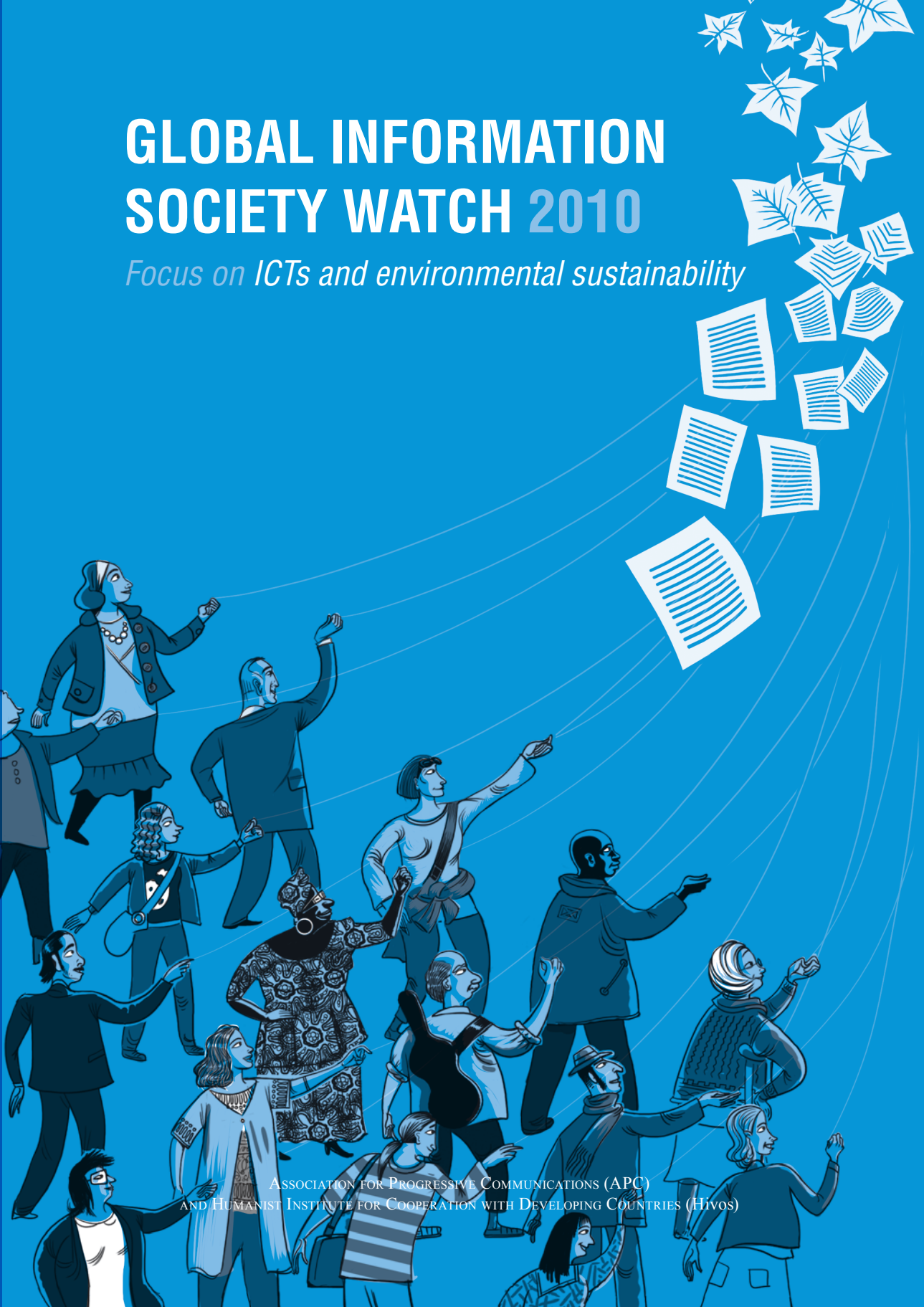
GLOBAL INFORMATION SOCIETY WATCH 2010

Focus on ICTs and environmental sustainability



Association for Progressive Communications (APC)
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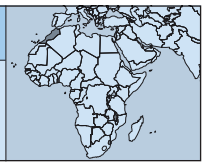

Introduction

The last two decades have marked a significant increase in the use of information and communications technologies (ICTs) in Morocco. In 2009, mobile telephone subscribers reached 25.3 million and internet users 13 million.[1] Consequently, the sale of devices like mobiles and computers has flourished to accommodate the spike in demand in the local market.

