Global environmental protection has featured high on the international political agenda since the United Nations (UN) Conference on the Human Environment in 1972. Yet, despite more than 900 environmental treaties coming into force over the past 40 years, human-induced environmental degradation is reaching unprecedented levels. Human societies must change course and steer away from critical tipping points in the earth system that might lead to rapid and irreversible change, while ensuring sustainable livelihoods for all. This requires a fundamental transformation of existing practices. If we are to achieve more sustainable development in the future, we have to reorient and restructure our national and international institutions and governance mechanisms. Incrementalism will not suffice to bring about societal change at the level required; the world needs structural change in global governance.

The 2012 UN Conference on Sustainable Development must become a major stepping stone towards introducing a stronger institutional framework for sustainable development. We urge decision makers to seize this opportunity to develop a clear and ambitious roadmap for institutional change and bring about fundamental reform of current sustainability governance within the next decade. This policy brief outlines the core areas needing most urgent action.

**Rio+20 Policy Briefs**

One of nine policy briefs produced by the scientific community to inform the United Nations Conference on Sustainable Development (Rio+20). These briefs were commissioned by the international conference *Planet Under Pressure: New Knowledge Towards Solutions* (www.planetunderpressure2012.net).
Summary of key points and policy recommendations

- Strengthen international environmental treaties: Governments must engage in structural reforms in how international environmental negotiations are conducted and treaties designed. Present and future treaties must rely more on systems of qualified majority voting in specified areas.

- Manage conflicts among multilateral agreements: International economic institutions must advance transitions to a sustainable economy, including by multilaterally harmonized systems that allow for discriminating between products on the basis of production processes, based on multilateral agreement. Global trade and investment regimes must be embedded in a normative context of social, developmental, and environmental values.

- Fill regulatory gaps in international sustainability governance: New or strengthened international regulatory frameworks are needed in several areas, including on emerging technologies, water, food, and energy.

- Upgrade UNEP: Governments need to engage in negotiations for the up-grading of UNEP to a specialized UN agency, along the lines of the World Health Organization or the International Labour Organization.

- Better integrate sustainable development policies within the UN system: Governments need to support overall integrative mechanisms within the UN system that better align the social, economic and environmental pillars of sustainable development.

- Strengthen national governance: New policy instruments are a promising complement to regulation if carefully designed. But they are not panaceas.

- Streamline and strengthen public–private governance networks and partnerships: The CSD and other bodies need a stronger mandate and better methodologies for the verification and monitoring of partnerships. Despite the growing role of non-state actors, there is still a strong need for effective and decisive governmental action.

- Strengthen accountability and legitimacy: Novel accountability mechanisms are needed, including mandatory disclosure of accessible, comprehensible and comparable data about government and corporate sustainability performance. Stronger consultative rights for civil society representatives in intergovernmental institutions should be introduced.

- Address equity concerns within and among countries: Equity concerns must be at the heart of the institutional framework for sustainable development. High consumption levels in industrialized countries and in some parts of the emerging economies require special and urgent action. Financial transfers from richer to poorer countries are inevitable, either through direct support payments for mitigation and adaptation programmes or through international market mechanisms, for example global emissions markets.

- Prepare global governance for a warmer world: Global adaptation programmes need to become a core concern of the UN system and governments.
STRENGTHEN INTERNATIONAL ENVIRONMENTAL TREATIES

Recent research on factors that foster the creation and effectiveness of international environmental treaties has led to important insights into how to improve the international governance system. International treaties are most effective when they:

- state precise goals, criteria and benchmarks for assessing progress;
- are designed to be flexible and adaptable to changes in the problem and context;
- have formal procedures to ensure new scientific information is taken up quickly; and
- systematically collect information about the effectiveness of the treaty and review this information regularly.

Governments can also speed up treaty negotiations by conducting them within existing institutions and by breaking down problems into smaller negotiation packages. Negotiators can sometimes sacrifice substance and stringency to reach ‘shallow’ but inclusive agreements that can be built on later; e.g., through framework-plus-protocol approaches, tacit-acceptance procedures for amendments, and formalized mechanisms that help develop soft law agreements into hard law. Such measures will lead to an incremental improvement of the system of international environmental agreements. We urge governments to draw on the lessons of past treaty-making exercises to improve their functioning.

While incremental change is important, it is not sufficient. More transformative reform is needed urgently. Introducing a stronger reliance on qualified majority voting would be a positive step, since political systems that rely on majority-based rule are quicker to arrive at far-reaching decisions. At the international level, experiences with qualified majority voting are rare and will need to be restricted to clearly specified areas to ensure the support of all countries. One route is the double-weighted majority voting developed in the treaties on stratospheric ozone depletion, which accept majority decisions yet also grant veto power to North and South as groups of countries.

