



Second Reporting Cycle

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

JORDAN

(06 September 2022)



ONLINE REPORTING SYSTEM

Second Report on Compliance of ITPGRFA

Online Reporting System on Compliance of the International Treaty on Plant Genetic Resources for Food and Agriculture

Pursuant to Article 21 of the Treaty, the Governing Body approved, at its Fourth Session, the Compliance Procedures that include, among others, provisions on monitoring and reporting: Resolution 2/2011.

According to the Compliance Procedures, 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. This Online Reporting Systems facilitates the submission of such information in electronic format.

Should you need any additional information regarding the reporting on compliance or the use of the online system, please visit the Treaty's Website or contact the Secretariat at PGRFA-Treaty@fao.org.

Additional Reporting Information

Name and contact of the reporting officer

>>> Khaled Abulaila

Institution(s) of affiliation
>>> National Agricultural Research Center (NARC)

Article 4: General Obligations

1. Are there any laws, regulations procedures or policies in place in your country that implement the Treaty? Please select only one option ☐ Yes ☑ No
1A. If your answer is 'yes', please provide details of such laws, regulations, procedures or policies:
2. Are there any other laws, regulations, procedures or policies in place in your country that apply to plant genetic resources? Please select only one option ✓ Yes □ No
You have attached the following Web links/URLs to this answer.
ministry of agriculture portal - legislations, instructions and laws
2A. If your answer is 'yes', please provide details of such laws, regulations, procedures or policies: >>> - Instructions No. (g / 1) for the year 2017 Instructions for organizing the administration of government forests and forest trees growing on treasury lands and forest lands issued under Paragraph A of Article (26) of Agriculture Law No. (13) of 2015 and its amendments - Article#8 (It is forbidden to remove natural, rare or endangered forest trees such as (Oak, Carob , Wild pistachio, Wild almond; Wild pear; Wild olive; Hawthorns; Acacia; Juniper; Christ's thorn jujube).
- Instructions (G / 22) of 2016 regulating investment in private forests - Article#10-A (The following are excluded from removal:
excluded from removal: A- Wild trees amenable to grafting and budding such as; Wild olives, Wild pears, Carob, Hawthorn and others, as it is allowed to prune them only for grafting). - Environmental Protection Law No. (6) of 2017 - Article#12-B (It is prohibited to carry out any activity or behavior that negatively affects plant and animal genetic resources inside and outside their natural habitats). - Agriculture Law No. 13 of 2015 - Article#13 (A-It is not permissible to expulsion the plant and animal genetic resources from the Kingdom without prior permission. The Minister shall determine, in a decision that he issues for this purpose, the genetic assets included in the provisions of this article, B - Anyone who exits or tries to expulsion plant or animal genetic resources from the Kingdom without permission shall be penalized with a fine of not less than ten times their material value, and what is seized shall be confiscate). - Agriculture Law No. 13 of 2015-Article#33 (A-1 Cutting down forest trees, forest bushes and wild plants without permission from the Minister. A-2 Burning trees, forest bushes and wild plants, or stripping them of their scales or of their leaves, except in the cases and circumstances specified by the Minister and with his permission. A-5 Cutting old and rare trees and wild trees in the private forest, but it is allowed to prune them for the purposes of budding or grafting, and the owner of them may benefit from their fruits). - Agriculture Law No. 13 of 2015- Article#34 (B- It is forbidden to cut down, destroy, or attack any of the perennial or rare forest trees and wild plants that are threatened with extinction or destroy it or assault it in any way. C- It is banned to cut down or destroy rare and endangered fruit trees except with the approval of the Minister).
- Agriculture Law No. 13 of 2015-Article#38 (A- It is forbidden to encroach rangelands, whether by plowing them, cultivating them, erecting buildings or facilities on them, opening quarries in them, cutting, uprooting or burning plants growing on them, collecting their seeds, attacking their wells, border marks and fences, or any other attack such as throwing rubble or waste or Solid, liquid, radioactive waste or any other polluting materials for the environment).
You have attached the following Web links/URLs to this answer.
ministry of agriculture portal - legislations, instructions and laws
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? Please select only one option ☑ Yes □ No
3A. If your answer is 'yes', please provide details of such adjustments and any plans to make those adjustments:

>>> - Bylaw No. (47) for the year 2016 The bylaw of compensation for farmers affected by frost issued in

accordance with Paragraph (c) of Article (4) of the Agricultural Risk Management Fund Law No. (H) of 2009. - Law No. (5) of 2009: The Agricultural Risk Management Law of 2009.

You have attached the following Web links/URLs to this answer.

ministry of agriculture portal - legislations, instructions and laws

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

7. Has the collection of PGRFA and relevant associated information on those plant genetic resources that

Please select only one option

would affect strategies of survival in many cases by changing habitats.

are under threat or are of potential use been promoted in your country?

