



Food and Agriculture
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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 the information on best practices and measures of implementing Article 9 of the International Treaty submitted by Agricultural University of Tirana, Albania on 21 April 2021.

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



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Template for submission of

Measures, Best Practices and Lessons Learned from the Realization of Farmers' Rights as set out in Article 9 of the International Treaty

Basic information

- **Title of measure/practice:** Participation of farmers in the conservation and use of plant genetic resources for food and agriculture, as well as their involvement in decision-making at local and national level.
- **Date of submission:** 2104/2021
- **Name(s) of country/countries in which the measure/practice is taking place:** Albania
- **Responsible institution/organization (name, address, website (if applicable), e-mail address, telephone number(s) and contact person) :** Agricultural University of Tirana Albania : www.ubt.edu.al; contact person: Prof. Dr. Ndoc Faslia; ndocf@icc-al.org
- **Type of institution/organization (categories):** Public University
- **Collaborating/supporting institutions/organizations/actors, if applicable (name, address, website (if applicable), e-mail address, telephone number(s):** Ministry of Agriculture and Rueral Development ; <http://bujqesia.gov.al>

Description of the examples

Mandatory information:¹

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

The Department of Agronomic Sciences, at the Agricultural University of Tirana, is implementing the project titled : Identification, evaluation and genetic improvement of some local crop varieties to face with impact of climate change, increase the productivity, food security and on-farm incomes, for poor farmers in remote mountainous areas in Albania.

The implementation of this project, will bring an added value and contribution to the enhancement of the relevant mechanisms and policies of the International Treaty, especially in relation to farmer's right.

The project aims to: The most important local crop populations of maize and bean, which have potential uses, will be identified, characterized, pre-bred/bred and used by poor farmers in remote mountainous areas;The project will contribute to strengthen the research, which enhances and conserves agrobiodiversity by maximizing genetic variation for the benefit of farmers, especially those who generate and use their own local varieties/populations; The implementation of the project will contribute significantly to promote plant breeding efforts, which, with participation of farmers, researchers, professors and experts, will strengthen the capacity to develop varieties adapted to social, economic and

¹ This mandatory information is required in order for the measure/practice to be included in the Inventory.



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ecological conditions; The identified, improved and multiplied genetic material, will be exchanged with farmers, farmers groups, non-governmental organizations operating in the field of sustainable rural development, private seed companies, and other stakeholders, which are interested in the conservation and sustainable use of biodiversity.

Implementing entity and partners

The implementing entity is the Agricultural University of Tirana Albania. The implementation is carried out by Department of Agronomic Sciences and Institute of Plant genetic Resources. The main partners are Ministry of Agriculture and Rural Development and private stakeholders.

Start year: 2019

Objective:

The main objective is: to contribute to food security and improved livelihood of farming communities, using of some genetically improved local varieties, which help farmers, to face effects of climate change on crop production.

Summary of core components

Public awareness on climate change effects and importance of agro -biodiversity conservation, as a measure to face this effects; Identification, collection and characterization of locally adopted crop varieties of maize and bean, to be used by farmers, in order to face with climate change effects; Improvement of local crop varieties, seed multiplication and distribution to the farmers; Strengthening of seed system capacities to provide quality seed of adopted local cultivars; Conservation and sustainable use of agro-biodiversity, as a guarantee for food security, for poor farmers living in remote areas; Strengthening of the knowledge and capacities for implementation of the Treaty.

Key outcomes

- Farmers supported to maintain and conserve agro-biodiversity in areas vulnerable to climate change and food insecurity.
- Strengthening of research capacities to produce locally adapted varieties, adapted to produce in climate change conditions.
- The enabling environment for Treaty implementation is strengthened with increased funding available for the sustainability of the interventions
- Enhanced equity and inclusion in the implementation of the programme as well as partnerships and collaboration strengthened.

Lessons learned (if applicable)

The most important lessons learned by the implementation of the measure are:

- Participatory approaches that directly involve beneficiaries in measure implementation enhance the success and sustainability of the activity.
- The direct participation of farmers is the key for success. This practical way, increases the interest of all beneficiaries to be active and to contribute to the activities.
- Cooperation with scientific institutions, such as national genebank, agricultural research centres with farmers and agricultural experts that deal with management of PGR, is imperative to ensure the sustainability of the results achieved in the framework of this project.



