><em>Momordica charantia</em></td>
<td>7</td>
</tr>
<tr>
<td></td>
<td></td>
<td><em>Trichosanthes cucumerina</em></td>
<td>2</td>
</tr>
<tr>
<td>7</td>
<td>Fabaceae</td>
<td><em>Phaseolus vulgaris</em></td>
<td>49</td>
</tr>
<tr>
<td></td>
<td></td>
<td><em>Vigna unguiculata</em></td>
<td>65</td>
</tr>
<tr>
<td></td>
<td></td>
<td><em>Trigonella foenum-graceum</em> L.</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td></td>
<td><em>Glycine max</em> (L.) Merrit</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td></td>
<td><em>Sesbania grandiflora</em></td>
<td>1</td>
</tr>
<tr>
<td></td>
<td></td>
<td><em>Pisum sativum</em></td>
<td>11</td>
</tr>
<tr>
<td>8</td>
<td>Lamiaceae</td>
<td><em>Mentha piperita</em></td>
<td>1</td>
</tr>
<tr>
<td>9</td>
<td>Solanaceae</td>
<td><em>Capsicum chinense</em></td>
<td>1</td>
</tr>
<tr>
<td></td>
<td></td>
<td><em>Capsicum annuum</em></td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td><em>Capsicum frutescens</em></td>
<td>60</td>
</tr>
<tr>
<td>10</td>
<td>Rutaceae</td>
<td><em>Citrus hystrix</em></td>
<td>2</td>
</tr>
<tr>
<td>11</td>
<td>Poaceae</td>
<td><em>Zea mays</em></td>
<td>1</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td></td>
<td><strong>289</strong></td>
</tr>
</tbody>
</table>

If your answer is 'no', please indicate:
- Any difficulties encountered in surveying or inventorying PGRFA; Any action plans to survey and inventory PGRFA;
- The most important PGRFA that should be surveyed and inventoried:

6. Has any threat to PGRFA in your country been identified?

☑ Yes
If your answer is 'yes', please indicate:

- The species, subspecies and/or varieties subject to such threats; traditional
- Varieties The sources (causes) of these threats; new economic varieties
- Any steps taken to minimise or eliminate these threats; collecting in bank gene
  (national or farmer level)
- Any difficulties encountered in implementing such steps: supporting budget

<table>
<thead>
<tr>
<th>No</th>
<th>Family</th>
<th>Species</th>
<th>Acsession</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Asteraceae</td>
<td>Cosmos caudatus</td>
<td>40</td>
</tr>
<tr>
<td>2</td>
<td>Fabaceae</td>
<td>Psophocarpus tetragonolobus</td>
<td>135</td>
</tr>
<tr>
<td>3</td>
<td>Solanaceae</td>
<td>Mucuna pruriens</td>
<td>83</td>
</tr>
<tr>
<td></td>
<td>Lamiaceae</td>
<td>Canavalia ensiformis</td>
<td>29</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Ocimum citriodorum</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td></td>
<td>293</td>
</tr>
</tbody>
</table>

Traditional rice varieties of Daringan and Seulawah were not found in National Gene Bank Collection and in farmer field.

Indonesia has many new commercial varieties so that local varieties start not being planted, but this plant has a lot of nutrient content so it needs to be further developed. There’s any way to prevent the loss of local varieties is to store them in a genetic bank. AIC of Gajah Mada University has kept underutilized vegetables as many as 293 accessions for a 6 months period. After collection, conservation is carried out so that underutilized vegetables are not eliminated from economic varieties. One of the problems that arise in the conservation of underutilized vegetables is limited funding for non-economic vegetables.

Indonesia Institute of Sciences has routine activity to identify endangered species and reported to CITES.

7. Has the collection of PGRFA and relevant associated information on those plant genetic resources that are under threat or are of potential use been promoted in your country?

Yes

If your answer is 'yes', please provide details of the measures taken:

8. Have farmers and local communities’ efforts to manage and conserve PGRFA on-farm been promoted or supported in your country?

