

## FIRST PART

Struggle for wealth, power and civilization. Everything has to be shared and there is way: Keeping trade without domination.

### Water

*Food first, then morality.*

Bertolt Brecht. *Three-penny opera*

According to my interest in social domination in the capitalism system I find it important to analyse and research this subject that is one of the important conditions of life - water. This is the life component that is vitally important for existence. Without it there will not be any civilizations.



I focus on water in order to be more precise and concrete in analysing how capitalism works. I want to ask the questions: What does it mean to be at the bottom of the pyramid of class society? What does it mean to be used for other's benefit? As an artist I find myself part of this problem and I will ask myself the problematic question: *What is art good for?*

Group: *Chto Delat (What has to be done)* David Riff,  
*When art once again becomes useful*

As water is a most important value for life, I think that everybody can agree, that everyone must and should have access to it. It is a common to be shared and cannot justly be denied or withheld from those who need it (all of us). My research will show how this life component became profitable for the corporations and through my findings I will draw the map of these problems.

I am researching how the benefits of natural resources, which are sharable and could be held in common, are enclosed by corporate power and denied to people or else sold to them at a profit to others. I will focus on water management. With this research I found out that the dominant powers are claiming these resources as their own, that water, this so important life component is not shared at all, and that the future will be extremely dusty for the nations in the bottom of this system. Through research on water I will analyze the limit between powerful and powerless structures of our political, economical and social life. Important factors are the division between “loser“ and “winner“ countries, between poor and rich, what it means to be powerful or weak, and what it means to be treated as a tool or mere means for another’s benefit.

**Key questions:** Who owns water? Should any one have to own it? What rights have corporations to buy water systems? Should it be treated as a commodity in the free open market? Should corporations have the right to use water needed by others, especially water needed by thirsty countries, suffering from water scarcity?

For many years water deemed a common good rather than a private property. But then question was posed by market: food has economical value why should water be an exception? Here came the new laws of water management.

**The Dublin Statement on Water and Sustainable Development Adopted January 31, 1992 in Dublin, Ireland International Conference on Water and the Environment states:**

*Scarcity and misuse of fresh water pose a serious and growing threat to sustainable development and protection of the environment. Human health and welfare, food security, industrial development and the ecosystems on which they depend, are all at risk, unless water and land resources are managed more effectively in the present decade and beyond than they have been in the past.*

And there are some principles to defend Dublin statement about water issues:

*Fresh water is a finite and vulnerable resource, essential to sustain life, development and the environment*

*Water development and management should be based on a participatory approach, involving users, planners and policy-makers at all levels*

*Women play a central part in the provision, management and safeguarding of water*

*Water has an economic value in all its competing uses and should be recognized as an economic good*

*Within this principle, it is vital to recognize first the basic right of all human beings to have access to clean water and sanitation at an affordable price. Past failure to recognize the economic value of water has led to wasteful and environmentally damaging uses of the resource. Managing water as an economic good is an important way of achieving efficient and equitable use, and of encouraging conservation and protection of water resources.*

*Current patterns of water use involve excessive waste. There is great scope for water savings in agriculture, in industry and in domestic water supplies.*

*Irrigated agriculture accounts for about 80% of water withdrawals the entire world. In many irrigation schemes, up to 60% of this water is lost on its way from the source to the plant. More efficient irrigation practices will lead to substantial freshwater savings.*

*Recycling could reduce the consumption of many industrial consumers by 50% or more, with the additional benefit of reduced pollution. Application of the **polluter pays** principle and realistic water pricing will encourage conservation and reuse. On average, 36% of the water produced by urban water utilities in developing countries is **unaccounted for**. Better management could reduce these costly losses. Combined savings in agriculture, industry and domestic water supplies could significantly defer investment in costly new water-resource development and have enormous impact on the sustainability of future supplies. More savings will come from multiple use of water. Compliance with effective discharge standards, based on new water protection objectives, will enable successive downstream consumers to reuse water which presently is too contaminated after the first use.*

*Achieving food security is a high priority in many countries, and agriculture must not only provide food for rising populations, but also save water for other uses. The challenge is to develop and apply water-saving technology and management methods, and, through capacity building, enable communities to introduce institutions and incentives for the rural population to adopt new approaches, for both rains fed and irrigated agriculture. The rural population must also have better access to a potable water supply and to sanitation services. It is an immense task, but not an impossible one, provided appropriate policies and programmes are adopted at all levels - local, national and international.*

*The International Conference on Water and the Environment began with a Water Ceremony in which children from all parts of the world made a moving plea to the assembled experts to play their part in preserving precious water resources for future generations. In transmitting this Dublin Statement to a world audience, the Conference participants urge all those involved in the development and management of our water resources to allow the message of those children to direct their future actions.*

Dublin Statement, 1992, UN Documents: Gathering a Body of Global Agreements  
online at: <http://www.un-documents.net/h2o-dub.htm>

Instead of changing laws for the good, new laws led to more problems. What if water is not accessible for every one and if it is not used properly? What if it is not affordable for many people in many places? What if distribution of this component is organized in a mistaken or harmful way? What if water is pumped from the ground stock 15 times faster than it is being replacing in a way that making places deserts? What If, searching for money, corporations are destroying rainforests, that are crucial to the global circulation of water and exactly in the places were it is easier to have power and in many cases where there is lack of water? What if many of children are dying because of inadequate or polluted? What if some huge corporations control most of the water supply and show no care or concern for people too poor to be their customers? What if in some places (in the bottom of pyramid) Coca-Cola is cheaper than water? And what if it's true? Experience shows that selling water does not address the needs of poor, real thirsty people. But on the contrary, once it became privatized, it is only affordable to wealthy cities and individuals, and water-intensive industries, like agriculture and high-tech production. In this case we could declare that there is something basically very wrong about the Dublin Statement and that we have urgently to change the rules.

In the book *Water Wars*, the Indian author Vandana Shiva lists nine principles underpinning water democracy. At least two of these principles are directly compromised by the privatization of water. Point number four states *Water must be free for sustenance needs. Since nature gives water to us free of cost, buying and selling it for profit violates our inherent right to nature's gift and denies the poor of their human rights.*

When private companies try to make large profits through high water prices, it denies the poor the inalienable right to the most necessary substance for life. In accordance with this fact, point number seven states, *Water is a commons . . . It cannot be owned as private property and sold as a commodity.* How can one justify claiming water as his or her own through contractual agreement while letting another human being go thirsty? Water is a commons because it is the basis of all life. Water rights are natural rights and thus are common rights, meaning that water can be used, but not owned. As far-fetched as water ownership may seem, it is happening at an increasing rate around the globe.

This privatization of services is only the first step toward the privatization of all aspects of water. Through this new globalization and privatization of water resources, there is an effort to replace collective ownership of water sources with corporate control. This effort is being met with increasing opposition. Supporters of privatization say that it has a great track record of success, increasing the efficiency, quality, reliability and affordability of services to the population.