MANAGE CONFLICTS AMONG MULTILATERAL AGREEMENTS

Conflict among different treaties – both within sustainability policy and beyond – has recently become a major concern. Here, governments must strengthen the capacity and mandate of environmental treaties (including their secretariats) to collect, disseminate and exchange information on links with other treaties. Treaties with similar objectives need formal mechanisms for joint negotiation and management. Furthermore, the requirement to respect and support the objectives of (other) multilateral environmental treaties should be accepted as a general principle.

It is particularly important to manage conflicts between economic and environmental treaties, with reforms of the institutional framework for sustainable development brought in line with the ideal of the ‘green economy’. Environmental goals must be mainstreamed into the activities of global economic institutions, while global trade and investment regimes need to be embedded in a normative context of social, developmental and environmental values. Discriminating in world trade law between products on the basis of production processes is critical, if investments in cleaner products and services are to be encouraged. Such discrimination should be based on multilateral agreement to prevent protectionist impacts.
In addition to strengthening existing treaties, there are numerous areas where new frameworks are needed. One is the development and deployment of such technologies as nanotechnology, synthetic biology and geoengineering. These emerging technologies promise significant benefits, but also pose major risks for sustainable development. They therefore need an international institutional framework to support forecasting, transparency and information-sharing on new technologies; further develop technical standards; help clarify the applicability of existing treaties; promote public discussion and input; and engage multiple stakeholders in policy dialogues. Such a framework must ensure that environmental considerations are fully respected. Initially, multilateral action on emerging technologies could take the form of one or more framework conventions.

Global water governance also needs a stronger and more coherent multilateral framework, since it remains the remit of several UN agencies and civil society organizations. Global food governance must be strengthened as well. Regulatory challenges here include international management of food safety and nutrition, the coordination of climate change adaptation in food systems, limits on commodity speculation, and standards to guide private regulation such as certification and labeling schemes. Furthermore, energy governance requires strong oversight by global bodies whose activities are currently dispersed and poorly coordinated.

International environmental organizations play vital roles in governance for sustainable development, but need further strengthening. Many reform proposals have been submitted in recent decades. Some of the more radical proposals – such as an international agency that centralizes and integrates existing intergovernmental organizations and regimes – are unlikely to be implemented and would yield uncertain gains. However, most of us see substantial benefits in upgrading the United Nations Environment Programme (UNEP) to a specialized UN agency for environmental protection, along the lines of the World Health Organization or the International Labour Organization.

At the same time, it is important to increase the integration of sustainable development policy within the UN system and beyond. The UN Commission on Sustainable Development (UNCSD) was created to fulfil this role, but its political relevance has remained limited. Governments must take action to support mechanisms within the UN system that will improve integration of the social, economic and environmental pillars of sustainable development. An upgraded, strengthened CSD that includes meaningful participation from all branches of government, is one route to consider.
The shortcomings of international institutions largely reflect those of domestic policies. An effective institutional framework for sustainable development requires critical institutional innovations at the national level. New policy instruments – often involving non-state actors – have become popular as a means of overcoming problems in implementing regulations, since they are often seen as being more flexible. However, questions remain about their transparency, equity implications and long-term effectiveness. When designed carefully, new policy instruments are a promising complement to regulation, but they are not panaceas. Success lies in developing packages of different instruments, and in evaluating the effectiveness of these in their own terms as well as in relation to alternative options.

The past few decades have seen tremendous growth in new types of governance, such as public–private partnerships or transnational labelling schemes. Yet the effectiveness of these novel mechanisms remains uncertain. Research indicates that few of the 300-plus partnerships for sustainable development formed around the 2002 Johannesburg Summit have delivered on their promise. Overall, the partnership approach has not met its expectations in contributing to the Millennium Development Goals and furthering participation and implementation. Insufficient funding, ineffective organizational structures, lack of quantitative targets and weak accountability systems have also limited its effectiveness. To strengthen such partnerships, UNCSD and other agencies need a stronger mandate and better methodologies for the verification and monitoring of progress.

Labelling and certification schemes can advance sustainable development by enabling markets to support environmentally sound business practices. To be effective, these need multiple stakeholders, appropriate national regulatory frameworks, built-in accountability mechanisms and consumer demand. Governments play a crucial role through regulations that create incentives for certification, focused procurement policies, legitimization of measures...
and involvement in monitoring sustainability effects. International organizations can also play a powerful role in catalyzing novel forms of private and public–private governance.

Novel mechanisms such as the Clean Development Mechanism or Reducing Emissions from Deforestation and Forest Degradation (REDD) can contribute to sustainable development when they are seen as supplementary to, rather than a replacement for, governmental action. To ensure equitable distribution of benefits and to minimize the risks associated with them (e.g. to indigenous people or biodiversity), international, national and local bodies must have strong institutional oversight. Governments must work towards improving institutional capacity, increasing representation of local stakeholders, changing the uneven monitoring of claimed benefits, and rebalancing global and local benefits.

New types of transnational cooperation among local public authorities (e.g. cities) are becoming important and many such authorities have taken significant action towards addressing the causes and consequences of global environmental risks. Governments must provide a political mandate that recognizes their diverse contexts and guides practical action on the ground as well as supporting collaboration and developing local capacity and financial resources.

