

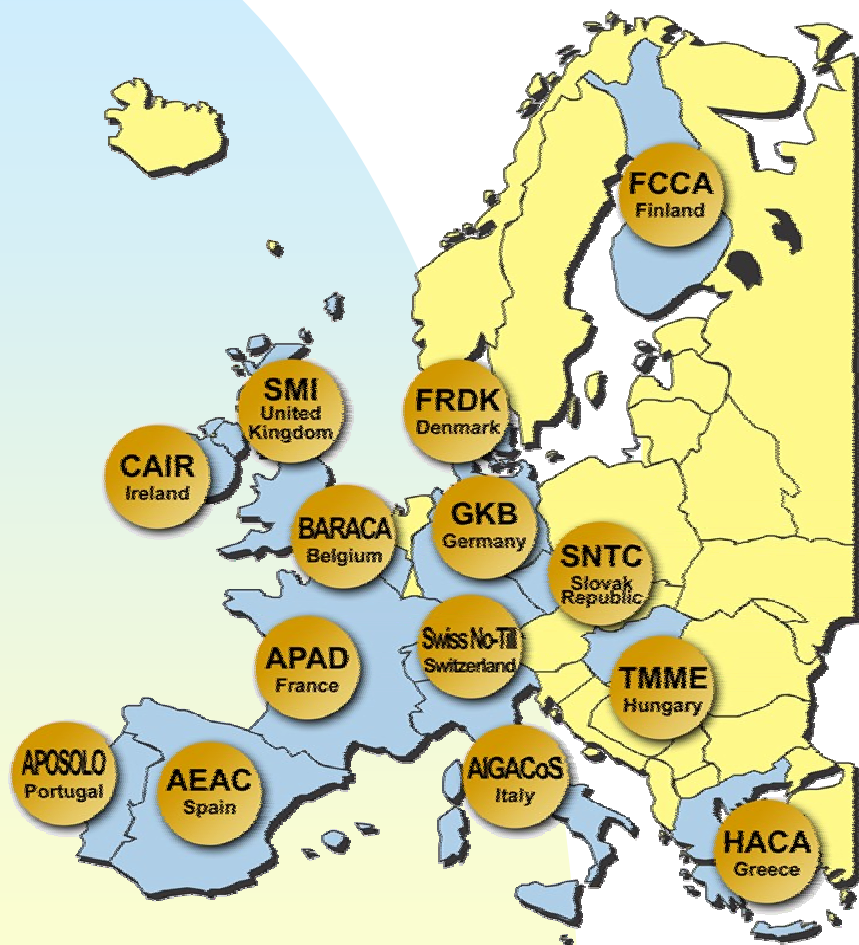


Situation of Conservation Agriculture in Europe

- **Presentation ECAAF**
- **Situation of CA in Europe and Spain**
- **Perspectives for the future**
 - ◆ **Agro-environmental legislation**
 - ◆ **Thematic strategy for soil protection**
 - ◆ **CAP Mid-term review**

Armando Martínez Vilela
Executive Director ECAAF

What is ECAF?



- **Non-Profit association**
- **Based in Brussels**
- **Objectives:**
 - **Exchange of Experiences among members**
 - **Relation with EU Institutions**
 - **Relation with International Institutions: FAO, World bank...**
 - **Support to the activities of National Associations**



Activities. Transfer of technology: Publications



Activities ECAF: Training, Field days, Seminars



Collaboration in the development of Legislative Proposals. EU

- **Thematic Strategy of the Commission for Soil Protection**
 - ◆ **Communication COM(2002) 179 “Towards a Thematic Strategy for Soil Protection”**
 - ◆ **Contacts with Commission, European Parliament and ESC**
- **Mid-term Review CAP**
 - ◆ **Proposal for a Council regulation for direct support schemes: Good Agricultural Conditions: measures for soil protection**

History of CA (I)

1930-40: Start Research (USA, UK)

■ Causes:

◆ EROSION:

☞ Costs “on-site”	27.000 mill\$/ year
☞ Costs “off-site”	17.000 mill\$/ year
☞ Total	44.000 mill\$/ year

◆ Saving fuel

Reduction of tillage needed

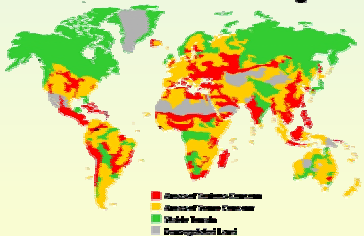
■ Problems:

