

Evaluation of remediation recommendations: Stakeholder Workshop 3 Ribeira Seca, Cape Verde

1. Introduction



In Cape Verde, the low soil cover and inadequate practices on rain fed agricultural lands constitute major problems related to desertification. To the fragility of the land associates severe water erosion, causing tons of land to be washed away from the fields every year during the rainy season.

Therefore, the aim in the scope of combating desertification is to provide a certain degree of permanent soil cover to serve as shield for the impact of rain. During the selection workshop several technologies, all related to vegetative cover either as strips or surface cover were

discussed. Only two technologies were selected: vegetation strip with pigeon pea and afforestation with fruit trees.

- Technology 1: Pigeon pea (*cajanus cajan*) barriers/strips. It consists in planting seeds of pigeon pea, a leguminous perennial shrub that has dual purpose of protecting the soil and feed people. It is planted in association with maize crop. After the maize is harvested, the soil remains with some degree of cover. Though the objective was to plant as strip barriers, six meters apart, most farmers planted it as surface cover.
- Technology 2: Afforestation with fruit trees. It consists in the plantation of different fruit tree species in humid areas to provide both soil cover and feed for farmers. Since fruit trees require several years to provide effective cover, and though it was implemented in some areas, it was not evaluated during the project's period.

2. Priority Remediation Strategies

As mentioned, the priority strategy for effective and sustainable combat of desertification was to strengthen vegetative cover on rainfed lands.



Figure 1: Rainfed land treated with pigeon pea

Figure 2: Steep slope treated with pigeon pea combined with terraces

The Pigeon pea technology was selected as it appears to be the simplest, most accessible, least expensive, socio economically acceptable technique, with great impact on soil cover and land rehabilitation. Participants, farmers in particular, were unanimous in that pigeon pea is a technology that should be spread in the country because of its numerous advantages (Figures 4.1.1 and 4.1.2).

The same technologies selected during previous workshop were implemented. However, only the pigeon pea technology was evaluated. During evaluation workshop, additional criteria were proposed for the social component to evaluate the technology. These were: employment generation, law enforcement regarding animals invading agricultural fields, urban planning, articulation among institutions and on-going projects related to desertification and food security and quality.

3. How can we enable priority remediation options to be adopted?

Participants of the workshop, that included several groups of stakeholders, from land users to decision makers, agreed that dissemination of the technology will only be effective if: all groups are involved; each has a well defined task; and it is defined where, when and how it will be done (Table 1).

Where

It was recommended that the technology should be promoted in:

- ✓ Rainfed lands vulnerable to soil erosion and desertification,
- ✓ Watersheds that will benefit from future dams, particularly on the upstream areas
- ✓ Rainfed lands that need crop diversification

Table 1: Who, How, When: Effective stakeholders' responsibility

Stakeholder groups	Responsibility	When
Land users	Implementation, maintenance and conservation of technologies Participation in capacity building, participatory research and monitoring	Rainy season 2012 2011-2012
NGOs	Funding (acquisition of seeds, training, ..) Empowerment of local communities (capacity building, follow-up)	2012 2011-2012

Municipality	Funding (acquisition of seeds, training) Planning, monitoring, facilitation/articulation	2012 2011-2012
INIDA	Research, technical assistance Monitoring and dissemination	2011-2012 2011
DGASP/Delegations MDR	Capacity building of farmers, technical assistance Funding, monitoring, legislation	2012
Focal Point of CCD	Information of projects/ programs on the combat of desertification Information on existing global mechanisms for funding	2011

- The local/regional policies that could promote wide adoption of the strategy may include: the National Plan to Combat Desertification (PAN_LCD) _UNCCD, the Municipal Action Plan to Combat Desertification, the Municipal Development Plan (PDM), and the National Action Plan for Environment (PANA)
- Major obstacles to adopt mitigation priority identified in the discussion were:
 - Inapplicability of the technology to arid climatic regions, with very low precipitation. To overcome this obstacle, lands should be treated with a more drought resistant species, such as *Aloe vera*.
 - In arid regions, only irrigated lands can benefit from this technology.
 - Poverty of some families forcing them to consume part of the distributed seeds as food rather than sowing. Solution to this vulnerability is more complex.

4. Feedback from participants

Participants evaluated the workshop as positive and rated it good to very good since it provided them an opportunity to know the results of the project that they were part of, and participated in actively.

Regarding the project, participants found the participatory approach and methodology used in its implementation very good. This was because it gave each group of stakeholder the opportunity to be part of the project and share responsibility for the success of the selected technology.

It was registered the reactions of some participants and here are some quotes from them:

Farmers:

- “I recommend all my friends to plant pigeon pea in their land”
- ” Pigeon pea helps woman to feed their children, get extra income, enrich the soil and protect their land from being carried away”

Technicians:

- “The DESIRE methodology enforced the participatory approach used in Cape Verde to combat desertification”
- “The project changed the attitude of land users regarding the use of Natural Resources”

UNCCD focal point:

- “The objectives of the DESIRE project fit in the goals of UNCCD and the positive results should be applied to other watersheds in Cape Verde”

5. Next steps

Some of the actions to be taken for widespread of technology are:

- Field survey of potential areas to apply the technology
- Identification of funding sources
- Capacity building/sensitization of land users
- Implementation
- Monitoring
- Wide scale dissemination

Other agreed actions:

- To carry out farmers exchange visits to pigeon pea plots and have the farmers hosting the event. Farmers are most likely to adopt technologies from their fellow farmers than from technical services
- Regarding dates and responsibilities, the previous table specifies which stakeholder group is responsible for each task in the dissemination process, and gives dates for completion.