



Committee : United Nations Environment Programme

Issue : Using ICTs to increase environmental awareness and responsibility and encourage sustainable decisions

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Unprecedented challenges require unprecedented solutions: this is the reasoning behind the overall theme of FerMUN 2020, “ICTs for SDGs”. Information and Communication Technologies (ICTs) have the potential to accelerate progress towards every one of the Sustainable Development Goals (SDGs), and the role of the International Telecommunication Union (ITU) is to maximise this potential. FerMUN 2020 is a chance for young people from across the world to come together in support of this mission.

Using Information and Communication Technologies to increase environmental awareness and responsibility and encourage sustainable decisions

1. Introduction

Nowadays, ICTs are omnipresent in our lives: we use them to communicate, to get informed. In the last few years, the use of ICTs to help solving climate and environmental issues has strongly increased. One of the greatest examples of using ICTs to raise environmental awareness is what a young Swedish teenager, Greta Thunberg, did to make people react to global warming. She massively shared her message through social media provoking reactions from political leaders at the COP 24 in 2018. This example shows us the great impact of ICTs on environmental issues as well as all the things that we can do to tackle these issues through them.

a. Key words

ICTs: ICTs, Information and Communication Technologies, are all the devices and services that allow us to access, store, transmit, and manipulate information. This term regroups phones, computers as well as software and storage systems. These technologies enable humans to communicate with one another.

UNEP: The United Nations Environment Program is the world's leading environmental authority. It sets the global environmental agenda, promotes the coherent implementation of the environmental dimension of sustainable development within the United Nations system and serves as an advocate for the global environment.

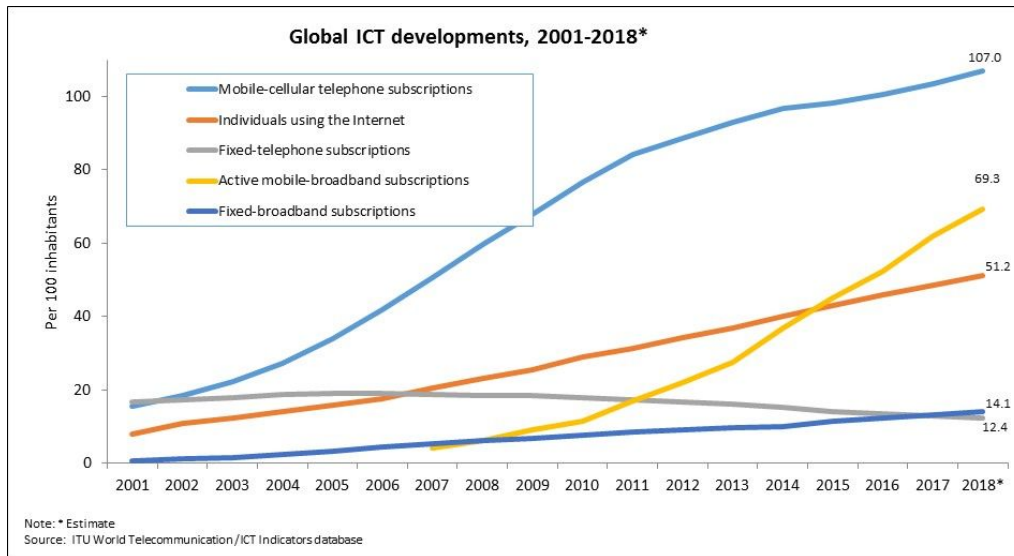
Sustainable decisions: Sustainable decisions are all the decisions that combine respect of the environment and social and economical viability. It is highly related to environmental awareness and responsibility but also to SDGs.

E-environment: It is the use of ICTs for an environmental purpose and the sustainable use of resources.

Environmental reform: the action or process of making change in order to improve the ecology, addressing environmental issues.