◆ Weeds control

◆ Machinery suitable



Areas of Concern for Soil Degradation



Source: International Soil Reference and Information Center, <http://www.isric.org/>, 2002



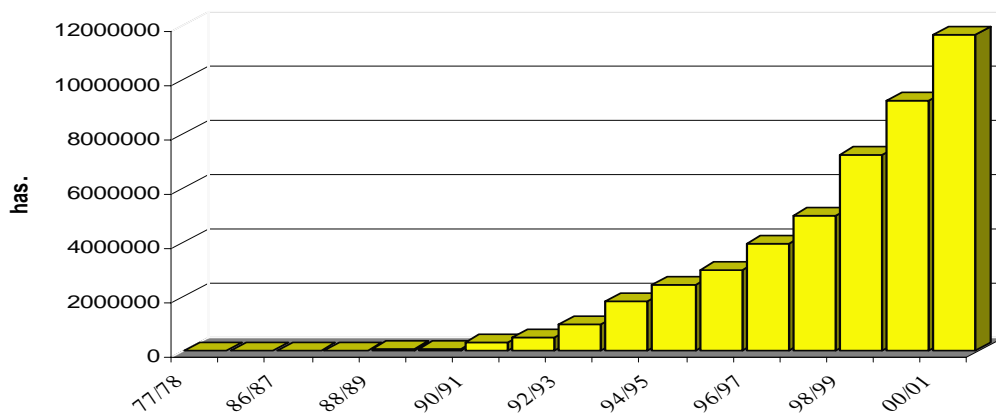
History of CA (II)

1950-Fin 80.

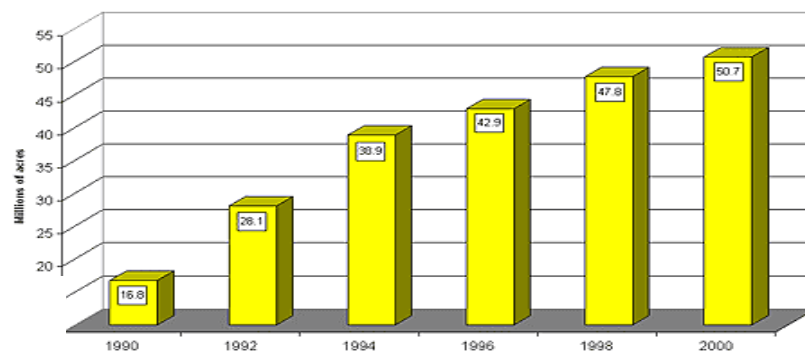
- ◆ Development of herbicides.
- ◆ Better machinery: Direct-drilling seeders.

Fin. 80-... Big growth

**Evolución de la superficie en Siembra Directa.
(Período 77/01). Fuente: AAPRESID**



**No-Till Adoption in the U.S.
1990 - 2000**



History of CA (III)

■ Causes

- ◆ Environmental requirements: USA Farm Bill 1995. 16 (1982)- 11 (1995) tn/ha/year:
- ◆ Evolution prices inputs:saving costs.
- ◆ Evolution worldwide prices grains
- ◆ Training and transfer of technology: CTIC, AAPRESID, CAAPAS....
- ◆ Support International Institutions: FAO, World Bank

