



MINISTERUL AGRICULTURII ȘI  
INDUSTRIEI ALIMENTARE  
AL REPUBLICII MOLDOVA

MINISTRY OF AGRICULTURE AND  
FOOD INDUSTRY OF THE  
REPUBLIC OF MOLDOVA



UNITATEA CONSOLIDATĂ PENTRU IMPLEMENTAREA PROGRAMELOR IFAD  
THE CONSOLIDATED UNIT FOR THE IMPLEMENTATION OF IFAD PROGRAMMES

## Terms of Reference:

### Conservation Farming Development Expert

**Position:** Conservation Farming Expert

**Location:** CPIU-IFAD, Chisinau, Republic of Moldova

**Length of the assignment:** 8 weeks

The Rural Financial Services and Agribusiness Development Project (RFSADP), financed by the International Fund for Agriculture Development and implemented by Consolidated IFAD Program Implementation Unit, is designed to contribute to reducing rural income poverty in Moldova, through promoting access to a full range of appropriate and mainstreamed financial services, with a particular emphasis on products that support the development of sustainable improved incomes for the most vulnerable and poorest groups in rural areas.

### Background

One of the most important constraints facing agriculture in Moldova is the semi-arid climate. This is characterised by highly variable rainfall over space and time, coupled with high summer temperatures. These conditions lead to low yields and frequent crop failures within the dominant system of rain fed agriculture. As has been noted elsewhere, this is exacerbated by the obsolete and unreliable machinery which is mostly available to small farmers. Arable agriculture in Moldova mostly uses conventional land and crop management technology. This involves ploughing the soil, one or more subsequent cultivations and crop establishment with seed drills. While such techniques work, they are no longer optimal in terms of their impact on the soils and their ability to produce in semi-arid conditions. The long-term effects of using this type of technology, especially within the predominant Chernozem (black soil) types, are quite damaging. These include:

- Soil compaction
- Soil erosion
- Loss of organic matter
- Reduction of moisture holding capacity.

One of the characteristics which are most important in these soils is their ability to absorb and store relatively large amounts of moisture. Due to the predominance of heavy soils, they have the ability to hold moisture for long periods, while maintaining an ability to release it for plant growth. However, this characteristic is greatly reduced due to the impact of the conventional farming systems employed. These make the soils less reliable for agriculture and the impact of dry seasons much more severe. By recognizing the problem as a major, the Ministry of Agriculture of Moldova has determined one of the major objectives in its activity: promotion and implementation of new technologies in soil processing. In order to promote the conservative soil systems technology, with directly support of the Rural Financial Services and Agribusiness Development Project (PSFRDBA), will be carried out a number of activities in the period of five years (2011-2016)

According to Ministry requests and IFAD working plan, UCIP- IFAD has launched the project "Conservation agriculture demonstration plots". The purpose of the project is creation four demo plots, which will serve as a basis for the implementation and promotion of No-till and Mini-Till - technologies of soil processing, and where under a field conditions agricultural producers will be able to learn how to pass from conventional to conservation agriculture. This project is planned for a period of three years. (2012-2015)

## Tasks of the assignment

An internationally recognised expert or consulting company specialized in conservation farming in semi-arid environments will be recruited to support implementation of this technology. The main emphasis of the assignment would be the establishment in 2012 of 4 demonstration farms as a means of providing farmers access to the technology and training. To accomplish this task international consultant will be supported by a local team of experts. International expert will be head of this team of experts. The main tasks of the group are: Design and directly support the implementation of the demonstrations plots which would demonstrate the following:

- Trials of Zero-tillage technology, and other soil moisture management techniques;
- Improved cultivars and the development of an appropriate crop rotation system;
- Fertility management for optimum rainfed production;
- Long-term experiments with rotations;
- Alternative pest control techniques, including the use of IPM, and techniques for plant protection at the farm level;
- Alternative weed control techniques;
- Crops and cultivars suitable for livestock fodder and forage;
- Specific research to assist with livestock production, especially in a crop and livestock production system.

Assistance for the first phase (year 2012) will be divided into three parts: The period of analysis, the initiation period and business plan development period. Additionally, will be held four seminars on the topic: Initial steps in the transition from conventional to conservation agriculture.

1. The analysis period: For each of the four selected demo plots to be developed by the project will be conducted a complex analysis which includes:

- a general farm analysis ;
- an economic and financial analysis;
- an analysis of the structure of agricultural production sold;
- an analysis of suppliers of inputs and output ;
- a level of specialization, profiling the company;
- climate conditions analysis
- an analysis of the structure, chemical and biological composition of soil from the demo plots;
- an historical analysis of land selected for field demonstration plots;
- an analysis of chemicals used on demonstration plots:
- an analysis of agricultural machines and tractors that is managed by the household, in relation to their utility to be used to implement Conservation technology; (CT)
- Other analyzes and studies that will contribute to the successful establishment Conservation technology and development of demo plots.