*The future of one of the earth's most vital resources is being determined by those who profit from it's overuse and abuse ... Government's are signing away their control over domestic water supplies by participating in trade agreements such as the North American Free Trade Agreement (NAFTA); it's proposed successor, the Free Trade Area of the Americas (FTAA); and the World Trade Organization (WTO)*

Maude Barlow, Tony Clarke, *Blue Gold*

Vandana Shiva, in her book *Water Wars* writes: *Destruction of water resources and of forest catchments and aquifers is a form of terrorism. Denying poor people access to water by privatizing water distribution or polluting wells and rivers is also terrorism. In the ecological context of water wars, terrorists are not just those hiding in the caves of Afghanistan. Some are hiding in corporate boardrooms and behind the free trade rules of the WTO, North American Free Trade Agreement (AFTA), and Free Trade Area of the Americas (FTAA). They are hiding behind the privatization conditionality's of the IMF and World Bank. By refusing to sign the Kyoto protocol, President Bush is committing an act of ecological terrorism on numerous communities who may very well be wiped off the earth by global warming. (The Kyoto Protocol is an amendment to the United Nations Framework Convention on Climate Change (UNFCCC), an international treaty intended to bring countries together to reduce global warming and to cope with the effects of temperature increases that are unavoidable after 150 years of industrialization. The provisions of the Kyoto Protocol are legally binding on the ratifying nations, and stronger than those of the UNFCCC.) In Seattle, the WTO was dubbed the "World Terrorist Organization" by protestors because its rules are denying millions the right to a sustainable livelihood.*

*Greed and appropriation of other people's share of the planet's precious resources are at the root of conflicts, and the root of terrorism. When President Bush and Prime Minister Tony Blair announced that the goal of the global war on terrorism is the defence of the American and European "way of life," they are declaring a war against the planet its oil, its water, its biodiversity. A way of life for the 20 percent of the earth's people - who use 80 percent of the planet's resources will dispossess 80 percent of its people of their just share of resources and eventually destroy the planet. We cannot survive as a species if greed is privileged and protected and the economics of the greedy set the rules for how we live and die.*

*The ecology of terror shows us the path to peace. Peace lies in nourishing ecological and economic democracy and nurturing diversity. Democracy is not merely an electoral ritual but the power of people to shape their destiny, determine how their natural resources are owned and utilized, how their thirst is quenched, how their food is produced and distributed, and what health and education systems they have.*

*Market assumptions are blind to the ecological limits set by the water cycle and the economic limits set by poverty. Over-exploitation of water and disruption of the water cycle create absolute scarcity that markets cannot substitute with other commodities. The assumption of substitution is in fact central to logic of commoditization.*

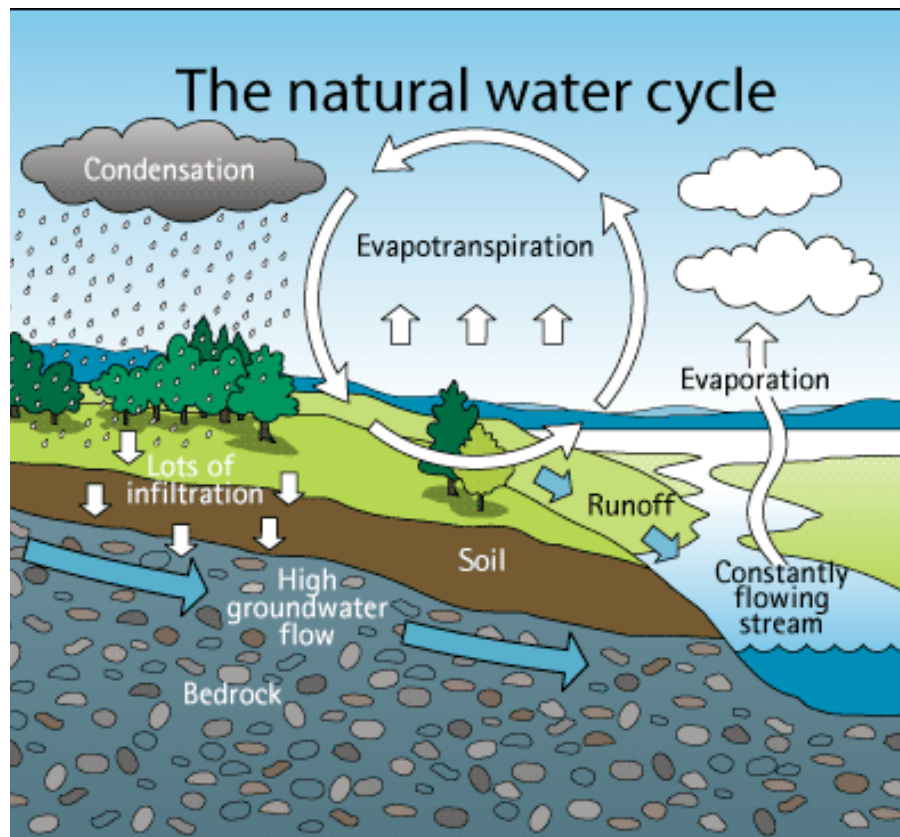
*When water disappears, there is no alternative. For Third World women, water scarcity means travelling longer distances in search of water. For peasants, it means starvation and destitution as drought wipes out their crops. For children, it means dehydration and death. There is simply no substitute for this precious liquid, necessary for the biological survival of animals and plants.*

*Water can be used but not owned. People have a right to life and the resources that sustain it, such as water. The necessity of water to life is why, under customary laws, the right to water has been accepted as a natural, social fact.*

*... Water is a commons because it is the ecological basis of all life and because its sustainability and equitable allocation depend on cooperation among community members. Although water has been managed as a commons throughout human history and across diverse cultures, and although most communities manage water resources as common property or have access to water as a commonly shared public good even today, privatization of water resources is gaining momentum.*

Vandana Shiva. *Water war*

Water is limited and exhaustible if not used sustainably. No sustainable use includes extracting more water from ecosystems than nature can recharge (ecologically not sustainable) or consuming more than one's legitimate share.



*Neither international nor national water laws adequately respond to the ecological and political challenges posed by water conflicts. No legal document in contemporary law mentions the most basic law related to water-the natural law of the water cycle saying Vandana Shiva. Claims are derived from and protection is limited to artificial concrete structures. This limitation has propelled regions and states to enter a contest for the most extravagant water projects as a means of establishing their rights to water-the more you extract and divert water through giant projects, the more you can claim rights. Water conflicts continue to escalate and, to date, no appropriate legal framework exists to resolve these conflicts.*

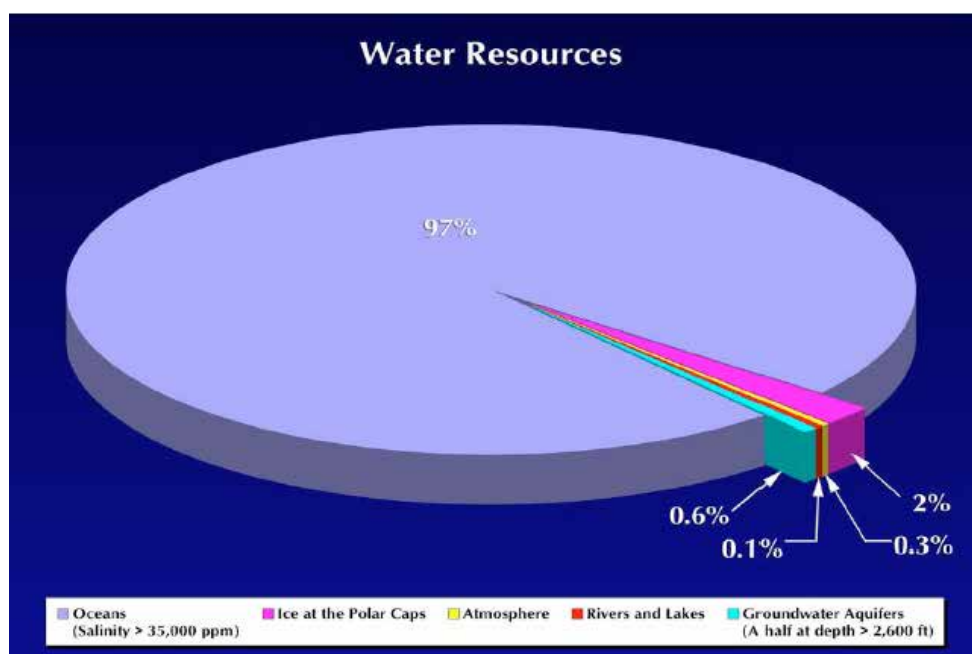
Some believe that fresh water will be a critical limiting resource for many regions in the very close future. About one-third of the world's population lives in countries that are experiencing water stress. Access to clean water finally for basic needs is a fundamental right of humanity. We have to ensure that water does not decrease because of our activities.

## The water resources of earth

Over 70% of our Earth's surface is covered by water. Although water seems to be abundant, the real issue is the amount of fresh water available.

97% of all water on Earth is salt water, leaving only 2% as fresh water

Nearly 70% of that fresh water is frozen in the icecaps of Antarctica and Greenland; most of the remainder is present as soil moisture, or lies in deep underground aquifers as groundwater not accessible for human use.