Yes

If your answer is 'yes', please provide details of the measures taken:

We carried out national meeting in the form of Genetic Resources Congress every two years, and through this event an award to farmer’s who deal with conservation of GR are given. However, support in other forms, especially increasing the capacity of farmers in conservation and its
sustainability are not monitored or not facilitated by the government. Despite this fact, individually some farmer’s or local communities in several region that conserve local PGRFA are recognized.

9. Has *in situ* conservation of wild crop relatives and wild plants for food production been promoted in your country?

   - Yes
   - NO

If your answer is 'yes', please indicate whether any measures have been taken to:

- Promote *in situ* conservation in protected areas;
- Support the efforts of indigenous and local communities.

If such measures have been taken, please provide details of the measures taken:

10. Are there any *ex situ* collections of PGRFA in your country?

   - YES
   - No

If your answer is 'yes', please provide information on the holder and content of such collections:

<table>
<thead>
<tr>
<th>Genetic resources</th>
<th>Number of Species</th>
<th>Number of accession</th>
<th>Collector</th>
</tr>
</thead>
<tbody>
<tr>
<td>Food Crop (cereals, legumes,</td>
<td>20</td>
<td>11,435</td>
<td>ICABIOGRAD, ILETRI, ICERI, ICRR</td>
</tr>
<tr>
<td>tubers)</td>
<td></td>
<td></td>
<td>IVEGRI, IFRI, CITROPHRES, IORI</td>
</tr>
<tr>
<td>Horticulture</td>
<td>32</td>
<td>2065</td>
<td>Research and Development Center for Animal Husbandry</td>
</tr>
<tr>
<td>Forage crop</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: Including non-Annex I crops

11. Has the development of an efficient and sustainable system of *ex situ* conservation of PGRFA been promoted in your country?

   - YES
   - No

If your answer is 'yes', please indicate the measures taken to promote *ex situ* conservation, in particular any measures to promote the development and transfer of technologies for this purpose:

An efficient and sustainable use of ex-situ collection of PGRFA in ICABIOGRAD genebank was conducted by: 1). Establishment of gene bank facilities, 2). Setting the International standart as reference for the gene bank activities.

National Gene Bank at Ministry of Agriculture and National Gene Bank at Indonesian Institute of Science was established by Indonesian Government.

12. Has the maintenance of the viability, degree of variation, and the genetic integrity of *ex situ* collections of PGRFA been monitored in your country?

   - YES
   - No
If your answer is 'yes', please provide details of the main conclusions of these monitoring activities:

National Agricultural Gene Bank under Ministry of Agriculture conducts routine monitoring for seed viability and genetic integrity. An observation of degree of variation was also conducted with morphological and molecular characterization for the purpose of assessment of genetic diversity.

13. Has your country cooperated with other Contracting Parties, through bilateral or regional channels, in the conservation, exploration, collection, characterization, evaluation or documentation of PGRFA?

- YES

If your answer is 'yes', please indicate the other Contracting Parties with whom the cooperation was undertaken (where additional to cooperation through the Governing Body or other Treaty mechanisms) and, where possible, details of any relevant projects:

Collection and identification of selected PGRFA have done under collaboration with National Institute of Health (USA), Global Crop Trust, and AFACI.

Article 6: Sustainable Use of Plant Genetic Resources for Food and Agriculture

14. Are there any policy and legal measures2 in place in your country that promote the sustainable use of PGRFA?

- YES

If your answer is 'yes', please indicate whether such policy and legal measures include:

- Pursuing fair agricultural policies that promote the development and maintenance of diverse farming systems that enhance the sustainable use of agricultural biological diversity and other natural resources;
  - Law of Republic Indonesia No. 12 of 1992 about Plant Cultivation system
  - Law of Republic of Indonesia No 13 of 2010 about Horticulture
  - Law of Republic of Indonesia No. 39 of 2014 about Plantation
  - Minister of Agriculture Regulation No. 39 of 2006 concerning on Production, Certification, and Circulation of certified seed

