



Index

Welcome to PAN-utopia 2100 – An Interactive Utopia

Step 1: Learn about it

Step 2: Work in Class

I. Themes: 7 Critical Issues at Rio+20

Sample Materials and Other Resources

Issues Brief no. 1: **Jobs**

Issues Brief no. 2: **Energy**

Issues Brief no. 3: **Cities**

Issues Brief no. 4: **Food**

Issues Brief no. 5: **Water**

Issues Brief no. 6: **Oceans**

Issues Brief no. 7: **Disasters**

II. Extra-curricular Activities

Step 3: Take part in the Contest

I. Rio+100, Earth Summit 2092

Contest Regulations

II. Severn Cullis-Suzuki

III. Rio+20

IV. *Blanket Made of Blue*, Ana Luísa Amaral

Welcome to PAN-utopia 2100 - An Interactive Utopia



PAN-utopia 2100: An Interactive Utopia is hosted by ILCML – Instituto de Literatura Comparada Margarida Losa – and CETAPS – Centre for English, Translation and Anglo-Portuguese Studies –, both based at the Faculty of Letters of the University of Porto and funded by the Foundation for Science and Technology, with the support of the Rectory of the University of Porto, of QUERCUS and of the ECO-SCHOOLS network.

In a world of rapid change and controversial issues, **PAN-utopia 2100: An Interactive Utopia** provides a forum for reflection on the future of the world, by opening a window on the year 2100, a date distant enough so that plans could be drawn up, solutions devised and dreams fulfilled.

This year, **PAN-utopia 2100: An Interactive Utopia** invites you to participate in the contest **“Rio+100, Earth Summit 2092 | Rio+100, Cimeira Terra 2092”**.

This initiative is associated with the United Nations Conference on Sustainable Development (Rio +20), which will run between 20th and 22nd of June 2012, in Rio de Janeiro (www.uncsd2012.org/rio20/), with the aim of discussing new forms of sustainable development, and considers indispensable a utopian dimension in building a sustainable future.

The **7 Critical Issues** at **Rio+20** are **Jobs, Energy, Cities, Food, Water, Oceans and Disasters**.

Find out how to explore these subjects with your students and how to participate. This dossier is divided in three steps:

Step 1: Learn about it

Step 2: Work in Class

Step 3: Take part in the Contest

Whatever step you start at, bear in mind that the aim is to “Think globally, act locally”.

Step 1: *Learn about it*

In this section you'll find [information](#) and useful links regarding Utopia and Utopianism.

Utopia & Utopianism

Utopia – a nonexistent society described in detail

Utopianism – social dreaming

“**Utopianism** generally is the imaginative projection, positive or negative, of a society that is substantially different from the one in which the author lives. The word **utopia** or *outopia* was derived from the Greek and means “no (or not) place” (*u* or *ou*, no, not; *topos*, place). **Thomas More** (1478-1535), inventor of the word, punned on *eutopia*, or good place, and we have since added *dystopia*, or bad place. Thus, the primary characteristic of the utopia is its nonexistence combined with a *topos* – a location in time and space – to give verisimilitude.”

In Gregory Claeys and Lyman Tower Sargent, *The Utopian Reader*
(New York University Press, 1999)

“Historically, the concept of utopia has been defined with regard to one of four characteristics: (1) the content of the **imagined society** (i.e., the identification of that society with the idea of ‘good place’, a notion that should be discarded since it is based on a subjective conception of what is or is not desirable, and envisages utopia as being essentially in opposition to the prevailing ideology); (2) the **literary form** into which the utopian imagination has been crystallized (which is a very limiting way of defining utopia, since it excludes a considerable number of texts that are clearly utopian in perspective but that do not rigorously comply with the narrative model established by More); (3) the **function of utopia** (i.e., the impact that it causes on its reader, urging him to take action (a definition that should be rejected as it takes into account political utopia only)); (4) **the desire for a better life**, caused by a feeling of discontentment towards the society one lives in (utopia is then seen as a matter of attitude). This latter characteristic is no doubt the most important one, as it allows for the inclusion within the framework of utopia of a wide range of texts informed by what Ernst Bloch to be the principal energy of utopia: **hope**.”

In Fátima Vieira, *The Cambridge Companion to Utopian Literature*
(Cambridge University Press, 2010)

Trivia

Did you know that...

- ...Thomas More, a British author, wrote *Utopia* in 1516, in Latin?
- ... More's *Utopia* tells the story of a Portuguese traveller, Raphael Hythlodæus, who finds a perfect society in a distant island and comes back to confront his own?
- ... *Gulliver's Travels*, by Jonathan Swift, is a utopia?
- ... the expression "Big Brother" is taken from the dystopian novel *1984*, by George Orwell?
- ... an environment-based utopia is called an ecotopia?
- ... many people try to create real-life utopias through the establishment of intentional communities or through social and political innovation?
- ... many utopian thinkers have anticipated most of today's technological advances?
- ... before the creation of the Internet in the 1990s, the term "cyberspace" was invented by William Gibson, an utopian writer, in the short-story "Burning Chrome" (1982) and was later used in his novel, *Neuromancer* (1984)?
- ... you can follow intentional communities online (Facebook, twitter, ...)?
- ... you can create your own utopia by participating in PAN-utopia 2100?

Useful Links

For Utopia **on the Web** go to:

Utopia on the Internet: A Philosophy for a Better Life

<http://users.erols.com/jonwill/utopialist.htm>

Utopias Literárias e Pensamento Utópico

<http://web.letras.up.pt/utopia/>

For Utopia **in cinema** look for:

Filmographie: Utopie et Cinéma

<http://expositions.bnf.fr/utopie/cabinets/rep/filmo.htm>

Wikipedia | List of dystopian films

For Utopia **in art** go to:

Utopia: The Search for the Ideal Society in the Western World - New York Public Library

<http://utopia.nypl.org/>



For Utopia in literature see:

E-topia: Revista Electrónica de Estudios sobre a utopia

<http://web.letras.up.pt/utopia/revista/index.htm>

Spaces of Utopia: An Electronic Journal

<http://ler.letras.up.pt/site/default.aspx?qry=id05id174&sum=sim>

Utopian Writing, 1516-1798

www.trin.cam.ac.uk/rws1001/utopia/bibliog.htm

Map of Utopian Locations

www.trin.cam.ac.uk/rws1001/utopia/map.htm

For utopian organizations go to:

Utopian Studies Society Europe

www.utopianstudieseurope.org/

The Society for Utopian Studies

<http://utopian-studies.org/>

For real-life utopian communities, go to:

Tamera

www.tamera.org/index.html

Auroville

www.auroville.org/

Sadhana Forest

<http://sadhanaforest.org/>

Findhorn Foundation

www.findhorn.org/

Arcosanti Project

www.arcosanti.org/

For virtual utopian communities, go to:

Bergonia

www.bergonia.org/

The Principality of Freedonia

<http://www.freedonia.org/>

Step 2: Work in Class

In this section you'll find [information](#), [sample materials](#) and [other resources](#) on the **7 critical issues** which will be discussed at **Rio+20 | United Nations Conference on Sustainable Development**, which will take place in Brazil, on 20-22 June 2012.

I. Themes: 7 Critical Issues at Rio+20

- Issues Brief no. 1: **Jobs**
- Issues Brief no. 2: **Energy**
- Issues Brief no. 3: **Cities**
- Issues Brief no. 4: **Food**
- Issues Brief no. 5: **Water**
- Issues Brief no. 6: **Oceans**
- Issues Brief no. 7: **Disasters**

II. Extra-curricular Activities



Issues Brief no. 1: Jobs

Economic recession has taken a toll on both the quantity and quality of jobs. For the 190 million unemployed, and for over 500 million job seekers over the next 10 years, labour markets are vital not only for the production and generation of wealth, but equally for its distribution. Economic action and social policies to create gainful employment are critical for social cohesion and stability. It's also crucial that work is geared to the needs of the natural environment. "Green jobs" are positions in agriculture, industry, services and administration that contribute to preserving or restoring the quality of the environment.

(source: www.un.org/en/sustainablefuture/jobs.shtml)

Key-words

Permaculture (inspiration for sustainable living); Fair trade / ethical working conditions; Sustainable development; Green jobs; Productive employment

Sample Materials

- ▶ Jobs: Guiding you through the Web

Other Resources

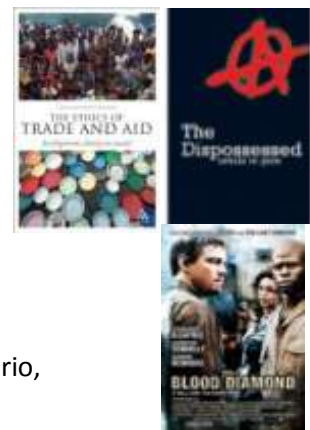
- ▶ **Extensive Reading:**

The Ethics of Trade and Aid: Development, Charity or Waste? (Think Now) (2011). Author: Christopher D. Wraight

The Dispossessed: An Ambiguous Utopia (1974). Author: Ursula K. LeGuin

- ▶ **Extensive Viewing:**

Blood Diamond (2006). Director: Edward Zwick; Starring: Leonard DiCaprio, Jennifer Connely and Djimon Hounsou



Useful Links

- ▶ New Lanark World Heritage Site | www.newlanark.org/
- ▶ New Lanark Kids | www.newlanark.org/kids/index2.html
- ▶ Ethical Trade Initiative: Respect for workers worldwide | www.ethicaltrade.org
- ▶ Permaculture Institute | www.permaculture.org/nm/index.php
- ▶ school.coop > Teaching Materials | <http://teacher.beecoop.co.uk/>

Jobs: guiding you through the Web

The United Nations declared as one of the Millennium Goals for sustainable development the promotion of full and productive employment and decent work for all, including for women, indigenous people, young people, people with disabilities and rural populations.