1% of the world's fresh water (~0.007% of all water on earth) is accessible for direct human uses. This is the water found in lakes, rivers, reservoirs and those underground sources that are shallow enough to be tapped at an affordable cost. Only this amount is regularly renewed by rain and snowfall, and is therefore available on a sustainable basis.

The world's thirst for water is likely to become one of the most pressing resource issues of the 21st century... in some cases, water withdrawals are so high, relative to supply, that surface water supplies are literally shrinking and groundwater reserves are being depleted faster than they can be replenished by precipitation

World Resources.

Publication of the United Nations Environmental Program.

The World Bank and World Resources Institute



## Water problems

*Some 1.1 billion people in developing countries have inadequate access to water, and 2.6 billion lack basic sanitation.*

*Almost two in three people lacking access to clean water survive on less than \$2 a day, with one in three living on less than \$1 a day.*

*More than 660 million people without sanitation live on less than \$2 a day, and more than 385 million on less than \$1 a day.*

*Access to piped water into the household averages about 85% for the wealthiest 20% of the population, compared with 25% for the poorest 20%.*

*1.8 billion people, who have access to a water source within 1 kilometre, but not in their house or yard, consume around 20 liters per day. In the United Kingdom the average person uses more than 50 liters of water a day flushing toilets (where average daily water usage is about 150 liters a day. The highest average water use in the world is in the US, at 600 liters day.)*

*Some 1.8 millions child deaths each year as are result of diarrhoea*

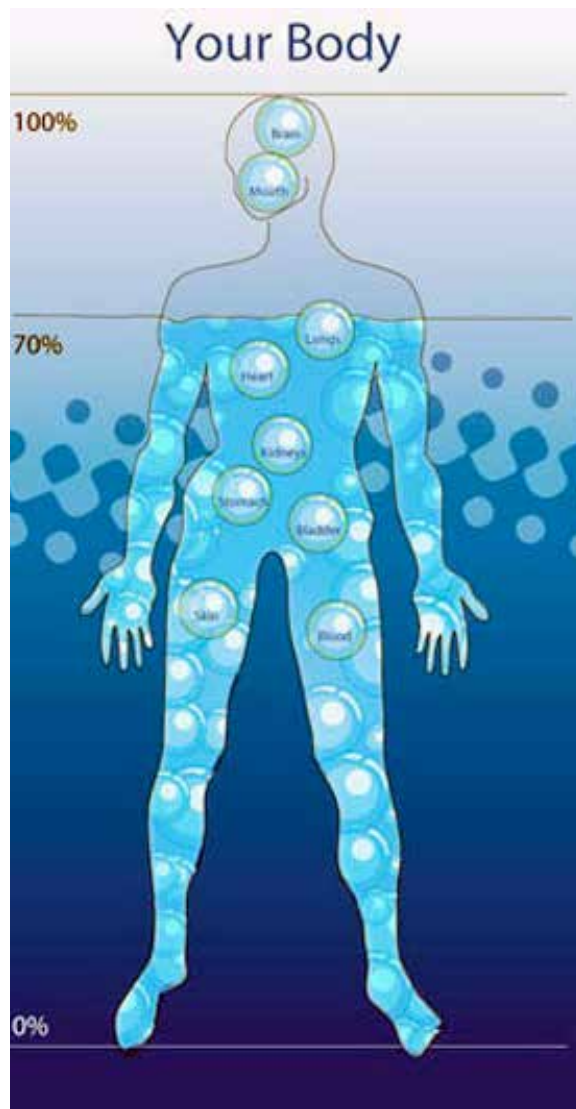
*The loss of 443 million school days each year from water-related illness.*

*Close to half of all people in developing countries suffering at any given time from a health problem caused by water and sanitation deficits.*

*Millions of women spending several hours a day collecting water.*

*To these human costs can be added the massive economic waste associated with the water and sanitation deficit... The costs associated with health spending, productivity losses and labour diversions ... are greatest in some of the poorest countries. Sub-Saharan Africa loses about 5% of GDP, or some \$28.4 billion annually, a figure that exceeds total aid flows and debt relief to the region in*

## The major multinational water companies investing in water resources



*Around the world, more than 215 major rivers and 300 groundwater basins and aquifers are shared by two or more countries, creating tensions over ownership and use of the precious waters they contain. Growing shortages and unequal distribution of water are causing disagreements, sometimes violent, and becoming a security risk in many regions.... Poor countries are being forced to the entire world to handover basic control of their water systems to profit multinational companies.*

Maude Barlow, Tony Clarke, *Blue Gold*

The two largest water corporations in the world are part of French transnational Suez and German energy conglomerate RWE.

Ranked 79th and 78th among Fortune's Global 100 List, these two water giants capture nearly 40 percent of the existing water market share. The French company, Vivendi, previously ranked 51st has dropped off the list, but remains a strong contender. These multinationals are now gaining a foothold in the United States, where they operate through a number of subsidiaries.

*Suez operates in 130 countries and Vivendi in over 100; their combined annual revenues are over \$70 billion (including \$19 billion in water and wastewater services). RWE revenues are currently over \$50 billion (energy included), having acquired British water giant Thames Water. After purchasing American Water Works, RWE gained control of the largest U.S. private water utility. This expanded its customer base from 43 million to 56 million people. Other major water corporations include Bechtel, Biwater plc, Bouygues/Saur, U.S. Water, Severn Trent, Anglian Water, and the Kelda Group.*

David Hall , The Water multinationals, 1999

Most of the American lakes and fresh water resources are also privatized, owned by the giant corporations, says Maude Barlow in her book: *Blue Gold*

*New York, New York: Suez*

*Chicago, Illinois: Veolia*

*Pittsburgh, Pennsylvania: RWE/Thames*

*Las Vegas, Nevada: Suez*

*New Orleans, Louisiana: Veolia*

*Seattle, Washington: RWE/Thames*

*Riverside, California: Suez*

*Grand Canyon, Arizona: Veolia*

*Buffalo, New York: RWE/Thames*

*Houston, Texas: Suez*

*Tampa, Florida: Veolia*

*Atlanta, Georgia: Suez*

*Mecosta, Michigan: Nestle...*

*Buenos Aires, Argentina: Suez*

*Puerto Rico: Veolia*

*Jakarta, Indonesia: RWE/Thames*

*Santiago, Chile: Veolia*

*Mexico City, Mexico: Coca-Cola*

*Kenya, Africa: Coca Cola...*

Maude Barlow, Tony Clarke, *Blue Gold*

In some places such as Mexico, Kenya and India, Coca-Cola is cheaper than the water.



Nobel prize winning African activist, Dr. Wangari Muta Maathai, explains that in Kenya, 500ml of Coca-Cola costs 26 Kenyan Shilling (KSH); the same amount of water costs 45 KSH. Dasani company explain that Coca-Cola is in the glass bottles and needs less money to produce while water is in plastic and needs more care. Still, 1 liter of Coca-Cola in plastic costs 40 KSH, but the same amount of water bottled in plastic costs 70 KSH. SO she is arguing that Coca-Cola is taking control over the water pumping to make more profit out of peoples health.

Sam Bozzo, *The making of World Water Wars*

Human appropriation of the world's fresh water supply reports: 12,000 yrs. ago: hunter-gatherers continually return to fertile river valleys. 7,000 yrs. ago: water shortages spur humans to invent irrigation. 1,100 yrs ago: collapse of Mayan civilization due to drought. Mid 1800's: faecal contamination of surface water causes severe health problems (typhoid, cholera) in some major North American cities, notably Chicago. 1858: **Year of the Great Stink** in London, due to sewage and wastes in Thames. Late 1800s-early 1900: Dams became popular as a water management tool. 1900s: The green revolution strengthens human dependency on irrigation for agriculture

World War II: water quality impacted by industrial and agricultural chemicals. 1972: Clean Water Act passed; humans recognize need to protect water

*Human Appropriation of the World's Fresh Water Supply,*

Source: [http://www.globalchange.umich.edu/globalchange2/current/lectures/freshwater\\_supply/freshwater.htm](http://www.globalchange.umich.edu/globalchange2/current/lectures/freshwater_supply/freshwater.htm)

A great deal of water use is non-consumptive, which means that the water is returned to surface runoff. Usually that water is contaminated however, whether used for agriculture, domestic consumption, or industry. The WHO estimates that more than 5 million people die each year from diseases caused by unsafe drinking water, and lack of sanitation and water for hygiene.

