Opportunities and Constraints for Cooperation between International Organisations

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This paper provides an examination of opportunities for and constraints on cooperation between international organisations, which is an increasingly important form of governance. Two case studies are presented which have relevance to the issues of intellectual property and climate change. These represent an established governance area (genetic resources) and an emerging area (biofuels).

1. Introduction

An increasing number of global challenges – including climate change – cut across the remit of several international organisations[1] and require coordination between these organisations to be effectively addressed. The first part of the paper provides a general outline of opportunities and constraints faced by international organisations when they need to cooperate on issues of joint concern. When such cooperation is not achievable this can result in a number of problems including tensions, contradictions, imbalances and duplication of efforts – all of which reduce the effectiveness of international action. The second part of the paper will explore the governance of two issues – genetic resources and biofuels – as case studies of international organisations' responses to cross-cutting issues.

2. Cooperation between international organisations

State action benefits from cooperation in areas where there is a high degree of international interdependence, i.e. those in which separate action by individual states will be insufficient to address issues of common concern. Issues that fall within the jurisdiction of more than one international organisation require the development of cooperative activities in order to promote balance and coherence in policy approaches. Such activities are an increasingly significant governance mechanism, particularly because of the long time periods and complex negotiations necessary to amend existing or develop new regulations.[2]

International rules[3] and other governance mechanisms fulfil various functions in relation to the coordination of state action including:

- *Defining rights and obligations;*
- *Providing predictability and reducing uncertainty;*
- *Reducing the costs of individual action and increasing efficiency;*
- *Authorising or prohibiting certain actions;*
- *Establishing and shaping expectations;*
- *Imposing constraints;*
- *Channelling conflict and providing mechanisms for its resolution;*
- *Simplifying and facilitating transactions; and*
- *Assisting or directing policy-making.*[4]

Coherent policy and regulatory approaches by international organisations are important for fulfilment of these functions wherever a set of rules and/or institutions cover a particular issue area. In situations of uncertainty states are unlikely to act in a coordinated manner, and will face uncertainty in policy making where approaches are incoherent.[5] For example: states may be unclear about which rules they should be applying and which other states will apply;

where there are contradictions between approaches states will be unclear on their rights and obligations; and where there is competition over the values used in different organisations uncertainty will increase.[6] Duplication of action is also likely to occur with resulting reductions in efficiency. This means that in the absence of inter-organisational cooperation to govern a cross-cutting issue, state action will not be effectively coordinated.

3. Inter-organisation cooperation – opportunities

Opportunities for cooperation between international organisations arise from overlaps between issue areas, regulations and organisational scope and are provided by mandates and mechanisms granted to the organisations by their member states. Overlaps represent both opportunity and need for inter-organisational cooperation. Climate change, for example, involves areas such as environment, development, trade, energy, transport, biodiversity, agriculture, water, health, and science and innovation. It is, therefore, a matter of interest to several international organisations including *inter alia*: the Convention on Biodiversity (CBD) Secretariat, Food and Agriculture Organisation (FAO), Intergovernmental Panel on Climate Change (IPCC), United Nations Environment Programme (UNEP), World Bank, World Health Organisation (WHO), World Meteorological Organisation, and World Trade Organisation (WTO). To give an illustrative example, an overlap between the substances covered by the United Nations Framework Convention on Climate Change (UNFCCC) and the Montreal Protocol on Substances that Deplete the Ozone Layer produces an opportunity and need for inter-organisation coordination to avoid conflictual approaches. Cooperative work has taken place, through the Meeting of the Parties to the Montreal Protocol and the UNFCCC's Subsidiary Body on Scientific and Technical Advice in relation to hydroflourocarbons and perflour-ocarbons.[7]

Mandates and mechanisms for cooperation can be readily identified through examination of relevant documents produced by the organisations. These include their constitutional documents, the texts of relevant regulations and formal cooperation agreements. Constitutional documents show that awareness of a potential need to cooperate has often been present from an organisation's foundation:

"The Organization shall establish effective relations and co-operate closely with such other inter-governmental organizations as may be desirable."[8]

"In order to provide for close cooperation between the Organization and other international organizations with related responsibilities, the Conference may enter into agreements with the competent authorities of such organizations."[9]

An extensive range of cooperative mechanisms have been granted to international organisations by their member states at varying levels of formality – from basic information provision through to joint action projects. The (non-exhaustive) list provided below gives examples of mechanisms available to the Food and Agriculture Organisation and World Health Organisation, which are broadly representative of the mechanisms available to international organisations:[10]