As you can see, you have access to full information regarding the topics under discussion next summer at the **Rio+20** website:

1. Go to www.uncsd2012.org/rio20/
2. Click on *Objective and Themes*
3. Click on *Green jobs and Social inclusion*

❶ Now, think about the possibility of achieving **social inclusion** by means of sustainable employment.

❷ To expand your knowledge on this issue, find out information on the following topics:

- **Green jobs**
- **Productive employment**

The following sites can be useful to provide you with data regarding employment, green jobs and sustainable development:

🔗 **United Nations Development Programme**
www.undp.org/sl/Documents/documents.htm

🔗 **Forbes Magazine**
www.forbes.com/sites/williampentland/2011/06/08/ranking-of-fastest-hiring-industries-tinged-green/

🔗 **Green Careers Journal**
http://issuu.com/GreenCareersJournal/docs/preview_gcj_fall2011_vol6num1/5

❸ **Fair trade** and/or **ethical working conditions** are very relevant to social inclusion and sustainable development. Find more at www.ethicaltrade.org/get-involved



④ As you have seen, it's not that difficult to get involved in changing the world. So, try these addresses and see how you can be an **"ethical pest"**:

🔗 www.facebook.com/group.php?gid=24143333268&ref=ts

🔗 www.ethicaltrade.org/get-involved/be-an-ethical-pest

⑤ Are you familiar with Switcher?



Switcher is a Swiss textile company, founded by Robin Cornelius. As an industry pioneer, the company has developed CO2 and H2O indexes for textile products. They have also created an online transparency service called **respect-code.org**, which was launched in 2006. To find out more, go to the company's website (www.switcher.ch/).



You can also watch the following videos at:

🔗 www.youtube.com/watch?v=SbBldgLLr4M

🔗 www.youtube.com/watch?v=iFmfUWAXPiU&feature=related

1. Imagine you are writing an article about Switcher and how Robin Cornelius managed to achieve economic efficiency, environmental responsibility and social solidarity.

Here you have another example of ethical trade: www.primark-ethicaltrading.co.uk/ourwork.htm.

2. Try to search for other examples of trade / employment that can be a source of inspiration to your project work.



Issues Brief no. 2: Energy

Energy is central to nearly every major challenge and opportunity the world faces today. Be it for jobs, security, climate change, food production or increasing incomes, access to energy for all is essential. Sustainable energy is needed for strengthening economies, protecting ecosystems and achieving equity. United Nations Secretary-General Ban Ki-moon is leading a Sustainable Energy for All initiative to ensure universal access to modern energy services, to improve efficiency and to increase use of renewable sources.

(source: www.un.org/en/sustainablefuture/energy.shtml)

Key-words

Renewables; Global equity; Environmental protection; ecologically-sustained development

Sample Materials

- ▶ What is energy?
- ▶ Father Himalaya: A man ahead of his time

Other Resources

- ▶ Extensive reading:

Ecotopia (1975). Author: Ernest Callenbach

- ▶ Extensive Viewing:

An Inconvenient Truth (2006). Director: Davis Guggenheim



Useful Links

- ▶ Energy Information Administration's Kids page | www.eia.doe.gov/kids/
- ▶ Natural Environment > Crossword puzzle | www.heritage.nf.ca/games/environment/crossword.html
- ▶ Energy Quest website | www.energyquest.ca.gov/story/
- ▶ Earth Preservers - environmental newspaper for kids | www.earthpreservers.com/
- ▶ EEK! Environmental education for kids | www.dnr.state.wi.us/org/caer/ce/eeek/

What is Energy?

Energy lights our cities, powers our vehicles, and runs machinery in factories. It warms and cools our homes, cooks our food, plays our music, and gives us pictures on television.

Energy is defined as the ability or the capacity to do work.

We use energy to do work and make all movements. When we eat, our bodies transform the food into energy to do work. When we run or walk or do some work, we 'burn' energy in our bodies. Cars, planes, trolleys, boats, and machinery also transform energy into work. Work means moving or lifting something, warming or lighting something. There are many sources of energy that help to run the various machines invented by man.



The discovery of fire by man led to the possibility of burning wood for cooking and heating thereby using energy. For several thousand years human energy demands were met only by renewable energy sources—sun, **biomass** (wood, leaves, twigs), **hydel** (water) and wind power.

As early as 4000-3500 BC, the first sailing ships and windmills were developed harnessing wind energy. With the use of hydropower through water mills or irrigation systems, things began to move faster. Fuelwood and dung cakes are even today a major source of energy in rural India. **Solar energy** is used for drying and heating.

With the advent of the Industrial Revolution, the use of energy in the form of fossil fuels began growing as more and more industries were set up. This occurred in stages, from the exploitation of **coal** deposits to the exploitation of **oil and natural gas** fields. It has been only half a century since **nuclear** power began being used as an energy source. In the past century, it became evident that the consumption of non-renewable sources of energy had caused more environmental damage than any other human activity. Electricity generated from fossil fuels such as coal and crude oil has led to high concentrations of harmful gases in the atmosphere. This has in turn led to problems such as ozone depletion and global warming. Vehicular pollution is also a grave problem.

There has been an enormous increase in the demand for energy since the middle of the last century as a result of industrial development and population growth. World population grew 3.2 times between 1850 and 1970, per capita use of industrial energy increased about twentyfold, and total world use of industrial and traditional energy forms combined increased more than twelvefold.



Due to the problems associated with the use of fossil fuels, alternative sources of energy have become important and relevant in today's world. These sources, such as the sun and wind, can never be exhausted and are therefore called renewable. Also known as non-conventional sources of energy, they cause less emission and are available locally. Their use can significantly reduce chemical, radioactive, and thermal pollution. They are viable sources of clean and limitless energy. Most of the renewable sources of energy are fairly non-polluting and considered clean. However, biomass is a major polluter indoors.

Renewable energy sources include the sun, wind, water, agricultural residue, fuelwood, and animal dung. Fossil fuels are non-renewable sources. Energy generated from the



sun is known as **solar energy**. **Hydel** is the energy derived from water. **Biomass** – firewood, animal dung, and biodegradable waste from cities and crop residues – is a source of energy when it is burnt. **Geothermal energy** is derived from hot dry rocks, magma, hot water springs, natural geysers, etc. **Ocean thermal** is energy derived from waves and also from tidal waves.

Through the method of **co-generation** a cleaner and less polluting form of energy is being generated. Fuel cells are also being used as cleaner energy source. In India a number of initiatives have been taken. A good example is the model village of **Ralegaon Siddhi**.

How energy is measured

One of the basic measuring blocks for energy is called a Btu or British thermal unit. Btu is defined as the amount of heat energy it takes to raise the temperature of 1 pound of water by 1 degree Fahrenheit, at sea level. One Btu equals about one black-tip kitchen match. It takes about 2000 Btu to make a pot of coffee.

Energy can also be measured in joules (pronounced the same way as 'jewels'). One joule is the amount of energy needed to lift 1 pound about 9 inches. It takes 1000 joules to equal a Btu. It would take 2 million joules to make a pot of coffee.

Joule is named after an English physicist named James Prescott Joule who lived from 1818 to 1889. He discovered that heat is a type of energy.

Around the world, scientists measure energy in joules rather than Btu. It is much like people around the world using the metric system, metres and kilograms. Like in the metric system, you can have kilojoules: 'kilo' means 1000, therefore, 1000 joules = 1 kilojoule = 1 Btu.

Total commercial energy consumption has been growing tremendously since the last decade. Per capita commercial energy consumption in low-income countries has more than doubled. About 15% of the world's population living in the wealthy industrialized nations consume over half the energy used in the world. The number of motor vehicles in use worldwide has more than doubled since 1970.

In some respects, the global energy system has evolved in a cleaner direction in the last 25 years. The share of world primary energy derived from natural gas – the cleanest fossil fuel – has increased by more than 25%. So has the use and generation of renewable energy sources.

