Sense and nonsense

of a fully developed binding treaty on AnGR

(from an ABS perspective) A cost-benefit analysis

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Exploring the need for specific measures for access and benefit-sharing of animal genetic resources for food and agriculture

Outline

- Historical background: a discussion on possible Treaty on AnGR
- Current opportunities under the CBD
- Rationale for the PGR Treaty – applying this rationale to AnGR
- SWOT analysis for the AnGR Treaty
- If not a Treaty what else?
- Conclusions

Historical background: a discussion on possible Treaty on AnGR

The Ninth Session of the CGRFA, October 2002

- Pros and cons were expressed on the possible need for a Treaty on AnGR, pending completion of the *Report on the State of the World's Animal Genetic Resources*

- The issue was left open for consideration in future sessions of the Commission

(FAO, 2002: CGRFA-9/02/REP : para 13)

Historical background: a discussion on possible Treaty on AnGR

The Third Session of the ITWG-AnGR March/April 2004

- A number of countries expressed the view that the Commission, at its Tenth Session, should consider initiating negotiating of an international treaty on AnGR for food and agriculture,

  noting that the Commission had left is possibility open, pending completion of the first *Report on the State of the World's Animal Genetic Resources*

(FAO, 2004a: CGRFA/WG-AnGR-3/04/REPORT, para 19)

Historical background: a discussion on possible Treaty on AnGR

The Tenth Session of the Commission, November 2004

- Some Members of the Commission suggested the initiation of a process for preparing an international treaty on AnGR, and noted the need for safeguarding the rights of indigenous livestock keepers

- Other Members considered this to be premature, and stated that any discussion of a legal instrument should await the completion of the first *Report on the State of the World's Animal Genetic Resources*

(FAO, 2004b: CGRFA-10/04/REP , para 60)

Tenth session
of the Commission

AnGR Treaty debate

Historical background: a discussion on possible Treaty on AnGR

League of Pastoral Peoples

- "A fair, comprehensive international legal framework on AnGR is possible and that it will contribute to global food security, and also benefit the populations of some of the world's most drought-stricken and food-insecure countries"

- Need to recognize Livestock Keepers' Rights, as described in the "Karen Commitment" (Köhler-Rollefson , 2005)

Historical background: a discussion on possible Treaty on AnGR

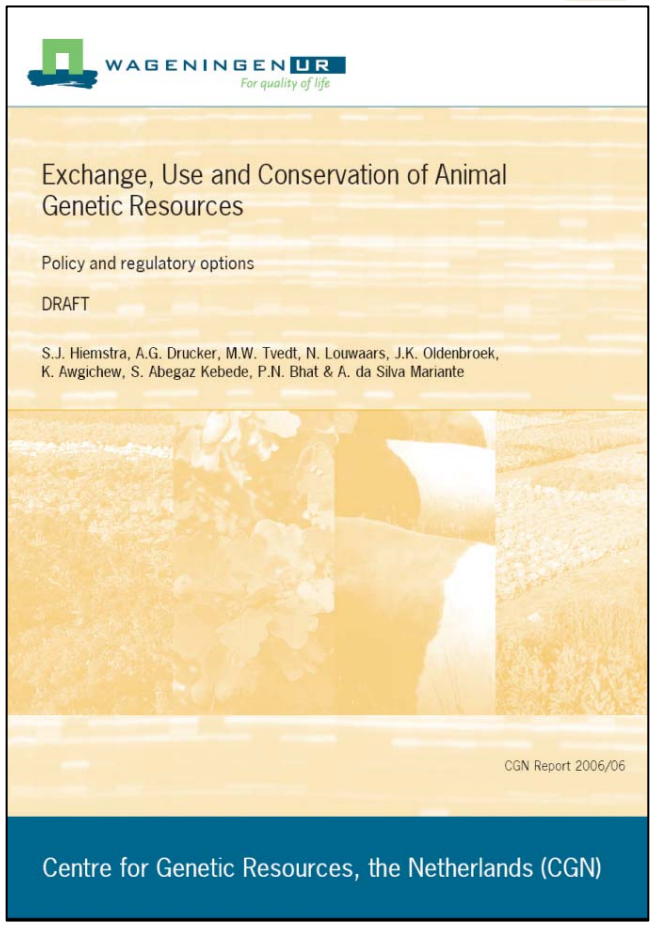
CGN thematic study

Some stakeholders suggested the development of:

- an international treaty
- or other legal instrument

to govern the cross-border exchange of AnGR

(Hiemstra et al., 2006)



Current opportunities under the CBD

Article 3 *bis*

addresses the relationship of Nagoya protocol with international agreements and instruments

- nothing in the Protocol shall prevent parties from developing and implementing other relevant international agreements, including **other specialized ABS agreements**, provided that they are supportive of, and do not run counter to, the CBD and Protocol objectives;
- the Protocol shall be implemented in a **mutually supportive manner** with relevant international instruments;

Three international agreements

Convention on Biological Diversity	International Treaty on Plant Genetic Resources for F&A	NAGOYA PROTOCOL
Article 1. Objectives	**Article 1 - Objectives**	**ARTICLE 1. OBJECTIVE**
The objectives of this Convention, to be pursued in accordance with its relevant provisions, are the **conservation** of biological diversity, the **sustainable use** of its components and the **fair and equitable sharing of the benefits** arising out of the utilization of genetic resources, including by **appropriate access** to genetic resources and by appropriate **transfer of relevant technologies,** taking into account all rights over those resources and to technologies, and by appropriate funding.	1.1 The objectives of this Treaty are the **conservation** and **sustainable use** of plant genetic resources for food and agriculture and the **fair and equitable sharing of the benefits** arising out of their use, in harmony with the Convention on Biological Diversity, for sustainable agriculture and food security. 1.2 These objectives will be attained by closely linking this Treaty to the Food and Agriculture Organization of the United Nations and to the Convention on Biological Diversity.	The objective of this Protocol is the **fair and equitable sharing of the benefits** arising from the utilization of genetic resources, including by **appropriate access** to genetic resources and by appropriate **transfer of relevant technologies,** taking into account all rights over those resources and to technologies, and by appropriate funding, **thereby contributing to the conservation of biological diversity and the sustainable use of its component.**

Rationale for the PGR Treaty applying this rationale to AnGR

PGR Treaty	Relevance of arguments for AnGR sector
Need to conserve PGR	Very relevant
Need to sustainably use PGR	Very relevant
Need to address ABS	Arrangements for ABS appear adequate
Existence of international/regional gene banks for PGR before the CBD	Lack of international/regional gene banks for AnGR
Ex-situ collections in public domain	No, generally private ownership of AnGR
Need to ensure access to these ex-situ collections	Limited needs so far
Need to support maintenance of gene banks and PGR conservation activities in developing countries	Yes, obligation of developed countries under the CBD so far limited use of genetics from developing countries

Animal breeding versus plant breeding

- Different breeding practices and methods to achieve genetic progress applied in seed and pedigree sectors
  - development and dissemination of new varieties
  - selection in purebred populations, based on sophisticated methods to evaluate breeding values of individuals
- Different ways to disseminate genetic progress into commercial production
  - widespread commercial crossbreeding in meat and egg production especially in intensive production systems
- Biological limitations affecting possibility to conserve plant and animal genetic material

Current gene flow in livestock sector

- The current pattern of international exchange of genetic material in livestock species is rather one-sided
- The transfer of genetic material from the developed “North” to the developing “South” and between the regions of the North is far greater than that occurring from South to North
- Significant South-South exchanges e.g. the cattle sector in Latin America utilizes breeds of South Asian ancestry
- Substantial, often unrecorded, inter-regional trade between neighbouring countries within regions

FAO, 2009

SWOT analysis for the AnGR Treaty

Strengths

- Lessons learnt from PGR process, especially negotiations of the ITPGR and experience gained in its implementation
- Adoption of the Global Plan of Action for AnGR and substantial efforts undertaken by countries for its implementation at the national level
- Well developed Global Network on AnGR, through continuous interactions via global workshops of NCs, DAD-IS and DAD-Net

