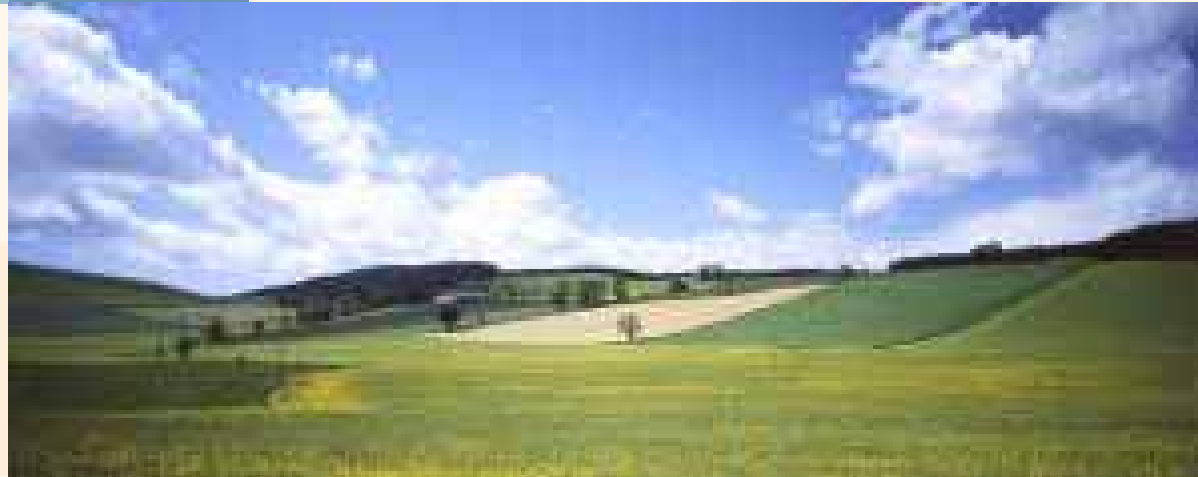


European Commission
Agriculture and Rural Development



The EU policy context for crop wild relative and landrace conservation and use

**AEGRO – ECPGR Symposium
Madeira, 15 September 2010**

Olivier DIANA

**European Commission
Directorate General for Agriculture and Rural Development
Unit H.1. Environment, GMOs and genetic resources**



Outline



- **DEVELOPMENT OF THE EU BIODIVERSITY POLICY**
- **EU BIODIVERSITY ACTION PLAN**
- **RELEVANCE OF AGRICULTURE FOR BIODIVERSITY**
- **BIODIVERSITY INTEGRATION INTO THE CAP**
- **RURAL DEVELOPMENT POLICY 2007- 2013**
- **RDP AND CONSERVATION OF PLANT GENETIC RESOURCES**
- **OTHER EU FINANCIAL INSTRUMENTS**
- **THE 2 COMMUNITY PROGRAMMES ON THE CONSERVATION OF GENETIC RESOURCES IN AGRICULTURE**
- **COMMUNICATION POLICY**