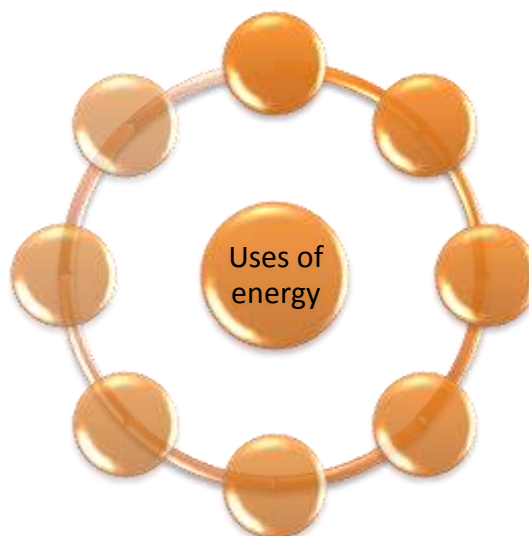
Still, the overall efficiency of energy production remains extremely low: on average, more than 90% of energy consumed is lost or wasted in the process of conversion from raw materials such as coal to the final energy service such as the light to read a book. The main problem isn't that we use energy, but how we produce and consume energy resources. What we really need are energy sources that will last forever and can be used without polluting the environment. Conserving energy has become the need of the day be it in the transport, household, or industrial sectors.

(source: Environmental Information System, www.upenvvis.nic.in/energy.htm; adapted)

For more information on Energy link to

- www.energy.ca.gov/
- www.eia.doe.gov/
- www.fe.doe.gov/education
- www.ase.org/greenschools
- www.conserinfo.org

❶ Complete the diagram below.



❷ In note form, write the consequences of the consumption of non-renewable sources.

❸ What are the positive aspects of using alternative energies?

❹ What has been done lately to protect the environment and control the energy sources?

Activity



Ways of trapping heat energy from the sun

Materials:

1. Two identical bottles
2. White paint and black paint
3. Water
4. Thermometer

Steps:

- a. Paint one bottle white and the other black.
- b. Fill each with water.
- c. Leave them in the sun for about two hours.
- d. Now with a thermometer check the temperature in each bottle.
- e. You will find that the temperature in the black bottle is higher.

(source: <http://edugreen.teri.res.in/misc/activity/activity.htm>)

Father Himalaya:

A Man Ahead of His Time

History has revealed many extraordinary men and women who dared to dream of a better world. Among them, we should certainly count the Portuguese thinker Father Himalaya, a multifaceted man, a strong supporter of the civil rights movement, a bold scientist, a pioneer in what came to be termed ‘ecologically-sustained development’, and, above all, a man who forged and lived his own utopia.

I. The Man

Born in 1868, in Cendufe, a small village in the North of Portugal, Manoel António Gomes soon adopted the nickname devised by his Seminary colleagues – Himalaya. This enigmatic and meaningful name combined perfectly associations with his great ideals and the important scientific breakthroughs in which he was to be the leading protagonist a few years later. Father Himalaya travelled the world. In addition to Portugal, he lived in Germany, France, England, the United States of America and Argentina. His journeys were usually aimed at acquiring knowledge and financial support to work on his many projects. Before moving to Paris, in 1899, he lived in the city of Porto and worked as a teacher of Chemistry and Physics. This was an important time for Father Himalaya, who published numerous essays in scientific journals during this period. His interests, his lectures and his writings ranged from Religion to Science, Ecology, Philosophy, Education and Economics. (...)



A daring man, Father Himalaya never hesitated when new scientific challenges arose, and nothing could keep him from participating in his own experiments. Indeed, it was by testing some of his medicines on himself that he became seriously ill and eventually died, in 1933, without finishing his book on the Mechanics of the Universe.

II. The Scientist

Father Himalaya was only seventeen when he built a machine that could transform nitrogen – a gas without colour, taste or smell that occurs in large quantities in the earth’s atmosphere –, and increase the fertility of the soil. He didn’t take out a patent for his invention, though, and, a few years later, a German citizen obtained one for a similar machine. Father Himalaya’s interest in plants and their medicinal properties led him to initiate a thorough research programme on the subject and to create various natural medicines. One of these – the Organic Salts – was successfully commercialised at the time. (...)

Nonetheless, Father Himalaya’s greatest scientific achievements were yet to come. In 1900, he began his experiments on solar energy in Sorede, France. The Pyrliophoro was a gigantic solar furnace with equally gigantic lens that received solar energy and transformed it into electricity. After a few failed attempts to keep the first prototypes working, a new machine was built and presented, in 1904, in St. Louis, at the World’s Great Exhibition, the highest exponent of technological sophistication. The enthusiasm of both the visitors and the press was overwhelming. The “New York Times”, the “Sunday Magazine” and the “Republic” all devoted their front pages to Father Himalaya’s engine. An amazed crowd stared at the enormous machine which occupied 80 square meters and reached 3500 Celsius in temperature. When Father Himalaya placed the furnace closer to the refractory focal point, everything melted. Granite and basalt instantly liquefied. The Exhibition Jury awarded Father Himalaya first prize and the Portuguese scientist inscribed his name in the history of renewable energies forever.



Despite this enormous success, the Pyrliophoro was never commercialised. It was too expensive to be used in industry and, above all, its principles were contrary to the ruling economic system based on fossil fuels. (...) Father Himalaya soon began to work on new inventions and, in 1908, back in Portugal, he publicly presented a

National Plan to decentralise dams and irrigate the whole country through a system of canals. This plan also pointed out the many advantages of using renewable sources of energy. Thus, Father Himalaya inaugurated in Portugal a hundred years ago, the concept of ecologically-sustained development.

(source: <http://jacintorodrigues.blogspot.com/2009/07/conferencia-padre-himalaya-um-homem.html>; adapted and abridged)

1 Read the text about Father Himalaya, a well-known Portuguese utopist and visionary scientist, and fill in his ID chart:

Father Himalaya	
Year of Birth	
Place of Birth	
Full Name	
Nickname	
Places where he lived	
Job while living at Porto	
Writing interests	
Year of death	
Cause of death	
Father Himalaya's inventions	
Awards	

2 Now answer the following questions on Father Himalaya's greatest inventions:

- How old was Father Himalaya when he invented his first machine?
- In 1900 he invented his most famous engine. What was it and what was it used for?
- Why was this machine/engine never commercialized?
- Father Himalaya is referred to as "a man ahead of his time". Do you agree with this statement? State your reasons.





Issues Brief no. 3: Cities

Cities are hubs for ideas, commerce, culture, science, productivity, social development and much more. At their best, cities have enabled people to advance socially and economically. However, many challenges exist in maintaining cities in a way that continues to create jobs and prosperity while not straining land and resources. Common city challenges include congestion, lack of funds to provide basic services, a shortage of adequate housing and deteriorating infrastructures. The challenges cities face can be overcome in ways that allow them to continue to thrive and grow, while improving resource use and reducing pollution and poverty.

(source: www.un.org/en/sustainablefuture/cities.shtml)

Key-words:

Sustainable living; Carbon footprint; Pollution; Urban planning; Congestion; Social inclusion

Sample Materials

- ▶ Auroville: a utopian city
- ▶ Reduce your carbon footprint

Other Resources

- ▶ [Extensive Reading](#)

Nineteen Eighty-Four (1949). Author: George Orwell.

- ▶ [Extensive Viewing:](#)

Home (2009). Director: Yann Arthus-Bertrand (available on Youtube)

In Time (2011). Director: Andrew Niccol ; Starring: Justin Timberlake and Amanda Seyfried

Blade Runner: The Final Cut (1982/2011). Director: Ridley Scott; Starring: Harrison Ford and Rutger Hauer



Useful Links

- ▶ Auroville | www.auroville.org
- ▶ Sadhanaforest | <http://sadhanaforest.org/>
- ▶ Tamera-Peace Research Centre in Southern Portugal | www.tamera.org/index.html
- ▶ Urban Nouveau | www.urbannouveau.com

Auroville: a utopian city

What is Auroville?

Auroville is a universal township in the making for a population of up to 50,000 people from around the world.

Where is Auroville?

Auroville is located in southern India, mostly in the State of Tamil Nadu (some parts are in the State of Puducherry), a few kilometres inland from the Coromandel Coast, about 160 kms south of Chennai (previously Madras) and 10 kms north of the town of Puducherry.

How did Auroville begin?

Auroville was founded in the mid-1960s as a project of the Sri Aurobindo Society by Mirra Alfassa (also known as “The Mother”) and designed by architect Roger Anger. In 1966 UNESCO passed a unanimous resolution commending it as a project of importance to the future of humanity, thereby giving their full encouragement.

The purpose of Auroville is to realise human unity – in diversity. Auroville is also concerned with – and practically researching into – sustainable living and the future cultural, environmental, social and spiritual needs of humankind.

Who are the Aurovilians?

They come from some 45 nations, from all age groups (from infancy to over eighty, averaging around 30), from all social classes, backgrounds and cultures, representing humanity as a whole. The population of the township is constantly growing, but currently stands at around 2,160 people, of whom about one-third are Indian.

(source: www.auroville.org)



1 To find out how people live in Auroville, complete the following message from their spiritual leader, The Mother, by putting the following verbs in brackets in the correct tense. Then check your answers at www.auroville.org/comingtoav/how2join.htm

Admission to Auroville _____ (be) subject to approval by The Mother.

_____ (there to be) a trial period of one year. This period can be made longer or shorter.

People living in Auroville should not provide hospitality there to others who _____ (not/accept) to live there.