*Between 1990 and 1025 the number of people living in countries without adequate water is projected to rise from 131 million to 817 million. India is supposed to fall into the water stress category long before 2025*

Vandana Shiva, *Water wars*

*There will die lot of children before age 5 and most of the reasons will come from lack of clean drinking water. People who can't pay water they are doom to death.*

Jim Schuletz , speaking in *Blue Gold* (Founder, democracy centre, Bolivia)

*A mere 12 percent of the world's population uses 85 percent of its water, and these 12 percent do not live in the Third World*

Maude Barlow, *Water as Commodity - The Wrong Prescription, The Institute for Food and Development Policy, Backgrounder.*

## **Distribution of the common goods**

*We are interrupting the natural cycle. And another thing we are doing is something called virtual water trade. That is where you send water out of the watershed in the form of products or agriculture. You've used the water to produce something and then you export it, and about 20 percent of water used in the world is exported out of watershed in this way, because so much of our economy is about export.*

Maude Barlow, Tony Clarke, *Blue Gold*

In common economy, goods consumed in a country are mostly produced in another one. In the case of water, when the water demand of a population is much higher than the national water withdrawals, there are two options. Either the country can afford to buy water from others or else people will suffer from this lack. In fact, powerful occidental corporations from the global North can control the local water in Southern countries for two reasons. First, they can of course buy it for a cheap price, a price, which nevertheless is too high for local people. Second one is that they will not have the same problem that they would have in their own country with contaminating the local water for they usually escape the costs of public regulation. In this case the problem is not to share goods but to share it in a proper way.

Nestle's Kit Kat chocolate bars are best remembered by the advertising refrain, *Have a break, have a Kit Kat*. But now an environmental group wants Nestle to take a break from supporting rainforest-killing companies. Vancouver, B.C. - Greenpeace Canada says Nestle's Kit Kat bars should give rainforests a break.

Deforestation , Indonesia



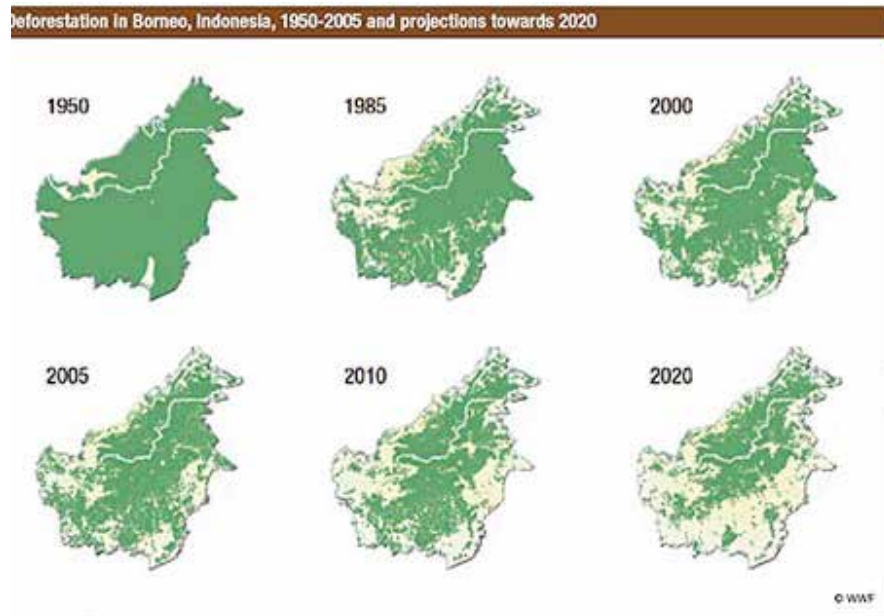
*At issue is one ingredient used in the chocolate bar -- palm oil. The international Greenpeace campaign calls attention to palm oil and the destruction of rainforests in Indonesia, which threatens the endangered Orang-utan*

*Digital Journal, March 23, 2010*

*Trees in these rainforests play a vital role in regulating our ecosystem. However, when they are removed, there are a multitude of largely irreversible*

*consequences. When the trees are no longer present, they can't absorb the rain water through their roots and evaporate it back into the atmosphere, resulting in a much drier climate, leading most notably to drought. Additionally, when trees are no longer present to anchor the soil, this causes erosion flooding and landslides*

The Devastating Impact of Rainforest Deforestation, Source: *WebEcoist*.



*Under the current model of globalization, everything is for sale. Areas once considered our common heritage are being commercialized and privatized at an alarming rate. Today, more than ever before, the targets of this assault comprise the building blocs of life as we know it on this planet, including freshwater, the human genome, seeds and plant varieties, the air and atmosphere, the oceans and outer space. The assault on, and defence of, the commons is one of the great ideological and social struggles of our times.*

Maude Barlow, Tony Clarke, *Blue Gold*

One practice that is ultimately unsustainable is the withdrawal of water in problematic places. Groundwater is being pumped out far faster than it is naturally recharged and levels are falling fast. Some groundwater levels have now fallen hundreds of meters below (Griffiths 2009). These levels of pumping cannot be sustained. There will be no sustainable development in the future if there is no groundwater supply.

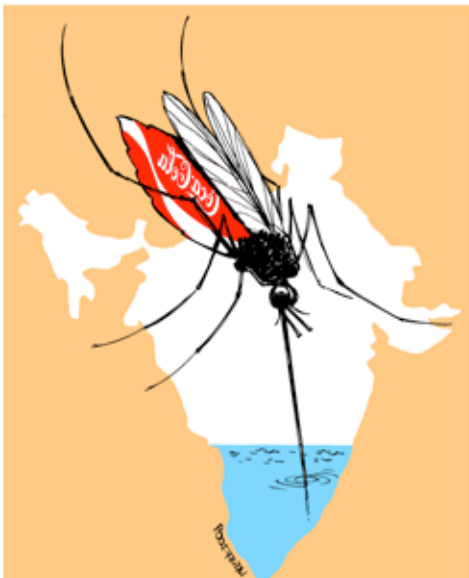
*To make up for all the water we've wasted and polluted, we pump too much groundwater out, creating giant sinkholes! And of course, if we're pumping out more than nature puts in, we're going to run out of groundwater sooner or later.*

Maude Barlow, Tony Clarke, *Blue Gold*, (*Soft Drinks, Hard Cases*)

The farmers declare that they were using one source of water for farming, but since Coca-Cola moved in and started pumping water from the natural reservoir to make soft drinks, the soil became dryer and drier each year. In 1990 the ground water was 30 ft below ground. In 2009 it became 90 ft below ground.

*The Indian government forced Coca-Cola out of the country in 1977. The company's return, in October 1993, coincided with the arrival of its archrival Pepsi. The United States multinationals now own 90 factories in India: Coca-Cola 52 and Pepsi 38. They describe these as bottling plants; actually they are pumping stations, each of which extracts up to 1.5m liters of water a day from the ground. It takes nine liters of clean water to manufacture a liter of Coke.*

Maude Barlow, Tony Clarke, *Blue Gold, (Soft Drinks, Hard Cases)*



Communities across India are under assault from Coca-Cola's practices in the country. A pattern has emerged as a result of Coca-Cola's bottling operations in India.