- *Observerships;*
- *Joint committees, working parties and missions;*
- *Joint meetings and conferences;*
- *Joint action projects and work programmes;*
- *Formal cooperative arrangements;*

- *Informing other organisations about implementation matters;*
- *Information, knowledge and document exchange;*
- *Inter-secretariat committees;*
- *Interchange of personnel;*
- *Cooperation on the establishment of regional and branch offices;*
- *Reciprocal representation at meetings;*
- *Transmission of resolutions and recommendations;*
- *Delineation of areas of responsibility;*
- *Joint technical support and educational activities;*
- *Coordination of research;*
- *Cooperation in preparation of official documents;*
- *Collaboration on technical assistance and provision of technical advice;*
- *Statistical cooperation;*
- *Suggestion of agenda items; and*
- *Where appropriate, taking on the functions of another organisation*.

4. Inter-organisation cooperation – constraints

Even in situations where there are clear needs and opportunities for cooperation it does not necessarily take place. It may also take place only at a very basic and informal level with limited impact on practice. This can be explained by the constraints faced by international organisations when they need to cooperate.[11]

These constraints[12] include:

Jurisdiction: Organisations may limit cooperative activities because of concern about encroaching on or competing with another organisation's area of jurisdiction. They may also be reluctant to cooperate where it is perceived as giving up 'control' of an issue, particularly if this could have financial implications.

Resources: Two main types of resource constraint can impede cooperation. The first is financial – an organisation may be unwilling to take on the additional costs of addressing a new issue; they are generally insufficiently funded for the tasks they already have. The second relates to expertise – an organisation may be reluctant to take on an issue in which it lacks relevant expertise and experience. (It is worth noting that converse dynamics may also operate in these situations as organisations may choose to cooperate in order to share costs and expertise.) Most formal cooperation agreements made between international organisations include cost-sharing arrangements. An example is the following clause from a cooperation agreement between the Food and Agriculture Organisation and World Health Organisation:

> *"If compliance with a request for assistance made by either organization to the other involves or would involve substantial expenditure for the organization complying with the request, consultation shall take place with a view to determining the most equitable manner of meeting such expenditure."*[13]

Other Constraints: Other constraints include: structural issues such as incompatible bureaucracies and working practices;[14] the effects of individual personalities within the organisation; lack of practical experience in cooperation; and the level of cooperation between national government units which do not always coordinate their negotiating positions and so may end up adopting divergent approaches in different organizations.[15]

Attitudes and Actions of Member States: This appears to be the most significant form of constraint on inter-organisational cooperation. International organisations are created by states to serve their interests. While they may be granted limited autonomy of action, ultimately it is for states to decide whether cooperation takes place on a particular issue, the extent of this

cooperation and the effects it can have on action. States are generally the main resource providers for international organisations; they set the organisation's agenda, prioritise issues, and are the main decision-makers. They are also responsible for implementing decisions.

States are likely to have differences of opinion about the desirability of cooperation on any particular issue and so power relations matter in determining outcomes. Reasons that states may choose to block inter-organisation cooperation include: that an issue is too politically sensitive; that due to power dynamics they want only one particular forum to deal with the issue; that they are not ready to move the issue to the international level; and their overall negotiating position within an international organisation. Particularly in complex ongoing negotiations, such as those in the climate regime, states often link ostensibly unconnected issues within a bargaining process, so that a decision not to allow cooperation on an issue might be unrelated to judgements on its merit.[16] Many states also continue to conceive national interest narrowly in terms of short-term political and economic advantage, which can limit their willingness to support effective international cooperation.

5. Case study of cross-Cutting governance – genetic resources

Genetic resources have been the subject of international governance since the 1950s, which has expanded from a narrow focus on collection and exchange of plant genetic material involving one international organisation – the Food and Agriculture Organisation – to incorporate a number of other concerns, including equity, benefit-sharing, conservation and intellectual property rights, of interest to several international organisations.

Genetic resources are defined in the Convention on Biodiversity[17] as "genetic material of actual or potential value" (and genetic material as "any material of plant, animal, microbial or other origin containing functional units of heredity"). Advances in the life sciences over the past few decades have meant that the range of genetic material considered to have 'actual or potential value' has expanded rapidly and this has been reflected in the expansion of areas of concern internationally.

