# SHORT QUESTIONNAIRE ON THE STATE OF PLANT GENETIC RESOURCES FOR FOOD AND AGRICULTURE

### **ANGOLA**



































#### **Note by FAO**

This short questionnaire has been prepared by the national authorities in the context of the preparatory process for the Second Report on the State of World's Plant Genetic Resources for Food and Agriculture.

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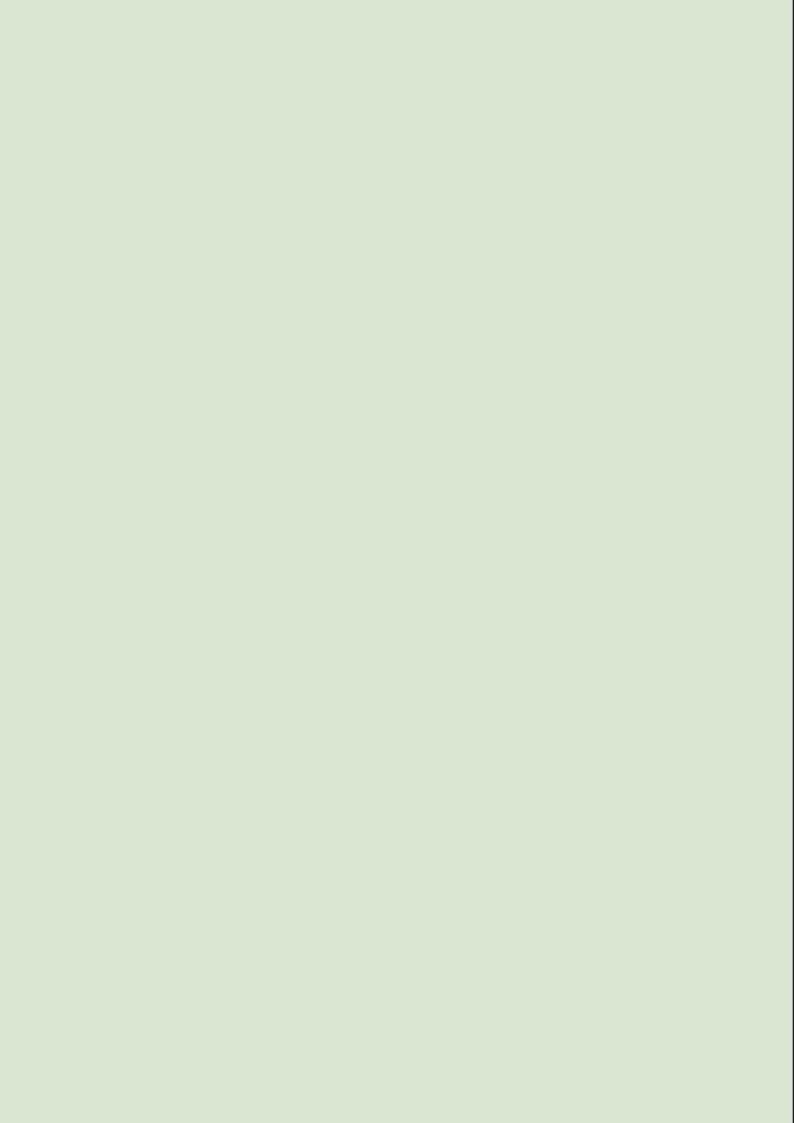
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### **FOREWORD**

#### The document:

- Is entirely based on the guidelines for the preparation of Country Reports. It does not contain new concepts.
- Does not replace, but is complementary to the guidelines for the preparation of Country Reports.
- Is made up of targeted questions to obtain the most relevant information for the preparation of a Second State of the World's PGRFA that illustrates changes since 1996.
- Asks questions that will generate good quality data.
- Will allow for responses that will provide complete data-sets, to conduct relevant analyses.
- · Will allow for analysis of change and main emerging issues, which will be a basis for updating the rolling GPA.







