

2) Promotion of application of conservative cultivation technology in rural communities of Azerbaijan

Background

Conservative cultivation technology is a very untraditional and unfamiliar technology for rural communities in Azerbaijan. There was no practice of this application in the past, as there was no knowledge on the advantages of the technology. Consequently, there is also a lack of necessary agricultural machinery for conservative cultivation (State Statistics Committee of the Republic of Azerbaijan, Food Safety of Azerbaijan, 2008).

By applying conservation tillage practices in rural communities, risks from drought could be decreased, thereby reducing soil erosion, enhancing moisture retention and minimizing soil compaction. In combination, these factors will improve resilience to climatic effects of droughts and floods. Improved soil nutrient recycling may also help combat crop pests and diseases. Conservation tillage benefits farming by minimizing erosion, increasing soil fertility and improving yield.

The current project initiative aims to demonstrate new practice of conservative cultivation technology in rural communities and address social, capacity building/information, policy/regulatory and technology barriers to deployment of the technology.

Proposed project initiatives successfully line with the country's economic, social and environmental development priorities. Moreover, they contribute to food security priority by increasing productivity, reducing expenses for agricultural activities, improving quality of cultivated lands, increasing organic matters and improving soil structure. Managing and controlling weeds, insects and plant diseases also result in both economic and environmental benefits.

Project goals and objectives:

The main goal of the proposed project is to demonstrate effective practices of conservative cultivation technology to local farmers, local authorities, private sector, NGOs and other relevant stakeholders, and increase their knowledge on advantages of the technology. Another goal is to increase access to necessary agricultural machinery for application of conservative cultivation technology, by providing advocacy activities with respective agencies and state bodies.

Main project objectives could be listed as follows:

- Increase awareness level of local communities, local authorities and other relevant stakeholders on forecasted climate change tendencies and environmental/economic advantages of applied technology;
- Increase availability of necessary agricultural machinery for application of conservative cultivation technologies and feasibility study;
- Demonstrate practical application of conservative cultivation technology;
- Organize advocacy activities with respective agencies and bodies (Ministry of Agriculture, Agro-service Centers) in order to improve access to necessary agricultural machinery;
- Organize effective outreach activities in order to achieve replication of applied technology in other communities and regions.

Project activities:

The project aims to promote application of conservative cultivation technology and demonstrate the effective best practice in rural communities of the agricultural regions of Azerbaijan. The following activities are to be implemented under the current initiative:

- Launch workshops for presentation of project goals and objectives;

- Organize round-table discussions with relevant stakeholders, particularly with Ministry of Agriculture and Agro-service Centers;
- Information campaigns and outreach activities to increase awareness level;
- Capacity building training for representatives of local authorities, private sector, NGOs, other relevant stakeholders and community residents;
- Specific training to increase technical capacity of service providers;
- Implement pilot project at community level by introducing new technology at cultivated lands;
- Organize study tours with participation of representatives of surrounding communities in order to demonstrate effective project results and enable replication of project activities;
- Improve market linkages of target communities with relevant market players, including financial institutions, in order to create enabling framework for further application of technologies;
- Organize national conference in order to present project achievements to wider group of stakeholders.

Project outputs/outcomes:

Main project outputs could be listed as follows:

- Three pilot projects to demonstrate effective results of technology deployment;
- Three round-table discussions with participation of representatives of relevant ministries, agencies, institutions;
- At least 1000 participants, including representatives of local authorities, private sector, local community residents, NGOs, with improved knowledge and capacity of advantages of technology deployment;
- Four Study tours with at least 100 participants in order to share effective practice;
- At least two Agro-service Centers provided with necessary agricultural machinery to be applied to conservative cultivation;
- At least 20 local residents to receive affordable loans from financial institutions to deploy demonstrated adaptive technologies;
- At least two financial institutions involved in project;
- At least 10 technical staff of Agro-service Centers have increased capacity and quality of provided services;
- Two national conferences organized to disseminate project achievement at national level.