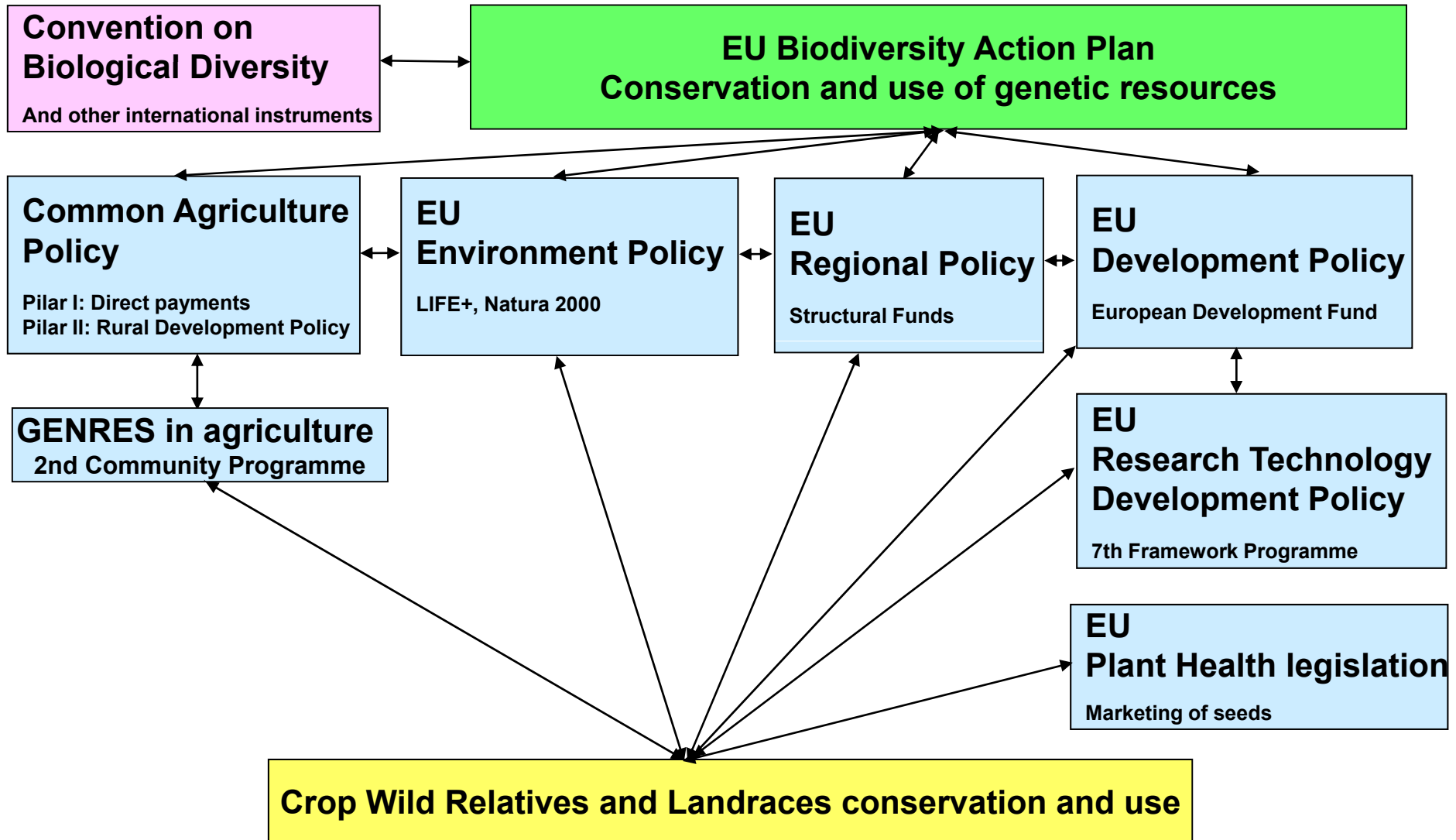
Development of the EU Biodiversity Policy



- **1979 – Birds Directive 79/409/EEC**
- **1985 – EIA Directive 85/337/EEC**
- **1992 – Habitats Directive 92/43/EEC**
- **1993 – EC contracting party to Convention on Biological Diversity (CBD)**
- **1998 – EC Biodiversity Strategy**
- **2001 – SEA Directive 2001/42/EC**
- **2001 – Göteborg Declaration >> *halt of biodiversity loss till 2010***
- **2002 – EU Biodiversity Action Plans in 4 sectors including Agriculture**
- **2004 – Malahide (EI) conference. Stakeholders consultation**
- **2006 – EU Biodiversity Action Plan >> target = 2010**
- **2008 – BAP Interim Report**
- **April 2009 G8 Environment ministers « Carta di Siracusa »**
- **April 2009 – Message from Athens on post-2010 policy**
- **2010 – UN International Year of Biodiversity**
- **January 2010 – Communication EU post-2010 Biodiversity vision and targets**
- **March 2010 – EU Head of States: decision on long term vision biodiversity 2050 and 2020 target. Towards a Biodiversity Strategy**
- **October 2010 - 10th CoP of the UN Convention on Biological Diversity.**



