

SOIL CONSERVATION IN ICELAND: CONNECTING THE PIECES



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DEVELOPING THE PACKAGE OF ACT

1. Changing public perceptions about soil
2. Valuing soil as a societal resource
3. Developing knowledge about soil conservation
4. Transferring knowledge to soil managers
5. Stimulating soil stewardship
6. Providing a new legal framework

CHANGING PERCEPTIONS ABOUT SOIL

1. Explain importance of soil for
 - Food & fibre production
 - Carbon storage & sequestration
 - Ecosystem function
 - Biodiversity conservation

And therefore

Societal dependence on it and its careful stewardship

2. Explain soil erosion and land degradation, and why action is still needed

3. Action by Landgraedsla

- ✓ Simple brochure A4 folded widely distributed
- ✓ Video for use by national TV
- ✓ Teachers packs for primary and for secondary schools
- ✓ Provide data pack on benefits of different elements, achievements of different approaches

VALUING SOIL AS A SOCIETAL RESOURCE

✓ 1. Develop measures of value of soil as natural capital and societal capital, goods & services

✓ Landgraedsla action: commission environmental economist to develop measures

2. Use measures in evaluation of strategies, programmes & projects

✓ Landgraedsla action: promote measures to Ministries, especially Finance, Agriculture & Development, & to Althingi Finance Committee

3. Use measures in national economic accounts as part of resource accounting

✓ Landgraedsla action: promote measures to Ministries, especially Finance & Althingi Finance Committee

DEVELOPING KNOWLEDGE ABOUT SOIL CONSERVATION

1. Recognise lot of knowledge exists by SCS, AUI etc

Landgraedsla action:

✓ assess what is known from local and international research

2. Recognise possible need for new research

Landgraedsla action:

✓ Identify priority needs for new information, eg

- Interaction natural and human causes

- Soil carrying capacity for sheep and for horses in different situations

- Use of native species mixes for stabilisation and carbon lock up

A landscape photograph showing a rural scene. In the foreground, there is a large, dark brown plowed field. A fence line with wooden posts runs across the bottom of the frame. In the middle ground, there is a vibrant green field. To the left, a farm with a grey barn and a white house is visible. In the background, there are rolling hills and a large body of water under a clear sky.

TRANSFERRING KNOWLEDGE TO SOIL MANAGERS

Farmers and other soil managers do not read peer-reviewed journals or understand scientific jargon

TRANSFERRING KNOWLEDGE TO SOIL MANAGERS

Landgraedsla action: Translate the high-blown into the practical

- ✓ Summarise all R&D into practical guidance
- ✓ Poster for every piece of completed R&D
- ✓ Modern means of information transfer: posters, short leaflets, text messaging, web, tractor cab cards
- ✓ All regional advisors trained in communication
- ✓ Advisory centres throughout rural area easily accessible to farmers & alongside other rural agencies
- ✓ Establish demonstration farms & plots in all SCS Regions
- ✓ Set up farm visits programme with Advisors and farmers

STIMULATING SOIL STEWARDSHIP

Sticks & carrots approach lead by Landgraedsla & agreed with Agriculture Ministry:

- ✓ Basic soil stewardship Code developed with farming community & agreed by ,Althingi
- ✓ Penalties for non-compliance with Code admin by Agriculture Ministry on advice of SCS
- ✓ Incentives: direct financial support for specific restoration work, tax breaks for exemplary achievement of highest standards in implementing Code

PARTICIPATION IN STEWARDSHIP

Top-down approaches failed to work effectively in past, eg working without farmers/land users, fencing without agreement & using only aeroplanes

Landgraedsla action:

- Get farmers together to recognise problems & identify solutions: encourage farmers to setup and lead local care groups with SCS support
- Get farmers to develop local action plans using locally-based advisors as facilitators & SCS GIS info as input
- Provide technical support by ensuring that R&D staff get out of the office
- Loan specialist equipment for assessment (eg GPS), for treatments (eg fertiliser)

GETTING THE APPROPRIATE SUPPORT STRUCTURE

Too many organisations involved nationally, regionally and locally, need to rationalise to remove duplication, save money but no/limited political will for change after setup
AUI

Landgraedsla action:

- ✓ Build on existing arrangements by improving cooperation & coordination
- ✓ Argue case politically for integration relevant agencies
- ✓ Develop integrated regional delivery of conservation advice
- ✓ Ensure that any agency for soil integrates science & technology, knowledge transfer and local advice

IMPROVING THE LAW

Suggested key elements of improved law to be lead by Landgraedsla:

- ✓ Define soil as natural & societal resource
- ✓ Place soil conservation within ecosystem approach
- ✓ Link soil conservation to sustainable development
- ✓ Define soil stewardship
- ✓ Attach Good Practice Code as Schedule
- ✓ Protection where special measures necessary, ie no grazing where severely damaging
- ✓ Soil preservation sites for research & education on changes in climate, other natural changes and human activity
- ✓ Provide scope & funding for R & D, & demonstration projects
- ✓ Power for incentives for exemplary management
- ✓ Power to set up local groups and schemes
- ✓ Power to set up special agency

THE INTEGRATED ACTION PACKAGE

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THE WAY FORWARD

A red tractor is shown working in a large, flat, brownish field. In the background, there is a body of water with a rocky shoreline. The foreground is a green field with a fence line. The text is overlaid on the image.

✓ Develop with full stakeholder participation

✓ Implement in integrated way through SCS & other parts government