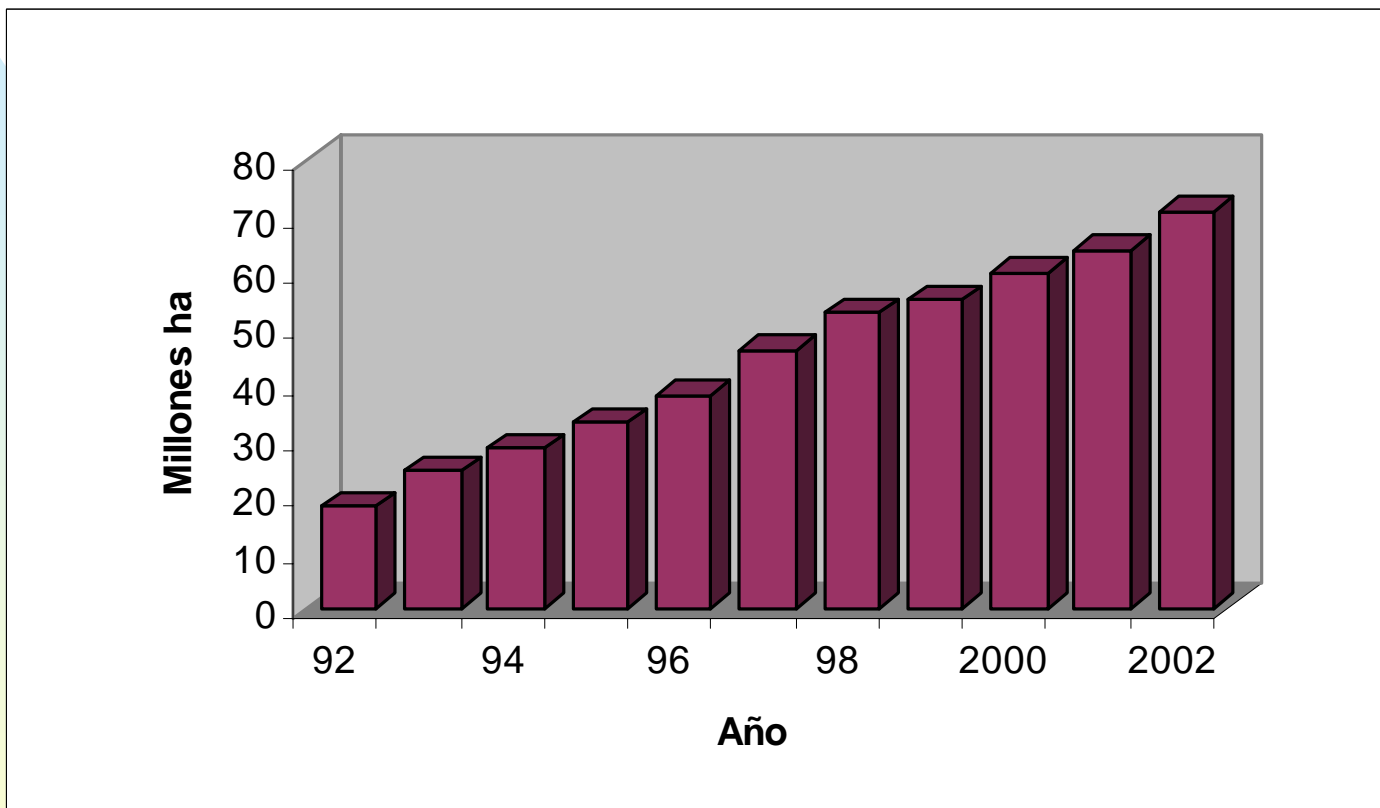
■ Conclusion

- ◆ **Beginning:** environmental benefits
- ◆ **Growth:** economic benefits:
Reduction costs + Subsidies

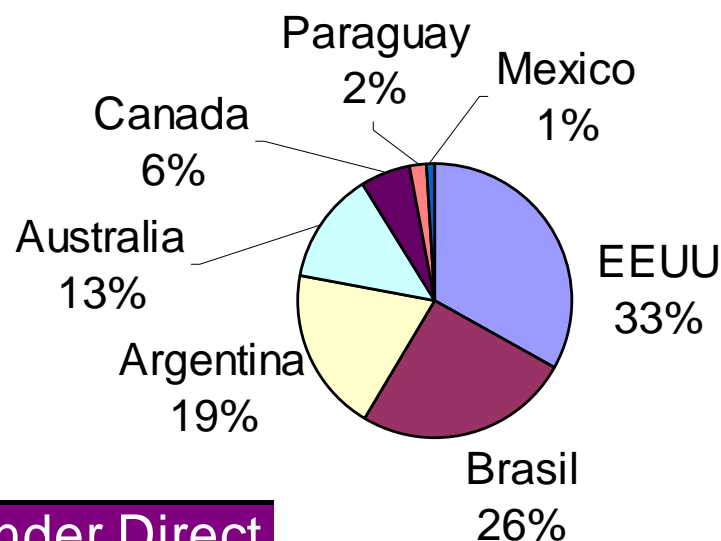




Direct drilling in the world



Direct drilling in the world



Surface under Direct Drilling (x 1,000 ha)	
USA	22.393
Brazil	17.356
Argentine	13.000
Australia	9.000
Canada	4.080

Direct drilling in the world

Country	Percentage DD/ Total arable surface
Paraguay	56,8%
Argentina	52,0%
Brasil	32,6%
Bolivia	21,5%
Australia	17,9%
USA	12,7%
Canada	9,0%