Main project outcomes achieved as a result of the implemented project activities could be listed as follows:

- Best effective practices of conservative cultivation technologies demonstrated to residents of target rural communities, as well as surrounding communities;
- Local community residents, local authorities and representatives of NGOs/private sector have improved capacity and knowledge of economic and environmental advantages of demonstrated technology;
- Market linkages between financial institutions, Agro-service Centers and local community residents created and improved;
- Local farmers have improved access to agricultural machinery;

- Improved quality of services provided by Agro-service Centers;
- Effective practice is spread to other regions in order to achieve replication.

Project beneficiaries:

Project beneficiaries are rural communities situated in agricultural regions of Azerbaijan, as well as local authorities, private sector, NGOs and other relevant stakeholders. The current project will cover three pilot communities (totaling 800 households) and will have 4000 direct project beneficiaries. It is intended to enhance replication of applied best practices in other regions of the country and increase the number of beneficiaries.

Relevant stakeholders:

- Ministry of Agriculture will be responsible for coordination of the project;
- Ministry of Ecology and Natural Resources will play a key role in promoting activities on ecological advantages of new technology;
- Agro-service Centers will coordinate project activities to supply agricultural machinery;
- Local authorities will be responsible for community mobilization;
- Private sector will be involved as market players supplying the technology.

Project duration: 2 years

Project inception phase: 3 months (launch workshops, formation of project Steering Committee, and selection of pilot communities)

Project implementation: 19 months (vulnerability assessment, feasibility studies, pilot projects, capacity building activities, study tours, outreach activities)

Project closure: 2 months (organization of final national conference)

Project budget: 900,000 USD

#	Component	Amount
1	Project administration	100,000 USD
2	Capacity building	150,000 USD
3	Purchase of agricultural machinery	300,000 USD
4	Pilot projects	300,000 USD
5	Outreach activities	50,000 USD

The project will seek funding from state, private, local and international sources. It is also possible to have multiple donors (main donor and co-financier).

Project sustainability:

Information campaigns, capacity building activities and study tours for demonstration of effective practices are designed to achieve project sustainability. Practical demonstration of advantages of applied technology will lead to replication of technology use by other communities. Additionally, provision of necessary agricultural machinery to Agro-service Centers will create the opportunity to provide for all related services of conservative cultivation.

Close involvement of relevant stakeholders (relevant ministries, state institutions, private sector, local authorities) to the project implementation cycle will ensure necessary support for enabling an environment for technology deployment and replication of similar initiatives. During the initial phase of the project, when forming the Project Steering Committee, all relevant stakeholders representing different sectors will be involved in the Committee.

Creation of linkages between financial institutions and local farmers will enable them to have easy access to credits in order to overcome financial barriers in technology deployment.

Round-table discussions will be mainly focused on advocacy issues to increase interest and facilitate stakeholders to initiate measures/actions for enabling an environment for technology deployment. Such measures/actions will be incorporated into sectoral or local plans of relevant stakeholders to achieve sustainability.

Project deliverables:

Creating access to necessary agricultural machinery for provision of conservative cultivation activities will be the most important project deliverable. Additionally, feasibility studies on application of conservative cultivation technology at cultivated lands in target communities will be another important deliverable for project beneficiaries.

At the community level, the pilot project will lead to significant results and will enable the demonstration of best practices to other local communities. Demonstration of effective practices will lead to replication of technology deployment.

Project scope and possible implementation:

The project will cover three rural communities (totaling 800 households) situated in rural agricultural regions. All relevant stakeholders (State institutions, agencies, private sector, local authorities, NGOs, local communities) are interested in project implementation. In the past, there were similar project initiatives, however they were lacking in capacity building or advocacy components, and were therefore unsustainable.

Risks:

The main risk of project implementation is the lack of knowledge on conservative cultivation technology and its advantages. This risk will be mitigated through effective awareness raising activities to be organized during the project implementation period. Another risk is low level of collaboration of the Ministry of Agriculture, as conservative cultivation technology may not be considered a priority issue compared to issues such as food security, increase of productivity and so on. Effective advocacy activities will help to mitigate this risk.

Project monitoring and evaluation:

The project will be monitored by a Project Steering Committee to be formed under the current project. Representatives of different State institutions, agencies, NGOs, private sector and local authorities will be included in the Project Steering Committee. Project results will be assessed by external evaluators, as well as by relevant State institutions (Ministry of Agriculture, Ministry of Ecology and Natural Resource) responsible for project coordination.