The international organisations involved in the governance of genetic resources include: the Food and Agriculture Organisation – which has worked on plant genetic resources since the 1950s; the Union for the Protection of New Varieties of Plants (UPOV) established in 1961 to give protection to plant breeders' rights; the United Nations Environment Programme, established in 1972; the Convention on Biodiversity Secretariat, established in 1992; the World Trade Organisation, established in 1995; the World Intellectual Property Organisation (WIPO), which has been engaged in the area since the late 1990s; and the World Health Organisation, particularly since 2007.

These organisations between them cover the issues of: facilitation of access to genetic resources through collection and exchange; conservation; development and food security concerns; fair and equitable benefit-sharing; effects of intellectual property rights on access and benefit-sharing; human rights; and sharing of viral genetic resources for health research. The main rules, mechanisms and institutions that have been developed are listed in Table 1 (a list of acronyms is provided at the end of the paper).

Table 1. Rules, Mechanisms and Institutions for the Governance of Genetic Resources

Rule/Mechanism/Institution	Associated Organisation(s)	Year
Seed exchange mechanism; World List of Plant Breeders; and catalogues of genetic stocks.	FAO	1950s
Convention on the Protection of New Varieties of Plants	UPOV	1961
Consultative Group on International Agricultural Research	FAO, UNDP, World Bank	1971
International Undertaking on Plant Genetic Resources	FAO	1983
Commission on Genetic Resources for Food and Agriculture	FAO	1983
Convention on Biodiversity	CBD Secretariat	1992
Bonn Guidelines on Access to Genetic Resources	CBD Secretariat	2002
International Treaty on Plant Genetic Resources	FAO	2001
Multilateral System of Access and Benefit Sharing (under the ITPGR)	FAO	Operational in 2007
Agreement on Trade Related Aspects of Intellectual Property Rights	WTO	1995
Review process for Article 27.3(b) of TRIPS Agreement	WTO	Ongoing
Stakeholder consultations on intellectual property and genetic resources	WIPO	1998-1999
Intergovernmental Committee on Intellectual Property and Genetic Resources, Traditional Knowledge and Folklore (IGC)	WIPO	2000
Database of intellectual property licensing provisions relating to access to genetic resources	WIPO-IGC	in progress
Draft Intellectual Property Guidelines for Access and Equitable Benefit-Sharing	WIPO-IGC	2004
Declaration and Global Plan of Action on Animal Genetic Resources	FAO	2007

In the near future it is expected that an international regime on access and benefit-sharing will be agreed by the Conference of the Parties to the CBD and an international legal instrument for the protection of genetic resources, traditional knowledge and traditional cultural expressions is currently being developed by WIPO's Intergovernmental Committee.

The World Health Organisation has taken an interest in the area of access to genetic resources and intellectual property rights in relation to public health research on viruses. It raised concerns about the effects of patenting of the SARS virus and its genes on research in 2003,[18] but it was in 2007 that major problems were encountered in relation to avian influenza.

Indonesia temporarily stopped supplying samples of the virus to WHO Collaborating Centres[19] due to concerns that vaccines or other medical products produced by private groups from research on the virus would not be accessible to its population.[20] This can be viewed as a restriction on access to genetic resources due to concern that benefits would not be shared equitably. An *Interim Statement* produced by WHO in November 2007[21] noted that: "there has been a breakdown in trust in this essential system of the international collaboration and collective action" relating to "sharing of viruses and specimens, the development and production of preventive and curative measures such as vaccines and antivirals" and that "the current system does not deliver the desired level of fairness, transparency and equity".

WHO's work to resolve this issue has included organisation of an Intergovernmental Meeting on Pandemic Influenza Preparedness, which established: a traceability mechanism – the Influenza Virus Tracking System; an advisory mechanism; and an Open-Ended Working Group on Pandemic Influenza Preparedness. The Working Group produced a *Draft Pandemic Influenza Preparedness Framework for the Sharing of Influenza Viruses and Access to Vaccines and Other Benefits* in 2009.[22]

The collection and use of human genetic material is covered by three declarations of the United Nations Educational, Scientific and Cultural Organisation (UNESCO) – the Universal Declaration on the Human Genome and Human Rights; the International Declaration on Human Genetic Data; and the Universal Declaration on Bioethics and Human Rights. Each contains a clause on access and benefit-sharing, with, for example the Universal Declaration on the Human Genome and Human Rights stating that: "Benefits from advances in biology, genetics and medicine, concerning the human genome, shall be made available to all, with due regard for the dignity and human rights of each individual."[23]