SWOT analysis for the AnGR Treaty

Weaknesses

- Low demand for access to local AnGR by the livestock breeding sector
- Limited uptake of local breeds in modern improvement programmes
- Limited ex-situ AnGR collections in public domain
- Resources and time required for development of fully binding ABS instrument
- Level of applicability and unclear scope: all livestock genetic material or only from local breeds

SWOT analysis for the AnGR Treaty: **Weaknesses**

- Only in “very exceptional cases” exploitation of variation from low productive breeds to improve mainstream breed may be applicable since most likely this would result in lowering of the mean of a mainstream breed

(Dempfle, 1990)

- Until now little use was made of conserved local populations in mainstream commercial production as it is not profitable to cross back to “far out of date stocks”

(Hill and Zhang, 2009; Nicholas,2009)

SWOT analysis for the AnGR Treaty: **Weaknesses**

- Majority of international exchange of genetic material takes place between commercial breeders around the world

  (Hiemstra et al., 2006; Valle Zarate, 2006, Mathias and Mundy, 2005)

- Currently, in the AnGR sector, most gene flow takes place between Northern countries and between North and South countries

- Market price is reflecting the value of genetic stock, therefore a treaty-based compensation system is not necessary

  (Gollin et al., 2009)

SWOT analysis for the AnGR Treaty: **Weaknesses**

- Number of cryoconservation programmes is about half the number of *in-situ* programmes for most livestock species. Fully operational national gene banks in 26 countries out of 90 in the survey, 14 of them from Europe and 6 from Africa
- The flow of genetic material from in *ex-situ* collection does not appear to warrant the need for legal arrangement to facilitate access and ensure benefit sharing for AnGR
- Only three countries (United States of America, Tunisia and Burkina Faso) reported to host genetic material obtained through multinational storage programmes

(FAO, 2010)

SWOT analysis for the AnGR Treaty

Opportunities

- Nagoya Protocol: possibility to develop a specialized ABS agreement for AnGR
- Acknowledgment of the Livestock Keepers Rights
- Increased profile and interest in AnGR and the livestock sector
- Enhancement of activities for AnGR conservation and sustainable use at national, regional and global levels
- Possible increase of funding to support such activities in developing countries

Livestock Keepers Rights

Framers' Rights under the article 9.2 of the ITPGR:

- (a) **protection of traditional knowledge** relevant to plant genetic resources for food and agriculture
- (b) the **right to equitably participate in sharing benefits** arising from the utilization of plant genetic resources for food and agriculture; and
- (c) the **right to participate in making decisions**, at the national level, on matters related to the conservation and sustainable use of plant genetic resources for food and agriculture

Karen Commitment

Additional elements:

- **access, save, use, exchange, sell their AnGRFA, unrestricted by Intellectual Property Rights** (IPRs) and [modification through] genetic engineering technologies that we believe will disrupt the integrity of these genetic resources

- **have their breeds recognised** as products of their communities and Indigenous Knowledge and therefore remain in the public domain

(LPP, 2003)

LEAGUE FOR PASTORAL PEOPLES

IIDG PRACTICAL ANSWERS TO POVERTY

Leaders of Traditional Livestock and Pastoral Communities, government representatives, Civil Society Organizations with a focus on livestock genetic resources, academics and livestock researchers met in Karen, Kenya from 27 to 30 October, 2003.

They issued a statement as follows:

Karen Commitment
Pastoralist/Indigenous Livestock Keepers' Rights

We call on governments and relevant international bodies to commit themselves to the formal recognition of the historical and current contribution of pastoralists and pastoralism to food and livelihood security, environmental services and domestic animal diversity.

We also demand that they recognise the contributions of pastoralists and other livestock keepers, over millennia, to the conservation and sustainable use of animal genetic resources for food and agriculture including associated species and the genes they contain (AnGRFA).