- Strengthening research that enhances and conserves biological diversity by maximizing intra- and inter-specific variation for the benefit of farmers;
  - Law of Republic Indonesia No. 29 of 2000 about Protection of Plant Varieties
  - Ministry of Agriculture Regulation No. 37 of 2011 concerning Preservation and Utilization of Plant Genetic Resources
  - Laws Of The Republic Indonesia Number 18 Of 2002 About National Research System, Development, And Implementation Of Knowledge And Technology Science
  - National Long-term Plan for Food Diversity
  - Strategic Plan of the Ministry of Agriculture
  - Strategic Plan of Indonesian Agency for Agricultural Research and Development

- Promoting plant breeding efforts, with the participation of farmers, that strengthen the capacity to develop varieties particularly adapted to social, economic and ecological conditions, including in marginal areas;
  - Indonesian Center for Agricultural Technology Assessment and Development (ICATAD) performs new plant varieties for specific location in Indonesia. ICATAD coordinates the activities of Assessment Institutes for Agricultural Technology (AIATs) in 31 provinces.
A BSF-ITPGRFA/FAO project lead by Indonesian Center for Agricultural Biotechnological and Genetic Resources Research and Development accommodate a participatory varietal selection improved rice varieties in swamp area using traditional and improved varieties shared by participating countries.

Indonesian Center for Horticulture Research and Development conducted a research project to strengthening famer bargain position in development traditional fruit varieties in East Java (Kediri), West Sumatera, and South Kalimantan. A research Project is supported by Bioversity.

- Broadening the genetic base of crops and increasing the range of genetic diversity available to farmers;
- Dissemination of new superior varieties (food), superior national varieties (plantations) to farmers
- Introducing food crops (such as rice) through multicountry project under IAARD and other crops outside Annex 1 (such as soybean) through bilateral agreement with National Seoul University, South Korea and USDA; and further assessment for selection

- Promoting the expanded use of local and locally adapted crops, varieties and underutilised species;
  - Ministry of Agriculture Regulation No. 37 of 2011 concerning Preservation and Utilization of Plant Genetic Resources
  - Law of Republic Indonesia No. 29 of 2000 concerning Protection of Plant Variety
  - Minister of Agriculture Regulation No. 37 of 2011 concerning Preservation and Utilization of Plant Genetic Resources
  - Ministry of Agriculture Regulation No. 37/2011 on Conservation and Use of Plant Genetic Resources
  - Government Regulation No. 13 of 2004 about Naming, Registration of Origin varieties for the Manufacture of Essential Derivative Varieties

- Supporting the wider use of diversity of varieties and species in on-farm management, conservation and sustainable use of crops and creating strong links to plant breeding and agricultural development;

- Minister of Agriculture Regulation No. 1 of 2006 concerning Planting Conditions and Procedures for Registering Plant Varieties

- Reviewing and adjusting breeding strategies and regulations concerning variety release and seed distribution.
  - Regulation of The Minister of Agriculture Number 01 of 2006 about Terms of Procedure And Procedure Registration of Plant Varieties
  - Regulation of The Minister of Agriculture of The Republic of Indonesia Number 56 of 2015 about Production, Certification, And Circulation of Certified Seeds Food Plants And Plants Animal Feed.
  - Regulation of The Minister of Agriculture Number: 347 of 2003 Concerning Management Guidelines For Food And Or Horticulture

If such policy and legal measures are in place, please provide details of the measures taken and any difficulties encountered in implementing them:

**Article 7: National Commitments and International Cooperation**

15. Has the conservation, exploration, collection, characterization, evaluation, documentation and sustainable use of PGRFA been integrated into your country's agriculture and rural development programmes and policies?
If your answer is 'yes’, please provide details of the integration of such activities into the agriculture and rural development programmes and policies:

Selected released traditional varieties are involved in national program for increasing rice production.

Traditional rice varieties which good quality are cultivated by farmer for production premium rice, such variety of Anak Daro (West Sumatera), Padi Adan (East Kalimantan), and Siam (Central and South Kalimantan).

A PGR excluding in Annex 1, an originating plant species from Indonesia i.e. *Garcinia* sp and *Nephelium* sp have been supported to be on-farm conservation by local communities in Sumatera.