Those who have been accepted should lead an Aurovilian life the main principles of which _____ (clearly/indicate) by The Mother.

Everyone should _____ (work) at least five hours every day including Sundays.

Working for oneself is not _____ (work) for the community.

Each member of the community should have an activity that _____ (correspond) to the needs of Auroville.

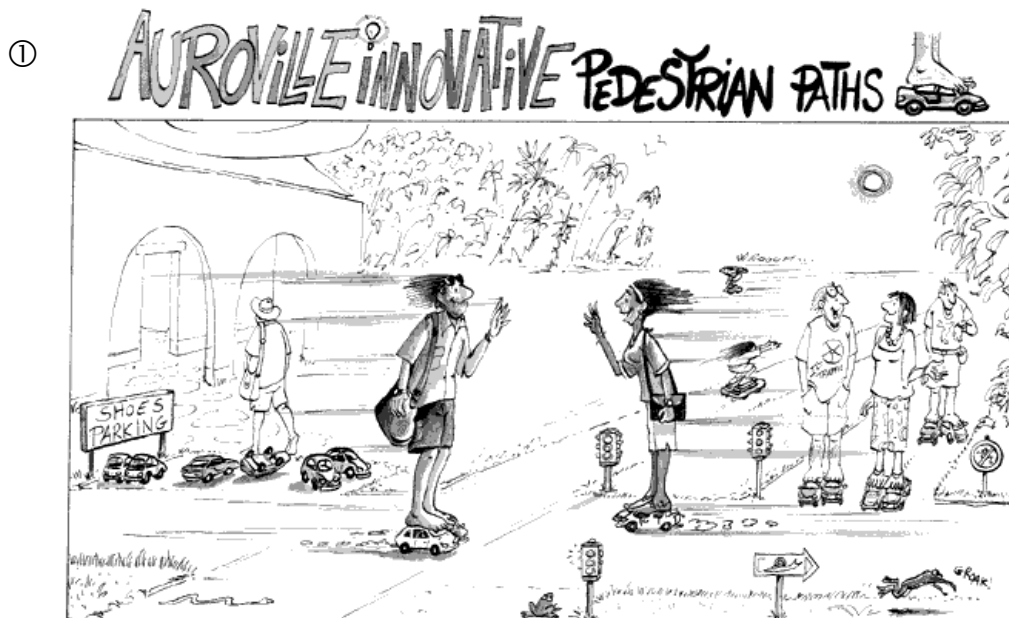
Drugs _____ (forbid; passive) in Auroville.

When Auroville is a city there will be several kitchens providing different types of food. But even now individuals _____ (not/cook) for themselves. It is better _____ (organise) kitchens for groups.

Those who live in Auroville should aspire for the new life.

Mother, 20.2.1971

- ② Look at some of the cartoons posted by Aurovilians at their website.
Choose one and comment on it.



③

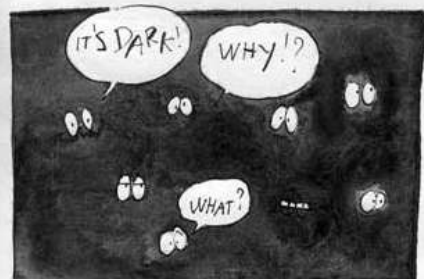
ONE AMONGST MANY NIGHTS...



THE NEXT NIGHT



ANOTHER...NEXT...NIGHT.



By MARIO-ESTANQUE OF

Reduce your Carbon Footprint

Leo wants to know: The extreme and inevitable path for a lasting life

❶ Read the following text about the “Carbon Footprint”. Give each paragraph the right title:



- Eat less meat
- Drive less
- Use less energy
- Buy a smaller apartment
- Buy things you actually need
- Go Vegan
- Have a *paper free* office
- Buy less
- Travel less
- Use less water

Leo Babauta

Minimalism is a wonderful way to go when we walk with lighter feet on this Earth. Needing less is much more important than buying right ecologically.

So let's go through these tips:

1. _____. World-wide beef production contributes more to climate change than the entire transport sector. Pigs and chickens also contribute considerably to pollution and the CO₂-footprint.

2. _____. Whenever crops are transported from where they are grown to the place where they are going to be packed and finally to the supermarket, the environment suffers. To supply ourselves regionally reduces not only the (ecological) costs of transportation but also supports local farmers. Look for regional and seasonal foods whenever possible and search for farmer markets in your neighborhood.

3. _____. Buying many things is useless and wasteful. Each product requires a lot of resources and clearly contributes to climate change. Shop much less. Think whether you can borrow something, like a book from the library; take better care of what you already have or find innovative ways to use old objects or simply make them yourself. Think if you can really live without them or not too. Often you will realise that they aren't necessary and that you won't really miss them in your life.

4. _____. This prevents you from buying new things and using all the resources that are wasted in manufacture and transportation. Extend the life of something that is already bought. Look at flea markets, second-hand shops, second-hand bookshops, Ebay (www.e-bay.com) or Freecycle (www.freecycle.org). Sometimes you can find some really cool vintage things there.

5. _____. Even without a small apartment, there are innumerable ways to lower your energy consumption. Cool and heat your apartment less. Turn the lights off. Unplug appliances that you are not using. Dry your laundry on a clothes rack as often as you can.

6. _____. Don't take a bath daily and don't take a shower for hours either: make yourself wet, turn off the water, apply the soap, rinse yourself and you're ready! Don't water your lawn every day and wash your car only when needed. Don't wash your clothes after every use, wear them longer. Save water whenever you wash your hands and the dishes.

(source: www.52wege.de/reduziere-deinen-co2-fu%C3%9Fabdruck; translated from the German, abridged and adapted)

❷ Go online and access **Carbon Foot Print Calculator** at www.carbonfootprint.com/calculator.aspx. Calculate your own carbon footprint and share the results on Facebook.

❸ Watch the video **Act on CO2: Bedtime Story**, available on YouTube (www.youtube.com/watch?v=0dOfBEm5DZU).



List what you can do in order to give the story a happy ending.



Issues Brief no. 4: Food

It is time to rethink how we grow, share and consume our food.

If done right, agriculture, forestry and fisheries can provide nutritious food for all and generate decent incomes, while supporting people-centred rural development and protecting the environment.

But right now, our soils, freshwater, oceans, forests and biodiversity are being rapidly degraded. Climate change is putting even more pressure on the resources we depend on.

A profound change of the global food and agriculture system is needed if we are to nourish today's 925 million hungry and the additional 2 billion people expected by 2050.

The food and agriculture sectors offer key solutions for development and is central to hunger and poverty eradication.

(source: www.un.org/en/sustainablefuture/food.shtml)

Key-words

Food Supplies; Distribution; Sustainability; Resources; Agriculture; Climate Change; Globalization; Permaculture; Food Miles; Factory Farming; Genetically-Modified Food

Sample Materials

- ▶ Niger: As food crisis looms, Darin's education is lost
- ▶ WFP Molly's World: A Girl Films Her Life in a Nairobi Slum
- ▶ The grass is greener: rehabilitating the Syrian Badia

Other Resources

- ▶ [Extensive Reading:](#)

Dreaming of Cockaigne: Medieval Fantasies of the Perfect Life (2003). Author: Herman Pleij

- ▶ [Extensive Viewing:](#)

As We Sow (2003). Director: Jan Weber

Food, Inc. (2008). Director: Robert Kenner.

Fast Food Nation (2006). Director: Richard Linklater. Starring: Greg Kinnear, Bruce Willis.



Useful Links

- ▶ WWOOF (World Wide Opportunities on Organic Farms) | www.wwooof.org
- ▶ World Food Programme | www.wfp.org/
- ▶ Sustainable Table - Serving Up Healthy Food Choices | www.sustainabletable.org/home.php

Niger:

As food crisis looms, Darin's education is lost



❶ Go to the **OCHOA (United Nations Office for the Coordination of Humanitarian Affairs) website** and read the top story on **Darin, a Nigerian girl** (available at www.unocha.org/top-stories/all-stories/niger-food-crisis-looms-darin%E2%80%99s-education-lost)

Now, complete the following text.

Darin is a young girl from Niger who already _____ a job. One would think she is 10 to 12 years old, but she doesn't know her own _____. She used to go to _____, but classes were cancelled as a result of _____ in the region. In Tillabéri, about _____% of students has already left school.

❷ Go to **WOOOF Portugal website** (available at www.woof.pt/).

Explore the website and create an ad for WWOOF Portugal's work, which includes the expressions 'permaculture' and 'food miles'.





WFP Molly's World:

A Girl Films Her Life in a Nairobi Slum

(available at www.wfp.org/stories/mollys-world-growing-nairobi-slum)



❶ Go to **WFP (World Food Programme)** website, watch the video about Molly, a girl from Nairobi, and Fill in the gaps:

Woman: You _____ to film your _____ in school, your life at _____, your _____ at _____. You can also _____ somebody to film _____, ok?

Molly: Thank you.

❷ Answer the questions:

1. Does Molly go to school?
2. Does her cousin know how to count to 100, read and write?
3. Does he go to school?
4. Describe Molly's house.