A national strategy called e-Morocco was launched by the government in partnership with both public and private stakeholders represented in a strategic committee on ICTs. This strategy not only aims at promoting the use of new technologies for a better positioning of Morocco in the international market, but also aims to improve the market structure and develop a practical regulatory framework through institutional programmes and action plans. In this context, the government in particular has given special attention to the issue of electronic waste (e-waste) and has delegated this task to the State Secretary for the Ministry of Energy, Mines, Water and Environment.[2]

Policy and legislative context

There is no specific legislation in Morocco to regulate e-waste; however, Law 28-00[3] is related to waste management and disposal and can be used to develop the necessary legal mechanisms for the better governance of e-waste.

Since e-waste has a dangerous impact on the environment and public health in general, and particularly in uncontrolled dumps, Law 28-00 is relevant as it prohibits the mixing of hazardous waste with other types of waste. Moreover, it establishes rules for the organisation of existing dumps and calls for their replacement with sanitary landfills, defining three different landfill categories. This categorisation defines the type of waste the landfills are authorised to receive.[4]

The Moroccan legal system also comprises a numerous set of laws relevant to e-waste management, namely Law 10-95 on water, Law 13-03 on air pollution, Law 12-03 on environmental impact studies, and Law 11-03 on the protection of the environment. The Investment Charter (1995)[5] is also applicable.

Morocco has also adopted the concept of sustainable development and ratified various international agreements specific to environment protection, namely the Montreal Protocol in 1992; the Vienna Convention and the amendments in London and Copenhagen in 1995; the UN Framework Convention on Climate Change (UNFCCC) in 1995, followed by the Kyoto Protocol in 2002; the Basel Convention on transboundary movements of hazardous wastes in 1995; the Stockholm Convention on persistent organic pollutants (POPs) in 2001; and the protocol on the prevention of the Mediterranean Sea's pollution in 1999. Finally, Morocco cooperates actively with the European Union in the domains of soil and water quality, the consequences of industrial development, and the control and prevention of marine pollution.[6]

E-waste in Morocco: Early days, yet strong awareness

A recent report of the United Nations Environment Programme (UNEP) entitled *Recycling: From E-Waste to Resources* states that sales of electronic products in regions such as Africa and Latin America are set to rise sharply in the next ten years. Unless the necessary steps are taken to adequately collect and recycle materials, many developing countries risk facing hazardous e-waste mountains with serious consequences for the environment and public health.[7]

In 2007, Morocco launched an e-waste project led by the Moroccan Centre for Cleaner Production (MCCP) with the objective of conducting a diagnosis of the country's e-waste status.[8] A national strategy committee was set up which included concerned stakeholders that are directly linked to e-waste to assess the current situation. The task of the committee was to define the necessary elements for drafting a road map to allow the implementation of a proper e-waste management system. By 2008, Morocco was the only Arab country that had concluded an e-waste assessment study to define the current e-waste management situation.

The study concluded that households account for 73% of e-waste generated, which is the largest share compared to companies and government with 26% and 1% respectively.[9] The study also found that 54% of e-waste is

1 www.maroc.ma/NR/exeres/6EB10135-4808-4DC1-A854-5CD310882D0F.htm
2 ewasteguide.info/Laissaoui_2008_CMPP
3 www.lexadin.nl/wlg/legis/nofr/oeur/lxwemar.htm
4 ewasteguide.info/files/Laissaoui_2008_WasteCon.pdf
5 www.lexadin.nl/wlg/legis/nofr/oeur/lxwemar.htm
6 ewasteguide.info/Laissaoui_2008_CMPP
7 www.unep.org/PDF/.../E-Waste_publication_screen_FINALVERSION-sml.pdf
8 www.dsf-fsn.org/en/documents/newsletter/Newsletter_14b_en.pdf
9 ewasteguide.info/Laissaoui_2008_CMPP

concentrated in five of the most important regions in terms of population density and economic activity: Casablanca, Souss, Marakech, Tangier/Tetouan and Rabat. Morocco is said to throw away 13,500 metric tonnes of PCs and 15,100 metric tonnes of TV e-waste in a year.[10]

The collection and recycling of 90% of waste in Morocco is mainly performed by the informal sector, which is not specifically interested in collecting e-waste due to the lack of interested buyers.[11] Waste collectors employed by municipalities or private firms segregate recyclable waste to be sold to wholesale intermediaries. Similarly, independent collectors or waste pickers sort through dumped waste and sell it per kilo to the informal "manager" of the dump on-site.