16. Has your country cooperated with other Contracting Parties, through bilateral or regional channels, in the conservation and sustainable use of PGRFA?

   √ Yes
   No

If your answer is 'yes', please indicate whether the aim of such cooperation is to:

- Strengthen the capability of developing countries and countries with economies in transition with respect to conservation and sustainable use of PGRFA;
- Enhance international activities to promote conservation, evaluation, documentation, genetic enhancement, plant breeding, seed multiplication, and sharing, providing access to and exchanging PGRFA and appropriate information and technology, in conformity with the Multilateral System of Access and Benefit-Sharing under the Treaty.

If, in addition to cooperation through the Governing Body or other Treaty mechanisms, your country has cooperated with other Contracting Parties directly or through FAO and other relevant international organizations, please indicate such other Contracting Parties and, where possible, details of any relevant projects:

**Article 8: Technical Assistance**

17. Has your country promoted the provision of technical assistance to developing countries and countries with economies in transition, with the objective of facilitating the implementation of the Treaty?

   √ YES
   No

If your answer is 'yes', please provide details of the measures taken:

- We implemented the Treaty through BSF-ITPGRFA/FAO project by conduction transfer technology of molecular approach to participating countries (such as Lao PDR)
- We implemented the Treaty through BSF-ITPGRFA/FAO project to develop digital object identifier to track PGRFA movement in MLS system.

18. Has your country received technical assistance with the objective of facilitating the implementation of the Treaty?

   √ YES
   No
If your answer is 'yes', please provide details of such technical assistance:


**Article 9: Farmers’ Rights**

19. Subject to national law, as appropriate, have any measures been taken to protect and promote farmers rights in your country?

☐ Yes  
☐ NO

If your answer is 'yes', please indicate whether such measures were related to:

☐ Recognition of the enormous contribution that local and indigenous communities and farmers of all regions of the world have made and will continue to make for the conservation and development of plant genetic resources;

☐ The protection of traditional knowledge relevant to PGRFA;

☐ The right to equitably participate in sharing benefits arising from the utilisation of PGRFA;

☐ The right to participate in making decisions, at the national level, on matters related to the conservation and sustainable use of PGRFA;

☐ Any rights that farmers have to save, use, exchange, and sell farm-saved seed / propagating material.

If such measures were taken, please provide details of the measures taken and any difficulties encountered in implementing them:

Decision of National Constitutional Court 87/PUU-XI/2013

Law number 19 Year 2013 on Protection and Empowerment of Farmers

**Article 11: Coverage of the Multilateral System**

20. Has your country included in the Multilateral System of Access and Benefit-Sharing (MLS) all PGRFA listed in Annex I to the Treaty that are under the management and control of your Government and in the public domain?

☐ All  
☐ Partially ☑

☐ None  

If your answer is 'all', please provide details of any difficulties encountered in including Annex I PGRFA in the MLS:

If your answer is 'partially', please provide details of:

- The extent to which Annex I PGRFA have been included in the MLS;
- The crops that have been included in the MLS; and
The difficulties encountered in including Annex I PGRFA in the MLS:

Until now, the PGRFA included in the MLS is limited to rice collection. Inclusion of another annex-1 crop is still in consultation and preparation. However, some IARC collect traditional varieties collected from our country

If your answer is 'none', please provide details of the difficulties encountered in including Annex I PGRFA in the MLS:

21. Has your country taken measures to encourage natural and legal persons within your jurisdiction who hold Annex I PGRFA to include those resources in the MLS?

Yes

NO

If your answer is 'yes', please provide details of:

- The natural or legal persons within your jurisdiction that included Annex I PGRFA in the MLS;
- The crops that have been included in the MLS by these persons; and
- Any difficulties these persons encountered in including Annex I PGRFA in the MLS:

If your answer is 'no' please provide details, in particular details of any difficulties encountered in encouraging these persons to include Annex I PGRFA in the MLS:

The country has priority on finalization of the inclusion of PGRFA under management and control of government.

**Article 12: Facilitated access to plant genetic resources for food and agriculture within the Multilateral System**

22. Has your country taken measures to provide facilitated access to Annex I PGRFA, in accordance with the conditions set out in Article 12.4 of the Treaty?