☑ Yes □ No
7A. If your answer is 'yes', please provide details of the measures taken: >>> Targeted collection missions for some of those threatened species have been carried out. Conservation and evaluation ex situ for some of the collections have been executed.
8. Have farmers and local communities' efforts to manage and conserve PGRFA on-farm been promoted or supported in your country? Please select only one option ☑ Yes □ No
8A. If your answer is 'yes', please provide details of the measures taken: >>> - Scientific days Field schools Brochures.
9. Has in situ conservation of wild crop relatives and wild plants for food production been promoted in your country? Please select only one option ☐ Yes ☐ No
9A. 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
9B. 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? Please select only one option ☑ Yes □ No
10 A. If your answer is 'yes', please provide information on the holder and content of such collections: >>> the National Agricultural Research Center (NARC) holds about 4,000 herbaria accessions, and 5,000 seed accessions.
11. Has the development of an efficient and sustainable system of ex situ conservation of PGRFA been promoted in your country? Please select only one option ✓ Yes □ No
11A. 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: >>> - Seed bank currently working at NARC The funded project to establish and operate a big, well-developed national seed bank. Fund is about 3,000,000 JD.
12. Has the maintenance of the viability, degree of variation, and the genetic integrity of ex situ collections of PGRFA been monitoring in your country? Please select only one option ☐ Yes ☐ No
12A. If your answer is 'yes', please provide details of the main conclusions of these monitoring activities >>>
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? Please select only one option ☐ Yes ☐ No

13A. 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 Treaty mechanisms) and, where possible, details of any relevant projects:

>>>

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

14. Are there any policy and legal measures in place in your country that promote the sustainable use of PGRFA Please select only one option ☑ Yes ☐ No
14A. 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; ☑ Strengthening research that enhances and conserves biological diversity by maximizing intra- and inter-specific variation for the benefit of farmers; ☑ Promoting plant breeding efforts, with the participation of farmers, that strengthen the capacity to develop varietie particularly adapted to social, economic and ecological conditions, including in marginal areas; □ Broadening the genetic base of crops and increasing the range of genetic diversity available to farmers □ Promoting the expanded use of local and locally adapted crops, varieties and underutilised species □ 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 ☑ Reviewing and adjusting breeding strategies and regulations concerning variety release and seed distribution
14B. If such policy and legal measures are in place, please provide details of the measures taken and any difficulties encountered in implementing them: >>> details of the measures taken are provided in the link As general the difficulties are in articulating the already existing frameworks on farmers local famer's varieties and in the local context, in addition, implementation of the law is a general issue whenever said.
You have attached the following Web links/URLs to this answer.
IOGAL TEAMOMORKE

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 programmes and policies? Please select only one option ✓ Yes □ No
15A. If your answer is 'yes', please provide details of the integration of such activities: ☑ Conservation ☐ Exploration ☑ Collection ☐ Characterization ☐ Evaluation ☐ Documentation ☑ Sustainable Use
You have attached the following Web links/URLs to this answer.
<u>conservation</u> - In situ conservation <u>Policies and laws</u> - In situ and ex situ conservation relevant laws and policies
Please indicate into which type of programmes and policies: ☑ Agriculture and rural development □ Food security ☑ Biodiversity conservation □ Climate change □ Other
You have attached the following documents to this answer.
<u>jo-nbsap-v2-en.pdf</u> - NBSAP of Jordan
You have attached the following Web links/URLs to this answer.
<u>Mandate of Biodiversity Directorate at the National Agricultural Research Center</u> - Mandate of Biodiversity Directorate at the National Agricultural Research Center
Additional details: >>> It is directly or indirectly impeded in the national strategies, policies and legal documents issued by the Ministry of Agriculture and Ministry of environment such as the NBSAP (attached above) of Jordan and the Law of Agriculture number 13 of 2015 (in Arabic) and Jordan conservation strategy of genetic resources and National strategy of PGRFA conservation
You have attached the following documents to this answer.
strategy of PGRFA Jordan 2018 to 28.docx - PGRFA National strategy
16. Has your country cooperated with other Contracting Parties, through bilateral or regional channels, in the conservation and sustainable use of PGRFA? Please select only one option ✓ Yes □ No
16A. 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
16B. 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: >>> We are collaborating with our partners and through different networks in safeguarding the genetic
resources Ex situ, such as the following: Old and recent collaboration with ICARDA and CGIAR centers Contentious collaboration with the Millennium Seed Bank of RBG/ Kew in conserving more than 70 wild species over 10 years and still collaborating

ollaboration with the Center of the Genetic Resources at the Netherlands in collection and conservation and ilization of crop wild relatives	

Second Report on Compliance of ITPGRFA [Khaled Abulaila, Jordan]

Article 8: Techical 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? Please select only one option ☐ Yes ☐ No ☐ Not applicable
17A. If your answer is 'yes', please provide details of the measures taken ☐ Exchange of information ☐ Access to and transfer of technology ☐ Capacity building
Please explain:
18. Has your country received technical assistance with the objective of facilitating the implementation of the Treaty? Please select only one option ✓ Yes ✓ No ✓ Not applicable
18 A. If your answer is 'yes', please provide details of such technical assistance: □ Exchange of information □ Access to and transfer of technology □ Capacity building
Please explain: >>> Installation and training on the GRIN global software by an expert from Tunisia for plant genetic resources database management, access and exchange.

