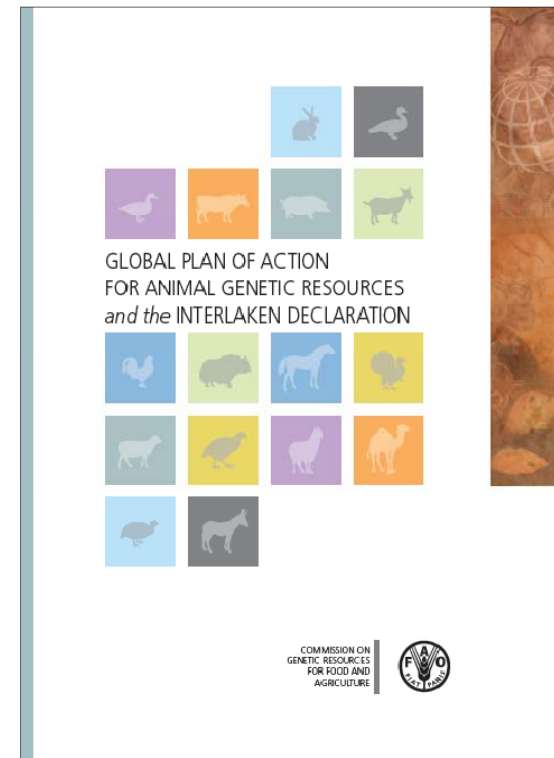


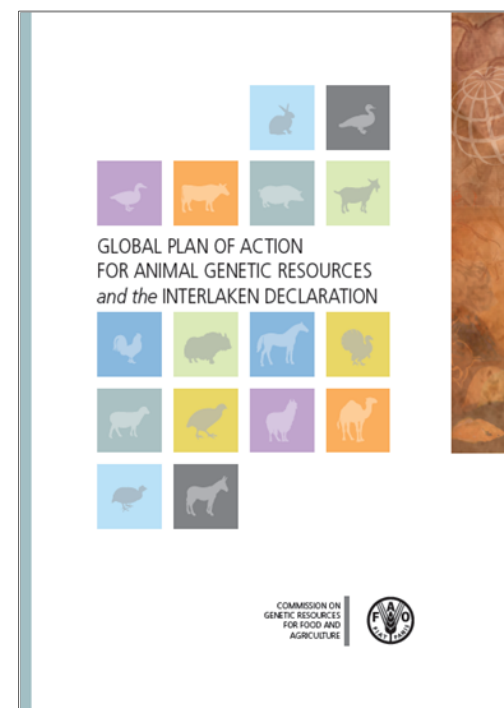
Implementation of the Global Plan of Action for Animal Genetic Resources

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Global Plan of Action

- FAO member countries reported a continual erosion of livestock genetic diversity
 - State of the World's AnGR
- To address this loss of diversity, FAO Member countries developed the ***Global Plan of Action for Animal Genetic Resources***
 - Multiyear, participatory process
- Adopted in 2007 through the ***Interlaken Declaration***



Rationale of Global Plan of Action

- The *Global Plan of Action for Animal Genetic Resources* provides a **framework**, agreed by the international community,
 - to **support and increase** the overall **effectiveness** of national, regional and global efforts for the sustainable use, development & conservation of animal genetic resources
 - to facilitate **mobilization of resources**, including adequate financial resources, development of institutions, human resources and cooperative frameworks.

Strategic Priorities for Action

Priority Areas

1. Characterization, inventory & monitoring of trends and associated risks (2 SP)
2. Sustainable use and development (4 SP)
3. Conservation (5 SP)
4. Policies, institutions & capacity building (13 SP)

***23 Strategic Priorities for Action
provide agenda for action***

Implementation and Financing of the GPA

- National, regional and global levels
- Role of international organizations
- Involvement of stakeholders
- International cooperation
- Interaction with donor community
- Monitoring of progress and reporting
- Further guidance by the Commission on Genetic Resources for Food and Agriculture
 - governing body within FAO