YES

No

If your answer is ‘yes’, please provide details of such measures:

- Access to PGRFA regulates according Regulation of The Minister Of Agriculture Number: 15 of 2009 about The Guidelines for Development of The Material Transfer Agreement (Material Transfer Agreement)
- Minister of Agriculture Regulation No. 37 of 2011 concerning Preservation and Utilization of Genetic Resources
If your answer is ‘no’, please provide details of any difficulties encountered in providing facilitated access to Annex I PGRFA:

23. Has facilitated access been provided in your country to Annex I PGRFA pursuant to the standard material transfer agreement (SMTA)?
   
   √ YES
   
   No

If your answer is ‘yes’, please provide the number of SMTAs entered into:

Establishment of Regulation of Ministry of Agriculture No. 15 year 2009 revealing the support of facilitated access. In this regulation, the SMTA is attached as one of MTA models for access to PGRFA.

If your answer is ‘no’, please provide details of any difficulties encountered in providing facilitated access to Annex I PGRFA pursuant to the SMTA:

24. Has the SMTA been used voluntarily in your country to provide access to non-Annex I PGRFA?
   
   Yes
   
   √ NO

If your answer is 'yes', please indicate the number of such SMTAs entered into:

25. Does the legal system of your country provide an opportunity for parties to material transfer agreements (MTAs) to seek recourse in case of contractual disputes arising under such agreements?
   
   Yes
   
   √ NO

If your answer is 'yes', please provide details of the relevant laws, regulations or procedures:

26. Does the legal system of your country provide for the enforcement of arbitral decisions related to disputes arising under the SMTA?
   
   Yes
   
   √ NO

If your answer is 'yes', please provide details of the relevant laws, regulations or procedures:

27. Have there been any emergency disaster situations in respect of which your country has provided facilitated access to Annex I PGRFA for the purpose of contributing to the re-establishment of agricultural systems?
   
   Yes
   
   √ NO
If your answer is 'yes', please provide details of such emergency disaster situations and the Annex I PGRFA to which access was provided:

Article 13: Benefit-sharing in the Multilateral System

28. Has your country made any information available regarding Annex I PGRFA?

√ YES
No

If your answer is 'yes', please provide details of any information made available regarding Annex I PGRFA (e.g. catalogues and inventories, information on technologies, results of scientific and socio-economic research, including characterisation, evaluation and utilisation):

Limited information is available for limited crop.
http://biogen.litbang.pertanian.go.id/codevelopment/

29. Has your country provided or facilitated access to technologies for the conservation, characterisation, evaluation and use of Annex I PGRFA?

√ YES
No

If your answer is 'yes', please indicate whether your country:

√ Has established or participated in crop-based thematic groups on utilisation of PGRFA;
□ Is aware of any partnerships in your country in research and development and in commercial joint ventures relating to the material received through the MLS, human resource development and effective access to research facilities.

If access to technologies was provided, please provide details of the access provided:

A set of technology for molecular analysis on rice was provided in the crop-based (rice germplasm) group, Co-development and transfer of rice technology.

30. Has your country provided for and/or benefitted from capacity building measures in respect of Annex I PGRFA?

√ YES
No

If your answer is 'yes', please indicate whether such measures were related to:

□ Establishing and/or strengthening programmes for scientific and technical education and training in conservation and sustainable use of PGRFA;
√ Developing and strengthening facilities for conservation and sustainable use of PGRFA;
√ Carrying out scientific research and developing capacity for such research.

If your country provided for and/or benefitted from such measures, please provide details:

Article 14: Global Plan of Action
31. Has your country promoted the implementation of the Global Plan of Action for the Conservation and Sustainable Use of Plant Genetic Resources for Food and Agriculture?