### THE STATE OF DIVERSITY

#### Has the state of diversity of PGRFA in your country been assessed since 1996?

| Yes | No | If so, what crops? How?  |
|-----|----|--|
| Х   |    | Maize, common bean, cowpea, sorghum, pearl millet, groundnut, bambara groundnut, pumpkin, flower, rice, pigeon pea, <i>Amaranthus</i> , sesame, okra, sunflower, soya bean, banana, mango, cassava, sweet potato, wheat.  Assessments obtained in the course of general crop collections made of farmers local varieties/ecotypes.  Assessments made as a result of characterisation programmes and information from local farmers. Coffee, cotton, palm oil, onion, potato. |

#### Does your country have plans to assess the state of diversity of PGRFA?

| Yes | No | If so, what crops? How?   |
|-----|----|---|
| Х   |    | Crops as in answer above, adding other crops. Extend collecting areas to include the 40% of Angola's municipalities so far not visited in collecting missions.  Continue characterisation of collected samples. |

#### Does your country have procedures in place to monitor or measure genetic erosion?

| Yes | No | If so, what procedures? If not, do you intend to establish procedures?   |
|-----|----|--|
|     | X  | Crops as in answer above, adding other crops. Extend collecting areas to include the 40% of Angola's municipalities so far not visited in collecting missions. |
|     |    | Continue characterisation of collected samples.  |

### In your opinion, have there been changes in crop genetic diversity in your country over the past ten years? If so, please provide the information in the tables below:

• In your country's production systems

| Diversity                                       |   |  |   |     |     |     |     |
|---|---|--|---|-----|-----|-----|-----|
| Crop Decreased Increased How was this assessed? |   |  |   |     |     |     |     |
| Maize   | X |  | Opinions of local farmers and community leaders |     |     |     |     |
| Sorghum   | X |  | "   | u . | u . | "   | "   |
| Pearl Millet                                    | X |  | "   | u . | u . | "   | u u |
| Common bean                                     | X |  | "   | u . | u . | "   | "   |
| Cowpea  | X |  | "   | u . | "   | u . | u   |



#### • In ex situ management

| Diversity  |           |           |  |   |                 |  |  |
|--|-----------|-----------|--|---|-----------------|--|--|
| Crop   | Decreased | Increased | How was this ass   | essed?  |                 |  |  |
| Maize  |           | Х         | Increase in number   | Increase in number of accessions held in NPGRC Bank |                 |  |  |
| Sorghum  |           | Х         | и и  | И   | и               |  |  |
| Pearl Millet   |           | Х         | и и  | и   | и               |  |  |
| Common bean  |           | Х         | и и  | и   | и               |  |  |
| Cowpea   |           | Х         | и и  | и   | и               |  |  |
| All other crops<br>Mentioned in first answer, except<br>Fruit tree collections |           | Х         | и  | и   | и               |  |  |
| Mango  | Х         |           | Visits to field bank varieties                             | s register los                                      | ss in number of |  |  |
| Banana   | Х         |           | Visits to field banks register loss in number of varieties |   |                 |  |  |



### THE STATE OF IN SITU MANAGEMENT

#### In the last ten years, in your country, have actions been taken:

• To support the in situ conservation of crop wild relatives?

| Yes | No | Action taken                              | If so, for which crops or species? |
|-----|----|---|------------------------------------|
|     | Х  | Inventories of species in protected areas |                                    |
|     | Х  | Legislation                               |                                    |
|     | Х  | Developed a management plan               |                                    |
|     | Х  | Eco-geographical surveys                  |                                    |
|     | Х  | Others (please specify)                   |                                    |

• To encourage or support the *in situ* conservation of crop-associated biodiversity and wild plants used for food?

| Yes | No | Action taken                              | If so, for which crops or species? |
|-----|----|---|------------------------------------|
|     | Х  | Inventories of species in protected areas |                                    |
|     | Х  | Legislation                               |                                    |
|     | Х  | Developed a management plan               |                                    |
|     | Х  | Eco-geographical surveys                  |                                    |
|     | Х  | Others (please specify)                   |                                    |