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Brief history (including starting year), as appropriate

Climate change in recent years has had a significant impact on agricultural production, reducing significantly crop yields. Under these conditions, the identification and introduction into production of local crops, resistant to these changes, will be a good alternative for farmers, in order to increase production capacities and farm incomes.

These local crop varieties have been neglected and underutilized for many years, and for these reasons, some of them have been greatly reduced and are threatened to disappear. In these conditions, collection characterization and multiplication of these local crops is an urgent need, in order to help farmers in facing with the effects of climate change and to guarantee the food security.

The local varieties of maize and beans, represent a gene pool of a great value, but they are not studied in details, and in some cases these local varieties, due to the negligence in cultivation, have been mixed with other varieties such as hybrids, lines, and so on. Through this measure it will be possible that some of the most valuable local varieties of maize and beans will be included in plant breeding programs, for the creation/development of new cultivars with high production capacity.

Core components of the measure/practice (max 200 words)

Information exchange, technology transfer and capacity building on sustainable use of PGRFA. Through the project activities, all involved stakeholders have learned and are trained about the practices and methods of collecting, describing and evaluating local varieties, important for agriculture and food. Also, the participants in the project have been trained for cultivation technologies of local crops especially for maize and beans.

Managing and conserving plant genetic resources on-farm. Some of the collected populations, as well as others stored in the national genetic bank, are cultivated and multiplied on-farm, with the objective to be used by farmers and other stakeholders. This has made it possible to significantly increase knowledge about the importance of on-farm conservation of locally adapted crop varieties.

The sustainable use of plant genetic resources. In this context, the implementation of this project, have a very positive impact on the identification of some local cultivars and populations of maize and beans, which will be used in difficult climate conditions, to produce food for the local population. Conservation on the national genebank as well as on-farm conservation of these locally adapted varieties, will help to avoid genetic erosion as well as the sustainable use of these genetic resources in the future.

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)

Climate change effects, have had a very negative impact in agricultural production, especially in mountainous and remote areas of the country. Long-term drought in summer, very low winter temperatures, as well as floods, has caused considerable damages to agricultural production. For these reasons, productivity in agriculture and the level of income for farm families is very low.

On the other side, these remote and poor areas of Albania are characterized by the presence of many autochthonous (local) varieties and plant populations, which are adapted to difficult climate conditions and have a great interest for cultivation, as they have very qualitative traits and features in terms of adaptation to climate change, high nutrient values, resistance to pest and diseases and tolerance to production shocks.



These local varieties need to be identified, collected, conserved and multiplied on-farm, as well as selected and used in pre-breeding/breeding programs, in order to be available for farmers.

The introduction of these genetically improved local varieties will give farmers the opportunity to better face climate changes and weather conditions, as well as will create the bases to increase production from their farms as a guarantee for food security and income growth for their families

- 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 ²	Also relevant ³
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	X	
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		X
6	Facilitation of farmers' access to a diversity of PGRFA through community seed banks ⁴ , seed networks and other measures improving farmers' choices of a wider diversity of PGRFA.		X

²Please select only one category that is most relevant, under which the measure will be listed.

³Please select one or several categories that may also be relevant (if applicable).

⁴ Including seed houses.



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		X
9	Training, capacity development and public awareness creation		X
10	Legal measures for the implementation of Farmers' Rights, such as legislative measures related to PGRFA.		
11	Other measures / practices		

Objective

The main objective is: to contribute to food security and improved livelihood of farming communities, using of some genetically improved local varieties, which help farmers, to face effects of climate change on crop production

Target group(s) and numbers of involved and affected farmers⁵

Direct beneficiaries of the project: Poor farmers who live in remote mountainous areas, with a low level of farm income and are at risk due to the effects of climate change and the loss of agrobiodiversity. In total it is expected to benefit 500 farmers, and 60% of them, will be women. Agricultural specialists who work in the areas where this project will be implemented. In total, it is expected to benefit 25 agriculture specialists. Professors and researchers of the Department of Plant Sciences and Technologies of the Agricultural University. In total it is expected to be engaged 8 people. Experts and scientific researchers of the agricultural research centres, which are under responsibility of the Ministry of Agriculture. In total it is expected to benefit 5 experts.

Indirect beneficiaries of the project will be: About 5 farmer groups with an average of 10 person/group, totalizing around 50 farmers. About 3 small and medium seed traders, which are interested to buy qualitative locally adapted crop seeds, and to sell them to the other groups of interest.

Location(s) and geographical outreach

The geographic extension of the project will be about 5000 km², in 5 districts and 40 villages of Albania.