Furthermore, we insist that there is international legally-binding recognition of inalienable Livestock Keepers' Rights and the Rights of their communities to:

- continue to use their knowledge concerning the conservation and sustainable use of AnGRFA, without fears of its appropriation
- participate democratically in making decisions on matters related to the conservation and sustainable use of AnGRFA
- access, save, use, exchange, sell their AnGRFA, unrestricted by Intellectual Property Rights (IPRs) and [modification through] genetic engineering technologies that we believe will disrupt the integrity of these genetic resources
- have their breeds recognised as products of their communities and Indigenous Knowledge and therefore remain in the public domain
- benefit equitably from the use of AnGRFA in their own communities and by others.

We call on the Food and Agriculture Organisation of the UN (FAO) to start negotiating such a legally-binding agreement, without delay, ensuring that it will be in harmony with the Convention on Biological Diversity.

We further call on the FAO to develop a Global Plan for the conservation and sustainable use of AnGRFA by pastoralists, other livestock keeping communities and relevant public institutions.

Finally, we insist that AnGRFA be excluded from Intellectual Property Rights claims and that there should be a moratorium on the release of genetically-modified livestock until bio-safety is proven, in accordance with the Precautionary Principle. We call on relevant institutions concerned with food, agriculture, trade, intellectual property and animal research to provide assurances and such legal protection as is necessary to sustain the free flow and integrity of AnGRFA, vital to global food security and the environment.

Workshop was supported by:

eed Evangelischer Entwicklungsdienst

People & Biodiversity in Rural Areas

CTA

MISEREOR

Statement is endorsed by:

LIFE
Local Livestock For Empowerment of Rural People

CONSEIL MONDIAL DES ÉLEVEURS
VIEHHALTER-WELTRAT
WORLD HERDERS COUNCIL
KAWIRTAL MAROOBE DUNIA

SWOT analysis for the AnGR Treaty: Opportunities

The negotiation process:

- will draw media interest
- may create public awareness
- may create political commitment
- may result in better understanding and appreciation of roles and values of AnGR
- may increase profile and understanding of overall importance of the livestock sector

SWOT analysis for the AnGR Treaty: Opportunities

In the long-term the AnGR Treaty:

- would enhance activities towards conservation and sustainable use of AnGR
- most probably will result in enhancement of funding to support AnGR management activities in developing countries
- will provide additional stimulus for political commitment followed-up by decisions and actions towards improved management of AnGR

SWOT analysis for the AnGR Treaty

Threats

- Possible obstacles in commercial trade of livestock
- Possible difficulties to access material for international research
- Lack of sufficient political will to get involved/continue/finalize
- Current negative perception of livestock sector

SWOT analysis for the AnGR Treaty: Threats

Political commitment will not be sufficient

- to mobilize resources and conclude negotiation in the reasonable timeframe
- due to the growing negative perception of livestock sector related to its contribution to greenhouse gases emission and climate change

(FAO, 2006; Goodland and Anhang, 2009)

We may be engaged for a long time in activity that, until concluded, will not result in a single breed being saved from extinction

Issues to consider in the AnGR Treaty

- How to address: indigenous/local breeds and modern international breeds
- How to take into account: indigenous knowledge and modern knowledge
- How to address possible claims on benefit sharing arrangements regarding native breeds that were exported within trade agreement long time ago (e.g. Awassi sheep, Tulu cattle)
- How to ensure that such agreement will respect the needs of various stakeholders in AnGR?

