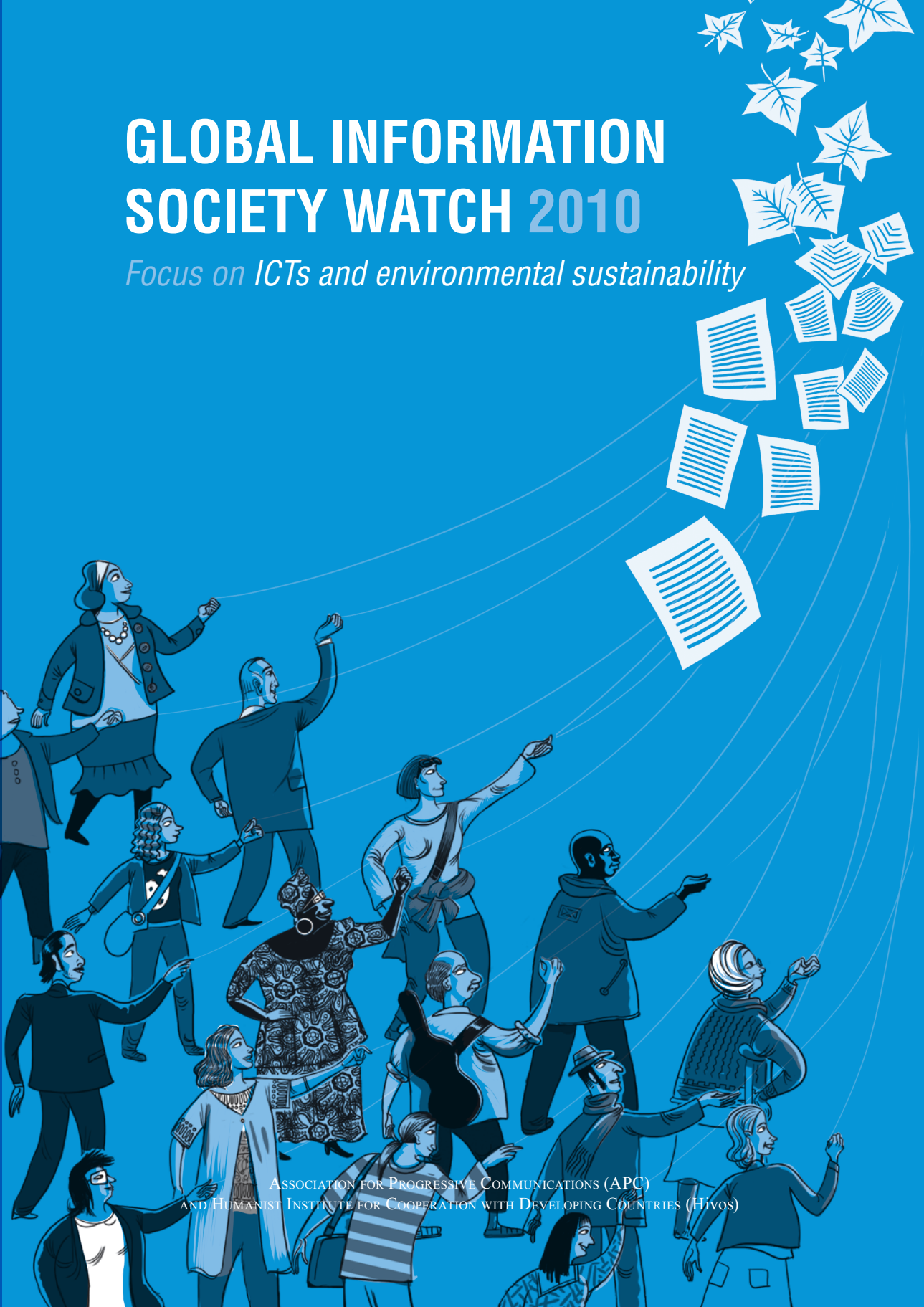


# GLOBAL INFORMATION SOCIETY WATCH 2010

*Focus on ICTs and environmental sustainability*



ASSOCIATION FOR PROGRESSIVE COMMUNICATIONS (APC)  
AND HUMANIST INSTITUTE FOR COOPERATION WITH DEVELOPING COUNTRIES (HIVOS)

# Global Information Society Watch

## 2010

## Global Information Society Watch 2010

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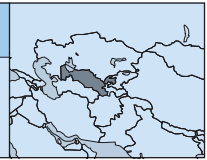


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# UZBEKISTAN

GIPI Uzbekistan  
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## Introduction

