

Goal of Approach:

Plantation of windbreaks for prevention of land degradation and aridization of agricultural soils.

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Main elements of the implementation strategy

1. Investigations on trend of soil specific (its fertility, humus, moisture etc);
2. Identification of area of windbreaks;
3. Identification of plant(s) – according to its root system, height, climate etc. , appropriate for the soil specific, wind speed and frequency, soil agricultural purpose(s);
4. Implementation of the measures.

Targeted beneficiaries

Local farmers owning and managing the cropland

Any significant lessons learned

Climate Change affecting lands by means of increased temperature and precipitation changes often cause land degradation and in some cases, even desertification. This is related to decrease of agricultural production. Windbreaks, along with irrigation, may be a help to degrading soils in windy areas as winds cause additional impacts on land degradation process. Appropriate plantation and well-identified area for windbreaks may substantially slow or/and stop land degradation process, especially in combination with irrigation, increasing thus agricultural production.

Resource requirements

Scientific exploration of soil, climatic parameters (in trend), capacity in agriculture, land, flora areas.
Financial provision for plants and their plantation may be very low, cost-effectiveness thus being high.

Potential for replication or scaling-up

Replication of the approach is quite possible.
In neighboring areas (plots) the replication may require no additional explorations. In remote areas the specific of soil and wind should be taken into consideration.

Any additional information

The approach has double profit – from agricultural point of view (increased productiveness) and climate change mitigation because of reduction of GHG emission from degraded soils.