5.1. Cooperative initiatives

Examples of cooperative initiatives in genetic resources governance include:

- *The Consultative Group on International Agricultural Research – established by the FAO, United Nations Development Programme (UNDP) and World Bank in 1971. It aims to "reduce poverty and hunger, improve human health and nutrition, and enhance ecosystem resilience through high-quality international agricultural research, partnership and leadership."*[24] *The international agricultural research centres supported by Consultative Group have now placed their resources under the multilateral system of the International Treaty on Plant Genetic Resources. These centres hold "over 650,000 samples of crop, forage and agroforestry genetic resources in the public domain".*[25]

- *The Convention on Biodiversity Secretariat shares information (a basic form of cooperative activity) through provision of a database on access and benefit-sharing measures, a set of case studies on access and benefit-sharing, and a roster of experts on access and benefit-sharing. The CBD's Conference of the Parties has invited other international organisations including the FAO, WTO, WIPO and UPOV, to cooperate with its Ad Hoc Group on Access and Benefit-Sharing.*[26] *The CBD Secretariat and UPOV have corresponded for several years on "the process, nature, scope, elements and modalities of an international regime on access and benefit-sharing".*[27] *This has taken the form of gaining information on the*

position of UPOV on work being done by the Ad Hoc Working Group.

- *The World Intellectual Property Organisation has shared information with other international organisations on issues of intellectual property and genetic resources including: A background document for the CBD's Conference of the Parties – Examination of Issues Regarding the Interrelation of Access to Genetic Resources and Disclosure Requirements in Intellectual Property Rights Applications;[28] a joint study with UNEP – The Role of Intellectual Property Rights in the Sharing of Benefits Arising from Use of Biological Resources and Associated Traditional Knowledge;[29] and Reports for the World Health Organisation in 2007 – Patent Issues Related to Influenza Viruses and their Genes and Draft Patent Landscape for the H5 Virus.[30]*

- *WIPO's Intergovernmental Committee has also received guidance from the CBD's Conference of the Parties and the Commission on Genetic Resources for Food and Agriculture[31] and WIPO has engaged with the CBD Secretariat, FAO, UNEP, UNESCO, WHO and WTO within its programme Intellectual Property and the Life Sciences,[32] including a jointly organised symposium with FAO in 2008.*

The case study of genetic resources governance is useful for several reasons: it shows development of cooperative activities over a number of years as the focus of governance has expanded to incorporate new concerns; there are strong and controversial interactions between the issue of access to genetic resources and intellectual property rights; a broad and easily accessible base of genetic resources is vital to efforts to identify and adapt crops suitable for changing climatic conditions; and there is an apparent divergence between the interests of developed and developing countries – the latter being the source of most of the world's key genetic resources and diversity, but not benefiting proportionately from their use.

6. Case study of cross-cutting governance – biofuels

In contrast to the previous case study, international governance of biofuels has only recently started to emerge. Several major industrialised countries/regional blocs – notably the US and EU – have adopted policies over the past few years to massively increase the production and consumption of biofuels in transport.[33] These policies were motivated by their perceived potential to reduced greenhouse gas (GHG) emissions, improve energy security, and boost agricultural and industrial development. However, the international effects of these policies have been largely detrimental.

The OECD (Organisation for Economic Cooperation and Development) has estimated that the $11 billion per annum of subsidies for biofuel production and consumption made by the US, Canada and the EU will reduce greenhouse gas emissions by only 0.5-0.8%.[34] Documented land use changes, such as clearing rainforest for feedstock growth[35] are likely to result in significant additional emissions.[36] Increased demand for agricultural inputs (land, water, fertilizer, etc.), raises prices and limits the economic gains small-scale farmers can make from growing feedstock. In combination with this, diversion of land from food crop to feedstock production has contributed to recent substantial food price rises,[37] and is likely to remain a contributing factor into the medium term.[38] This affects the food security and development prospects of millions of people and is compounded by the effects of increased price

volatility as the linkages between food and fuel markets are strengthened.[39] Several other negative environmental and developmental impacts have been noted.[40]

The dynamics outlined demonstrate that states cannot achieve internationally appropriate biofuel policies through individual action. The severe and in some cases irreversible impacts of biofuel mandates mean that policies for sustainable development of biofuels need a rapid international response, including the following actions:

- *Review of existing biofuel policies – particularly mandatory consumption/production targets;*
- *Extensive research and development on appropriate policy for sustainable production and consumption of biofuels;*
- *Establishment of sustainability criteria and assessment mechanisms;*
- *Analysis of the current regulatory situation – for example the implications of quality standards and certification schemes in relation to trade rules;*
- *Appropriate, consistent and complete assessments of biofuels, including life-cycle emissions, environment, development and energy security impacts;*
- *Policies that safeguard food security, for example by prioritising local food production needs; and*
- *Mechanisms for monitoring and review of implementation.*

The necessary integration of environment, development, trade, agriculture, food security, human rights and energy policies will require extensive coordination among international organisations with support from their member states and significant additional finance. The organisations with an interest in the relevant policy areas include the:

- *Commission on Sustainable Development (CSD) – responsible for monitoring the implementation of international commitments on sustainable development;*
- *CBD Secretariat – concerned with the conservation and sustainable use of biodiversity;*
- *FAO – which has the mission to achieve food security for all;*
- *Office of the High Commissioner on Human Rights (OHCHR) – promotes and protects human rights internationally;*
- *United Nations Conference on Trade and Development (UNCTAD) – which has a "focus on ensuring that domestic policies and international action are mutually supportive in bringing about sustainable development";*[41]
- *UNDP – provides advice and assistance to states on development issues;*
- *UN-Energy – the interagency mechanism for promotion of coherent policy on energy and sustainable development;*
- *UNEP – which leads international efforts on environment and development and includes the Intergovernmental Panel on Climate Change;*
- *United Nations Industrial Development Organisation (UNIDO) – which "promotes industrial development for poverty reduction, inclusive globalization and environmental sustainability";*[42]
- *World Bank - which provides technical and financial assistance to developing countries;*

- *World Food Programme (WFP) – responsible for the provision of food aid; and*
- *WTO – concerned with the reduction of tariff and unjustified non-tariff barriers to trade.*

6. 1. Cooperative initiatives

These organisations are aware of key issues raised by increased biofuels use – several have produced reports on the subject,[43] information sharing that may be viewed as a basic form of cooperative activity. The FAO took the lead in organising a High Level Conference on World Food Security: The Challenges of Climate and Bioenergy in 2008 – international organisations participating included the IPCC, OHCHR, UNCTAD, UNDP, UNEP, UNFCCC Secretariat, UNIDO, the World Bank, WFP and WTO. The UN Secretary-General established a High-Level Task Force on the Global Food Crisis in 2008. Its work includes development of an international consensus on biofuels. International organisations participating in the Task Force include, *inter alia*, the FAO, OHCHR, UNCTAD, UNEP, UNDP, WFP, WHO, World Bank, and WTO.

The FAO, UNCTAD, UNDP, UNEP, UNIDO and the World Bank also participate in the Global Bioenergy Partnership that works to develop a research base for sustainable development of biofuels. FAO seems to be most active in terms of ongoing work on biofuels – including through projects on Biofuels and Food Security (BEFS) and Biofuels and Food Security Criteria and Indicators (BEFSCI). The CBD Secretariat is also working on biofuels under its agricultural biodiversity programme – this includes an invitation to other international organisations for input on "information and experiences on the development and application of tools relevant to the sustainable production and use of biofuels".[44]

Extension / expansion of these cooperative activities will depend on the support of member states for such action, particularly the major states and regional blocs. Agreement between these groups is often difficult to achieve and therefore progress on these issues is likely to be slow. In regard to biofuels the *Declaration of the High-Level Conference on World Food Security*[45] only managed to agree that: in-depth studies should be carried out on sustainable production and use of biofuels; information should be exchanged "on biofuels technologies, norms and regulations"; and that further international dialogue is needed. While state support for specific international action on biofuels appears limited, policy reviews and amendments have taken place in the UK[46] and EU[47] in regard to concerns about environmental sustainability and effects on food prices. The US is also emphasising sustainability in its approach to biofuels.[48]

7. Conclusion

Cooperation between international organisations is an increasingly important form of governance and is particularly relevant to addressing climate change issues which cut across the remit of several international organisations. This overlap provides the opportunity for cooperation. But international organisations also face several constraints when they attempt to cooperate. The most significant constraint is the attitudes of (particularly the powerful) member states. Their pursuit of short-term political and economic interests over long-term interests threatens to block effective attempts to address global challenges.