Uzbekistan, undoubtedly, is amongst those countries badly affected by global climate change. Intensive climate warming is observed in the entire Central Asia region. The weather is warmer in summer as well as in winter. On average warming is occurring at 0.29°C per decade, which is twice as fast as the global average (0.13°C per decade since 1950).<sup>1</sup> A shortage of water supply and degradation of water and soil resources are burning issues in every part of the country. A considerable part of the arable land suffers from salinated groundwater and soil erosion. This in turn negatively affects the development of agriculture and other branches of the economy, and ruins the income of the rural population – which still represents the largest part of the Uzbek nation, with agriculture making up a substantial share of the Uzbek gross domestic product (GDP). There is a close connection between the quality of water and health and income of the local population. Almost a quarter of the population (six million people) is affected by the salinated water – a fact that was clearly demonstrated by World Bank and Asian Development Bank research.<sup>2</sup>

It is impossible to avoid mentioning another problem of the region: the Aral Sea disaster. The sea that is located in the very heart of Central Asia, and for ages actively shaped the climate in the region, is now on the verge of complete disappearance. Within the last 40 years, the total surface area of the sea has shrunk from 66,000 to 28,000 square kilometres, its volume has been reduced from 1,046 to 210 cubic kilometres and its average depth from 53 to 19 metres.<sup>3</sup> All this has happened due to an increase in the population from 14 million to almost 40 million in the said period, together with the impact of climate change. Two rivers (Amudaria and Syrdaria) that used to carry over 119 cubic kilometres of water into the sea, now, as a result of intensive use of water for agriculture purposes, can hardly supply a fifth of that volume. The Aral Sea basin has now turned into a new salted desert, called Aralkum, that along with two other deserts of the region (Kysylkum and Karakum) actively affect the ecological state of the country by supplying an additional 75 million tonnes of salt and sand,<sup>4</sup> dramatically decreasing the productivity of arable lands.

A United Nations (UN) report released in 2005 on human development in Central Asia stated that the complex ecological, socioeconomic and demographic problems in the Aral zone, such as the degradation of soil, the inferior quality of drinking water, the reduction of biodiversity, contamination of the atmosphere, and poverty of the population, are now so severe that they have become global issues.<sup>5</sup>

## Policy and legislative context

The complicated environmental situation in the country and region as a whole called for immediate action. Grounded in a UN decision that declared the period 2005-2015 the International “Water for Life” Decade, Uzbekistan, together with neighbouring countries, acceded to the UN Convention on the Protection and Use of Transboundary Watercourses and International Lakes (1992)<sup>6</sup> and the Convention on the Law of Non-Navigational Uses of International Watercourses (1997)<sup>7</sup> that determined the main principles of the use of transboundary water reservoirs. It then developed a concept document proposing solutions to the problems arising in the Aral region with regard to the social and economic development of the region.<sup>8</sup>

The concept document provided for the following main activities in the field of climate change prevention:

- In arable farming: the accurate management of hydro-melioration systems and strict discipline of water use with a view to further implementation of water preservation methods.
- In the communal sphere: upgrading of water supply and canal systems; the implementation of progressive sanitation equipment and water use standards.
- In industry: reduction of water use through the implementation of closed-cycle water use systems and the development of low water consumption technologies.

At the national level, the Uzbek legislature adopted the following key laws related to the environment:

- “On Forests and Forestry” (1999)
- “On Nature Protection” (1992)
- “On Water and Water Use”(1993)

1 [www.uzembassy.ru/8000.htm](http://www.uzembassy.ru/8000.htm)

2 [www.cawater-info.net/5wwf/national\\_report\\_uzbekistan.htm](http://www.cawater-info.net/5wwf/national_report_uzbekistan.htm)

3 [arbuz.uz/w\\_aral\\_vv.html](http://arbuz.uz/w_aral_vv.html)

4 [iqtisod.zn.uz/148](http://iqtisod.zn.uz/148)

5 [www.ekois.net/wp/?p=4254](http://www.ekois.net/wp/?p=4254)

6 [europa.eu/legislation\\_summaries/environment/water\\_protection\\_management/128059\\_en.htm](http://europa.eu/legislation_summaries/environment/water_protection_management/128059_en.htm)

7 [en.wikipedia.org/wiki/Convention\\_on\\_the\\_Law\\_of\\_Non-Navigational\\_Uses\\_of\\_International\\_Watercourses](http://en.wikipedia.org/wiki/Convention_on_the_Law_of_Non-Navigational_Uses_of_International_Watercourses)

8 [www.ca-econet.info/mfsa/14.htm](http://www.ca-econet.info/mfsa/14.htm)

- “On Fauna Protection” (1998)
- “On Flora Protection” (1998)
- “On the Protected Natural Territories” (1994)
- “On the Protection of Air” (1997)
- “On State Sanitation Control” (1993).<sup>9</sup>

All of the above laws are being corrected and amended in response to the new challenges of constantly changing climate conditions. On top of this legislation – which includes statutory acts of subordinate legislation – the Uzbek government established a special body called the State Nature Committee that is responsible for control and management in the field of nature protection. It also deals with the use and reproduction of natural resources and monitors the general climate situation in the country.