Also, in the first period of this project, for farmers who want to implement in their farms conservation agriculture (CA), will take place four seminars.

2. The goal of the initiation period is to establish starting clear landmarks as a result of previous analysis.

For this, team of local experts in collaboration with international expert will prepare a progress report for each demo plot, which will include:

- a brief description of the history of the company (registration, organizational structure, location, historical development, crop specialization, profiling, etc..)
- Analysis of a production (crop structure, areas of production, productivity indicators, financial indicators analysis, marketing, etc..)



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- a description of demo plots pedological and climatic zone with specifying: soil structure, rainfall amounts, specific climate, water sources for irrigation, other capabilities for enterprise development, etc..
- a description of field history of the land selected for demo plots on the last 5-10 years;
- an analysis of chemicals, fertilizers, used in 2010-2012 on the site selected for the demonstration group;
- a description of the agricultural machine and tractors that are in household management, in relation for their utility to be used to implementation of Conservation agriculture, specifying the list of machines that can be used to implement CA, and analyze technical condition;
- a description of the type of technology which will be implemented in demo plot;
- a description of the set of machines and equipment needed to implement CA on each demo plots specifying householders technical units and units available to be purchased with the description of the technical and marketing costs;
- a conclusions and recommendations.

The first phase is scheduled for 17/09/2012-12/10/2012 and will take 20 working days. Additional, four seminars in four zones will be done in this period. Purpose of the seminar is to involve a large number of farmers to use a CA technology through facilitating access to information and practical demonstrations.

3. For the second period 15/10/2012-09/11/2012 the task of the implementation team is developing a Business Plan separate for each demo plots. The plan will cover the period 2013-2018. The development team will take into account results of previous investigations, soil analysis and final goal.

The consultant would report to the Value Chain Facilitator of the CPIU, and through him, to the Clients and Beneficiaries of the RFSADP.

### **Deliverables and timeframe**

The outlined works is planned for the period:

17/09/2012-29/09/2012 - Analysis stage

01/10/2012-06/10/2012 – Initiation period (Writing the interim report)

08/10/2012-19/10/2012 - Organizing seminars

15/10/2012-09/11/2012 - Business Plan Development

Total: 20 working days. The initial stage (Analysis, Interim Report, seminars)

Total: 20 working days. Stage Business Plans

### **Reports:**

Team of experts will present:

- Interim Report - the presentation up on 10/10/2012
- PowerPoint presentations and materials for the introductory seminar, till 15/10/2012
- Business plans for each demo plot separately to 12/11/2012

The team of experts will work with UCIP-IFAD value chain development specialist.

## **Requirements for Experience and Qualifications**

- Extensive qualifications in agronomy, soil science or related university level qualification;
- At least 5 years experience in conservation agriculture
- Possess deep knowledge in conservation agriculture
- Good command of spoken and written in English.

## **Documents to be included when submitting the proposals**

Interested consultants (consulting companies) should submit their applications, consisting of the following documents/information to demonstrate their qualifications:

- Technical Proposal: explaining why they are the most suitable for this kind of work;
- Personnel (company) CV including past experience in similar projects and at least 5 references;
- Detailed Financial proposal (shall clearly specify consulting fee per day in country of location and in Moldova, the number of visits to Moldova, etc.);
- Reports, description of similar assignments, experience in similar conditions, etc.
- Other document proving the applicant experience in the field.

## **The evaluation criteria**

- The consultant will be selected in accordance with the procedures set out in the current edition of IFAD Procurement Guidelines, based on consultant qualifications.
- The financial offer will provide the cost for the above provided assignment **in USD**. The procurement of required services will be made in accordance with IFAD Procurement Guidelines, based on selection method "Quality and Cost- Based Selection (QCBS)", the final score obtained by each company being composed of 70% of the score for the parameter „Quality" (evaluated based on technical bid) and 30% - score obtained for the parameter „Cost" (established based on financial bid).
- Provided technical offer will be examined to ensure that they would pass the minimum technical score of 60 points, to allow the opening of financial offers.

## **Location and other aspects**

- Payments will be disbursed in instalments upon submission and approval of deliverables and certification by CPIU-IFAD coordinator, that the services have been satisfactorily performed.
- Proposal should be submitted at the following address: CPIU-IFAD, office 1303,  
162, Stefan cel Mare si Sfint bld,  
MD-2004 Chisinau, Republic of Moldova  
or by e-mail to: [office@ifad.md](mailto:office@ifad.md) or [marina.rusu@ifad.md](mailto:marina.rusu@ifad.md) no later than **22 september 2012**.

Any request for clarification must be sent in writing by standard electronic communication to [office@ifad.md](mailto:office@ifad.md).