Acronyms

BEFS – Bioenergy and Food Security

BEFSCI – Bioenergy and Food Security Criteria and Indicators

CBD – Convention on Biodiversity

CSD – Commission on Sustainable Development

FAO – Food and Agriculture Organisation

GHG – Greenhouse gas

IGC – Intergovernmental Committee on Intellectual Property and Genetic Resources, Traditional Knowledge and Folklore

IPCC – Intergovernmental Panel on Climate Change

ITPGR – International Treaty on Plant Genetic Resources

OECD – Organisation for Economic Cooperation and Development

OHCHR – Office of the High Commissioner for Human Rights

TRIPS – Agreement on Trade Related Aspects of Intellectual Property Rights

UNCTAD – United Nations Conference on Trade and Development

UNDP – United Nations Development Programme

UNEP – United Nations Environment Programme

UNESCO – United Nations Educational, Scientific and Cultural Organisation

UNFCCC – United Nations Framework Convention on Climate Change

UNIDO – United Nations Industrial Development Organisation

UPOV – Union for the Protection of New Varieties of Plants

WFP – World Food Programme

WHO – World Health Organisation

WIPO – World Intellectual Property Organisation

WTO – World Trade Organisation

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[1] The term international organisation is used in this paper to refer to intergovernmental organisations with potentially universal membership (i.e. that are open to the participation of any state). Regional or otherwise restricted membership organisations are not included in the analysis.

[2] For general reading on international organisations see, for example, Barnett, M. and Finnemore, M., 2004, *Rules for the World: International Organisations in Global Politics*, London: Cornell University Press; Goodspeed, S., 1987, *The Nature and Function of International Organisation, 2nd Edition*, Oxford: Oxford University Press.

[3] This term includes voluntary standards, guidelines and codes as well as legally-binding treaties, agreed between states to govern their actions.

[4] Rhodes, C., 2009, "Is the international regulation of biotechnology coherent?", *Journal of International Biotechnology Law*, Vol.6(5), pp.177-191.

[5] Joyner, C., 2005, *International Law in the 21st Century: Rules for Global Governance*, Oxford: Rowman & Littlefield, p.7.

[6] Rhodes, C., (forthcoming November 2010), *International Governance of Biotechnology: Needs, Problems and Potential*, London: Bloomsbury Academic, Chapter 11.

[7] For further details see: UNFCCC, *Methodological Issues Relating to Hydroflourocarbons and Perflourocarbons*, http://unfccc.int/methods_and_science/other_methodological_issues/items/2311.php; UNFCCC, 2006, *Information on consideration by the Meeting of the Parties to the Montreal Protocol of the special report on safeguarding the ozone layer and the global climate system – Submission by the Ozone Secretariat*, http://unfccc.int/resource/docs/2006/sbsta/eng/misc07.pdf; and UNFCCC, 2010, *Summary of cooperative activities with United Nations entities and intergovernmental organizations to contribute to work under the Convention*, pp.9-10, http://unfccc.int/resource/docs/2010/sbsta/eng/inf01.pdf.

[8] WHO, *Constitution of the World Health Organisation*, Article 70, adopted 1946, most recent amendments adopted 2005, http://apps.who.int/gb/bd/PDF/bd47/EN/constitution-en.pdf. (1946 version available through the Avalon Project: Documents in Law, History and Diplomacy – A Decade of American Foreign Policy 1941-1949, http://avalon.law.yale.edu/20th_century/decad051.asp.)

[9] FAO, (no date given), *Constitution*, Article XIII, http://www.fao.org/docrep/009/j8038e/j8038e00.htm.

[10] Sources include: the *WHO Constitution* (see footnote 8); *FAO Constitution* (see footnote 9);

WHO, 17.07.48 - 1, "Agreement between the Food and Agriculture Organisation of the United Nations and the World Health Organisation", pp. 54-57 in *Agreements with Other International Organizations*, http://www.who.int/gb/bd/PDF/bd46/e-bd46_p4.pdf;
WHO, 16.12.04, "Agreement between the Office International des Epizooties and the World Health Organisation", pp. 77-80, in *Agreements with Other International Organizations*, http://www.who.int/gb/bd/PDF/bd46/e-bd46_p4.pdf;

WHO, 17.07.48 - 2, "Agreement between the United Nations Educational, Scientific and Cultural Organisation and the World Health Organisation", pp. 58-61, in *Agreements with Other International Organizations*, http://www.who.int/gb/bd/PDF/bd46/e-bd46_p4.pdf;
FAO, 2006, *Basic Texts of the Food and Agriculture Organisation of the United Nations*, Volumes I and II, 2006 Edition, http://www.fao.org/docrep/009/j8038e/j8038e00.htm;
FAO, 1997, *International Plant Protection Convention*, https://www.ippc.int/file_uploaded//publications/13742.New_Revised_Text_of_the_International_Plant_Protectio.pdf; and FAO, 2001, *International Treaty on Plant Genetic Resources*, http://www.planttreaty.org/texts_en.htm.