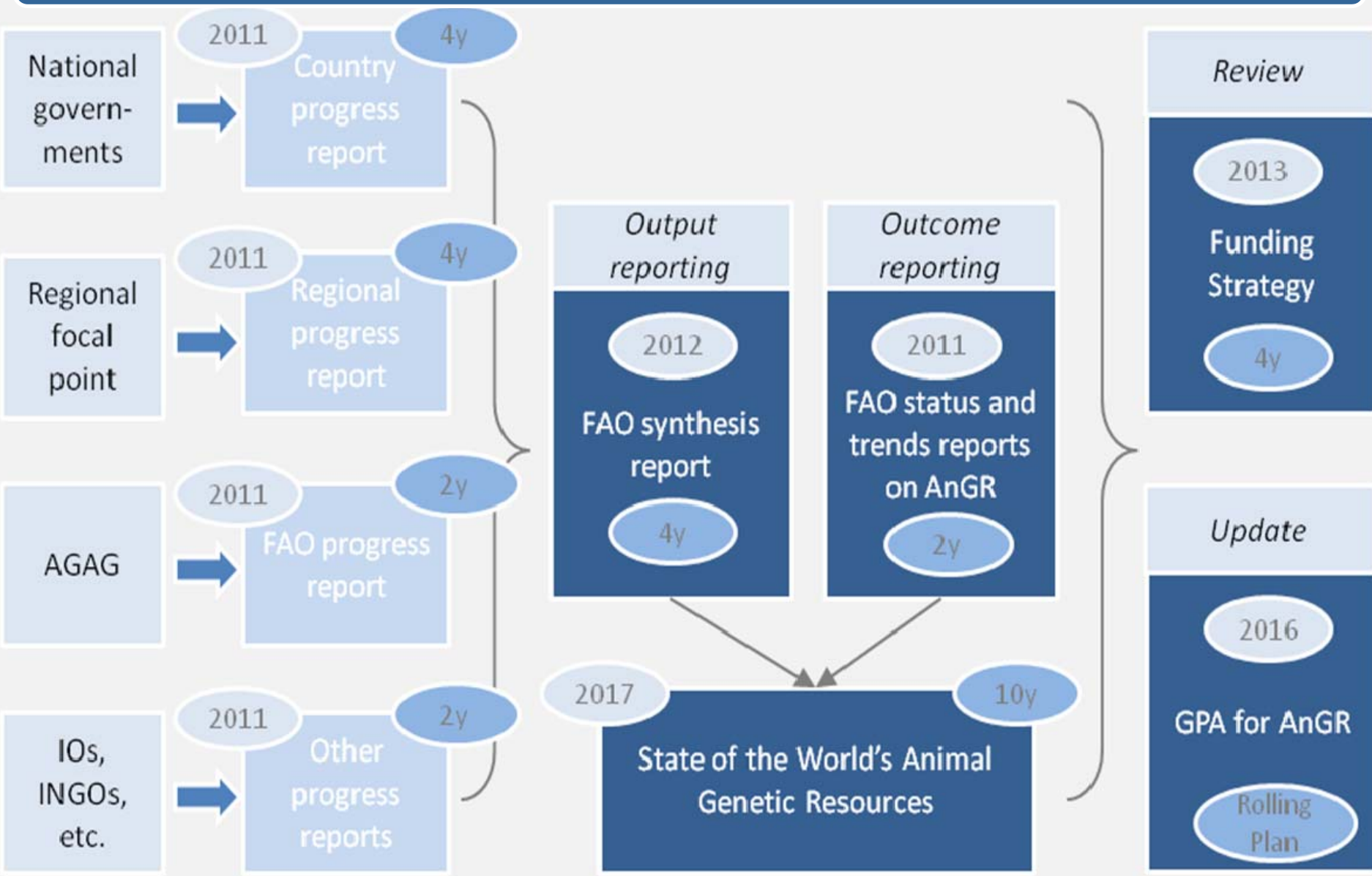
Implementation and Financing of the GPA

- Main responsibility rest with National Governments
 - AnGR are sovereign entities
 - Knowledge of local AnGR rests within countries
- The GPA notes that implementation will require:
 - Substantial and additional financial resources and long-term support
 - Support from national investments and international cooperation, especially from developed to developing countries
 - International cooperation, including strong participation by FAO