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? Please select only one option ✓ Yes □ No
19 A. 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 benefit 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
19B. If such measures were taken, please provide details of the measures taken and any difficulties encountered in implementing them: >>> Basic information • Title of measure/practice Financial Support • Date of submission
16th Aug. 2020Name(s) of country/countries in which the measure/practice is taking place
ordan
 Responsible institution/organization (name, address, website (if applicable), e-mail address, telephone number(s) and contact person) The Ministry of Agriculture
Amman - Queen Rania St. – in front of Jerusalem Hotel
P.O. Box: 2099 - Jordan
https://www.moa.gov.jo
email: agri@moa.gov.jo
2. The Ministry of Industry, Trade and Supply Amman - King Hussein Street 34
PO.Box 2019 Amman - 11118 Jordan
https://www.mit.gov.jo/en
email:Info@mit.gov.jo
3. Jordan Cooperative Corporation
Amman - Jordan P. O. Box 1343 http://www.jcc.gov.jo/
email: alounjcc@nic.net.jo
4. Ministry of Finance - Income and Sales Tax Department
General Manager: Hussam Abu Ali
3rd Circle- Al-Burj Building
Tel: 4604444 ext:4401 Fax : 4624643
P.O Box (840818) Zip Code 11184
https://www.istd.gov.jo/indexEn.aspx
email: husam.abu.ali@istd.gov.jo
Type of institution/organization (categories) Governmental Institute
Collaborating/supporting institutions/organizations/actors, if applicable (name, address, website (if
applicable), e-mail address, telephone number(s))
National Agricultural Research Center (NARC)
P. O. Box 639
Baqa'a 19381 Jordan
https://www.narc.gov.jo Tel. +962 6 4725071
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Dr. Nizar Haddad (e-mail: director@narc.gov.jo)
Dr. Khaled Abulaila (e-mail: kabulaila@gmail.com)
Description of the examples
Mandatory information:

The Ministry of Industry, Trade and Supply (MITS) has a role in buying grain from farmers as wheat reserve and buy improved grains as seeds from farmers with preferential prices. The grain seeds sieving and

sterilization project was launched in 1982 in cooperation with the Ministry of Agriculture and the Ministry of Industry, Trade and Supply.

The National Production Protection bylaw No. 55 of 2000 published on page 4526 of the Official Gazette No. 4465 dated 11/16/2000 issued in accordance with Article 14 of the National Production Protection Law No. 4 of 1998 - Article 37 states that:

- A. The Ministry of Industry, Trade and Supply (MITS) collects the following fees from applicants for protection:
- 1. Two hundred and fifty dinars for submitting the application.
- 2. Seven hundred and fifty dinars for the start of the investigation.
- B. The provisions of Paragraph (a) of this article do not apply if the request and the investigation relate to an agricultural product.

https://www.mit.gov.jo/En/List/Regulations

In addition, Patent Law and its amendments No. 32 of 1999 published on page 4256 of the Official Gazette No. 4389 dated 01/11/1999 - Article 3 states that:

The invention is patentable if the following conditions are met:

C. If it is industrially applicable so that it can be made or used in any type of agriculture, fishing, services or industry in the broadest sense, including handicrafts.

Moreover, Article 4 states that:

A patent is not granted in any of the following cases: Inventions whose commercial exploitation is necessary to protect human, animal, or plant life or health, or to avoid severe damage to the environment. In order to apply the provisions of Clauses (1) and (2) of this paragraph, the prohibition of protection is not decided merely to stipulate the prohibition of the exploitation of this invention under the other legislation in force. As for the role of the Jordanian Cooperative Corporation, it was focused on:

- 1. Making contracts with farmers to plant foundation seeds and produce improved seeds
- 2. Sieving, sterilizing and transforming the seeds in order to secure it for farmers through its stations. In the period 2012-2016, about 8637 tons of sifted, sterilized, mixed and standardized seeds were provided.
- 3. Maintaining a strategic stock of sieving and sterilized grains to cover the shortage in drought years. Ministry of Finance Income and Sales Tax Department is supporting the farmers as well. /This is obvious by its Income Tax Law No. (34) of 2014 and its amendments. Law amending the Income Tax Law No. 38 of 2018 (periods 2019 and beyond) Article 5 states that:
- A Exemption from tax is the first (1,000,000) million dinars from sales of a natural person resulting from agricultural activity inside the Kingdom.
- B Exemption from tax is the first (50,000) fifty thousand dinars of the net income of a legal person generated within the Kingdom from agricultural activity.
- C- For the purposes of this article, agricultural activity means the following: -
- 1- Production of crops, grains, vegetables, fruits, plants, flowers and trees.
- 2. Breeding livestock, fish, birds and bees, including the production of eggs and honey.