Stakeholders in AnGR

Sectors	Stakeholders	Products
Agricultural	The primary users of AnGR: •smaller-scale farmers, •livestock keepers •commercial livestock industry *Livestock keepers and specialized breeders Producers: "end users" of genetic material*	Livelihoods based on livestock production: milk, meat and eggs; fibres, feathers, hides and skins; inputs for crop production (draught power and manure); fuel; transport; assistance with herding; insurance and savings; a basis for social networks; and various sporting, cultural and religious functions
	Hobby breeders	Non production functions
Research	Universities, research institutes, etc	Live animals and their genetic material
Conservation	Ecological NGO s, public sector institutions, private farmers	Grazing herbivore animals to manage vegetation
Educational	Parks and zoos	Live animals at exhibitions
Entertainment	Riding establishments, horse races, etc	Recreation
Health	Therapeutic establishments	Live animals, especially horses and dogs
Other sectors	Public sector institutions: police forces, emergency rescue, etc	Live animals, especially horses and dogs

Adopted from FAO, 2009

If not a Treaty what else?

Taking into account:

- impressive efforts to implement the GPA-AnGR
- growing number of countries that are already implementing , currently developing or planning to develop their NSAPs
- adoption of the Funding Strategy for the implementation of the GPA, and
- recently agreed administrative arrangements for the FAO Trust Account

Can the outcomes expected from the specialized ABS agreement for AnGR be realized within the current GPA-AnGR framework?

If not a Treaty what else?

A number of issues would be difficult to address immediately within the GPA-AnGR

A possible solution may include development of :

- the voluntary instrument
- set of voluntary instruments

Establishing principles for the responsible use and exchange of AnGR, taking into account all relevant biological, technological, economic, social, environmental and commercial aspects and international law
(Hiemstra et al., 2006)

If not a Treaty what else?

The possible next steps:

- Amendment of the Global Plan of Action after update of the State of the World of Animal Genetic Resources for Food and Agriculture as already envisaged in the MYPOW of the Commission for its 16th Regular Session

- Such amendment may accommodate issues that are currently not sufficiently addressed in the GPA-AnGR, like for instance the Livestock Keepers Rights

Conclusions: the main question

Do we need a specialized ABS agreement for AnGR?

Are the current arrangements for ABS in livestock sector:

- Adequate and fulfill needs of the sector?
- Require improving?
- Should be substantially improved?

Current arrangements for the ABS

International trade based on "*private value*":

(the value placed on the AnGR by private buyers and sellers)

- This value may differ from the true economic value
- In general, the private value reflect anticipated contributions to productivity gains that will result in appropriable benefits

(Gollin et al., 2009)

The buyers and sellers may be incorrect in their anticipation of the benefits derivable from the exchanged AnGR

Current arrangements for the ABS

The main suppliers of traded animal genetics: livestock breeding companies

- happy with the current regulatory framework
- they are free to trade (need to comply with zoosanitary regulations of the importing/receiving country)

Many recipient/ importing coutries are also happy with the current state of affairs

Current arrangements for the ABS

- Mojority of stakeholders:

Current exchange of AnGR under the private law agreements has generated benefits for both sellers and buyers

(Hiemstra et. al, 2006)

- A treaty-based compensation system would not create sufficient value for indigenous genetic resources to ensure their conservation

(Gollin at al., 2009)

Current arrangements for ABS

Concerns:

- Possible negative effects on livelihoods and on AnGR diversity

- If supplied genetic material is unsuitable for the receiving production environments

Some countries addressed the problem by requiring impact assessments before new breeds are imported

(Hiemstra et. al, 2006)

Conclusions: objectives of AnGR Treaty

ITPGR objectives:

Conservation + Sustainable use + ABS

For AnGR

- Is conservation of AnGR adequate? **No**
- Is enhancement of sustainable use of AnGR an important food security issue? **Yes**
- Is ABS alone sufficient to justify a Treaty? **No**

Conclusions

If legally binding instrument on AnGR under the FAO will help to:

- Advance implementation of the GPA
- Build profile of AnGR
- Support mobilization of resources
- Contribute to capacity building
- Support policy development
- Recognize Livestock Keepers Rights

it may meet needs of our sector

Any AnGR legally binding instrument have to be seen in a broader context that the ABS alone!

Conclusions

However

- A legally binding instrument on AnGR is not the only option

- Voluntary instrument/s may be develop and included under the umbrella of the International ABS Regime (as the ITPGR and The Bonn Guidelines on ABS)


Be careful, let's get what we need!