Implementation and Reporting

- GPA will be implemented on a number of levels
 - National
 - governmental and non-governmental
 - Regional
 - International
 - including FAO
- Framework and schedule for reporting has been established at each level

Reporting lines for the implementation of the GPA on AnGR



20xx Date of next compilation of document

xy Frequency of compilation of document (in years)

Implementation and Reporting

- GPA will be implemented on a number of levels
 - National
 - governmental and non-governmental
 - Regional
 - International
 - including FAO
- Framework and schedule for reporting has been established at each level
- Country-level reporting starts at end of 2011
 - via questionnaire
 - insufficient data at moment

FAO Contributions to Implementation

- Communication
 - technical guidelines
 - awareness raising and mainstreaming of AnGR
- Assistance in development of national measures
- Monitoring of AnGR
 - status and trends reports
- Development of partnerships and facilitation of regional and international collaboration
- Provision of policy support
 - Review of policies and coordination with other forums
- Support training and research
- Development of a Funding Strategy

Overview of Guidelines

Guidelines to assist the preparation of national strategy and action plans

Strategic Priority Area 1
Characterization, inventory and monitoring of trends and associated risks

Survey and monitoring

Characterization phenotypic

Characterization - molecular

Strategic Priority Area 2
Sustainable use and development

Breeding strategies for sustainable management of animal genetic resources

Animal identification and performance recording

Strategic Priority Area 3
Conservation

Cryoconservation guidelines

In vivo conservation guidelines

Strategic Priority Area 4
Policies, institutions and capacity-building

Institutional arrangements for the implementation of national strategy and action plans

FAO Guidelines for Management of AnGR

- Two were approved in 2009 and have been published
 - Preparation of National Strategies and Action Plans for Animal Genetic Resources
 - <http://www.fao.org/docrep/012/i0770e/i0770e00.htm>
 - Breeding Strategies for Sustainable Management of Animal Genetic Resources
 - <http://www.fao.org/docrep/012/i1103e/i1103e00.htm>

FAO Guidelines for Management of AnGR

Five more were approved in 2011 and are being published

- Surveying and monitoring
 - <http://www.fao.org/docrep/meeting/022/am650e.pdf>
- Phenotypic characterization
 - <http://www.fao.org/docrep/meeting/022/am651e.pdf>
- Molecular characterization
 - <http://www.fao.org/docrep/meeting/022/am652e.pdf>
- Cryoconservation
 - <http://www.fao.org/docrep/meeting/022/am653e.pdf>
- Institutional framework
 - <http://www.fao.org/docrep/meeting/022/mb542e.pdf>

Other Guidelines

- Two AnGR Guidelines under development
 - in vivo conservation
 - animal identification and performance recording
- In Vivo Guidelines will be reviewed at this workshop

Global Plan of Action



Arabic, Chinese, Danish, English, French, German, Norwegian, Polish, Russian, Spanish,

in preparation by: Czech, Hindi, Portugese, Thai, Vietnamese, Indonesian, Greek, Korean, Slovakian

Other Communication

- Publication and dissemination of SOW-AnGR and related products in all UN languages (A,C,E,F,R,S)
 - More than 54 000 copies of different related publications in various languages distributed
- DAD-net
 - more than 1000 subscribers
- AGRI – scientific journal – Cambridge University Press
 - special issues to International year on natural fibre (2009), and International year of biodiversity (2010)
- National GPA implementation - poster exhibition
 - <http://www.fao.org/ag/againfo/programmes/en/genetics/posters.html>