Indeed, the role of the Ministry of Agriculture has been organizing and developing the agricultural sector for the sake of a developed, diversified, growing and integrated agricultural production. Actually, the Agricultural Risk Management Fund Act of 2009 - Article 4 states that:

The fund aims to:

- A- Managing risks to the agricultural sector in the Kingdom, and limiting their effects.
- B Compensation to the beneficiaries in the event of agricultural risks according to principles, mechanisms and ceilings determined according to a system issued for this purpose.
- C- Building institutional capacities in the field of agricultural risk management.
- D- Contributing to achieving sustainable agricultural development.
- E Encouraging the beneficiaries to adopt modern methods to reduce agricultural risks as much as possible and developing techniques to control them to reduce the losses resulting from them.

(http://pm.gov.jo/newspaperSubjects/4948/4948.html)

In addition, Article 12 is supportive as well. It states that:

The public treasury contributes fifteen million dinars, from which eight million dinars are paid in the first year of the fund's establishment, four million dinars are paid from it in the second year of its incorporation, and three million dinars are paid from it in the third year of incorporation.

On the other hand, regulation No. (74) for the year 2016 set out a compensation system for farmers affected by frost issued in accordance with Paragraph (c) of Article (4) of the Agricultural Risk Management Fund Law of 2009. Article 3 states that:

The application for compensation for the farmer affected by the frost is limited to damages that affect fruit trees, exposed and protected vegetables, medicinal and aromatic plants.

The Ministry of Agriculture has also instructions for distributing feed materials (barley and bran) to livestock breeders Issued based on the text of Article (12) of the Industry and Commerce Law No. (21) for the year 1991 According to the provisions of Article (12) of the Industry and Trade Law No. (21) of the year 1991 and pursuant to the provisions of Article No. (4 / B) Paragraph (3) of the law states the following: Mechanism for distributing feed to livestock breeders

- 1- The fodder materials are disbursed to the real holders and registered with the Ministry's feedstock selling centers in the governorates According to the numbers specified according to the livestock vaccination card issued by the Ministry of Agriculture.
- 2- The feed materials are disbursed according to the records issued by this ministry, which include the

national number and the owner's name possession, data related to livestock preparation, and each person's share of feed materials.

- 3- It is allowed to sell fodder materials to citizens who do not have vaccination cards and have holdings in quantities not exceeding 122 kg one time one per month, provided that they prove their livestock rearing by the Ministry of Agriculture.
- Brief history (including starting year), as appropriate
- Core components of the measure/practice (max 200 words)
- Description of the context and the history of the measure/practice is taking place (political, legal and economic framework conditions for the measure/practice) (max 200 words)
- To which provision(s) of Article 9 of the International Treaty does this measure relate

Art. 9.1 •

Art. 9.2a •

Art. 9.2b √

Art. 9.2c •

Art. 9.3 •

Other information, if applicable

• Please indicate which category of the Inventory is most relevant for the proposed measure, and which other categories are also relevant (if any):

No. Category Most relevant Also relevant

- 1 Recognition of local and indigenous communities', farmers' contributions to conservation and sustainable use of PGRFA, such as awards and recognition of custodian/guardian farmers
- 2 Financial contributions to support farmers conservation and sustainable use of PGRFA such as contributions to benefit-sharing funds $\sqrt{}$
- 3 Approaches to encourage income-generating activities to support farmers' conservation and sustainable use of PGRFA \checkmark
- 4 Catalogues, registries and other forms of documentation of PGRFA and protection of traditional knowledge 5 In-situ/on-farm conservation and management of PGRFA, such as social and cultural measures, community biodiversity management and conservation sites $\sqrt{}$
- 6 Facilitation of farmers' access to a diversity of PGRFA through community seed banks, seed networks and other measures improving farmers' choices of a wider diversity of PGRFA.
- 7 Participatory approaches to research on PGRFA, including characterization and evaluation, participatory plant breeding and variety selection $\sqrt{}$
- 8 Farmers' participation in decision-making at local, national and sub-regional, regional and international levels
- 9 Training, capacity development and public awareness creation
- 10 Legal measures for the implementation of Farmers' Rights, such as legislative measures related to PGRFA. 11 Other measures / practices
- In case you selected 'other measures', would you like to suggest a description of this measure, e.g. as a possible new category?
- Objective(s)
- Target group(s) and numbers of involved and affected farmers
- Location(s) and geographical outreach
- Resources used for implementation of the measure/practice
- How has the measure/practice affected the conservation and sustainable use of plant genetic resources for food and agriculture?
- Please describe the achievements of the measure/ practice so far (including quantification) (max 200 words)
- Other national level instruments that are linked to the measure/practice
- Are you aware of any other international agreements or programs that are relevant for this measure/practice?
- Other issues you wish to address, that have not yet been covered, to describe the measure/practice Lessons learned
- Describe lessons learned which may be relevant for others who wish to do the same or similar measures/practices (max 250 words).
- What challenges encountered along the way (if applicable) (max 200 words)
- What would you consider conditions for success, if others should seek to carry out such a measure or organize such an activity? (max 100 words)