Vandana Shiva declare:

*Communities across India living around Coca-Cola's bottling plants are experiencing severe water shortages, directly as a result of Coca-Cola's massive extraction of water from the common groundwater resource. The wells have run dry and the hand water pumps do not work any more.*

*Studies, including one by the Central Ground Water Board in India, have confirmed the significant depletion of the water table. When the water is extracted from the common groundwater resource by digging deeper, the water smells and tastes strange.*



*Coca-Cola has been indiscriminately discharging its wastewater into the fields around its plant and sometimes into rivers, including the Ganges, in the area. The result has been that the groundwater has been polluted as well as the soil. Public health authorities have posted signs around wells and hand pumps advising the community that the water is unfit for human consumption. In two communities, Plachimada and Mehdiganj, Coca-Cola was distributing its solid waste to farmers in the area as **fertilizer**. Tests conducted by the BBC found cadmium and lead in the waste, effectively making the waste toxic waste. Coca-Cola stopped the practice of distributing its toxic waste only when ordered to do so by the state government. Tests conducted by a variety of agencies, including the government of India, confirmed that Coca-Cola products contained high levels of pesticides, and as a result, the Parliament of India has banned the sale of Coca-Cola in its cafeteria. However, Coca-Cola not only continues to sell drinks laced with poisons in India (that could never be sold in the US and EU), it is also introducing new products in the Indian market. And as if selling drinks with DDT (from its trivial name, **dichlorodiphenyltrichloroethane** is one of the most well-known synthetic pesticides) and other pesticides to Indians was not enough, one of Coca-Cola's latest bottling facilities to open in India, in Ballia, is located in an area with a severe contamination of arsenic in its groundwater.*

*In India, traditionally space, air, water and energy have been viewed as **incapable of being bound into property relations**. Water has been considered as a sacred common heritage to be nurtured, conserved, used sustainably and shared equitably. For example in Islam, the **Sharia** or **way** originally connoted the **path to water** (West coat 1995) and provides the ultimate basis for **rights of thirst** that applies to humans and animals. Various cultures have developed numerous creative mechanisms of water management and ownership through collective and consensual decision-making processes ensuring sustainable resource use and equitable distribution, especially in regard to the needs of the poor.*

Vandana Shiva. *India Resource Centre*

Source from: [http://www.citizen.org/cmep/article\\_redirect.cfm?ID=8109](http://www.citizen.org/cmep/article_redirect.cfm?ID=8109)

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

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

*Desalination plants (refers to any of several processes that remove some amount of salt and other minerals from water) will ring the world's oceans, many of them run by nuclear power; corporate nanotechnology will clean up sewage water and sell it to private utilities who will sell it back to us at a huge profit; the rich will drink only bottled water found in the few remote parts of the world left or sucked from the clouds by machines, while the poor die in increasing numbers. This is not science fiction. This is where the world is headed unless we change course.*

Maude Barlow, Tony Clarke, *Blue Gold*



*Desalination plants*

Why are poor countries lacking clean water? Why have they not developed the infrastructure clean water delivery? Why are they poor?

*Kenya, Nakuru has big resources of tea, but they are sell it for lowest price to big corporations. World banks and stock market did not getting them sell this product in high price and if they had fair trade with only tea, they could make enough money to sustain most needs. That why these countries cannot get out from dept, they can't develop water system, health care, education etc... In other case it has to be reach place*

Dr George Morara Ogendi (professor of environmental geology, Alkansas state university)

*Kenya resources of tea*



*For every \$1 in aid a developing country receives, over \$25 is spent on debt repayment Total debts of the developing world in 2006... The poorer the country, the more likely it is that debt repayments are being extracted directly from people who neither contracted the loans nor received any of the money*

*Debt - The facts, New Internationalist, Issue 312*

*For the price of one bottle of Evian, the average North American could buy roughly 4,000 liters of tap water.*

*The rush to privatize water continues unencumbered, despite its unpopularity among residents worldwide who are affected by it. Countries faced with large debts are forced by the World Bank and IMF to privatize water. Water deregulation is a common demand of the World Bank and IMF as part of their loan conditions. In 2000, out of 40 IMF loans distributed through the International Finance Corporation, 12 had requirements of partial or full privatization of water supplies. They also insisted on the creation of policies to stimulate "full cost recovery" and the elimination of subsidies. African governments, such as Ghana, increasingly give in to pressures for water privatization. In Ghana, the World Bank and IMF policies forced the sale of water at market rate, requiring the poor to spend up to 50 percent of their earnings on water purchases. As Vandana Shiva writes in Water Wars, "The water*

*crisis is the most pervasive, most severe, and most invisible dimension of the ecological devastation of the earth.*

Dustin VanOverbeke , *Water Privatization Conflicts*

In many places people cannot afford to have clean drinking water at home, because the prices are too high and beyond their means. If nearly all of your monthly salary would be needed to pay for clean water on tap, then clearly it is unaffordable. In Tanzania minimum wage is 2500 shilling per month (equivalent to 10 Euros) As the water has been privatized and is now controlled by a British company, each month people have to pay most of the salary they are earning.

*Whatever river flowing free is now treated as the supply of raw material as if it was oil we have the generation of water wars.*

Vandana Shiva, *Water wars*

*The Independent gave several other examples of regions of potential conflict. These include Israel, Jordan and Palestine, who all rely on the Jordan River, which is controlled by Israel; Turkey and Syria, where Turkish plans to build dams on the Euphrates River brought the country to the brink of war with Syria in 1998, and where Syria now accuses Turkey of deliberately meddling with its water supply; China and India, where the Brahmaputra River has caused tension between the two countries*

*In the past, and where China's proposal to divert the river is re-igniting the divisions; Angola, Botswana and Namibia, where disputes over the Okavango water basin that have flared in the past are now threatening to re-ignite as Namibia is proposing to build a three hundred-kilometre pipeline that will drain the delta; Ethiopia and Egypt, where population growth is threatening conflict along the Nile; and Bangladesh and India, where flooding in the Ganges caused by melting glaciers in the Himalayas is wreaking havoc in Bangladesh, leading to a rise in illegal, and unpopular, migration to India.*

*Similar trouble is brewing on the U.S.-Mexican border, where a private group of U.S.-based water rights holders is using the North American Free Trade Agreement to challenge the long-term practice by Mexican farmers to divert water from the Rio Grande before it reaches the United States...*

Maude Barlow, *Blue Covenant*

Martin Luther King Jr. said: *Legislation won't change the heart, but it will restrain the heartless.* We need legislation at every level, in order to restrain the markets and corporate power. It is all well for grass roots people to do their wonderful work - but they should not have to do all the work. We need laws from the municipal level up to the state, national and international, in order to protect water ecologically on the one hand and to protect the notion of water as a human right. For it is both a human right and a right of the earth..

Something that is so fundamental cannot be a mere commodity. We need double covenant - between humans and the earth, to stop destroying the lifeblood of the earth, and between the rich and poor (Global North to the South) for water justice. Not charity -- justice. Water should be a fundamental right for all generations, and no one should be allowed to sell it for profit.

*Change the world it needs it!*

Bertolt Brecht, *Ändere die Welt: sie braucht es!* from *Die Maßnahme*.

The current system is oriented towards profits above all things – evidently over all human rights and common goods. The situation becoming more and more problematic: If water is not accessible to every one, if we abuse and deplete this natural resource by enclosing it, so that, for example poor children are dying from a lack of clean water, then how can we say that this system is working for the benefit of all?

*People tell me: Eat and drink! Be happy that you have! But how can I eat and drink, if what I eat, I take from the hungry, and if my glass of water deprives the thirsty? And yet, eat and drink I do. I would also like to be wise. In the old books, it is written what wisdom is: To keep oneself out of the world's struggle and to spend One's short time without fear And to get by without violence To pay back evil with good Not to achieve one's wishes, but rather to forget them This is what wisdom is. But I cannot do any of this: Really, I live in dark times!*

Bertolt Brecht, *To our posterity*

Can we say that goods are shared in this system? Can we say that all people have even a minimum possibility to meet their primary needs? We see it is not like this and we can imagine what will be in other cases if most important component for the life is not shared and we do not care of it. My feeling is that this problem will not end if we will not share everything and if we will not stop treating nature as an exploitable commodity. Back then to the question about artists and art; given such problems, can artists turn away? All the time we have different or similar, permanent problems. As artists are we taking the side of the oppressed? Do we want to take on this responsibility? Why do we need to make art if it will not be good for satisfying vital human needs? Are we doing art that accepts such problems as unchangeable or are we posing questions to make a system change? Are we just making money for our comfort or creating situations and putting the question, what will lead to the final transformation? Where *to be* is more important than *to have*

(Erich Fromm, *To have or to be*)

## Through the details

In order to see in details the ugly side of the system we need more precise facts, which will show how need is ignored. Water is the very basic human need. Without it there will not be life. What about the rose?