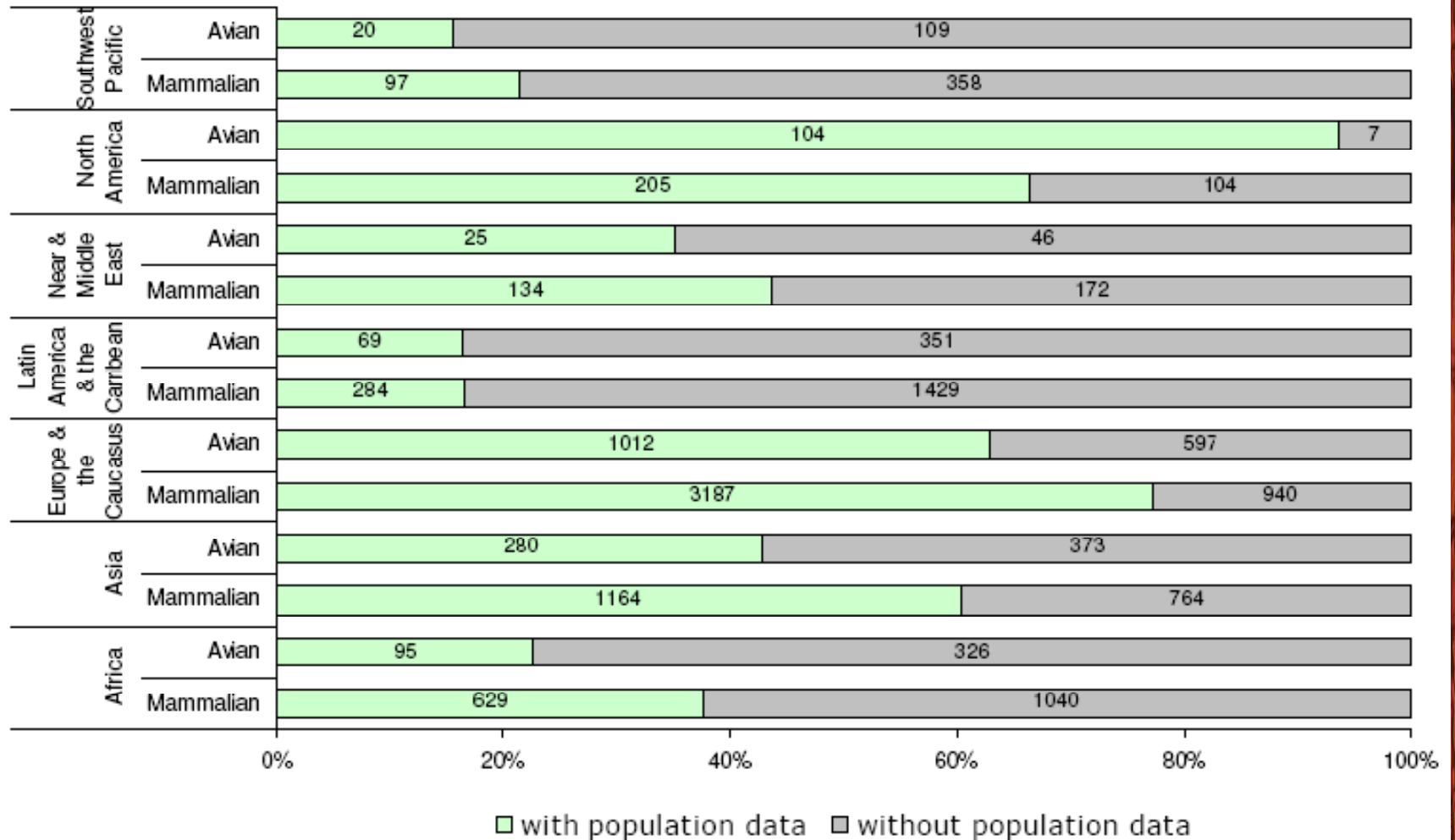
Support for national implementation of the *Global Plan of Action*

SPA 1: Characterization, inventory & monitoring

- South West Pacific: Pig and chicken characterization in 6 countries
- HPAI – biodiversity interface (Uganda, Cambodia, Egypt) and breed characterization
- Development of Biodiversity Indicators
- DAD-IS training
 - regional workshops in Central Asia, Asia, Eastern Europe
- Status and trends report on animal genetic resources in 2010