Further information

• Link(s) to further information about the measure/practice

https://www.mit.gov.jo/En

http://www.jcc.gov.jo/

https://www.narc.gov.jo

https://www.istd.gov.jo/indexEn.aspx

https://www.moa.gov.jo

Basic information

• Title of measure/practice

Technical Support/ Extension services

· Date of submission

20th Aug. 2020

- Name(s) of country/countries in which the measure/practice is taking place Jordan
- Responsible institution/organization (name, address, website (if applicable), e-mail address, telephone number(s) and contact person)

1. The Ministry of Agriculture

Amman - Queen Rania St. - in front of Jerusalem Hotel

P.O. Box: 2099 – Jordan https://www.moa.gov.jo email: agri@moa.gov.jo

2. National Agricultural Research Center (NARC)

PO Box 639

Baqa'a 19381 Jordan https://www.narc.gov.jo email: director@narc.gov.jo

Tel. +962 6 4725071 Fax. +962 6 4726099

Dr. Nizar Haddad (e-mail: director@narc.gov.jo)
Dr. Khaled Abulaila (e-mail: kabulaila@gmail.com)
3. Jordan Enterprise Development Corporation (JEDCO)

Amman, Jordan Tel: (+962 6) 5603507 Fax: (+962 6) 5684568 email: jedco@jedco.gov.jo http://www.jedco.gov.jo/

Type of institution/organization (categories)

Governmental Research Institute and Extension Services

• Collaborating/supporting institutions/organizations/actors, if applicable (name, address, website (if applicable), e-mail address, telephone number(s))

1. Jordan Exporters and Producers Association for Fruits and Vegetables (JEPA)

Tel: + 962 6 5699631/2 Fax: + 962 6 5699630

P.O.Box: 930058, Amman 11193 Jordan

email: jepa@jepa.org.jo https://jepa.org.jo/

Description of the examples

Mandatory information:

• Short summary to be put in the inventory (max. 200 words) including:

"The National Agricultural Research Center (NARC) aims at utilizing the outcomes of the agricultural research that is developed locally or devised from other sources for the purposes of increasing both plant and animal production, and improving it and its efficiency, conserving the agricultural natural resources and optimizing their use, serving the purposes of agricultural development, and preserving the ecological balance" (Article (4) of Bylaw No (42) for the year (1993) and its amendments issued under Article (120) of the Jordanian Constitution).

NARC has launched several projects in supporting the farmers in both technical and logistic aspects. One of these major projects is Food Security Project 2016 in which 200-250 field observations have been accomplished as follows:

A. An improved wheat or barley variety experiments (please see Annex 1)

- B. Agricultural services package (please see Annex 2) including:
- 1. Preparing the land for farmers
- 2. Seeds, fertilizers and chemicals
- 3. Agricultural mechanization

Furthermore, the Field Schools Project (please see Annex 3) is another important tool towards the agricultural community which began in Jordan in the growing season 2004/2005 (the World Food and Agriculture Organization of the United Nations (FAO). Field schools were limited to vegetables, and later field schools were introduced for fruit trees and crops of all kinds. This project aims to integrate the researcher, agricultural extension agent and farmer into a pioneering agricultural experiment.

For instance, one of the pioneering experiences in this field (Control of weeds in wheat fields 2018) was performed in collaboration with a group of experts from Greece, where the problem lies in the presence of thin herbs such as wild oats in the wheat fields, where the yield loss was about 50%. Practically, a new herbicide was tried which was not used in Jordan before, and the result was an amazing 99% weed control. Actually, this experiment was considered a success story.

On the other hand, NARC has launched an Agricultural Innovation Incubator Initiative on February 26th, 2019. It is a product of the important role of the Center in disseminating science and agricultural knowledge, which aims to transform entrepreneurial ideas into real projects that enhance the national economy and contribute

to sustainable development and create job opportunities and outstanding success stories. Incubator goals could be summarized below:

- Rehabilitation of entrepreneurs and innovators, maturing their ideas, caring and qualifying them, and providing a suitable work environment to be able to compete in the market
- Linking agricultural innovation with artificial intelligence to enhance the values of Jordanian innovation in the field of agriculture.
- Contributing to establishing agricultural projects (productive / service) within the scope of the initiative.
- The sustainability of innovative projects within the time plan of the project.

One of the several important directorates of NARC is the Laboratory Directorate which provides laboratory services to scientific research, farmers and agricultural companies at preferential prices in the following aspects:

- · Samples analysis.
- Conducting laboratory experiments in laboratories.
- Field inspection of farmers' fields.
- Issuing analysis certificates for agricultural product exports.