❸ Imagine Molly's day. Then watch some episodes of her diary and compare her daily life to yours.



| Transport | Food Miles Podcast

(available at www.youtube.com/watch?v=HzYO0S292q4)

❶ Check the podcast by **e² Transport** and choose one of the following activities:

Activity 1: Take notes and create an article based on the information you collected.

Activity 2: Listen to the podcast and create a set of five questions and answers based on the information provided.



❷ Create a facebook profile for your class project on **Rio+20** and feed it regularly with news, videos, links, comments...

The Grass is Greener: Rehabilitating the Syrian Badia

(available at www.ruralpovertyportal.org/web/guest/country/voice/tags/syria/syria_green)

❶ Go to the **Rural Poverty Portal**, read the text on rehabilitating the Syrian Badia and create a shorter news item reporting on it. Include information from the graph “The Ten Core Guiding Principles”.

❷ Now complete the following text from the **Global Risk Forum** with the appropriate verb tenses:

“It is time _____ (rethink) how we grow, share and consume our food. If done right, agriculture, forestry and fisheries can provide nutritious food for all and generate decent incomes, while supporting people-centred rural development and protecting the environment. But right now, our soils, freshwater, oceans, forests and biodiversity are being rapidly degraded. Climate change is putting even more pressure on the resources we depend on.

A profound change of the global food and agriculture system _____ (need) if we are to nourish today’s 925 million hungry and the additional 2 billion people expected by 2050. The food and agriculture sector offers key solutions for development, and is central for hunger and poverty eradication.

Facts and figures

The food and agriculture sector is critical to greening the economy: it is the single largest sector using 60 per cent of the world’s ecosystems and providing livelihoods for 40 per cent of today’s global population.

Agriculture _____ (be) the largest source of income and jobs for poor rural households, and often their surest pathway out of poverty. Smallholder farms, most still rainfed, provide up to 80 per cent of food in developing countries, so _____ (invest) in their productivity is an important way to increase food production.

Since the 1900s, some 75 per cent of crop diversity _____ (lose) from farmers’ fields. Better use of agricultural biodiversity can contribute to more nutritious diets, enhanced livelihoods for farming communities and more resilient and sustainable farming systems.

Protecting vulnerable and food insecure people, particularly women and children, from shocks and empowering them to fulfil their potential and contribute to economic growth _____ (be) critical elements of _____ (achieve) global food and nutrition security and an inclusive and people-centred green economy”. (source: www.un.org/en/sustainablefuture/food.shtml)



The Ten Core Guiding Principles



Issues Brief no. 5: Water

Clean, accessible water for all is an essential part of the world we want to live in. There is sufficient fresh water on the planet to achieve this dream. But due to bad economics or poor infrastructures, every year millions of people, most of them children, die from diseases associated with inadequate water supply, sanitation and hygiene. Water scarcity, poor water quality and inadequate sanitation negatively impact food security, livelihood choices and educational opportunities for poor families across the world. Drought afflicts some of the world's poorest countries, worsening hunger and malnutrition. By 2050, at least one in four people is likely to live in a country affected by chronic or recurring shortages of fresh water.

(source: www.un.org/en/sustainablefuture/water.shtml)

Key-words

Water supply; Fresh water; Water scarcity; Drought; Shortage of water; Dehydration; Water privatization; Water wars; Blue gold; Water activism

Sample Materials

- ▶ Blue Covenant: Where Has All the Water Gone?
- ▶ Blue Gold

Other Resources

- ▶ [Extensive Reading](#)

Blue Gold: The Fight to Stop the Corporate Theft of the World's Water (2002). Authors: Maude Barlow and Tony Tucker.

- ▶ [Extensive Viewing:](#)

Blue Gold: World Water Wars (2008). Director: Sam Bozzo.
(available on Youtube)



Useful Links

- ▶ Greenpeace International | www.greenpeace.org/international/en/
- ▶ Global Water | www.globalwater.org/
- ▶ Rio+20 Water for the World | www.un.org/en/sustainablefuture/water.shtml
- ▶ 100 Ways to Conserve Water | www.wateruseitwisely.com/100-ways-to-conserve/index.php
- ▶ Drop by Drop Ad Competition | www.dropbydrop.eu/en/



Blue Covenant

In 2002, activist **Maude Barlow** published *Blue Gold*, a book that showed how the transnational corporations are plotting to control the world's dwindling water supply. Now Barlow has written a follow-up to *Blue Gold*, called *Blue Covenant: The Global Water Crisis and the Coming Battle for the Right to Water*, addressing the state of the global water crisis, focusing on water privatization and how it has affected countries in Asia, Africa, and beyond. Read an excerpt of her book:

Chapter 1

Where Has All the Water Gone?

The Laws of Ecology

*All things are interconnected. Everything goes somewhere.
There is no such thing as a free lunch. Nature bats last.*

Ernest Callenbach

Three scenarios collude toward disaster.

Scenario one: The world is running out of fresh water. It is not just a question of finding the money to hook up the two billion people living in water-stressed regions of our world. Humanity is polluting, diverting and depleting the Earth's finite water resources at a dangerous and steadily increasing rate. The abuse and displacement of water is the ground-level equivalent of greenhouse gas emissions, and likely as great a cause of climate change.

Scenario two: Every day more and more people are living without access to clean water. As the ecological crisis deepens, so too does the human crisis. More children are killed by dirty water than by war, malaria, HIV/AIDS and traffic accidents combined. The global water crisis has become a most powerful symbol of the growing inequality in our world. While the wealthy enjoy boutique water at any time, millions of poor people have access only to contaminated water from local rivers and wells.

Scenario three: A powerful corporate water cartel has emerged to seize control of every aspect of water for its own profit. Corporations deliver drinking water and take away wastewater; corporations put massive amounts of water in plastic bottles and sell it to us at exorbitant prices; corporations are building sophisticated new technologies to recycle our dirty water and sell it back to us; corporations extract and move water by huge pipelines from watersheds and aquifers to sell to big cities and industries; corporations buy, store and trade water on the open market, like running shoes. Most importantly, corporations want governments to deregulate the water sector and allow the market to set water policy. Every day, they get closer to that goal. Scenario three deepens the crises now unfolding in scenarios one and two.



Imagine a world in twenty years in which no substantive progress has been made to provide basic water services in the Third World; or to create laws to protect source water and force industry and industrial agriculture to stop polluting water systems; or to curb the mass movement of water by pipeline, tanker and other diversions, which will have created huge new swaths of desert.

Desalination plants will ring the world's oceans, many of them run by nuclear power; corporate-controlled nanotechnology will clean up sewage water and sell it to private utilities, which will in turn sell it back to us at a huge profit; the rich will drink only bottled water found in the few remaining uncontaminated parts of the world, or sucked from the clouds by corporate-controlled machines, while the poor will die in increasing numbers from a lack of water.

This is not science fiction. This is where the world is headed unless we change course – a moral and ecological imperative.

But we first must come to terms with the dimension of the crisis.

(Excerpt from *Blue Covenant: The Global Water Crisis and the Coming Battle for the Right to Water*, New Press, 2008)

Author's Corner



Maude Victoria Barlow (born May 24, 1947) is a Canadian author and activist. She is the National Chairperson of The Council of Canadians, a citizens' advocacy organization with members and chapters across Canada. She is also the co-founder of the Blue Planet Project, which works internationally for the human right to water. Maude chairs the board of Washington-based Food & Water Watch, is a founding member of the San Francisco-based International Forum on Globalization, and a Councillor with the Hamburg-based World Future Council. In 2008/2009, she served as Senior Advisor on Water to the 63rd President of the United Nations General Assembly. She has authored and co-authored 16 books, among which are *Blue Gold: The Fight to Stop the Corporate Theft of the World's Water* (with Tony Clark) (2002), and the follow-up *Blue Covenant: The Global Water Crisis and the Coming Battle for the Right to Water* (2008). (source: www.amazon.com; adapted)

Now answer the following questions:

- ❶ Which of the three scenarios worries you the most? Why?
- ❷ Imagine a world in twenty years in which substantive progress has been made to solve these dystopian scenarios. What would your solutions be?

To find more on **Water Activism**, go to **Harvest H2O website** (www.harvesth2o.com/waterorgs.shtml) and find out which organizations are making a difference and how they are fighting these scenarios.

You'll also find valuable information on **Greenpeace International website** (What We Do > Pollution > Water).

BLUE GOLD

By Maude Barlow

The wars of the next century will be about water.
Ismail Serageldin, former Vice-President of the World Bank

We'd like to believe there's an infinite supply of water on the planet. But the assumption is tragically false. Available fresh water amounts to less than one-half of 1 percent of all the water on earth. The rest is sea water, or is frozen in the polar ice. Fresh water is renewable only by rainfall, at the rate of 40,000 to 50,000 cubic kilometers per year. Due to intensive urbanization, deforestation, water diversion and industrial farming, however, with the drying of the earth's surface, even this small finite source of fresh water is disappearing; if present trends persist, the water in all river basins on every continent could steadily be depleted.