2. Overview of the issue

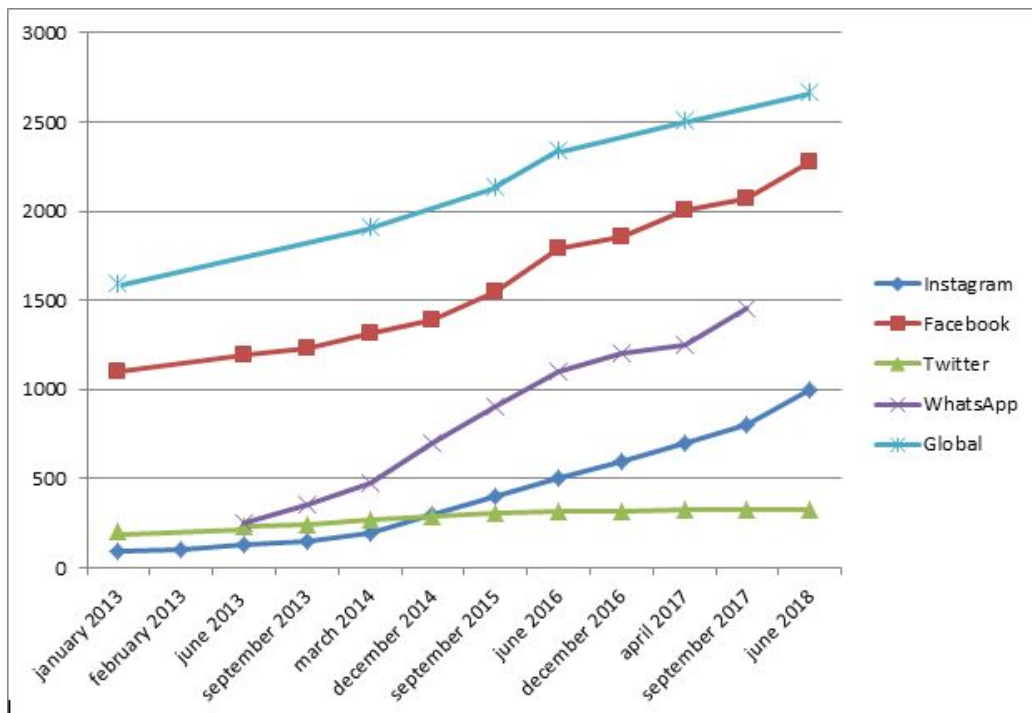
Since the beginning of the 21st century, ICTs, especially mobile phones and things related to the internet access, have undergone significant development. In modern society, over three billion people have access to the Internet, with approximately 8 out of 10 Internet users owning a smartphone.



ITU, 2018

This rapid growth, especially in developing countries, has led ICTs become a fundamental basis of everyday life.

One of the examples of this development is the birth of social media and their very rapid and significant expansion, especially since the early 2010s. These media are one of the major new means of communication, especially among young people. Social media has now become an integral part of all of their lives. It is used to connect with friends and family, to catch up on current events, and, perhaps most importantly, to entertain themselves.



Evolution of the number of active users (in million of users) of the main social networks and social media in general, stats from Statista

Even though, the number of Internet users in developing countries has doubled in five years (2009-2014), only two thirds of all people online now living in the developing world. Therefore, of the 4.3 billion people not yet using the Internet, 90% live in developing countries. The world's 42 Least Connected Countries (LCCs), such as Nigeria and Bangladesh, are home to 2.5 billion people. So access to ICTs there remains largely out of reach, particularly for these countries' large rural populations.

However, an estimated 450 million people worldwide live in places which are still out of reach of mobile cellular services, including developed countries, since many remote areas are lacking availability of cellular coverage.

Favorably, the gap between internet and mobile coverage access has decreased in the last fifteen years. ICTs continue to take on new forms, with nanotechnology for example. ICTs newest editions into the modern electronic world include smart watches, such as the Apple Watch, smart wristbands such as the Nike+ Fuel Band, and smart TVs such as Google TV.

Additionally, this development is also marked by an important environmental dimension. All around the world, people are more and more concerned by environmental issues. Therefore, information communication technologies play a role in facilitating social and environmental movements, as well as group information and actions nowadays, promoting change. Sustainable Development and Environmental Reform. Environmental awareness and information technology can be therefore considered as facilitators for sustainable development that will set off the participatory process and assist people in spelling out their ideas, perceptions, attitudes, knowledge, etc. so as to attain self-development and compliance as well as conservation of natural resources.

3. Case studies

a. First case study : Greta Thunberg

Greta Thunberg is a Swedish teenager who, in 2018, started a school strike for climate to get Swedish politicians to react. Beyond her engagement for the preservation of our planet, she mainly illustrated how ICTs could be used to raise environmental awareness, both among politicians and citizens in general.

She filmed herself during her strikes and gradually shared her message on social networks, calling on young people to mobilize all over the world by also taking this strike to get the political authorities in their respective countries to react.

It shows us how ICTs could be used to increase environmental awareness on a large scale, these strikes mobilized about 1.4 million people in 128 countries in March and several hundred thousand in May, which additionally has led many people to think about

sustainable decisions that would help both the environment and different populations in their development.



Greta Thunberg in 2018

b. Second case study : the dematerialization of tasks through ICTs

This second case study is about a global policy started, mostly in developed countries, since the early 2000s, by both public and private sectors. This policy is marked by an awareness of the ecological impact and a desire to maintain economic competitiveness.

The various actors have understood the important impact of the use of material resources such as paper for the functioning of the various companies and administrations. Thus, ICTs have made it possible to respond to this problem by providing sustainable solutions. By using ICTs for different tasks such as storing and sharing documents, teleworking or communicating between the different members of these administrations and companies, they were able to provide solutions that both ensure the economic development of these countries and companies as well as reduce the environmental impact of their operations.

Moreover, the use of ICTs in these companies to control the use of energy resources for heating, for example, has made it possible to reduce the waste associated with them and thus the negative impact on the environment.