EU Biodiversity Policy



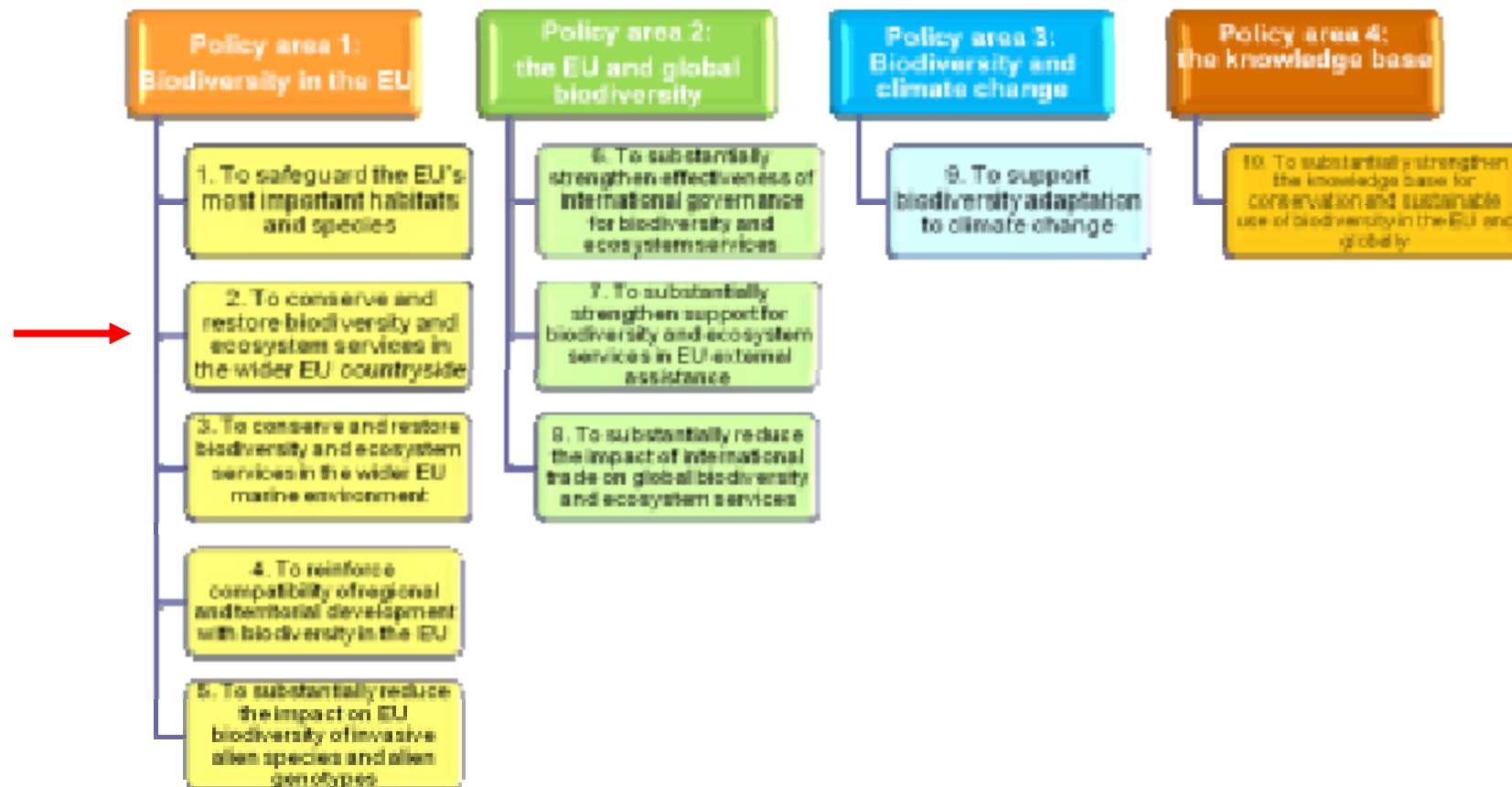


EU Biodiversity Action Plan (2006-2010)



