



Food and Agriculture
Organization of the
United Nations



The International Treaty
ON PLANT GENETIC RESOURCES
FOR FOOD AND AGRICULTURE

**Views, Experiences and Best Practices as an example of possible options for
the national implementation of Article 9 of the International Treaty**

Note by the Secretary

At its [second meeting](#) of the Ad hoc Technical Expert Group on Farmers' Rights (AHTEG), the Expert Group agreed on a revised version of the [template](#) for collecting information on examples of national measures, best practices and lessons learned from the realization of Farmers' Rights

This document presents information on best practices and measures of implementing Article 9 of the International Treaty submitted by Jordan on 25 August 2020.

The submission is presented in the form and language in which it was received.



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
Baq'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



Description of the examples
Mandatory information:⁶

- 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.

⁶ This mandatory information is required in order for the measure/practice to be included in the Inventory.



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



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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, Mafraq, Balqa (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 ⁷	Also relevant ⁸
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		√
4	Catalogues, registries and other forms of documentation of PGRFA and protection of traditional knowledge		

⁷ Please select only one category that is most relevant, under which the measure will be listed.

⁸ Please select one or several categories that may also be relevant (if applicable).



5	In-situ/on-farm conservation and management of PGRFA, such as social and cultural measures, community biodiversity management and conservation sites	√	
6	Facilitation of farmers' access to a diversity of PGRFA through community seed banks ⁹ , 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		√
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 farmers¹⁰
- 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)

⁹ Including seed houses.

¹⁰ Any classification, e.g. of the types of farmer addressed, may be country-specific.



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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



 المركز الوطني للبحوث الزراعية
International Agricultural Research Center

المركز الوطني للبحوث الزراعية
مشروع تحسين الأمن الغذائي في الدول العربية
إتفاقية (توزيع بذار محسن) للموسم الزراعي 2019-2020

١

الفريق الأول:- المركز الوطني للبحوث الزراعية ويمثله مدير عام المركز الوطني للبحوث الزراعية.

الفريق الثاني:-

المزارع / السيد:- بلال محمد إبراهيم العنسان

المحافظة / اللواء / القضاء:- البحر

إسم البلدة / القرية:- الحجر

رقم الهاتف:-

شروط الإتفاقية 0987435235

أولاً:- إلتزامات الفريق الأول:-

١- توفير البذار المحسن.

٢- الكمية (١٠٠) كغم.

٣- الصنف (١٤٧٥).

ثانياً:- إلتزامات الفريق الثاني:-

١- أن يتوفر لدى المزارع قطعة أرض مناسبة مملوكة أو ضمان.

٢- أن يلتزم المزارع بالدورة الزراعية بحيث يكون المحصول السابق بقوايات/صيفي/كراب أو أي محصول آخر غير محصولي القمح والشعير.

٣- أن يلتزم المزارع بزراعة البذار كاملاً في حقله.

٤- أن يلتزم المزارع بتزويد المحطة بجميع المعلومات المطلوبة مثل كمية الإنتاج من الحب والقش والجهة التي باع المحصول إليها وسعر البيع والكمية التي احتفظ بها للإستهلاك المنزلي.

٥- الحقل خاضع لزيارات المختصين في المحطة في أي وقت للتأكد من تنفيذ جميع الشروط.

٦- في حالة الإخلال في أي من الشروط السابقة سيتم تغريم المزارع ثمن البذار الذي حصل عليه.

ثالثاً: لا يتحمل الفريق الأول أية إلتزامات تجاه الفريق الثاني عن الأضرار الناتجة عن إهمال الفريق الثاني مثل الرعي أو الحريق أو الكوارث الطبيعية(جفاف سيول.....إلخ).

رابعاً: مدة العقد من تاريخ / / وحتى تاريخ / /

الفريق الثاني / منسق المشروع / الفريق الأول

Annex 1. Improved wheat variety contract 2019/2020



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المركز الوطني للبحث والإرشاد الزراعي
مشروع تحسين الأمن الغذائي في الدول العربية
اتفاقية تنفيذ المشاهدات الزراعية (شعير) للموسم الزراعي
2020/2017

الفريق الأول: المركز الوطني للبحث والإرشاد الزراعي ويمثله مدير عام المركز الوطني للبحث والإرشاد الزراعي.
الفريق الثاني:

المزارع/السيد: يوسف سالم السويدي
المحافظة/الواء/القضاء: حارث
اسم البلدة/القرية: الوسيد
رقم الهاتف: _____
المنصف: أكرم
المساحة: ١٣ دونم

شروط الاتفاقية

أولاً: التزامات الفريق الأول:

٢. توفير البذار المحسن والأسمدة والمبيدات اللازمة لزراعة ارض المشاهدة.

ثانياً: التزامات الفريق الثاني:

٨. تقديم قطعة أرض مملوكة مساحتها (١٠-٢٠ دونم) ،شريطة موافقة الفريق الأول عليها.
٩. تحضير الأرض للزراعة.
١٠. عدم إجراء أي تعديل أو تصرف يحقل المشاهدة إلا بموافقة الفريق الأول.
١١. المحافظة على الحقل لمنع حدوث أي ضرر خارجي كالرعي أو غيره لحين الانتهاء من إجراء النشاط طيلة مدة التعاقد.
١٢. القبول بتعليمات الفريق الأول والإجراءات الفنية التي يراها مناسبة.
١٣. تبليغ الفريق الأول عن موعد الحصاد.
١٤. بعود نتائج المحصول للفريق الثاني.

ثالثاً: لا يتحمل الفريق الأول أية التزامات تجاه الفريق الثاني عن الأضرار الناتجة عن إهمال الفريق الثاني مثل الرعي أو الحريق أو الكوارث الطبيعية(جفاف سيول.....الخ).

رابعاً: مدة العقد من تاريخ (١٩/١٢/٢٠١٩) وحتى تاريخ (٢٠/٨/٢٠٢٠).

الفريق الثاني: يوسف سالم السويدي
منسق المشروع: _____
الفريق الأول: _____

Annex 2. Full Package contract 2019/2020



(Al Ramtha)

Farmers' Field Schools (themes)	Date and duration	Number of participants/beneficiaries				
		Farmers	Technicians / Extensionists	Scientists/ Researchers	Policy makers	Others (Dev agencies ...)
Introduction to field school	November (one day)	20	1	3	1	1
Use of seed drill	November (one day)	31	3	3		
Field mouse and weed control	February (one day)	15	2	2		
Fertilizers' Application	February (one day)	15	4	1		1
Wheat diseases	March (one day)	17	4			
Loose and cover smuts	April (1 day)	12	4	2		
Harvesting	June (1 day)	10	1	2		1
Total		120	19	13		

Activity 4.1b Farmers' Field Schools: (Al Taibeh)

Farmers Field Schools (themes)	Date and duration	Number of participants/beneficiaries				
		Farmers	Technicians / Extensionists	Scientists/ Researchers	Policy makers	Others (Dev agencies...)
Introduction to field school	November (1 day)	16	2	2		1
Seed drill usage and seeding rate	November (1 day)	12	4	3		
Weed control and field mouse	January (1 day)	11	1	2		
Fertilizers' application	January (1 day)	20	1	3		
Wheat diseases	March (one day)	15	2	4		

Annex 3. Field schools' activities at Al Ramtha and Al Taibeh