### Flowers.

Are they important for our lives? Or they are just to make our life beautiful?

*There are times when you have to choose between being a human and having good taste.*

Bertolt Brecht *Notes on Philosophy in On Politics and Society*



Flowers are beautiful. They have special quality. They touch us. They decorate the places we live and work. People give each other flowers to express their love and passion. This plants giving the houses nice ambiance and cosiness. We give it to persons who we love and appreciate. But is it necessary for life? I guess not! Can it be more important then water?

Let me go deeper in this research and find out how we arranging our *needs* and *wants* in capitalist system.

## Where the flowers coming from?

### Industry

Flower production and trade is huge business. In countries such as The Netherlands, Italy, Kenya, Tanzania, Columbia Ecuador, Ethiopia, Chin, Nicaragua, Niagara, Thailand, Israel, Turkey, Zimbabwe, Morocco, Zambia and India, this business is well established.

*Flower export-import mapping*

Work by Elene Naveriani. *Valentine's Day*



The global cut-flower trade is characterized by a high degree of concentration by sources. Germany is the main market for imports, and the Netherlands the world's leading exporter. Exports from the Netherlands to Germany are a principal component of the world cut flower trade, they make a significant part of the intra EU trade, which itself accounts for a large part of the world trade. In the Americas, Colombia is the major supplier to the United States. Japan receives its supplies from a more diversified base, with Taiwan, New Zealand and Europe being the most important ones.

*Netherland is the largest importer of flowers. Flower growers from all over the world assemble at the famed flower auctions to find suitable buyers for their produce. These flower auctions offer a central marketplace for buying and selling of floricultural products with good facilities for growers and buyers and effective logistics. Flowers are imported from various countries in order to create the largest possible assortment of flowers. This allows the industry to overcome the handicap of wholesalers not having the opportunity to import directly out of these countries.*

*The flower expert, Source from: <http://www.theflowerexpert.com/>*

Ethiopia is one of the hungriest countries in the world with more than 13 million people needing food aid, but paradoxically the government is offering at least 3m hectares of its most fertile land to rich countries and some of the world's most wealthy individuals to export food for their own populations.

But Ethiopia is only one of 20 or more African countries where land is being bought or leased for intensive agriculture on an immense scale in what may be the greatest change of ownership since the colonial era.

An Observer investigation estimates that up to 50m hectares of land - an area more than double the size of the UK – has been acquired in the last few years or is in the process of being negotiated by governments and wealthy investors working with state subsidies.

Leading the rush are international agribusinesses, investment banks, hedge funds, commodity traders, sovereign wealth funds as well as UK pension funds, foundations and individuals attracted by some of the world's cheapest land.

Together they are scouring Sudan, Kenya, Nigeria, Tanzania, Malawi, Ethiopia, Congo, Zambia, Uganda, Madagascar, Zimbabwe, Mali, Sierra Leone, Ghana and elsewhere. Ethiopia alone has approved 815 foreign-financed agricultural projects since 2007. Any land there, which investors have not been able to buy, is being leased for approximately \$1 per year per hectare.

Indian ecologist Vandana Shiva said: *that large-scale industrial agriculture not only threw people off the land but also required chemicals, pesticides, herbicides, fertilisers, intensive water use, and large-scale transport, storage and distribution which together turned landscapes into enormous mono-cultural plantations.*



*We are seeing dispossession on a massive scale. It means less food is available and local people will have less. There will be more conflict and political instability and cultures will be uprooted. The small farmers of Africa are the basis of food security. The food availability of the planet will decline.*

Vandana Shiva, *Immense Land Grab in Africa*,  
source from: <http://www.lorenzohagerty.com/blog/?tag=news-from-africa>

Lorenzo Cotula, senior researcher with the International Institute for Environment and Development, who co-authored a report on African land exchanges with the UN fund found that well-structured deals could guarantee employment, better infrastructures and better crop yields. But badly handled they could cause great harm, especially if local people were excluded from decisions about allocating land and if their land rights were not protected.

Water is also controversial. Local government officers in Ethiopia told the Observer that foreign companies that set up flower farms and other large intensive farms were not being charged for water. *We would like to, but the deal is made by central government*, said one. *In Awassa, the al-Amouni farm uses as much water a year as 100,000 Ethiopians.*

*How food and water are driving a 21st-century African land grab*

Source from: <http://www.guardian.co.uk/environment/2010/mar/07/food-water-africa-land-grab>

Together, Colombia and Ecuador accounted for roughly 90% of all roses, 98% of all carnations, and 95% of all chrysanthemums sold in the U.S. And, they're not the only countries competing for America's love of flowers.

#### *Colombia and Ecuador Dominate U.S. Flower Market:*

*Colombia is the largest flower exporter to the U.S., followed by Ecuador. Approximately 60% of all flowers sold in the U.S. come from Colombia. A third of Ecuador's yearly production is exported to the U.S. for Valentine's Day.*

*Poverty Wages, Long Hours, Unhealthy Conditions, Sexual Harassment Afflict Workers - Workers earn poverty-level wages, making less than half of what is needed to meet basic needs.*

*55% of women workers in Ecuador's flower plantations have been the victims of some form of sexual harassment in the workplace.*

*66% of Colombian and Ecuadorian flower workers suffer from work-related health problems.*

*Pesticide abuse is rampant---flower workers experience higher-than-average rates of premature births, congenital malformations, and miscarriages.*

*70-80 hour workweeks are common in the high season.*

*Core worker rights are not respected. No new unions have been formed in Ecuador in years and no independent unions have been able to win a collective bargaining agreement in Colombia's flower sector.*

*The most important worker organizing effort in the Colombian flower sector in the past five years is currently in the process of being crushed by the country's largest flower owner and exporter, U.S.-based Dole.*

### *Flowers Enter U.S. Duty-Free Under the Andean Trade Preference Act*

#### *Benefits That Are Subject to Taking Steps on Worker Rights*

*Over 95% of Colombia and Ecuador's flower exports enter the U.S. duty-free under the Andean Trade Preferences Act (ATPA). Flowers are one of the biggest recipients of ATPA benefits outside of petroleum. By law, ATPA requires qualifying countries to take steps on worker rights. Congress extended the ATPA program in December 2006 for six months and renewal will be on the Congressional agenda later this year.*

*International labour rights forum*

### *A Day in the Life of Flower Workers:*

*In low season, workers at the plantation regularly work about 50 hours per week. The high season workweek is often 70-80 hours. Men report waking up around 5 a.m. to get on the bus. They arrive at the plantation, put on their work clothes, and must be in position when the bell rings at 6:15 a.m. Women report waking up as early as 3 a.m. in order to finish housework, feed their children and prepare them for school. The post-harvest section, in which flowers are sorted by quality and colour, employs only women, while the cultivation and packing sections are more male-dominated.*

*The number of hours worked daily depends on the worker's department, but a typical worker will stay at work during the low season from 6:15 a.m. until 3 p.m. Monday through Friday, and 6:15 a.m. to 1 p.m. on Saturdays. They are allowed 30 minutes for lunch and at least one 15-minute break. During the high season, workers report working 14 or 15-hour days. They begin work at 6:15 a.m. and often stay until 10 or 11 p.m.. At the end of the day the workers return home in buses, then start all over again the next day.*

A Valentine's Day report: Worker Justice and Basic Rights on Flower Plantations in Colombia and Ecuador Prepared by the U.S./Labour Education in the Americas Project and The International Labour Rights Fund.