Communication from the Commission in May 2006: « Halting the loss of biodiversity by 2010 and beyond »

4 policy areas, 10 priority objectives, 160 actions





EU Biodiversity Action Plan



Objective 1 : To safeguard the EU's most important natural habitats and species

A1.1 Target: Natura 2000 network established (13 actions)

Total : > 25,000 sites , around 17% of EU territory

- ➔ **What is the situation of the *in situ* conservation of Crop Wild Relatives and landraces inside and outside the Natura 2000 sites ?**



Objective 2 : To conserve and restore biodiversity and ecosystem services in wider EU countryside (25 actions)

- **Integrate biodiversity into Rural Development Programmes (2007-2013)**
- **Ensure conservation and sustainable use of genetic resources**

Now, the 2010 target will not be achieved

BAP report 2010 in preparation



Agriculture and Biodiversity



Relevance of Agriculture for Biodiversity (2009 statistics)

- **Agriculture and forestry represent 78,3% of land use in the EU-27**, ranging from 50% in Malta to 95% in Poland: major role for the environment
- High nature value farming systems cover > 10% of agricultural area in most Member States
- Natura 2000 sites cover 13% of cultivated area and 10% of agro-ecosystems needing extensive practice

Two threats: ► **intensification** and ► **marginalisation** (land abandonment)

Integrating the environment into the CAP: based on 2 complementary approaches:

- **Market and Income Policy (Pillar I of the CAP):** Respect mandatory basic environmental requirements as defined **under cross compliance**.
- **Rural Development Policy (Pillar II of the CAP):** Encourage the provision of **environmental public goods** such as the preservation of biodiversity and environmentally valuable landscapes. Beneficial environmental outcomes of farming are subject to **incentive measures**.



Rural Development Policy 2007-2013: Objectives and Priorities

Axis 1: Competitiveness

- Increase the competitiveness of the agricultural and forestry sector

Axis 2 (42,5 b €) : Environment and Land Management

- Improving the environment and the countryside with specific focus on biodiversity, organic farming, high nature value farmland, water and climate change

Axis 3: Diversification and quality of life

- Improving the quality of life in rural areas and encouraging diversification of the rural economy

Axis 4: Leader

- Local development and Governance
- according an integrated, innovative and bottom-up approach

EAFRD: European Agricultural Fund for Rural Development



Rural Development Policy and conservation of genetic resources



Better use of opportunities at national and regional level offered by:

► **Agri-environment payments (around 19 b€ i.e. 44% of Axis 2)**

Articles 39(1) to 39(4) of Council Regulation (EC) No 1698/2005 and Article 27(4) of Regulation (EC) No 1974/2006: **“To preserve plant genetic resources naturally adapted to the local and regional conditions and under threat of genetic erosion”**.

Genetic resources (plants and animals): In 2008, 0,013% (15,7 m€) of the total budget for agri-environment (1,2b€).

► **Other opportunities**

Article 39(5) of Council Regulation (EC) No 1698/2005 and Article 28(3) of Regulation (EC) No 1974/2006: Operations at national and regional level for **specific support for the conservation of genetic resources in agriculture**.

Genetic resources (plants and animals): In 2008, 0,008% (10 m€) of the total budget for agri-environment (1,2b€).



RDP specific support for the conservation of plant genetic resources



Portugal

Objectives:

- Conserve genetic plant resources. In accordance with a conservation and improvement programme defined for each species or variety.
- Promote networking for conserving genetic plant resources, interconnect institutions involved in the collection, characterisation, multiplication and valorisation of genetic resources, by including them in certification systems.

Beneficiaries: [Public and private institutions](#) in public/private partnerships.

Type of actions:

- Conserve species and varieties used by farmers and rural populations, adapted to local environmental conditions and produced in traditional systems.
- Support establishment and maintenance of conservation fields, including collection expenditure;
- Support classification and valorisation of genetic plant resources (regional varieties);
- Support information dissemination, according to the technical rules previously defined by the coordinating structure;
- Support dissemination of the valorised genetic material;
- Purchase of services and equipment to support *ex-situ* conservation and information exchange.