Global consumption of water is doubling every 20 years, more than twice the rate of human population growth. According to the United Nations, more than one billion people on earth already lack access to fresh drinking water. If current trends persist, by 2025 the demand for fresh water is expected to rise to 56 percent above the amount that is currently available.

As the water crisis intensifies, governments around the world – under pressure from transnational corporations – are advocating a radical solution: the privatization, commodification and mass diversion of water. Proponents say that such a system is the only way to distribute water to the world's thirsty. However, experience shows that selling water on the open market does not address the needs of poor, thirsty people. On the contrary, privatized water is delivered to those who can pay for it, such as wealthy cities and individuals and water-intensive industries, like agriculture and high-tech. As one resident of the high desert in New Mexico observed after his community's water had been diverted for use by a high-tech industry: "Water flows uphill to money."

The push to commodify water comes at a time when the social, political and economic impacts of water scarcity are rapidly becoming a destabilizing force, with water-related conflicts springing up around the globe. For example, Malaysia, which supplies about half of Singapore's water, threatened to cut off that supply in 1997 after Singapore criticized its government policies. In Africa, relations between Botswana and Namibia have been severely strained by Namibian plans to construct a pipeline to divert water from the shared Okavango River to eastern Namibia.

The former Mayor of Mexico City predicts a war in the Mexican Valley in the foreseeable future if a solution to his city's water crisis is not found soon. Much has been written about the potential for water wars in the Middle East, where water resources are severely limited. The late King Hussein of Jordan once said the only thing he would go to war with Israel over was water, because Israel controls Jordan's water supply.

Meanwhile, the future of one of the earth's most vital resources is being determined by those who profit from its overuse and abuse. A handful of transnational corporations, backed by the World Bank, are aggressively taking over the management of public water services in developing countries, dramatically raising the price of water to the local residents and profiting

from the Third World's desperate search for solutions to the water crisis. The corporate agenda is clear: water should be treated like any other tradable good, with its use determined by market principles.

At the same time, governments are signing away their control over domestic water supplies by participating in trade agreements such as the North American Free Trade Agreement (NAFTA); its proposed successor, the Free Trade Area of the Americas (FTAA); and the World Trade Organization (WTO). These global trade institutions effectively give transnational corporations unprecedented access to the water of signatory countries.

Already, corporations have started to sue governments in order to gain access to domestic water sources. For example, Sun Belt, a California company, is suing the government of Canada under NAFTA because British Columbia (B.C.) banned water exports several years ago. The company claims that B.C.'s law violates several NAFTA-based investor rights and therefore is claiming \$10 billion in compensation for lost profits.

With the protection of these international trade agreements, companies are setting their sights on the mass transport of bulk water by diversion and by supertanker. Several companies are developing technology whereby large quantities of fresh water would be loaded into huge sealed bags and towed across the ocean for sale. Selling water to the highest bidder will only exacerbate the worst impacts of the world water crisis.

A number of key research and environmental organizations such as Worldwatch Institute, World Resources Institute and the United Nations Environment Program have been sounding the alarm for well over a decade: if water usage continues to increase at current rates, the results will be devastating for the earth and its inhabitants. Groups such as the International Rivers Network, Greenpeace, Clean Waters Network, Sierra Club and Friends of the Earth International, along with thousands of community groups around the world, are fighting the construction of new dams, reclaiming damaged rivers and wetlands, confronting industry over contamination of water systems, and protecting whales and other aquatic species from hunting and overfishing. In a number of countries, experts have come up with some exciting and creative solutions to these problems. This work is crucial, yet such efforts need to be coordinated and understood in the broader context of economic globalization and its role in promoting privatization and commodification.

Who owns water? Should anyone? Should it be privatized? What rights do transnational corporations have to buy water systems? Should it be traded as a commodity in the open market? What laws do we need to protect water? What is the role of government? How do those in water-rich countries share with those in water-poor countries? Who is the custodian for nature's lifeblood? How do ordinary citizens become involved in this process?

(excerpt from the conference *Blue Gold: The Global Water Crisis and the Commodification of the World's Water Supply*, 2001)



Activity

After reading the text "Blue Gold", get together in groups and try to find answers for the questions asked in the last paragraph of the excerpt. Then write the **10 commandments of water users**. You can start like this: *Thou shall not ...* or *Those who use water shall/should/must not*



Issues Brief no. 6: Oceans

The world's oceans – their temperature, chemistry, currents and life – drive global systems that make the Earth habitable for humankind. Our rainwater, drinking water, weather, climate, coastlines, much of our food, and even the oxygen in the air we breathe, are all ultimately provided and regulated by the sea. Throughout history, oceans and seas have been vital conduits for trade and transportation. Careful management of this essential global resource is a key feature of a sustainable future.

(source: <http://www.un.org/en/sustainablefuture/oceans.shtml>)

Key-words

Sustainable management; Coastal and marine ecosystems; Overfishing; Ocean acidification; Sustainable fisheries

Sample Materials

- ▶ Oceans
- ▶ Case Study: Fishermen become allies in protection efforts in the Caribbean

Other Resources

▶ Extensive reading:

The Drowned World (1962). Author: J. G. Ballard

Sea Change: A Message from the Ocean (1996). Author: Sylvia Earle



▶ Extensive Viewing:

2012 (2009). Director: Roland Emmerich. Starring: John Cusack, Amanda Peet, Thandie Newton, and Woody Harrelson.

Big Miracle (2012). Director: Ken Kwapis. Starring: Drew Barrymore and John Krasinski.

The Blue Planet (2005). BBC documentary series. Narrated by David Attenborough.



Useful Links

- ▶ National Geographic | www.nationalgeographic.com/
- ▶ Sylvia Earle's TED Prize wish to protect our oceans | www.ted.com



If some alien called me up... "Hello, this is Alpha, and we want to know what kind of life we have," – I'd say, water based... Earth organisms figure out to make do without almost anything else. The single nonnegotiable thing life requires is water.

Christopher Mckay

❶ Go to **Rio + 20 > Subjects and Themes > Oceans**. Think about solutions to a **Sustainable management and use of oceans and marine resources**.

❷ To really understand this topic make sure you understand relevant concepts such as:

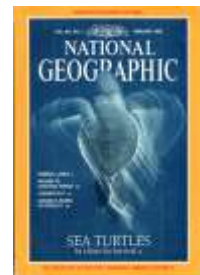
- a. Overfishing
- b. Rises in temperatures
- c. Marine pollution
- d. Ocean acidification
- e. Marine habitat destruction
- f. Rises in sea levels
- g. Invasive marine species
- h. Gulf oil crises

❸ **National Geographic** has this interesting site:

<http://ocean.nationalgeographic.com/ocean/protect/>. Here you will find texts, videos, photos, and a lot of information regarding the causes of the pollution of the oceans.

Before starting your search check how much you know about oceans making the **Ocean Issue Quiz** at:

<http://ocean.nationalgeographic.com/ocean/ocean-issues-quiz/>



❹ Although marine ecosystems are in danger, many proven solutions exist to restore the health of oceans. We suggest a visit to the **NRDC (Natural Resources Defense Council) website** and its page on **Global Ocean Protection** (www.nrdc.org/water/oceans/success.asp).

You'll also find information about **Ocean and coastal ecosystems, MPAs – Marine protected areas, Sustainable Fisheries**, etc. at <http://data.iucn.org/dbtw-wpd/edocs/2010-053.pdf>

These sites will provide with many study cases where you can find some **hope and inspiration**.

If you think it's very difficult to find solutions to global problems read the following text.
Here is an example of how communities can solve serious environmental problems.

Case Study

Fishermen become allies in protection efforts in the Caribbean

At the 62nd Annual Conference of the Gulf and Caribbean Fisheries Institute (GCFI) held in Venezuela in November, 2009, a Caribbean Fisher Forum cosponsored by UNEP, Camp AM, GCFI and others, was attended by 25 fishers, and more than 150 marine scientists, college students and professors, as well as staff of governmental and nongovernmental agencies. This forum is part of a larger initiative (www.gcfi.org/Initiatives/FisheriesForFishers/FisheriesForFishersEng.html) aimed at incorporating fishers into the regional conservation dialogue and dissemination of best management practices. This dialogue showed that the problems are similar and require quick solutions to generate radical changes in the ways coastal resources are used in the 21st century. Among the measures and changes suggested are:

1. Grant exclusive fishing rights to traditional local fishermen in certain "areas of responsible fishing." This would generate a climate conducive to self-monitoring and control of resources, and create community management schemes that combine sustainable fisheries and tourism.
2. Increase the number and size of no-take areas (sanctuaries and reserves) within multiple-use managed areas (for conservation, fisheries, tourism, etc.).
3. Train fishermen and coastal communities to better understand the ecological functioning and value of their marine ecosystems and the promotion of alternative (non-extractive) livelihoods.
4. Increase the added value of fishery products for boosting competitiveness in domestic and international markets, and increase income with fewer catches.

These recommendations show that fishermen and marine managers in the Caribbean understand the need of spatial planning, and the development of new policies are essential if the marine resources are to be there to be available for present and future generations.