The global cut flower industry provides a vital income for millions of people in countries like Kenya and Colombia. Like many other industries that rely on a large supply of cheap labour, a lot of the jobs involved in the flower industry - such as grading, packing, harvesting, tending beds, watering and so on - require limited skills. Many of the workers employed in the industry are poor and so vulnerable to exploitation.

*Common abuses of flower workers' rights include low wages and failure by companies to protect them from repetitive strain injuries and toxic pesticides. Shifts of up to 15 hours a day, sometimes without a break, are common around annual peaks in demand such as Valentine's Day and Mothers' Day. The majority of flower workers are women. Sexual harassment and bullying is often a major issue, as is inadequate maternity cover or allowances for childcare responsibilities.*



*The Ethical Trading Initiative, source from: <http://www.ethicaltrade.org/>*

*Currently there is an opportunity for exporters from East Africa and Latin America to avoid increasing freight costs by developing an air-conditioned sea freight system for cut flowers. Israeli exporters are using this option for shipping flowers in refrigerated sea containers to Marseille, France. From there, the products are trucked to different European importers. So additional flowers shipping projects has been developed for African flower exports.*

*Global database, source from: [www.export-import-companies.com](http://www.export-import-companies.com)*

*Big corporations see moneymaking opportunities — and are taking private ownership of water. In fact, in exchange for debt relief, some third world countries were forced to allow privatization of water — which resulted in lower water quality and service plus a hike in rates.*

*United Nations and World Bank for this **new colonialism** created by the privatization of water, where polluted natural bodies of water become a boon*

*for corporations that want to sell water, and where the virtual water trade — i.e. Kenya's water-intensive flowers sold to European countries unwilling to use their own water — depletes what natural resources developing nations still have.*

*Blue Gold, World Water Wars. Film by Sam Bozzo*

## **A rose is just a rose**

Lake Naivasha is a large freshwater lake in Kenya. Floriculture (flower farming) is the main industry surrounding this lake. Many European companies are involved in growing roses here, which requires huge quantities of water for irrigation. Maude Barlow, a long time water-rights activist, writes the following in her book *Blue Covenant*:

*Kenya is destroying the waters of Lake Naivasha to grow roses for export to Europe. Scientists predict the lake, the source of water for Africa's largest population of hippopotamuses, will be a **putrid muddy puddle** within five to ten years if its draining for flower irrigation is not halted. (Knowing this, the big European flower companies are already planning to relocate to Ethiopia and Uganda.)*

*If you live in Europe and are planning on giving roses to a loved one this year, you might want to find out more about where those roses came from, and what their production cost. Many workers growing these roses make only a dollar a day, and are becoming ill from excessive exposure to pesticides and herbicides. They receive the side benefit of being allowed to participate in the destruction of their own local environment. Of course, once the water is gone, the companies will move on, but they will still have to live there.*

*Maude Barlow, Blue Covenant*

Around one in four of the flowers we buy for our nearest and dearest on Valentine's Day come from Kenya, as it provides ideal growing conditions for the roses, carnations, and other flowers loved by Western consumers. Other major flower exporters include Tanzania, Uganda, Zambia and Ethiopia as well as Colombia. Conditions for workers across all these countries are likely to be fairly similar. So Kenya produces most of the roses that are sold in Europe. Growing roses in dry places needs a lot of water (120 litres per dozen roses) And people there in Kenya are dying because of lack of water.

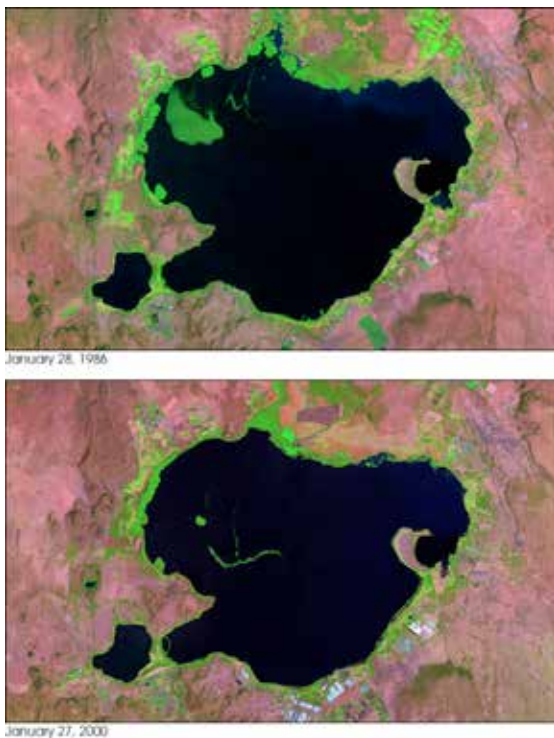
Ecology and conservation biologist at the University of Leicester, Dr David Harper, who has conducted research for over 25 years at Lake Nai

vasha in Kenya, has warned that cut-price Valentine roses exported for sale in the UK were *bleeding that country dry*.

University of Leicester biologist Dr David Harper has conducted research for over 25 years at Lake Naivasha in Kenya and says: *Roses that come cheap are grown by companies that have no concern for the environment, who cut corners and avoid legislation, who sell their flowers into the auction in Amsterdam so that all the buyer knows is the flowers come from Holland.*

*In reality, they have come from Kenya where the industry is - literally - draining that country dry. However, some companies took a more responsible*

2008 Lake Naivasha



*approach and sold direct to British supermarkets - many of them being Fair Trade certified. These companies want a sustainable future for the wildlife and the environment, as well as the people, where they grow their roses. Sadly, there are not enough of them. At Lake Naivasha, the good companies make up about half of the total. That is not enough; together, the industry is sucking the lake dry. The country's legislation is strong, but its enforcement is weak so companies whose only interest is profit take advantage of that.*

Dr David Harper, *Cheap Roses Cost The Earth*

Source from: <http://www.sciencedaily.com/releases/2009/02/090213070917.htm>

Along with greenhouse gas emissions there are other environmental impacts to consider, as documented in the 2008 report by **Food and Water Watch and The Council of Canadians Lake Naivasha: Withering Under the Assault of International Flower Vendors**. Over 30 commercial flower farms siphoning off water with canals dug around the lake, restricting access to the lake by blocked corridors so cannot provide water for livestock including Maasai cattle grazing, depleting biodiversity, and contaminating the wider environment with toxic pesticides and fertilizers. The chemicals are also poisoning workers, many of whom are not provided with protective clothing. The report highlights wider issues of poor labour standards, low wages and mass sackings, which led to protests at the Oserian, flower farm, which supplies over 1 billion cut flowers per year, in 2006. While exporting flowers effectively exports enormous amounts of embedded water, as a flower is 90 per cent water, there were instances of wages insufficient even for a farmer to purchase water for their family. Will Kenya's flower exports help the hunger crisis?

Will Kenya's flower exports help the hunger crisis?

Source from: <http://www.zimbio.com/Kenya/articles/yn7jibqttZF/Will+Kenya+flower+exports+help+hunger+criss>

The reality of a cut flower's life is not nearly so romantic. Nowhere are beauty and danger so entangled. Many of the chemicals used are probable human carcinogens, highly toxic to fish, or known to contaminate groundwater. The ever-expanding cut flower industry uses a considerable amount of highly toxic pesticides (*Chemicals used in the flood plain with high levels of toxicity include soil fumigants such as Telone - It is used mainly in farming as a pesticide, specifically as a preplant fumigant and nematicide. It widely used in the US and other countries, but in the process of being phased out in the European Union, Metam Sodium, Methyl Bromide - NIOSH considers methyl bromide to be a potential occupational carcinogen as defined by the OSHA carcinogen policy (29 CFR 1990). «methyl bromide showed a significant dose-response relationship with prostate cancer risk, Exposure levels leading to death vary from-[www.aghealth.org](http://www.aghealth.org), and Chloropicrin - Chloropicrin is a lacrimator and a severe irritant of the respiratory system in humans; it also causes severe skin irritation on contact. When splashed onto the eye chloropicrin has caused corneal oedema and liquification of the cornea. Examples of industrial exposure in humans: 27 workers in a cellulose factory who were exposed to high levels of chloropicrin for 3 minutes developed pneumonitis after 3 to 12 hours of irritated coughing and difficulty on breathing; they subsequently developed pulmonary oedema and one died . Chloropicrin is a highly toxic chemical: NIOSH - The National*

Institute for Occupational Safety and Health ), as well as organophosphate and carbamate insecticides including Disulfoton - The use of the substance has been restricted by the US government, and Carbofuron - The EPA announced on July 25, 2008 that it intends to ban all forms in the US. The ban requires that no residue be present on domestic or imported foods)

The high use of noxious chemicals is buttressed by a flower's non-edible nature that allows it to be exempt from inspection for pesticide residues. Many cut flowers are derived from bulbs, which ostensibly require toxic soil fumigants to ward off nematodes and other soil microorganisms that would otherwise nibble away at its core. The high use of chemicals not only potentially jeopardizes the health of workers involved in the production and nearby residents, but also the surrounding environment. Given the volume and toxicity of the pesticides used in the flower industry, it is not surprising that residents near growing areas may also be at risk.