CA in Europe

	Superface Conservation Agriculture	Surface Direct Drilling
Francia	2.500	50
Alemania	2.375	354
España	2.000	350
Reino Unido	1.440	24
Italia	560	80
Hungría	500	8
Portugal	390	25
Dinamarca	230	
Eslovaquia	140	10
Bélgica	140	
Suiza	120	9
Finlandia		30
Irlanda	10	0

	% CA/ Arable surface	% DD/ Arable Surface
Suiza	29,1%	2,2%
Reino Unido	24,5%	0,4%
Alemania	20,1%	3,0%
Portugal	19,6%	1,3%
Bélgica	17,2%	
España	15,0%	2,6%
Francia	13,6%	0,3%
Hungría	10,9%	0,2%
Dinamarca	10,1%	0,0%
Eslovaquia	9,7%	0,7%
Italia	7,0%	1,0%

Situation CA in Europe

The development is being slower:

Less than 5% under Direct Drilling

Big effort in research

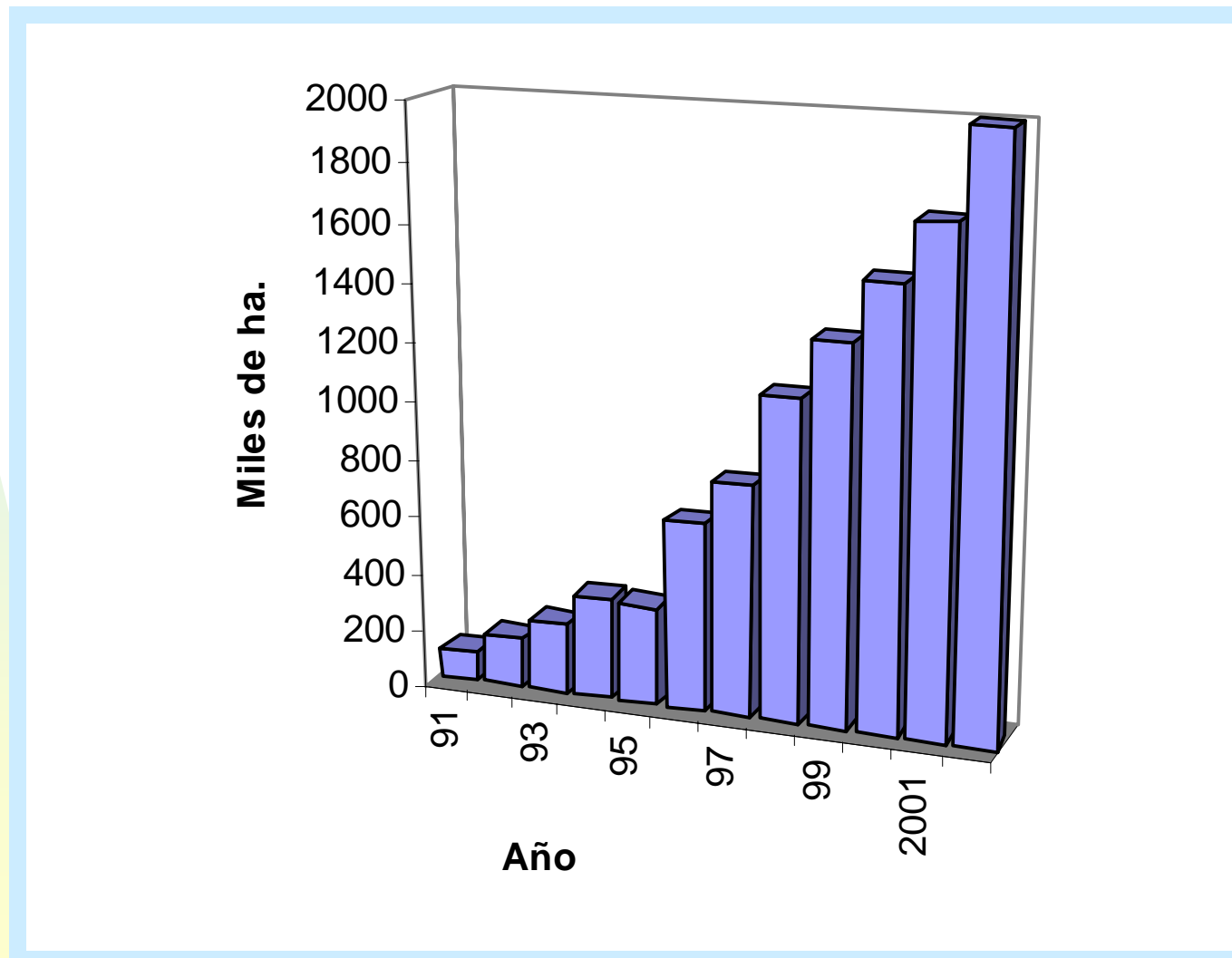
■ **Reasons:**

- ◆ Cultural: agriculture more traditional
- ◆ Less need to risk
- ◆ Lack of clear institutional support
- ◆ Lack of technology
- ◆ Lack of transfer of technology

■ **Situation is changing in last years (specially minimum tillage)**



Situation CA in Spain



Agri-environmental legislation

- **Introduced with 1992 reform**
- **Became more important in Agenda 2000**
- **3 levels of requirements:**
 - ☞ **Cross compliance:**
 - ☞ **Good agricultural practices**
 - ☞ **Agri-environmental measures:**
 - **Period: 5 years**
 - **Maximum amounts:**
 - **Annual crops: 600€/ha**
 - **Perennial crops: 900 €/ha**

Agri-environmental policy in Spain (I)

Cross compliance

- Requirements for farmers:
 - ◆ No burning straw
 - ◆ Keep land under fallow with minimum tillage or cover crops
 - ◆ No tillage following maximum slope
- Reduction payments until 20%

Agri-environmental measures

- ◆ Cover crops in perennial crops. 132.22 €/ha
- ◆ Minimum tillage and direct drilling. 54 €/ha
- Also in Integrated Farming





Agri-environmental measures: Portugal



	Cash crops (basic subsidy)	Irrigated cash crops (basic subsidy)	*Stubble conservation	*Cover crops	*Straw Conservation on the soil Surface
<20 ha	45	75	59	61	69
20 – 100 ha	36	60	47	49	55
100 – 200 ha	18	30	24	25	28

Agri-environmental measures: Germany