Resources used for implementation of the measure/practice

The measure is undertaken in the framework of the implementation of the Project PR-02-Albania (forth call). Also, implementation was done through mobilisation of human capacities of national genebank, Agricultural University of Tirana, Ministry of Agriculture and Rural Development, as well as local capacities in the Municipalities where the measure is implemented.

⁵ Any classification, e.g. of the types of farmer addressed, may be country-specific.



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How has the measure/practice affected the conservation and sustainable use of plant genetic resources for food and agriculture?

The selection of some new locally adapted populations of maize and bean, have contributed considerably in sustainable use of plant genetic resources for food and agriculture as well as have increased the food security capacities for farm families. Introduction of four new crop populations/cultivars with high nutritional value, have a direct impact to increased income for farmers and improved livelihood in targeted area.

Through implementation of the project, the sustainable use of PGRFA and food security dimension have changed as following:

- The availability of food in targeted area is increased. This is done through development of new populations/ varieties of crops which are much more productive than the existing crops.
- The availability of high yield/ resistant crops is increased. Collection, characterization and evaluation of genetic material of targeted crops will give farmers possibility to have high resistant crops for on-farm cultivation in their farms.
- The availability of improved–high quality seed is increased. Development of seed selection and production systems will create a good base for farmers to use high quality seeds in their farms.

Please describe the achievements of the measure/ practice so far (including quantification) (max 200 words)

During implementation of the measure, to promote on-farm conservation and multiplication of local crops, about 700 farmers were present. Field demonstration activities for on-farm cultivation, selection and multiplication of local varieties of maize and beans, are attended by these farmers, while the number of direct beneficiaries of distributed plant material (seeds), is about 500 farmers. About 700 kg of improved seeds of maize and bean are produced and distributed to these farmers

During measure implementation process have taken part about 25 local agriculture experts, who have increased their knowledge on the importance of local germplasm, as well as they have learned the methods of collecting, evaluation, characterization, selection and conservation of local crop cultivars.

The other stakeholders who have benefited by tis measure are: 25 specialists of agricultural technology transfer centers, which depend on the Ministry of Agriculture, 10 lecturers of the Department of Agronomy ; 25 students of Agricultural University , and 10 genebank staff ,etc. These specialists, lecturers and students, have increased their knowledge on the effects of climate change on agriculture, the importance of local crop species, the role of genetic resources for food safety, as well as ways of on-farm conservation, selection, and pre- breeding methods of local plant varieties.

Lessons learned

Describe lessons learned which may be relevant for others who wish to do the same or similar measures/practices (max 250 words).

The most important lessons, learned from the execution of the project so far are:

- *Participatory approaches that directly involve beneficiaries in project activities enhance the success and sustainability of the project.*

One of the most important lessons learned during the implementation of the project activities is that the direct participation of stakeholders is the key for success. This practical way, increases the interest of all beneficiaries to be active and to contribute to the project activities



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- *On time implementation of the project activities was crucial for achieving the planned outcomes and outputs of the project.* Many operations carried out in the framework of the project, have had a seasonal nature, which means were dependent on the biology of cultivated plants in the field. In these circumstances it was very important that the project activities, have taken place at the right time. In particular the field collection of local varieties, as well as the time of their planting in the field, was very important for achieving the objectives and results of the project.
- *Cooperation* with scientific institutions, such as national genebank, Agricultural Technology Transfer Centres (ATTC) , local authorities, Ministry of Agriculture and other institutions that deal with management of PGR, was very important to ensure the sustainability of the results achieved in the framework of this project.
- *Women's participation in project activities* has significantly increased the effectiveness of the project. This participation is a guarantee for sustainability, in order to carry out similar activities in the future, as women account for about 60% of the workforce in rural areas of the country.

What challenges encountered along the way (if applicable) (max 200 words)

- In some cases, there have been problems related with major forces (rai, floods, etc),.
- Coordination with local government. Sometimes, municipality staff, does not have the necessary information, or do not have the necessary awareness about the issues, and therefore are nor very cooperative.

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)

First: Public awareness, about the measure, which will be implemented. This awareness campaign should include all actors: Farmers. Local government, Universities, Ministry, private companies interested in PGR management etc.

Second: Direct involvement of farmers in the activities, as they are the main beneficiaries of the implemented measure.

Third: A very good coordination of the work, with all stakeholders, and with all actors involved in the implementation of the measure