Among the general statutory acts there are some tools of direct enforcement intended to deal with serious violations of rules. For instance, the Administrative Code in its Articles 65 through 96 allows for fines to be imposed on the public and officials in the amount of one to twenty times the minimum monthly wage. It describes unlawful activities such as spoilage of fertile soils (Art. 65); the violation of earth resources protection measures (Art. 70); violation of water resources protection (Art. 72); violation of water use and water consumption (Art. 74); violation of forests (Art. 77-80); violation of state-protected zones (Art. 82); contamination of the air and soil (Art. 85-88); and failure to respect requirements on the reinstatement of the natural environment (Art. 95).

At the same time, the Criminal Code of Uzbekistan contains an entire chapter dealing with crimes in the sphere of ecology and protection of nature (Chapter IV). The violator here can be imprisoned for a period of up to five years, while a minimum fine would be equal to 100 times the minimum wage on the date of the crime. The crimes described here include the violation of the norms of ecological preservation (Art. 193); deliberate concealing of the facts of environmental contamination (Art. 194); contamination of the environment (Art. 196); harm to the soil, forests and flora (Art. 197-198); violation of restrictions on the use of fauna and flora (Art. 202); and violations of the water regime (Art. 203).

While environmental laws already cover a good deal in the area of environmental protection, they constantly grow in number and scope of application.

## Cooperation and global partnerships

As an answer to the challenges posed by climate change, the Uzbek government has entered into close cooperation with international institutions such as the United Nations Development Programme (UNDP), World Bank, Asian Development Bank (ADB), Swiss Agency for Development and Cooperation (SDC), British Council, ECOSAN International Fund, and GTZ.

Among the activities undertaken was an international conference organised in 2008 by the UNDP, World Bank and ADB in the Uzbek capital Tashkent, entitled “ICTs and Global Climate Change: Resistance to Pressure and Diversification”.<sup>10</sup> The final document of the conference was entitled *Improvement of Planning and Management of Water and Land Resources*. This programme provided the following information and communications technology (ICT)-based measures to improve the ecological situation in Uzbekistan:

- Upgrading of the system for assessing and managing the quality of water resources
- Updating of hydro-ecological monitoring
- Institutional development in the sphere of water use and consumption
- Improvement of the technical state of melioration systems, and the development and implementation of water-preserving technologies
- Upgrading of knowledge and skills in the management of water and land resources
- Regular dissemination among the local population of information concerning climate change and the latest methods of resource preservation.

The issue of the common use of water resources from transboundary rivers was also discussed during the 13th International Water Congress held in Montpellier, France in 2008. The focus of the conference was on the Aral Sea and its impact on the population, flora and fauna, as well as the measures of international cooperation aimed at the alleviation of its negative consequences. An outcome of the conference was the development of the uniform strategy for the management of water resources among six countries of the region as well as the establishment of a Regional Communication Centre located in Tashkent for monitoring the climate and water situation. That centre was equipped with the latest ICT equipment and software, provided by the UNDP.

The participants at the conference also came to a common understanding that the successful implementation of its strategic aims is possible only if there is regular communication among the countries in the region when it concerns the management and consumption of water resources.

At a national level, activities in the field of climate change, sometimes focusing on ICTs, are also growing. The State Nature Committee of Uzbekistan, in cooperation with local private and public funders, develops and implements projects preventing climate change impacts and dealing with ecological crises (over 25 interventions have happened over the last five years). Several conferences were held in 2009, with titles such as: “The Aral region: Partnership for better social protection of population”; “Youth and innovative development”; “Change of Climate: Youth initiatives”; and “The

9 [sreda.uz/index.php?newsid=375](http://sreda.uz/index.php?newsid=375)

10 [www.ots.uz/ru/latest-news/59-news-of-uzbekistan/140-the-european-union](http://www.ots.uz/ru/latest-news/59-news-of-uzbekistan/140-the-european-union)

role of ICTs and the media in environmental protection and public health".<sup>11</sup>

The European Union is also active in the field. On 17 March 2010, a seminar entitled "Scientific and technical cooperation between the European Union and Uzbekistan: Priorities and opportunities for cooperation" was held in Tashkent under the patronage of the Uzbek Nature Committee. This was within the scope of the 7th European Commission Framework Programme on global strategic partnerships in ICT-related research.<sup>12</sup> The seminar was dedicated to the development of cooperation in scientific research in the sphere of ICT and environmental protection.