Lessons learned:

- 1. Technology transfer and dissemination of knowledge to farmers
- 2. High-quality applied agricultural research
- 3. Promote trust between the farmer, the agricultural extension agent and the researcher
- 4. The farmer's contribution to the selection of the appropriate variety (Participatory Breeding Approach).
- 5. Increase the planted area
- 6. Increase production per unit area
- 7. Preserve the agricultural character of the region

In line with the projects mentioned earlier, Rural Economic Growth and Employment Project (REGEP) has been adopted and practiced by NARC several years ago. The Rural Economic Growth and Employment Project (REGEP) is a six year project with a total financing of around USD 15 million, of which USD 10.84 million is financed by an International Fund for Agricultural Development (IFAD) loan and USD 0.5 million is financed by an IFAD grant. The remaining finance is provided by the Government, beneficiaries and domestic microfinance banks. The project aims to support the strengthening of the horticulture value chains, focusing on high water value crops, while also boosting access to rural financial services and promoting entrepreneurship in the project area. The project development objective is the containment and reduction of poverty, vulnerability and inequality in rural areas through creation of productive employment and income generating opportunities for the rural poor and vulnerable, especially youth and women. The project is implemented in five (5) governorates, namely Jerash, Ajloun, Mafrag, Balga (Elsalt and Dier Alla), and Madaba.

In the same context, Jordan Enterprise Development Corporation (JEDCO) is the leading implantation agency which operates the Project Management and Coordination Unit (PMCU) under the overall supervision of the JEDCO CEO. The PMCU is responsible for the overall management, coordination and monitoring of project implementation. The project approach is based on:

- (i) Targeting smallholders, rural entrepreneurs and the unemployed and underemployed in rural areas, directly, through existing and new associations, and through MSMEs which create employment in rural areas; (ii) Building their technical and business capacity;
- (iii) Increasing access to rural financial services;
- (iv) Building win-win value chain linkages and enhancing access to high value domestic and export market through marketing initiative; and
- (v) Improving post-harvest handling, quality standards and certification.

The value chain and enterprise development component (first component) of REGEP aims to integrate small-farmers into the value chain. It aims to do this in the following ways: activating small farmer participation in value chains; building technical capacity; improving business capacity; encouraging small farmers to form groups and associations; improving value chain efficiency; and developing value chain efficiency through increased exports of high-value vegetables and fruits, improving post-harvest handling, quality standards and certification. This will help create jobs in rural areas.

The 'value chain and enterprise development' component is managed by JEDCO, in cooperation with the National Agricultural Research Centre (NARC), the Jordan River Foundation (JRF), the Jordan Standards and Metrology Organization (JSMO) and the Jordan Exporters and Producers Association for Fruit and Vegetables (JEPA). This component focuses on the following crops: grapes, pomegranates, apples, olives, tomatoes, baby cucumber, okra, and medicinal and aromatic plants (oregano and sage).

- To which provision(s) of Article 9 of the International Treaty does this measure relate
- Art. 9.1 •
- Art. 9.2a •
- Art. 9.2b •
- Art. 9.2c √
- Art. 9.3 √

Other information, if applicable

- Please indicate which category of the Inventory is most relevant for the proposed measure, and which other categories are also relevant (if any):
- No. Category Most relevant Also relevant

- 1 Recognition of local and indigenous communities', farmers' contributions to conservation and sustainable use of PGRFA, such as awards and recognition of custodian/guardian farmers
- 2 Financial contributions to support farmers conservation and sustainable use of PGRFA such as contributions to benefit-sharing funds
- 3 Approaches to encourage income-generating activities to support farmers' conservation and sustainable use of PGRFA $\sqrt{}$
- 4 Catalogues, registries and other forms of documentation of PGRFA and protection of traditional knowledge 5 In-situ/on-farm conservation and management of PGRFA, such as social and cultural measures, community biodiversity management and conservation sites $\sqrt{}$
- 6 Facilitation of farmers' access to a diversity of PGRFA through community seed banks , seed networks and other measures improving farmers' choices of a wider diversity of PGRFA. $\sqrt{}$
- 7 Participatory approaches to research on PGRFA, including characterization and evaluation, participatory plant breeding and variety selection $\sqrt{}$
- 8 Farmers' participation in decision-making at local, national and sub-regional, regional and international levels $\sqrt{}$
- 9 Training, capacity development and public awareness creation \checkmark
- 10 Legal measures for the implementation of Farmers' Rights, such as legislative measures related to PGRFA. 11 Other measures / practices
- In case you selected 'other measures', would you like to suggest a description of this measure, e.g. as a possible new category?
- Objective(s)
- Target group(s) and numbers of involved and affected farmers
- Location(s) and geographical outreach
- Resources used for implementation of the measure/practice
- How has the measure/practice affected the conservation and sustainable use of plant genetic resources for food and agriculture?
- Please describe the achievements of the measure/ practice so far (including quantification) (max 200 words)
- Other national level instruments that are linked to the measure/practice
- Are you aware of any other international agreements or programs that are relevant for this measure/practice?
- Other issues you wish to address, that have not yet been covered, to describe the measure/practice Lessons learned
- Describe lessons learned which may be relevant for others who wish to do the same or similar measures/practices (max 250 words).
- What challenges encountered along the way (if applicable) (max 200 words)
- What would you consider conditions for success, if others should seek to carry out such a measure or organize such an activity? (max 100 words)