Yes ☑️

NO

If your answer is 'yes', please indicate whether the implementation of the plan was promoted through:

☐ National actions;

☐ International cooperation;

If the implementation of the plan was promoted, please provide details:

**Article 15: Ex Situ Collections of Plant Genetic Resources for Food and Agriculture held by the International Agricultural Research Centres of the Consultative Group on International Agricultural Research and other International Institutions**

32. Has facilitated access to Annex I PGRFA been provided in your country to the International Agricultural Research Centres of the Consultative Group on International Agricultural Research (IARCs) or other international institutions that have signed agreements with the Governing Body of the Treaty?

☑️ YES

No

If your answer is ‘yes’, please indicate:

To which IARCs or other international institutions facilitated access was provided; **IRRI, CIP, RDA, Svalbard**

The number of SMTAs entered into with each IARC or other international institution:

If your answer is ‘no’, please provide details of any difficulties encountered in providing facilitated access to Annex I PGRFA to IARCs and other international institutions that have signed agreements with the Governing Body of the Treaty:

33. Has access to non-Annex I PGRFA been provided in your country to IARCs or other international institutions that have signed agreements with the Governing Body of the Treaty?

Yes ☑️

NO

If your answer is ‘yes’, please indicate:

To which IARCs or other international institutions access was provided;

The number of MTAs entered into with each IARC or other international institution:

If your answer is ‘no’, please provide details of any difficulties encountered in providing access to non-Annex I PGRFA to IARCs and other international institutions that have signed agreements with the Governing Body of the Treaty:

Crops non Annex 1 is under consideration of bilateral regime (Nagoya Protocol)
Article 16: International Plant Genetic Resources Networks

34. Has your country undertaken any activities to encourage government, private, non-governmental, research, breeding and other institutions to participate in the international plant genetic resources networks?

√ YES
No

If your answer is 'yes', please provide details of such activities:

Indonesia with supported by FAO-ITPGRFA Secretariate and Norway Government initiated non-monetary benefit-sharing workshop in 2010. In 2012, Brazil and Indonesia initiated a Platform on Co-development and Transfer of Technology under ITPGRFA, followed by high-level meetings for it in Bandung in 2013. Under IAARD presidency of the platform from 2013 to 2016, IAARD requested the development of a business model for the platform. For better capacity building, ITPGRFA decided in 2015 to identify existing centers which provide training and could be partners in an international network with common curriculum. During IAARD chairmanship of ITPGRFA, it requested the Secretariat to utilize existing contacts to high-quality training institutions and multidisciplinary universities to explore their interest for them to join the network and motivate them to establish dedicated programs and centers of excellence on GR. IAARD also led discussions with multiple leading universities and training institutions, such as Wageningen, Saskatoon, Cornell, Duke, Bogor Agricultural University, Padjajaran, Adelaide and others.

Article 18: Financial Resources

35. Has your country provided and/or received financial resources for the implementation of the Treaty through bilateral, regional or multilateral channels?

√ YES
No

If your answer is 'yes', where possible, please provide details of such channels and the amount of the financial resources involved:

Received:

Bilateral level: Indonesia – Japan, South Korea, National Institute of Health (USA), and Generation Challenge Program;
Regional level: AFACI, NISM (FAO)
Multilateral level: BSF, Global Crop Trust

36. Has your country provided financial resources for national activities for the conservation and sustainable use of PGRFA?

√ YES
No

If your answer is 'yes', please provide details of such national activities and the amount of the financial resources involved:

There is an allocation budget at IAARD based on its national budget for routine operation of PGRFA conservation

About this reporting format

37. Have you encountered any difficulties in completing this reporting format?

√ Yes
No

If your answer is 'yes', please provide details on such difficulties:

National consultation should be conducted with Multisector and multi stakeholder involved in GR management.

If you have suggestions for improvement of this reporting format, please share them:

**General remarks on the implementation of the ITPGRFA**

38. You may use this box to share any advice you may have arising from your country’s experience with implementation of the Treaty:

- We have not formatted a law for ABS enforcement for parties in the use of GR
- We want to international law which promote to regulated direct benefits to farmers when parties use the GR

39. You may use this box to share any additional information that may be useful to provide a broader perspective of difficulties in implementation of the Treaty:

- None

40. You may use this box to share any additional information that may be useful to provide a broader perspective of measures that could help to promote compliance:

- None