• In the last ten years, have actions have been taken in your country, to encourage or support on-farm maintenance of traditional varieties?

| Yes | No | Types of action              | Scale (e.g., number of farmers) and priority crops |
|-----|----|------------------------------|--|
|     | Х  | Policy/Legislation           |  |
|     | Х  | Provision of incentives      |  |
|     | Х  | Development of markets       |  |
| Х   |    | Participatory plant breeding | Very small scale: 30 farmers, maize                |
|     | Х  | Base-broadening              |  |
| Х   |    | Small-scale seed production  | 40 maize, beans                                    |
|     |    | Capacity-building            | Incipient interest                                 |
|     | Х  | Farmer Field Schools         |  |
| Х   |    | Community seed banks         | Incipient interest through NGOs                    |
|     |    | Other (please specify)       |  |



### THE STATE OF EX SITU CONSERVATION

Of the genebank accessions that were sourced within your country (not obtained from foreign genebanks), approximately what percentage are in need of regeneration? (i.e., the percentage of accessions whose germination rate is now below 85% of the level it had when first acquired)

Approx. 10%

What percentage of genebank accessions sourced within your country have been safety-duplicated in a genebank outside your country?

• 52%

How many accessions in the national genebank were distributed last year to:

Users within the country: 160Users outside the country: 60

Are there any crop collections being conserved *ex situ* from which no samples were distributed last year? If so, how many crops?

• 15

Does the national genebank have formal links with breeders such as crop or breeder committees?

• NPGRC has a protocol of collaboration with the NARS (Agric Res. Institutes of Min of Ag. and Rural Development.)

Has the budget (inflation-adjusted) for your national genebank roughly stayed the same, risen or fallen during the last five years?

Budget has risen

Does the national genebank have an annually approved budget, or a budget that is approved for multiple years? (If so, how many?)

• Main administrative part of budget is annual, part is biennial.



### In the past ten years, have more of the PGRFA in your country's *ex situ* collections been characterized and evaluated?

|                      | Yes | No | If yes, please indicate the extra percentage (%) characterized and evaluated |
|----------------------|-----|----|--|
| Grains and legumes   | X   |    | Approx. 10%  |
| Root and tuber crops | Х   |    | Approx. 10%  |
| Vegetable crops      |     | Х  |  |
| Underutilized crops  |     | Х  |  |
| Forage crops         |     | Х  |  |

#### In the past ten years, has the documentation of PGRFA in your country improved?

|                 | Yes | No | If yes, please indicate the extra percentage (%) documented |
|-----------------|-----|----|---|
| In written form | Х   |    | Passport data 100% Characterisation 5%                      |
| Electronically  | Х   |    | Passport data 85% Characterisation 3%                       |

### In the past ten years, has the yearly number of samples of PGRFA distributed by holders in your country increased?

|                   | Yes | No |
|-------------------|-----|----|
| To domestic users | Х   |    |
| To foreign users  |     | Х  |

### In the past ten years, has plant breeding capacity (e.g., the number of active breeders, and of active programmes) in your country changed?

|   | Less | Same | More |
|---|------|------|------|
| In the public sector  |      |      | Х    |
| In the private sector - Virtually no private sector breeding exists |      |      |      |



### In the past ten years, has the balance between public and private sector changed in your country?

| Please tick one box |          |
|---------------------|----------|
| No change           |          |
| More public         |          |
| More private        | X Slight |

#### In the past ten years, has the amount of use of PGRFA in your country changed?

|                               | Grains and legumes |          |             | Roots and tubers |      |             |
|-------------------------------|--------------------|----------|-------------|------------------|------|-------------|
|                               | Less use           | Same     | More<br>use | Less use         | Same | More<br>use |
| Fundamental research          |                    |          |             |                  |      |             |
| Breeding                      |                    |          | X Slight    |                  |      | Х           |
| Biotechnology                 |                    | X Slight |             |                  |      |             |
| Direct use in farming systems |                    | Х        |             |                  | Х    |             |

|                               |          | Vegetables |             |          | Underutilized crops |          |  |
|-------------------------------|----------|------------|-------------|----------|---------------------|----------|--|
|                               | Less use | Same       | More<br>use | Less use | Same                | More use |  |
| Fundamental research          |          |            |             |          |                     |          |  |
| Breeding                      |          |            |             |          |                     |          |  |
| Biotechnology                 |          |            |             |          |                     |          |  |
| Direct use in farming systems |          | Х          |             |          | Х                   |          |  |