## New trends

The development and implementation of new technologies in environmental protection at a national level, as well as their accessibility to every member of society, is one of the priorities of the state programme "Collaborative Development for the Year 2010".<sup>13</sup>

According to this programme, signed by the president in January 2010, from 2010 through 2012 the Uzbek government will implement measures towards better affordability and higher quality of ICT services for the population, including in rural areas.

In particular, USD 2 million has been allocated from the state budget for the development and modernisation of the international centre for packet switching run by Uzbelecom. This centre will primarily be dealing with environmental issues and climate change.

A project on expanding internet channels using satellite runs until the end of 2011. USD 3 million has been set aside for this purpose.

The installation of special infrastructure for the development of environmental internet content, including data centres in all provinces of the country, is planned for the period 2010-2012. The estimated cost of the project is USD 1.4 million.

For the remainder of 2010, exhibitions, seminars, conferences and competitions have been planned, dedicated to implementation of ICTs in all spheres of life, including their use for environmental protection and prevention of climate change. As a special goal the activities this year will be focused on attracting the youth and explaining to them the necessity of personal involvement in environment protection activities.

## Action steps

Taking into account the critical situation regarding the impact of climate change on everyday life in Uzbekistan and in the region, the task of elaborating environmental legislation so that it forms the legal ground for ecological protection appears to be more than important. The role of ICTs in that process cannot be overestimated.

To achieve this, the following should be done on a regional basis:

- A national strategy in each country of the region with respect to environmental protection and against climate change must be developed.
- The mechanisms of arbitration of cross-boundary disputes and reaching consensus in the environmental sphere must be produced and mutually agreed on.
- The extent of responsibility of each country as well as the share of economic participation in mutual environmental projects must be determined.
- Special bodies dealing with climate change must be established in each country and these structures must be in the closest possible communication with each other to be able to react mutually and immediately on each environmental challenge.
- The latest in ICT innovations must be used to achieve the above.

On a national level the following measures must be implemented:

- The creation of effective legal mechanisms that will promote environmental and health protection as well as ecological safety.
- The development and permanent upgrading of ICT-based systems for ecological education. Through this, the involvement of different public strata in the process of environmental protection must be achieved.
- The practical elimination of existing contradictions between natural resources acts and environmental laws by way of broad public discussion (ICT-based) among all relevant public institutions, private groups and international organisations practicing in the field.
- The development of a system of strict public standards in the field of environmental protection and air and water pollution, based on international standards and encouraging the reduction of anthropogenic pressure on the environment.
- The creation of judicial mechanisms for dispute resolution in the environmental sphere across all tiers of society.
- The creation of a system of ecological insurance.
- The harmonisation of domestic and international environmental laws by way of accession, ratification and implementation of the key instruments of international environmental protection. ■

<sup>11</sup> [www.regnum.ru/news/781984.html](http://www.regnum.ru/news/781984.html)

<sup>12</sup> [www.ecosan.uz/units-116-107.ru.html](http://www.ecosan.uz/units-116-107.ru.html)

<sup>13</sup> [swiatelektroniki.com/index.php?mode=newsOut&newsId=2379](http://swiatelektroniki.com/index.php?mode=newsOut&newsId=2379)

**GLOBAL INFORMATION SOCIETY WATCH 2010** investigates the impact that information and communications technologies (ICTs) have on the environment – both good and bad.

Written from a civil society perspective, **GISWatch 2010** covers some 50 countries and six regions, with the key issues of ICTs and environmental sustainability, including climate change response and electronic waste (e-waste), explored in seven expert thematic reports. It also contains an institutional overview and a consideration of green indicators, as well as a mapping section offering a comparative analysis of “green” media spheres on the web.

While supporting the positive role that technology can play in sustaining the environment, many of these reports challenge the perception that ICTs will automatically be a panacea for critical issues such as climate change – and argue that for technology to really benefit everyone, consumption and production patterns have to change. In order to build a sustainable future, it cannot be “business as usual”.

**GISWatch 2010** is a rallying cry to electronics producers and consumers, policy makers and development organisations to pay urgent attention to the sustainability of the environment. It spells out the impact that the production, consumption and disposal of computers, mobile phones and other technology are having on the earth’s natural resources, on political conflict and social rights, and the massive global carbon footprint produced.

**GISWatch 2010** is the fourth in a series of yearly reports critically covering the state of the information society from the perspectives of civil society organisations across the world.

**GISWatch** is a joint initiative of the Association for Progressive Communications (APC) and the Humanist Institute for Cooperation with Developing Countries (Hivos).

**GLOBAL INFORMATION SOCIETY WATCH**  
2010 Report  
[www.GISWatch.org](http://www.GISWatch.org)