Drought, flower farms, and pesticides are damaging the lake .  
*Blooming Controversy: What Is Killing the Wildlife in Kenya's Lake Naivasha*

Many chemicals used in the industry are known groundwater contaminants. If a privately owned well is the primary source of water for a family, they may be at an increased risk of pesticide exposure from bathing, cooking, and drinking.

Lake Naivasha, contaminated water

Worker exposure to chemicals used in the cut flower industry is of concern as well. Workers who transplant, prune, cut, or pack flowers without protective clothing may absorb chemicals through their skin. Dusting and spraying within greenhouses creates an environment where workers can readily inhale pesticide vapours. Many of the pesticides used can cause cancer, birth defects and other reproductive illnesses, as well as neurological disease in humans.

## Big business

The trade in Kenyan flowers has grown from humble origins in the early 1970s to account for about \$110 million of export earnings a year, or eight percent of the country's total, according to the Kenya Flower Council, an industry association.

The Council says: *the horticulture industry is vital to creating jobs in Kenya, where earnings in key sectors such as coffee growing have fallen sharply and tourism has suffered from political violence in previous years. It's provided employment in a lot of rural areas where there was no employment*

Kenya Council Chairman Rod Evans.

Source from: <http://www.bangladeshinfo.com/news/feature06.php>

Evans said the industry has grown to provide an estimated 30,000 to 40,000 jobs in a country of 30 million people where the unemployment rate is around 50 percent. The Commission says some farms pay employees as little as 2,000 shillings a month, women are subjected to sexual harassment by supervisors and 90 percent of workers are not members of unions that could help protect them.

It's total exploitation. Most of the workers are women, most of them are divorcees and single mothers, and they have to be exploited just to feed their families. Activists accuse flower farms clustered around picturesque Lake Naivasha in central Kenya of polluting the water with fertilisers and pesticides, threatening the delicate ecological balance of an area home to hippos and spectacular bird life. In response, the industry points to model farms. The Red Lands Roses farm, situated about 25 km (15 miles) outside of the Kenyan capital Nairobi, holds itself up as an example of environmentally sound flower growing with decent pay and conditions for staff.

Eunice Muthoni, a monitor for the Kenya Human Rights Commission.

Source from: <http://www.bangladeshinfo.com/news/feature06.php>





Ton van Zantvoor, Documentary movie: *A Blooming Business*

Image Source: *Newton Film*

We cannot sit back and ignore the statistics shown for Lake Naivasha by different people and organizations! One big question all communities must ask themselves is how much water remains for domestic purposes, for wildlife and for supporting the livelihood of the local communities, what are the consequences ahead if nothing is changed?

### **Facts:**

*The lake is at risk of extinction because of human activities. The demand for environmental resources such as land, water and forestry for human settlement threaten to damage the lake and if nothing is done, the following factors may occur.*

*The loss of ground water will cause a more serious problem and the results will affect everyone such as:*

*Wells and boreholes will dry up. The graze land on the lakeshores will no longer provide sufficient grass cover for the existing wildlife and livestock*

*The high population will have a water shortage problem that will lead to healthy problems as a result of water shortage (With the rose farm using large quantities of water to irrigate)*



NASA, Lake Naivasha, Kenya

In photo: Flower factories

*Acacia woodlands will decrease due to the failure of revitalization.*

*Internationally, we might stop having war refuges but instead have hunger refuges if the resources and ecosystems are not protected. This can be done through:*

*Promoting efficient farming practices that will conserve water, assure safe use and disposal of agrichemicals.*

*Promoting soil and forest conservation in order to reduce soil runoffs in the lake.*

*The government should implement the Water Act, which only allows water abstraction during flood flow periods.*

*Save lake Naivasha, Source from: <http://environment.mkfc.se/naivasha/>*

*The flowers provide an important source of income to Kenya, but the industry comes with a price. Flowers are not held to the same standards for chemical residues as food products. Strong chemical pesticides can be used on the flowers to produce the perfect, pest-free bloom, and this could pose a health risk to workers and local wildlife, including hippos, environmental groups told the Food and Agriculture Organization of the United Nations in 2002. The chemicals may also threaten the water quality of Lake Naivasha, one of Kenya's few freshwater lakes. The Kenya Flower Council instituted a code of conduct establishing guidelines for pesticide that phases out the use of one of the most toxic pesticides.*

*NASA Report: Happy Mother's Day - Flowers Fields as Seen by NASA Satellite*

*Source from: [http://www.redorbit.com/images/images-of-the-day/img/19702/lake\\_naivasha\\_kenya/index.html](http://www.redorbit.com/images/images-of-the-day/img/19702/lake_naivasha_kenya/index.html)*

50 000 jobs have been created on the flower farms, but not the kind of jobs you or I would want to do. Workers get rashes from the pesticides because they don't have protective clothing. They won't get the truth out of their doctors, because the flower companies provide them. Labour rights are also an issue. In 2006 workers at one farm complained about working conditions and pay, and the company responded by firing 1000 people at a stroke. This led to rioting, and police tear-gassed the crowds. If you were about to suggest Fair-trade, you may be alarmed to know that this was one the Fair-trade certified farms. The tragedy of Naivasha is not that it was developed, but that it has been developed unsustainably. If the farms had been better planned, the water managed and the pesticide runoff regulated, Kenya could have profited for decades from the lake. Instead, it will enjoy twenty years of profit, and then be dried up, polluted and useless. And when Naivasha is no longer viable, production will switch to facilities in Ethiopia or Rwanda and the cycle will carry on – everybody loses in this kind of exploitation of the land, except the flower corporations.

*The price of Kenyan roses and the tragedy of lake Naivasha*

Kenya has some of the largest flower farms in the world, employing up to 10,000 workers. They usually live on the farm where they work. Approximately 65% of Kenyan flower workers are employed as casual workers. This means that they are not entitled to benefits and can be fired at any time. Women workers are likely to lose their jobs if they become pregnant. Many workers are paid wages of just £1 a day. The flowers are grown mostly around the Rift Valley lakes, which supply water for the farms. Millions of flowers are flown from Nairobi to Europe every year. The peak period for export is in early February around Valentine's Day. Irene Mwai's works in a flower farm in Kericho in the Highlands of Kenya. Because of the favorable climate, an increasing number of flowers are cultivated here – especially roses. By 9am, on a February morning, Irene has already been in the farm for two hours and has cut 2,000 roses. She wears leather gloves reaching up to her elbows; **protection against thorns** she says. When she does the harvesting, she cuts the stems and shoves them skillfully under her left hand. "It is always like this just before Valentine Day", says the 32 year-old, even though the popular "Lovers Day" is not celebrated in rural Kenya in the way it is in the USA and Europe. Large foreign companies and white Kenyan farmers own almost 90% of all the flower farms. Asian Kenyans own the rest. Although Kenya sells a lot of flowers, most of the money goes to the foreign companies that own the farms.

We Can't Live on Flowers:

[http://www.learningafrica.org.uk/trade\\_activities.htm](http://www.learningafrica.org.uk/trade_activities.htm)