

Remediating Erosion in rainfed agricultural systems of the “secano interior” of Central Chile



In the Mediterranean climate area of Central Chile, (“secano interior”) soil erosion is the direct cause of rural poverty and environmental degradation



Key Policy Messages

- **Remaining issues**
- New Strategies for stubble Management
- Elimination of stubble burning
- Adding organic matter to soil
- Water harvesting

Priority Remediation Strategies

New technologies such as 0 tillage, subsoiling, incorporation of legumes in the crop rotation and agroforestry systems were prioritized by the farmers in workshop1



Rank	Remediation Technologies
	Description
1	0 Tillage and subsoiling
2	Crop rotations with legumes Lower input in N fertilization. Use of biological Nitrogen fixation
3	Contour ploughing
4	Agroforestry

What strategies can be designed to promote adoption of remediation technologies ?

1. Including technologies developed in DESIRE as part of the incentive program for the recovery of degraded soils managed by the Agriculture and Livestock Service (SAG) which implies:
 - Adjusting incentives according to timing of the expenses and investments.
 - Conditioning incentives to the adoption of the technologies
2. Generating a participatory approach for further transfer and dissemination of the results, which implies considering the production systems and the goals of the farmers
3. Developing an adoption model with local leadership - coordination between institutions - long-term institutional commitments.
4. Training for technicians to support the adoption of the technologies.
5. Evaluating the economic and social impact of the soil conservation practices

Problem to improve adoption

Mechanization is the main obstacle for adopting 0 tillage and subsoiling

Solution To create and promote small companies of agricultural machinery, managed by farmers themselves. Two examples already exist in the counties of San Carlos and Ninhue .

Feedback

It should encourage the association of small farmers to mechanize and modernize their production systems.

Need to continue with soil conservation applied research. Need for long-term financing.