Mediouna landfill in Casablanca is one of the largest dumps in Morocco, covering 76 hectares and attracting around 500 waste pickers. According to the assessment study, this landfill has only received one recycling request from an industrial pollution control company. An agreement was signed in 2008 to create a new public sanitary landfill with the objective of rehabilitating the current dump and closing the landfill permanently.[12] The project also addresses the reuse of waste, for both electricity production and the recovery of recyclable materials.

Wholesale intermediaries take part in auctions held by companies in the region and some public authorities. However, they are not specialised in e-waste. Some companies specialising in collecting waste sell electrical waste directly to recyclers without processing, while others dismantle it first by removing plastic from desktop computers and printers. The metal parts are sold as scrap and the electrical cables are burned in the open air to recover the copper.[13]

The formal sector of e-waste management in Morocco is in its early stages of development. Several initiatives have been recently launched by associations or non-profit organisations which voluntarily collect computer equipment from companies, repair it and distribute it to other associations and organisations, and rural schools.

Many computer agents offer their customers the option of trading in their used computers after two to five years of use. There is also a new wave of companies specialised in collecting computer waste from companies, dismantling it and selling it either locally or to the international market.

Computer repairers are also an indirect stakeholder in e-waste management since some of them entrust their scrap waste to industrial pollution control companies. However, only a few retailers give their e-waste to processing companies due to the high cost and limited money offered for their waste.

In Morocco, there is no industry for the recovery of the precious and special metals contained in e-waste, with the exception of the Guemassa hydrometallurgy complex, which specialises in a few metals, including copper, lead, zinc and cobalt.[14]

New trends

Besides the work being done by the State Secretary for the Ministry of Energy, Mines, Water and Environment, an allied initiative is being led by the Department of Environment. It aims to draft a decree for the adoption and implementation of a National Hazardous Waste Master Plan. A detailed feasibility study for launching a National Centre of Hazardous Waste Treatment (CNEDS) is currently taking place within the framework of cooperation between the Kingdom of Morocco and the Land of North Rhine-Westphalia in Germany.[15] This centre will provide the necessary solutions to dispose of e-waste components that cannot be reused.

It is worth mentioning that some cultural initiatives are taking place that use electronic waste in order to create works of art. In May 2008, the headquarters of the General Confederation of Moroccan Enterprises (CGEM) hosted an exhibition by the artist Mohammed Tayert entitled Traces and Totems, with 56 paintings and statues, ten of which were made using e-waste.[16]

Action steps

The fact that there is no official e-waste management system or specific legislation in Morocco leads to the conclusion that the current situation needs more efforts to set up an organised legal and technical framework to guarantee better management of e-waste. It should be noted that the situation in Morocco is not yet alarming since the government and the private sector have shown awareness of the issue at an early stage. However, there is a pressing need to adopt specific regulations to establish the necessary e-waste management mechanisms in order to serve the environmental sustainability of the country.

At the same time, both the government and the private sector have set up ambitious strategies for the development of ICTs. Both parties also have active environmental protection initiatives, namely, the government's Environmentally Sustainable Industrial Development Plan, which aims at preventing environmental degradation, and the private sector's Social Responsibility Charter of the CGEM. Yet, in order to translate these commitments into action, the existing conventions and strategies need to be amended to reinforce an effective management plan for e-waste.

10 www.itp.net/579372-cause-for-concern-as-e-waste-mounts-in-developing-nations

11 ewasteguide.info/files/Laissaoui_2008_WasteCon.pdf

12 Ibid.

13 Ibid.

14 ewasteguide.info/files/Laissaoui_2008_WasteCon.pdf

15 www.minenv.gov.ma/index.asp?param=12_publications/documentations.htm

16 ewasteguide.info/files/Laissaoui_2008_WasteCon.pdf

Thanks to the assessment study on e-waste management, Morocco was defined as having great potential to introduce state-of-the-art e-waste recycling technologies because the informal e-waste sector is relatively small.[17]

The following recommendations are vital to advance e-waste management plans in the Moroccan context:

- Launching campaigns to raise awareness about the negative impact of e-waste.
- Initiating quantitative and qualitative follow-up studies to measure e-waste status.
- Leading capacity-building programmes and training courses on e-waste management.
- Establishing the necessary legal and regulatory frameworks.
- Developing strategic plans to define the business opportunities of having an effective e-waste management system in place.
- Encouraging multi-stakeholder partnerships between all the parties involved: technology corporations, environmental associations, the health sector, government legal bodies, etc.
- Securing the necessary financial support for recycling operations that are struggling to become profitable. ■

17 www.un.org/apps/news/story.asp?NewsID=33845&Cr=waste&Cr1

GLOBAL INFORMATION SOCIETY WATCH 2010

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).

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