Further information

• Link(s) to further information about the measure/practice

https://www.moa.gov.jo

https://www.narc.gov.jo

http://www.jedco.gov.jo/

https://jepa.org.jo/

Important comments:

- 1. Insufficient financial support
- 2. Changes in land use
- 3. Adverse effects of climate change
- 4. Climate change effects and natural disasters (mainly floods and rainstorms)
- 5. Irrigation water is not sufficient and not readily accessible
- 5. Fragmentation of land property

You have attached the following Web links/URLs to this answer.

the Ministry of Agriculture - legislations, instructions and laws

the Ministry of Industry, Trade and Supply - legislations

Jordan Cooperative Corporation - general

Ministry of Finance - Income and Sales Tax Department - Taxes

Article 11: Coverage of the Multilateral System

20. Has your country notified all PGRFA listed in Annex I to the Treaty that are under the management and control of your Government and in the public domain as included in the Multilateral System of Access and Benefit-Sharing (MLS)? Please select only one option □ All □ Partially □ None
20A. If your answer is 'all', please provide details of any difficulties encountered in including Annex 1 PGRFA in the MLS:
20B. If your answer is 'partially', please provide details of:
The extend to which Annex 1 PGRFA have been included in the MLS The crops that have been included in the MLS; and The difficulties encountered in including Annex 1 PGRFA in the MLS: >>> For us the public domain is only the national seed bank of jordan, for which we did the notification unless
stock is under threshold and cant be in MLS on temporary basis
20C. If your answer is 'none', please provide details of the difficulties encountered in including Annex 1 PGRFA in the MLS: ☐ Lack of guidelines for the identification and inclusion of material; ☐ There is no national genebank; ☐ Lack of catalogue of PGRFA in the country; ☐ Lack of specialised human resources; ☐ Limited economic resources and the need for capacity building;
Other, please explain:
21. Has your country taken measures to encourage natural and legal persons within your jurisdiction who hold Annex 1 PGRFA to include those resources in the MLS? Please select only one option ☐ Yes ☐ No
21A. If your answer is 'yes', please provide details of:
The natural or legal persons within your jurisdiction that included Annex 1 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 1 PGRFA in the MLS: >>>>
21B. If your answer is 'no', please provide details, in particular details of any difficulties encountered in encouraging these persons to include Annex 1 PGRFA in the MLS: >>> This happened partially especially upon dealing with organizations, yet not always possible with persons like farmers in remote places because sometimes the minimal amount of seeds available and in many times lack of trust

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 1 PGRFA, in accordance with the conditions set out in Article 12.4 of the Treaty? Please select only one option ☐ Yes ☑ No
22A. If your answer is 'yes', please provide details of such measures:
22B. If your answer is 'no', please provide details of any difficulties encountered in providing facilitated access to Annex 1 PGRFA: >>> actually there are no difficulties faced and indeed we are implying all provisions of 12.4 but I answered no because there is no measure taken to have this done
23. Has facilitated access been provided in your country to Annex 1 PGRFA using the Standard Material Transfer Agreement (SMTA)? Please select only one option ✓ Yes □ No
23B. If your answer is 'no', please provide details of any difficulties encountered in providing facilitated access to Annex 1 PGRFA using the SMTA: ***********************************
24. Has the SMTA been used voluntarily in your country to provide access to non-Annex 1 PGRFA? Please select only one option ✓ Yes ☐ No ☐ No, but the issue is under consideration
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? Please select only one option ☐ Yes ☐ No
25A. 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? Please select only one option ☐ Yes ☐ No
26A. 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 1 PGRFA for the purpose of contributing to the re-establishment of agricultural systems? Please select only one option ☐ Yes ☐ No
27A. If your answer is 'yes', please provide details of such emergency disaster situations and the Annex 1 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?

Please select only one option ☑ Yes □ No
28A. If your answer is 'yes', please provide details of any information made available regarding Annex 1 PGRFA: □ Catalogues and inventories □ Information on technologies □ Results of scientific and socio-economic research, including characterisation, evaluation and utilisation □ Other
29. Has your country provided or facilitated access to technologies for the conservation, characterisation evaluation and use of Annex I PGRFA?
Please select only one option ☑ Yes □ No
29A. 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 relatin to the material received through the MLS, human resource development and effective access to research facilities.
Please provide details: >>> There is a full access to available technologies relevant to conservation, characterization and evaluation of PGRFA in general and part of which the Annex 1 species and this is done on regular basis in local research institutes like the National Agricultural Research Center and local universities. We are now on the way of upgrading the national seed bank to be in a separate building and equipped with the most up to date equipment that aid in conservation and characterization of PGRFA
30. Has your country provided for and/or benefitted from capacity building measures in respect of Annex PGRFA?
Please note that this question differs from question 15 as it only concerns Annex I PGRFA and is more specific. □ Yes □ No
30A. 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.
30B. 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?
Please select only one option ☑ Yes
□ No 31A. If your answer is 'yes', please indicate whether the implementation of the plan was promoted through: ☑ National actions ☑ International cooperation ☑ Other actions
Please provide details:

Please provide details:

>>> almost all of the projects and activities carried out toward conservation and sustainable utilization of PGRFA whether funded locally or from international donors serves implementation of GPA

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? Please select only one option Yes No
32A. If your answer is 'yes', please indicate:
To which IARCs or other international institutions facilitated access was provided; The number of SMTAs entered into with each IARC or other international institution: >>>
32B. If your answer is 'no', please provide details of any difficulties encountered in providing facilitated access to Annex 1 PGRFA to IARCs and other international institutions that have signed agreements with the Governing Body of the Treaty .>>> no difficulties are there but simply because non of them has asked for any access.
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? Please select only one option □ Yes □ No
33A. 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: >>>
33B. If your answer is 'no', please provide details of any difficulties encountered in providing access to not Annex 1 PGRFA to IARCs and other international institutions that have signed agreements with the Governing Body of the Treaty: >>> no difficulties are there but simply because they didnt ask for any access.

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
34A. If your answer is 'yes', please provide details of such activities:
>>> The National Agricultural Research Center (NARC)/Jordan has always been and is a hub of knowledge
exchange and networking between the different national institutes working in research and breeding of
PGRFA, including the private sector, where all the overtime relations with organizations and networks relevant

to PGRFA are put available to different interested national stakeholders, and this happens through ongoing

workshops, siminars, webpages, regional leagues such as AARINENA that is based in NARC too

Please select only one option

Article 18: Financial Resources

35. Has your country provided financial resources for national activities for the conservation and sustainable use of PGRFA?
Please select only one option ☑ Yes □ No
35A. If your answer is 'yes', please provide the estimated amount of funds provided during the last five years, including government resources: >>> 70K US dollars including governmental and donors
35B. Please indicate if your country has developed a strategy or other measures to enhance the availability, transparency, efficiency and effectiveness of the provision of financial resources to implement the International Treaty: >>> Its indirectly set strategy, as the National Agricultural Research Center (NARC), the focal point of the Treaty
has fitted its strategy, including the financial provisions, the SDGs that in itself itemize many of the provisions of the Treaty, in addition, the mission of NARC includes the sustainability of the natural resources including the PGR. In addition to that, in the articles in any newly agreed upon MOU we, NARC enroll the support of the upgrading of facilities and running missions and activities that support the implementation of the ITPGRFA
36. Has your country provided financial resources for the implementation of the International Treaty? Please select only one option ✓ Yes □ No
36A. If your answer is 'yes', where possible, please provide details of such channels and the amount of the financial resources involved during the last 5 years:: >>> The amount reaches 5.1M US Dollars, those came from different sources including, the annual set budget from the government and executed either as running activities that are related to the collection, conservation and characterization of PGRFA as well as locally funded projects from NARC or from local resources (for example currently we are running a project of conservation of crop wild relatives of vegetable crops supported from the National Center for Research and Development (NCRD) and, and as a very recent support, we have signed a MOU with a local university (the Hashimite University) through which the University will support the establishment of a new Gene Bank on a separate land that will serve as a center for local and may be regional conservation of the PGRFA, it would be a pleasure of ours to share the MOU however, the only available version is an Arabic one
36B Channel: ☑ Bilateral □ Regional □ Multilateral
36C. Please provide details: >>> Please see 36A
37. Has your country received financial resources for the implementation of the International Treaty? Please select only one option ✓ Yes □ No
37A. If your answer is 'yes', where possible, please provide details of such channels and the amount of the financial resources involved during the last 5 years: >>> Within the last 5 years we had projects funded from the UNDP and the GIZ to support conservation of national biodiversity and in particular crop wild relatives as well
37B. Channel: □ Bilateral □ Regional □ Multilateral
37C. Please provide details: >>> Please see 37A

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:
- >>> There is a need to raise awareness on different levels regarding the Treaties articles and its provisions and its effect on the local livelihoods and the sustainability of PGRFA and different benefits including monitory and non monitory for the country and the contribution toward food security on the global level
- 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:
- >>> There are general difficulties that apply to the implementation of different legal provisions of any law or relevant instructions in the developing countries part of which the implementation of issues relevant to the conservation and sustainable utilization of PGRFA and other provisions of the laws relevant to the different provisions of the treaty
- 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:
- >>> Public awareness campaigns
- Development of policies, laws, instructions and regulations supporting the efficient implementation of ITPGRFA.
- on-going project of establishing a new GENEBANK with international standard that would be a regional center for conservation of PGRFA as well as capacity building program.

About this reporting

41. Have you encountered any difficulties in completing this reporting format?
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41A. If your answer is 'yes', please provide details on such difficulties:

>>> Technically there has been no difficulties, yet the issue was a weak participation of national stakeholders in filling-in this important compliance report.

41B. If you have suggestions for improvement of this reporting format, please share them:

>>> I think it is fine and easy to deal with as it is now