RDP specific support for the conservation of genetic resources



European Network for Rural Development:

<http://enrd.ec.europa.eu/>

National contact points for RDPs:

http://enrd.ec.europa.eu/whos-who/managing-authorities/en/managing-authorities_home_en.cfm



CAP and Biodiversity Policy: next steps



Challenges for post-2013 CAP

- **Food security** (competitive agriculture)
- Taking care of natural resources and the environment : **Ecosystem services**
- Wider development in rural areas: **Strengthening the RD policy**
- Definition of sub-targets: **Indicators**

Post-2010 EU Biodiversity Strategy

March 2010 - Head of Member States. A new vision for 2050 and decision on the post 2010 target

Target: To halt the loss of biodiversity and the degradation of ecosystem services in the EU by 2020, , and restoring them in so far as feasible, while stepping up the EU contribution to averting global biodiversity loss.

- On going public consultation on the post-2010 EU biodiversity strategy is now available from the DG ENV website:

<http://ec.europa.eu/environment/consultations/biodecline.htm>

- New EU Biodiversity Strategy (post-2010) under preparation



Post-2010 EU Biodiversity Strategy



- Build on the experience and lessons from the current process
- **Legislative and policy tools:** **Effective implementation** and **commitment** of different stakeholders
- **Ecosystems:** Biodiversity policy should evolve towards conserving the vitality of **entire ecosystems**, including biodiversity outside protected areas. Recognize the value of ecosystems services and public goods
- **Green infrastructure:** Will play a **substantial role** in the EU's post-2010 biodiversity policy and particularly in the implementation of the Habitats and Birds Directives
- **Climate change:** Strengthen the link between the climate change and biodiversity agendas, promote Natura 2000 as a part of climate change adaptation
- **Natura 2000:** Ensure **better integration** into broader countryside (ecosystems), complete and secure the **long-term management** of Natura 2000 sites (budget)
- **Biodiversity including genetic resources:** Enhance **integration** into the other policy sectors
- **Comparative data and suitable/relevant indicators:** **Better knowledge** and **appropriate use**
- **Invasive species:** Promote good **management practices** and an **effective strategy**



OTHER EU FINANCIAL INSTRUMENTS



The 7th Framework Programme (FP7) for research activities



10 Themes among which theme 2:
Food, agriculture and fisheries, and biotechnology (FAB)

EC contribution 2007-2013 (1.935 b€)



FP7 Plant Projects



■ SOLIBAM: "Strategies for organic and low-input integrated breeding and management"



Objectives:

Increased understanding and use of Gene x Environment x Management interactions to improve crop breeding and production in highly variable organic and low-input systems

Crops: Wheat, Barley, Maize, Vegetables (incl. landraces) EU-funding: 6M€/4,5 years
Started: March 2010

■ PGR SECURE: "Novel characterisation of crop wild relative (CWR) and landrace (LR) resources as a basis for crop breeding"

Objectives:

- Develop novel characterisation techniques and conservation strategies for European CWR and LR diversity
- Facilitate use of CWR and LR by breeders
- Development of informatics

Genera: Avena, Beta, Brassica, Medicago EU-funding: 3M€/3,5 years
Start: Feb. 2011



FP7



- **FRUIT BREEDOMICS: "Integrated approach for increasing breeding efficiency in fruit tree crops"**

Objectives:

Improve efficiency in apple and peach breeding programmes

Tree crops: Apple, Peach EU-funding: 6 M€/4,5 years Start: April 2011

On going FP7 call with relevance for research on genetic resources Infrastructure capacities: gene banks data bases


Upcoming FP7 call topics under Work Programme 2011 publication of topic: Sustaining and managing forest tree genetic resources