Despite the growing role of non-state actors, there is still a need for effective and decisive governmental action, both at the national and intergovernmental level. Governance beyond the state can be a useful supplement but still requires governmental support.

---

**STRENGTHEN ACCOUNTABILITY AND LEGITIMACY**

“...governance accountability can be strengthened when stakeholders gain better access to information and decision-making...”

Both intergovernmental and novel non-state-driven institutions face increasing pressures for improved accountability and access to decision making. There is no universal formula to increase accountability and legitimacy across all sustainable development institutions. In general, governance accountability can be strengthened when stakeholders gain better access to information and decision-making, for example through special rights enshrined in agreements, charters and codes, and stronger participation in councils that govern resources, or in commissions that hear complaints. International environmental, developmental and economic institutions must adopt such novel accountability mechanisms more widely. Stronger consultative rights for civil society representatives in intergovernmental institutions can be a major step forward. This requires appropriate mechanisms that account for imbalances between countries and for power differentials between different segments of civil society, and that ensure appropriate accountability mechanisms for civil society representatives vis-à-vis their constituencies.

While greater transparency and information disclosure can empower citizens and consumers to hold governments and private actors accountable as well as providing incentives for better sustainability performance, transparency does not always deliver on its promises. Disclosed information is often inaccessible, inconsistent or incomprehensible. Governments and private actors must ensure that disclosure obligations go beyond ‘business as usual’ to stimulate a change in existing unsustainable practices.
ADDRESS EQUITY CONCERNS WITHIN AND AMONG COUNTRIES

The institutional framework for sustainable development must address questions of justice, fairness and equity. Regarding equity within countries, there may be a trade-off between effectiveness/efficiency and equity. However, this presents a false dichotomy in most complex environmental problems, which are inherently political in nature. Legitimate and transparent democratic processes are needed to allow societies and communities to choose policies they see as being equitable and effective.

Poor and marginalized communities are most vulnerable to global environmental change but seldom have a voice in policymaking. Relevant processes should therefore promote participation of the poor in policy preparation, implementation, monitoring and adaptation.

At the international level, equity and fairness need to be at the heart of strong and durable international regimes. Equitable progress towards globally sustainable development requires greater action by the richer nations. In particular, governments and societies in industrialized countries need to accept that global environmental change has fundamentally increased global interdependence and (further) transformed the international system. Also the rapidly industrializing countries in the South need to actively determine their role and position on sustainable development governance and to direct their development pathways towards a green economy.

Overall, financial transfers from richer to poorer countries at unprecedented levels are inevitable, either through direct support payments for mitigation and adaptation programmes based on international agreement or through such mechanisms as global emissions markets. Novel financial mechanisms like transnational air transportation levies for sustainability purposes could also contribute.

The organization of global funding for sustainable development lacks consistency and inclusiveness, with most funding agencies having different interests, rules and general policies. Policy coherence is often weak. Governments and funding agencies need to revisit existing funding mechanisms to increase policy coherence and strengthen the voice of the recipient countries.

PREPARE GLOBAL GOVERNANCE FOR A WARMER WORLD

Complete mitigation of global environmental change is already out of reach, so the new institutional framework for sustainable development must include governance for adaptation. Research indicates that the adaptability of local communities is stronger when the governance system itself is adaptive. Institutional frameworks with multiple centres and levels of authority may foster the adaptive capacities required. Strong informal networks and public participation in planning, implementation and review are all important and governments and international institutions should support adaptability in local governance mechanisms.

At the global level, the institutional framework seems ill prepared to cope with the consequences of massive global change that will affect such major systems as food, water, energy, health and migration, and their interactions. While massive changes, for example in sea level, may not be imminent, future dangers can be minimized if institutional reform is planned and negotiated today. Global adaptation programmes thus need to become a core concern of the UN system and governments.
CONCLUSION

“We need to have a ‘constitutional moment’ in world politics...”

We need to have a ‘constitutional moment’ in world politics, akin to the major transformative shift in governance after 1945 that led to the establishment of the United Nations and numerous other international organizations, along with far-reaching new international legal norms on human rights and economic cooperation. The 2012 Rio+20 Conference offers both an opportunity and a crucial test as to whether such conferences can bring about substantial and urgently needed change in the current institutional framework for sustainable development.

Compiled by:

The Earth System Governance Project.
Lead author: Frank Biermann
Assessment Managers: Ruben Zondervan and Andrea Brock.

A longer and fully referenced version of this Policy Brief is available at: www.earthsystemgovernance.org/ifsd.

The Earth System Governance Project is a ten-year research initiative under the auspices of the International Human Dimensions Programme on Global Environmental Change, which is sponsored by the International Council for Science (ICSU), the International Social Science Council (ISSC), and the United Nations University. The Earth System Governance Project involves about 1700 colleagues along with a core network of twelve institutions in the Global Alliance of Earth System Governance Research Centres (www.earthsystemgovernance.org).