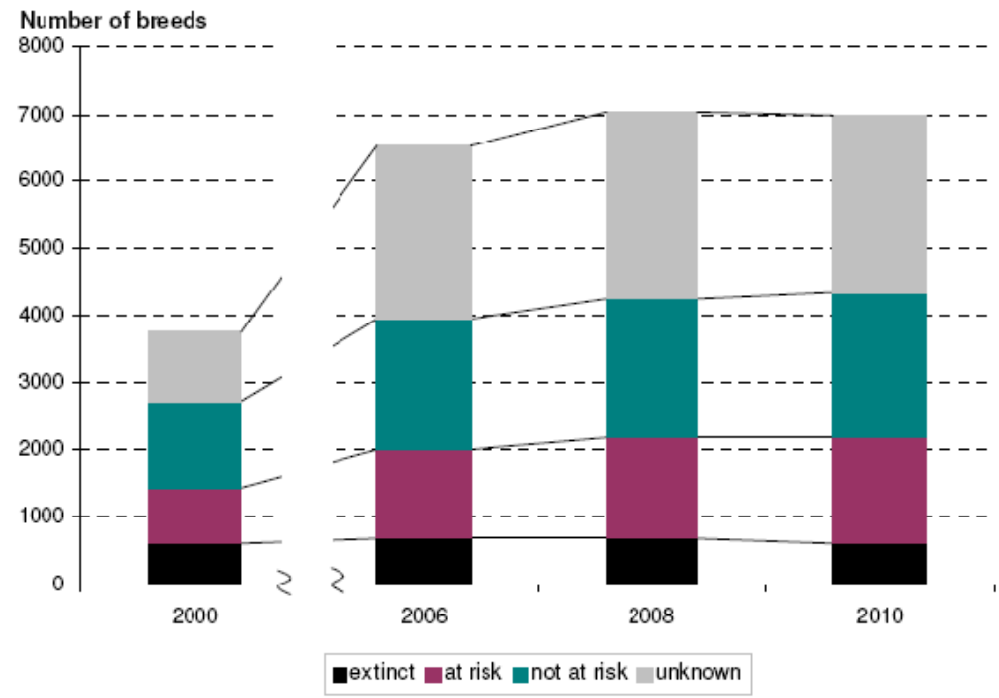
State of reporting

Proportion of national breed populations for which population figures have been reported



Trends in genetic erosion

Changes in the risk status of local breeds from 2006 to 2010



- number of local breeds categorized as at risk increased from 21 % to 22 % (2008-2010)
- absolute number of local breeds categorized as at risk also increased from 1 477 to 1 543
- fewer extinct breeds

Breed Reporting Summary

- Coverage of breed diversity has improved
 - remains far from complete
- Risk status is not known for more than 1/3 of breeds because of missing population data
- Not possible to draw reliable conclusions regarding global trends in breed risk status

SPA 2: Sustainable use and development

- FAO TCP in Mongolia, Myanmar and Nepal for genetic improvement of dairy cattle
 - identification
 - performance recording
 - bull dam selection
- Animal identification and performance recording
 - ICAR Task Force for Animal Identification and Performance Recording in Developing Countries
 - paper at EC and OIE conference
 - guidelines development
 - TCP requests by India and Tanzania

SPA 3: Conservation

- GEF project In-situ conservation of endemic ruminant livestock in West Africa, with ILRI, ITC
- GLOBALDIV project www.globaldiv.eu
 - summer school
 - research papers
 - editorials in project newsletter
- Guidelines on Cryo and In Vivo Conservation
 - capacity building workshops
- Evaluation of current arrangements for existing national and multi-country storage systems for the conservation of animal genetic resources
 - contribute to new agreements

National Implementation

- Awareness of the importance of AnGR low, especially among general public
- Conservation is most important AnGR activity
 - *in situ* is most common method
 - Twice as common as *ex situ* approaches
- Countries are active in gene banking of AnGR
 - 20% have fully operational gene banks
 - Another 50% expect to have gene banks within 5 years
- Many countries have dispersed gene banks (50%)
 - government agencies, research centres, universities, AI stations
- Semen is most commonly banked material