Source : *Global Ocean Protection*, Chapter 4, page 44
(<http://data.iucn.org/dbtw-wpd/edocs/2010-053.pdf>)

Activity

Imagine you are a journalist. Write an article / an interview about this event.



Issues Brief no. 7: Disasters

Disasters caused by earthquakes, floods, droughts, hurricanes, tsunamis and more can have devastating impacts on people, environments and economies. But resilience – the ability of people and places to withstand these impacts and recover quickly – remains possible. Smart choices help us recover from disasters, while poor choices make us more vulnerable. These choices relate to how we grow our food, where and how we build our homes, how our financial system works, what we teach in schools and more. With a quickening pace of natural disasters taking a greater toll on lives and property, and a higher degree of concentration of human settlements, a smart future means planning ahead and staying alert.

(source: www.un.org/en/sustainablefuture/disasters.shtml)

Key-Words

Natural- / Human-made Disasters; Earthquakes; Floods; Droughts; Hurricanes; Tsunamis; Resilience; Protection; Prevention; Planning; Recovery; Climate Change; Nuclear

Sample Materials

- ▶ One Planet BBC - The Dry Lands of Texas
- ▶ Disasters

Other Resources

- ▶ Extensive reading:

The Ice People (1998). Author: Maggie Gee

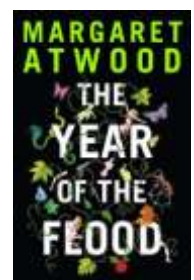
Oryx and Crake (2003). Author: Margaret Atwood

The Year of the Flood (2009). Author: Margaret Atwood

- ▶ Extensive Viewing:

I Am Legend (2007). Director: Francis Lawrence.
Starring: Will Smith.

Happening (2008). Director: M. Night Shyamalan.
Starring: Mark Wahlberg.



Useful Links

- ▶ Aftermath: Population Zero | www.youtube.com/watch?v=ZJmRzzldq6w



| One Planet The Dry Lands of Texas

(12:32 Monday, 23rd January)

(available at www.bbc.co.uk/iplayer/console/p00mwzc6)



① Watch the video and fill in the gaps:

BBC World Service, I'm Mike Williams. _____ to One Planet. This week, drought in the southern _____ of the USA. In Texas, it's the _____ on record.

"The lack of _____ and intense heat baked the fields and _____ reservoirs. America may be the world's richest nation but fighting _____ on this scale costs vast sums of money."

Also in America, the _____ candidate who does believe in global _____ withdraws from the presidential race. We'll talk about climate _____, conservation and conservatism.

② Answer the questions:

1. Is the cause of the drought in Texas clearly identified?
2. What percentage of Texas is affected in any degree?
3. How old is rancher Robert Survanka?
4. By what percentage did Survanka reduce his cattle?
5. What was the measure Texas Governor Rick Perry called for in April?
6. By the end of 2011 how many acres of Texas had burned down?
7. Is 2012 expected to bring relief?

③ Take notes and create an article based on the information you collected.

Disasters

Mongolian Children Against the Nuclear Waste Repository

7th September, 2011 – The issue regarding the future establishment of a nuclear power plant and nuclear waste repository in Mongolia is still at the center of public attention and Mongolian children have started expressing their protest against it in recent days.

A secondary school student has succeeded in his attempt to get Mongolian Prime Minister S. Batbold to sign a petition against storing nuclear waste in the country. The student, B. Bat-Orgil, started the petition in response to rumors that Mongolia is considering taking nuclear waste from other countries. He lives in Mandal Soum, Selenge Aimag, and he wanted the prime minister to sign the petition when he visited there this week.

Batbold signed the petition for the student and praised his patriotism. He also said young people should not be misled by the rumors. The prime minister said the Government has already released a statement officially denying the rumors. He also said Mongolian law prohibits the transportation and storage of nuclear waste in the country.

(source: <http://english.news.mn/>; adapted)

❶ Read the text and describe the campaign B. Bat-Orgil launched in Mongolia to prevent future nuclear disasters in his country.

Haiti's hard road to recovery

Two years _____ (pass) since the terrible earthquake in Haiti, killing more than 200,000 people. The reconstruction of the country _____ (come) under attack because of its slow response: in particular, the ongoing political crisis along with intrigues in Parliament so far _____ (prevent) the return to normality.

Over 500,000 homeless earthquake victims are still _____ (live) in tents and shacks. The survival and development prospects of 4.3 million children and adolescents are lagging behind.

Most Haitians do not have running water, a toilet or access to a doctor; cholera _____ (claim) thousands of lives and _____ (remain) a major threat to public health; and more than 70% of the workforce is under or unemployed.

Many millions of dollars of aid money were spent; schools, homes and hospitals have been rebuilt. But aid _____ (be) still struggling to reach the streets and the 3 million people affected by the earthquake.



Cartoon by Peter Brookes, from *The Times*

❷ Now read about a nature-made disaster and complete with the appropriate verb tenses. Check your answers at **Global Risk Forum GRF Davos** (www.grforum.org/).

Extra-curricular Activities

Elementary

- ❶ Creating a newspaper out of genuine, relevant news items collected by students
- ❷ Creating a structured presentation on Earth Summits to be held before other classes at school
- ❸ Creating a virtual zoo of endangered animals, including ID files based on students' research

	Name	
	Species	
	Relevant description	
	Natural Habitat	
	Endangered since...	
	Main threats	

- ❹ Translating (P<->E) relevant texts
- ❺ Writing emails to private and state institutions regarding Rio+20 7 main issues
- ❻ Selecting endangered areas, imagining visiting them and writing postcards home
- ❼ Exploring the website for Rio +20
- ❽ Participating in the contest "Rio+100, Earth Summit 2092"

Advanced

- ❶ Creating a newspaper out of genuine, relevant news items, collected by students, and their own argumentative pieces
- ❷ Creating a short video documentary of the history of Earth Summits
- ❸ Creating a school-wide Quiz Show based on information studied beforehand
- ❹ Translating (P<->E) relevant texts
- ❺ Creating an audio broadcast live from an Earth Summit
- ❻ Organizing debates on Rio+20 related issues
- ❼ Holding a mini-Earth Summit
- ❽ Exploring and interacting with the website for Rio+20
- ❾ Agreeing on guidelines and priorities for the United Nations budget
- ❿ Participating in the contest "Rio+100, Earth Summit 2092"

Step 3: Participate in the Contest

In this section you'll find [information](#) on how to participate in the contest “**Rio+100, Earth Summit 2092 | Rio+100, Cimeira Terra 2092**”, which will run from February to May 2012, as well as [sample materials](#) to introduce your students to the topics under discussion.

Rio+100, Earth Summit 2092

Regulations

This initiative is associated with the **United Nations Conference on Sustainable Development (Rio +20)**, which will run between **20th and 22nd of June 2012**, in Rio de Janeiro (<http://www.uncsd2012.org/rio20/>), with the aim of discussing new forms of sustainable development, and considers indispensable a utopian dimension in building a sustainable future. The ILC – Instituto de Literatura Comparada Margarida Losa and the CETAPS – Centre for English, Translation and Anglo-Portuguese Studies, both based at the Faculty of Letters of the University of Porto and funded by the Foundation for Science and Technology, with the support of the Rectory of the University of Porto, of QUERCUS and of the ECO-SCHOOLS network declare open the contest **"Rio+100, Earth Summit 2092 | Rio+100, Cimeira Terra 2092"**.

All young people between the ages of **twelve (12) and eighteen (18)**, of all nationalities, can participate in this contest, individually or in groups. The designated language of the contest is English.

To apply, interested parties should reflect on the problem of sustainable development and imagine **how the problems of sustainability in 2092 had been overcome** through an **original video posted on YouTube**. The video may not exceed **6 minutes and 42 seconds** as a tribute to Severn Suzuki who, in 1992, at the age of only twelve, spoke at the United Nations as a representative of an organization she had founded herself at the age of nine, The Environmental Children's Organization, giving a speech which was both highly critical and clear sighted (www.youtube.com/watch?v=TQmz6Rbpnu0). Although this video serves as a starting point, candidates may opt for other forms of intervention such as a documentary, a news broadcast, a piece of musical theater and a music video, among other possibilities. All videos must:

- a) be set in the year 2092;
- b) be associated with at least one of the following problem areas: Employment, Energy, Cities, Food, Water, Oceans and Disasters. They may, as an alternative or additional element, relate to the two thematic focal points of the United Nations Conference on Sustainable Development Rio +20, namely the "green economy" in the context of sustainable development and the eradication of poverty and the Institutional Framework for Sustainable Development.
- c) focus on the means used to overcome the problems listed in b);
- d) comply with the specified maximum time (6 minutes and 42 seconds);
- e) must be in English;
- f) be identified by the expression "Rio +100" before the title of the work;
- g) be posted on YouTube before 30th May 2012;
- h) be entered in the contest by sending an email to the address: rioplusahundred@gmail.com with the following information: title and link to the video; name (s) of author (s), contacts (address, phone and email) , any other information considered relevant.

Only the videos posted before the **30th of May 2012** may enter the contest. It is the



responsibility of their authors to ensure that the materials submitted will not infringe the rights of third parties.