[11] The analysis in this section has been informed by discussions with staff of the FAO, WHO and WTO in March/April 2008.

[12] For further discussion of constraints see, for example: Goodspeed, S., 1987, *The Nature and Function of International Organisation, 2nd Edition*, Oxford: Oxford University Press; Dijkzeul, D. and Beigbedes, Y., 2003, *Rethinking International Organizations: Pathology and Promise*, Oxford: Berghahn Books; and Campbell, A.I.L., (April 1983), "The limits of the powers of international organizations", *International and Comparative Law Quarterly*, Vol. 32(2), pp. 523-533..

[13] WHO, 17.07.48 - 1, "Agreement between the Food and Agriculture Organisation of the United Nations and the World Health Organisation", pp. 54-57 in *Agreements with Other International Organizations*, http://www.who.int/gb/bd/PDF/bd46/e-bd46_p4.pdf.

[14] In regard to structural constraints see, for example, Ruggie, J.G., 2003, "The United Nations and Globalization: Patterns and Limits of Institutional Adaptation", pp.301-321 in *Global Governance 9*.

[15] This point was particularly emphasised in discussions with staff of the FAO, WHO and WTO held in March/April 2008.

[16] See, for example: Jinnah, S., Bushey, D., Munoz, M. and Kulovesi, K., 2009, "Tripping points: barriers and bargaining chips on the road to Copenhagen", *Environmental Research Letters* Vol.4(3), pp.2-6; and Johnson, T., 04.12.09, *Council for Foreign Relations Backgrounder – Copenhagen's Many Agendas*, http://www.cfr.org/publication/20906/copenhagens_many_agendas.html.

[17] UNEP, 1992, *Convention on Biodiversity*, http://www.cbd.int/convention/convention.shtml.

[18] WHO, 29.05.03, *Patent Applications for SARS Virus and Genes*, http://www.who.int/ethics/topics/sars_patents/en/print.html.

[19] "By definition, a WHO collaborating centre is an institution designated by the Director-General of WHO to form part of an inter-institutional collaborative network set up by WHO in support of its programme at the country, intercountry, regional, interregional and global levels, as appropriate."
http://www.who.int/collaboratingcentres/cc_historical/en/index1.html.

[20] WHO, 27.03.07, *Indonesia to Resume Sharing H5N1 avian influenza virus samples following a WHO meeting in Jakarta*, http://www.who.int/mediacentre/news/releases/2007/pr09/en/index.html.

[21] WHO, 23.11.07, *Interim Statement of the Intergovernmental Meeting on Pandemic Influenza Preparedness: Sharing of Influenza Viruses and Access to Vaccines and Other Benefits*, http://www.who.int/gb/pip/pdf_files/IGM_PIP-IntStatement-en.pdf.

[22] WHO, 18.05.09, *Pandemic Influenza Preparedness Framework for the Sharing of Influenza Viruses and Access to Vaccines and Other Benefits* , http://apps.who.int/gb/ebwha/pdf_files/A62/A62_5Add1-en.pdf.

[23] UNESCO, 1997, *Universal Declaration on the Human Genome and Human Rights*, http://www.unesco.org/new/en/social-and-human-

sciences/themes/bioethics/human-genome-and-human-rights/.

[24] Consultative Group for International Agricultural Research, (no date given), *Who We Are*, http://www.cgiar.org/who/index.html.

[25] See note 24.

[26] CBD Conference of the Parties, 2004, *Decision VII/19 – Access and Benefit-Sharing as related to Genetic Resources (Article 15)*, http://www.cbd.int/decision/cop/?id=7756.

[27] UPOV, 17.04.08, *Letter to the Executive Secretary of the Convention on Biodiversity*, http://www.upov.int/export/sites/upov/en/about/pdf/upov_cbd_17_04_2008.pdf.

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