International Implementation

- No substantial multi-country gene banking of AnGR
- Widespread interest among respondents (90%)
- Regional gene bank is the preferred option
 - 60% willing to host and 40% to contribute
- Preferred hosts are intergovernmental agency or the government of host country
- Most countries (84%) prefer to maintain ownership of contributed material
 - 53% willing to share ownership
- Health and sanitary regulations would be an important factor to consider

SPA 4: Policies, institutions and capacity-building

- Awareness raising
 - invited speakers at a number of scientific conferences
 - several papers on animal genetic resources and climate change
 - Publication of [Adding Value to Livestock Diversity - Marketing to promote local breeds and improve livelihoods](#)
- Capacity building
 - courses with GLOBALDIV, ILRI-SLU, European Master in Animal Breeding and Genetics, International Centre for Advanced Mediterranean Agronomic Studies CIHEAM, AGE
- Cooperation with
 - CBD
 - WIPO on patents: Patent landscape study
 - European Forum for Farm Animal Breeders (EFFAB)
 - Poultry Breeders Roundtable

SPA 4: Policies, institutions and capacity-building

- Guidelines
 - Preparation of National Strategies and Action Plans for Animal Genetic Resources
 - Development of the Institutional Framework for the Management of Animal Genetic Resources
- Strengthening and establishing RFP
 - West and Central Africa established
 - East and Southern Africa, Central Asia and Asia planned
 - Collaboration with Europe and Latin America
- Assistance to countries in preparation of national strategies and action plans

Countries and NSAPs

Status	No	Countries
not yet planned	5	Burundi, Costa Rica, Ghana, Tunisia, Zimbabwe
planned	15	Bangladesh, Bolivia, Cambodia, China, Iran, Lao People's Democratic Republic, Myanmar, Nepal, Papua New Guinea, Poland, Philippines, Moldova*, Rwanda, Sri Lanka, Viet Nam
under development	21	Belgium, Bhutan, Burkina Faso, Chile*, Colombia*, France, India, Kenya, Malawi, Malaysia, Mongolia, the Netherlands, Nigeria, Oman, Peru*, Russia, Slovakia, Syria, Togo, Turkey, Ukraine
Endorsed	7	Armenia*, Denmark , Finland , Iceland , Norway , Romania, Sweden
being implemented	9	Albania*, Austria, Canada, Czech Republic, Germany**, Montenegro, Spain, United Kingdom**, United States of America

Results of informal surveys on progress in country implementation of the Global Plan of Action for Animal Genetic Resources (CGRFA/WG-AnGR-6/10/Inf.10)

GPA Funding Strategy

- The funding strategy for the GPA was developed Includes all funding for implementation of GPA
 - National governments
 - Bi-lateral, regional and multi-lateral
 - National and international NGO
 - Private sector
 - FAO regular programme
 - Voluntary Contributions to Special Trust Account

Funding Strategy Trust Account

- Modeled after similar programme for International Treaty on Plant Genetic Resources for Food and Agriculture
- ITWG/CGRFA established framework
 - Eligibility to developing countries
 - Funding limits
 - \$50 000 for national projects
 - \$100 000 for multi-country projects
 - Two year time frame
- Donors provide non-earmarked funds
 - Use is not specified except to predefined priorities
 - at least \$500 000 to launch first call

Voluntary contributions to the FAO Trust Account

Donor	Date	Contribution
Switzerland	December 2009	50.000 US-\$
Switzerland	December 2010	250.000 US-\$
Norway	December 2010	150.000 US-\$
Germany	July 2011	480.000 €

- Call was announced on September 15
- Concept notes due November 15
- Call for full proposals early 2012
- Projects initiated in Summer 2012

Looking Forward

- Directly assist countries in GPA implementation
 - administer Funding Strategy projects
 - support countries in development of NSAP
 - backstop Technical Cooperation Projects
- Raise global awareness for AnGR
- Complete and distribute all Guidelines
 - support implementation with capacity building
- Support regional coordination
 - support existing and new RFP
- Cooperate with international organizations
- Act as AnGR Secretariat to CGRFA
- Report on GPA implementation

Thank you