For further information: www.cordis.europa.eu/fp7/kbbe/home_en.htm



EU legislation on the marketing of conservation varieties



- **Commission Directive 2008/62/EC** of 20 June 2008 providing for certain derogations for agricultural landraces and varieties threatened by genetic erosion and for marketing of seed and seed potatoes of those landraces and varieties.
 - **Commission Directive 2009/145/EC** providing for certain derogations, for vegetable landraces and varieties threatened by genetic erosion and vegetable varieties with no intrinsic value for commercial crop production (OJ L 312, 27.11.2009, p. 44–54).
 - **Commission Directive 2010/60/EU** providing for certain derogations for marketing of fodder plant seed mixtures (OJ L 228, 31 .08. 2010, p.10-14).
-
- **Impact assessment:** best options for a review of the EU legislation on the marketing of seed and plant propagating material.
 - External consultants prepared a study report on variety registration, while the Commission services made an enquiry on seed certification. The data thus gathered should be brought together in an **impact assessment report by end 2010/early 2011**.
 - **More information :**  sanco-mailbox@ec.europa.eu



Community Programmes for the conservation of genetic resources in agriculture



First Community Programme under former Council Regulation (EC) N° 1467/1994

21 co-funded projects: 17 plant + 4 animal (9 m€)

17 plant projects: *Allium, Avena, Hordeum, Beta, Brassica, Daucus, Solanum, Ulmus, Vitis, Zea, Fruit trees, Prunus, Oryza, Rosa*

GENRES brochure: outcome of 20 co-funded projects



Second Community Programme under Council Regulation (EC) N° 870/2004

17 co-funded actions: 12 plant + 5 animal (10 m€)

12 plant projects: *Leafy Vegetables, Grapevine, Forest, Saffron, Small berries, Rice, Garlic, Crop wild relatives, Oats, Artichoke, Hazelnut and Almond, Gooseberries*

**Leaflet publication under preparation: 11,000 copies, several languages
Awareness on genetic resources to a large audience**



COMMUNICATION POLICY



- **17 GENRES actions: meetings, workshops, on spot missions...**
- **Develop **synergies** between GENRES actions having complementary objectives and other initiatives (coordinators)**
- **Improve communication between **scientific community** and **national authorities**: GENRES, RDPs, RTD Committees**
- **GENRES Committee: next meeting on 02 December 2010**




COMMUNICATION POLICY




Executive summary for Heritage sheep

<http://www.heritagesheep.eu/Heritagesheep.pdf>

Use as a model for the dissemination of the final results of the actions on coordinator's web sites

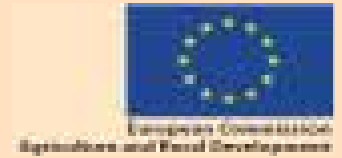
The University of York
Heritage Sheep AGRI GEN RES action 040
co-funded by the European Commission
under Council Regulation (EC) N° 870/2004 



WEB SITE OF DG AGRI on Genetic resources in agriculture:
http://ec.europa.eu/agriculture/genetic-resources/index_en.htm



AGRI- RESGEN@ec.europa.eu



Thank you for your attention



FUTURE PERSPECTIVE OF THE COMMUNITY PROGRAMME



- **Closure of the 17 GENRES actions (2011-2012)**
 - ▶ **Output of the final results of the 17 GENRES actions: a leaflet is under preparation (11,000 copies in several EU languages)**
- **Evaluation of the Community programme** by independent experts :
Article 14 of Council Regulation (EC) N°870/2004
- **Key issues to be considered for needs and future priorities** for promoting plant genetic resources at regional, national and EU level:
 - **Analysis of plant genetic diversity (plant, crop, agro-ecosystems),**
 - **Characterisation (phenotype and genome),**
 - **In situ and ex situ conservation: germplasm collection, gene banks data bases (maintenance and harmonisation), catalogues, etc...**
 - **Breeding activities**
 - **Awareness and communication policies.**
- **Third Community programme ?** ▶ **Political decision**

N.B: Community Programme for the conservation of genetic resources in agriculture (Council Regulation (EC) No 870/2004) is co-funding transnational actions