Federal State	Project	Support
 Brandenburg	Promotion of conservation tillage and no-tillage for reduction of sediment and nutrients run-off.	25€*ha ⁻¹ *y ⁻¹
 Nordrhein-Westfalen	Promotion of conservation tillage and no-tillage for reduction of soil erosion:	100€*ha ⁻¹ *y ⁻¹
 Rheinland-Pfalz	<p>No inversion tillage / mulch tillage after cereals before seeding of maize and sugarbeets</p> <p>a) with cover crops</p> <p>b) without cover crops</p>	<p>115€*ha⁻¹*y⁻¹</p> <p>45€*ha⁻¹*y⁻¹</p>
 Bayern	Mulch tillage including cover crops for row crops	100 €*ha ⁻¹ *y ⁻¹



Switzerland



Crops	Minimum tillage		Direct Drilling	
	1 – 5 years	6 – 10 years	1 – 5 years	6 – 10 years
Cereals	102	0	204	204
Rape	204	0	340	340
Maize (strip tillage)	306	204		
Maize	204	0	340	340
Beets	238	0	374	340
Peas and beans	170	0	272	272
Sunflowers	204	0	340	340

Future: Soil Protection Strategy



- 1. Communication from the Comision: April 2002**
- 2. Main threats to soil: erosion, loss of organic matter and contamination**
- 3. New environmental policy on soil protection**
- 4. CAP**
 - 1. Integration of Soil Protection in GAP, Agri-environmental measures.**
- 5. Other common Policies: structural, transport, research, foreign affairs**
- 6. Communication on soil erosion, loss of organic matter and contamination. June 2004**

Mid term review CAP

- **Compulsory cross-compliance**
 - ◆ Legal requirements: environment.
 - ◆ Good Agricultural Practices.
 - ◆ Reduction payments: 10%, 20%, 50% e incluso total
 - ◆ Environmental audit
- **Good Agricultural practices: measures against:**
 - ◆ Soil erosion
 - ◆ Soil compaction
 - ◆ Loss of organic matter

Conclusion

- Globalization and reduction of subsidies:
 - ◆ Need to be more competitive: reduction of costs
- Greater environmental requirements:
 - ◆ Need to adopt techniques that protect the environment and, specially, the soil
- **SOLUTION: Conservation Agriculture**



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- **More information:**
www.ecaf.org
www.aeac-sv.org