The organizers reserve the right not to be considered for the contest any material that includes content that is xenophobic, pornographic or with explicit commercial objectives. Materials that may incite violence of any kind will also be excluded.

Starting on **June 1, 2012** the videos will be subject to **electronic voting** by Internet users on YouTube Channel created for this purpose (Rioplus100). The electronic voting officially closes on **June 15th, 2012**. The organizers of the Contest will have the opportunity to select and retrieve two videos from among the least voted. The three most voted videos by Internet users, along with two videos retrieved, will then be evaluated by an international jury, whose composition will be announced in due course, and the winner will be announced on June 19th, 2012, the result being published on the YouTube channel created for this purpose.

The award winning video will be publicly presented on **July 13th 2012**, within the activities of The Junior University (<http://universidadejunior.up.pt/>), **Rio +40 Conference on Youth**, an initiative of the ILC and CETAPS in partnership with QUERCUS.

If the jury finds that the videos sent to the contest do not have merit, it may choose not to award any prize. The jury may award 'honorable mentions' to videos with merit over and above the award-winning video. Applicants may not appeal the jury's decision.

Participation in the contest implies acceptance of these terms.

Useful Links

Earth Summit 2012

www.earthsummit2012.org/

Rio+20: United Nations Conference on Sustainable Development

www.uncsd2012.org/rio20/

Severn Suzuki's speech

www.youtube.com/watch?v=TQmz6Rbpnu0



Severn Cullis-Suzuki

- ❶ Listen to the speech made by Severn Cullis-Suzuki at Earth Summit 1992 (you can find it at www.youtube.com/watch?v=TQmz6Rbpnu0).
- ❷ List the environmental problems referred by Seven Suzuki ("the girl who silenced the world for 6 minutes"). Have they been solved?
- ❸ To help in your research work, complete the following KWLH chart:

What I already know

- ▶ *Global warming: exhaust fumes.....*
- ▶ *Deforestation: ...*
- ▶ *Water pollution*
- ▶ *Animal extinction*
- ▶ *Poverty*
- ▶ *(...)*

What I want to know

- ▶ What is happening to the planet?...
- ▶ What kind of problems can global warming cause?...
- ▶ How are issues such as eradication of poverty and basic education for all connected to the protection of the environment?
- ▶ (...)

What I learned

- ▶ (...)

Did I learn what I wanted to learn?

How I can learn more

- ▶ The millennium goals for a sustainable development
- ▶ Environment and poverty, Environment and education
- ▶ Inclusion (women, disabled people, young..)
- ▶ Green jobs
- ▶ (...)

What can I suggest to solve these problems?

You may choose just one topic. Try to find out solutions for the selected problem.

Don't forget you should **Think globally to act locally** *and* **Survival is not negotiable**



Transcript of the 1992 speech by Severn Suzuki:

Hello, I'm Severn Suzuki speaking for E.C.O. – The Environmental Children's Organization.

We are a group of twelve and thirteen-year-olds from Canada trying to make a difference: Vanessa Suttie, Morgan Geisler, Michelle Quigg and me. We raised all the money ourselves to come six thousand miles to tell you adults you must change your ways. Coming here today, I have no hidden agenda. I am fighting for my future.

Losing my future is not like losing an election or a few points on the stock market. I am here to speak for all generations to come.

I am here to speak on behalf of the starving children around the world whose cries go unheard.

I am here to speak for the countless animals dying across this planet because they have nowhere left to go. We cannot afford to be not heard.

I am afraid to go out in the sun now because of the holes in the ozone. I am afraid to breathe the air because I don't know what chemicals are in it.

I used to go fishing in Vancouver with my dad until just a few years ago we found the fish full of cancers. And now we hear about animals and plants going extinct every day—vanishing forever.

In my life, I have dreamt of seeing the great herds of wild animals, jungles and rainforests full of birds and butterflies, but now I wonder if they will even exist for my children to see.

Did you have to worry about these little things when you were my age?

All this is happening before our eyes and yet we act as if we have all the time we want and all the solutions. I'm only a child and I don't have all the solutions, but I want you to realise, neither do you!

- You don't know how to fix the holes in our ozone layer.
- You don't know how to bring salmon back up a dead stream.
- You don't know how to bring back an animal now extinct.
- And you can't bring back forests that once grew where there is now desert.

If you don't know how to fix it, please stop breaking it!

Here, you may be delegates of your governments, business people, organisers, reporters or politicians— but really you are mothers and fathers, brothers and sisters, aunts and uncles—and all of you are somebody's child.

I'm only a child yet I know we are all part of a family, five billion strong, in fact, 30 million species strong and we all share the same air, water and soil—borders and governments will never change that.



I'm only a child yet I know we are all in this together and should act as one single world towards one single goal.

In my anger, I am not blind, and in my fear, I am not afraid to tell the world how I feel.

In my country, we make so much waste, we buy and throw away, buy and throw away, and yet northern countries will not share with the needy. Even when we have more than enough, we are afraid to lose some of our wealth, afraid to share.

In Canada, we live the privileged life, with plenty of food, water and shelter—we have watches, bicycles, computers and television sets.

Two days ago here in Brazil, we were shocked when we spent some time with some children living on the streets. And this is what one child told us: "I wish I was rich and if I were, I would give all the street children food, clothes, medicine, shelter and love and affection."

If a child on the street who has nothing, is willing to share, why are we who have everything still so greedy?

I can't stop thinking that these children are my age, that it makes a tremendous difference where you are born, that I could be one of those children living in the Favellas of Rio; I could be a child starving in Somalia; a victim of war in the Middle East or a beggar in India.

I'm only a child yet I know if all the money spent on war was spent on ending poverty and finding environmental answers, what a wonderful place this earth would be!

At school, even in kindergarten, you teach us to behave in the world. You teach us:

- not to fight with others,
- to work things out,
- to respect others,
- to clean up our mess,
- not to hurt other creatures
- to share—not be greedy.

Then why do you go out and do the things you tell us not to do?

Do not forget why you're attending these conferences, who you're doing this for—we are your own children. You are deciding what kind of world we will grow up in. Parents should be able to comfort their children by saying "everything's going to be alright", "we're doing the best we can" and "it's not the end of the world".

But I don't think you can say that to us anymore. Are we even on your list of priorities? My father always says "You are what you do, not what you say."

Well, what you do makes me cry at night. You grownups say you love us. I challenge you, please make your actions reflect your words. Thank you for listening.



Key-words



Permaculture (inspiration for sustainable living)
 Fair trade / ethical working conditions
 Sustainable development
 Green jobs
 Productive employment
 Renewables
 Global equity
 Environmental protection
 Ecologically-sustained development
 Sustainable living
 Carbon footprint
 Pollution
 Urban planning
 Congestion
 Social Inclusion
 Food Supplies
 Distribution
 Sustainability
 Resources
 Factory Farming
 Genetically-Modified Food
 Food Miles
 Water supply
 Fresh water
 Water scarcity
 Shortage of water
 Dehydration
 Water privatization
 Water activism
 Sustainable management
 Coastal and marine ecosystems
 Overfishing
 Ocean acidification
 Sustainable fisheries
 Natural- / Human-made Disasters
 Earthquakes
 Floods
 Droughts
 Hurricanes
 Tsunamis
 Resilience
 Nuclear

Blanket Made of Blue

Lyrics: "Blanket Made of Blue", by Ana Luísa Amaral

Music: Mariana Mello & Francisco Rua

Small, light blue
and touchingly alone,
not these my words,
but his,
a man speaking from space
a few decades ago

Some fifty years ago,
the moon was there
so touchingly away,
awaiting, so it seemed,
for human touch
disturbing stone and dust

'Tis we, ourselves in space,
a part of stellar dust
and blue debris,
and touchingly alone

And yet,
the moon has no desire of its own

*Keep the blue
keep the blue,
small and touchingly blue*

Our home this is:
a blanket made of blue,
not outer space
but inner space,
where green and brown
and all the coral colours of the sea
merge with the human face

No creed, no colour, and no outer form,
only the human face
and every other form
born from the blue.



Our home this is,
no other home but this.
Small and light blue

And yet,
the stellar dust: a common destiny

*Keep the blue
keep the blue,
small and touchingly blue*

Listen to the promotional song of *Rio+20 Global Youth Music Contest (Portugal)*, “Blanket Made of Blue”, and start working on your message for **Rio+100, Earth Summit 2092**.



© 2012 PAN-utopia 2100 – An Interactive Utopia

General Coordination

Fátima Vieira (Univ. Porto)

Editorial Staff

Marinela Freitas (Univ. Porto)

Sofia de Melo Araújo (Univ. Porto)

Olga Almeida (Escola Secundária de Valongo/Univ. Porto)

Maria do Rosário Barros Rebelo (Colégio de S. Gonçalo, Amarante/Univ. Porto)

Collaboration

Ana Catarina Vaz (Univ.Porto)

Linguistic revision

Nicolas Hurst (Univ. Porto)

Text design

Marinela Freitas

PAN-utopia Website & logo design

OXYS

Project hosted by



Funded by



In partnership with



Utopian Studies Society