In this case, ICTs have helped to reduce the use of resources and have increase sustainable decisions and environmental responsibility of huge actors like administrations.

c. Third case study : Ecosia

Ecosia is a search engine which aims to raise awareness among Internet users about reforestation. Thus, the Ecosia company pays back 80% of its profits, which mainly come from advertisement, to NGOs that support reforestation programmes, such as WWF.

This company has so far helped to plant more than 62 million trees thanks to the bottom it has redistributed.

It helps to raise environmental awareness and responsibility of the Internet users as well as promoting sustainable solutions through reforestation projects, particularly in Africa, benefiting both the environment and local populations.



4. Possible solutions

Targeting specific groups

According to latest researches and statistics, environmental awareness campaigns are most successful when targeting specific groups or populations. Many people don't understand the importance of the environmental problems because they don't see how they as well as their lifestyle will be directly affected. Therefore, if awareness campaigns become targeted, people will more easily and more likely adopt solutions such as solar panels or electric cars. Therefore one of the solutions would be to use social media or the internet in order to target specific groups and make more informative posts and short informative videos. These would specifically target the groups of people that may be ignoring the impact of global warming and the importance of sustainable development. However, this can only apply to developed countries but not the countries in development, because these will not be able to benefit from the access to social media or web in general.

Producing more documentaries

Another possible solution can be to produce more documentaries about the environmental crisis that would target the populations not only in developed countries. These documentaries can show how changing our lifestyle can positively impact the planet. Therefore, sustainable solutions could be promoted globally. They wouldn't necessarily need a big budget, with members of the populations taking part in them, and they would be more relatable as well as more efficient in targeting specific populations.

Using social media to increase environmental education

Environmental education is just as important in the developing world as it is in industrialized nations, however, reaching out to the children as well as adults in these countries can be very difficult.

Language barriers, illiteracy, and cultural differences can prevent them from learning about environmental issues, particularly in rural or tribal areas. Reaching out to tribal, religious, and community leaders can often help government organizations or non-governmental organizations (NGOs) in educating populations on environmental issues. Community leaders can help in solving communication problems and deal with the cultural divisions in order to ensure that people get together in solving global environmental problems. These communications and connexions can be made using different types of media as well as social networks.

Promoting eco friendly lifestyles through ICTs in developed countries

People in developing countries can also help industrialized nations since they usually are closer to the environment as they live and work often more sustainably. Therefore, promoting their lifestyle through social media, web, or short documentaries can give quite a good example to people knowing only urban life in urban areas .

Using local media

In developed countries and urban areas, the use of print and broadcast can be a great way to increase environmental awareness. For example, the websites of local communities and press can promote locally produced groceries goods and services to make each small community as self-sufficient as possible.

5. Main international actors

WWF: The WWF is one of the biggest world known NGOs acting for the environment. This NGO makes extensive use of ICTs, particularly social networks, to communicate on environmental issues and thus increases environmental awareness. It is one of the major non-governmental actors involved in this issue.

France: For some years now, France has been pursuing a national policy that aims to increase their use of ICTs in order to reduce its consumption of resources, especially energy, by dematerializing as many tasks as possible in administrations and encourages companies to do the same by giving priority to the use of ICTs to address ecological issues.

Sweden: According to ITU ranking Sweden is one of the countries that develops ICTs the most. Moreover, it is also one of the most advanced countries in promoting ideas to preserve the environment, particularly in relation to ICTs.

USA: The USA is one of the leaders in ICT research, particularly with companies linked to GAFAM, and therefore has great potential in the development of ICTs for environmental awareness .

ITU: ITU is the reference organization for all matters related to ICTs and their different involvement. As such, ITU plays a major role in the issue, and more generally in all matters relating to the environment and ICTs.

6. Guidelines for research

- In what ways does ICTs help to promote sustainable solution? What makes ICTs especially efficient nowadays?
- How can we increase the access to and the impact of ICTs in developing and less developed countries?
- What are the negative aspects of the impact of ICTs in raising awareness on environmental problems?
- How to ensure cooperation between countries, developed and less developed, to have a global and not just local impact through ICTs?

7. Bibliography

www.conserve-energy-future.com

<http://www.sustainablefriends.com>

<http://www.earthtimes.org>

-> Examples of solutions using ICTs and the environment in everyday life

<https://en.wikipedia.org>

<https://en.wiktionary.org>

-> Useful for definitions and explanations

<https://ict.eu/>

-> Useful for more general ICT-related solutions and explanations

<https://www.itu.int/en/action/climate/Pages/default.aspx>

-> ITU link for all matters related to ICTs and climate

<https://www.ladocumentationfrancaise.fr/var/storage/rapports-publics/094000118.pdf>

-> Report by the French government on the links between ICTs and sustainable development, especially on energy consumption and how ICTs can reduce it, it could be also helpful as it presents some general aspects of dematerialization of tasks through ICTs ***Only in french***

<https://www.itu.int/net4/ITU-D/idi/2017/index.html>

-> ITU's ranking of countries according to ICT development

<https://www.ecosia.org/>

-> Ecosia's website