### In the last ten years, have legislation and regulations been developed in your country to:

|  | Yes | No |
|--|-----|----|
| Support farmers' access to improved seeds?                                 | Х   |    |
| Support the marketing diversity-rich products, including farmer varieties? |     | Х  |

## TH

|                      |           |  | The same          |
|----------------------|-----------|--|-------------------|
| THE ST               | TATE      | OF NATIONAL PROGRAMMES,                          | A                 |
| TI                   | RAIN      | NING NEEDS AND LEGISLATION                       | The second second |
| National Program     | mes       |  | 高                 |
| In the last ten year | rs, has y | your National Plant Genetic Resources Programme: | <b>A</b>          |
| Become stronger?     | Х         |  |                   |
| Remained the same?   |           |  | B                 |
| Declined?            |           |  | 1                 |
|                      |           |  | F                 |

In the last ten years, has programme funding for your National Plant Genetic **Resources Programme:** 

| Please tick one box |   |
|---------------------|---|
| Increased?          | Х |
| Remained the same?  |   |
| Declined?           |   |

### **Education and Training**

In the last ten years, has the capacity for training and education on PGRFA-related issues:

| Please tick one box |   |
|---------------------|---|
| Increased?          | Х |
| Remained the same?  |   |
| Declined?           |   |



### **National Legislation, Regulations and Policies**

In the last ten years, has your country adopted legislation, promulgated regulations, or established policies relevant to plant genetic resources for food and agriculture?

|                         | Yes | No |
|-------------------------|-----|----|
| Phytosanitary matters   | Х   |    |
| Seed production         | Х   |    |
| Plant breeders' rights  |     | Х  |
| Others (please specify) |     |    |

#### **Information Systems**

In the last ten years, have information systems to support conservation, use and development of PGRFA been established or strengthened in your country?

| Yes | No | If so, which, and how?   |
|-----|----|--|
|     | Χ  | SADC Regional network information system (SDIS) Could also count present GPA Implementation initiative to establish NIS. |

# THE STATE OF REGIONAL AND INTERNATIONAL COLLABORATION

### In which regional and international networks does your country participate?

| Action taken               | If so, for which crops or species?                                 |
|----------------------------|--|
| Crop networks              | SADC regional networks on: Maize; Roots and Tubers; Legumes.       |
| Thematic networks          |  |
| Regional or world networks | Southern African Development Community (SADC Regional PGR Network) |

#### **International Agreements**

In the past ten years, has your country subscribed to international agreements, treaties, conventions, or trade agreements relevant to the sustainable use, development and conservation of plant genetic resources?

| Yes | No | If so, which?      |
|-----|----|--------------------|
| X   |    | ITPGRFA            |
| Х   |    | Cartagena Protocol |



### ACCESS TO PLANT GENETIC RESOURCES, THE SHARING OF BENEFITS ARISING OUT OF THEIR UTILIZATION AND FARMERS' RIGHTS

#### **Access to Plant Genetic Resources**

In the last ten years, have your national public and private sectors experienced difficulties in obtaining the PGRFA they need from other countries?

| Yes | No | If so, what difficulties?  |
|-----|----|--|
|     | Х  | Lack of national breeding capacity means little material has been requested. PGRFA has mainly been obtained from links to CGIAR regional programmes. |

The International Treaty on Plant Genetic Resources for Food and Agriculture provides for a Multilateral System of Access and Benefit-sharing. Is your country already a Contracting Party?

| Yes | No | If not, are procedures underway to accede to the Treaty? Can you give a likely date? |
|-----|----|--|
| Х   |    |  |

